



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**Bill Richardson**  
Governor  
**Joanna Prukop**  
Cabinet Secretary

July 15, 2003

**Lori Wrotenbery**  
Director  
Oil Conservation Division

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

Attention: **Steve Millican**  
[SEMillican@MarathonOil.com](mailto:SEMillican@MarathonOil.com)

## *Administrative Order NSL-4215-B (BHL) (SD)*

Dear Mr. Millican:

Reference is made to the following: (i) your application filed with the New Mexico Oil Conservation Division ("Division") on May 30, 2003 (*administrative application reference No. pKRV0-315347812*); and (ii) the Division's records in Santa Fe, including the file on Division Administrative Orders NSL-4215 and 4215-A (SD): all concerning Marathon Oil Company's ("Marathon") request for an exception to Rule 2 (b) of the "*Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool*", as promulgated by New Mexico Oil Conservation Division ("Division") Order Nos. R-9922, R-9922-A, R-9922-B, R-9922-C, R-9922-D, and R-9922-E 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 its proposed Indian Hills Unit Well No. 53 to be drilled as an upper Pennsylvanian infill well to an unorthodox subsurface location within an existing standard 320-acre lay-down spacing and proration unit comprising the S/2 of Section 28, Township 21 South, Range 24 East, NMPM, Indian Basin-Upper Pennsylvanian Associated Pool (33685), Eddy County, New Mexico.

This unit is currently simultaneously dedicated to Marathon's:

- (i) Indian Hills Unit Well No. 19 (API No. 30-015-30572), located at an unorthodox location (approved by Division Administrative Order NSL-4215, dated February 18, 1999) 1400 feet from the South line and 1248 feet from the West line (Unit L) of Section 28;
- (ii) Indian Hills Unit Well No. 20 (API No. 30-015-30658), located at an unorthodox location (approved by Division Administrative Order NSL-4215-A, dated August 13, 2001) 2250 feet from the South line and 1730 feet from the East line (Unit J) of Section 28; and
- (iii) Indian Hills Unit Well No. 35 (API No. 30-015-32199), located on the surface 1087 feet from the North line and 2037 feet from the East line (Unit B) of Section 33, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico, and completed within the Indian Basin-Upper Pennsylvanian Associated Pool (33685) at a standard sub-surface location within the SW/4 SE/4 (Unit O) of Section 28.

It is our understanding the proposed Indian Hills Unit Well No. 53, because of topographic reasons, will be spud at a surface location 1383 feet from the North line and 1586 feet from the West line (Unit F) of Section 28, and drilled directionally to the south-southeast to a targeted-bottomhole location at an approximate depth 8,119 feet (TVD) 2397 feet from the South line and 2014 feet from the West line (Unit K) of Section 28. The wellbore is to intersect the top of the Upper-Pennsylvanian interval at an approximate depth of 7,419 feet (TVD) 2582 feet from the South line and 1945 feet from the West line (Unit K) of Section 28. The proposed well will be unorthodox in that the entire producing interval will be closer than the standard setback distance of 660 from the northern boundary line South line of this spacing and proration unit. Further, this bottom-hole location has been chosen by Marathon to optimize reservoir drainage and minimize geological risk.

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

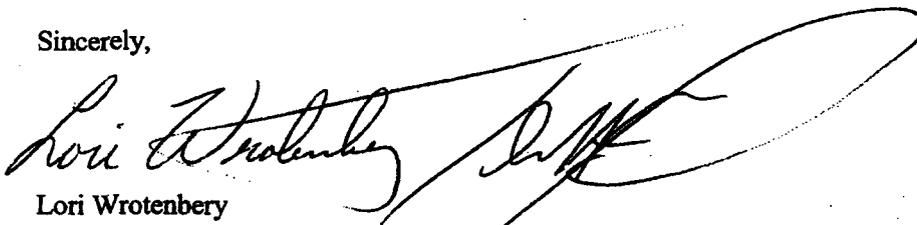
By the authority granted me under the provisions of Division Rule 104.F (2) and the applicable provisions of the special rules governing the Indian Basin-Upper Pennsylvanian Associated Pool, the above-described unorthodox sub-surface location for the Indian Hills Unit Well No. 53 within the N/2 of Section 28, is hereby approved.

Further, the aforementioned well and spacing unit will be subject to all existing rules, regulations, policies, and procedures applicable to the Indian Basin-Upper Pennsylvanian Associated Pool.

Marathon is hereby authorized to simultaneously dedicate production attributed to the Indian Basin-Upper Pennsylvanian Associated Pool from the aforementioned Indian Hills Unit Wells No. 19, 20, 35, and 53. Furthermore, Marathon is permitted to produce the allowable assigned the subject 320-acre spacing and proration unit from both wells in any proportion.

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

Sincerely,



Lori Wrotenbery  
Director

LW/mes

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



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

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

February 18, 1999

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

*Administrative Order NSL-4215*

Dear Mr. Ducease:

Reference is made to the following: (i) your initial application dated January 26, 1999; (ii) the New Mexico Oil Conservation Division's ("Division") letter dated February 9, 1999 from Mr. Michael E. Stogner, Chief Hearing Officer/Engineer, withdrawing this application; (iii) your re-submittal of this application hand delivered to the Division's Santa Fe office on February 17, 1999; (iv) the records of the Division in Santa Fe; and (v) Division Order No. R-9922-D, issued in Case No. 12006 dated December 7, 1998, which adjusted the Upper-Pennsylvanian pool boundaries in the area subject to your application: all concerning Marathon Oil Company's request for a non-standard oil/gas well location within a 320-acre standard spacing and proration unit for the Indian Basin-Upper Pennsylvanian Associated Pool comprising the S/2 of Section 28, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico.

The subject application has been duly filed under the provisions of Division Rule 104.F.

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

**Indian Hills Unit Well No. 19  
1400' FSL & 1248' FWL (Unit L) of Section 28  
(API No. 30-015-30572).**

It is our understanding that this well is to be a replacement for Marathon Oil Company's Indian Hills Unit Well No. 4 (API No. 30-015-10738), located 1650 feet from the South and West lines (Unit K) of Section 28, which was drilled by Ralph Lowe in 1965 and produced from the Upper-Pennsylvanian interval until 1970 when this well was temporarily abandoned.

Further, Marathon Oil Company will assure that any and all wells in Section 28 producing from the Indian Basin-Upper Pennsylvanian Associated Pool are being operated pursuant to the requirements of Division Order No. R-9922-D.

Sincerely,

Lori Wrotenbery  
Director

LW/MES/kv

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



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

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

August 13, 2001

Lori Wrotenbery  
Director  
Oil Conservation Division

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

Telefax No. (505) 982-2047

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

Dear Mr. Kellahin:

Reference is made to the following: (i) your initial application filed with the New Mexico Oil Conservation Division ("Division") on behalf of the operator, Marathon Oil Company ("Marathon") on July 23, 2001 (*Division application reference No. pKRV0-120540431*); (ii) your telephone conversation with Mr. Michael E. Stogner, Engineer/Chief Hearing Officer with the Division in Santa Fe on Monday, August 13, 2001; and (iii) the Division's records in Santa Fe, including the file on Division Administrative Order NSL-4215, dated February 18, 1999: all concerning Marathon's request for an exception to Rule 2 (b) of the "*Special Rules and Regulations for the Indian Basin-Upper Pennsylvanian Associated Pool*", as promulgated by New Mexico Oil Conservation Division ("Division") Order Nos. R-9922, R-9922-A, R-9922-B, R-9922-C, and R-9922-D and the "*General Rules and Regulations for the Associated Oil and Gas Pools of Northwest New Mexico and Southeast New Mexico*", as promulgated by Division Order No. R-5353, as amended, for an existing infill well that was inadvertently drilled at an unorthodox well location within an existing 320-acre lay-down spacing and proration unit comprising the S/2 of Section 28, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico.

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

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

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

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

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

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

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

Sincerely,



Lori Wrotenbery  
Director

LW/MES/kv

cc: New Mexico Oil Conservation Division - Artesia  
New Mexico Department of Land Management - Carlsbad  
NSL-4215 ✓

**N.M. Oil Cons. DIV-Dist. 2**  
**1301 W. Grand Avenue**  
**Artesia, NM 88210**  
**UNITED STATES**  
**DEPARTMENT OF THE INTERIOR**  
**BUREAU OF LAND MANAGEMENT**

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

SUBMIT IN TRIPPLICATE  
(One copy to be submitted to the reverse side)

**APPLICATION FOR PERMIT TO DRILL OR DEEPEN**

1a. TYPE OF WORK  
 DRILL  DEEPEN

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

2. NAME OF OPERATOR  
Marathon Oil Company

3. ADDRESS AND TELEPHONE NO.  
P.O. Box 552 Midland, TX 79702 432-687-8360

4. LOCATION OF WELL (Report location clearly and in accordance with applicable State requirements.)  
 At surface  
1383' FNL & 1586' FWL  
 At proposed prod. zone  
2397' FSL & 2014' FWL

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

15. DISTANCE FROM PROPOSED\* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.  
 (Also to nearest drlg. unit line, if any) P.P. 52'

16. NO. OF ACRES IN LEASE  
320

17. NO. OF ACRES ASSIGNED TO THIS WELL  
80

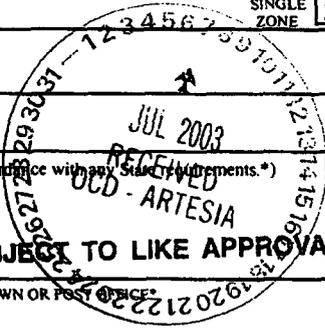
18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
24'

19. PROPOSED DEPTH  
8385'

20. ROTARY OR CABLE TOOLS  
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
G.L. 3702

22. APPROX. DATE WORK WILL START\*  
July 1, 2003



5. LEASE DESIGNATION AND SERIAL NO.  
JM 030482

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

7. UNIT AGREEMENT NAME  
Indian Hills Unit

8. FARM OR LEASE NAME, WELL NO.  
Indian Hills Unit 53

9. API WELL NO.  
30-015-32875

10. FIELD AND POOL, OR WILDCAT  
Indian Basin U.P. Associated

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

12. COUNTY OR PARISH  
Eddy

13. STATE  
N.M.

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	9-5/8" K-55	36#	1200'	515 sks.
8-3/4"	7" K-55	23/26#	8385'	1280 sks.

**Carlsbad Controlled Water Basin**

Marathon Oil Company is proposing to drill a Directional well from the existing drilling pad of the Indian Hills Unit # 34.  
 The same drilling pit used to drill the IHU # 34 will be re-opened and used again. Pit contents will be stockpiled on liner material to prevent soil contamination.  
 This well will have a Non-Standard BHL. The BHL is too close to the outer boundary of the 320 acre South half proration unit of Section 28.  
 Baker directional plan is attached.

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

H2S Contingency Plan on File  
 IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED [Signature] TITLE Engineer Tech. DATE 5/28/03

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 /s/ LESLIE A. THEISS TITLE FIELD MANAGER DATE JUL 03 2003

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

**APPROVAL FOR 1 YEAR**

DISTRICT I  
P.O. Box 1000, Hobbs, NM 88241-1000

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1984  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0710

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number	Pool Code	Pool Name
	33685	Indian Basin Upper Penn. Assoc.
Property Code	Property Name	Well Number
	INDIAN HILLS UNIT	53
OGRID No.	Operator Name	Elevation
14021	MARATHON OIL COMPANY	3702'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	28	21-S	24-E		1383'	NORTH	1586'	WEST	EDDY

Bottom Hole Location If Different From Surface

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320 <sup>N</sup> / <sub>8</sub>			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Jerry Fletcher</i> Signature</p> <p>Jerry Fletcher Printed Name</p> <p>Engineer Tech. Title</p> <p>5/28/03 Date</p>
	<p><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>May 20, 2003</p> <p>Date Surveyed _____ AWB</p> <p>Signature &amp; Seal of Professional Surveyor</p> <p><i>Ronald J. Edson</i> 5/23/03 03.11.0532</p>
	<p><b>GEODEIC COORDINATES</b> NAD 27 NME</p> <p>Y = 528872.9 X = 446801.8 LAT. 32°27'13.92"N LONG. 104°30'20.87"W</p>
	<p>Certificate No. RONALD J. EDSON 3238 GARY KIDSON 12641</p>

DISTRICT I  
P.O. Box 1688, Hobbs, NM 88241-1688

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1984  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0718

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

AMENDED REPORT

API Number	Pool Code	Pool Name
	33685	Indian Basin Upper Penn. Assoc.
Property Code	Property Name	Well Number
	INDIAN HILLS UNIT	53
OGRID No.	Operator Name	Elevation
14021	MARATHON OIL COMPANY	3702'

Surface Location

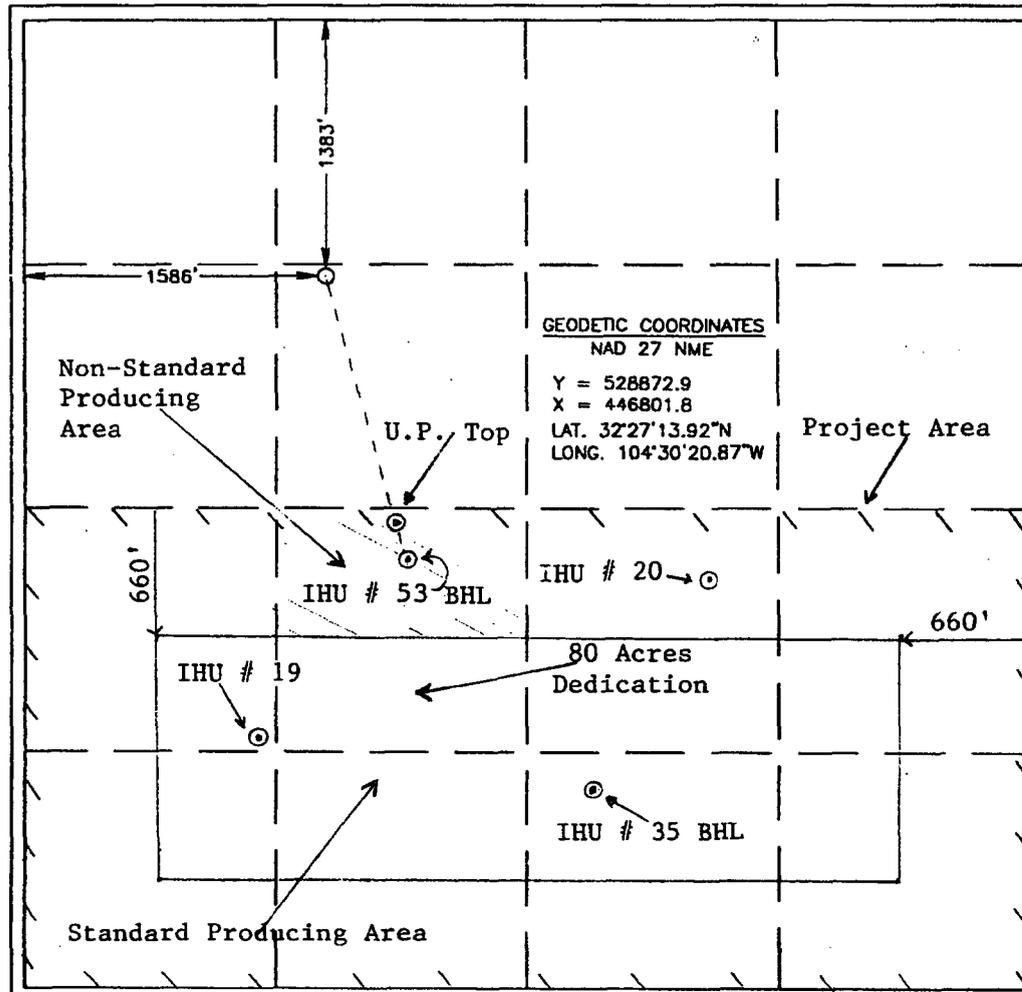
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	28	21-S	24-E		1383'	NORTH	1586'	WEST	EDDY

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
K	28	21-S			2397'	SOUTH	2014'	WEST	

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



**OPERATOR CERTIFICATION**

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

*Jerry Fletcher*  
Signature

Jerry Fletcher  
Printed Name

Engineer Technician  
Title

5/28/03  
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.

