

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Oil Co. s.
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 code)
915-687-8351

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

SHL Section 20, T-21-S, R-24-E 497' FNL & 2512' FEL Eddy Co. N.M.
BHL Section 20, T-21-S, R-24-E 1300' FNL & 1525' FWL Eddy Co. N.M.

6. If Indian, Allottee or Tribe Name

N/A

7. If Unit or CA/Agreement, Name and/or No.
Indian Hills Unit

8. Well Name and No.
Indian Hills Unit # 40

9. API Well No.
30-015-32222

10. Field and Pool, or Exploratory Area
Indian Basin Upper Perm.

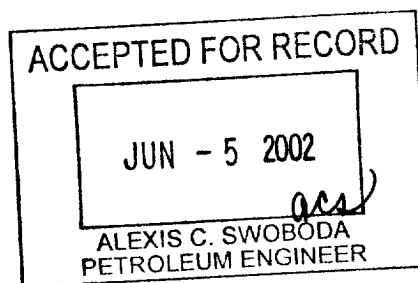
11. County or Parish, State
Eddy N.M.

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

TYPE OF SUBMISSION	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	
	☐ 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 final site is ready for final inspection.)

Please see attached information to form 3160-5.



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

Jerry Fletcher

Title

Engineer Tech.

Date 5/31/02

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

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

BUREAU OF LAND MANAGEMENT
DEPARTMENT OF THE INTERIOR

2002 JUN -3 AM 10:36

RECEIVED

Operations Summary Report

Legal Well Name: INDIAN HILLS UNIT NO. 40

Common Well Name: INDIAN HILLS UNIT NO. 40

Event Name: ORIGINAL DRILLING

Contractor Name:

Rig Name:

Start: 4/24/2002

Rig Release:

Rig Number:

Spud Date: 4/3/2002

End:

Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
5/13/2002	-					Location: 497' FNL & 2512' FEL, Section 20 T-21-S, R-24-E (Surface) X:442,239.3 Y:535,016.7 690' FNL & 1975' FWL, Section 20 T-21-S, R-24-E (UP top, 7750 TVD) X:441,534.2 Y: 534,787.1 745' FNL & 1808' FWL, Section 16 T-21-S, R-24-E (TD, 8885 MD) MIRU from IHU #42 on IHU # 40 on same well pad. Well cellars are 20'+ apart. Filled cellar on IHU # 42 with gravel to protect well & monitored well pressure @ 0#. Installed well protection guard on IHU #42 after moving on #40. Had no problems. Raised derrick. Weld on starting head. N/U surface stack. Weld & re-fab flowline on both ends & R/U floor & equipment. Rig was moved by Wilbanks Trucking.
	07:00 - 20:00	13.00				Start motors. Check air system for air leak. R/U equipment.
5/14/2002	08:00 - 10:00	2.00	RURD		DRLSUR	P/U BHA-12-3/8" Hammer Bit, monel DC, XO's & kelly.
	10:00 - 11:15	1.25	BBHD		DRLSUR	Spud well @ 11:15 CST W/ 12-3/8" Hammer. Drilled f/ 40' t/ 299' w/ 2500 SCFM air.
	11:15 - 15:00	3.75	DOHR		DRLSUR	Survey @ 233' / 0.5°, Az. 144.4
	15:00 - 15:15	0.25	SURV		DRLSUR	Drill Open Hole (Rotary)
	15:15 - 20:00	4.75	DOHR		DRLSUR	Survey @ 473' / .25°, Az. 142.0
	20:00 - 20:30	0.50	SURV		DRLSUR	Drill Open Hole (Rotary)
	20:30 - 00:45	4.25	DOHR		DRLSUR	Survey @ 658' / .25°, Az. 201.0
	00:45 - 01:00	0.25	SURV		DRLSUR	Drill Open Hole (Rotary)
	01:00 - 05:15	4.25	DOHR		DRLSUR	Survey @ 842' / .25°, Az. 152.0
	05:15 - 05:30	0.25	SURV		DRLSUR	Drill Open Hole (Rotary)
	05:30 - 06:00	0.50	DOHR		DRLSUR	IHU #42 : Blew down 7" x 9-5/8" annulus from 30 PSI. Used Key
5/15/2002	-					killtruck to load annulus w/ 23 BBL's. of fresh water to 300# w/ slow leakoff. Work air out & reload to 300# w/ very slow leakoff. Used 23 BBL's. today & 34 BBL's. on 5/10/02 to displace cement. TOC @ appx. 1918' (100' below 9-5/8" shoe).
	06:00 - 10:15	4.25	DOHR		DRLSUR	Drill Open Hole (Rotary) w/ 3400 SCFM Air.
	10:15 - 10:30	0.25	SURV		DRLSUR	Survey @ 1026 - misrun.
	10:30 - 11:15	0.75	DOHR		DRLSUR	Drill Open Hole (Rotary)
	11:15 - 11:30	0.25	SURV		DRLSUR	Survey @ 1057 / 0.125°, Az. 179.
	11:30 - 13:45	2.25	DOHR		DRLSUR	Drill Open Hole (Rotary). Hit water @ 1207 & rate stopped @ 1211.
	13:45 - 16:00	2.25	TRIP		DRLSUR	Install bailers & elevators. Pull rotating rubber. TOH L/D hammer bit.
	16:00 - 17:30	1.50	TRIP		DRLSUR	P/U BHA #2. TIH w/ 12-1/4" RR insert BIT. Install rotating rubber.
	17:30 - 20:15	2.75	DOHR		DRLSUR	Drill Open Hole w/ well making 8-10 BPH water. Drilling w/ airiated mix (3400 SCFM Air / 4-6 BPM water) to regulate reserve pit.
	20:15 - 20:30	0.25	SURV		DRLSUR	Survey @1267/ 0.5°, 210 Az.
	20:30 - 01:45	5.25	DOHR		DRLSUR	Drill Open Hole (Rotary)
	01:45 - 02:00	0.25	SURV		DRLSUR	Survey @1455 / 0.5°, 188 Az.
	02:00 - 06:00	4.00	DOHR		DRLSUR	Drill Open Hole (Rotary)
5/16/2002	06:00 - 08:15	2.25	DOHR		DRLSUR	Drill Open Hole (Rotary)
	08:15 - 09:00	0.75	SURV		DRLSUR	Run wireline survey
	09:00 - 11:00	2.00	DOHR		DRLSUR	Drill Open Hole (Rotary)
	11:00 - 11:30	0.50	SURV		DRLSUR	Run wireline survey
	11:30 - 13:00	1.50	TRIP		DRLSUR	POOH L/D 12 1/4" reamer, shock sub, 8" monel, & bit.
	13:00 - 16:15	3.25	RSCL		CSGSUR	R/U casers & Held safety meeting. Run 41 jts of 9 5/8" 36# J-55 casing to 1818'.
	16:15 - 17:30	1.25	CANDC		CSGSUR	Pumped down 9 5/8" casing.R/D Casers. Held safety meeting w/ cementers. R/U Halliburton.
	17:30 - 18:30	1.00	COPS		CSGSUR	Cemented w/ 700 sks foam cement tailed w/ 150 sks Prem+. Bumped plug @ 18:30 HRs. Cir no cement to surface.
	18:30 - 20:00	1.50	COPS		CSGSUR	Pumped 450 sks foam cement down backside capped w/ 75 sks thix. Lost all pressure on casing. Had about 190 psi friction pressure while

