

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

NMOC

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

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

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

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMNM07260	
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: 713.629.6600 Ext: 3254 Fx: 713.499.6748		8. Well Name and No. INDIAN HILLS UNIT 8	
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 33 T21S R24E SESW 1182FSL 1545FWL		9. API Well No. 30-015-28590-00-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			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Drilling Operations
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or 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 in the I.B.Upper Penn Assoc. . Marathon will plug off current producing interval w/ 200 sks. of premium cement. Will cut a window in the 7" casing @ approx. 8,100'(MD) and drill a 4-3/4" hole to a new TL of 683' FSL & 2606' FWL. Marathon will use a mixture of produced water and fresh water as drilling fluids. The completion will be OPEN HOLE (no Liner)

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

NSL

14. I hereby certify that the foregoing is true and correct. <b>Electronic Submission #32861 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 (04AL0254SE)</b>	
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 07/12/00
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 1088, Hobbs, NM 88241-1088

DISTRICT II  
P.O. Box 88, Artesia, NM 88211-0088

DISTRICT III  
1088 Rio Grande Rd., Aztec, NM 87410

DISTRICT IV  
P.O. Box 888, Santa Fe, N.M. 87504-0888

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-182  
Revised February 10, 1984  
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	Pool Name
Property Code	Property Name <b>INDIAN HILLS UNIT</b>	Well Number <b>8</b>
OGED No.	Operator Name <b>MARATHON OIL COMPANY</b>	Elevation <b>4090'</b>

Surface Location

UL or lot No.	Section	Township	Range	Lot 1/4	Feet from the	North/South line	Feet from the	East/West line	County
14	33	21-S	24-E		1182'	SOUTH	1545'	WEST	EDDY

Bottom Hole Location if Different From Surface

UL or lot No.	Section	Township	Range	Lot 1/4	Feet from the	North/South line	Feet from the	East/West line	County
14	33	21-S	24-E		683'	SOUTH	2606'	WEST	EDDY

Dedicated Acres	Joint or In/In	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

LOT 4 42.16 AC	LOT 5 42.38 AC	LOT 6 42.38 AC	LOT 7 42.81 AC	<b>OPERATOR CERTIFICATION</b>  I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature _____  Printed Name _____  Title _____  Date _____
LOT 5 42.29 AC	LOT 6 42.51 AC GEODETIC COORDINATES NAD 27 NME SURF. Y=520750.0 N X=446377.3 E	LOT 7 42.72 AC	LOT 8 42.94 AC	
LOT 12 42.42 AC	LOT 11 42.54 AC	LOT 10 42.85 AC	LOT 9 43.07 AC	
LOT 13 42.65 AC	LOT 14 42.77 AC	LOT 15 42.98 AC	LOT 16 43.20 AC	

4091.0' 4004.5' 400' 1545' 3684.5' 2606' 1182' 4028.5' 400' 1163.0' GRAZ = 115.48'

B.H.  
Y=520251.0 N  
X=447427.3 E

<b>SURVEYOR CERTIFICATION</b>  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.  JUNE 13, 1995 Date Surveyed REV: 07/02/04 JH Signature & Seal of Professional Surveyor  04.13.0832 Certificate No. GARY HENSON 1884J			
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Marathon Oil Company  
IHU 8

slot #1  
Indian Basin  
EDDY COUNTY, NM.

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

by  
Baker Hughes INTEQ

Your ref : Pln 1  
Our ref : prop4298  
License :

Date printed : 30-Jun-2004  
Date created : 28-Jun-2004  
Last revised : 28-Jun-2004

Field is centred on n32 30 0.000,w104 30 0  
Structure is centred on 446536.000,520751.100,999.00000,N

Slot location is n32 25 53.540,w104 30 23.822  
Slot Grid coordinates are N 520751.100, E 446536.000  
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  
IHU 8, slot #1  
Indian Basin, EDDY COUNTY, NM.