May 20, 2003  
Date Surveyed

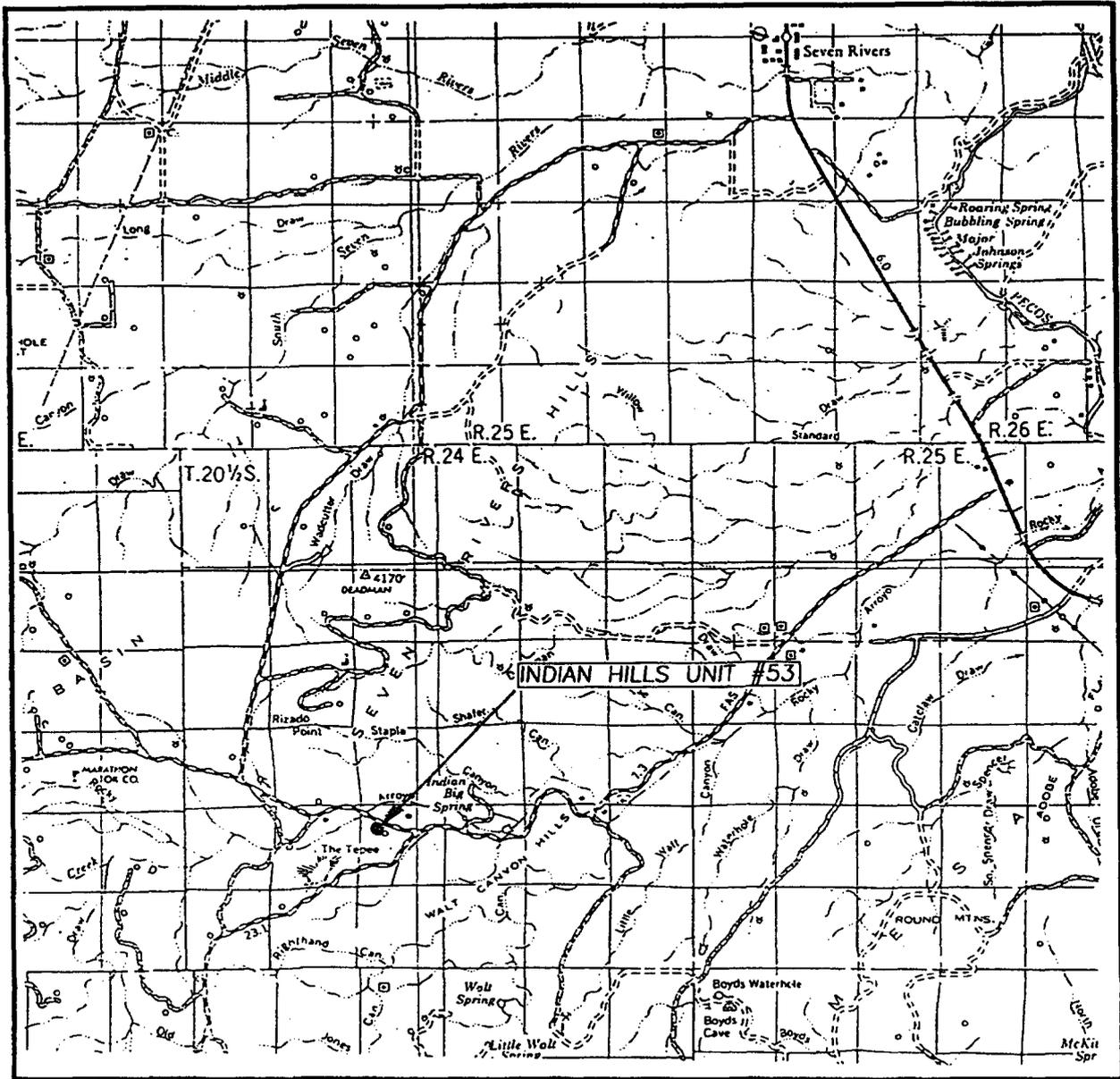
AWB  
Signature & Seal of Professional Surveyor

*Ronald J. Edson*  
Professional Surveyor

03.11.0532  
Stamp

Certificate No. RONALD J. EDSON 3298  
GARY KIDSON 12641

# VICINITY MAP

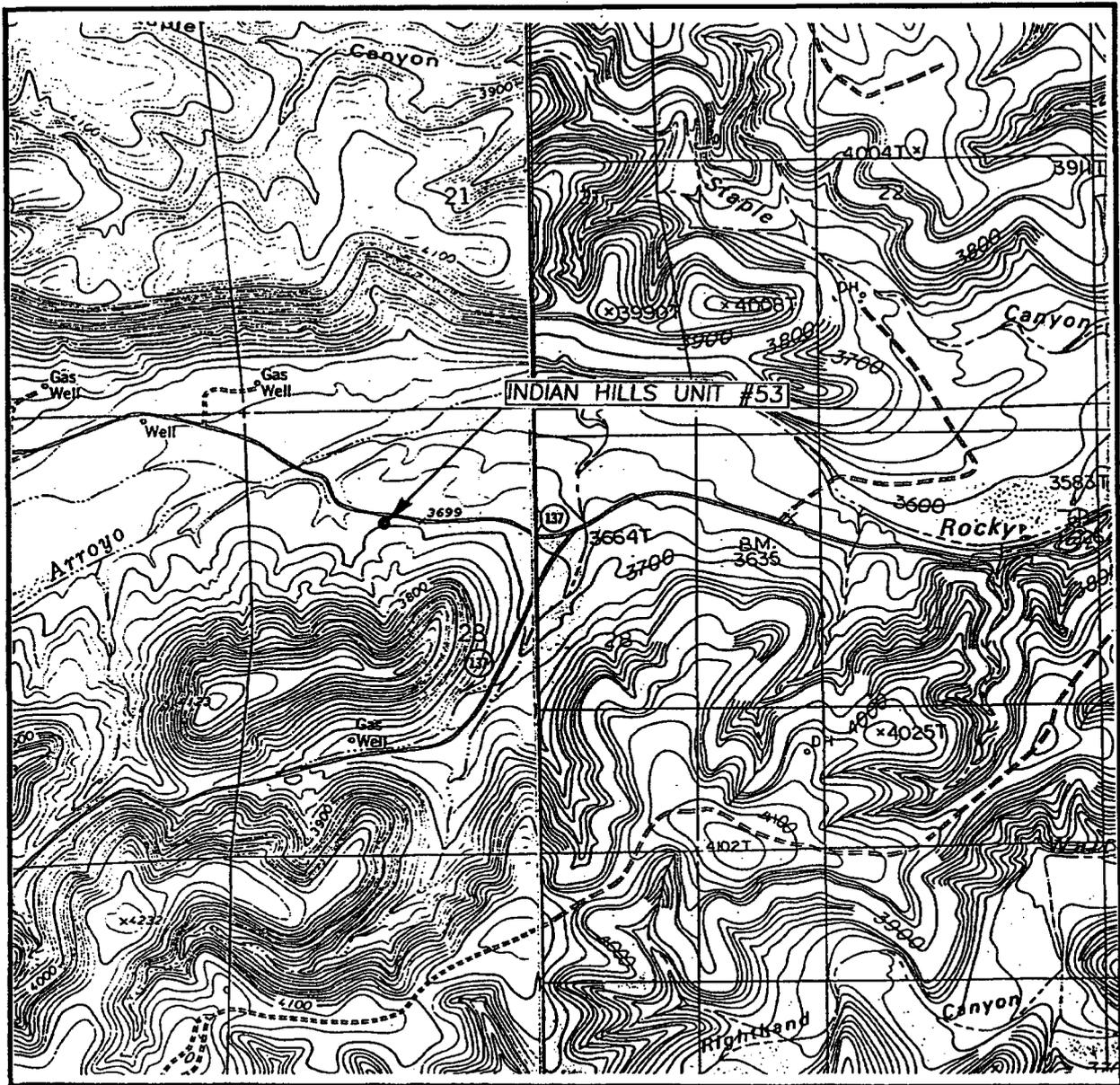


SCALE: 1" = 2 MILES

SEC. 28 TWP. 21-S RGE. 24-E  
 SURVEY N.M.P.M.  
 COUNTY EDDY  
 DESCRIPTION 1383' FNL 1586' FWL  
 ELEVATION 3702'  
 OPERATOR MARATHON OIL COMPANY  
 LEASE INDIAN HILLS UNIT

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

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 20'  
 MARTHA CREEK, N.M.  
 AZOTEA PEAK, N.M.

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

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1383' FNL 1586' FWL

ELEVATION 3702'

OPERATOR MARATHON OIL COMPANY

LEASE INDIAN HILLS UNIT

U.S.G.S. TOPOGRAPHIC MAP  
 MARTHA CREEK AZOTEA PEAK, N.M.

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



Marathon Oil Company  
Indian Hills Unit #53

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 : P0 2DJ SM/JF  
Our ref : Prop3862  
License :

Date printed : 27-May-2003  
Date created : 27-May-2003  
Last revised : 27-May-2003

Field is centred on n32 30 0.000, w104 30 0  
Structure is centred on 446801.800, 528872.900, 999.000000, N

Slot location is n32 27 13.917, w104 30 20.874  
Slot Grid coordinates are N 528872.900, E 446801.800  
Slot local coordinates are 0.00 N 0.00 E

Projection type: mercator - New Mexico East (3001), Spheroid: Clarke - 1866  
Reference North is Grid North

Marathon Oil Company  
 Indian Hills Unit #53, slot #1  
 INDIAN BASIN, Eddy County New Mexico

PROPOSAL LISTING Page 1  
 Your ref : PO 2DJ SM/JF  
 Last revised : 27-May-2003

Measured Depth	Inclin Degrees	Azimuth Degrees	True Vert Depth	R O O R D I N A T E S	Dogleg Deg/100ft	Vert Sect	G R I D Easting	C O O R D S Northing
0.00	0.00	164.55	0.00	0.00N	0.00E	0.00	446801.80	528872.90
500.00	0.00	164.55	500.00	0.00N	0.00E	0.00	446801.80	528872.90
1000.00	0.00	164.55	1000.00	0.00N	0.00E	0.00	446801.80	528872.90
1500.00	0.00	164.55	1500.00	0.00N	0.00E	0.00	446801.80	528872.90
2000.00	0.00	164.55	2000.00	0.00N	0.00E	0.00	446801.80	528872.90
2100.00	2.50	164.55	2099.97	2.10S	0.58E	2.50	446802.38	528870.80
2200.00	5.00	164.55	2199.75	8.41S	2.32E	2.50	446804.12	528864.49
2300.00	7.50	164.55	2299.14	18.90S	5.22E	2.50	446807.02	528854.00
2400.00	10.00	164.55	2397.97	33.56S	9.28E	2.50	446811.08	528839.34
2500.00	12.50	164.55	2496.04	52.36S	14.48E	2.50	446816.28	528820.54
2600.00	15.00	164.55	2593.17	75.27S	20.81E	2.50	446822.61	528797.63
2604.74	15.12	164.55	2597.74	76.45S	21.14E	2.50	446822.94	528796.45
3000.00	15.12	164.55	2979.33	175.82S	48.60E	0.00	446850.40	528697.08
3500.00	15.12	164.55	3462.02	301.51S	83.35E	0.00	446885.15	528571.39
4000.00	15.12	164.55	3944.72	427.20S	118.10E	0.00	446919.90	528445.70
4500.00	15.12	164.55	4427.41	552.90S	152.85E	0.00	446954.65	528320.00
5000.00	15.12	164.55	4910.10	678.59S	187.59E	0.00	446989.39	528194.31
5500.00	15.12	164.55	5392.80	804.28S	222.34E	0.00	447024.14	528068.62
6000.00	15.12	164.55	5875.49	929.97S	257.09E	0.00	447058.89	527942.93
6500.00	15.12	164.55	6358.19	1055.67S	291.84E	0.00	447093.64	527817.23
7000.00	15.12	164.55	6840.88	1181.36S	326.58E	0.00	447128.38	527691.54
7500.00	15.12	164.55	7323.58	1307.05S	361.33E	0.00	447163.13	527565.85
7598.84	15.12	164.55	7419.00	1331.90S	368.20E	0.00	447170.00	527541.00
8323.94	15.12	164.55	8119.00	1514.19S	418.59E	0.00	447220.39	527358.71

Top U.P.  
 Terminus

All data in feet unless otherwise stated. Calculation uses minimum curvature method.  
 Coordinates from slot #1 and TVD from rotary table.  
 Bottom hole distance is 1570.98 on azimuth 164.55 degrees from wellhead.  
 Vertical section is from N 0.00 E 0.00 on azimuth 164.55 degrees.  
 Grid is mercator - New Mexico East (3001).  
 Grid coordinates in FBET and computed using the Clarke - 1866 spheroid  
 Presented by Baker Hughes INTEQ

Marathon Oil Company  
 Indian Hills Unit #53, slot #1  
 INDIAN BASIN, Eddy County New Mexico

PROPOSAL LISTING Page 2  
 Your ref : P0 2DJ SM/JF  
 Last revised : 27-May-2003

Comments in wellpath  
 =====

MD	TVD	Rectangular Coords.	Comment
7598.84	7419.00	1331.90S 368.20E	TOP OF UPPER PENN

Targets associated with this wellpath  
 =====

Target name                      Geographic Location                      T.V.D.                      Rectangular Coordinates                      Revised

-----  
 TOP OF UPPER PENN                      447170.000, 527541.000, 0.00000                      7419.00                      1331.90S                      368.20E                      27-May-2003

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

Oil Cons.  
N.M. Div-Dist. 2  
1301 W. Grand Avenue  
Artesia, NM 88210

FORM APPROVED  
OMB NO. 1004-0135  
Expires: November 30, 2000

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well  
 Oil Well  Gas Well  Other

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

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

3b. Phone No. (include area code)  
**1-800-351-1417**

5. Lease Serial No.  
**NM-030482**

6. If Indian, Allottee or Tribe Name

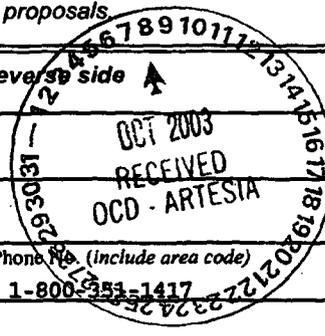
7. If Unit or CA/Agreement, Name and/or No.  
**INDIAN HILLS UNIT**

8. Well Name and No.  
**INDIAN HILLS UNIT 53**

9. API Well No.  
**30-015-32875**

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

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

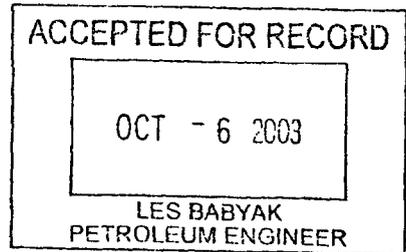


12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

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

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

Please see attached well summary report.



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

Name (Printed/Typed) **Mike Mick** Title **Eng. Tech**

Date **10-02-03**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

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

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Office \_\_\_\_\_

Marathon Oil Company  
Casing Report

Legal Well Name: INDIAN HILLS UNIT NO. 53  
Common Well Name: INDIAN HILLS UNIT NO. 53  
Event Name: ORIGINAL DRILLING

Report #: 1  
Start: 8/7/2003

Spud Date: 8/14/2003  
Report Date: 8/15/2003  
End:

General Information

String Type: SURFACE CASING  
Hole TVD: 1,210.0 (ft)  
Ground Level: 3,702.00 (ft)  
Circ Hours: (hr)

Permanent Datum: KELLY BUSHING  
KB-Datum: 0.00 (ft)  
CF Elevation: (ft)  
Mud Lost: (bbl)

Hole Size: (in)  
Water TMD: (ft)  
Liner Overlap: (ft)  
KB to Cutoff: (ft)

Hole TMD: 1,210.0 (ft)  
Str Wt on Slips: (lb)  
Max Hole Angle: 0.40 (°)  
Days From Spud: (days)

Casing Flange / Wellhead

Manufacturer: WOOD GROUP  
Hanger Model: 14" x 9 5/8"  
Model: FMC C-22  
Packoff Model:  
Top Hub/Flange: 11,000 (in) / 3,000 (psi)  
BTM Hub/Flange: 9,625 (in) / (psi)

Actual TMD Set: 1,210.120 (ft)

Integral Casing Detail

Item	Size (in)	Weight (lb/ft)	Grade	Drift (ft)	Threads	UTS	Length (ft)	Top (ft)	Mid-Term (ft)	Bottom (ft)	Manufacturer	Model	Cond.	Max OD (in)	Int ID (in)	Comp Name	
CASING FLOAT SHOE	9.625	36.0	K-55	8.765	8 ROUND	1	1,100									NEW	8.921
CASING JOINT(S)	9.625	36.0	K-55	8.765	8 ROUND	1	44.970	1.10								NEW	8.921
CASING FLOAT COLLA	9.625	36.0	K-55	8.765	8 ROUND	1	1,100	46.07								NEW	8.921
CASING JOINT(S)	9.625	36.0	K-55	8.765	8 ROUND	26	1,162.950	47.17								NEW	8.921

Non-Integral Casing Accessories

Accessory	Manufacturer	Number	Spacing (ft)	Top (ft)	Interval (ft)	Bottom (ft)	How Fixed
CENTRALIZER	GEMCO	11	90.0	45.0	1,195.0		CLAMPED

**Marathon Oil Company**  
**Cementing Report**

Legal Well Name: INDIAN HILLS UNIT NO. 53      Spud Date: 8/14/2003  
 Common Well Name: INDIAN HILLS UNIT NO. 53      Report #: 1      Report Date: 8/15/2003  
 Event Name: ORIGINAL DRILLING      Start: 8/7/2003      End:

**Cement Job Type: Primary**

Primary	Squeeze Open Hole	Squeeze Casing	Plug
Hole Size: 12.250 (in)	Hole Size:	Hole Size:	Hole Size:
TMD Set: 1,210.0 (ft)	SQ TMD: (ft)	TMD Set:	Top Set: (ft)
Date Set: 8/15/2003	SQ Date:	Date Set:	BTM set: (ft)
Csg Type: SURFACE CASING	SQ Type:	Csg Type:	Plug Date:
Csg Size: 9.625 (in)		SQ TMD:	Plug Type:
		SQ Date:	Drilled Out:
Cmtd. Csg: OPEN HOLE	Cmtd. Csg:	Cmtd. Csg:	Cmtd. Csg:

Cement Co: HALLIBURTON      Cementer:      Pipe Movement: NO MOVEMENT

**Pipe Movement**

Rot Time Start: :      Time End: :      RPM:      Init Torque: (ft-lbf)      Avg Torque: (ft-lbf)      Max Torque: (ft-lbf)  
 Rec Time Start: :      Time End: :      SPM:      Stroke Length: (ft)      Drag Up: (lb)      Drag Down: (lb)

**Stage No. 1 of 1**

Type: PRIM CMT 1ST STAGE	Start Mix Cmt: 18:30	Disp Avg Rate: 4.00 (bbl/min)	Returns: 100% returns
Volume Excess %: 100.00	Start Slurry Displ: :	Disp Max Rate: 6.00 (bbl/min)	Total Mud Lost: (bbl)
Meas. From: KB	Start Displ: :	Bump Plug: Y	Cmt Vol to Surf: 120.00 (bbl)
Time Circ Prior	End Pumping: :	Press Prior: 600 (psi)	
To Cementing: 1.00	End Pump Date:	Press Bumped: 900 (psi)	Ann Flow After: N
Mud Circ Rate: 250 (gpm)	Top Plug: N	Press Held: 5 (min)	Mixing Method:
Mud Circ Press: 300 (psi)	Bottom Plug: Y	Float Held: Y	Density Meas By:

**Mud Data**

Type: AIR/GAS Density: (ppg) Visc: (s/qt)      PVYP: (cp) / (lb/100ft<sup>2</sup>) Gels 10 sec: (lb/100ft<sup>2</sup>) Gels 10 min: (lb/100ft<sup>2</sup>)  
 Bottom Hole Circulating Temperature: 76 (°F)      Bottom Hole Static Temperature: (°F)  
 Displacement Fluid Type: FRESH WATER      Density: 8.4 (ppg)      Volume: 138.00 (bbl)

**Stage No. 1 Slurry No. 1 of 4**

**Slurry Data**

Fluid Type: LEAD      Description: FOAM      Class: CLASS C      Purpose: FILLER CEM  
 Slurry Interval: (ft)      To: 837.00 (ft)      Cmt Vol: 650 (sk)      Density: 14.8 (ppg)      Yield: 1.34 (ft<sup>3</sup>/sk)      Mix Water: 6.36 (gal/sk)  
 Water Source: Frac-tanks      Slurry Vol: 10.0 (bbl)      Water Vol: 120.0 (bbl)      Other Vol: ( )      Foam Job: Y