Marathon Oil Company
Operations Summary Report

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Legal Well Name: INDIAN HILLS UNIT NO. 40
Common Well Name: INDIAN HILLS UNIT NO. 40
Event Name: ORIGINAL DRILLING
Contractor Name:
Rig Name:

Spud Date: 4/3/2002
Start: 4/24/2002
End:
Rig Release:
Group:
Rig Number:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
5/16/2002	18:30 - 20:00	1.50	COPS		CSGSUR	pumping foam cement . Dropped to -0- when pumping cap.
	20:00 - 00:00	4.00	WOC		CSGSUR	WO Cement
	00:00 - 00:30	0.50	NDNUD		CSGSUR	No pressure on casing. N/D surface stack & cut off conductor pipe & 9 5/8" casing.
5/17/2002	00:30 - 02:00	1.50	COPS		CSGSUR	Picked up 1" pipe & tagged cement @ 60'. R/U Halliburton & cemented w/ 55 sks C to surface. Cir 20 sks to pit. R/D Halliburton.
	02:00 - 06:00	4.00	NDNUD		CSGSUR	Weld on 9 5/8" wellhead & N/U 11" 3M annular w/ 11" 5M double BOP.
	06:00 - 12:30	6.50	NDNUD		DRLPRO	NU / BOP, manifold, kill line, cut to fit flowline.
	12:30 - 22:30	10.00	PLOT		DRLPRO	Pressure Test: BOP's . Replaced btm ring on stack. Valves were leaking. (wash through valves because of dirt trapped in housing when valves were close. Replace check valve on kill line twice still leaked. Ordered another check valve to replace when POOH to pick up motor.
	22:30 - 01:30	3.00	BBHD		DRLPRO	BHA/Bit Handling Picked up PHA w/ rerun bit.
	01:30 - 02:30	1.00	TRIP		DRLPRO	TIH w/ collars & HWDP.
	02:30 - 03:00	0.50	RPSR		DRLPRO	Installed rotating head rubber.
5/18/2002	03:00 - 03:45	0.75	DCP		DRLPRO	Tagged up on top of plug @ 1764'. Drill Plug, float collar, cement to 1803'.
	03:45 - 04:00	0.25	PLOT		DRLPRO	Pressure Test: shoe jt, w/ rig pump to 1000 PSI O.K.
	04:00 - 05:30	1.50	DOHR		DRLPRO	Drill cement f/ 1803 to 1818'. Drill formation f/ 1818' to 1872' Open Hole.
	05:30 - 06:00	0.50	CANDC		DRLPRO	Switch over to air.
	06:00 - 06:30	0.50	CANDC		DRLPRO	Switched over to air, blew flowline off.
	06:30 - 07:15	0.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	07:15 - 08:45	1.50	WELDF		DRLPRO	Weld flowline back on.
	08:45 - 09:30	0.75	DOHR		DRLPRO	Drill Open Hole (Rotary). Switched over to air.
	09:30 - 10:15	0.75	DOHR		DRLPRO	Drill Open Hole (Rotary) w/ air.
	10:15 - 10:30	0.25	SURV		DRLPRO	W.L.S. & BOP drill.
	10:30 - 12:00	1.50	DOHR		DRLPRO	Drill Open Hole (Rotary) w/ air.
	12:00 - 12:15	0.25	SURV		DRLPRO	W.L.S.
	12:15 - 12:30	0.25	DOHR		DRLPRO	Drill Open Hole (Rotary) w/ air.
	12:30 - 13:00	0.50	RRCO		DRLPRO	Repair Rig, Contractor. Worked on air package.
	13:00 - 16:00	3.00	DOHR		DRLPRO	Drill Open Hole (Rotary) w/ air.
	16:00 - 16:15	0.25	SURV		DRLPRO	W.L.S. & BOP drill.
	16:15 - 19:30	3.25	DOHR		DRLPRO	Drill Open Hole (Rotary) w/ air.
	19:30 - 19:45	0.25	SURV		DRLPRO	W.L.S.
	19:45 - 23:00	3.25	DOHR		DRLPRO	Drill Open Hole (Rotary) w/ air.
	23:00 - 23:15	0.25	SURV		DRLPRO	W.L.S.
5/19/2002	23:15 - 02:30	3.25	DOHR		DRLPRO	Drill Open Hole (Rotary) w/ air.
	02:30 - 03:45	1.25	SURV		DRLPRO	W.L.S.. Couldn't get pass collars. Had to pump fluid down. drill string to unplug. Got pass top of collars on 3rd try after pumping fluid. Went to mist after pumping fluid.
	03:45 - 06:00	2.25	DOHR		DRLPRO	Drill Open Hole (Rotary) w/ mist due that we pumped to much fluid down pipe while tring to get survey.
	06:00 - 07:00	1.00	DOHR		DRLPRO	Drill Open Hole (Rotary) w/ mist.
	07:00 - 07:15	0.25	SURV		DRLPRO	W.L.S. @ 2928'. Misrun.
	07:15 - 08:00	0.75	DOHR		DRLPRO	Drill Open Hole (Rotary) w/ mist.
	08:00 - 08:15	0.25	SURV		DRLPRO	W.L.S. @ 2960'. Misrun.
	08:15 - 17:00	8.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	17:00 - 18:00	1.00	CANDC		DRLPRO	Switched to fluid, load hole & Circulate
	18:00 - 20:30	2.50	TRIP		DRLPRO	Set kelly back & POOH.
	20:30 - 21:15	0.75	BBHD		DRLPRO	L/D PHA w/ bit.
	21:15 - 23:00	1.75	PLOT		DRLPRO	R/U Safety Test & retested killline & check valve on killline.
	23:00 - 00:45	1.75	BBHD		DRLPRO	Picked up motor, teleco, & thruster w/ new bit. Test motor & teleco.

Operations Summary Report

Legal Well Name: INDIAN HILLS UNIT NO. 40

Common Well Name: INDIAN HILLS UNIT NO. 40

Event Name: ORIGINAL DRILLING

Contractor Name:

Rig Name:

Start: 4/24/2002

Rig Release:

Rig Number:

Spud Date: 4/3/2002

End:

Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
5/19/2002	00:45 - 03:45	3.00	TRIP		DRLPRO	TIH w/ new bit.
	03:45 - 05:00	1.25	SURV		DRLPRO	Survey or Orienting Operations. Ran surveys @ 2870', 3060', 3250', & orient tool face @ 3440'.
	05:00 - 05:30	0.50	DOHS		DRLPRO	Drill Open Hole (Slide)
	05:30 - 06:00	0.50	DOHR		DRLPRO	Drill Open Hole (Rotary)
5/20/2002	06:00 - 06:15	0.25	SURV		DRLPRO	Survey
	06:15 - 07:00	0.75	DOHS		DRLPRO	Drill Open Hole (Slide)
	07:00 - 07:45	0.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	07:45 - 08:00	0.25	SURV		DRLPRO	Survey & Conn.
	08:00 - 08:15	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	08:15 - 09:15	1.00	DOHR		DRLPRO	Drill Open Hole (Rotary)
	09:15 - 09:30	0.25	SURV		DRLPRO	Survey & Conn.
	09:30 - 09:45	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	09:45 - 10:30	0.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	10:30 - 10:45	0.25	SURV		DRLPRO	Survey & Conn.
	10:45 - 11:00	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	11:00 - 11:45	0.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	11:45 - 12:00	0.25	SURV		DRLPRO	Survey & Conn.
	12:00 - 12:15	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	12:15 - 13:00	0.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	13:00 - 13:15	0.25	SURV		DRLPRO	Survey & Conn.
	13:15 - 14:15	1.00	DOHR		DRLPRO	Drill Open Hole (Rotary)
	14:15 - 14:30	0.25	SURV		DRLPRO	Survey & Conn.
	14:30 - 14:45	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	14:45 - 15:45	1.00	DOHR		DRLPRO	Drill Open Hole (Rotary)
	15:45 - 16:00	0.25	SURV		DRLPRO	Survey & Conn.
	16:00 - 16:15	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	16:15 - 17:15	1.00	DOHR		DRLPRO	Drill Open Hole (Rotary)
	17:15 - 17:30	0.25	SURV		DRLPRO	Survey & Conn.
	17:30 - 17:45	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	17:45 - 19:00	1.25	DOHR		DRLPRO	Drill Open Hole (Rotary)
	19:00 - 19:15	0.25	SURV		DRLPRO	Survey & Conn.
	19:15 - 19:30	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	19:30 - 20:45	1.25	DOHR		DRLPRO	Drill Open Hole (Rotary)
	20:45 - 21:00	0.25	SURV		DRLPRO	Survey & Conn.
	21:00 - 21:15	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	21:15 - 22:00	0.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	22:00 - 22:15	0.25	SURV		DRLPRO	Survey & Conn.
	22:15 - 22:45	0.50	RRCO		DRLPRO	Replaced Pro Pannel on MWD screen.
	22:45 - 23:00	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	23:00 - 00:00	1.00	DOHR		DRLPRO	Drill Open Hole (Rotary)
	00:00 - 00:15	0.25	SURV		DRLPRO	Survey & Conn.
	00:15 - 00:30	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	00:30 - 01:30	1.00	DOHR		DRLPRO	Drill Open Hole (Rotary)
	01:30 - 01:45	0.25	SURV		DRLPRO	Survey & Conn.
	01:45 - 02:00	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	02:00 - 03:00	1.00	DOHR		DRLPRO	Drill Open Hole (Rotary)
	03:00 - 03:15	0.25	SURV		DRLPRO	Survey & Conn.
	03:15 - 03:30	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	03:30 - 04:30	1.00	DOHR		DRLPRO	Drill Open Hole (Rotary)
	04:30 - 04:45	0.25	SURV		DRLPRO	Survey & Conn.
	04:45 - 05:00	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	05:00 - 06:00	1.00	DOHR		DRLPRO	Drill Open Hole (Rotary)

Marathon Oil Company
Operations Summary Report

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Legal Well Name: INDIAN HILLS UNIT NO. 40

Common Well Name: INDIAN HILLS UNIT NO. 40

