



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

Bill Richardson

Governor

Joanna Prukop

Cabinet Secretary

July 16, 2003

Lori Wrotenbery

Director

Oil Conservation Division

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

Attention: Steve Millican
SFMillican@MarathonOil.com

Administrative Order NSL-4918 (BHL) (SD)

Dear Mr. Millican:

Reference is made to the following: (i) your application filed with the New Mexico Oil Conservation Division ("Division") on June 10, 2003 (***administrative application reference No. pKRV0-316332201***); and (ii) the Division's records in Santa Fe: 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 Gas Com. Well No. 56 to be drilled as an upper Pennsylvanian infill well to an unorthodox subsurface location within an existing standard 337.95-acre stand-up spacing and proration unit comprising Lots 1, 6, 7, 8, 13, and 14 and the E/2 NE/4 (E/2 equivalent) of Irregular Section 29, 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. 14 (API No. 30-015-30624), located at a standard 2300 feet from the South line and 2000 feet from the East line (Lot 8/Unit J) of Irregular Section 29;
- (ii) Indian Hills Unit Well No. 27 (API No. 30-015-31406), located on the surface 503 feet from the North line and 2310 feet from the West line (Lot 2/Unit C) of Irregular Section 29, and completed within the Indian Basin-Upper Pennsylvanian Associated Pool (33685) at a bottom-hole location that is 1313 feet from the North line and 1332 feet from the East line (Lot 1/Unit B) of Irregular Section 29; and
- (iii) Indian Hills Unit Gas Com. Well No. 47 (API No. 30-015-32536), located on the surface 2316 feet from the South line and 2004 feet from the East line (Lot 8/Unit J) of Irregular Section 29, and completed within the Indian Basin-Upper Pennsylvanian Associated Pool (33685) at a standard sub-surface location within the SE/4 SE/4 equivalent (Lot 14/Unit P) of Irregular Section 29.

It is our understanding the proposed Indian Hills Unit Gas Com. Well No. 56, because of topographic reasons, will be spud at a surface location 453 feet from the South line and 350 feet from the West line (Unit M) of Section 21, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico, and drilled directionally to the west-southwest to a targeted-bottomhole location at an approximate depth of 8,084 feet (TVD) 179 feet from the North line and 1207 feet from the East line (Unit A) of Irregular Section 29. The wellbore is to intersect the top of the Upper-Pennsylvanian interval at an approximate depth of 7,276 feet (TVD) 99 feet from the North line and 1013 feet from the East line (Unit A) of Irregular Section 29. The proposed well will be unorthodox in that the entire producing interval will be closer than the standard setback distance of 660 feet from the North line of Irregular Section 29. 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.

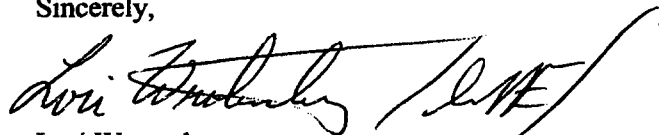
By the authority granted me under the provisions of Division Rule 104.F (2) and the applicable provisions of the special rules governing the Indian Basin-Upper Pennsylvanian Associated Pool, the above-described unorthodox sub-surface location for the Indian Hills Unit Gas Com. Well No. 56 within the E/2 equivalent of Irregular Section 29, 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. 14 and 27 and Indian Hills Unit Gas Com. Wells No. 47 and 56. Furthermore, Marathon is permitted to produce the allowable assigned the subject 337.95-acre spacing and proration unit from all four 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

CMD : ONGARD 10/08/04 12:42:35
 OG6CLOG C105-WELL COMPLETION OR RECOMP CASING LOG OCOMES -TPQV

OGRID Identifier : 14021 MARATHON OIL CO
 Prop Identifier : 6410 INDIAN HILLS UNIT GAS COM Well No : 056
 API Well Identifier : 30 15 32878
 Surface Locn - UL : M Sec : 21 Twp : 21S Range : 24E Lot Idn :
 Multiple comp (S/M/C) : S TVD Depth (Feet) : 8310 MVD Depth (Feet) : 8310
 Spud Date : 09-02-2003 P/A Date :
 Casing/Linear Record:

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

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

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

CMD : ONGARD 10/08/04 12:42:42
 OG6IWCM INQUIRE WELL COMPLETIONS OGOMES -TPQV

API Well No : 30 15 32878 Eff Date : 09-30-2003 WC Status : A
 Pool Idn : 33685 INDIAN BASIN;UPPER PENN (ASSOC)
 OGRID Idn : 14021 MARATHON OIL CO
 Prop Idn : 6410 INDIAN HILLS UNIT GAS COM

Well No : 056
 GL Elevation: 3667

U/L Sec Township Range North/South		East/West		Prop/Act (P/A)	
B.H. Locn	: A 29 21S 24E	FTG 179 F N	FTG 1207 F	E	P
Lot Identifier:					
Dedicated Acre: 329.40					
Lease Type : F					
Type of consolidation (Comm, Unit, Forced Pooling - C/U/F/O) :					

M0025: Enter PF keys to scroll

PF01 HELP	PF02	PF03 EXIT	PF04 GOTO	PF05	PF06
PF07	PF08	PF09	PF10 NEXT-WC	PF11 HISTORY	PF12 NEXTREC

CMD : ONGARD 10/08/04 12:42:54
 OG6C101 C101-APPLICATION FOR PERMIT TO DRILL OGO MES -TPQV

OGRID Idn : 14021 API Well No: 30 15 32878 APD Status(A/C/P) : A
 Opr Name, Addr: MARATHON OIL CO Aprvl/Cncl Date : 07-15-2003
 539 SOUTH MAIN STREET
 FINLAY, OH 45840

Prop Idn: 6410 INDIAN HILLS UNIT GAS COM Well No: 56

U/L	Sec	Township	Range	Lot	Idn	North/South	East/West
Surface Locn	: M	21	21S	24E		FTG 453 F S	FTG 350 F W
OCD U/L	: M	API County		: 15			

Work typ(N/E/D/P/A) : N Well typ(O/G/M/I/S/W/C) : G Cable/Rctary (C/R) : R
 Lease typ(F/S/P/N/J/U/I) : F Ground Level Elevation : 3667

State Lease No: LC 064319 Multiple Comp (S/M/C) : S
 Prpsd Depth : 8385 Prpsd Frmtcn : UNDIAN BASIN U/PENN ASSOC

E0009: Enter data to modify record
 PF01 HELP PF02 PF03 EXIT PF04 GOTO PF05 PF06 CONFIRM
 PF07 PF08 PF09 PRINT PF10 C102 PF11 HISTORY PF12

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR DEEPEN

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

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL WELL ☐

GAS WELL ☒

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 any State requirements.)
At surface

453' FSL & 350' FWL Sec. 21
At proposed prod. zone

179' FNL & 1207' FNL Sec. 21

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

15 miles NW of Carlsbad N.M.

15. DISTANCE FROM PROPOSED

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest dir. well line, if any)

BHL 179' FNL

18. DISTANCE FROM PROPOSED LOCATION

TO NEAREST WELL, DRILLING, COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT.

1450'

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

G.L. 3667'

CARLSBAD CONTROLLED WATER BASIN

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.

'Master' H2S Contingency Plan on File - OCD

Marathon Oil Company is proposing to drill a Directional well from the existing drilling pad of the Indian Hills Unit # 33 and 36. The surface stake is between the IHU # 33 and the IHU # 36. The same drilling pit to drill the existing IHU # 33 and 36 will be re-opened and used to drill the proposed IHU # 56. Old pit contents will be stockpiled on liner material to prevent any soil contamination.

This well has a Non-Standard BHL. The BHL is too close to the outer boundary of the 320 acre North half of Section 23.

Baker Integ directional plan is attached.

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

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

24.

SIGNED

[Signature]

TITLE Engineer Tech.

DATE 6/4/03

(This space for Federal or State office use)

NSL 4918 CBHL CSD

PERMIT NO. _____

APPROVAL DATE _____

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

ACTING

FIELD MANAGER

APPROVED BY

/s/ Joe G. Lara

TITLE _____

DATE

15 JUL 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 1980, Hobbs, NM 88241-1980

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

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

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

State of New Mexico

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code 33685	Pool Name Indian Basin Upper Penn. Assoc.
Property Code	Property Name INDIAN HILLS UNIT GAS COM	Well Number 56
OGRID No. 14021	Operator Name MARATHON OIL COMPANY	Elevation 3667'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	21	21-S	24-E		453'	SOUTH	350'	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
A	29	21-S	24-E		179'	NORTH	1207'	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

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

		LOT 2	LOT 1
		38.26 AC LOT 3	38.29 AC LOT 4
	GEODETIC COORDINATES NAD 27 NME Y = 530701.1 X = 445521.6 LAT. 32°27'31.99"N LONG. 104°30'35.85"W	36.69 AC LOT 6	36.72 AC LOT 5
		36.35 AC LOT 7	36.29 AC LOT 8
		37.74 AC	37.68 AC

OPERATOR CERTIFICATION

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

Jerry Fletcher
Signature

Jerry Fletcher
Printed Name

Engineer Tech.
Title

6/3/03
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.