**Test Data**

	Time	Temp	Pressure
Thickening Time: 3.00	Temperature: (°F)	Compressive Strength 1: 12.00	(°F) 600 (psi)
Free Water: (%)	Temperature: (°F)	Compressive Strength 2: 24.00	(°F) 1,950 (psi)
Fluid Loss: 800.0 (cc)	Temperature: (°F)		
Fluid Loss Pressure: (°F)			

**Marathon Oil Company  
Cementing Report**

Legal Well Name: INDIAN HILLS UNIT NO. 53      Spud Date: 8/14/2003  
 Common Well Name: INDIAN HILLS UNIT NO. 53      Report #: 1      Report Date: 8/15/2003  
 Event Name: ORIGINAL DRILLING      Start: 8/7/2003      End:

**Stage No: 1 Slurry No: 1 of 4 - Additives**

Trade Name	Type	Concentration	Units	Liquid Conc.	Units
1.5% ZoneSeal		1.50			% BWOC
CALC2	ACCELERATOR	2.00			% BWOC

**Stage No: 1 Slurry No: 2 of 4**

**Slurry Data**  
 Fluid Type: TAIL      Description: NEAT      Class: CLASS C      Purpose: SHOE INTEG  
 Slurry Interval: (ft) To: (ft)      Cmt Vol: 150 (sk)      Density: 14.8 (ppg)      Yield: 1.34 (ft<sup>3</sup>/sk)      Mix Water: 6.34 (gal/sk)  
 Water Source: Frac tanks      Slurry Vol: (bbl)      Water Vol: 36.0 (bbl)      Other Vol: ( )      Foam Job: N

**Test Data**

	Temperature: (°F)	Time	Temp	Pressure
Thickening Time:		Compressive Strength 1: 12.00	(°F)	1,800 (psi)
Free Water: (%)		Compressive Strength 2: 24.00	(°F)	3,200 (psi)
Fluid Loss: (cc)				
Fluid Loss Pressure: (°F)				

**Stage No: 1 Slurry No: 2 of 4 - Additives**

Trade Name	Type	Concentration	Units	Liquid Conc.	Units
CALC2	ACCELERATOR	2.00			% BWOC
Cal-Seal		10.00			% BWOC

**Stage No: 1 Slurry No: 3 of 4**

**Slurry Data**  
 Fluid Type: OTHER      Description: FOAM      Class: CLASS C      Purpose: FILLER CEM  
 Slurry Interval: 200.00 (ft) To: 450.00 (ft)      Cmt Vol: 150 (sk)      Density: 14.8 (ppg)      Yield: 1.35 (ft<sup>3</sup>/sk)      Mix Water: 6.37 (gal/sk)  
 Water Source:      Slurry Vol: (bbl)      Water Vol: (bbl)      Other Vol: ( )      Foam Job: Y

**Test Data**

	Temperature: (°F)	Time	Temp	Pressure
Thickening Time:		Compressive Strength 1: 12.00	(°F)	600 (psi)
Free Water: (%)		Compressive Strength 2: 24.00	(°F)	1,200 (psi)
Fluid Loss: 800.0 (cc)				
Fluid Loss Pressure: (°F)				

**Stage No: 1 Slurry No: 3 of 4 - Additives**

Trade Name	Type	Concentration	Units	Liquid Conc.	Units
Zonesealant		1.50			% BWOC
CaCl2		2.00			% BWOC

## Cementing Report

Legal Well Name: INDIAN HILLS UNIT NO. 53      Report #: 1      Spud Date: 8/14/2003  
 Common Well Name: INDIAN HILLS UNIT NO. 53      Start: 8/7/2003      Report Date: 8/15/2003  
 Event Name: ORIGINAL DRILLING      End:

## Stage No: 1 Slurry No: 4 of 4

## Slurry Data

Fluid Type: OTHER      Description: BENTONITE ACCEL.      Class: CLASS C      Purpose: CONDUCTOR  
 Slurry Interval: (ft)      To: (ft)      Cmt Vol: 30 (sk)      Density: 14.8 (ppg)      Yield: 1.32 (ft<sup>3</sup>/sk)      Mix Water: 14.80 (gal/sk)  
 Water Source:      Slurry Vol: (bbl)      Water Vol: (bbl)      Other Vol: ( )      Foam Job: Y

## Test Data

	Temperature: (°F)	Time	Temp	Pressure
Thickening Time:		Compressive Strength 1: 12.00	(°F)	1,800 (psi)
Free Water: (%)		Compressive Strength 2: 24.00	(°F)	3,200 (psi)
Fluid Loss: 200.0 (cc)				
Fluid Loss Pressure: (°F)				

## Stage No: 1 Slurry No: 4 of 4 - Additives

Trade Name	Type	Concentration	Units	Liquid Cont.	Units
CALC2	ACCELERATOR	2.00			% BWOC
Cal-Seal		10.00			% BWOC

## Casing Test

## Shoe Test

## Liner Top Test

Test Press: 2,000 (psi)	Pressure: (ppge)	Liner Lap:
For: 10 (min)	Tool: N	Pos Test: (ppge)      Tool: N
Cement Found between	Open Hole: (ft)	Neg Test: (ppge)      Tool: N
Shoe and Collar: Y	Hrs Before Test:	Hrs Before Test:
		Cement Found on Tool: N

## Log/Survey Evaluation

## Interpretation Summary

CBL Run: N	Cement Top: 100 (ft)
Under Pressure: (psi)	How Determined: Water Volume/Filled
Bond Quality:	TOC Sufficient: N
Cet Run: N	Job Rating:
Bond Quality:	If Unsuccessful Detection Indicator:
Temp Survey: N	Remedial Cementing Required: N
Hrs Prior to Log:	Number of Remedial Squeezes:

## Operations Summary Report

Legal Well Name: INDIAN HILLS UNIT NO. 53  
 Common Well Name: INDIAN HILLS UNIT NO. 53  
 Event Name: ORIGINAL DRILLING  
 Contractor Name: MCVAY DRILLING  
 Rig Name: MCVAY DRILLING

Start: 8/7/2003  
 Rig Release: 8/30/2003  
 Rig Number: 4

Spud Date: 8/14/2003  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
8/13/2003	06:00 - 22:00	16.00	RIG	MIRU	MIRU	Location built by Key Services: Added on to IHU #34 Drilled & set 40' by 14" conductor pipe, rat & mouse hole. Cemented conductor to surface. Welded on 13 5/8" flange & N/U 13 5/8" 3m Hydril w/ rotating head. MIRU rig & equipment. Weld on flowline
8/15/2003	06:00 - 09:00	3.00	EQUIP	RURD	MIRU	RU/RD Equipment. PU 12 1/4" hammer bit. Safety meeting
	09:00 - 13:30	4.50	DRILL	DOHR	DRLSUR	Spudded 12 1/4" hole @ 0900 hrs. Drill Open Hole Rotary. Air drilled f/ 56' t/ 295'.
	13:30 - 14:45	1.25	EQUIP	REQP	DRLSUR	Survey. Redman shut down Booster to ck oil. Not able to start. Chg out starter. Down 1 hr.
	14:45 - 20:30	5.75	DRILL	AIR	DRLSUR	Air Drilling. Water @ 491'. 2 t/3 BPM.
	20:30 - 20:45	0.25	SURV	GYRO	DRLSUR	Survey with GYRO system
8/16/2003	20:45 - 02:15	5.50	DRILL	AIR	DRLSUR	Aired drilled
	02:15 - 02:30	0.25	SURV	GYRO	DRLSUR	Survey with GYRO system
	02:30 - 06:00	3.50	DRILL	AIR	DRLSUR	Aired drilled 30 GPH 3200 SCF Drilling 48'/hr.
	06:00 - 09:00	3.00	DRILL	AIR	DRLSUR	Air Drilling
	09:00 - 09:15	0.25	SURV	GYRO	DRLSUR	Survey with GYRO system
	09:15 - 13:00	3.75	DRILL	AIR	DRLSUR	Air Drilling
	13:00 - 13:15	0.25	CIRC	CLN	DRLSUR	Circulate Clean
	13:15 - 13:30	0.25	SURV	GYRO	DRLSUR	Survey with GYRO system
	13:30 - 14:30	1.00	TRIP	BIT	DRLSUR	TOOH. LD 1- 8" DC. L/D Hammer.
	14:30 - 17:30	3.00	CSG	RUN	CSGSUR	Safety meeting. RU. Ran 27 jts of 9 5/8", 36#, K-55 csg. Landed @ 1210'.
	17:30 - 18:30	1.00	CIRC	CLN	CSGSUR	Circulate Clean. Good returns.
	18:30 - 20:00	1.50	CEMT	PRIM	CSGSUR	Safety meeting. Tst t/ 3000 psi. RU Cmt. Pumped 10,000 SCF of N2, 20 bbls of gelled water ahead of Cmt w/ 650 sks. of Premuim Plus( foamed) tailed w/ 150 sks of Premuim Plus w/ 2% CaCl2. Circ 400 sks. Bullheaded 35 sks of Thix-set down annulus. SI @ 108 psi.
	8/17/2003	20:00 - 00:00	4.00	WAIT	CEMT	CSGSUR
00:00 - 03:00		3.00	NUND	UBOP	CSGSUR	Cut of 14" & 9 5/8" csg. Pulled Hydril. Welded on 9 5/8" SOW x 11" 3M Casing head. Tested t/ 1500 psi.
03:00 - 06:00		3.00	NUND	UBOP	CSGSUR	NU 11" BOP & choke @ 0600 hrs.
06:00 - 07:00		1.00	NUND	UBOP	CSGSUR	Install BOP Equipment
07:00 - 12:30		5.50	TEST	BOP	CSGSUR	Tested pipe & blind rams, choke, TIW valves t/ 3000 psi high, 250 psi low. Tested Hydril t/ 1500 psi high, 250 psi low. Ran Acc test. Replaced 1-" manual choke & 2" choke valve.
12:30 - 15:30		3.00	TRIP	BBHD	CSGSUR	PU 8 3/4" bit. Motor, NM DC, Tested Teleco & motor. TIH w/ 6 1/4" DC's & HWDP. Tagged @1152'.
15:30 - 15:45		0.25			CSGSUR	Test Casing 1500 psi.
15:45 - 16:30		0.75	DRILL	CEMT	CSGSUR	Drill Cement / Drill Shoe
16:30 - 17:30		1.00	EQUIP	RURD	CSGSUR	Weld saddle in flowline. Hook up RPM's ( Epoch)
17:30 - 18:15		0.75	DRILL	CEMT	CSGSUR	Drill Cement / Drill Shoe
8/18/2003	18:15 - 19:30	1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary t/ KOP.
	19:30 - 20:30	1.00	RIG	RCNT	DRLPR	Repaired Rotary lock.
	20:30 - 22:30	2.00	CHECK	SURF	DRLPR	Trouble shoot Panal t/ Teleco.
	22:30 - 00:30	2.00	TRIP	BHA	DRLPR	Trip for BHA
	00:30 - 05:00	4.50	WAIT	EQIP	DRLPR	Wait on Teleco.
	05:00 - 06:00	1.00	TRIP	BHA	DRLPR	PU new Teleco. TIH @ 0600 hrs.
	06:00 - 06:30	0.50	TRIP	BHA	DRLPR	Trip for BHA
	06:30 - 06:45	0.25	DRILL	DOHS	DRLPR	Drill Open Slide
	06:45 - 07:15	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	07:15 - 07:45	0.50	DRILL	DOHS	DRLPR	Drill Open Slide
	07:45 - 08:00	0.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	08:00 - 08:30	0.50	DRILL	DOHS	DRLPR	Drill Open Slide

## Operations Summary Report

Legal Well Name: INDIAN HILLS UNIT NO. 53

Common Well Name: INDIAN HILLS UNIT NO. 53

Event Name: ORIGINAL DRILLING

Contractor Name: MCVAY DRILLING

Rig Name: MCVAY DRILLING

Start: 8/7/2003

Rig Release: 8/30/2003

Rig Number: 4

Spud Date: 8/14/2003

End:

Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operation
8/18/2003	08:30 - 09:00	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	09:00 - 09:15	0.25	DRILL	DOHS	DRLPR	Drill Open Slide
	09:15 - 09:30	0.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	09:30 - 09:45	0.25	EQUIP	RSEQ	DRLPR	Chg out flowline valve.
	09:45 - 10:30	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	10:30 - 10:45	0.25	DRILL	DOHS	DRLPR	Drill Open Slide
	10:45 - 12:00	1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	12:00 - 12:15	0.25	DRILL	DOHS	DRLPR	Drill Open Slide
	12:15 - 12:45	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	12:45 - 13:15	0.50	DRILL	DOHS	DRLPR	Drill Open Slide
	13:15 - 13:45	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	13:45 - 14:00	0.25	DRILL	DOHS	DRLPR	Drill Open Slide
	14:00 - 14:30	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	14:30 - 14:45	0.25	DRILL	DOHS	DRLPR	Drill Open Slide
	14:45 - 15:15	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	15:15 - 15:45	0.50	DRILL	DOHS	DRLPR	Drill Open Slide
	15:45 - 16:15	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	16:15 - 16:30	0.25	DRILL	DOHS	DRLPR	Drill Open Slide
	16:30 - 17:00	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	17:00 - 17:30	0.50	DRILL	DOHS	DRLPR	Drill Open Slide
	17:30 - 18:00	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	18:00 - 18:30	0.50	DRILL	DOHS	DRLPR	Drill Open Slide
	18:30 - 19:00	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	19:00 - 19:30	0.50	DRILL	DOHS	DRLPR	Drill Open Slide
	19:30 - 20:00	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	20:00 - 20:15	0.25	DRILL	DOHS	DRLPR	Drill Open Slide
	20:15 - 20:45	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	20:45 - 21:00	0.25	DRILL	DOHS	DRLPR	Drill Open Slide
	21:00 - 23:15	2.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	23:15 - 23:30	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	23:30 - 00:45	1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	00:45 - 01:00	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	01:00 - 02:00	1.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	02:00 - 02:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	02:15 - 02:30	0.25	DRILL	DOHS	DRLPR	Drill Open Slide
	02:30 - 03:45	1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	03:45 - 04:00	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	04:00 - 04:15	0.25	DRILL	DOHS	DRLPR	Drill Open Slide
	04:15 - 06:00	1.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	8/19/2003	06:00 - 07:00	1.00	DRILL	DOHR	DRLPR
07:00 - 07:15		0.25	SURV	MWD	DRLPR	Survey with MWD Tools
07:15 - 07:30		0.25	DRILL	DOHS	DRLPR	Drill Open Slide
07:30 - 10:00		2.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
10:00 - 10:15		0.25	SURV	MWD	DRLPR	Survey with MWD Tools
10:15 - 10:30		0.25	DRILL	DOHS	DRLPR	Drill Open Slide
10:30 - 11:45		1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
11:45 - 12:00		0.25	SURV	MWD	DRLPR	Survey with MWD Tools
12:00 - 12:15		0.25	DRILL	DOHS	DRLPR	Drill Open Slide
12:15 - 16:15		4.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
16:15 - 16:30		0.25	SURV	MWD	DRLPR	Survey with MWD Tools
16:30 - 16:45		0.25	DRILL	DOHS	DRLPR	Drill Open Slide
16:45 - 18:30	1.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary	
18:30 - 18:45	0.25	SURV	MWD	DRLPR	Survey with MWD Tools	

## Operations Summary Report

Legal Well Name: INDIAN HILLS UNIT NO. 53

Common Well Name: INDIAN HILLS UNIT NO. 53

Event Name: ORIGINAL DRILLING

Contractor Name: MCVAY DRILLING

Rig Name: MCVAY DRILLING

Start: 8/7/2003

Rig Release: 8/30/2003

Rig Number: 4

Spud Date: 8/14/2003

End:

Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations	
8/19/2003	18:45 - 19:00	0.25	DRILL	DOHS	DRLPR	Drill Open Slide	
	19:00 - 20:45	1.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary	
	20:45 - 21:00	0.25	SURV	MWD	DRLPR	Survey with MWD Tools	
	21:00 - 21:15	0.25	DRILL	DOHS	DRLPR	Drill Open Slide	
	21:15 - 23:00	1.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary	
	23:00 - 23:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools	
	23:15 - 01:30	2.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary	
	01:30 - 01:45	0.25	SURV	MWD	DRLPR	Survey with MWD Tools	
	01:45 - 02:15	0.50	DRILL	DOHS	DRLPR	Drill Open Slide	
	02:15 - 04:15	2.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary	
	04:15 - 04:30	0.25	SURV	MWD	DRLPR	Survey with MWD Tools	
	04:30 - 06:00	1.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary	
	8/20/2003	06:00 - 07:00	1.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
		07:00 - 07:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
07:15 - 07:45		0.50	DRILL	DOHS	DRLPR	Drill Open Slide	
07:45 - 09:45		2.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary	
09:45 - 10:00		0.25	SURV	MWD	DRLPR	Survey with MWD Tools	
10:00 - 10:30		0.50	DRILL	DOHS	DRLPR	Drill Open Slide	
10:30 - 12:45		2.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary	
12:45 - 13:00		0.25	SURV	MWD	DRLPR	Survey with MWD Tools	
13:00 - 16:00		3.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary	
16:00 - 16:15		0.25	SURV	MWD	DRLPR	Survey with MWD Tools	
16:15 - 18:45		2.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary	
18:45 - 19:00		0.25	SURV	MWD	DRLPR	Survey with MWD Tools	
19:00 - 19:30		0.50	DRILL	DOHS	DRLPR	Drill Open Slide	
19:30 - 21:45		2.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary	
21:45 - 22:00		0.25	SURV	MWD	DRLPR	Survey with MWD Tools	
22:00 - 22:30		0.50	DRILL	DOHS	DRLPR	Drill Open Slide	
22:30 - 01:00		2.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary	
8/21/2003		01:00 - 01:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	01:15 - 02:30	1.25	DRILL	DOHS	DRLPR	Drill Open Slide	
	02:30 - 04:45	2.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary	
	04:45 - 05:00	0.25	SURV	MWD	DRLPR	Survey with MWD Tools	
	05:00 - 06:00	1.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary	
	06:00 - 08:00	2.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary	
	08:00 - 08:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools	
	08:15 - 10:30	2.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary	
	10:30 - 10:45	0.25	SURV	MWD	DRLPR	Survey with MWD Tools	
	10:45 - 13:15	2.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary	
	13:15 - 13:30	0.25	SURV	MWD	DRLPR	Survey with MWD Tools	
	13:30 - 16:00	2.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary	
	16:00 - 16:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools	
	16:15 - 16:45	0.50	DRILL	DOHS	DRLPR	Drill Open Slide w/ 180 T/F	
	16:45 - 19:15	2.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary	
	19:15 - 19:30	0.25	SURV	MWD	DRLPR	Survey with MWD Tools	
	19:30 - 23:15	3.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary . Switched to pump #1. 4319' to 4395'. Lower out put & pressure. Cut back on wt. P-rate slowed down to 25' Per hour.	
	23:15 - 23:30	0.25	SURV	MWD	DRLPR	Survey with MWD Tools	
23:30 - 02:00	2.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary		
02:00 - 02:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools		
02:15 - 05:00	2.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary		
05:00 - 05:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools		
05:15 - 06:00	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary		