Event Name: ORIGINAL DRILLING

Contractor Name:

Rig Name:

Start: 4/24/2002

Rig Release:

Rig Number:

Spud Date: 4/3/2002

End:

Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
5/21/2002	06:00 - 06:15	0.25	SURV		DRLPRO	Survey & Conn.
	06:15 - 06:30	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	06:30 - 07:00	0.50	DOHR		DRLPRO	Drill Open Hole (Rotary)
	07:00 - 07:30	0.50	SURV		DRLPRO	Survey & L/D jt w/ hole.Conn.
	07:30 - 07:45	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	07:45 - 08:30	0.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	08:30 - 08:45	0.25	SURV		DRLPRO	Survey Conn.
	08:45 - 09:00	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	09:00 - 09:45	0.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	09:45 - 10:00	0.25	SURV		DRLPRO	Survey & Conn. BOP Drill.
	10:00 - 10:15	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	10:15 - 10:45	0.50	DOHR		DRLPRO	Drill Open Hole (Rotary)
	10:45 - 11:00	0.25	SURV		DRLPRO	Survey & Conn.
	11:00 - 11:15	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	11:15 - 12:15	1.00	DOHR		DRLPRO	Drill Open Hole (Rotary)
	12:15 - 12:30	0.25	SURV		DRLPRO	Survey & Conn.
	12:30 - 12:45	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	12:45 - 13:30	0.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	13:30 - 13:45	0.25	SURV		DRLPRO	Survey & Conn.
	13:45 - 14:00	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	14:00 - 14:45	0.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	14:45 - 15:00	0.25	SURV		DRLPRO	Survey & Conn.
	15:00 - 16:00	1.00	DOHR		DRLPRO	Drill Open Hole (Rotary)
	16:00 - 16:15	0.25	SURV		DRLPRO	Survey & Conn. BOP drill.
	16:15 - 17:15	1.00	DOHR		DRLPRO	Drill Open Hole (Rotary)
	17:15 - 17:30	0.25	SURV		DRLPRO	Survey & Conn.
	17:30 - 17:45	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	17:45 - 19:45	2.00	DOHR		DRLPRO	Drill Open Hole (Rotary)
	19:45 - 20:00	0.25	SURV		DRLPRO	Survey & Conn.
	20:00 - 22:15	2.25	DOHR		DRLPRO	Drill Open Hole (Rotary)
	22:15 - 22:30	0.25	SURV		DRLPRO	Survey & Conn.
	22:30 - 22:45	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	22:45 - 01:00	2.25	DOHR		DRLPRO	Drill Open Hole (Rotary)
	01:00 - 01:15	0.25	SURV		DRLPRO	Survey & Conn. BOP drill.
	01:15 - 03:30	2.25	DOHR		DRLPRO	Drill Open Hole (Rotary)
	03:30 - 03:45	0.25	SURV		DRLPRO	Survey & Conn.
	03:45 - 04:00	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	04:00 - 06:00	2.00	DOHS		DRLPRO	Drill Open Hole (Slide)
5/22/2002	06:00 - 06:15	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	06:15 - 08:00	1.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	08:00 - 08:30	0.50	RRCO		DRLPRO	Repair Rig, Contractor
	08:30 - 09:15	0.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	09:15 - 09:45	0.50	RRCO		DRLPRO	Repair Rig, Contractor
	09:45 - 12:15	2.50	DOHR		DRLPRO	Drill Open Hole (Rotary)
	12:15 - 12:30	0.25	SURV		DRLPRO	Survey & BOP drill. BOP Drill.
	12:30 - 14:45	2.25	DOHR		DRLPRO	Drill Open Hole (Rotary)
	14:45 - 15:00	0.25	SURV		DRLPRO	Survey & Conn.
	15:00 - 17:45	2.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	17:45 - 18:00	0.25	SURV		DRLPRO	Survey & Conn. BOP Drill.
	18:00 - 18:15	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	18:15 - 20:45	2.50	DOHR		DRLPRO	Drill Open Hole (Rotary)
	20:45 - 21:00	0.25	SURV		DRLPRO	Survey & Conn.
	21:00 - 23:45	2.75	DOHR		DRLPRO	Drill Open Hole (Rotary)