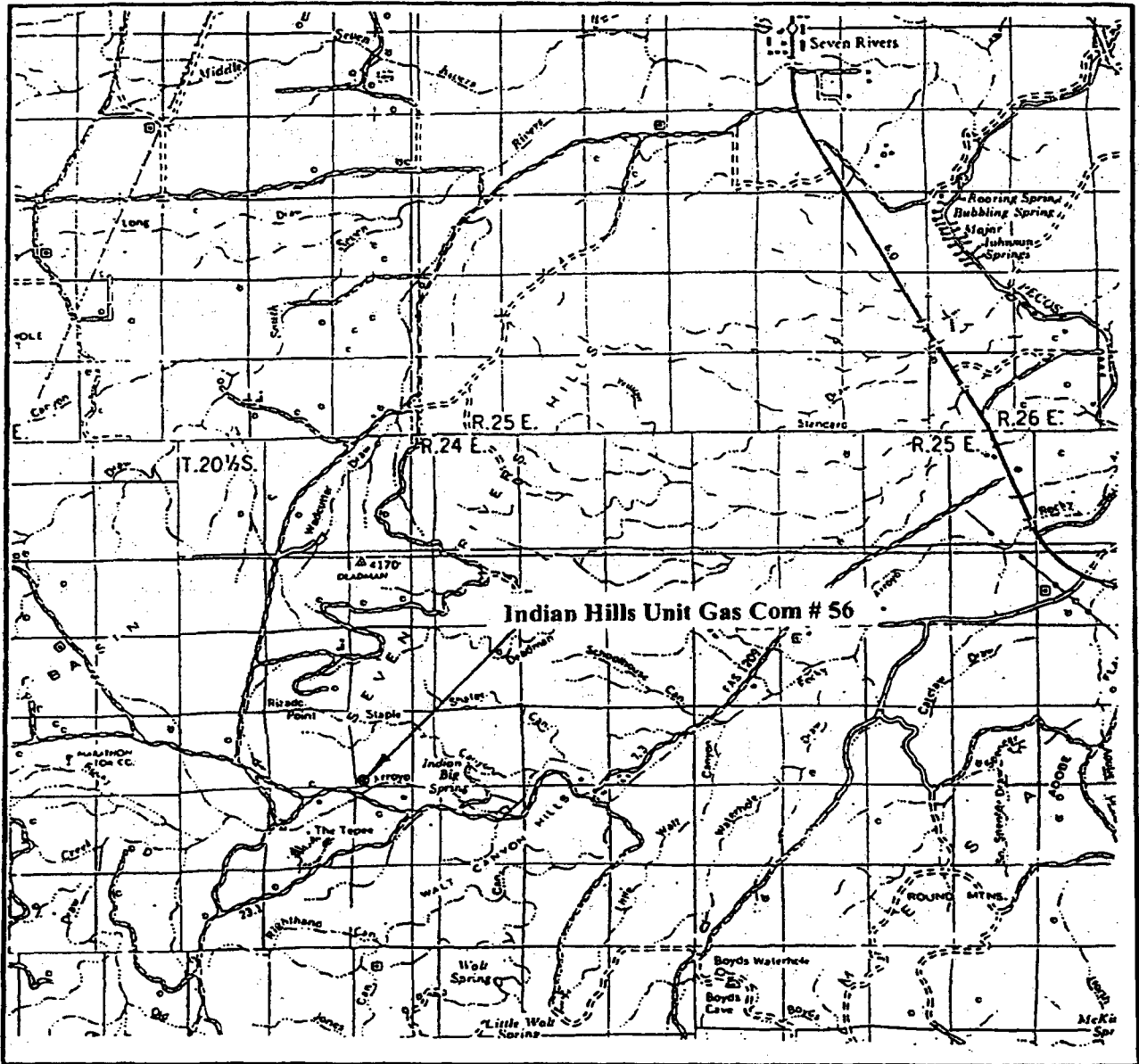
May 19, 2003
Date Surveyed

Signature & Seal of Professional Surveyor
Gary E. Edson 5/22/03

03-11.0535

Certificate No. RONALD J. EDSON 3239
GARY EDSON 12641

VICINITY MAP



SCALE: 1" = 2 MILES

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

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 453' FSL 350' FWL

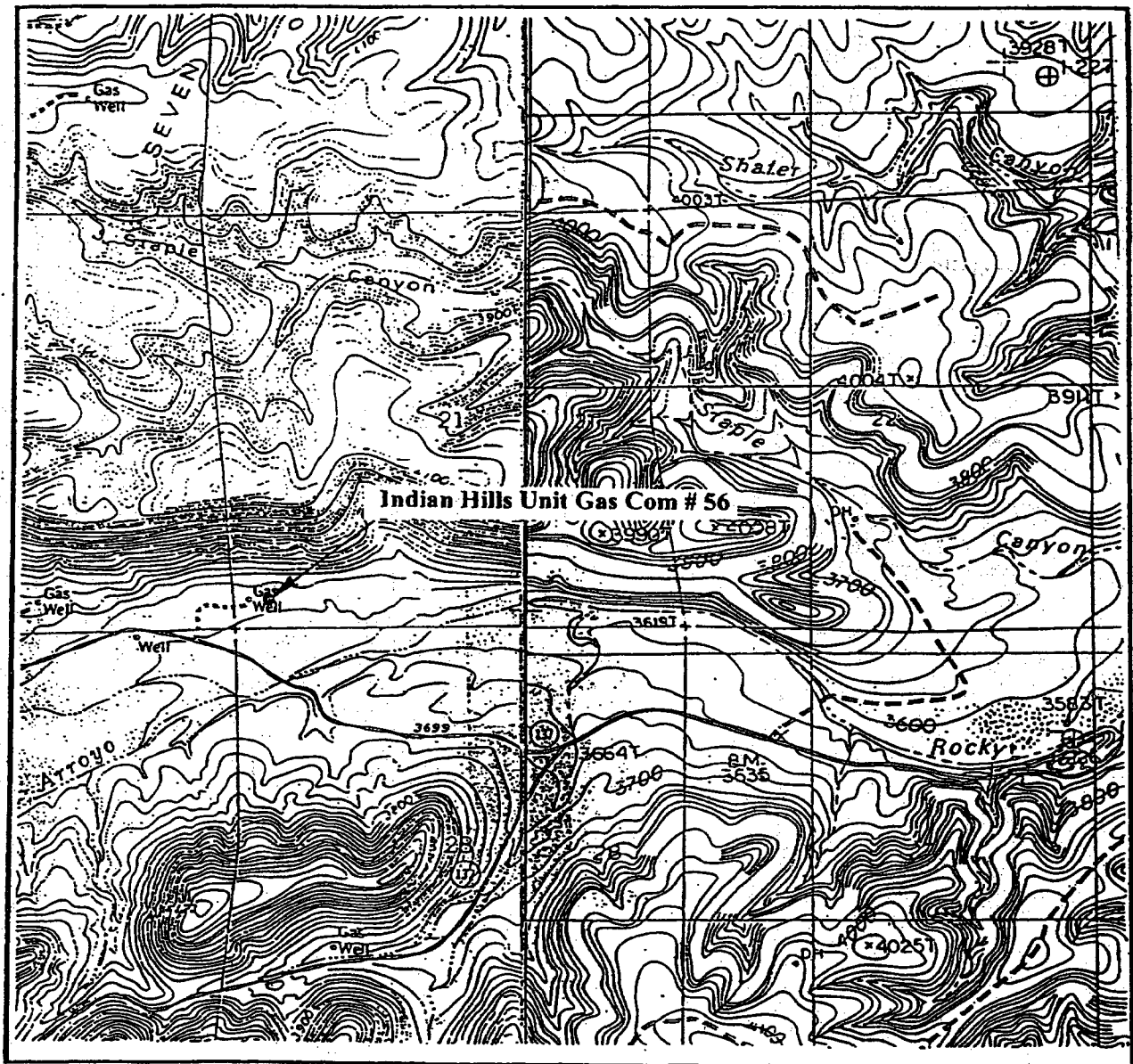
ELEVATION 3667'

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

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 453' FSL 350' FWL

ELEVATION 3667'

OPERATOR MARATHON OIL COMPANY

LEASE INDIAN HILLS UNIT

U.S.G.S. TOPOGRAPHIC MAP

MARTHA CREEK AZOTEA PEAK, N.M.N.M.

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

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

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

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-102
Revised February 10, 1984
Submit to Appropriate District Office
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WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code 33685	Pool Name Indian Basin Upper Penn. Assoc.
Property Code	Property Name INDIAN HILLS UNIT GAS COM.	Well Number 56
GRID No. 14021	Operator Name MARATHON OIL COMPANY	Elevation 3667

Surface Location

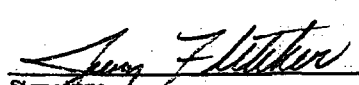
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
"M"	21	21-S	24-E		453'	SOUTH	350'	WEST	EDDY

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
"A"	29	21-S	24-E		179'	North	1207'	EAST	EDDY

Dedicated Acres 320 E/2	Joint or Infill	Consolidation Code	Order No.
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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.  Signature Jerry Fletcher Printed Name Engineer Tech. Title 6/5/03 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 knowledge and belief. Date Surveyed Signature & Seal of Professional Surveyor Certificate No.
--	---

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

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

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

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

State of New Mexico
Energy, Minerals and Natural Resources Department

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

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WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
	33685	Indian Basin Upper Penn. Ass0c.
Property Code	Property Name	Well Number
	INDIAN HILLS UNIT GAS COM	56
OGRID No.	Operator Name	Elevation
14021	MARATHON OIL COMPANY	3667'

Surface Location

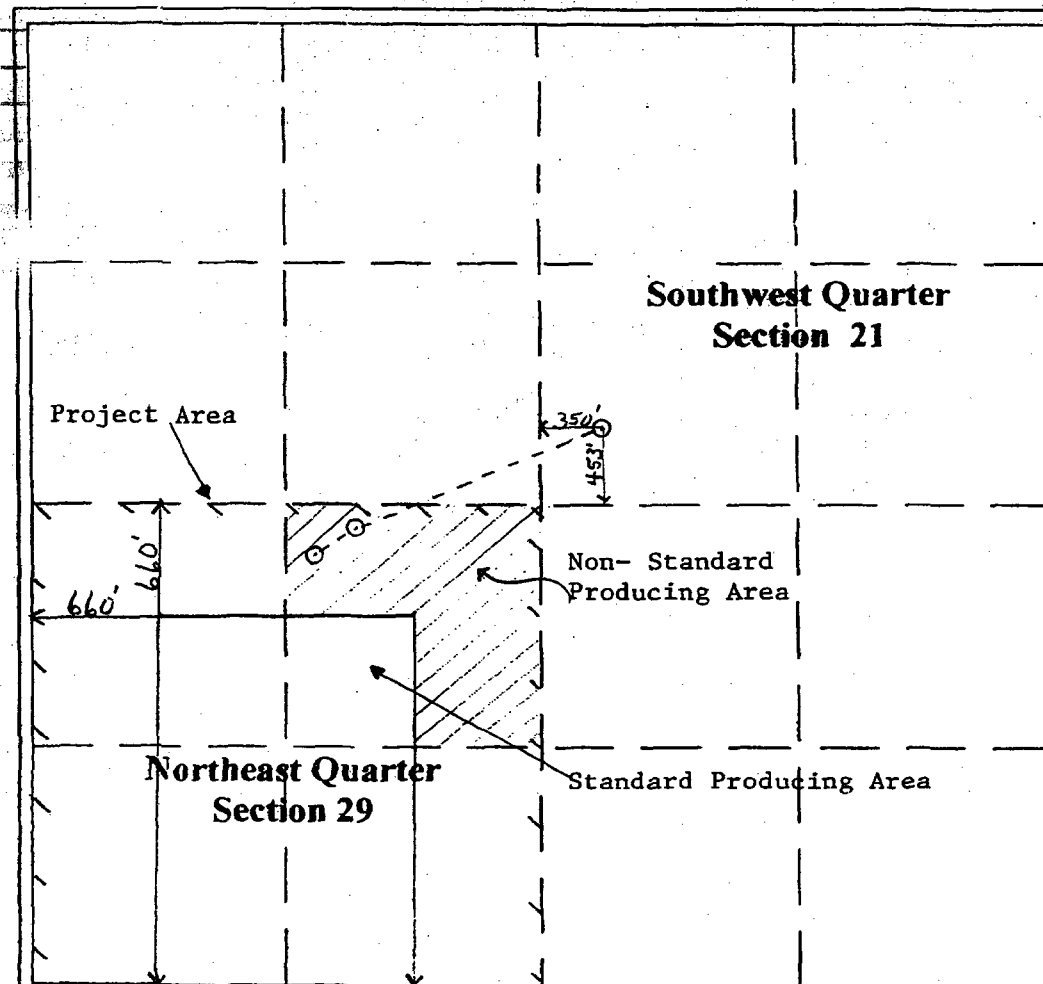
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
"M"	21	21-S	24-E		453'	SOUTH	350'	WEST	EDDY

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
"A"	29	21-S	24-E		179'	NORTH	1207'	EAST	EDDY

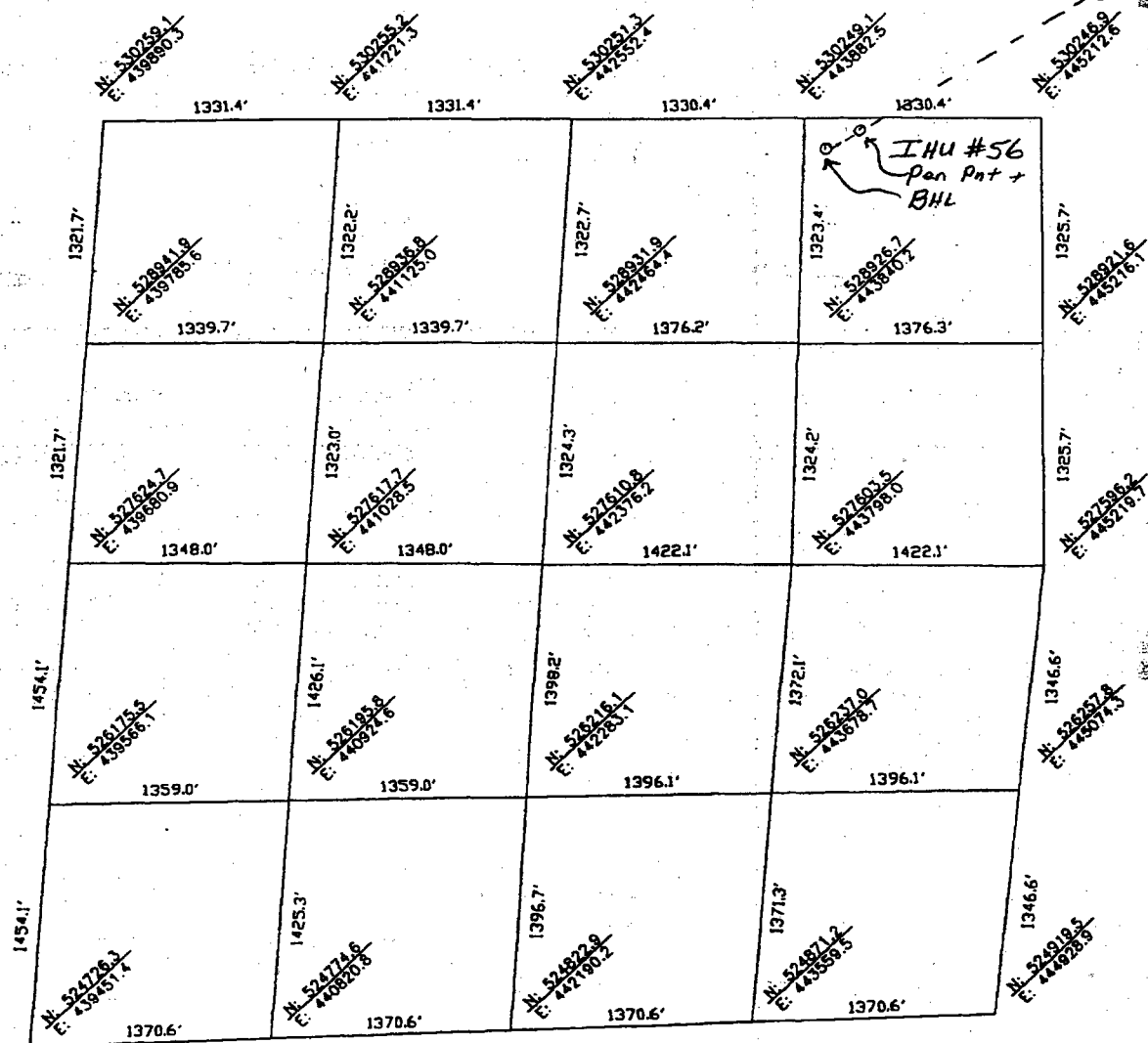
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320 E/2			

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. <i>Jerry Fletcher</i> Signature Jerry Fletcher Printed Name Engineer Tech. Title 6/3/03 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 knowledge and belief. Date Surveyed Signature & Seal of Professional Surveyor Certificate No.
--	--

SECTION 29, TOWNSHIP 21 SOUTH, RANGE 24 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

SHL in Section 21



1000 0 1000 2000 FEET
Scale: 1"=1000'

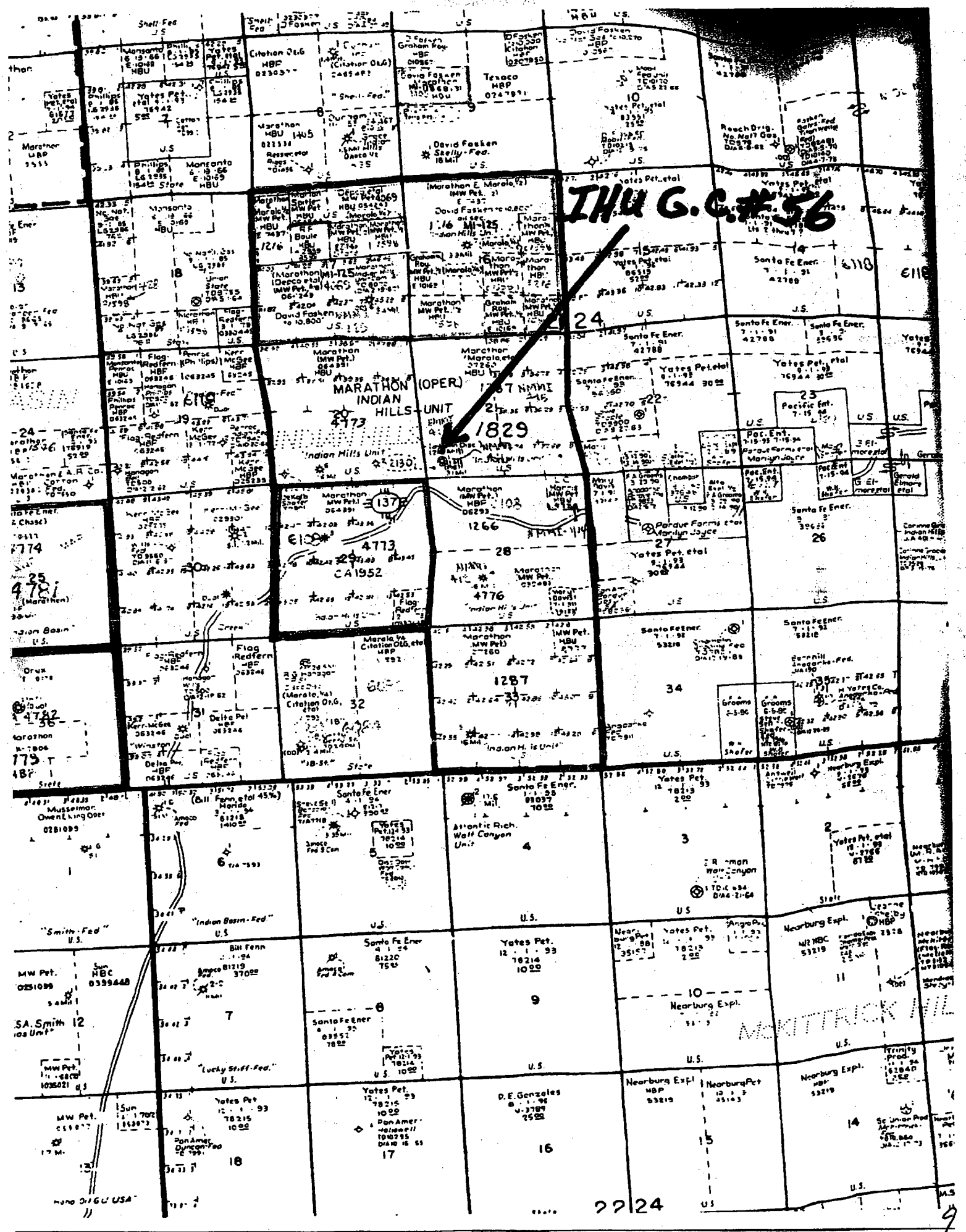
NOTE:
DISTANCES ARE SURFACE VALUES.
COORDINATE VALUES ARE RELATIVE
TO THE NEW MEXICO COORDINATE
SYSTEM, EAST ZONE, NAD 27

