Form 3160-5 (August 1999)

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

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₩.	775	•		

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

If Unit or CA/Agreement Name and/or No

Lease Serial No. NMNM07260

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals 13 14 15 16 72

6. If Indian, Allottee or Tribe Name

SUBMII IN IRI	PLICA I E - Other Instru	ctions on reverse side.	2004	NMNM70964A	
1. Type of Well Gas Well Ott	her	/	EIVEU ARTESIA	B: Well Name and No.	
2. Name of Operator MARATHON OIL COMPANY	Contact:	MIKE MICK (7) E-Mail: mfmick@marathonoil.co	m k	7/ API Well No. / 30-015-32199-0	
P O BOX 3128 HOUSTON, TX 77253		3b. Phone No. (include area code Ph: 713.629.6600 Ext 325 Fx: 713.499.6748	821236	O. Field and Pool, or INDIAN BASIN	Exploratory UPPER PENN ASS
4. Location of Well (Footage, Sec., 7 Sec 33 T21S R24E NWNE 10		on)		IT. County or Parish, EDDY COUNTY	
12. CHECK APPI	ROPRIATE BOX(ES) T	O INDICATE NATURE OF	NOTICE, REP	ORT, OR OTHE	R DATA
TYPE OF SUBMISSION		TYPE O	F ACTION		
Notice of Intent Subsequent Report Final Abandonment Notice	☐ Acidize ☐ Alter Casing ☐ Casing Repair ☐ Change Plans	☐ Deepen ☐ Fracture Treat ☐ New Construction ☐ Plug and Abandon	Production Reclamati Recomple	te	□ Water Shut-Off □ Well Integrity □ Other □ Drilling Operations

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

☐ Plug Back

☐ Water Disposal

Marathon Oil Co. intends to drill a new horizontal lateral to the same permitted producing interval . Marathon will plug off current producing interval w/ 200 sks. of premium cement. Marathon will cut a window in the casing at approx. 9313'MD, 8078' TVD and drill a 4-3/4" hole to a TL of 664' FSL & 686' FEL , Sec. 28, T 21-S,R-24-E. Marathon will use produced water and Fresh water as drilling fluids. This will be an Open Hole completion (no liner)

Convert to Injection

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

14. I hereby certify	For MARATHON	89 verified by the BLM Well Information System DIL COMPANY, sent to the Carlsbad ng by ARMANDO LOPEZ on 07/12/2004 (04AL0255SE)
Name (Printed/T)	yped) MIKE MICK	Title AUTHORIZED REPRESENTATIVE
Signature	(Electronic Submission)	Date 07/09/2004
	THIS SPACE FOR	EDERAL OR STATE OFFICE USE
	EXIS C SWOBODA QUELL	TitlePETROLEUM ENGINEER Date 07/12/2
certify that the applica which would entitle th	al, if any, are attached. Approval of this notice does not ant holds legal or equitable title to those rights in the sub- terapplicant to conduct operations thereon.	

DISTRICT [P.A. Nor 1888, Sabba, NN 68864-1888

State of New Mexico

Harry, Marris and Ratural Surveyors Department

Form C-162 Revised February 18, 1964 Submit to Appropriate Statest Office State Lean - 4 Copies

DISTRICT II P.D. December 550, Automia, 1854 555841 - 6715

OIL CONSERVATION DIVISION P.O. Box 2088

State Lenen - 4 Copins Fao Lenes - 2 Copins

DISTRICT III 1000 Bio Brazos Rd., Anton, RM 57410 Santa Fe, New Mexico 87504-2058

DISTRICT IV

WELL LOCATION AND ACREAGE DEDICATION PLAT

II AMENDED REPORT

API Rumber	Peal Code	Pesi Name			
Property Code		HILLS UNIT	Well Humber 35		
ogrid %.	_	ratur Menne OIL COMPANY	Elevation 4123'		

Surface Location

-	UL or lot No.	Gootlan	Township	Bezgo	lot kin	Pest from the	North/Bouth line	Post from the	Best/West Has	County
ļ	2	33	21-S	24-E		1087	NORTH	2037	EAST	EDDY

Bottom Hole Location if Different From Surface

UL or let No.	Rection	Township	Renge	Lot like	Post from the	Horth/South line	Post from the	Bust/Vant Mass	County
P	25	21-5	24-E		664	SOUTH	686	EAST	EDDY
Dodicated Agre	Sedicated Acres Joint or Infili Consolidation Code								
		İ							