Marathon Oil Company
Operations Summary Report

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Legal Well Name: INDIAN HILLS UNIT NO. 40
Common Well Name: INDIAN HILLS UNIT NO. 40
Event Name: ORIGINAL DRILLING
Contractor Name:
Rig Name:

Start: 4/24/2002
Rig Release:
Rig Number:
Spud Date: 4/3/2002
End:
Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
5/22/2002	23:45 - 00:00	0.25	SURV		DRLPRO	Survey & Conn. BOP Drill.
	00:00 - 02:45	2.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	02:45 - 03:00	0.25	SURV		DRLPRO	Survey & Conn.
	03:00 - 03:15	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	03:15 - 05:30	2.25	DOHR		DRLPRO	Drill Open Hole (Rotary)
5/23/2002	05:30 - 05:45	0.25	SURV		DRLPRO	Survey & Conn.
	05:45 - 06:00	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	06:00 - 07:45	1.75	DOHR		DRLPRO	Finish slide 5160-5162. Drill Open Hole (Rotary) 5162-5220.
	07:45 - 08:00	0.25	SURV		DRLPRO	Survey or Orienting Operations & BOP drill.
	08:00 - 10:15	2.25	DOHR		DRLPRO	Drill Open Hole (Rotary)
	10:15 - 10:30	0.25	SURV		DRLPRO	Survey or Orienting Operations
	10:30 - 11:45	1.25	DOHR		DRLPRO	Drill Open Hole (Rotary)
	11:45 - 12:30	0.75	DOHR		DRLPRO	Drill Open Hole (Rotary). Switched to #1 Pump, to work on #2 pump (replacing valves & seats).
	12:30 - 12:45	0.25	SURV		DRLPRO	Survey or Orienting Operations
	12:45 - 13:00	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	13:00 - 15:15	2.25	DOHR		DRLPRO	Drill Open Hole (Rotary)
	15:15 - 15:30	0.25	SURV		DRLPRO	Survey or Orienting Operations
	15:30 - 15:45	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	15:45 - 18:00	2.25	DOHR		DRLPRO	Drill Open Hole (Rotary)
	18:00 - 18:15	0.25	SURV		DRLPRO	Survey or Orienting Operations
5/24/2002	18:15 - 20:00	1.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	20:00 - 20:15	0.25	SURV		DRLPRO	Survey or Orienting Operations
	20:15 - 22:00	1.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	22:00 - 22:15	0.25	SURV		DRLPRO	Survey or Orienting Operations
	22:15 - 00:00	1.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	00:00 - 00:15	0.25	SURV		DRLPRO	Survey or Orienting Operations
	00:15 - 02:00	1.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	02:00 - 02:15	0.25	SURV		DRLPRO	Survey or Orienting Operations
	02:15 - 04:15	2.00	DOHR		DRLPRO	Drill Open Hole (Rotary)
	04:15 - 04:30	0.25	SURV		DRLPRO	Survey or Orienting Operations
	04:30 - 06:00	1.50	DOHR		DRLPRO	Drill Open Hole (Rotary)
	06:00 - 06:15	0.25	DOHR		DRLPRO	Drill Open Hole (Rotary)
	06:15 - 06:30	0.25	SURV		DRLPRO	Survey or Orienting Operations
	06:30 - 08:15	1.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	08:15 - 08:30	0.25	SURV		DRLPRO	Survey or Orienting Operations
	08:30 - 10:15	1.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	10:15 - 10:30	0.25	SURV		DRLPRO	Survey or Orienting Operations
	10:30 - 12:00	1.50	DOHR		DRLPRO	Drill Open Hole (Rotary)
	12:00 - 12:15	0.25	SURV		DRLPRO	Survey or Orienting Operations
	12:15 - 12:30	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	12:30 - 14:15	1.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	14:15 - 14:30	0.25	SURV		DRLPRO	Survey or Orienting Operations
	14:30 - 14:45	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	14:45 - 16:15	1.50	DOHR		DRLPRO	Drill Open Hole (Rotary)
	16:15 - 16:30	0.25	SURV		DRLPRO	Survey or Orienting Operations
	16:30 - 18:30	2.00	DOHR		DRLPRO	Drill Open Hole (Rotary)
	18:30 - 18:45	0.25	SURV		DRLPRO	Survey or Orienting Operations
	18:45 - 20:30	1.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	20:30 - 20:45	0.25	SURV		DRLPRO	Survey or Orienting Operations
	20:45 - 22:15	1.50	DOHR		DRLPRO	Drill Open Hole (Rotary)
	22:15 - 22:30	0.25	SURV		DRLPRO	Survey or Orienting Operations
	22:30 - 00:00	1.50	DOHR		DRLPRO	Drill Open Hole (Rotary)