MARATHON OIL COMPANY

SECTION 29, TOWNSHIP 21 SOUTH, RANGE 24 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: N/A	Sheet 1 of 1 Sheets
W.O. Number: 02.13.0854	Drawn By: A.W.B
Date: 11/11/02	DISK: CD#8
MARATHON	Scale: 1"=1000'

JOHN WEST SURVEYING COMPANY
412 N. DAL PASO - HOBBS, NEW MEXICO - 505-393-3117



THU G.C. #56

MARATHON INDIAN HILLS UNIT (OPER) 1829

McKITTRICK HIL

22 24

9

Marathon Oil Company
INDIAN HILLS UNIT GAS COM #56

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 : PO 2DJ SMILL
Our ref : prop3872
License :

Date printed : 4-Jun-2003
Date created : 4-Jun-2003
Last revised : 4-Jun-2003

Field is centred on n32 30 0.000,w104 30 0
Structure is centred on 445521.600,530701.100,999.00000,N

Slot location is n32 27 31.989,w104 30 35.850
Slot Grid coordinates are N 530701.100, E 445521.600
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

Structure : INDIAN HILLS UNIT GAS COM #56

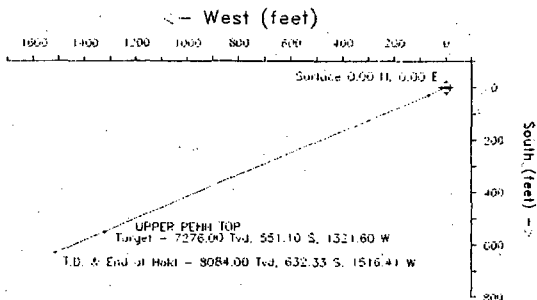
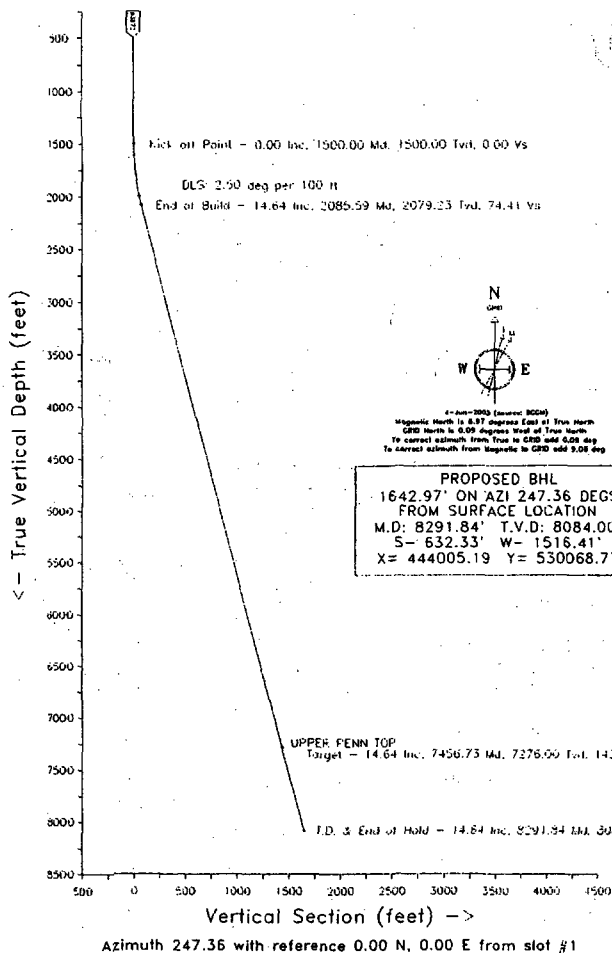
Slot : slot #1

Field : INDIAN BASIN

Location : Eddy County New Mexico

WELL PROFILE DATA

Point	MD	WD	Dir	Tvd	True H	East	S. Sect	Depth (ft)
Surface	0.00	0.00	247.36	0.00	0.00	0.00	0.00	0.00
End of Build	1500.00	0.00	247.36	1500.00	0.00	0.00	0.00	0.00
End of Build	2085.59	14.64	247.36	2079.23	-28.34	-0.57	74.41	2.54
Target UPPER PENN TOP	7456.73	14.64	247.36	7276.00	-321.10	-1327.00	1451.90	0.00
T.D. & End of Hole	8291.84	14.64	247.36	8084.00	-632.33	-1516.41	1642.97	0.00



STRUCTURE SET-UP REFERENCE	
LAT :	31.342 N
LONG :	104.402 W
X :	444005.19
Y :	530068.77
PROJECTION: MERCATOR	
Mercator Zone: 18N	
Spheroid Used: WGS84	
Data Source: BCGM	
Dip Angle:	2.50 deg
Field Strength:	0.00 nT



INTEQ

Created By kellym
Date plotted: 4-Jun-2003
Plot Reference is PG 200 SMILL
Coordinates are in feet reference slot #1.
True Vertical Depth and reference rotary table.
ihugc56
--- Baker Hughes INTEQ ---

Marathon Oil Company
INDIAN HILLS UNIT GAS COM #56, slot #1
INDIAN BASIN, Eddy County New Mexico

PROPOSAL LISTING Page 1
Your ref : PO 2DJ SMILL
Last revised : 4-Jun-2003

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 Easting	C O O R D S Northing	
0.00	0.00	247.36	0.00	0.00N	0.00E	0.00	0.00	445521.60	530701.10	SHL
500.00	0.00	247.36	500.00	0.00N	0.00E	0.00	0.00	445521.60	530701.10	
1000.00	0.00	247.36	1000.00	0.00N	0.00E	0.00	0.00	445521.60	530701.10	
1500.00	0.00	247.36	1500.00	0.00N	0.00E	0.00	0.00	445521.60	530701.10	
1600.00	2.50	247.36	1599.97	0.84S	2.01W	2.50	2.18	445519.59	530700.26	
1700.00	5.00	247.36	1699.75	3.36S	8.05W	2.50	8.72	445513.55	530697.74	
1800.00	7.50	247.36	1799.14	7.55S	18.10W	2.50	19.61	445503.50	530693.55	
1900.00	10.00	247.36	1897.97	13.40S	32.14W	2.50	34.82	445489.46	530687.70	
2000.00	12.50	247.36	1996.04	20.91S	50.14W	2.50	54.33	445471.46	530680.19	
2085.59	14.64	247.36	2079.23	28.64S	68.67W	2.50	74.41	445452.93	530672.46	
2500.00	14.64	247.36	2480.19	68.95S	165.34W	0.00	179.14	445356.26	530632.15	
3000.00	14.64	247.36	2963.96	117.58S	281.98W	0.00	305.51	445239.62	530583.52	
3500.00	14.64	247.36	3447.73	166.22S	398.61W	0.00	431.88	445122.99	530534.88	
4000.00	14.64	247.36	3931.50	214.86S	515.25W	0.00	558.25	445006.35	530486.24	
4500.00	14.64	247.36	4415.26	263.49S	631.88W	0.00	684.62	444889.72	530437.61	
5000.00	14.64	247.36	4899.03	312.13S	748.52W	0.00	810.99	444773.08	530388.97	
5500.00	14.64	247.36	5382.80	360.76S	865.15W	0.00	937.36	444656.45	530340.34	
6000.00	14.64	247.36	5866.57	409.40S	981.79W	0.00	1063.73	444539.81	530291.70	
6500.00	14.64	247.36	6350.33	458.04S	1098.42W	0.00	1190.10	444423.18	530243.06	
7000.00	14.64	247.36	6834.10	506.67S	1215.06W	0.00	1316.47	444306.54	530194.43	
7456.73	14.64	247.36	7276.00	551.10S	1321.60W	0.00	1431.90	444200.00	530150.00	U.P. Top
7500.00	14.64	247.36	7317.87	555.31S	1331.69W	0.00	1442.84	444189.91	530145.79	99' AL
8000.00	14.64	247.36	7801.63	603.95S	1448.33W	0.00	1569.21	444073.27	530097.15	1013' FEL
8291.84	14.64	247.36	8084.00	632.33S	1516.41W	0.00	1642.97	444005.19	530068.77	BHL

179' FNL
1207' FEL
Rectangular
Coordinates

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 1642.97 on azimuth 247.36 degrees from wellhead.
 Vertical section is from N 0.00 E 0.00 on azimuth 247.36 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 GAS COM #56, slot #1
 INDIAN BASIN, Eddy County New Mexico

PROPOSAL LISTING Page 2
 Your ref : P0 2DJ SMILL
 Last revised : 4-Jun-2003

				Comments in wellpath	
				=====	
MD	TVD	Rectangular Coords.		Comment	

7456.73	7276.00	551.10S	1321.60W	UPPER PENN TOP	
Targets associated with this wellpath					
=====					
Target name	Geographic Location		T.V.D.	Rectangular Coordinates	Revised

UPPER PENN TOP	444200.000,530150.000,0.00000		7276.00	551.10S 1321.60W	4-Jun-2003

Oil Cons.
N.M. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM 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	Contact: GINNY LARKE E-Mail: vllarke@marathonoil.com	5. Lease Serial No. LC-064391-B
3a. Address P.O. BOX 552 MIDLAND, TX 79702	3b. Phone No. (include area code) Ph: 800.351.1217 Ext: 8321 Fx: 915.687.8306	8. Well Name and No. INDIAN HILLS UGC #	9. API Well No. 30-015-3287
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Multiple-See Attached	10. Field and Pool, or Exploratory INDIAN BASIN UPPER PENN A		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			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Surface Commi
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration then. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zon header with the wells from section 20, (these wells are Indian Hills Unit wells). When the #27 well is being tested, using the Indian Hills Gas Com Lease separator, the #56 well will be tested, using the test separator used to test the Indian Hills Unit wells. The wells from section 20 will all be sent to the Indian Hills Unit production separator during this test period so that the Indian Hills Gas Com production is not commingled with the Indian Hills Unit production. After being separated and measured, the production from this well will be handled as shown in the original commingling agreement. If you have questions or need clarification, please call me at (915)687-8321.

Please amend the Indian Basin Field Commingle agreement as follows: Indian Hills Unit Gas Com #56 gross production will be sent to the same separator as the Indian Hills Unit Gas Com #27 at Station 120 Satellite Facility (see attached flow diagram). The #56 well will be piped into the test header with the wells from section 20, (these wells are Indian Hills Unit wells). When the #27 well is being tested, using the Indian Hills Gas Com Lease separator, the #56 well will be tested, using the test separator used to test the Indian Hills Unit wells. The wells from section 20 will all be sent to the Indian Hills Unit production separator during this test period so that the Indian Hills Gas Com production is not commingled with the Indian Hills Unit production. After being separated and measured, the production from this well will be handled as shown in the original commingling agreement. If you have questions or need clarification, please call me at (915)687-8321.

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

Electronic Submission #23630 verified by the BLM Well Information System
For MARATHON OIL COMPANY, sent to the Carlsbad

Name (Printed/Typed) GINNY LARKE

Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission)

Date 06/25/2003

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

(ORIG. SGD.) ALEXIS C. SWOBODA

Title

PETROLEUM ENGINEER

JUL 28

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

Office

Title 18 U.S.C. Section 1001 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.

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

Additional data for EC transaction #23630 that would not fit on the form

Wells/Facilities, continued

Agreement
70984A
70984A

Lease
LC-064391-B
LC-064391-B

Well/Fac Name, Number API Number
INDIAN HILLS UNIT GAS COM 56
FAC STATION 120 SATELLITE FACILITY

Location
Sec 21 T21S R24E SWSW 453FSL 350FWL
Sec 20 T21S R24E SESW 453FSL 350FWL

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.

5. Lease Serial No.
LC-064391-B
6. If Indian, Allottee or Tribe Name
7. If Unit or CA/Agreement, Name and/or No.
70964A
8. Well Name and No. *INDIAN HILLS*
Multiple--See Attached *Unit Gas Com*
9. API Well No.
Multiple--See Attached *30-015-32*
10. Field and Pool, or Exploratory
INDIAN BASIN UPPER PENN ASSC
11. County or Parish, and State
EDDY COUNTY, NM

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
MARATHON OIL COMPANY

Contact: GINNY LARKE
E-Mail: vlarke@marathonoil.com

3a. Address
P.O. BOX 552
MIDLAND, TX 79702

3b. Phone No. (include area code)
Ph: 800.351.1417 Ext: 8321
Fx: 915.687.8305

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

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Surface Commingling
	☐ Convert to Injection	☐ Plug Back	☐ 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 recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Please amend the Indian Basin Field Commingle agreement as follows: Indian Hills Unit Gas Com #56 gross production will be sent to the same separator as the Indian Hills Unit Gas Com #27 at Station 120 Satellite Facility (see attached flow diagram). The #56 well will be piped into the test header with the wells from section 20, (these wells are Indian Hills Unit wells). When the #27 well is being tested, using the Indian Hills Gas Com Lease separator, the #56 well will be tested, using the test separator used to test the Indian Hills Unit wells. The wells from section 20 will all be sent to the Indian Hills Unit production separator during this test period so that the Indian Hills Gas Com production is not commingled with the Indian Hills Unit production. After being separated and measured, the production from this well will be handled as shown in the original commingle agreement. If you have questions or need clarification, please call me at (915)687-8321.



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

Electronic Submission #23630 verified by the BLM Well Information System
For MARATHON OIL COMPANY, sent to the Carlsbad

Name (Printed/Typed) GINNY LARKE

Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission)

Date 06/25/2003

9/12/03

APPROVED THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By (ORIG. SGD.) DAVID R. GLASS

Title

Date

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

Office

Title 18 U.S.C. Section 1001 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.