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 haroby outsity the the information constained herein in true and complete to it best of my herosistys and better.
	55CTT 25		Signature
			Printed Name
	2007 - Day	8.H. Y=525668.6 N X=449725.9 E	SURVEYOR CERTIFICATION
159 4 42.16 AG	22 30 AC 4500 5 42.6 AC	GEODETIC COORDINATES NAD 27 NIME SURF.	I havely cartify that the well incestion sha on this plat was platfed from field notice actual surveys made by me or under supervisors, and that the game to Iron
100 6 47.39 AC	12.51 AC 4100.1" 4060 8" 42.54 AC	Y=523893.6 N X=448349.0 E LAT.=32'26'24.67" N	SEPTEMBER 6, 2001
COT 18	1 43.77 AC 42.84 AC 42.85 AC 43.87 AC	LONG.=104'30'02.73" W	Data Surveyed REV: 07/02/04 Mignature & Soal of Professional Surveyor
1.07 1.3 004 62.59	2007 to 12 to 16 to 16 to 12 to 16 t		04,13.0832
	1		Cortificate No. GARY EDSON 12

Marathon Oil Company INDIAN HILLS UNIT #35

slot #1 INDIAN BASIN Eddy County New Mexico

PROPOSAL LISTING

by Baker Hughes INTEQ

Your ref : ST_P1 Our ref : prop3527 License :

Date printed : 26-Jun-2004 Date created : 21-Oct-2002 Last revised : 26-Jun-2004

Field is centred on 445535.500,521332.200,-105.00000,N Structure is centred on 448350.100,523894.600,-105.00000,N

Slot location is n32 26 24.677,w104 30 2.712
Slot Grid coordinates are N 523894.600, E 448350.100
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 #35,slot #1 INDIAN BASIN,Eddy County New Mexico

PROPOSAL LISTING Page 1 Your ref : ST_P1 Last revised : 26-Jun-2004

Measured Depth		Azimuth Degrees	True Vert Depth	RECTANG COORDIN		Dogleg Deg/100ft	Vert Sect
8335.00	20.58	348.17	8046.19	1831.01 N	277.55 W	0.00	1276.67
8400.00	40.14	65.99	8103.84	1851.57 N	260.03 W	61.89	1303.65
8495.42	94.30	93.22	8140.00	1862.39 N	176.94 W	61.89	1363.12
8500.00	94.30	93.22	8139.66	1862.13 N	172.39 W	0.00	1365.72
9000.00	94.30	93.22	8102.17	1834.13 N	325.42 E	0.00	1648.69
9295.00	94.30	93.22	8080.05	1817.60 N	619.12 E	0.00	1815.65
9313.40	93.38	93.22	8078.82	1816.57 N	637.45 E	5.00	1826.07
9400.00	93.38	93.22	8073.71	1811.72 N	723.77 E	0.00	1875.14
9500.00	93.38	93.22	8067.81	1806.11 N	823.43 E	0.00	1931.80
9600.00	93.38	93.22	8061.91	1800.51 N	923.10 E	0.00	1988.45
9700.00	93.39	93.22	8056.00	1794.90 N	1022.77 E	0.00	2045.11
9800.00	93.39	93.22	8050.10	1789.30 N	1122.44 E	0.00	2101.78
9900.00	93.39	93.22	8044.19	1783.70 N	1222.11 E	0.00	2158.44
10000.00	93.39	93.21	8038.28	1778.10 N	1321.77 E	0.00	2215.10
10055.41	93.39	93.21	8035.00	1775.00 N	1377.00 E	0.00	2246.50 BHL

Marathon Oil Company
INDIAN HILLS UNIT #35,slot #1 INDIAN BASIN, Eddy County New Mexico

PROPOSAL LISTING Page 2 Your ref : ST_P1 Last revised: 26-Jun-2004

Comments in wellpath

MD TVD Rectangular Coords. Comment 10055.41 8035.00 1775.00 N 1377.00 E BHL

Targets associated with this wellpath

Geographic Location T.V.D. Rectangular Coordinates Revised Target name 8035.00 1775.00N 1377.00E 26-Jun-2004



Marathon Oil Company

Created by, danf Date plotted 26-Jun-2004

Plot Reference is ST P1. Coordinates are in feet reference slot #1.

Structure: INDIAN HILLS UNIT #35

Slot: slot #1

Vertical Depths are reference rotary table.