Operations Summary Report

Legal Well Name: INDIAN HILLS UNIT NO. 40

Common Well Name: INDIAN HILLS UNIT NO. 40

Event Name: ORIGINAL DRILLING

Contractor Name:

Rig Name:

Start: 4/24/2002

Rig Release:

Rig Number:

Spud Date: 4/3/2002

End:

Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
5/24/2002	00:00 - 00:15	0.25	SURV		DRLPRO	Survey or Orienting Operations
	00:15 - 00:30	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	00:30 - 01:30	1.00	CANDC		DRLPRO	Circulate and Condition Hole
	01:30 - 04:45	3.25	TRIP		DRLPRO	TOH for bit change.
	04:45 - 05:45	1.00	BBHD		DRLPRO	BHA/Bit Handling. Bit had multiple broken teeth. Surface test motor. P/U new motor.
5/25/2002	05:45 - 06:00	0.25	TRIP		DRLPRO	TIH w/ new bit & motor.
	06:00 - 08:45	2.75	TRIP		DRLPRO	TIH w/ new bit & motor. Moved RT-tool up 14 stds. above HWDP (2814' above bit).
	08:45 - 09:15	0.50	WASHR		DRLPRO	P/U kelly. Wash/Ream 13' to TD 6418'.
	09:15 - 09:30	0.25	DOHR		DRLPRO	Drill Open Hole (Rotary)
	09:30 - 09:45	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	09:45 - 11:00	1.25	DOHR		DRLPRO	Drill Open Hole (Rotary)
	11:00 - 11:15	0.25	SURV		DRLPRO	Survey or Orienting Operations
	11:15 - 11:30	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	11:30 - 13:00	1.50	DOHR		DRLPRO	Drill Open Hole (Rotary)
	13:00 - 13:15	0.25	SURV		DRLPRO	Survey or Orienting Operations
	13:15 - 13:30	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	13:30 - 14:45	1.25	DOHR		DRLPRO	Drill Open Hole (Rotary)
	14:45 - 15:00	0.25	SURV		DRLPRO	Survey or Orienting Operations
	15:00 - 15:30	0.50	DOHS		DRLPRO	Drill Open Hole (Slide)
	15:30 - 16:45	1.25	DOHR		DRLPRO	Drill Open Hole (Rotary)
	16:45 - 17:00	0.25	SURV		DRLPRO	Survey or Orienting Operations
	17:00 - 18:45	1.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	18:45 - 19:00	0.25	SURV		DRLPRO	Survey or Orienting Operations
	19:00 - 19:15	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	19:15 - 21:00	1.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	21:00 - 21:15	0.25	SURV		DRLPRO	Survey or Orienting Operations
	21:15 - 21:30	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	21:30 - 23:00	1.50	DOHR		DRLPRO	Drill Open Hole (Rotary)
	23:00 - 23:15	0.25	SURV		DRLPRO	Survey or Orienting Operations
	23:15 - 23:30	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	23:30 - 00:00	0.50	DOHR		DRLPRO	Drill Open Hole (Rotary)
	00:00 - 00:15	0.25	SURV		DRLPRO	Survey or Orienting Operations
	00:15 - 00:30	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	00:30 - 01:15	0.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	01:15 - 01:30	0.25	SURV		DRLPRO	Survey or Orienting Operations
	01:30 - 01:45	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	01:45 - 02:30	0.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	02:30 - 02:45	0.25	SURV		DRLPRO	Survey or Orienting Operations
	02:45 - 03:00	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	03:00 - 03:45	0.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	03:45 - 04:00	0.25	SURV		DRLPRO	Survey or Orienting Operations
	04:00 - 05:15	1.25	DOHR		DRLPRO	Drill Open Hole (Rotary)
	05:15 - 05:30	0.25	SURV		DRLPRO	Survey or Orienting Operations
	05:30 - 06:00	0.50	DOHR		DRLPRO	Drill Open Hole (Rotary)
5/26/2002	06:00 - 06:30	0.50	DOHR		DRLPRO	Drill Open Hole (Rotary)
	06:30 - 06:45	0.25	SURV		DRLPRO	Survey or Orienting Operations
	06:45 - 07:00	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	07:00 - 08:15	1.25	DOHR		DRLPRO	Drill Open Hole (Rotary)
	08:15 - 08:45	0.50	SURV		DRLPRO	Survey or Orienting Operations. BOP drill.
	08:45 - 10:30	1.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	10:30 - 10:45	0.25	SURV		DRLPRO	Survey or Orienting Operations