PROPOSAL LISTING Page 1  
Your ref : Pln 1  
Last revised : 28-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
0.00	0.00	115.46	0.00	0.00N	0.00E	0.00	0.00	446536.00	520751.10
500.00	0.00	115.46	500.00	0.00N	0.00E	0.00	0.00	446536.00	520751.10
1000.00	0.00	115.46	1000.00	0.00N	0.00E	0.00	0.00	446536.00	520751.10
1500.00	0.00	115.46	1500.00	0.00N	0.00E	0.00	0.00	446536.00	520751.10
2000.00	0.00	115.46	2000.00	0.00N	0.00E	0.00	0.00	446536.00	520751.10
2500.00	0.00	115.46	2500.00	0.00N	0.00E	0.00	0.00	446536.00	520751.10
3000.00	0.00	115.46	3000.00	0.00N	0.00E	0.00	0.00	446536.00	520751.10
3500.00	0.00	115.46	3500.00	0.00N	0.00E	0.00	0.00	446536.00	520751.10
4000.00	0.00	115.46	4000.00	0.00N	0.00E	0.00	0.00	446536.00	520751.10
4500.00	0.00	115.46	4500.00	0.00N	0.00E	0.00	0.00	446536.00	520751.10
5000.00	0.00	115.46	5000.00	0.00N	0.00E	0.00	0.00	446536.00	520751.10
5500.00	0.00	115.46	5500.00	0.00N	0.00E	0.00	0.00	446536.00	520751.10
6000.00	0.00	115.46	6000.00	0.00N	0.00E	0.00	0.00	446536.00	520751.10
6500.00	0.00	115.46	6500.00	0.00N	0.00E	0.00	0.00	446536.00	520751.10
7000.00	0.00	115.46	7000.00	0.00N	0.00E	0.00	0.00	446536.00	520751.10
7500.00	0.00	115.46	7500.00	0.00N	0.00E	0.00	0.00	446536.00	520751.10
8000.00	0.00	115.46	8000.00	0.00N	0.00E	0.00	0.00	446536.00	520751.10
8050.00	0.00	115.46	8050.00	0.00N	0.00E	0.00	0.00	446536.00	520751.10
8100.00	28.60	115.46	8097.95	5.25S	11.03E	57.20	12.22	446547.03	520745.85
8200.00	85.80	115.46	8149.90	39.91S	83.81E	57.20	92.83	446619.81	520711.19
8213.02	93.25	115.46	8150.01	45.51S	95.56E	57.20	105.84	446631.56	520705.59
8500.00	93.25	115.46	8133.74	168.69S	354.25E	0.00	392.36	446890.25	520582.41
9000.00	93.25	115.46	8105.41	383.31S	804.95E	0.00	891.56	447340.95	520367.79
9271.85	93.25	115.46	8090.00	500.00S	1050.00E	0.00	1162.97	447586.00	520251.10