35ston --- Baker Hughes INTEQ ---

BAKER HUGHES INTEO

Approved By:

Title: Date:

Field	1:	INDIA	N BA	NISA

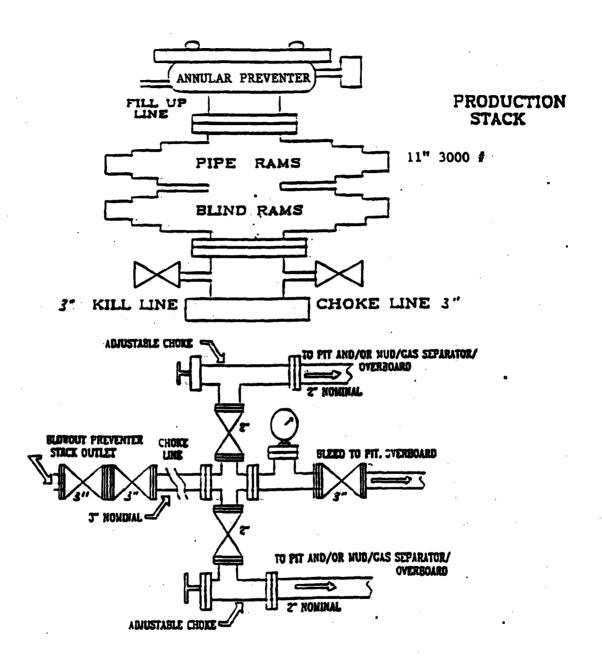
Location : Eddy County New Mexico

		WELL	PROF	TILE D	ATA		_	
Point	MΩ	inc	Dir	CVT	North	East	V. Sect	Deg/100
Tie on	8335.00	20.58	348.17	8046.19	1831.01	-277.55	1276.67	0.00
End of Build/Turn	8495.42	94.30	93.22	8140.00	1862.39	-176.94	1363.12	61.89
End of Hold	9295.00	94.30	93.22	8080.05	1817.60	619.12	1815.65	0.00
KOP	9313.40	93.38	93.22	8078.82	1816.57	637.45	1826.07	5.00-
T.D. & Target BHL	10055.41	93.39	93.21	8035.00	1775.00	1377,00	2246.50	0.00



East (feet) -> 600 400 200 1000 1200 1600 1400 2200 2000 Tie pn — 8046.19 Tvd, 1831.01 N, 277.55 w 1800 T.D. & Target - 8035.00 Tvd, 1775.00 N, 1377.00 E 1600 7500 1400 7600 - True Vertical Depth (feet) 1200 7700 7800 7900 000s T.D. & Target - 93.39 Inc, 19055.41 Md, 8035.00 Tvd, 2246 50 Vs 8335.00 Md. 8046.19 Tvd, 1276.67 Vs 8100 End of Build/Turn - 94.30 inc. 8495.42 Md, 3140.00 Tvd, 1363.12 Vs 3200 8300 1100 1200 1300 1800 1900 2000 2100 2200 2300 2400 2500 2600 Vertical Section (feet) ->

Azimuth 37.80 with reference 0.00 S, 0.00 W from slot #1



MARATHON OIL COMPANY

H2S DRILLING OPERATIONS PLAN

HYDROGEN SULFIDE TRAINING

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

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

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

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

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

II. H2S EQUIPMENT AND SYSTEMS

1. Safety Equipment

The following safety equipment will be on location.

- A. Wind direction indicators.
- B. Automatic H2S detection alarm equipment (both audio and visual).

- C. Clearly visible warning signs. Signs will use the words "POISON GAS' and "CAUTION" with a strong color contrast.
- D. Protective breathing equipment will be located in the dog house and at briefing areas.

2. WELL CONTROL SYSTEMS

A. Blowout Prevention Equipment

Equipment includes but is not limited to:

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

Auxiliary equipment added as appropriate includes:

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

B. Communication

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

C. Mud Program

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

III. WELL SITE DIAGRAM

CONDITIONS OF APPROVAL - DRILLING

Operator's Name:

Marathon Oil Company

Well Name & No.

Indian Hills Unit #35 - PLUG BACK AND SIDE TRACK

SH Location:

1087' FNL, 2037' FEL, Section 33, T. 21 S., R. 24 E., Eddy County, New Mexico Proposed BH Location: 664' FSL, 686' FEL, Section 28, T. 21 S., R. 24 E., Eddy County, New Mexico

Lease:

NM-07260 (BHL)

....... I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County in sufficient time for a representative to witness:

- A. Well spud
- B. Cementing casing: 9-5/8 inch 7 inch ALL CASINGS IN PLACE
- C. BOP tests
- 2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
- 3. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as: spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15-day time frame.
- 4. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

II. CASING:

- 1. The <u>9-5/8</u> inch surface casing is set at <u>1832 feet</u> and cement circulated to the surface.
- 2. The 7 inch production casing is set at 8875 feet and cement circulated to the surface.
- 3. Well bore will be plugged back with 200 sx cement. A window will be cut in the existing 7" casing at approximately 8078' TVD and a 4-3/4" hole will be drilled to the proposed bottom hole location.
- 4. Well will be completed open hole.

III. PRESSURE CONTROL:

- 1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 9-5/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
- 2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 3000 psi.
- 3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.