Marathon Oil Company
Operations Summary Report

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Legal Well Name: INDIAN HILLS UNIT NO. 40
Common Well Name: INDIAN HILLS UNIT NO. 40
Event Name: ORIGINAL DRILLING
Contractor Name:
Rig Name:

Start: 4/24/2002
Rig Release:
Rig Number:
Spud Date: 4/3/2002
End:
Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
5/26/2002	10:45 - 12:30	1.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	12:30 - 12:45	0.25	SURV		DRLPRO	Survey or Orienting Operations
	12:45 - 14:30	1.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	14:30 - 14:45	0.25	SURV		DRLPRO	Survey or Orienting Operations
	14:45 - 16:45	2.00	DOHR		DRLPRO	Drill Open Hole (Rotary)
	16:45 - 17:00	0.25	SURV		DRLPRO	Survey or Orienting Operations
	17:00 - 17:15	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	17:15 - 17:45	0.50	DOHR		DRLPRO	Drill Open Hole (Rotary)
	17:45 - 18:00	0.25	SURV		DRLPRO	Survey or Orienting Operations
	18:00 - 18:15	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	18:15 - 19:00	0.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	19:00 - 19:15	0.25	SURV		DRLPRO	Survey or Orienting Operations
	19:15 - 19:30	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	19:30 - 20:00	0.50	DOHR		DRLPRO	Drill Open Hole (Rotary)
	20:00 - 20:15	0.25	SURV		DRLPRO	Survey or Orienting Operations
	20:15 - 20:30	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	20:30 - 21:15	0.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	21:15 - 21:30	0.25	SURV		DRLPRO	Survey or Orienting Operations
	21:30 - 21:45	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	21:45 - 22:15	0.50	DOHR		DRLPRO	Drill Open Hole (Rotary)
	22:15 - 22:30	0.25	SURV		DRLPRO	Survey or Orienting Operations
	22:30 - 22:45	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	22:45 - 23:30	0.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	23:30 - 23:45	0.25	SURV		DRLPRO	Survey or Orienting Operations
	23:45 - 00:00	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	00:00 - 00:30	0.50	DOHR		DRLPRO	Drill Open Hole (Rotary)
	00:30 - 00:45	0.25	SURV		DRLPRO	Survey or Orienting Operations
	00:45 - 01:30	0.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	01:30 - 01:45	0.25	SURV		DRLPRO	Survey or Orienting Operations
	01:45 - 03:15	1.50	DOHS		DRLPRO	Drill Open Hole (Slide)
	03:15 - 03:30	0.25	SURV		DRLPRO	Survey or Orienting Operations
	03:30 - 03:45	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	03:45 - 06:00	2.25	DOHR		DRLPRO	Drill Open Hole (Rotary)
5/27/2002	06:00 - 06:15	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	06:15 - 07:30	1.25	DOHR		DRLPRO	Drill Open Hole (Rotary)
	07:30 - 07:45	0.25	SURV		DRLPRO	Survey or Orienting Operations
	07:45 - 09:30	1.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	09:30 - 09:45	0.25	SURV		DRLPRO	Survey or Orienting Operations
	09:45 - 11:15	1.50	DOHR		DRLPRO	Drill Open Hole (Rotary)
	11:15 - 11:30	0.25	SURV		DRLPRO	Survey or Orienting Operations
	11:30 - 11:45	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	11:45 - 13:15	1.50	DOHR		DRLPRO	Drill Open Hole (Rotary) to 7978 w/ 100% returns. Lost all returns @ 7978. Pumped 100 BBL. LCM pill & dry drilled for 45 minutes. Regained appx. 80% returns.
	13:15 - 13:30	0.25	SURV		DRLPRO	Survey or Orienting Operations
	13:30 - 14:00	0.50	DOHS		DRLPRO	Drill Open Hole (Slide)
	14:00 - 14:45	0.75	DOHR		DRLPRO	Drill Open Hole (Rotary). Pumped 50 BBL. LCM pill w/ returns fluxuating f/ 50% to 70%.
	14:45 - 15:00	0.25	SURV		DRLPRO	Survey or Orienting Operations
	15:00 - 16:00	1.00	DOHR		DRLPRO	Drill Open Hole (Rotary)
	16:00 - 16:15	0.25	SURV		DRLPRO	Survey or Orienting Operations
	16:15 - 16:30	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	16:30 - 18:15	1.75	DOHR		DRLPRO	Drill Open Hole (Rotary) w/ 40% - 70% returns, pumping sweeps every