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

Additional data for EC transaction #23630 that would not fit on the form

Wells/Facilities, continued

Agreement	Lease	Well/Fac Name, Number	API Number	Location
70964A	LC-064391-B	INDIAN HILLS UNIT GAS COM 58		Sec 21 T21S R24E SWSW 453FSL 350FWL
70964A	LC-064391-B	FAC STATION 120 SATELLITE FACILITY		Sec 20 T21S R24E SESW 453FSL 350FWL

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)

432-687-8366

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

Sections 21 & 29 Township 21 South, Range 24 East N.M.P.M.

surface location- 453' FSL & 350' FWL Sec.21

bottom hole location- 179' FNL & 1207' FWL Sec.29

5. Lease Serial No.

LC-06439B

6. If Indian, Allottee or Tribe Name

N/A

7. If Unit or CA/Agreement, Name and/or

Indian Hills Unit

8. Well Name and No.

Indian Hills Unit G.C.56

9. API Well No.

30-015-32878

10. Field and Pool, or Exploratory Area

Indian Basin

11. County or Parish, State

Eddy N.M.

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

TYPE OF SUBMISSION

- ☐ Notice of Intent
☒ Subsequent Report
☐ Final Abandonment Notice

TYPE OF ACTION

- | | | | |
|---|---|--|---|
| ☐ Acidize | ☐ Deepen | ☐ Production (Start/Resume) | ☐ Water Shut-Off |
| ☐ Alter Casing | ☐ Fracture Treat | ☐ Reclamation | ☐ Well Integrity |
| ☐ Casing Repair | ☐ New Construction | ☐ Recomplete | ☐ Other |
| ☐ Change Plans | ☐ Plug and Abandon | ☐ Temporarily Abandon | |
| ☐ Convert to Injection | ☐ Plug Back | ☐ Water Disposal | |

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration of work. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zone. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed on 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.

ACCEPTED FOR RECORD

OCT - 6 2003

LES BABYAK
PETROLEUM ENGINEER

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

Mike Mick

Title

Engineer 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

Operations Summary Report

Page 1 of 7

Legal Well Name: INDIAN HILLS UNIT GC NO 56
 Common Well Name: INDIAN HILLS UNIT GC NO 56
 Event Name: ORIGINAL DRILLING
 Contractor Name: MCVAY DRILLING
 Rig Name: MCVAY DRILLING

Spud Date: 8/24/2003
 Start: 8/26/2003
 End:
 Rig Release: 9/15/2003
 Group:
 Rig Number: 4

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
9/1/2003	06:00 - 19:00	13.00	RIG	MIRU	MIRU	Location built by Key Const. Drilled & set 40' of 14" conductor pipe. Cmt t/ surface. MIRU McVay #4.
9/2/2003	06:00 - 08:30	2.50	WAIT	DRLG	MIRU	Shut down. Started rig motors.
	08:30 - 09:00	0.50	TRIP	BBHD	MIRU	PU 12 1/4" Hammer.
	09:00 - 12:00	3.00	DRILL	AIR	DRLSUR	Spudded 12 1/4" hole @ 0900 hrs. Aired drilled f/ 56' t/ 179'. water @ 110'.
	12:00 - 12:15	0.25	SURV	GYRO	DRLSUR	Survey with GYRO system
	12:15 - 16:30	4.25	DRILL	AIR	DRLSUR	Air Drilling
	16:30 - 17:00	0.50	SURV	GYRO	DRLSUR	Survey with GYRO system
	17:00 - 17:30	0.50	DRILL	AIR	DRLSUR	Sired drilled t/ 446'. P-rate slowed.
	17:30 - 18:30	1.00	WAIT	OTHR	DRLSUR	Waited on hole to blow down. Would not blow down. Would head eveey 10 mins. Pumping water down hole w/ Rig pump.
	18:30 - 20:30	2.00	TRIP	BIT	DRLSUR	TOOH w/ Hammer. (stripped) L/D Hammer. PU Bit, Shock sub, 1-DC's, Reamer.
	20:30 - 23:00	2.50	TRIP	BIT	DRLSUR	TIH w/ 12 1/4" bit. 3 1/2 hrs before hoe quit unloaded water.
9/3/2003	23:00 - 03:30	4.50	DRILL	AIR	DRLSUR	Aired drilled f/ 446' t/ 590'. Pumping 16 gals/hr 2 gals/hr of soap.
	03:30 - 03:45	0.25	SURV	GYRO	DRLSUR	Survey with GYRO system
	03:45 - 06:00	2.25	DRILL	AIR	DRLSUR	Aired drilled.
	06:00 - 08:45	2.75	DRILL	AIR	DRLSUR	Air Drilling 3500 SCF/min of air, 20 gals of hr of water, 4 gals of soap/hr.
	08:45 - 09:00	0.25	SURV	GYRO	DRLSUR	Survey with GYRO system
	09:00 - 12:15	3.25	DRILL	AIR	DRLSUR	Air drilled
	12:15 - 12:30	0.25	SURV	GYRO	DRLSUR	Survey with GYRO system
	12:30 - 16:00	3.50	DRILL	AIR	DRLSUR	Air drilled
	16:00 - 16:15	0.25	SURV	GYRO	DRLSUR	Survey with GYRO system
	16:15 - 17:45	1.50	DRILL	AIR	DRLSUR	Air drilled
9/4/2003	17:45 - 18:00	0.25	CIRC	CLN	DRLSUR	Circulate Clean
	18:00 - 21:00	3.00	TRIP	BIT	DRLSUR	TOOH. L/D 3-8" DC's, & BHA. (Stripped) water flow/blow
	21:00 - 23:00	2.00	CSG	RUN	CSGSUR	Safety meeting. RU. Ran 27 jts of 9/58", 36#, K-55 csg. Landed @ 1208'. Well died out after 2 1/2 hrs.
	23:00 - 01:30	2.50	CEMT	PRIM	CSGSUR	Safety meeting. RU Cmt head. Tested lines t/ 3000 psi. Pumped csg capacity. Pumped 10,000 SCF of N2, 20 bbls of gelled water, 600 sks of Foamed Premium Plus, 1.5% Zonesealant, 2% CaCl2, tailed w/ 150 sks of Premium Plus w/ 1.5% Zonesealant, 2% CaCl2. Circ 65 sks. Capped w/ 75 sks of Neat w/ 2% Cacl2.
	01:30 - 04:30	3.00	WAIT	CEMT	CSGSUR	Wait on Cement
	04:30 - 06:00	1.50	NUND	DBOP	CSGSUR	ND Diverter. Cut off 9 5/8" csg @ 0600 hrs.
	06:00 - 10:30	4.50	NUND	DBOP	CSGSUR	Finish cutting surface pipe & pulled surface stack. (Location muddy & slick)
	10:30 - 13:00	2.50	WELD	WLHD	CSGSUR	Weld on Csg head WG-22 11" 3M X 9 5/8" SOW wellhead.
	13:00 - 18:00	5.00	NUND	UBOP	CSGSUR	Installed 11" 5M bop, install & weld on flow line, R/U manifold & choke line. Dumped 25 yards of ready mix behind 9 5/8" surface csg. Cement to surface.
	18:00 - 23:00	5.00	TEST	BOP	CSGSUR	Test bop's, choke manifold line, kelly & mud line to 3000 PSI O.K. (Replaced 4" valve on choke manifold, lower kelly valve, repaired leaks on mud line.)
9/5/2003	23:00 - 00:00	1.00	TRIP	BBHD	CSGSUR	Picked up motor w/ bit, 7 7/8" Nortrac, Shock sub, SNMDC, Teleco, X-over sub, NMDC.
	00:00 - 03:00	3.00	TRIP	MOTR	CSGSUR	TIH w/ motor, Picking up jars & set 10 stands HWDP below jars. Tagged up @ 1062'. L/D 4jt's of HWDP.
	03:00 - 06:00	3.00	DRILL	CEMT	CSGSUR	Tagged up on cement @ 1062'. Drill Cement w/ 4 to 5 points
	06:00 - 07:00	1.00	DRILL	CEMT	CSGSUR	Drill Cement / Drill Shoe

Marathon Oil Company

Operations Summary Report

Page 2 of 7

Legal Well Name: INDIAN HILLS UNIT GC NO 56
 Common Well Name: INDIAN HILLS UNIT GC NO 56
 Event Name: ORIGINAL DRILLING
 Contractor Name: MCVAY DRILLING
 Rig Name: MCVAY DRILLING

Spud Date: 8/24/2003
 Start: 8/26/2003
 End:
 Rig Release: 9/15/2003
 Group:
 Rig Number: 4

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
9/5/2003	07:00 - 07:15	0.25	TEST	CSG	CSGSUR	Test shoe jt to 1000 psi w/ rig pump.
	07:15 - 07:30	0.25	DRILL	CEMT	CSGSUR	Drill Cement / Drill Shoe
	07:30 - 09:30	2.00	DRILL	DOH	DRLPR	Drill Open Hole w/ 8 3/4" bit w/ 1.3 motor.
	09:30 - 09:45	0.25	DRILL	DOHS	DRLPR	Drill Open Slide 180 Azm
	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 190 Azm
	10:45 - 11:00	0.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	11:00 - 11:15	0.25	DRILL	DOHS	DRLPR	Drill Open Slide 190 Azm
	11:15 - 11:45	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	11:45 - 12:00	0.25	DRILL	DOHS	DRLPR	Drill Open Slide 190 Azm.
	12:00 - 12:15	0.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	12:15 - 12:30	0.25	DRILL	DOHS	DRLPR	Drill Open Slide 190 Azm.
	12:30 - 13:00	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	13:00 - 13:15	0.25	DRILL	DOHS	DRLPR	Drill Open Slide 10L.
	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 H/S
	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 H/S
	14:45 - 15:15	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	15:15 - 15:30	0.25	DRILL	DOHS	DRLPR	Drill Open Slide H/S
	15:30 - 16:15	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	16:15 - 16:30	0.25	DRILL	DOHS	DRLPR	Drill Open Slide H/S
	16:30 - 17:15	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary . Switched to pump #1.Changing out Liner & piston on # 2
	17:15 - 17:30	0.25	DRILL	DOHS	DRLPR	Drill Open Slide H/S.
	17:30 - 18:15	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	18:15 - 18:30	0.25	DRILL	DOHS	DRLPR	Drill Open Slide
	18:30 - 19:15	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	19:15 - 19:30	0.25	DRILL	DOHS	DRLPR	Drill Open Slide
	19:30 - 20:15	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary . Switched back to pump # 2
	20:15 - 20:30	0.25	DRILL	DOHS	DRLPR	Drill Open Slide
	20:30 - 21:15	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	21:15 - 21:30	0.25	DRILL	DOHS	DRLPR	Drill Open Slide
	21:30 - 22:45	1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	22:45 - 23:15	0.50	DRILL	DOHS	DRLPR	Drill Open Slide
	23:15 - 00:00	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	00:00 - 00:15	0.25	DRILL	DOHS	DRLPR	Drill Open Slide 35L
	00:15 - 00:45	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	00:45 - 01:15	0.50	DRILL	DOHS	DRLPR	Drill Open Slide 35L
	01:15 - 02:30	1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	02:30 - 03:00	0.50	DRILL	DOHS	DRLPR	Drill Open Slide 60L
	03:00 - 03:45	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	03:45 - 04:00	0.25	DRILL	DOHS	DRLPR	Drill Open Slide 100L
	04:00 - 04:30	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	04:30 - 05:00	0.50	DRILL	DOHS	DRLPR	Drill Open Slide 100L
	05:00 - 05:30	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	05:30 - 05:45	0.25	DRILL	DOHS	DRLPR	Drill Open Slide
	05:45 - 06:00	0.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
9/6/2003	06:00 - 06:45	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	06:45 - 07:00	0.25	DRILL	DOHS	DRLPR	Drill Open Slide 120R
	07:00 - 07:45	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	07:45 - 08:00	0.25	DRILL	DOHS	DRLPR	Drill Open Slide 110R
	08:00 - 08:45	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary

Operations Summary Report

Legal Well Name: INDIAN HILLS UNIT GC NO 56

Common Well Name: INDIAN HILLS UNIT GC NO 56

Event Name: ORIGINAL DRILLING

Start: 8/26/2003

Spud Date: 8/24/2003

Contractor Name: MCVAY DRILLING

Rig Release: 9/15/2003

Group:

Rig Name: MCVAY DRILLING

Rig Number: 4

Date	From	To	Hours	Code	Sub Code	Phase	Description of Operations
9/6/2003	08:45	09:15	0.50	DRILL	DOHS	DRLPR	Drill Open Slide 115R
	09:15	10:00	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	10:00	10:15	0.25	DRILL	DOHS	DRLPR	Drill Open Slide 115R
	10:15	10:45	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	10:45	11:00	0.25	DRILL	DOHS	DRLPR	Drill Open Slide 120R
	11:00	12:00	1.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	12:00	12:30	0.50	DRILL	DOHS	DRLPR	Drill Open Slide 110R
	12:30	13:15	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	13:15	13:30	0.25	DRILL	DOHS	DRLPR	Drill Open Slide 120R
	13:30	14:00	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	14:00	14:30	0.50	DRILL	DOHS	DRLPR	Drill Open Slide 120R
	14:30	15:15	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	15:15	15:45	0.50	DRILL	DOHS	DRLPR	Drill Open Slide 120R
	15:45	16:15	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	16:15	16:45	0.50	DRILL	DOHS	DRLPR	Drill Open Slide 110R
	16:45	17:15	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	17:15	17:30	0.25	DRILL	DOHS	DRLPR	Drill Open Slide 90R
	17:30	18:45	1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	18:45	19:00	0.25	SURV	MWD	DRLPR	Survey with MWD Tools. Check shot.
	19:00	19:45	0.75	DRILL	DOHS	DRLPR	Drill Open Slide 90R
	19:45	21:00	1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	21:00	21:45	0.75	DRILL	DOHS	DRLPR	Drill Open Slide 90R
	21:45	23:15	1.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	23:15	23:45	0.50	DRILL	DOHS	DRLPR	Drill Open Slide 110R
	23:45	00:45	1.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	00:45	01:15	0.50	DRILL	DOHS	DRLPR	Drill Open Slide 105R
	01:15	02:00	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	02:00	02:30	0.50	DRILL	DOHS	DRLPR	Drill Open Slide 110R
	02:30	03:30	1.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	03:30	03:45	0.25	DRILL	DOHS	DRLPR	Drill Open Slide 110R
	03:45	05:00	1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	05:00	05:15	0.25	DRILL	DOHS	DRLPR	Drill Open Slide
9/7/2003	05:15	06:00	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	06:00	06:15	0.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	06:15	06:30	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	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	08:15	0.50	DRILL	DOHS	DRLPR	Drill Open Slide 125R
	08:15	10:00	1.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	10:00	10:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	10:15	12:15	2.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	12:15	12:30	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	12:30	13:15	0.75	DRILL	DOHS	DRLPR	Drill Open Slide 165R
	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	18:30	0.50	DRILL	DOHS	DRLPR	Drill Open Slide 180
	18:30	20:45	2.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	20:45	21:00	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	21:00	23:30	2.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	23:30	23:45	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	23:45	02:45	3.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary

Marathon Oil Company

Operations Summary Report

Page 4 of 7

Legal Well Name: INDIAN HILLS UNIT GC NO 56
 Common Well Name: INDIAN HILLS UNIT GC NO 56
 Event Name: ORIGINAL DRILLING
 Contractor Name: MCVAY DRILLING
 Rig Name: MCVAY DRILLING

Start: 8/26/2003
 Rig Release: 9/15/2003
 Rig Number: 4
 Spud Date: 8/24/2003
 End:
 Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
9/7/2003	02:45 - 03:00	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	03:00 - 03:15	0.25	DRILL	DOHS	DRLPR	Drill Open Slide 180
	03:15 - 06:00	2.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
9/8/2003	06:00 - 06:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	06:15 - 07:15	1.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	07:15 - 09:15	2.00	TRIP	MOTR	DRLPR	Trip for Motor
	09:15 - 10:15	1.00	TRIP	BBHD	DRLPR	Replaced motor & bit. Turned motor to 1.3 degree. Check motor. O.K.
	10:15 - 11:45	1.50	TRIP	BIT	DRLPR	TIH w/ motor #2 w/ new bit.
	11:45 - 12:00	0.25	DRILL	WSHR	DRLPR	Picked up 1 jt & wash down to btm 32' no fill.
	12:00 - 14:15	2.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary. Used pump #1
	14:15 - 14:30	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	14:30 - 15:00	0.50	DRILL	DOHS	DRLPR	Drill Open Slide 90R
	15:00 - 17:00	2.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary. Switched back to #2 pump.
	17:00 - 17:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	17:15 - 17:45	0.50	DRILL	DOHS	DRLPR	Drill Open Slide. 75R
	17:45 - 19:45	2.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	19:45 - 20:00	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	20:00 - 21:45	1.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	21:45 - 22:00	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	22:00 - 22:45	0.75	DRILL	DOHS	DRLPR	Drill Open Slide. H/S
	22:45 - 01:00	2.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	01:00 - 01:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	01:15 - 03:45	2.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	03:45 - 04:00	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
9/9/2003	04:00 - 06:00	2.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	06:00 - 06:15	0.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	06:15 - 06:30	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	06:30 - 07:00	0.50	DRILL	DOHS	DRLPR	Drill Open Slide. H/S
	07:00 - 09:15	2.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	09:15 - 09:30	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	09:30 - 12:00	2.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	12:00 - 12:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	12:15 - 15:00	2.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	15:00 - 15:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	15:15 - 15:30	0.25	DRILL	DOHS	DRLPR	Drill Open Slide. 75L
	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 - 18:45	0.75	DRILL	DOHS	DRLPR	Drill Open Slide.
	18:45 - 21:15	2.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	21:15 - 21:30	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	21:30 - 00:00	2.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	00:00 - 00:45	0.75	SURV	MWD	DRLPR	Survey with MWD Tools. Tried to take survey no good. Worked w/ panel couldn't get f/ locking up to take survey.
	00:45 - 02:00	1.25	TRIP	BIT	DRLPR	TOOH to RT tool to move up hole.
	02:00 - 05:00	3.00	WAIT	EQUIP	DRLPR	Wait on Equipment. Panel is coming f/ Odessa.
9/10/2003	05:00 - 05:15	0.25	TRIP	BIT	DRLPR	Started in hole shut down. Computer still wouldn't run right.
	05:15 - 06:00	0.75	CHECK	OTHR	DRLPR	Perform Check Other. Checking computer still won't work.
	06:00 - 09:00	3.00	WAIT	Crew	DRLPR	Tried to get Directional panel working. No good. Waited on tech to get here to start up & program panel. (TIH w/ drill pipe moving RT tool up hole. 24 stands above HWDP.)
	09:00 - 09:30	0.50	SURV	MWD	DRLPR	Picked up kelly & wash down to btm. No fill & took survey w/ MWD.
	09:30 - 10:00	0.50	DRILL	DOHS	DRLPR	Drill Open Slide. 105L
	10:00 - 12:30	2.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary

Marathon Oil Company

Operations Summary Report

Page 5 of 7

Legal Well Name: INDIAN HILLS UNIT GC NO 56
 Common Well Name: INDIAN HILLS UNIT GC NO 56
 Event Name: ORIGINAL DRILLING
 Contractor Name: MCVAY DRILLING
 Rig Name: MCVAY DRILLING

Spud Date: 8/24/2003
 Start: 8/26/2003
 End:
 Rig Release: 9/15/2003
 Group:
 Rig Number: 4

Date	From-To	Hours	Code	Sub Code	Phase	Description of Operations
9/10/2003	12:30 - 12:45	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	12:45 - 15:30	2.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	15:30 - 15:45	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	15:45 - 18:30	2.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	18:30 - 18:45	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	18:45 - 19:15	0.50	DRILL	DOHS	DRLPR	Drill Open Slide. 60L
	19:15 - 22:00	2.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	22:00 - 22:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	22:15 - 00:30	2.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	00:30 - 00:45	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	00:45 - 03:00	2.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	03:00 - 03:15	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	03:15 - 05:30	2.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	05:30 - 05:45	0.25	SURV	MWD	DRLPR	Survey with MWD Tools
	05:45 - 06:00	0.25	DRILL	DOHS	DRLPR	Drill Open Slide
9/11/2003	06:00 - 08:00	2.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	08:00 - 08:15	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	08:15 - 08:45	0.50	DRILL	DOHS	DRLPR	Drill Open Slide
	08:45 - 11:15	2.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	11:15 - 11:30	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	11:30 - 12:30	1.00	DRILL	DOHS	DRLPR	Drill Open Slide
	12:30 - 14:45	2.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	14:45 - 15:00	0.25	DRILL	DOHS	DRLPR	Drill Open Slide
	15:00 - 15:30	0.50	EQUIP	RURD	DRLPR	Ck pump eff. - # 1- pump @ 89% (Duplex) #2 pump 88% Triplex
	15:30 - 18:00	2.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary. Motor locked up.
	18:00 - 20:30	2.50	TRIP	MOTR	DRLPR	Trip for Motor
	20:30 - 21:30	1.00	TRIP	BHA	DRLPR	BHA. L/D Motor. (Would not turn) Bit- Cone # 1- 6 broken compacts heal-row, 4 broke on #2, 4 broke on # 3. Seals good. Ran new bit. PU new motor. Tested.
	21:30 - 00:30	3.00	TRIP	BIT	DRLPR	Trip in / out for Bit. Washed to bottom. No fill.
	00:30 - 01:45	1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	01:45 - 02:00	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
9/12/2003	02:00 - 04:00	2.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	04:00 - 04:15	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	04:15 - 06:00	1.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	06:00 - 07:15	1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	07:15 - 07:30	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	07:30 - 08:15	0.75	DRILL	DOHS	DRLPR	Drill Open Slide
	08:15 - 11:45	3.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	11:45 - 12:00	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	12:00 - 12:45	0.75	DRILL	DOHS	DRLPR	Drill Open Slide
	12:45 - 14:30	1.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	14:30 - 14:45	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	14:45 - 15:30	0.75	DRILL	DOHS	DRLPR	Drill Open Slide
	15:30 - 18:00	2.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	18:00 - 18:15	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	18:15 - 19:15	1.00	DRILL	DOHS	DRLPR	Drill Open Slide
	19:15 - 22:00	2.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	22:00 - 22:15	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	22:15 - 23:15	1.00	DRILL	DOHS	DRLPR	Drill Open Slide
	23:15 - 02:00	2.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	02:00 - 02:15	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	02:15 - 06:00	3.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary

Operations Summary Report

Legal Well Name: INDIAN HILLS UNIT GC NO 56

Common Well Name: INDIAN HILLS UNIT GC NO 56

Event Name: ORIGINAL DRILLING

Start: 8/26/2003

Spud Date: 8/24/2003

Contractor Name: MCVAY DRILLING

Rig Release: 9/15/2003

End:

Rig Name: MCVAY DRILLING

Rig Number: 4

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
9/13/2003	06:00 - 06:15	0.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	06:15 - 06:30	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	06:30 - 07:00	0.50	DRILL	DOHS	DRLPR	Drill Open Slide
	07:00 - 08:15	1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	08:15 - 08:30	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	08:30 - 10:45	2.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	10:45 - 11:00	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	11:00 - 13:00	2.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	13:00 - 13:15	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	13:15 - 14:15	1.00	DRILL	DOHS	DRLPR	Drill Open Slide
	14:15 - 15:15	1.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	15:15 - 15:30	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	15:30 - 16:00	0.50	DRILL	DOHS	DRLPR	Drill Open Slide
	16:00 - 16:45	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	16:45 - 17:00	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	17:00 - 17:30	0.50	DRILL	DOHS	DRLPR	Drill Open Slide
	17:30 - 18:30	1.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	18:30 - 19:30	1.00	DRILL	DOHS	DRLPR	Drill Open Slide
	19:30 - 20:30	1.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	20:30 - 20:45	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	20:45 - 21:45	1.00	DRILL	DOHS	DRLPR	Drill Open Slide
	21:45 - 22:30	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	22:30 - 22:45	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	22:45 - 23:15	0.50	DRILL	DOHS	DRLPR	Drill Open Slide
	23:15 - 00:00	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	00:00 - 00:15	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	00:15 - 01:00	0.75	DRILL	DOHS	DRLPR	Drill Open Slide
	01:00 - 01:30	0.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	01:30 - 01:45	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	01:45 - 02:45	1.00	DRILL	DOHS	DRLPR	Drill Open Slide
	02:45 - 03:30	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	03:30 - 03:45	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	03:45 - 04:00	0.25	DRILL	DOHS	DRLPR	Drill Open Slide
	04:00 - 04:45	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	04:45 - 05:00	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	05:00 - 06:00	1.00	DRILL	DOHS	DRLPR	Drill Open Slide
9/14/2003	06:00 - 07:00	1.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	07:00 - 07:15	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	07:15 - 09:15	2.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	09:15 - 09:30	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	09:30 - 11:30	2.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	11:30 - 11:45	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	11:45 - 12:15	0.50	DRILL	DOHS	DRLPR	Drill Open Slide
	12:15 - 14:00	1.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	14:00 - 14:15	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	14:15 - 16:00	1.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	16:00 - 16:15	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	16:15 - 17:30	1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary. 50% returns @ 7495'.
	17:30 - 17:45	0.25	LSCIRC	PSPT	DRLPR	Pumped 50 bbl pill. 80 vis 20#/bbl of LCM.
	17:45 - 18:45	1.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary. 50% returns @ 7495'. Lost all returns @ 7590'. Dry drilled.
	18:45 - 19:00	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	19:00 - 20:30	1.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary. No returns.

Operations Summary Report

Legal Well Name: INDIAN HILLS UNIT GC NO 56

Common Well Name: INDIAN HILLS UNIT GC NO 56

Event Name: ORIGINAL DRILLING

Contractor Name: MCVAY DRILLING

Rig Name: MCVAY DRILLING

Start: 8/26/2003

Rig Release: 9/15/2003

Rig Number: 4

Spud Date: 8/24/2003

End:

Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
9/14/2003	19:00 - 20:30	1.50	DRILL	DOHR	DRLPR	
	20:30 - 20:45	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	20:45 - 22:15	1.50	DRILL	DOHR	DRLPR	Drill Open Hole Rotary. No returns.
	22:15 - 22:30	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	22:30 - 23:45	1.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary. No returns.
	23:45 - 00:15	0.50	DRILL	DOHS	DRLPR	Drill Open Slide
	00:15 - 01:15	1.00	SURV	GYRO	DRLPR	Survey with GYRO system
	01:15 - 01:30	0.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary. No returns.
	01:30 - 03:00	1.50	SURV	GYRO	DRLPR	Survey with GYRO system
	03:00 - 03:15	0.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary. No returns.
	03:15 - 04:00	0.75	DRILL	DOHS	DRLPR	Drill Open Slide
	04:00 - 06:00	2.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary. No returns.
9/15/2003	06:00 - 08:15	2.25	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	08:15 - 08:30	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	08:30 - 11:15	2.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	11:15 - 11:30	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	11:30 - 14:30	3.00	DRILL	DOHR	DRLPR	Drill Open Hole Rotary
	14:30 - 14:45	0.25	SURV	GYRO	DRLPR	Survey with GYRO system
	14:45 - 15:30	0.75	DRILL	DOHR	DRLPR	Drill Open Hole Rotary No returns.
	15:30 - 16:15	0.75	CIRC	CLN	DRLPR	Pumped 40 bbl sweep.
	16:15 - 17:30	1.25	TRIP	WTRP	DRLPR	Wiper Trip. No major drag or fill. (10 stds)
	17:30 - 18:30	1.00	CIRC	CLN	DRLPR	Spotted 60 bbl pill on bottom. Switched t/ completion report.