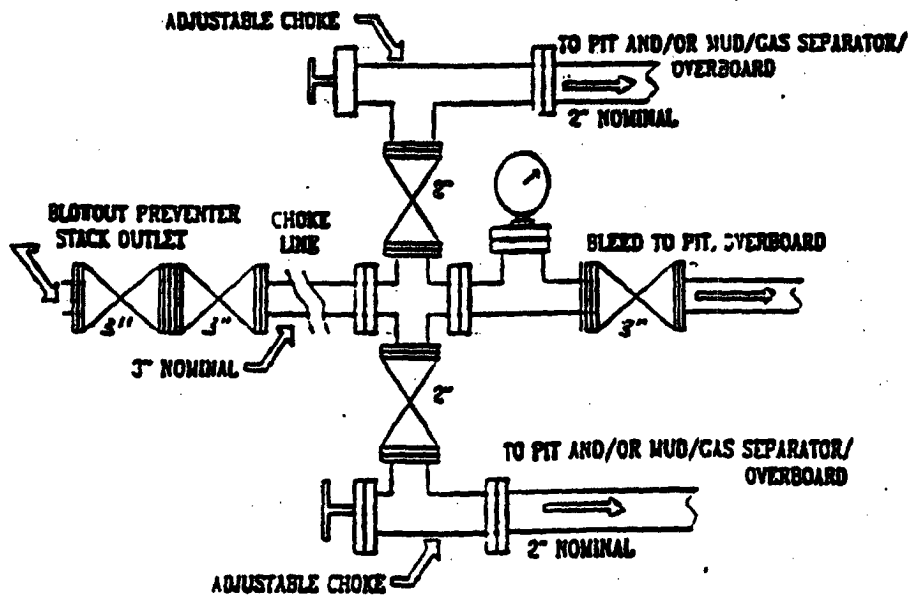
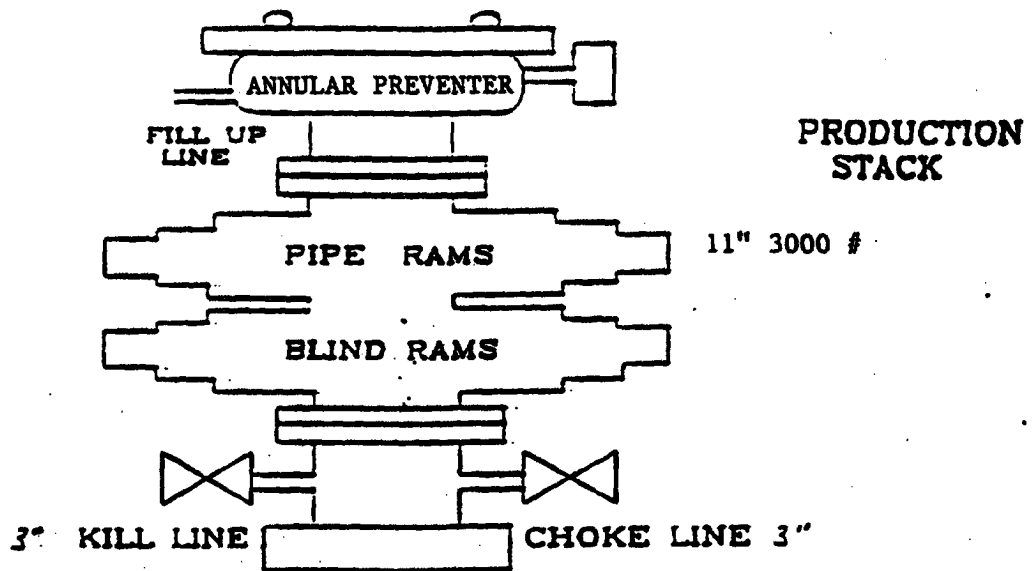
All data in feet unless otherwise stated. Calculation uses minimum curvature method.  
Coordinates from slot #1 and TVD from rotary table.  
Bottom hole distance is 1162.97 on azimuth 115.46 degrees from wellhead.  
Vertical section is from N 0.00 E 0.00 on azimuth 115.46 degrees.  
Grid is mercator - New Mexico East (3001).  
Grid coordinates in FEET and computed using the Clarke - 1866 spheroid  
Presented by Baker Hughes INTEQ

Marathon Oil Company  
IHU 8,slot #1  
Indian Basin,EDDY COUNTY, NM.

PROPOSAL LISTING Page 2  
Your ref : Pln 1  
Last revised : 28-Jun-2004

Targets associated with this wellpath

Target name	Geographic Location	T.V.D.	Rectangular Coordinates	Revised
BHL		8090.00	24401.82N 3130.52E	28-Jun-2004
EOC		8150.00	24856.32N 2176.07E	28-Jun-2004



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

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

#### **II. H<sub>2</sub>S EQUIPMENT AND SYSTEMS**

##### **1. Safety Equipment**

**The following safety equipment will be on location.**

**A. Wind direction indicators.**

**B. Automatic H<sub>2</sub>S 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 H<sub>2</sub>S circulated to surface. Proper mud weight, safe drilling practices, and the use of H<sub>2</sub>S scavengers when appropriate will minimize hazards when penetrating H<sub>2</sub>S bearing zones.**

## **III. WELL SITE DIAGRAM**



## CONDITIONS OF APPROVAL - DRILLING

**Operator's Name:** Marathon Oil Company  
**Well Name & No.** Indian Hills Unit # 8 – PLUG BACK AND SIDE TRACK  
**SH Location:** 1182' FSL, 1545' FWL, Section 33, T. 21 S., R. 24 E., Eddy County, New Mexico  
**Proposed BH Location:** 683' FSL, 2606' FWL, Section 33, 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 NMOCDC shall be included on the subsequent report of setting the first casing string.

### II. CASING:

1. The 9-5/8 inch surface casing is set at 2096 and cement circulated to the surface.

2. The 7 inch production casing is set at 8360 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 8100' MD 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.