## Operations Summary Report

Legal Well Name: INDIAN HILLS UNIT NO. 53  
 Common Well Name: INDIAN HILLS UNIT NO. 53  
 Event Name: ORIGINAL DRILLING  
 Contractor Name: MCVAY DRILLING  
 Rig Name: MCVAY DRILLING

Spud Date: 8/14/2003  
 Start: 8/7/2003  
 End:  
 Rig Release: 8/30/2003  
 Group:  
 Rig Number: 4

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
8/22/2003	06:00 - 08:00	2.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	08:00 - 08:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	08:15 - 08:45	0.50	DRILL	DOHS	DRLPR	Drill Open Slide . 160R . Switched to pump #1.
	08:45 - 11:45	3.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary. Still on pump #1. Replace swabs on pump #2. P-rate slowed down due to less wt on bit & less gpm on motor.
	11:45 - 12:00	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	12:00 - 15:00	3.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary. Switched back to pump #2.
	15:00 - 15:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	15:15 - 17:15	2.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	17:15 - 17:30	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	17:30 - 20:30	3.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	20:30 - 20:45	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	20:45 - 21:45	1.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	21:45 - 00:30	2.75	TRIP	BIT	DRLPR	POOH w/ Bit #2. Bearing were going out on motor. Button's on bit started breaking of on gauge roll on all three comb's. Flat crested wear on bit.
	00:30 - 01:30	1.00	TRIP	BBHD	DRLPR	BHA/Bit Handling. Changed out motor bearing was going out & replace bit. Check motor & MWD O.K.. Installed bit #3.
01:30 - 05:30	4.00	TRIP	BIT	DRLPR	TIH w/ Bit #3 . Picked up kelly & wash 40' to btm. No fill.	
8/23/2003	05:30 - 06:00	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	06:00 - 08:00	2.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	08:00 - 08:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	08:15 - 08:30	0.25	DRILL	DOHS	DRLPR	Drill Open Slide. 110 R
	08:30 - 10:45	2.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	10:45 - 11:00	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	11:00 - 11:15	0.25	DRILL	DOHS	DRLPR	Drill Open Slide. 75R
	11:15 - 11:45	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	11:45 - 12:15	0.50	RIG	RCNT	DRLPR	Rig Repair, Contractor owned. Worked on over riding clutch.
	12:15 - 13:45	1.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	13:45 - 14:00	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	14:00 - 14:15	0.25	DRILL	DOHS	DRLPR	Drill Open Slide.H/S
	14:15 - 15:00	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	15:00 - 15:15	0.25	DRILL	DOHS	DRLPR	Drill Open Slide. 15R
	15:15 - 16:15	1.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	16:15 - 16:30	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	16:30 - 17:00	0.50	DRILL	DOHS	DRLPR	Drill Open Slide.H/S
	17:00 - 18:00	1.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	18:00 - 18:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	18:15 - 18:45	0.50	DRILL	DOHS	DRLPR	Drill Open Slide.
	18:45 - 19:45	1.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	19:45 - 20:00	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	20:00 - 20:30	0.50	DRILL	DOHS	DRLPR	Drill Open Slide
	20:30 - 21:30	1.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	21:30 - 21:45	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	21:45 - 22:30	0.75	DRILL	DOHS	DRLPR	Drill Open Slide
22:30 - 23:30	1.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary	
23:30 - 23:45	0.25	SURV	MWD	DRLPR	Survey with MWD Tools	
23:45 - 00:30	0.75	DRILL	DOHS	DRLPR	Drill Open Slide	
00:30 - 01:45	1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary	
01:45 - 02:00	0.25	SURV	MWD	DRLPR	Survey with MWD Tools	
02:00 - 02:45	0.75	DRILL	DOHS	DRLPR	Drill Open Slide	
02:45 - 03:45	1.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary	
03:45 - 04:00	0.25	SURV	MWD	DRLPR	Survey with MWD Tools	

## Operations Summary Report

Legal Well Name: INDIAN HILLS UNIT NO. 53  
 Common Well Name: INDIAN HILLS UNIT NO. 53  
 Event Name: ORIGINAL DRILLING  
 Contractor Name: MCVAY DRILLING  
 Rig Name: MCVAY DRILLING

Start: 8/7/2003  
 Rig Release: 8/30/2003  
 Rig Number: 4

Spud Date: 8/14/2003  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
8/23/2003	04:00 - 04:45	0.75	DRILL	DOHS	DRLPR	Drill Open Slide
	04:45 - 06:00	1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
8/24/2003	06:00 - 07:00	1.00	DRILL	DOHS	DRLPR	Drill Open Slide. 15L
	07:00 - 08:15	1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	08:15 - 08:30	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	08:30 - 09:00	0.50	DRILL	DOHS	DRLPR	Drill Open Slide. 30L
	09:00 - 10:15	1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	10:15 - 10:30	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	10:30 - 11:00	0.50	DRILL	DOHS	DRLPR	Drill Open Slide. 30L
	11:00 - 12:15	1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	12:15 - 12:30	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	12:30 - 13:00	0.50	DRILL	DOHS	DRLPR	Drill Open Slide. 30L
	13:00 - 14:15	1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	14:15 - 14:30	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	14:30 - 15:15	0.75	DRILL	DOHS	DRLPR	Drill Open Slide. 20L
	15:15 - 15:45	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	15:45 - 16:15	0.50	DRILL	DOHS	DRLPR	Drill Open Slide. 20L
	16:15 - 16:45	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	16:45 - 17:00	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	17:00 - 17:45	0.75	DRILL	DOHS	DRLPR	Drill Open Slide. 25L
	17:45 - 18:15	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	18:15 - 19:00	0.75	DRILL	DOHS	DRLPR	Drill Open Slide
	19:00 - 19:45	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	19:45 - 20:45	1.00	RIG	RCNT	DRLPR	Rig Repair, Contractor owned. Replaced overriding clutch plate.
	20:45 - 21:00	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	21:00 - 21:30	0.50	DRILL	DOHS	DRLPR	Drill Open Slide
	21:30 - 22:45	1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	22:45 - 23:00	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	23:00 - 00:00	1.00	DRILL	DOHS	DRLPR	Drill Open Slide
	00:00 - 01:15	1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	01:15 - 01:30	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	01:30 - 02:15	0.75	DRILL	DOHS	DRLPR	Drill Open Slide
	02:15 - 03:45	1.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	03:45 - 04:00	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	04:00 - 04:30	0.50	DRILL	DOHS	DRLPR	Drill Open Slide
	04:30 - 06:00	1.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
8/25/2003	06:00 - 06:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	06:15 - 06:30	0.25	DRILL	DOHS	DRLPR	Drill Open Slide. 45L
	06:30 - 08:00	1.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	08:00 - 08:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	08:15 - 08:30	0.25	DRILL	DOHS	DRLPR	Drill Open Slide. 110L
	08:30 - 11:00	2.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	11:00 - 11:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	11:15 - 13:30	2.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	13:30 - 13:45	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	13:45 - 14:00	0.25	NUND	URTH	DRLPR	Install Rotating Head
	14:00 - 14:30	0.50	DRILL	DOHS	DRLPR	Drill Open Slide. 175R
	14:30 - 16:15	1.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	16:15 - 16:30	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	16:30 - 17:00	0.50	DRILL	DOHS	DRLPR	Drill Open Slide. 165R
	17:00 - 18:45	1.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	18:45 - 19:00	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	19:00 - 19:30	0.50	DRILL	DOHS	DRLPR	Drill Open Slide.

## Operations Summary Report

Legal Well Name: INDIAN HILLS UNIT NO. 53  
 Common Well Name: INDIAN HILLS UNIT NO. 53  
 Event Name: ORIGINAL DRILLING  
 Contractor Name: MCVAY DRILLING  
 Rig Name: MCVAY DRILLING

Start: 8/7/2003  
 Rig Release: 8/30/2003  
 Rig Number: 4  
 Spud Date: 8/14/2003  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
8/25/2003	19:30 - 21:00	1.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	21:00 - 21:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	21:15 - 23:15	2.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	23:15 - 23:30	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	23:30 - 00:30	1.00	DRILL	DOHS	DRLPR	Drill Open Slide. 25R
	00:30 - 02:15	1.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	02:15 - 02:30	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	02:30 - 03:45	1.25	DRILL	DOHS	DRLPR	Drill Open Slide. HS
	03:45 - 06:00	2.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary. Switched to pump #1 @ depth 7145' to 7170'. Swab on motor side went out. Switched back to #2 @ 7170'.
	8/26/2003	06:00 - 06:45	0.75	DRILL	DOHS	DRLPR
06:45 - 07:15		0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary. Pumped 10 bbl sweeps w/ magnifiber & gel to clean hole.
07:15 - 07:45		0.50	DRILL	DOHS	DRLPR	Drill Open Slide. 15L
07:45 - 08:30		0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
08:30 - 08:45		0.25	SURV	MWD	DRLPR	Survey with MWD Tools
08:45 - 09:15		0.50	DRILL	DOHS	DRLPR	Drill Open Slide. 30L
09:15 - 10:45		1.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary. Pump 10-15 bbl sweeps w/ magnifiber & gel to clean hole.
10:45 - 11:00		0.25	SURV	MWD	DRLPR	Survey with MWD Tools
11:00 - 11:30		0.50	DRILL	DOHS	DRLPR	Drill Open Slide. 45L
11:30 - 13:00		1.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
13:00 - 13:15		0.25	SURV	MWD	DRLPR	Survey with MWD Tools
13:15 - 13:45		0.50	DRILL	DOHS	DRLPR	Drill Open Slide. 25L
13:45 - 15:15		1.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary. Pump 10-15 bbl sweeps w/ magnifiber & gel to clean hole.
15:15 - 15:30		0.25	SURV	MWD	DRLPR	Survey with MWD Tools
15:30 - 17:30		2.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
17:30 - 17:45		0.25	SURV	MWD	DRLPR	Survey with MWD Tools
17:45 - 18:00		0.25	DRILL	DOHS	DRLPR	Drill Open Slide. 120L
18:00 - 19:30		1.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary. Pumped
19:30 - 19:45		0.25	SURV	MWD	DRLPR	Survey with MWD Tools
19:45 - 20:15		0.50	DRILL	DOHS	DRLPR	Drill Open Slide. 120L
20:15 - 21:45		1.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary. Pump 10-15 bbl sweeps w/ magnifiber & gel to clean hole .
21:45 - 22:00		0.25	SURV	MWD	DRLPR	Survey with MWD Tools
22:00 - 23:15		1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary. Started losing returns.Pit check. 18-20 BPH.Stared pumping 25 bbl sweeps w/ magnifiber to clean hole & help w/ lost returns.
23:15 - 23:30		0.25	SURV	MWD	DRLPR	Survey with MWD Tools
23:30 - 00:00		0.50	DRILL	DOHS	DRLPR	Drill Open Slide. 120L
00:00 - 01:00		1.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
01:00 - 01:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools	
01:15 - 01:30	0.25	DRILL	DOHS	DRLPR	Drill Open Slide. 140L	
01:30 - 02:30	1.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary	
02:30 - 02:45	0.25	SURV	MWD	DRLPR	Survey with MWD Tools	
02:45 - 04:15	1.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary. Pump 25 bbl sweep w/ magnifiber w/ gel to sweep hole & help w/ lost returns.	
04:15 - 04:30	0.25	SURV	MWD	DRLPR	Survey with MWD Tools	
04:30 - 05:00	0.50	DRILL	DOHS	DRLPR	Drill Open Slide. 140L	
05:00 - 06:00	1.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary. Losing up to 30-35 bph.	
8/27/2003	06:00 - 06:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	06:15 - 06:30	0.25	DRILL	DOHS	DRLPR	Drill Open Slide. 160L

## Operations Summary Report

Legal Well Name: INDIAN HILLS UNIT NO. 53  
 Common Well Name: INDIAN HILLS UNIT NO. 53  
 Event Name: ORIGINAL DRILLING  
 Contractor Name: MCVAY DRILLING  
 Rig Name: MCVAY DRILLING

Start: 8/7/2003  
 Rig Release: 8/30/2003  
 Rig Number: 4  
 Spud Date: 8/14/2003  
 End:  
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
8/27/2003	06:30 - 07:30	1.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	07:30 - 07:45	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	07:45 - 09:00	1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	09:00 - 09:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	09:15 - 09:45	0.50	DRILL	DOHS	DRLPR	Drill Open Slide. 150L
	09:45 - 11:00	1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary. Started mudding up @ 8120'.
	11:00 - 11:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	11:15 - 13:00	1.75	DRILL	DOHS	DRLPR	Drill Open Slide
	13:00 - 13:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	13:15 - 15:15	2.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	15:15 - 15:30	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	15:30 - 17:45	2.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	17:45 - 18:00	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	18:00 - 20:30	2.50	CIRC	HOLE	DRLPR	Circulate and Condition Hole
	20:30 - 21:30	1.00	TRIP	WTRP	DRLPR	Wiper Trip. 12 stand round trip.
	21:30 - 22:15	0.75	CIRC	HOLE	DRLPR	Circulate and Condition Hole. Wash down 31' & spotted pill.
	22:15 - 02:30	4.25	TRIP	LOGS	DRLPR	POOH to log. Strapped out.
02:30 - 03:30	1.00	TRIP	BBHD	DRLPR	BHA/Bit Handling. L/D Baker tool's & loaded on truck.	
8/28/2003	03:30 - 06:00	2.50	LOG	OPEN	DRLPR	Standard Open Hole Logging. R/U & make up tools to log well.
	06:00 - 10:00	4.00	LOG	OPEN	EVALPR	Standard Open Hole Logging. Top of the logging tools hung in the bottom of Logging Adapter. Pulled out of rope socket dropping 60' of tools down hole.
	10:00 - 11:30	1.50	FISH	PFSH	EVALPR	Walled on overshot
	11:30 - 18:00	6.50	FISH	PFSH	EVALPR	Made up 7 3/8" OD overshot, 3 5/8" grapple. TIH. t/ top of fish @ 8240'. Engaged overshot over fish. Good increase in pump pressure 2-4,000# drag.
	18:00 - 23:30	5.50	FISH	PFSH	EVALPR	Pull out of Hole with Fishing Tools / Fish
	23:30 - 00:30	1.00	FISH	PFSH	EVALPR	L/D logging tool & tools. Full recovery.
	00:30 - 01:45	1.25	TRIP	BIT	EVALPR	TIH w/ 8 3/4" bit & Dc's.
01:45 - 03:15	1.50	RIG	SCDL	EVALPR	Slip and Cut Drill Line	
03:15 - 06:00	2.75	TRIP	BIT	EVALPR	TIH w/ 8 3/4" bit t/ 8300'. Circ @ 00600 hrs.	