Operations Summary Report

Legal Well Name: INDIAN HILLS UNIT GC NO 56
 Common Well Name: INDIAN HILLS UNIT GC NO 56
 Event Name: ORIGINAL COMPLETION
 Contractor Name: MCVAY DRILLING
 Rig Name: MCVAY DRILLING

Start: 8/26/2003
 Rig Release: 9/15/2003
 Rig Number: 4
 Spud Date: 8/24/2003
 End:
 Group:

Date	From To	Hours	Code	Sub Code	Phase	Description of Operations
9/15/2003	18:30 - 03:00	8.50	TRIP	LDDP	CSGPRO	LD DP DC's & BHA.
	03:00 - 06:00	3.00	CSG	RUN	CSGPRO	Safety meeting. RU csg crew. Running 7"-26# & 23# Casing
9/16/2003	06:00 - 11:00	5.00	CSG	RUN	CSGPRO	Ran Float shoe, shoe jt, float collar, 38 jts of 7", 26#, ECP/DV, 39 jts of 7"-26#, 99 jts of 7"-23#, 2- jts of 26#.
	11:00 - 14:00	3.00	CIRC	FILL	CSGPRO	Washed the last 3 jts to bottom @ 8310'. (tight hole) Well flowed on last jt. Shut in. Bled off gas bubble. Landed Float collar @ 8261', DV tool @ 6480'. Pumped on csg while rigging up HES.
	14:00 - 16:15	2.25	CEMT	PRIM	CSGPRO	Pumped 50,000 SCF/N2, 10 bbls of 10% CC water, 10 bbl water spacer, 24 bbls of Super-Fush, 10 bbl water spacer, 47 bbls (100 sks of Acid Soluble cmt, 37 bbls (160 sks) Premuim, 36 bbls (120 sks) of Super "H". Displaced w/ 321 bbls of water. Set ECP 3200 psi.
	16:15 - 18:30	2.25	CEMT	PRIM	CSGPRO	Dropped bomb. Opened DV tool @ 6480'. (Switched t/ rig pump) Circ 100 sks on 1 st stage. Switched to steel pits. Monitor gain/loss. No loss of fluid.
	18:30 - 21:30	3.00	CEMT	PRIM	CSGPRO	Cmt 2 nd stage w/ 580 sks of Super "H" tailed w/ 100 sks of Premuim Plus. Circ 40 sks to pit. Good returns until last 20 bbls into displacement. FL in BOP. Not dropping.
	21:30 - 00:30	3.00	NUND	DBOP	CSGPRO	ND BOP. Set 7" slips, 150K, Cut off 7" csg. Snubbed out 11" BOP. NU 11"3M x 7 1/16" 3M Tubing head. Tested t/ 3000 psi.
	00:30 - 02:00	1.50	RIG	DMOB	CSGPRO	Cleaned pits. Released Rig @ 0200 hrs. 9/16 Will move rig on Thursday.
9/18/2003	06:30 - 18:30	12.00	RIG		OTHER	Set rig anchors and MIRU service unit. NU BOP. PU bit and scraper and C-1 2-7/8" EUE 8rd L-80 tubing. Tag DV tool @ 6495' and drill out same. CIH and tag PBD @ 8260'. Circulate hole clean. SWIFN
9/19/2003	06:30 - 18:30	12.00	RIG			Tailgate safety meeting. POH w/bit and scraper. RU Baker Atlas to run Spectral Gamma Ray, X-Mac and Neutron logs. Tailgate safety meeting on wireline ops. RIH w/logging tools and tag PBD @ 8257' WLM. Ran 2000' of X-Mac from PBD and GR/Neutron to surface. CBL showed no cement behind pipe from PBD to 8082' with good cement beginning at ~8046'. Engineering decided to not pressure casing for micro-annulus because bottom perf will be >50' above the good cement. RD loggers. RIH w/openended tbg. ND BOP and landed tubing with tubing flange. RDMO. Will rig back up on Wednesday to continue with completion after surface work is completed and perforations are picked.
9/23/2003	06:30 - 08:30	2.00	RIG	MIRU	MIRU	Move in / RU Rig, Workover Unit, etc. ND WH. NU BOPs. Function test. OK
	08:30 - 11:30	3.00	CLEAN	WELL	RCMP	RU Halliburton acid equipment. Held pre - job safety meeting. Loaded casing w/ 1000 gallons of 15% HCl spotted to bottom. Reverse circulated (pickled) casing and tbg. Circulated well clean. RD Halliburton.
	11:30 - 13:30	2.00	PLRNRP	PTBG	RCMP	POH w/ 264 jts of 2 7/8" L-80 tubing. Installed 7" 3M "frac" valve. Closed and SDFN
9/24/2003	06:30 - 16:30	10.00	PERF	WLNC	RCMP	PJSM. RU Baker Atlas. Tested lubricator to 1000#. RIH w/ first gun and gamma tool. Correlated correct depth with cased hole CNL dated 9/19/2003. Perforated as follows: Gun 1) 7957'-7976' 2) 7933'-7948 3) 7918'-7933' 4) 7882'-7896' 5) 7862'-7882' 6) 7827'-7851' 7) 7778'-7802' 8) 7740'-7764' 9) 7715'-7731' 10) 7699'-7615' @ 4JSPF in 120 deg phasing using 3 3/8" slick guns and 23 gram charges. All shots fired. RD Baker Atlas. PU PPI pks, assembled and RIH on killstring. SDFN
9/25/2003	06:30 - 13:30	7.00	PKRPLG		RCMP	PJSM. RIH w/ PPI to locate collar at 7988'. PUH above perms. Set and function test packers. SDFN Halliburton unable to stimulate today.

Marathon Oil Company
Operations Summary Report

Page 2 of 2

Legal Well Name:	INDIAN HILLS UNIT GC NO 56	Spud Date:	8/24/2003
Common Well Name:	INDIAN HILLS UNIT GC NO 56	End:	
Event Name:	ORIGINAL COMPLETION	Start:	8/26/2003
Contractor Name:	MCVAY DRILLING	Rig Release:	9/15/2003
Rig Name:	MCVAY DRILLING	Rig Number:	4
		Group:	

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
9/26/2003	05:30 - 15:00	9.50	STIM	ACID	STIM	RU Halliburton. Mixed and titrated acid. PJSM. Ran in hole w/ PPI pkr to bottom setting @ 7976.5'. Dropped retrievable valves and function tested. PUH stimulating new perms from 7975'-7699' w/ 100 gals/ft of 17% CCA in 100 settings total of 20,000 gals of CCA sour acid. Avg brk 1905#, Avg treat - 1560#, Max treat psi - 2980# Min treat - 885#. Max break psi @ 2991 and min break @ 900 psig. Fished retrievable valves. RD HES.
	15:00 - 19:30	4.50	PKRPLG		RCMP	POOH w/ tbg and PPI packers. LD PPI packers. PU 7" RBP and RIH to 3645'. Set RBP. OK Stung back in to RBP and opened bypass valve. SDWE

49

NMCCD

Form 3160-4
(August 1999)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No. 1004-0137
Expires: November 30, 2000

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other		5. Lease Serial No. NMLC084391B	
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		7. Unit or CA Agreement Name and No. NMNM70984A	
3. Address: P O BOX 552 MIDLAND, TX 79702		8. Lease Name and Well No. INDIAN HILLS UNIT GAS COM 56	
3a. Phone No. (include area code) Ph: 800.351.1417 Ext: 8104		9. API Well No. 30-015-32878-00-S1	
4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface: SWSW Lot M 453FSL 350FWL Sec 21 T21S R24E Mer NMP At top prod interval reported below: NENE Lot A 149FNL 1018FEL Sec 29 T21S R24E Mer NMP At total depth: NENE Lot A 176FNL 1185FEL		10. Field and Pool, or Exploratory INDIAN BASIN UPPER PENN ASSOC	
14. Date Spudded 09/02/2003		15. Date T.D. Reached 09/15/2003	
16. Date Completed ☐ D & A ☒ Ready to Prod. 09/27/2003		17. Elevations (DF, KB, RT, GL)* 3687 GL	
18. Total Depth: MD 8310 TVD 8088		19. Plug Back T.D.: MD 8260 TVD 8039	
20. Depth Bridge Plug Set: MD TVD		21. Type Electric & Other Mechanical Logs Run (Submit copy of each) COMPENSATED NEUT GAMMARAY	
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 Cement Depth	No. of Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
12.250	9.625 K55	38.0		1208		825		0	
8.750	7.000 K55	23.0		8310		1160		0	
8.750	7.000 K55	28.0		8310					

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	8046							

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) UPPER PENN	7699	7976	7699 TO 7976		748	OPEN
B)						
C)						
D)						

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

Depth Interval	Amount and Type of Material
7699 TO 7976	100 GALS P/FT OF 17% CCA IN 100 SETTINGS WITH PPI PACKER. TOTAL OF 20,000 GALS. OF OF CCA SOUR ACID.

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
10/01/2003	10/29/2003	24	→	62.0	1162.0	1639.0			ELECTRIC PUMP SUB-SURFACE
Choke Size	Tbg. Press. Flwg. SI	Csg. Press. SI	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
	300	180.0	→	62	1162	1639		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. SI	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 #24875 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

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OCD-ARTES

ACCEPTED FOR RECORD

NOV 24 2003

ALFEXIS C. SWOBODA
PETROLEUM ENGINEER

56

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	7699	7978		QUEEN SAN ANDRES GLORIETA YESO BONE SPRING TUBB- ABO WOLFCAMP CISCO CANYON	520 1222 2422 2611 4686 6522 6738 6797 7493 7703

32. Additional remarks (include plugging procedure):
Production Casing detail: All production casing is 7" w/ two weights used in the following sequence.
38 joints 26#
DV tool
39 joints 26#
99 joints 23#
Total MD 8310'
Logs and inclination survey are to be mailed, today.

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 #24875 Verified by the BLM Well Information System.
For MARATHON OIL COMPANY, sent to the Carlsbad
Committed to AFMSS for processing by ARMANDO LOPEZ on 11/21/2003 (04AL0117SE)

Name (please print) CHARLES KENDRIX

Title AUTHORIZED REPRESENTATIVE

Signature _____ (Electronic Submission)

Date 11/21/2003

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 ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ****

Additional data for transaction #24875 that would not fit on the form

32. Additional remarks, continued

**McVAY DRILLING COMPANY**

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

Well Name and Number: Indian Hills Unit # 56

Location: Sec. 21, T21S, R24E

Operator: Marathon

Drilling Contractor: McVay Drilling Company

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NOV 24 2003

OCD-ARTESIA

30-015-32878

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	
1/2	164	14 3/4	2748	13.4	5626
1/2	368	16	3195	14	5816
1/4	530	16	3350	13.3	6005
1/4	730	16 3/4	3539	13.8	6292
1/4	913	15 1/2	3735	14	6863
1/4	1095	15 1/2	4018	15	7113
3	1352	16	4207	14.4	7366
7 3/4	1607	15 1/2	4585	13 3/4	7935
12 1/2	1735	15	4775	14	8126
14 3/4	1925	14 3/4	4965	14	8221
14 1/4	2242	14 1/4	5247		
14 1/4	2495	14 1/4	5435		

Drilling Contractor: McVay Drilling Company

By: [Signature]

Subscribed and sworn to before me this 20th 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 GC 56

Target Azimuth: 247.45
Target TVD: 8100

Closure Direction: 248

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				
164.00	0.50	64.00	164.00	-0.71	0.31	0.64	0.72	0.003	0.390	0.30	mss
348.00	0.50	84.00	347.99	-2.29	0.75	2.16	2.29	0.000	0.109	0.09	mss
545.00	0.25	117.00	544.99	-3.39	0.84	3.40	3.46	-0.001	0.168	0.16	mss
730.00	0.25	154.00	729.99	-3.67	0.10	3.94	3.94	0.000	0.200	0.09	mss
913.00	0.25	158.00	912.98	-3.69	-0.63	4.26	4.31	0.000	0.022	0.01	mss
1,095.00	0.25	164.00	1,094.98	-3.65	-1.38	4.52	4.73	0.000	0.033	0.01	mss
1,232.00	0.79	163.00	1,231.98	-3.52	-2.57	4.88	5.51	0.004	-0.007	0.39	mss
1,293.00	1.05	199.20	1,292.97	-3.11	-3.50	4.82	5.96	0.004	0.593	1.02	mwd
1,354.00	2.90	204.80	1,353.93	-1.60	-5.43	3.99	6.74	0.030	0.092	3.05	mwd
1,416.00	4.80	205.50	1,415.79	1.48	-9.20	2.21	9.46	0.031	0.011	3.07	mwd
1,480.00	5.90	205.50	1,479.51	5.92	-14.58	-0.36	14.59	0.017	0.000	1.72	mwd
1,543.00	7.70	206.90	1,542.06	11.54	-21.27	-3.66	21.58	0.029	0.022	2.87	mwd
1,607.00	9.40	206.30	1,605.35	18.73	-29.78	-7.92	30.81	0.027	-0.009	2.66	mwd
1,672.00	11.20	207.70	1,669.30	27.58	-40.13	-13.20	42.24	0.028	0.022	2.80	mwd
1,735.00	12.60	208.40	1,730.94	37.62	-51.59	-19.32	55.09	0.022	0.011	2.23	mwd
1,799.00	13.30	208.40	1,793.31	48.76	-64.20	-26.14	69.32	0.011	0.000	1.09	mwd
1,861.00	14.10	204.50	1,853.55	59.83	-77.35	-32.66	83.96	0.013	-0.063	1.97	mwd
1,925.00	14.90	200.30	1,915.51	71.13	-92.16	-38.75	99.98	0.013	-0.066	2.06	mwd
1,989.00	15.30	194.30	1,977.31	81.79	-108.06	-43.69	116.56	0.006	-0.094	2.52	mwd
2,052.00	15.20	197.50	2,038.09	92.09	-123.99	-48.23	133.04	-0.002	0.051	1.35	mwd
2,116.00	14.90	203.80	2,099.90	103.44	-139.53	-54.07	149.64	-0.005	0.098	2.60	mwd
2,179.00	14.70	206.90	2,160.81	115.38	-154.07	-60.96	165.69	-0.003	0.049	1.30	mwd
2,242.00	14.20	212.60	2,221.82	127.79	-167.70	-68.74	181.24	-0.008	0.090	2.39	mwd
2,305.00	13.80	220.30	2,282.95	140.82	-179.95	-77.76	196.03	-0.006	0.122	3.02	mwd
2,368.00	13.80	226.30	2,344.14	154.52	-190.87	-88.05	210.20	0.000	0.095	2.27	mwd
2,432.00	14.20	230.50	2,406.24	169.14	-201.14	-99.63	224.46	0.006	0.066	1.71	mwd
2,495.00	14.30	235.10	2,467.30	184.14	-210.50	-111.97	238.43	0.002	0.073	1.80	mwd
2,559.00	14.10	239.30	2,529.35	199.58	-219.00	-125.16	252.24	-0.003	0.066	1.64	mwd
2,621.00	14.70	243.90	2,589.40	214.90	-226.32	-138.72	265.45	0.010	0.074	2.08	mwd
2,685.00	14.90	246.30	2,651.28	231.23	-233.20	-153.54	279.21	0.003	0.038	1.01	mwd
2,748.00	14.90	248.10	2,712.16	247.43	-239.48	-168.48	292.80	0.000	0.029	0.73	mwd
2,811.00	15.40	250.20	2,772.97	263.89	-245.33	-183.86	306.58	0.008	0.033	1.18	mwd
2,874.00	15.60	250.20	2,833.68	280.70	-251.04	-199.70	320.78	0.003	0.000	0.32	mwd
2,969.00	15.70	252.70	2,925.16	306.26	-259.18	-223.99	342.56	0.001	0.026	0.72	mwd
3,065.00	16.60	251.60	3,017.37	332.87	-267.38	-249.41	365.64	0.009	-0.011	0.99	mwd
3,159.00	16.10	252.30	3,107.57	359.25	-275.58	-274.56	389.01	-0.005	0.007	0.57	mwd
3,254.00	16.70	253.40	3,198.70	385.96	-283.48	-300.19	412.89	0.006	0.012	0.71	mwd
3,350.00	16.10	250.60	3,290.80	412.97	-291.84	-325.97	437.53	-0.006	-0.029	1.03	mwd
3,445.00	16.10	250.60	3,382.07	439.27	-300.59	-350.82	461.98	0.000	0.000	0.00	mwd
3,539.00	16.90	250.90	3,472.20	465.92	-309.39	-376.02	486.95	0.009	0.003	0.86	mwd
3,634.00	15.50	247.70	3,563.43	492.40	-318.73	-400.82	512.10	-0.015	-0.034	1.75	mwd
3,735.00	15.50	247.00	3,660.76	519.39	-329.12	-425.73	538.11	0.000	-0.007	0.19	mwd
3,830.00	15.60	250.20	3,752.28	544.85	-338.41	-449.43	562.59	0.001	0.034	0.91	mwd
3,924.00	15.90	252.30	3,842.75	570.30	-346.61	-473.59	586.88	0.003	0.022	0.69	mwd
4,018.00	15.60	253.00	3,933.22	595.71	-354.22	-497.94	611.08	-0.003	0.007	0.38	mwd
4,114.00	16.30	253.20	4,025.53	621.96	-361.89	-523.18	636.15	0.007	0.002	0.73	mwd
4,207.00	16.00	254.10	4,114.86	647.68	-369.17	-548.00	660.75	-0.003	0.010	0.42	mwd
4,302.00	15.30	254.10	4,206.33	673.13	-376.19	-572.65	685.16	-0.007	0.000	0.74	mwd
4,397.00	16.20	256.50	4,297.77	698.67	-382.72	-597.59	709.64	0.009	0.025	1.17	mwd
4,492.00	15.80	257.60	4,389.09	724.49	-388.59	-623.11	734.35	-0.004	0.012	0.53	mwd
4,585.00	15.40	259.70	4,478.66	749.02	-393.52	-647.63	757.81	-0.004	0.023	0.74	mwd
4,680.00	15.60	259.40	4,570.21	773.84	-398.12	-672.59	781.59	0.002	-0.003	0.23	mwd
4,775.00	15.10	254.10	4,661.82	798.63	-403.86	-697.05	805.59	-0.005	-0.056	1.57	mwd