## Operations Summary Report

Legal Well Name: INDIAN HILLS UNIT NO. 53  
 Common Well Name: INDIAN HILLS UNIT NO. 53  
 Event Name: ORIGINAL COMPLETION  
 Contractor Name: MCVAY DRILLING  
 Rig Name: MCVAY DRILLING

Start: 8/7/2003  
 Rig Release: 8/30/2003  
 Rig Number: 4  
 Spud Date: 8/14/2003  
 End:  
 Group:

Date	From To	Hours	Code	Sub Code	Phase	Description of Operations
8/29/2003	06:00 - 08:00	2.00	DRILL	DOHR	CSGPRO	Circ/Drill Open Hole Rotary
	08:00 - 09:30	1.50	CIRC	CLN	CSGPRO	Circulate Clean
	09:30 - 17:30	8.00	TRIP	LDDP	CSGPRO	RU L/D machine. Safety meeting. LD DP & DC's.
	17:30 - 02:30	9.00	CSG	RUN	CSGPRO	Safety meeting. Ran FS, FS, FC, 78- jts of 7", 26#, 100 jts of 7" 23# csg. Landed @ 8315'. No fill.
	02:30 - 03:45	1.25	CIRC	CLN	CSGPRO	Circulate
	03:45 - 06:00	2.25	CEMT	PRIM	CSGPRO	Safety meeting. RU cmt head. Tested lines t/ 4000 psi. Pumped 50,000 SCF of N2 ahead. Pumped 10 bbls of 2% CaCl2 water, 10 bbl water spacer, 24 bbls of Super flush, 10 bbls of water, Slurry-1 Cemented w/ 100 sks of foamed acid soluble cement @ 15 ppg Yield- 2.55. Slurry-2 1200 sks of foamed Premuim 2% Zonesealant, Yield-1.125 @ 15.2 ppg tailed w/ 120 sks of Mod. "H". Cmt @ 06000 hrs.
8/30/2003	06:00 - 08:00	2.00	CEMT	PRIM	CSGPRO	Safety meeting. RU cmt head. Tested lines t/ 4000 psi. Pumped 50,000 SCF of N2 ahead. Pumped 10 bbls of 2% CaCl2 water, 10 bbl water spacer, 24 bbls of Super flush, 10 bbls of water, Slurry-1 Cemented w/ 100 sks of foamed acid soluble cement @ 15 ppg Yield- 2.55. Slurry-2 1200 sks of foamed Premuim 2% Zonesealant, Yield-1.25 @ 15.2 ppg tailed w/ 120 sks of Mod. "H". Cmt Yield-1.67 @ 13 ppg. Circ 320 sks. Capped w/ 75sks of Premuim plus.
	08:00 - 14:00	6.00	NUND	DBOP	XMBO	ND BOP. Set 7" slips. Cut off 7" csg. Pulled BOP. NU 11" x 7 1/16"3M Tubing Head. Tested t/ 2000 psi.
	14:00 - 15:00	1.00	EQUIP	RURD	XMBO	Jet pits. Rig released @ 1500 hrs CST.
9/4/2003	07:00 - 10:00	3.00	RIG		MIRU	Pre job safety meeting. WO anchors to be set. Unload, prep and tally 267 jts of 2 7/8" L-80 new tubing. Set and tested anchors. RU PU.
	10:00 - 16:00	6.00	PLRNRP		OTHER	RU PU/LD machine. PU 264 jts. of tubing. RIH tag at 8269'
	16:00 - 18:00	2.00	FLUID	DPLC	RCMP	Displace hole with freshwater. Pickle tubing with 1000 gals 17% HCl. Reverse out to acid tank.
9/5/2003	18:00 - 19:00	1.00	PLRNRP		RCMP	POOH with tubing 50 stands. SDFN.
	06:00 - 07:00	1.00	PLRNRP			PJSM, POOH with tubing.
	07:00 - 11:30	4.50	LOG	CSGD		RU Baker Atlas cased hole loggers. RIH and log from PBDT to 7400'. POOH with W/L Encountered slight drag on bottom 50'. RD cased hole loggers.
	11:30 - 17:30	6.00	PERF			RU Baker Atlas. RIH and get on depth. Perforate Upper Penn. Made 9 perf runs (see perforation report). IFL - 500' from surface. FFL - 650' from surface.
9/6/2003	17:30 - 18:00	0.50	PLRNRP			RIH with killstring. SDFN.
	06:45 - 07:30	0.75	PLRNRP			PJSM. POOH with killstring.
	07:30 - 10:00	2.50	PERF			RU Baker Atlas. RIH and perforate Upper Penn. 5 runs from 76212'-7732'. Fluid level at start of operations, 4000' from surface, fluid level on last run, 4400' from surface. RD Baker Atlas.
	10:00 - 12:00	2.00	PKRPLG			PU 7" PPI packers with 2' spacings. RIH and swing above top perf. SDFW.
9/8/2003	07:00 - 08:00	1.00	RIG			PJSM. MIRU Halliburton Energy Services. Test lines to 3850 psi. Drop RFC valve and function test.
	08:00 - 19:00	11.00	STIM			PPI new perforations with 100 gpf 17% CCA sour. POOH 10 stands. SDFN.
9/9/2003	07:00 - 09:30	2.50	PLRNRP			PJSM. POOH with PPI packers on production tubing. LD PPI tools.
	09:30 - 10:30	1.00	PKRPLG			PU 7" BV RBP and RIH to 3500'. Load and test to 500 psi. POOH to 40 stand killstring. SDFN.
9/10/2003	06:00 - 06:30	0.50	SAFETY	SMTG	RCMP	Safety Meeting
	06:30 - 14:30	8.00	PLRNRP	ESP	RCMP	BO psi. POH w/ KS. PU and assembled GC2900 pump w/ 223 stages and tandem 150 HP motors. RU 3 spoolers. Respliced motor lead due to burr in cable. Located 72 protector clamps left over from other job.

## Operations Summary Report

Legal Well Name: INDIAN HILLS UNIT NO. 53  
 Common Well Name: INDIAN HILLS UNIT NO. 53  
 Event Name: ORIGINAL COMPLETION  
 Contractor Name: MCVAY DRILLING  
 Rig Name: MCVAY DRILLING

Start: 8/7/2003  
 Rig Release: 8/30/2003  
 Rig Number: 4

Spud Date: 8/14/2003  
 End:  
 Group:

Date	From To	Hours	Code	Sub Code	Phase	Description of Operations
9/10/2003	06:30 - 14:30	8.00	PLRNRP	ESP	RCMP	RIH on 36 stands of 2 7/8" L-80 tubing until collar clamp supply was exhausted. Left pump swinging. Closed torus and SDFN. Notified engineering to obtain additional clamps for run in tomorrow.
9/11/2003	06:30 - 07:00	0.50	SAFETY	SMTG	RCMP	Safety Meeting
	07:00 - 14:00	7.00	PLRNRP	ESP	RCMP	Bled off. Opened torus. Unloaded pallet of cable clamps. Prepped clamps. CIH w/ pump on 14 additional stands of 2 7/8" tubing to RBP. Latched on to RBP. Allowed pressure to equalize. CIH w/ remaining 157 jts of 2 7/8" tbg. Used a total of 202 protector clamps (1690' f/ surface) PU new hanger. Made top splice. Connected cable to bottom of hanger and 2 CT nylon lines Land hanger in wellhead. Nipple down blow out preventer and torus annular. Build wellhead tubing connections in to casing wrap around. Open flowline. SDFN

MARATHON OIL COMPANY

Daily Drilling Report  
Development-Gas

WELL NAME UTLEY A-9	KB 22.0	GL 357.00	24 HR PROG	TMD 5,090	TVD 5,056	DFS 7	DOL 8	RPT # 7	DATE 28-Sep-2003
SUPERVISOR Danny Jackson	RIG NAME & NO. NABORS 365			AUTH MD 12,637	WBS DD.03.09208.CAP.DRL			SAP/WBS COST 931,000	
FIELD NAME MIMMS CREEK	RIG PHONE 903-389-1208			MOC WI 37.5000	NRI 31.0246	DAILY WELL COST 120,498.00		CUM WELL COST 480,469.08	
STATE/PROV Texas	COUNTY/OTHER Freestone			LAST CASING 9.625 (in) @ 5,090 (ft)		NEXT CASING 4.500 (in) @ 12,650 (ft)		LEAKOFF	
CURRENT STATUS / MTS P/U Motor				24 HR FORECAST					

OPERATION COMMENTS  
Run 9 5/8 Csg., Cement, Nipple up BOP

OPERATIONS SUMMARY

FROM	TO	HRS	FROM	TO	SUB	PHASE	OP	TRBL	DESCRIPTION
06:00	07:00	1.00	5,090	5,090	AF	DRLIN1	TRIP		Finish L/D Directional Tools & MWD
07:00	07:30	0.50	5,090	5,090	AF	CSGIN1	SAFETY		Hold Pre Job Safety Meeting With Csg. Crew, L/D Machine Operators, And Nabors Emp.
07:30	08:30	1.00	5,090	5,090	AF	CSGIN1	EQUIP		RU Bo Gray Csg. Crew & Lay Down Machine.
08:30	09:00	0.50	5,090	5,090	TA	CSGIN1	EQUIP	CSHD	Weld up J hooks on L/D shute
09:00	13:30	4.50	5,090	5,090	AF	CSGIN1	CSG		M/U Float Shoe and Float Collar, Run 110 jts. of 9 5/8", 40#, J-55 Csg. to 5,090'. (1 shoe Jt. 52 Centrizers installed)
13:30	14:00	0.50	5,090	5,090	AF	CSGIN1	CEMT		Install Haliburton Cementing Head and lines
14:00	15:30	1.50	5,090	5,090	AF	CSGIN1	CIRC		Circulate and Condition Hole for cement job.
15:30	17:00	1.50	5,090	5,090	AF	CSGIN1	CEMT		Pumped 20 bbl. water spacer, Mix and pump Lead Cement 970 sks. Haliburton Light Cement + 0.3% CFR-3 + 0.3% Econolite. + 0.25# sx. Phenoseal LCM, + 10.64 GPS water. Mixed @ 12.4 ppg. 1.93 CF/sx. 334 bbl. slurry. Tailed with 230 sxs. Premium Cement, 5.23 GPS mix water. Mixed @ 15.6 ppg. Yield 1.93 CF/Sx., 48.5 bbis. slurry. Displace with 383 bbis. 9.1 ppg. mud. Bumped plug with 500 psi. over Diff. psi. of 1,100 psi. Floats Held, Bleed back 2.5 bbis. 100% Returns through out job. Returned 80 bbis. Cement to Surface.  Faxed TRRC District 5 Notification Form and Intention of Cementing.
17:00	18:00	1.00	5,090	5,090	AF	CSGIN1	NUND		Flush out Riser, well head, flow line with water, R/D Haliburton
18:00	21:30	3.50	5,090	5,090	AF	CSGIN1	NUND		Lift Riser Set slips with 100% String wt. of 125,000. Make Rough Cut on Csg. Remove Riser and Csg. from under Rig, Make Final Cut on Csg. Install "B" Section, and test to 1,500 psi.
21:30	02:00	4.50	5,090	5,090	AF	CSGIN1	NUND		Nipple up 11" 5M BOP
02:00	04:30	2.50	5,090	5,090	AF	CSGIN1	TEST		Test Bop and all related well control equipment to 250 low, 5,000 psi. high. Test Annular to 250 psi. low, 3,000 high.
04:30	05:00	0.50	5,090	5,090	AF	CSGIN1	DRILL		Rig Up & Clear off Floor, Install Wear Bushing, Close Csg. Valve.
05:00	06:00	1.00	5,090	5,090	AF	DRLPR	TRIP		Make up Bit, Motor, Teledrift Sub.

DENSITY(ppg)	9.10	PP		ECD		MUD DATA	DAILY COST	0.00	CUM COST	2937.00				
FV	PV/YF	GELS	WL/HTHP	FC/T.SOL	O/W	%Sand/MBT	Ph/pM	P/Mf	Cl/Ca	CaCl2(wt%)	H2S	LIME	ES	6RPM
34	5/5	2/7	18.0/	/	/	/	8/	/	600 /					

**MARATHON OIL COMPANY**

**Daily Drilling Report  
Development-Gas**

WELL NAME UTLEY A-9	KB 22.0	GL 357.00	24 HR PROG TMD 5,090	TVD 5,056	DFS 7	DOL 8	RPT # 7	DATE 28-Sep-2003
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**MATERIALS / CONSUMPTION**

ITEM	UNITS	USAGE	ON HAND	ITEM	UNITS	USAGE	ON HAND
DIESEL							

**PERSONNEL DATA**

POB @ 06:00:

COMPANY	SERVICE	NO.	HOURS	COMPANY	SERVICE	NO.	HOURS
Nabors Drilling USA	Drilling Contractor	11	132.00	Woods Group	Well Head	1	5.00
Baroid Drilling Fluids	Mud Engr	1	2.00	Bo Gray	Csg. Crew & L/D Machine	4	28.00
Brammer Eng.	Consulting	1	24.00	Halliburton	Cementing	4	20.00
Scientific Drilling	Directional driller & MWD	3	18.00	Jet Blast	Bop Testing	1	6.00
Bo Gray	L/D Machine, Csg. Crew	5	40.00	Simons Petroleum	Fuel	1	2.00

**CASING SUMMARY**

LAST BOP TEST: 9/28/2003			LAST CASING TEST:			NEXT BOP TEST:		
SIZE (in)	ID (in)	SHOE TEST (ppg)	MAX SICP (psi) @ (ppg)	MD (ft)	TVD (ft)	WT (lb/ft)	GRADE	BURST (psi)
13.375	12.715		(psi) @ (ppg)	1,076	1,076	48.00	H-40	1,730
9.625	8.835		(psi) @ 9.10 (ppg)	5,090	5,056	40.00	J-55	3,950

MARATHON OIL COMPANY

Daily Drilling Report  
Development-Gas

WELL NAME UTLEY C-15	KB 21.0	GL 408.00	24 HR PROG 185.0	TMD 10,445	TVD 10,445	DFS 13	DOL 18	RPT # 13	DATE 28-Sep-2003
SUPERVISOR Bruce Ellis	RIG NAME & NO. NABORS DRILLING 151			AUTH MD 12.650	WBS DD.03.09213.CAP.DRL			SAP/WBS COST 850,000	
FIELD NAME MIMMS CREEK	RIG PHONE 903-388-8174			MOC WI 36.8939	NRI 31.3418	DAILY WELL COST 20,973.58		CUM WELL COST 577,530.38	
STATE/PROV Texas	COUNTY/OTHER Freestone		LAST CASING 9.625 (in) @ 5,053 (ft)		NEXT CASING 4.500 (in) @ 12,700 (ft)		LEAKOFF		
CURRENT STATUS / MTS Drig @ 10,445'				24 HR FORECAST Drill ahead					
OPERATION COMMENTS Bit trip, cut drill line, service rig, TIH to 10,170', wash and ream 90' to 10,260', And drill from 10,260' to 10,445'.									

OPERATIONS SUMMARY

FROM	TO	HRS	FROM	TO	SUB	PHASE	OP	TRBL	DESCRIPTION
06:00	10:00	4.00	10,260	10,260	AF	DRLPR	TRIP		Trip out for Bit No. 5 Note: Hole slick and took the right amount of fill. Bit graded as: 8-8-WT-A-E-2-BT-PR
10:00	12:00	2.00	10,260	10,260	AF	DRLPR	TRIP		Trip in w/ Bit No. 6 to 9-5/8" casing shoe.
12:00	13:00	1.00	10,260	10,260	AF	DRLPR	RIG		Slip and Cut Drill Line
13:00	13:30	0.50	10,260	10,260	AF	DRLPR	RIG		Service Rig
13:30	15:00	1.50	10,260	10,260	AF	DRLPR	TRIP		Trip in w/ Bit No. 6 to 10,170'.
15:00	16:30	1.50	10,260	10,260	AF	DRLPR	TRIP		Wash/Ream from 10,170' to 10,260'. Note: Pulled bit was 1/8" undergauge.
16:30	06:00	13.50	10,260	10,445	AF	DRLPR	DRILL		Drill Open Hole Rotary from 10,260' to 10,445'.

DENSITY(ppg)	8.90	PP	ECD	MUD DATA	DAILY COST	438.00	CUM COST	9282.00						
FV	PV/YP	GELS	WL/HTHP	FC/T.SOL	OW	%Sand/MBT	Ph/pM	P/MF	Cl/Ca	CaCl2(wt%)	H2S	LIME	ES	6RPM
29	2/2	/3	22.0/	2.0/3.0	/	/	8/	0.1/	1,000 /					

BITS

BIT/RUN	SIZE	MANUF.	TYPE	SERIAL NO.	JETS OR TFA	DEPTH IN	DATE IN	IO-D-L-B-G-O-R
5 / 1	8.750	Smith	F80D	MP0765	10/10/11////////	9,532.0	9/25/2003	8-8-BT-A-E-2-WT-PR
6 / 1	8.750	Smith	F80D	MP3621	11/10/10////////	10,260.0	9/28/2003	0-0

BIT / RUN	WOB	RPM	GPM	PRESS	P BIT	HRS	24Hr DIST	24Hr ROP	CUM HRS	CUM DEPTH	CUM ROP
5 / 1	60 / 65	58 / 60	327	2,100	1,446			15.60	50.00	728.0	14.56
6 / 1	60 / 65	55 / 55	327	2,100		13.50	185.0	13.70	13.50	185.0	13.70

BHA

BHA NO.	LENGTH	EFF WT.	PICK UP	SLACK OFF	ROT WT.	TORQUE (max/min)	BHA HRS	JAR HRS	MWD HRS	MTR HRS	SS HRS
5	1,369.09	0	265,000	240,000		/					
BHA DESCRIPTION Tri-Cone Bit , Bit Sub , 6-1/4" Drill Collars (36), 9 Joints 4-1/2" HWDP (9)											

PUMP / HYDRAULIC DATA

NO.	MAKE OF PUMP	STROKE (in)	LINER (in)	SPM	Q (gpm)	PRESS. (psi)	TOTAL Q	KILL SPM / PRESSURE
1	NATIONAL	9.000	6.000	104	326.51	2,100	326.51	66 925
2	NATIONAL	9.000					326.51	60 975

MUD VOLUMES (bb) / ANNULAR VELOCITIES (ft/min)

HOLE	TOTAL	MUD LOST	ANN VEL DP	ANN VEL DC
810.0	700.0			
		1,510.0		

SURVEY DATA

MD	INCL	AZIMUTH	TVD	VS	N/S CUM	E/W CUM	DOGLEG	MD	INCL	AZIMUTH	TVD	VS	N/S CUM	E/W CUM	DOGLEG
10,230.0	2.00	0.00	10,226.38	255.33	255.33	0.00	0.07								

**MARATHON OIL COMPANY**

**Daily Drilling Report  
Development-Gas**

<b>WELL NAME</b> UTLEY C-15	<b>KB</b> 21.0	<b>GL</b> 408.00	<b>24 HR PROG</b> 185.0	<b>TMD</b> 10,445	<b>TVD</b> 10,445	<b>DFS</b> 13	<b>DOL</b> 18	<b>RPT #</b> 13	<b>DATE</b> 28-Sep-2003
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**MATERIALS / CONSUMPTION**

ITEM	UNITS	USAGE	ON HAND	ITEM	UNITS	USAGE	ON HAND
GEL, FRESH	392	28	392	Mica	50		73
BARITE SACKS	480	40	320	EZ Mud	13		12
Lime	5		5	EZ Spot	9		9
Caustic Soda	44		42	B-Seal	300		300

**PERSONNEL DATA**

POB @ 06:00: 13

COMPANY	SERVICE	NO.	HOURS	COMPANY	SERVICE	NO.	HOURS
Marathon		1	24.00	Baroid Drilling Fluids		1	1.00
Nabors Drilling USA		11	144.00				

**CASING SUMMARY**

LAST BOP TEST: 9/19/2003			LAST CASING TEST:			NEXT BOP TEST: 10/3/2003		
SIZE (in)	ID (in)	SHOE TEST (ppg)	MAX SICP (psi) @ (ppg)	MD (ft)	TVD (ft)	WT (lb/ft)	GRADE	BURST (psi)
13.375	12.715			1,070	1,070	48.00	H-40	1,730
9.625	8.835			5,053	5,053	40.00	K-55	3,920



**MARATHON OIL COMPANY**

**Daily Drilling Report  
Development-Gas**

<b>WELL NAME</b> UTLEY A-9	<b>KB</b> 22.0	<b>GL</b> 357.00	<b>24 HR PROG</b> 2,108.0	<b>TMD</b> 7,198	<b>TVD</b> 7,164	<b>DFS</b> 8	<b>DOL</b> 9	<b>RPT #</b> 8	<b>DATE</b> 29-Sep-2003
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**SURVEY DATA**

MD	INCL	AZIMUTH	TVD	VS	N/S CUM	E/W CUM	DOGLEG	MD	INCL	AZIMUTH	TVD	VS	N/S CUM	E/W CUM	DOGLEG
7,051.0	1.00	0.00	0.00	0.00	0.00	0.00	0.00								

**MATERIALS / CONSUMPTION**

ITEM	UNITS	USAGE	ON HAND	ITEM	UNITS	USAGE	ON HAND
DIESEL							

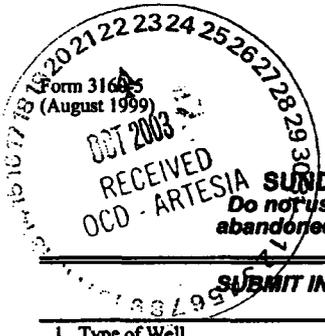
**PERSONNEL DATA**

POB @ 06:00:

COMPANY	SERVICE	NO.	HOURS	COMPANY	SERVICE	NO.	HOURS
Nabors Drilling USA	Drilling Contractor	11	132.00	Brammer Eng.	Consulting	1	24.00
Baroid Drilling Fluids	Mud Engr	1	2.00				

**CASING SUMMARY**

LAST BOP TEST: 9/28/2003			LAST CASING TEST:			NEXT BOP TEST:		
SIZE (in)	ID (in)	SHOE TEST (ppg)	MAX SICP (psi) @ (ppg)	MD (ft)	TVD (ft)	WT (lb/ft)	GRADE	BURST (psi)
13.375	12.715		(psi) @ (ppg)	1,076	1,076	48.00	H-40	1,730
9.625	8.835		(psi) @ 9.10 (ppg)	5,090	5,056	40.00	J-55	3,950



**NMOCD**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0135  
Expires: November 30, 2000

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

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

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMNM030482
2. Name of Operator MARATHON OIL COMPANY		6. If Indian, Allottee or Tribe Name
3a. Address P O BOX 552 MIDLAND, TX 79702		7. If Unit or CA/Agreement, Name and/or No. NMNM70964A
3b. Phone No. (include area code) Ph: 800.351.1417 Ext: 8104 Fx: 915.687.8307		8. Well Name and No. INDIAN HILLS UNIT 53
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 28 T21S R24E SENW Lot F 1383FNL 1586FWL		9. API Well No. 30-015-32875-00-S1
		10. Field and Pool, or Exploratory INDIAN BASIN UPPER PENN ASSOC
		11. County or Parish, and State EDDY COUNTY, NM

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

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

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

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

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

14. I hereby certify that the foregoing is true and correct.  
**Electronic Submission #24372 verified by the BLM Well Information System  
 For MARATHON OIL COMPANY, sent to the Carlsbad  
 Committed to AFMSS for processing by LINDA ASKWIG on 10/20/2003 (04LA0027SE)**

Name (Printed/Typed) CHARLES KENDRIX	Title AUTHORIZED REPRESENTATIVE
Signature (Electronic Submission)	Date 10/17/2003

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

Approved By <u>ALEXIS C. SWQBQDA</u>	Title <u>PETROLEUM ENGINEER</u>	Date <u>10/21/2003</u>
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office <u>Carlsbad</u>

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

**\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\***

October 17, 2003

**ATTACHMENT I**

**Marathon Oil Company Indian Basin**

**Primary Disposal:** MOC Battery Disposal System

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

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

**Primary Disposal:** IBGP Disposal System

Operated By: Marathon Oil Company  
Well Name: AGI # 1 SWD  
Location: UL "E", Section 23, T-21-S, R-23-E  
Permit #: SWD 784

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

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

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

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

Operated By: Marathon Oil Company  
Well Name: Indian Hills Unit #30 SWD  
Location: UL "L", Section 20, T-21-S, R-24-E  
Permit #: SWD 801

**Secondary Disposal**

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

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

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

October 17, 2003

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

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

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

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

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

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

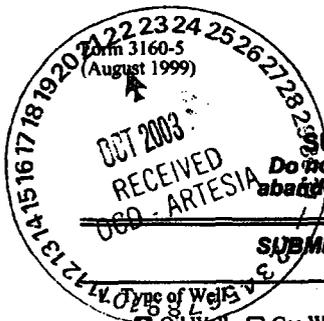
Well Name: Dagger Draw Salt Water Disposal  
Location: Sec 22, T-19-S, R-25-E  
Permit#: R7637

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

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

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

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



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

NMOC D

FORM APPROVED  
OMB NO. 1004-0135  
Expires: November 30, 2000

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

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

4. Type of Wells <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMNM030482
2. Name of Operator MARATHON OIL COMPANY		6. If Indian, Allottee or Tribe Name
Contact: CHARLES KENDRIX E-Mail: cekendrx@marathonoil.com		7. If Unit or CA/Agreement, Name and/or No. NMNM70964A
3a. Address P O BOX 552 MIDLAND, TX 79702	3b. Phone No. (include area code) Ph: 800.351.1417 Ext: 8104 Fx: 915.687.8307	8. Well Name and No. INDIAN HILLS UNIT 53
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 28 T21S R24E SENW Lot F 1383FNL 1586FWL		9. API Well No. 30-015-32875-00-S1
		10. Field and Pool, or Exploratory INDIAN BASIN UPPER PENN ASSOC
		11. County or Parish, and State EDDY COUNTY, NM

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

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

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

09/04/2003 Rigged up and tagged at 8269'. Run cased hole logs from PBD 8269 to 7400. Perforated casing intervals 7612-7616, 7630-7650, 7660-7669, 7677-7687, 7690-7717, 7724-7732, 7736-7750, 7761-7771, 7790-7810, 7816-7822, 7832-7842, 7846-7854, 7867-7937, 7944-7946, 7950-7952, 7956-7980 at 4 shots per ft.  
PPI new perforations with 100 gpf 17% CCA sour total of 25000 gals. POOH with PPI packers. RIH with RBP tested to 3500#. POOH w/kills string. RIH w/ GC2900 sumersible pump and 257 jts 2 7/8 N80 tubing. Nipple up well head and turned to production 09/11/2003.

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

Electronic Submission #24317 verified by the BLM Well Information System  
For MARATHON OIL COMPANY, sent to the Carlsbad  
Committed to AFMSS for processing by LINDA ASKWIG on 10/20/2003 (04LA0026SE)

Name (Printed/Typed) CHARLES KENDRIX	Title AUTHORIZED REPRESENTATIVE
Signature (Electronic Submission)	Date 10/17/2003

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <b>ACCEPTED</b>	ALEXIS C SWOBODA Title PETROLEUM ENGINEER	Date 10/21/2003
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office Carlsbad

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

**\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\***

NMOC

Form 3160-4  
(August 1999)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: November 30, 2000

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.  
NMNM030482

1a. Type of Well  Oil Well  Gas Well  Dry  Other  
b. Type of Completion  New Well  Work Over  Deepen  Plug Back  Diff. Resvr.  
Other \_\_\_\_\_

6. If Indian, Allottee or Tribe Name

2. Name of Operator  
MARATHON OIL COMPANY  
Contact: CHARLES KENDRIX  
E-Mail: cekendrx@marathonoil.com

7. Unit or CA Agreement Name and No.  
NMNM70964A

3. Address P O BOX 552  
MIDLAND, TX 79702

3a. Phone No. (include area code)  
Ph: 800.351.1417 Ext: 8104

8. Lease Name and Well No.  
INDIAN HILLS UNIT 53

4. Location of Well (Report location clearly and in accordance with Federal requirements)\*

At surface SENW Lot F 1383FNL 1586FWL  
At top prod interval reported below SENW Lot F 1383FNL 1586FWL  
At total depth SENW Lot F 2384FSL 1879FWL

9. API Well No.  
30-015-32875-00-S1

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

11. Sec., T., R., M., or Block and Survey  
or Area Sec 28 T21S R24E Mer NMP

12. County or Parish  
EDDY

13. State  
NM

14. Date Spudded  
08/15/2003

15. Date T.D. Reached  
08/27/2003

16. Date Completed  
 D & A  Ready to Prod.  
09/14/2003

17. Elevations (DF, KB, RT, GL)\*  
3702 GL

18. Total Depth: MD 8315  
TVD 8115

19. Plug Back T.D.: MD 8289  
TVD 8089

20. Depth Bridge Plug Set: MD  
TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)  
SPECTRALDENSITY

22. Was well cored?  No  Yes (Submit analysis)  
Was DST run?  No  Yes (Submit analysis)  
Directional Survey?  No  Yes (Submit analysis)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sls. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
12.250	9.625 K55	36.0	0	1210		835		0	
8.750	7.000 L80	23.0	0	8315		1495		0	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.875	8209							

25. Producing Intervals

26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) UPPER PENN	7612	7980	7612 TO 7980			OPEN
B)						
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

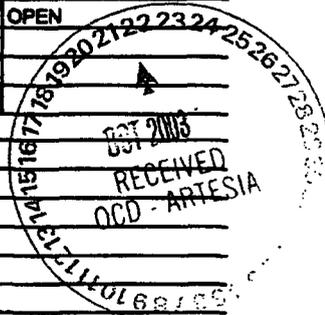
Depth Interval	Amount and Type of Material
7612 TO 7980	36800 GALLONS 17% CCA SOUR

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
09/14/2003	10/14/2003	24	→	188.0	740.0	2635.0			ELECTRIC PUMP SUB-SURFACE
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
	240	180.0	→	188	740	2635		POW	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						



ACCEPTED FOR RECORD  
OCT 20 2003  
ALEXIS C. SWOBODA  
PETROLEUM ENGINEER

(See Instructions and spaces for additional data on reverse side)  
ELECTRONIC SUBMISSION #23972 VERIFIED BY THE BLM WELL INFORMATION SYSTEM  
\*\* BLM REVISED \*\*

**28b. Production - Interval C**

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

**28c. Production - Interval D**

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

**29. Disposition of Gas (Sold, used for fuel, vented, etc.)**  
SOLD

**30. Summary of Porous Zones (Include Aquifers):**

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

**31. Formation (Log) Markers**

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
UPPER PENN	7568	8315		QUEEN SAN ANDRES GLORIETA YESO BONE SPRING TUBB- ABO WOLFCAMP CISCO CANYON	617 1216 2423 2584 4812 6884 6876 6854 7588 7784

**32. Additional remarks (include plugging procedure):**  
Inclination Survey will be sent at later date with the logs.

**33. Circle enclosed attachments:**

- |   |                    |               |                       |
|---|--------------------|---------------|-----------------------|
| 1. Electrical/Mechanical Logs (1 full set req'd.)     | 2. Geologic Report | 3. DST Report | 4. Directional Survey |
| 5. Sundry Notice for plugging and cement verification | 6. Core Analysis   | 7. Other:     |                       |

**34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):**

Electronic Submission #23972 Verified by the BLM Well Information System.  
For MARATHON OIL COMPANY, sent to the Carlsbad  
Committed to AFMSS for processing by ARMANDO LOPEZ on 10/16/2003 (04AL0026SE)

Name (please print) CHARLES KENDRIX

Title AUTHORIZED REPRESENTATIVE

Signature \_\_\_\_\_ (Electronic Submission)

Date 10/16/2003

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

**\*\* REVISED \*\* REVISED \*\***

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0135  
Expires: November 30, 2000

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

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

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NM 030482
2. Name of Operator MARATHON OIL COMPANY		6. If Indian, Allottee or Tribe Name
3a. Address P.O. BOX 552 MIDLAND, TX 79702		7. If Unit or CA/Agreement, Name and/or No. 70964A
3b. Phone No. (include area code) Ph: 432.687.8104 Fx: 432.687.8307		8. Well Name and No. INDIAN HILLS UNIT 53
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 28 T21S R24E SENW 1383FNL 1586FWL		9. API Well No. 30-015-32875
		10. Field and Pool, or Exploratory INDIAN BASIN UPPER PENN ASSOC
		11. County or Parish, and State EDDY COUNTY, NM

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

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

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

09/04/2003 Rigged up and tagged at 8269'. Run cased hole logs from PBSD 8269 to 7400. Perforated casing intervals 7612-7616, 7630-7650, 7660-7669, 7677-7687, 7690-7717, 7724-7732, 7736-7750, 7761-7771, 7790-7810, 7816-7822, 7832-7842, 7846-7854, 7867-7937, 7944-7946, 7950-7952, 7956-7980 at 4 shots per ft.  
PPI new perforations with 100 gpf 17% CCA sour total of 25000 gals. POOH with PPI packers. RIH with RBP tested to 3500#. POOH w/kills string. RIH w/ GC2900 sumersible pump and 257 jts 2 7/8 N80 tubing. Nipple up well head and turned to production 09/11/2003.

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

Electronic Submission #24317 verified by the BLM Well Information System  
For MARATHON OIL COMPANY, will be sent to the Carlsbad

Name (Printed/Typed) CHARLES KENDRIX

Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission)

Date 10/17/2003

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

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**\*\* DRAFT \*\* DRAFT \*\* DRAFT \*\* DRAFT \*\* DRAFT \*\* DRAFT \*\* DRAFT \*\***

**NMOC**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0135  
Expires: November 30, 2000

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

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

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other	2. Name of Operator <b>MARATHON OIL COMPANY</b>	Contact: <b>CHARLES E. KENDRIX</b> E-Mail: <b>cekendrix@marathonoil.com</b>	5. Lease Serial No. <b>NMNM030482</b>
3a. Address <b>P O BOX 552 MIDLAND, TX 79702</b>	3b. Phone No. (include area code) <b>Ph: 800.351.1417 Ext: 8104 Fx: 915.687.8196</b>	7. If Unit or CA/Agreement, Name and/or No. <b>NMNM70964A</b>	6. If Indian, Allottee or Tribe Name
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) <b>Sec 28 T21S R24E SENW Lot F 1383FNL 1586FWL</b>		8. Well Name and No. <b>INDIAN HILLS UNIT 53</b>	9. API Well No. <b>30-015-32875-00-S1</b>
		10. Field and Pool, or Exploratory <b>INDIAN BASIN UPPER PENN ASSOC</b>	11. County or Parish, and State <b>EDDY COUNTY, NM</b>

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

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

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

Please amend the Indian Basin Field commingle as follows:

Production from the Indian Hills Unit 53 is sent to Station 128 Satellite Facility. The production manifold tied to the test and production separators allow for individual well testing of the Indian Hills Unit wells 10, 17, 19, 24, 34, 45, 49 & 53, while production from the remainder of these wells flows to the production separator. After separation, the gas and liquids are handled in the same manner described in the paragraph titled "Station 128 Satellite Facility" in the current commingle agreement. I have attached an updated diagram of this facility and copies of this diagram will be sent of you by mail and to the Carlsbad office as well to update their site security diagrams for this facility.

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

Electronic Submission #24451 verified by the BLM Well Information System  
For MARATHON OIL COMPANY, sent to the Carlsbad  
Committed to AFMSS for processing by LINDA ASKWIG on 10/23/2003 (04LA0035SE)

Name (Printed/Typed) <b>CHARLES E. KENDRIX</b>	Title <b>AUTHORIZED REPRESENTATIVE</b>
Signature (Electronic Submission)	Date <b>10/22/2003</b>

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

Approved By <u>ALEXIS C SWOBODA</u>	Title <b>PETROLEUM ENGINEER</b>	Date <b>10/23/2003</b>
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office <b>Carlsbad</b>

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: November 30, 2000

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No. NM 030482

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No. 70964A

8. Lease Name and Well No. INDIAN HILLS UNIT 53

9. API Well No. 30-015-32875

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

11. Sec., T., R., M., or Block and Survey or Area Sec 28 T21S R24E Mer NMP

12. County or Parish EDDY 13. State NM

17. Elevations (DF, KB, RT, GL)\* 3702 GL

14. Date Spudded 08/15/2003 15. Date T.D. Reached 08/27/2003 16. Date Completed 09/14/2003  D & A  Ready to Prod.

18. Total Depth: MD 8315 TVD 8115 19. Plug Back T.D.: MD 8289 TVD 8089 20. Depth Bridge Plug Set: MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each) SPECTRAL DENSITY DUAL SPACED NEUTRON SPECTRAL GAMM

22. Was well cored?  No  Yes (Submit analysis)  
Was DST run?  No  Yes (Submit analysis)  
Directional Survey?  No  Yes (Submit analysis)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
8.750	7.000 L80	23.0							
12.250	9.625 K55	36.0	0	1210		835		0	
8.750	7.000 L80	26.0	0	8315		1495		0	

24. Tubing Record

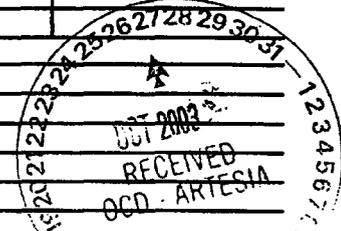
Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.875	8209							

25. Producing Intervals 26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) UPPER PENN	7612	7980	7612 TO 7980			OPEN
B)						
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
7612 TO 7980	36800 GALLONS 17% CCA SOUR



28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
09/14/2003	10/14/2003	24	→	186.0	740.0	2635.0			ELECTRIC PUMP SUB-SURFACE
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
	240	180.0	→					PGW	

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
			→						

(See Instructions and spaces for additional data on reverse side)  
ELECTRONIC SUBMISSION #23972 VERIFIED BY THE BLM WELL INFORMATION SYSTEM  
\*\* DRAFT \*\*

**28b. Production - Interval C**

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

**28c. Production - Interval D**

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	

**29. Disposition of Gas(Sold, used for fuel, vented, etc.)**  
**SOLD**

**30. Summary of Porous Zones (Include Aquifers):**

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

**31. Formation (Log) Markers**

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth
UPPER PENN	7568	8315		QUEEN SAN ANDRES GLORIETA YESO BONE SPRING TUBB ABO WOLFCAMP CISCO CANYON	617 1216 2423 2584 4812 6684 6876 6954 7568 7784

**32. Additional remarks (include plugging procedure):**  
 Inclination Survey will be sent at later date with the logs.

**33. Circle enclosed attachments:**

- |   |                    |               |                       |
|---|--------------------|---------------|-----------------------|
| 1. Electrical/Mechanical Logs (1 full set req'd.)     | 2. Geologic Report | 3. DST Report | 4. Directional Survey |
| 5. Sundry Notice for plugging and cement verification | 6. Core Analysis   | 7 Other:      |                       |

**34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):**

**Electronic Submission #23972 Verified by the BLM Well Information System.  
 For MARATHON OIL COMPANY, will be sent to the Carlsbad**

Name (please print) CHARLES KENDRIX Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission) Date 10/16/2003