* * * N A U T I C A L (V e r s i o n 4 . 0 1) * * *

Well: Indian Hills Unit GC 56

Target Azimuth: 247.45
Target TVD: 8100

Closure Direction: 248

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)
4,870.00	15.60	253.00	4,753.43	823.64	-410.99	-721.17	830.05	0.005	-0.012	0.61	mwd
4,964.00	14.70	250.60	4,844.17	848.13	-418.64	-744.50	854.13	-0.010	-0.026	1.17	mwd
5,057.00	14.60	249.50	4,934.14	871.62	-426.67	-766.61	877.35	-0.001	-0.012	0.32	mwd
5,152.00	14.40	249.90	5,026.12	895.39	-434.92	-788.92	900.86	-0.002	0.004	0.24	mwd
5,247.00	14.30	247.40	5,118.15	918.92	-443.49	-810.84	924.20	-0.001	-0.026	0.66	mwd
5,341.00	14.20	247.40	5,209.26	942.06	-452.38	-832.21	947.21	-0.001	0.000	0.11	mwd
5,435.00	14.30	248.10	5,300.37	965.20	-461.14	-853.62	970.22	0.001	0.007	0.21	mwd
5,530.00	14.20	249.50	5,392.45	988.58	-469.60	-875.42	993.42	-0.001	0.015	0.38	mwd
5,626.00	13.30	250.20	5,485.69	1,011.37	-477.46	-896.84	1,016.02	-0.009	0.007	0.95	mwd
5,720.00	13.70	250.50	5,577.10	1,033.29	-484.84	-917.51	1,037.73	0.004	0.003	0.43	mwd
5,816.00	13.90	252.70	5,670.33	1,056.13	-492.06	-939.23	1,060.32	0.002	0.023	0.58	mwd
5,911.00	14.40	252.00	5,762.44	1,079.26	-499.11	-961.36	1,083.20	0.005	-0.007	0.56	mwd
6,005.00	13.40	252.00	5,853.69	1,101.77	-506.09	-982.84	1,105.48	-0.011	0.000	1.06	mwd
6,100.00	13.40	255.50	5,946.10	1,123.65	-512.24	-1,003.96	1,127.09	0.000	0.037	0.85	mwd
6,196.00	13.50	254.10	6,039.47	1,145.79	-518.10	-1,025.51	1,148.96	0.001	-0.015	0.35	mwd
6,292.00	13.80	255.50	6,132.76	1,168.26	-524.04	-1,047.37	1,171.15	0.003	0.015	0.46	mwd
6,388.00	14.30	256.20	6,225.89	1,191.31	-529.73	-1,069.97	1,193.92	0.005	0.007	0.55	mwd
6,484.00	14.30	256.90	6,318.91	1,214.73	-535.25	-1,093.03	1,217.05	0.000	0.007	0.18	mwd
6,579.00	14.90	258.30	6,410.85	1,238.30	-540.38	-1,116.42	1,240.33	0.006	0.015	0.73	mwd
6,673.00	14.20	256.50	6,501.83	1,261.55	-545.52	-1,139.47	1,263.32	-0.007	-0.019	0.89	mwd
6,737.00	14.80	257.20	6,563.79	1,277.36	-549.17	-1,155.07	1,278.97	0.009	0.011	0.98	mwd
6,801.00	15.20	255.80	6,625.61	1,293.72	-553.04	-1,171.17	1,295.18	0.006	-0.022	0.84	mwd
6,863.00	14.00	250.20	6,685.61	1,309.25	-557.57	-1,186.11	1,310.63	-0.019	-0.090	2.99	mwd
6,925.00	13.80	245.60	6,745.80	1,324.13	-563.17	-1,199.90	1,325.49	-0.003	-0.074	1.81	mwd
6,989.00	14.50	247.40	6,807.86	1,339.77	-569.40	-1,214.25	1,341.13	0.011	0.028	1.29	mwd
7,051.00	14.90	249.90	6,867.83	1,355.50	-575.12	-1,228.90	1,356.82	0.006	0.040	1.21	mwd
7,113.00	15.00	253.40	6,927.73	1,371.44	-580.15	-1,244.08	1,372.70	0.002	0.056	1.47	mwd
7,176.00	15.50	259.40	6,988.52	1,387.79	-584.03	-1,260.17	1,388.92	0.008	0.095	2.63	mwd
7,240.00	15.40	260.10	7,050.20	1,404.45	-587.06	-1,276.94	1,405.43	-0.002	0.011	0.33	mwd
7,303.00	14.60	260.40	7,111.06	1,420.35	-589.83	-1,293.01	1,421.19	-0.013	0.005	1.28	mwd
7,366.00	14.40	260.80	7,172.05	1,435.71	-592.40	-1,308.57	1,436.42	-0.003	0.006	0.36	mwd
7,429.00	14.30	259.00	7,233.08	1,450.95	-595.14	-1,323.95	1,451.56	-0.002	-0.029	0.73	mwd
7,524.00	13.60	261.10	7,325.28	1,473.30	-599.11	-1,346.50	1,473.77	-0.007	0.022	0.91	mwd
7,588.00	14.00	261.50	7,387.43	1,488.12	-601.42	-1,361.59	1,488.50	0.006	0.006	0.64	mwd
7,651.00	14.30	260.80	7,448.52	1,503.09	-603.79	-1,376.81	1,503.38	0.005	-0.011	0.55	mwd
7,715.00	14.70	261.40	7,510.48	1,518.66	-606.26	-1,392.64	1,518.88	0.006	0.009	0.67	mwd
7,778.00	14.20	261.50	7,571.49	1,533.91	-608.60	-1,408.18	1,534.07	-0.008	0.002	0.79	mwd
7,840.00	14.20	261.80	7,631.60	1,548.66	-610.81	-1,423.23	1,548.77	0.000	0.005	0.12	mwd
7,935.00	13.90	261.10	7,723.75	1,571.03	-614.24	-1,446.04	1,571.09	-0.003	-0.007	0.36	mwd
8,031.00	13.90	260.80	7,816.94	1,593.46	-617.87	-1,468.81	1,593.48	0.000	-0.003	0.08	mwd
8,126.00	13.90	259.70	7,909.16	1,615.71	-621.73	-1,491.30	1,615.71	0.000	-0.012	0.28	mwd
8,221.00	14.00	260.40	8,001.36	1,638.06	-625.69	-1,513.86	1,638.06	0.001	0.007	0.21	mwd
8,310.00	14.00	260.40	8,087.72	1,659.05	-629.28	-1,535.09	1,659.06	0.000	0.000	0.00	proj

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-453
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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0135
Expires: November 30, 2000

RECEIVED

NOV 25 2003

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.

OCD-ARTESIA

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other		5. Lease Serial No. NMLC064391B
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. NMNM70964X
3b. Phone No. (include area code) Ph: 800.351.1417 Ext: 8104 Fx: 432.687.8196		8. Well Name and No. INDIAN HILLS UNIT GAS COM 56
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 21 T21S R24E SWSW Lot M 453FSL 350FWL		9. API Well No. 30-015-32878-00-X1
		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			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Production Start-up
	☐ Convert to Injection	☐ Plug Back	☐ 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 recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

09/18/2003 Rig W/O rig RIH w/ bit and scraper on 2 7/8 tubing. Tag DV tool @ 6495' and drill out.

Tag PBTD @ 8260

09/19/2003 Rig up Baker Atlas tagged PBTD @ 8257 WLM. Logged to surface with Spectral Gamma Ray, X-Mac, and Neutron logs.

09/23/2003 Rig up Halliburton pickled casing and tubing with 1000 gals of 15% HCl

09/24/2003 Rig up Baker Atlas and perforated w/4 shots p/ft in 120 phasing using 3 3/8" slick guns and 23 gram charges with intervals as follows. 7933-7948, 7918-7933, 7882-7896, 7862-7882, 7827-7851, 7778-7802, 7715-7731, 7715-7699.

09/26/2003 RIH w/ PPI packer dropped retrievable valves and acidized perms from 7975 to 7699 with 100 gals/ft of 17%CCA in 100 settings with a total of 20,000 gals of CCA sour acid. Fished retrievable valves.

09/27/2003 Ran 2 7/8 8.5# N-80 tubing and 125' sub pump. Nipped up well head.

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

Electronic Submission #25421 verified by the BLM Well Information System
For MARATHON OIL COMPANY, sent to the Carlsbad
Committed to AFMSS for processing by ARMANDO LOPEZ on 11/24/2003 (04AL01209E)

Name (Printed/Typed) CHARLES KENDRIX

Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission)

Date 11/21/2003

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By ACCEPTED	ALEXIS C SWOBODA Title PETROLEUM ENGINEER <i>asw</i>	Date 11/24/2003
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 **

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

1 Operator name and Address Marathon Oil Company P.O. Box 552 Midland, Texas		2 OGRID Number 014021
		3 Reason for Filing Code New Well
4 API Number 30-0 15-32878	5 Pool Name Indian Basin Upper Perm Associated	6 Pool Code 33658
7 Property Code 6410	8 Property Name Indian Hills Unit Gas Com	9 Well Number 56

II. Surface Location

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
C	21	21S	24E	M	453	South	350	West	Elddy

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
A	29	21S	24E	A	179	North	1207	East	Elddy

12 Lse Code F	13 Producing Method Code F	14 Gas Connection Date 09/30/2003	15 C-129 Permit Number	16 C-129 Effective Date	17 C-129 Expiration Date
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III. Oil and Gas Transporters

18 Transporter OGRID	19 Transporter Name and Address	20 POD	21 O/G	22 POD ULSTR Location and Description
138648	Amoco Pipeline Trucks 502 N. West Ave. Levelland, Texas 79336	2816323	Oil	UL "P" Section 19, T-21-S, R-24-E
14035	Marathon Oil Company PO Box 1324 Artesia, NM 88221-1324	2821753	Gas	UL "P" Section 19, T-21-S, R-24-E
				RECEIVED
				DEC 18 2003
				OCD-ARTESIA

IV. Produced Water

23 POD 2823131	24 POD ULSTR Location and Description UL "P", Section 19, T-21-S, R-24-E
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V. Well Completion Data

25 Spud Date 09/02/2003	26 Ready Date 09/30/2003	27 TD 8310	28 PBDT 8260	29 Perforations 7699-7976	30 DHC, MC
31 Hole Size 12.25	32 Casing & Tubing Size 9.625	33 Depth Set 1208	34 Sacks Cement 825		
8.75	7.0	8310	1160		
	2.875	8046			

VI. Well Test Data

35 Date New Oil 10/01/2003	36 Gas Delivery Date 10/01/2003	37 Test Date 10/10/2003	38 Test Length 24	39 Tbg. Pressure 300	40 Csg. Pressure 190
41 Choke Size N/A	42 Oil 39	43 Water 1598	44 Gas 265	45 AOF	46 Test Method

47 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		OIL CONSERVATION DIVISION Approved by: Jim W. Green Title: District Supervisor Approval Date: JAN 6 2003	
Printed name: Charles E. Kendrick Title: Engineering Technician			
Date: 12/10/2003	Phone: 713-296-2096		

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

61

EC

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

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		5. Lease Serial No. NMLC064391B	
2. Name of Operator MARATHON OIL COMPANY		6. If Indian, Allottee or Tribe Name	
3a. Address P O BOX 3128 HOUSTON, TX 77253		7. If Unit or CA/Agreement, Name and/or No. NMNM70964A	
3b. Phone No. (include area code) Ph: 713.629.6800 Ext: 3254 Fx: 713.499.6748		Well Name and No. INDIAN HILLS UNIT GAS COM 56	
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 21 T21S R24E SWSW Lot M 453FSL 350FWL		API Well No. 30-015-32878-00-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			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Surface Disturbance
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ 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 recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Marathon Oil Co. intends to drill a new horizontal lateral to the same permitted producing interval. Drilling operations will require construction of reserve pit. Marathon request constructing a 120' X 120' reserve pit at the site of the original approved reserve pit. No new disturbance area. Cuttings removed from original pit during construction will be stockpiled on a liner to prevent surface contamination. Pit will be padded to accept a 12 Mil liner. At the end of drilling operations pit area will be reclaimed as per BLM's requirements.

14. I hereby certify that the foregoing is true and correct.	
Electronic Submission #32852 verified by the BLM Well Information System For MARATHON OIL COMPANY, sent to the Carlsbad Committed to AFMSS for processing by ARMANDO LOPEZ on 07/06/2004 (04AL0244SE)	
Name (Printed/Typed) MIKE MICK	Title AUTHORIZED REPRESENTATIVE
Signature (Electronic Submission)	Date 07/02/2004

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <u>/s/ Joe G. Lora</u>	ACTING FIELD MANAGER	JUL 09 2004
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.	CARLSBAD FIELD OFFICE	
	Office	

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 **

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NMOCD

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		5. Lease Serial No. NMLC064391B
2. Name of Operator MARATHON OIL COMPANY		6. If Indian, Allottee or Tribe Name
3a. Address P O BOX 3128 HOUSTON, TX 77253		7. If Unit or CA/Agreement, Name and/or No. NNNM70964A
3b. Phone No. (include area code) Ph: 713.629.6600 Ext: 3254 Fx: 713.499.6748		8. Well Name and No. INDIAN HILLS UNIT GAS COM 58
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 21 T21S R24E SWSW Lot M 453FSL 350FWL		9. API Well No. 30-015-32878-00-S1
		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			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Drilling Operations
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ 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 recompleate 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 recompleation 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.)