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

**\*\* DRAFT \*\* DRAFT \*\* DRAFT \*\* DRAFT \*\* DRAFT \*\* DRAFT \*\* DRAFT \*\***



**McVAY DRILLING COMPANY**  
 Post Office Box 924  
 Hobbs, New Mexico 88241  
 (505) 397-3311  
 FAX: 39-DRILL

**Well Name and Number: Indian Hills Unit #53**

**Location: Sec. 23, T21S, R24E**

**Operator: Marathon**

**Drilling Contractor: McVay Drilling Company**

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

Degrees @ Depth		Degrees @ Depth		Degrees @ Depth	
¼	235	12 ¾	3312	16 ¼	6513
½	481	14 ½	3597	17 ½	6735
¾	721	13 ½	3787	14 ¾	7053
¾	969	13 ¾	4639	13 ½	7148
¾	1151	12 ¾	4831	13 ¼	7371
¾	1227	13 ¼	5053	12 ¾	7612
4 ¼	1480	11 ¼	5345	13	7812
14 ¼	1862	11 ½	5627	11 ¾	7939
14 ¾	2057	11 ¼	5880	11 ¼	8129
13 ¼	2493	12	6134	13 ¼	8240
12 ¾	2842	14 ¾	6324		
13 ¼	3028	16	6451		

**Drilling Contractor: McVay Drilling Company**

By: Jan W. [Signature]

Subscribed and sworn to before me this 21st day of October, 2003

[Signature]  
 Notary Public

My Commission Expires: 8-16-05

Lea County, New Mexico



\* \* \* NAUTICAL (Version 4.01) \* \* \*

Well: Indian Hills Unit 53

Target Azimuth: 164.55  
Target TVD: 8199

Closure Direction: 168



Calculation Method - Minimum Curvature

Measured Depth (ft)	Inclination (deg.)	Azimuth (deg.)	True Vertical Depth (ft)	Vertical Section (ft)	North/South (ft)	East/West (ft)	Closure (ft)	Build Rate (deg/ft)	Walk Rate (deg/ft)	Dogleg Severity (d/100')	Tool Face (deg)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	===== Tie-in Data				
235.00	0.25	64.00	235.00	-0.09	0.22	0.46	0.51	0.001	0.272	0.11	MSS
481.00	0.40	84.00	481.00	-0.05	0.55	1.80	1.88	0.001	0.081	0.08	MSS
724.00	0.25	139.00	723.99	0.57	0.24	2.99	3.00	-0.001	0.226	0.14	MSS
969.00	0.25	69.00	968.99	1.00	0.03	3.84	3.84	0.000	-0.286	0.12	MSS
1,150.00	0.00	69.00	1,149.99	0.96	0.17	4.21	4.21	-0.001	0.000	0.14	MSS
1,222.00	0.20	94.50	1,221.99	1.00	0.16	4.33	4.34	0.003	0.354	0.28	MWD
1,293.00	0.50	167.20	1,292.99	1.35	-0.15	4.52	4.53	0.004	1.024	0.68	MWD
1,354.00	2.20	175.00	1,353.97	2.77	-1.58	4.69	4.94	0.028	0.128	2.80	MWD
1,416.00	3.40	177.10	1,415.89	5.74	-4.60	4.88	6.71	0.019	0.034	1.94	MWD
1,480.00	4.30	171.80	1,479.75	9.97	-8.87	5.32	10.34	0.014	-0.083	1.51	MWD
1,544.00	5.80	172.80	1,543.50	15.55	-14.46	6.07	15.68	0.023	0.016	2.35	MWD
1,608.00	7.80	174.30	1,607.05	23.03	-21.99	6.90	23.04	0.031	0.023	3.14	MWD
1,671.00	9.70	173.20	1,669.31	32.49	-31.51	7.96	32.50	0.030	-0.017	3.03	MWD
1,735.00	11.50	171.80	1,732.21	44.15	-43.18	9.51	44.21	0.028	-0.022	2.84	MWD
1,798.00	13.00	170.10	1,793.78	57.44	-56.38	11.62	57.56	0.024	-0.027	2.45	MWD
1,862.00	14.40	168.70	1,855.96	72.54	-71.27	14.42	72.72	0.022	-0.022	2.25	MWD
1,926.00	14.70	168.30	1,917.90	88.58	-87.03	17.62	88.79	0.005	-0.006	0.49	MWD
1,988.00	14.90	169.00	1,977.85	104.37	-102.56	20.74	104.63	0.003	0.011	0.43	MWD
2,052.00	14.90	169.40	2,039.70	120.78	-118.72	23.82	121.09	0.000	0.006	0.16	MWD
2,114.00	15.00	168.60	2,099.80	136.72	-134.42	26.88	137.08	0.002	-0.013	0.37	MWD
2,178.00	14.90	165.90	2,161.43	153.21	-150.52	30.52	153.58	-0.002	-0.042	1.10	MWD
2,239.00	14.20	164.10	2,220.47	168.53	-165.32	34.48	168.88	-0.011	-0.030	1.37	MWD
2,303.00	13.90	163.40	2,282.56	184.07	-180.24	38.82	184.37	-0.005	-0.011	0.54	MWD
2,366.00	14.20	163.40	2,343.68	199.36	-194.90	43.19	199.62	0.005	0.000	0.48	MWD
2,430.00	13.60	161.60	2,405.80	214.72	-209.56	47.81	214.94	-0.009	-0.028	1.16	MWD
2,493.00	13.30	160.60	2,467.07	229.35	-223.42	52.56	229.52	-0.005	-0.016	0.60	MWD
2,556.00	13.90	160.90	2,528.31	244.13	-237.41	57.44	244.26	0.010	0.005	0.96	MWD
2,651.00	13.60	163.70	2,620.58	266.69	-258.91	64.31	266.78	-0.003	0.029	0.77	MWD
2,747.00	13.50	166.50	2,713.91	289.17	-280.64	70.09	289.26	-0.001	0.029	0.69	MWD
2,842.00	12.90	165.10	2,806.40	310.86	-301.67	75.41	310.95	-0.006	-0.015	0.72	MWD
2,937.00	13.60	164.40	2,898.87	332.63	-322.68	81.14	332.72	0.007	-0.007	0.78	MWD
3,028.00	13.30	163.70	2,987.38	353.80	-343.03	86.95	353.88	-0.003	-0.008	0.38	MWD
3,123.00	13.90	163.40	3,079.71	376.13	-364.45	93.28	376.20	0.006	-0.003	0.64	MWD
3,218.00	13.50	161.99	3,172.01	398.62	-385.93	99.97	398.67	-0.004	-0.015	0.55	MWD
3,312.00	12.70	158.10	3,263.57	419.85	-405.95	107.21	419.87	-0.009	-0.041	1.27	MWD
3,407.00	13.30	157.80	3,356.13	441.07	-425.76	115.24	441.08	0.006	-0.003	0.64	MWD
3,502.00	14.50	156.40	3,448.35	463.70	-446.78	124.13	463.70	0.013	-0.015	1.31	MWD
3,597.00	14.60	158.10	3,540.30	487.37	-468.79	133.36	487.38	0.001	0.018	0.46	MWD
3,692.00	14.00	162.70	3,632.36	510.75	-490.87	141.24	510.78	-0.006	0.048	1.35	MWD
3,787.00	13.50	168.70	3,724.64	533.30	-512.71	146.83	533.32	-0.005	0.063	1.59	MWD
3,883.00	12.70	165.10	3,818.14	555.03	-533.90	151.74	555.04	-0.008	-0.037	1.19	MWD
3,977.00	12.90	163.40	3,909.81	575.85	-553.94	157.39	575.87	0.002	-0.018	0.45	MWD
4,069.00	13.20	161.60	3,999.43	596.61	-573.75	163.64	596.63	0.003	-0.020	0.55	MWD
4,164.00	13.70	163.00	4,091.83	618.69	-594.80	170.36	618.72	0.005	0.015	0.63	MWD
4,259.00	13.20	164.80	4,184.22	640.78	-616.03	176.49	640.81	-0.005	0.019	0.69	MWD
4,354.00	13.30	165.50	4,276.69	662.55	-637.07	182.07	662.58	0.001	0.007	0.20	MWD
4,449.00	13.50	165.90	4,369.11	684.57	-658.41	187.51	684.59	0.002	0.004	0.23	MWD
4,544.00	13.50	163.40	4,461.48	706.74	-679.79	193.38	706.76	0.000	-0.026	0.61	MWD
4,639.00	13.90	161.90	4,553.78	729.22	-701.26	200.09	729.25	0.004	-0.016	0.56	MWD
4,735.00	12.60	163.00	4,647.22	751.21	-722.24	206.73	751.24	-0.014	0.011	1.38	MWD
4,831.00	12.80	164.40	4,740.87	772.31	-742.49	212.65	772.34	0.002	0.015	0.38	MWD
4,925.00	12.90	160.90	4,832.52	793.20	-762.44	218.89	793.23	0.001	-0.037	0.83	MWD
5,021.00	13.10	158.50	4,926.06	814.71	-782.68	226.38	814.77	0.002	-0.025	0.60	MWD

\* \* \* NAUTICAL (Version 4.01) \* \* \*

Well: Indian Hills Unit 53

Target Azimuth: 164.55  
Target TVD: 8199

Closure Direction: 165

Calculation Method - Minimum Curvature

Measured Depth (ft)	Inclination (deg.)	Azimuth (deg.)	True Vertical Depth (ft)	Vertical Section (ft)	North/South (ft)	East/West (ft)	Closure (ft)	Build Rate (deg/ft)	Walk Rate (deg/ft)	Dogleg Severity (d/100')	Tool Face (deg)
5,053.00	13.20	157.80	4,957.22	821.94	-789.44	229.09	822.01	0.003	-0.022	0.59	MWD
5,154.00	13.50	154.60	5,055.49	845.01	-810.77	238.51	845.12	0.003	-0.032	0.79	MWD
5,250.00	12.30	157.40	5,149.07	866.19	-830.33	247.24	866.36	-0.013	0.029	1.41	MWD
5,345.00	11.20	161.60	5,242.08	885.45	-848.43	254.04	885.65	-0.012	0.044	1.47	MWD
5,439.00	11.10	164.80	5,334.31	903.61	-865.82	259.30	903.82	-0.001	0.034	0.67	MWD
5,502.00	11.30	169.40	5,396.11	915.83	-877.74	262.02	916.02	0.003	0.073	1.45	MWD
5,565.00	11.60	170.40	5,457.85	928.28	-890.05	264.21	928.44	0.005	0.016	0.57	MWD
5,627.00	11.50	170.80	5,518.60	940.62	-902.30	266.24	940.76	-0.002	0.006	0.21	MWD
5,690.00	11.30	172.20	5,580.36	952.98	-914.62	268.08	953.10	-0.003	0.022	0.54	MWD
5,754.00	11.20	171.80	5,643.13	965.36	-926.98	269.82	965.45	-0.002	-0.006	0.20	MWD
5,816.00	11.20	171.80	5,703.95	977.31	-938.90	271.54	977.38	0.000	0.000	0.00	MWD
5,880.00	11.30	172.90	5,766.72	989.68	-951.27	273.20	989.73	0.002	0.017	0.37	MWD
5,943.00	12.00	176.40	5,828.42	1,002.19	-963.94	274.37	1,002.22	0.011	0.056	1.58	MWD
6,006.00	11.90	177.10	5,890.05	1,014.94	-976.96	275.11	1,014.96	-0.002	0.011	0.28	MWD
6,070.00	12.00	176.70	5,952.67	1,027.89	-990.19	275.83	1,027.89	0.002	-0.006	0.20	MWD
6,134.00	12.00	175.70	6,015.27	1,040.92	-1,003.47	276.71	1,040.92	0.000	-0.016	0.32	MWD
6,196.00	12.10	174.30	6,075.90	1,053.65	-1,016.36	277.84	1,053.65	0.002	-0.023	0.50	MWD
6,260.00	13.60	172.90	6,138.30	1,067.71	-1,030.50	279.44	1,067.72	0.023	-0.022	2.39	MWD
6,324.00	14.80	169.70	6,200.34	1,083.29	-1,046.01	281.83	1,083.32	0.019	-0.050	2.24	MWD
6,387.00	15.30	170.40	6,261.18	1,099.58	-1,062.13	284.65	1,099.61	0.008	0.011	0.84	MWD
6,451.00	16.00	171.80	6,322.81	1,116.73	-1,079.18	287.32	1,116.78	0.011	0.022	1.24	MWD
6,513.00	16.20	170.40	6,382.38	1,133.81	-1,096.17	289.98	1,133.88	0.003	-0.023	0.70	MWD
6,576.00	16.80	168.70	6,442.78	1,151.63	-1,113.76	293.23	1,151.72	0.010	-0.027	1.22	MWD
6,671.00	17.10	163.70	6,533.66	1,179.29	-1,140.63	299.84	1,179.38	0.003	-0.053	1.57	MWD
6,735.00	17.40	163.00	6,594.78	1,198.26	-1,158.81	305.28	1,198.35	0.005	-0.011	0.57	MWD
6,799.00	16.90	162.70	6,655.94	1,217.13	-1,176.85	310.85	1,217.21	-0.008	-0.005	0.79	MWD
6,862.00	15.90	164.80	6,716.37	1,234.91	-1,193.92	315.83	1,234.98	-0.016	0.033	1.85	MWD
6,926.00	16.00	165.90	6,777.91	1,252.49	-1,210.93	320.28	1,252.57	0.002	0.017	0.50	MWD
6,989.00	15.70	164.10	6,838.51	1,269.70	-1,227.55	324.73	1,269.78	-0.005	-0.029	0.91	MWD
7,053.00	14.90	166.60	6,900.25	1,286.58	-1,243.88	329.01	1,286.66	-0.013	0.039	1.62	MWD
7,116.00	14.00	169.00	6,961.25	1,302.27	-1,259.24	332.34	1,302.36	-0.014	0.038	1.72	MWD
7,180.00	13.20	171.80	7,023.46	1,317.24	-1,274.08	334.86	1,317.35	-0.013	0.044	1.62	MWD
7,244.00	13.80	171.80	7,085.69	1,332.06	-1,288.86	336.99	1,332.19	0.009	0.000	0.94	MWD
7,307.00	13.60	172.20	7,146.90	1,346.86	-1,303.64	339.07	1,347.01	-0.003	0.006	0.35	MWD
7,371.00	13.70	173.60	7,209.09	1,361.80	-1,318.63	340.93	1,361.99	0.002	0.022	0.54	MWD
7,434.00	13.40	175.30	7,270.34	1,376.34	-1,333.32	342.36	1,376.57	-0.005	0.027	0.79	MWD
7,497.00	13.50	176.40	7,331.61	1,390.71	-1,347.93	343.42	1,390.99	0.002	0.017	0.44	MWD
7,559.00	12.40	175.70	7,392.03	1,404.32	-1,361.79	344.38	1,404.66	-0.018	-0.011	1.79	MWD
7,621.00	12.70	173.90	7,452.55	1,417.58	-1,375.21	345.60	1,417.97	0.005	-0.029	0.79	MWD
7,684.00	13.20	171.50	7,513.95	1,431.55	-1,389.21	347.40	1,431.98	0.008	-0.038	1.17	MWD
7,748.00	12.80	165.90	7,576.31	1,445.89	-1,403.31	350.21	1,446.35	-0.006	-0.087	2.06	MWD
7,812.00	13.00	164.80	7,638.69	1,460.18	-1,417.13	353.82	1,460.63	0.003	-0.017	0.49	MWD
7,875.00	12.70	163.00	7,700.12	1,474.19	-1,430.59	357.70	1,474.63	-0.005	-0.029	0.79	MWD
7,939.00	11.70	161.60	7,762.67	1,487.70	-1,443.48	361.81	1,488.13	-0.016	-0.022	1.63	MWD
8,002.00	11.30	159.20	7,824.41	1,500.23	-1,455.31	366.02	1,500.63	-0.006	-0.038	0.99	MWD
8,066.00	11.40	156.30	7,887.15	1,512.73	-1,466.96	370.79	1,513.10	0.002	-0.045	0.91	MWD
8,129.00	11.90	154.60	7,948.86	1,525.29	-1,478.53	376.07	1,525.61	0.008	-0.027	0.96	MWD
8,193.00	12.80	154.60	8,011.38	1,538.77	-1,490.90	381.95	1,539.04	0.014	0.000	1.41	MWD
8,240.00	13.20	153.50	8,057.17	1,549.16	-1,500.40	386.57	1,549.40	0.009	-0.023	1.00	MWD
8,300.00	13.70	152.00	8,115.52	1,562.82	-1,512.81	392.97	1,563.01	0.008	-0.025	1.02	proj

1383' FWL  
+ 1513'  
-----  
2896' FWL

1586' FWL  
+ 393'  
-----  
1979' FWL

5280  
- 2896  
-----  
2384' FSL

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 South First, Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources

Form C-104  
Revised March 25, 1999

OIL CONSERVATION DIVISION  
2040 South Pacheco  
Santa Fe, NM 87505

Submit to Appropriate District Office  
5 Copies

AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

<sup>1</sup> Operator name and Address <b>Marathon Oil Company P.O. Box 552 Midland, TX 79702</b>		<sup>2</sup> OGRID Number <b>014021</b>
		<sup>3</sup> Reason for Filing Code <b>NEW WELL</b>
<sup>4</sup> API Number <b>30-0 30-015-32875</b>	<sup>5</sup> Pool Name <b>INDIAN BASIN UPPER PENN ASSOCIATED GAS POOL</b>	<sup>6</sup> Pool Code <b>33685</b>
<sup>7</sup> Property Code <b>6409</b>	<sup>8</sup> Property Name <b>INDIAN HILLS UNIT</b>	<sup>9</sup> Well Number <b>53</b>

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

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
<b>F</b>	<b>28</b>	<b>21-S</b>	<b>24-E</b>		<b>1383</b>	<b>NORTH</b>	<b>1586</b>	<b>WEST</b>	<b>BLDY</b>

<sup>11</sup> Bottom Hole Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
<b>K</b>	<b>28</b>	<b>21-S</b>	<b>24-E</b>		<b>2384</b>	<b>SOUTH</b>	<b>1979</b>	<b>WEST</b>	<b>BLDY</b>

<sup>12</sup> Lse Code <b>F</b>	<sup>13</sup> Producing Method Code <b>PUMPING</b>	<sup>14</sup> Gas Connection Date <b>9/14/2003</b>	<sup>15</sup> C-129 Permit Number	<sup>16</sup> C-129 Effective Date	<sup>17</sup> C-129 Expiration Date
------------------------------------	---	---	-----------------------------------	------------------------------------	-------------------------------------

III. Oil and Gas Transporters

<sup>18</sup> Transporter OGRID	<sup>19</sup> Transporter Name and Address	<sup>20</sup> POD	<sup>21</sup> O/G	<sup>22</sup> POD ULSTR Location and Description
<b>138648</b>	<b>AMOCO PIPELINE TRUCKS 502 N. WEST AVENUE LUBBOCK, TX 79336</b>	<b>2816323</b>	<b>OIL</b>	<b>UL "P", SECTION 19, T-21-S, R-24-E LOT 12</b>
<b>14035</b>	<b>MARATHON OIL COMPANY P. O. BOX 1324 ARTESIA, NM 88211-1324</b>	<b>2823213</b>	<b>GAS</b>	<b>UL "P", SECTION 19, T-21-S, R-24-E LOT 12</b>

IV. Produced Water

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

V. Well Completion Data

<sup>25</sup> Spud Date	<sup>26</sup> Ready Date	<sup>27</sup> TD	<sup>28</sup> PBDT	<sup>29</sup> Perforations	<sup>30</sup> DHC, MC
<b>08/15/2003</b>	<b>09/14/2003</b>	<b>8315</b>	<b>8269</b>	<b>7612-7980</b>	

<sup>31</sup> Hole Size	<sup>32</sup> Casing & Tubing Size	<sup>33</sup> Depth Set	<sup>34</sup> Sacks Cement
<b>12-1/4</b>	<b>9-5/8"</b>	<b>1210'</b>	<b>835 SK</b>
<b>8.75"</b>	<b>7"</b>	<b>8315'</b>	<b>1495 SK</b>
	<b>2-7/8"</b>	<b>8209'</b>	

VI. Well Test Data

<sup>35</sup> Date New Oil	<sup>36</sup> Gas Delivery Date	<sup>37</sup> Test Date	<sup>38</sup> Test Length	<sup>39</sup> Tbg. Pressure	<sup>40</sup> Csg. Pressure
<b>09/14/2003</b>	<b>09/14/2003</b>	<b>10/14/2003</b>	<b>24 HRS</b>	<b>240</b>	<b>180</b>

<sup>41</sup> Choke Size	<sup>42</sup> Oil	<sup>43</sup> Water	<sup>44</sup> Gas	<sup>45</sup> AOF	<sup>46</sup> Test Method
	<b>186</b>	<b>740</b>	<b>2635</b>		<b>PUMPING</b>

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

Signature: *Charles E. Kendrick*  
Printed name: **Charles E. Kendrick**  
Title: **Engineer Technician**  
Date: **10/22/2003**  
Phone: **432-687-8104**

OIL CONSERVATION DIVISION  
Approved by: *Jim W. Gunn*  
Title: **District Supervisor**  
Approval Date: **OCT 28 2003**

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB NO. 1004-0135  
Expires: November 30, 2000

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

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

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMNMO30482
2. Name of Operator MARATHON OIL COMPANY		6. If Indian, Allottee or Tribe Name
Contact: CHARLES KENDRIX E-Mail: CEKENDRIX@MARATHONOIL.COM		7. If Unit or CA/Agreement, Name and/or No. NMNMO70964A
3a. Address P O BOX 3487 HOUSTON, TX 77253	3b. Phone No. (include area code) Ph: 713-296-2096	8. Well Name and No. INDIAN HILLS UNIT 53
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 28 T21S R24E SENW Lot F 1383FNL 1586FWL		9. API Well No. 30-015-32875-00-S1
RECEIVED JAN 10 2005 GOD-ARTERIA		10. Field and Pool, or Exploratory INDIAN BASIN UPPER PENN ASS
		11. County or Parish, and State EDDY COUNTY, NM

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

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

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

Indian Hills Unit # 53 is a directionally drilled Upper Penn Assoc.gas well w/perfs: 7612' to 7980'(MD). Marathon intends to squeeze off current perfs.w/ approx 150 sks of cement, and cut a window in the 7" casing at approx. 7810'. Then drill a 4.75" horizontal lateral to a new TL-of 800' FSL & 2050' FWL of same section and producing interval. This will be an Open Hole completion. Please see attached C-102 and directional plan.

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

Electronic Submission #52644 verified by the BLM Well Information System  
For MARATHON OIL COMPANY, sent to the Carlsbad  
Committed to AFMSS for processing by ARMANDO LOPEZ on 01/05/2005 (05AL0077SE)

Name (Printed/Typed) MIKE MICK	Title AUTHORIZED REPRESENTATIVE
Signature (Electronic Submission)	Date 01/05/2005

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By ALEXIS C SWOBODA <i>[Signature]</i>	Title PETROLEUM ENGINEER	Date 01/06/2005
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office Carlsbad

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised June 10, 2003

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-015-32675	<sup>2</sup> Pool Code 33685	<sup>3</sup> Pool Name INDIAN BASIN UPPER FERRY ASSOCIATED
<sup>4</sup> Property Code 6409	<sup>5</sup> Property Name INDIAN HILLS UNIT	
<sup>7</sup> OGRID No. 14021	<sup>8</sup> Operator Name Marathon Oil Company	<sup>6</sup> Well Number 53
		<sup>9</sup> Elevation 3702'

<sup>10</sup> Surface Location

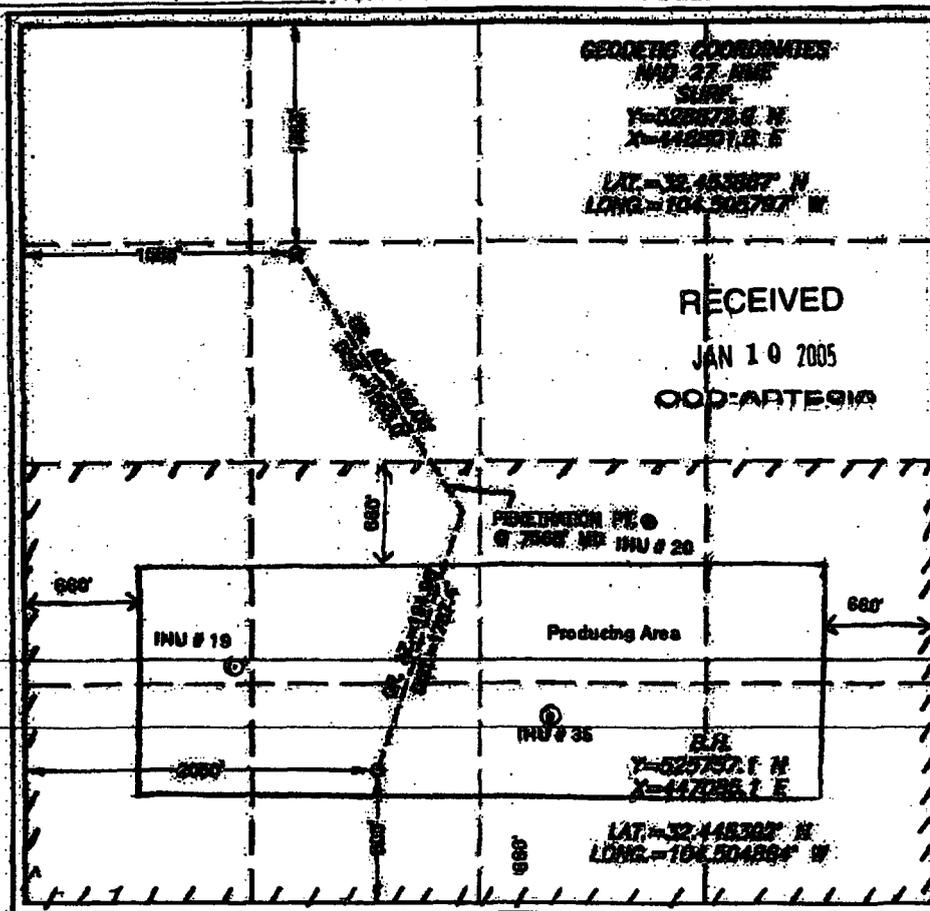
UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	28	21-S	24-E		1383'	North	1586	West	HIDE

<sup>11</sup> 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
H	28	21-S	24-E		800'	South	2050'	West	HIDE

<sup>12</sup> Dedicated Acres 320 8/2	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
--	-------------------------------	----------------------------------	-------------------------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



**OPERATOR CERTIFICATION**  
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  
*Mike Mick*  
Signature  
Mike Mick  
Printed Name  
Adv Sr. Engineer Technician  
mmick@marathonoil.com  
Title and E-mail Address

**SURVEYOR CERTIFICATION**  
I hereby certify that the well location shown on this plat was plotted from field notes of correct survey data by me or under my supervision and that the same is true and correct to the best of my belief.  
MAY 20 2003  
Date Entered: 05/15/04  
Signature of Seal of Professional Surveyor  
04.13.1029  
Certificate No. 6487 HIDE 2884

Marathon Oil Company  
Indian Hills Unit #53

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 : Plan 1 Horizontal  
Our ref : prop4417  
License :

Date printed : 8-Dec-2004  
Date created : 8-Dec-2004  
Last revised : 8-Dec-2004

Field is centred on 445535.500,521332.200,-105.00000,N  
Structure is centred on 446801.800,528872.900,-105.00000,N

Slot location is n32 27 13.917,w104 30 20.874  
Slot Grid coordinates are N 528872.900, E 446801.800  
Slot local coordinates are 0.00 N 0.00 E

Projection type: mercator - New Mexico East (3001), Spheroid: Clarke - 1866

Reference North is Grid North

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Marathon Oil Company  
 Indian Hills Unit #53, slot #1  
 INDIAN BASIN, Eddy County New Mexico

PROPOSAL LISTING Page 1  
 Your ref : Plan 1 Horizontal  
 Last revised : 8-Dec-2004

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	G R I D C O O R D S Easting Northing	
7748.00	12.80	165.90	7576.31	1403.30S	350.24E	0.00	1422.93	447152.04	527469.60
7810.00	12.80	165.90	7636.77	1416.62S	353.59E	0.00	1436.44	447155.39	527456.28
7900.00	53.52	182.07	7710.64	1464.54S	354.76E	45.93	1484.34	447156.56	527408.36
7986.08	92.93	185.48	7735.00	1545.14S	349.19E	45.93	1564.41	447150.99	527327.76
8000.00	92.93	185.48	7734.29	1558.98S	347.86E	0.00	1578.13	447149.66	527313.92
8100.00	92.93	185.48	7729.18	1658.39S	338.33E	0.00	1676.73	447140.13	527214.51
8200.00	92.93	185.48	7724.07	1757.81S	328.79E	0.00	1775.32	447130.59	527115.09
8300.00	92.93	185.48	7718.96	1857.22S	319.26E	0.00	1873.91	447121.06	527015.68
8400.00	92.93	185.48	7713.85	1956.63S	309.72E	0.00	1972.51	447111.52	526916.27
8500.00	92.93	185.48	7708.74	2056.04S	300.18E	0.00	2071.10	447101.98	526816.86
8600.00	92.93	185.48	7703.62	2155.46S	290.64E	0.00	2169.69	447092.44	526717.44
8700.00	92.93	185.48	7698.51	2254.87S	281.11E	0.00	2268.29	447082.91	526618.03
8800.00	92.93	185.48	7693.39	2354.28S	271.57E	0.00	2366.88	447073.37	526518.62
8900.00	92.93	185.48	7688.28	2453.69S	262.03E	0.00	2465.47	447063.83	526419.21
9000.00	92.93	185.48	7683.16	2553.11S	252.49E	0.00	2564.06	447054.29	526319.79
9100.00	92.93	185.48	7678.04	2652.52S	242.95E	0.00	2662.66	447044.75	526220.38
9200.00	92.93	185.48	7672.93	2751.93S	233.41E	0.00	2761.25	447035.21	526120.97
9300.00	92.93	185.48	7667.81	2851.34S	223.87E	0.00	2859.84	447025.67	526021.56
9400.00	92.93	185.48	7662.69	2950.76S	214.33E	0.00	2958.43	447016.13	525922.14
9500.00	92.94	185.48	7657.57	3050.17S	204.78E	0.00	3057.02	447006.58	525822.73
9550.13	92.94	185.48	7655.00	3100.00S	200.00E	0.00	3106.44	447001.80	525772.90

All data in feet unless otherwise stated. Calculation uses minimum curvature method.  
 Coordinates from slot #1 and IVD from rotary table.  
 Bottom hole distance is 3106.44 on azimuth 176.31 degrees from wellhead.  
 Vertical section is from S 0.00 E 0.00 on azimuth 176.31 degrees.  
 Grid is mercator - New Mexico East (3001).

Grid coordinates in FEET and computed using the Clarke - 1866 spheroid  
 Presented by Baker Hughes INTEQ

Marathon Oil Company  
 Indian Hills Unit #53, slot #1  
 INDIAN BASIN, Eddy County New Mexico

PROPOSAL LISTING Page 2  
 Your ref : Plan 1 Horizontal  
 Last revised : 8-Dec-2004

				Comments in wellpath	
				=====	
MD	TVD	Rectangular Coords.		Comment	
7986.08	7735.00	1545.14S	349.19E	End of Curve	
9550.13	7655.00	3100.00S	200.00E	TD Lateral	

Targets associated with this wellpath						
=====						
Target name	Geographic Location		T.V.D.	Rectangular Coordinates		Revised
End of Curve			7735.00	1545.14S	349.19E	8-Dec-2004
TD Lateral			7655.00	3100.00S	200.00E	8-Dec-2004

**Marathon Oil Company**

Created by earynm  
 Date plotted 8-Dec-2004  
 Plot Reference is Plan 1 Horizontal  
 Coordinates are in feet reference slot #1.  
 True Vertical Depths are reference rotary table.

Structure : Indian Hills Unit #53

Slot : slot #1

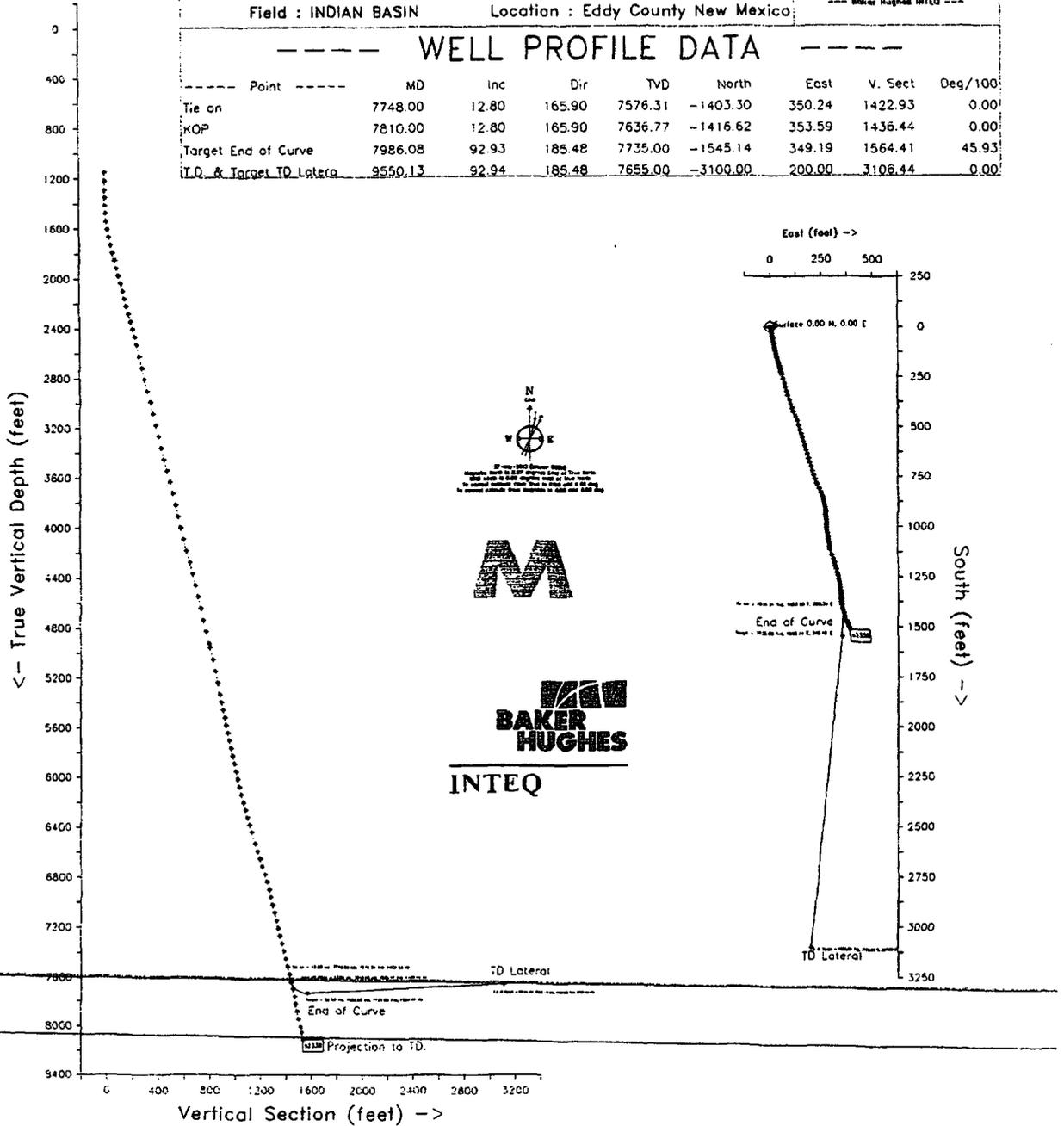
Field : INDIAN BASIN

Location : Eddy County New Mexico

--- Baker Hughes INTEQ ---

**WELL PROFILE DATA**

Point	MD	Inc	Dir	TVD	North	East	V. Sect	Deg/100'
Tie on	7748.00	12.80	165.90	7576.31	-1403.30	350.24	1422.93	0.00
KOP	7810.00	12.80	165.90	7636.77	-1416.62	353.59	1436.44	0.00
Target End of Curve	7986.08	92.93	185.48	7735.00	-1545.14	349.19	1564.41	45.93
T.O. & Target TD Lateral	9550.13	92.94	185.48	7655.00	-3100.00	200.00	3106.44	0.00



Azimuth 176.31 with reference 0.00 S, 0.00 E from slot #1