Marathon Oil Co. intends to drill a new horizontal lateral to the same permitted producing interval. Marathon intends to plug off existing Upper Penn. with approx. 200 sks. of premium cement. Marathon will cut a window in the casing @ approx. 8100', drill a 4-3/4" hole to a new TL of 913' FNL & 2633' FEL of sec. 29 T-21S, R- 24E. Marathon will use fresh water and produced water as drilling fluids. This will be an open hole completion (no liner).

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS ATTACHED

NSL

14. I hereby certify that the foregoing is true and correct. Electronic Submission #32871 verified by the BLM Well Information System For MARATHON OIL COMPANY, sent to the Carlsbad Committed to AFMSS for processing by ARMANDO LOPEZ on 07/12/2004 (04AL0256SE).	
Name (Printed/Typed) MIKE MICK	Title AUTHORIZED REPRESENTATIVE
Signature (Electronic Submission)	Date 07/09/2004

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By ALEXIS C SWOBODA	Title PETROLEUM ENGINEER	Date 07/12/04
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 **

DISTRICT I
P.O. Box 1000, Santa Fe, NM 87501-1000

DISTRICT II
P.O. Box 1000, Santa Fe, NM 87501-1000

DISTRICT III
1000 Rio Grande Rd., Santa Fe, NM 87501

DISTRICT IV
P.O. Box 1000, Santa Fe, NM 87501-1000

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Form C-102
Revised February 19, 1984
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Well Code	Well Name
Property Code	Property Name INDIAN HILLS UNIT GAS COM	Well Number 56
OGUID No.	Operator Name MARATHON OIL COMPANY	Elevation 3667'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	21	21-S	24-E		453'	SOUTH	350'	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
1	29	21-S	24-E		913'	NORTH	2633'	EAST	EDDY

Dedicated Acres	Joint or InHH	Consolidation Code	Order No.
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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

GEODETIC COORDINATES NAD 27 NME SURF. Y=530701.2 N X=445521.6 E LAT.=32°27'31.89" N LONG.=104°30'35.85" W				LOT 2 36.26 AC LOT 3	LOT 1 36.29 AC LOT 4
				36.69 AC LOT 6	36.72 AC LOT 5
				36.36 AC LOT 7	36.28 AC LOT 8
				37.74 AC	37.88 AC
LOT 3 LOT 2 LOT 1 LOT 4 LOT 5 LOT 6 LOT 7 LOT 8 LOT 9 LOT 10 LOT 11 LOT 12 LOT 13 LOT 14					
42.20 AC LOT 4 41.76 AC LOT 5 41.87 AC LOT 6 42.47 AC LOT 10 42.03 AC LOT 9 43.38 AC LOT 8 42.78 AC LOT 11 42.42 AC LOT 12 43.63 AC LOT 13 43.45 AC LOT 14 43.05 AC 42.69 AC 42.91 AC 42.53 AC					
B.H. Y=529341.1 N X=442589.9 E SCALE 1"=2000'					
OPERATOR CERTIFICATION I hereby certify the information contained herein is true and complete to the best of my knowledge and belief. Signature _____ Printed Name _____ Title _____ 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 19, 2003 Date Surveyed REV: 07/1/04 JR Signature & Seal of Professional Surveyor 04.13.0832 Certificate No. GARY EDSON 18943					

Marathon Oil Company
INDIAN HILLS UNIT GAS COM #56

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 : ST_P1
Our ref : prop4295
License :

Date printed : 25-Jun-2004
Date created : 25-Jun-2004
Last revised : 25-Jun-2004

Field is centred on 445535.500,521332.200,-105.00000,N
Structure is centred on 445541.600,530707.200,-105.00000,N

Slot location is n32 27 32.049,w104 30 35.617
Slot Grid coordinates are N 530707.200, E 445541.600
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 GAS COM #56, slot #1
INDIAN BASIN, Eddy County New Mexico

PROPOSAL LISTING Page 1
Your ref : ST P1
Last revised : 25-Jun-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 Easting	C O O R D S Northing
7870.00	14.11	261.58	7660.69	612.05S	1430.43W	0.00	1555.16	444111.17
7879.11	14.11	243.50	7669.52	612.71S	1432.52W	48.20	1557.34	444109.08
7900.00	24.19	243.50	7689.23	615.76S	1438.64W	48.24	1564.18	444102.96
8000.00	72.43	243.50	7753.80	648.10S	1503.52W	48.24	1636.64	444038.08
8054.24	98.60	243.50	7758.00	672.02S	1551.49W	48.24	1690.22	443990.11
8100.00	98.60	243.50	7751.16	692.21S	1591.98W	0.00	1735.45	443949.62
8200.00	98.60	243.50	7736.21	736.32S	1680.47W	0.00	1834.29	443861.13
8300.00	98.60	243.50	7721.26	780.44S	1768.96W	0.00	1933.12	443772.64
8400.00	98.60	243.50	7706.30	824.56S	1857.45W	0.00	2031.96	443684.15
8500.00	98.60	243.50	7691.35	868.67S	1945.94W	0.00	2130.80	443595.66
8600.00	98.60	243.50	7676.40	912.79S	2034.42W	0.00	2229.63	443507.18
8700.00	98.60	243.50	7661.45	956.91S	2122.91W	0.00	2328.47	443418.69
8800.00	98.60	243.50	7646.49	1001.03S	2211.40W	0.00	2427.31	443330.20
8856.79	98.60	243.50	7638.00	1026.08S	2261.65W	0.00	2483.44	443279.95
8887.34	96.63	243.50	7633.95	1039.59S	2288.75W	6.44	2513.71	443252.85
8987.34	90.19	243.50	7628.00	1084.11S	2378.04W	6.44	2613.44	443163.56
8990.29	90.00	243.50	7628.00	1085.42S	2380.67W	6.44	2616.38	443160.93
9000.00	90.00	243.50	7628.00	1089.76S	2389.37W	0.00	2626.09	443152.23
9100.00	90.00	243.50	7628.00	1134.38S	2478.86W	0.00	2726.05	443062.74
9200.00	90.00	243.49	7628.00	1179.01S	2568.35W	0.00	2826.01	442973.25
9300.00	90.00	243.49	7628.00	1223.64S	2657.84W	0.00	2925.97	442883.76
9400.00	90.00	243.49	7628.00	1268.27S	2747.32W	0.00	3025.93	442794.28
9500.00	90.00	243.49	7628.00	1312.91S	2836.81W	0.00	3125.89	442704.79
9600.00	90.00	243.48	7628.00	1357.55S	2926.29W	0.00	3225.85	442615.31
9605.93	90.00	243.48	7628.00	1360.20S	2931.60W	0.00	3231.78	442610.00

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 3231.78 on azimuth 245.11 degrees from wellhead.
Vertical section is from N 0.00 W 0.00 on azimuth 245.11 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 GAS COM #56, slot #1
INDIAN BASIN, Eddy County New Mexico

PROPOSAL LISTING Page 2
Your ref : ST P1
Last revised : 25-Jun-2004

				Comments in wellpath
				=====
MD	TVD	Rectangular Coords.		Comment
8054.24	7758.00	672.02S	1551.49W	EOC
9605.93	7628.00	1360.20S	2931.60W	BHL

Targets associated with this wellpath				
=====				
Target name	Geographic Location	T.V.D.	Rectangular Coordinates	Revised
EOC		7758.00	672.02S 1551.49W	25-Jun-2004
BHL	442610.000, 529347.000, -105.00	7628.00	1360.20S 2931.60W	25-Jun-2004



Marathon Oil Company

Created by: sant

Date plotted: 25-Jun-2004

Plot Reference is ST P1.

Coordinates are in feet reference slot #1.

True Vertical Depths are reference rotary table.

3651

--- Baker Hughes INTEQ ---

Structure : INDIAN HILLS UNIT GAS COM #56

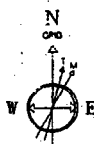
Slot : slot #1

Field : INDIAN BASIN

Location : Eddy County New Mexico

WELL PROFILE DATA

Point	MD	Inc	Dir	TVD	North	East	V. Sect	Deg/100
Tie on	7870.00	14.11	261.58	7660.69	-612.05	-1430.43	1555.16	0.00
KOP	7879.11	14.11	243.50	7669.52	-612.71	-1432.52	1557.34	48.20
Target EOC	8054.24	98.60	243.50	7758.00	-672.02	-1551.49	1690.22	48.24
End of Build/Turn	8856.79	98.60	243.50	7638.00	-1026.08	-2261.65	2483.44	0.00
KOP	8990.29	90.00	243.50	7628.00	-1085.42	-2380.67	2616.38	6.44
I.D. & Target BHL	9605.93	90.00	243.48	7628.00	-1360.20	-2931.60	3231.78	0.00



25-Aug-2003 (source: BGGM)
Magnetic North is 0.89 degrees East of True North
GRID North is 0.00 degrees West of True North
To correct azimuth from True to GRID add 0.89 deg
To correct azimuth from Magnetic to GRID add 9.04 deg

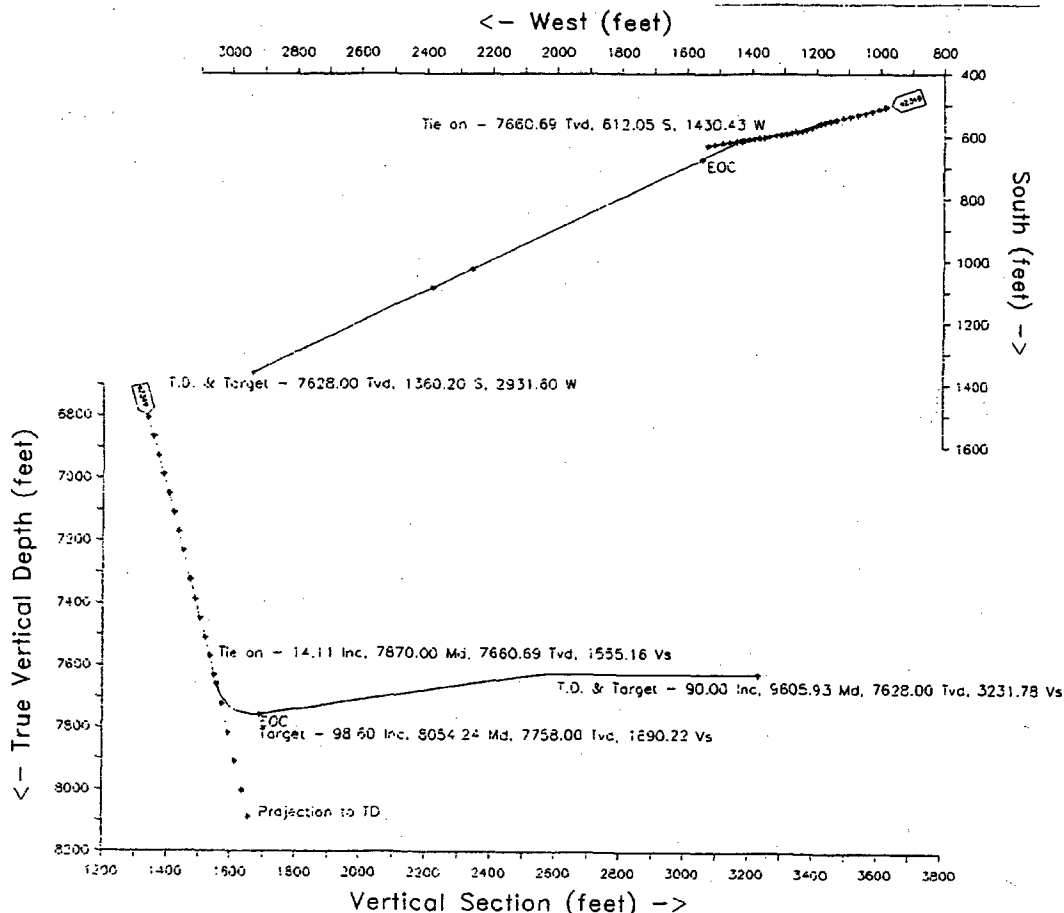
STRUCTURE SET-UP REFERENCE

LAT: _____ N
LONG: _____ W
X = _____ Y = _____

PROJECTION: MERCATOR

Mercator Zone: _____
Spheroid Used: _____

Data Source: BGGM
Dip Angle: _____ deg
Field Strength: _____ mT



RECEIVED

JUL 28 2004

DISTRICT I

P.O. Box 1900, Hobbs, NM 88241-1900

009-ARTESIA

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102

Revised February 10, 1994

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

DISTRICT II

P.O. Drawer 80, Artesia, NM 88211-0070

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

P.O. Box 2060, Santa Fe, N.M. 87504-2060

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-32878	Pool Code 33685	Pool Name INDIAN BASIN U.P. Assoc.
Property Code	Property Name INDIAN HILLS UNIT GAS COM	Well Number 56
OGUID No. 14021	Operator Name MARATHON OIL COMPANY	Elevation 3667'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	21	21-S	24-E		453'	SOUTH	350'	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
1	29	21-S	24-E		913'	NORTH	2633'	EAST	EDDY

Dedicated Acres 320 E/2	Joint or Infill	Consolidation Code	Order No.
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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

GEODETIC COORDINATES NAD 27 NME SURF. Y=530701.2 N X=445521.6 E LAT.=32°27'31.99" N LONG.=104°30'35.85" W		LOT 2 38.26 AC LOT 3 LOT 1 38.29 AC LOT 4 38.69 AC LOT 6 38.72 AC LOT 5 38.35 AC LOT 7 36.28 AC LOT 8 37.74 AC 37.68 AC		OPERATOR CERTIFICATION I hereby certify the the information contained herein to true and complete to the best of my knowledge and belief. <u>Mike Mick</u> Signature <u>Mike Mick</u> Printed Name <u>Leadr Eng. Teel</u> Title <u>7-21-04</u> Date
Sec 21 Non-Standard Producing Area SCALE - 1"=2000' Standard Producing Area Sec 29 IHU #27 IHU #14 IHU #47		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 19, 2003 Date Surveyed REV: 07/1/04 JR Signature & Seal of Professional Surveyor 04.13.0832 Certificate No. GARY KIDSON 12841		