Marathon Oil Company
Operations Summary Report

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Legal Well Name: INDIAN HILLS UNIT NO. 40

Common Well Name: INDIAN HILLS UNIT NO. 40

Event Name: ORIGINAL DRILLING

Contractor Name:

Rig Name:

Start: 4/24/2002

Rig Release:

Rig Number:

Spud Date: 4/3/2002

End:

Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
5/27/2002	16:30 - 18:15	1.75	DOHR		DRLPRO	60'.
	18:15 - 18:30	0.25	SURV		DRLPRO	Survey or Orienting Operations
	18:30 - 20:30	2.00	DOHR		DRLPRO	Drill Open Hole (Rotary)
	20:30 - 20:45	0.25	SURV		DRLPRO	Survey or Orienting Operations
	20:45 - 22:00	1.25	DOHR		DRLPRO	Drill Open Hole (Rotary)
	22:00 - 22:15	0.25	SURV		DRLPRO	Survey or Orienting Operations
	22:15 - 22:30	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	22:30 - 00:00	1.50	DOHR		DRLPRO	Drill Open Hole (Rotary)
	00:00 - 00:15	0.25	SURV		DRLPRO	Survey or Orienting Operations
	00:15 - 00:45	0.50	DOHS		DRLPRO	Drill Open Hole (Slide)
	00:45 - 02:00	1.25	DOHR		DRLPRO	Drill Open Hole (Rotary)
	02:00 - 02:15	0.25	SURV		DRLPRO	Survey or Orienting Operations
	02:15 - 02:30	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	02:30 - 04:00	1.50	DOHR		DRLPRO	Drill Open Hole (Rotary)
	04:00 - 04:15	0.25	SURV		DRLPRO	Survey or Orienting Operations
5/28/2002	04:15 - 06:00	1.75	DOHR		DRLPRO	Drill Open Hole (Rotary)
	06:00 - 07:00	1.00	DOHR		DRLPRO	Drill Open Hole (Rotary) w/ 40% returns. * Pumping 25 BBL.sweeps W/ LCM every 60'.
	07:00 - 07:15	0.25	SURV		DRLPRO	Survey or Orienting Operations
	07:15 - 07:30	0.25	DOHS		DRLPRO	Drill Open Hole (Slide)
	07:30 - 08:30	1.00	DOHR		DRLPRO	Drill Open Hole (Rotary)
	08:30 - 08:45	0.25	CONN		DRLPRO	Connection & work on flowline valve in attempt to isolate steel pits to check losses. Valve would not close completely.
	08:45 - 09:15	0.50	DOHR		DRLPRO	Drill Open Hole (Rotary) w/ no returns. Never regained returns after connection at 8587. Pumped 80 BBL.LCM pill.
	09:15 - 09:30	0.25	SURV		DRLPRO	Survey or Orienting Operations
	09:30 - 12:15	2.75	DOHR		DRLPRO	Drill Open Hole (Rotary) w/ no returns to TD 8700 (TVD 8619).
	12:15 - 13:45	1.50	CANDC		DRLPRO	Pump sweep & pump on well w/ no returns. Ran final survey.
	13:45 - 15:00	1.25	TRIP		DRLPRO	TOH 10 Std. short trip TO 7725'. TIH & P/U kelly.
	15:00 - 15:15	0.25	WASHR		DRLPRO	Wash 32' to TD 8700 w/ 4' of fill. Spot 100 BBL. pill on bottom.
	15:15 - 20:45	5.50	TRIP		DRLPRO	TOH (SLM). SLM 8705.92 (high winds during strap).
	20:45 - 22:00	1.25	BBHD		DRLPRO	BHA/Bit Handling - L/D BHA visually in good condition. Load out Baker tools.
	22:00 - 23:00	1.00	WLIN		DRLPRO	Wireline Operations. Pre-job meeting & R/U Schlumberger & lubricator.
	23:00 - 06:00	7.00	WLIN		DRLPRO	Wireline Operations. Calibrate logging tools. Ran FMI-NGT-CNL-Density (single tool). Set down at 8180 & 8217. Log from 8531 to surface. Did not desire to go below 8531. L/D tools. Start R/D Schlumberger & lubricator.

Marathon Oil Company
Operations Summary Report

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Legal Well Name: INDIAN HILLS UNIT NO. 40
Common Well Name: INDIAN HILLS UNIT NO. 40
Event Name: ORIGINAL COMPLETION
Contractor Name:
Rig Name:

Start: 4/24/2002
Rig Release:
Rig Number:
Spud Date: 4/3/2002
End:
Group:

Date	From - To	Hours	Code	Sub Code	Phase	Description of Operations
5/29/2002	06:00 - 06:30	0.50	WLIN		CSGPR	Wireline Operations. R/D Schlumberger.
	06:30 - 08:00	1.50	TRIP		CSGPR	TIH w/ bit # 5.
	08:00 - 09:15	1.25	SCDL		CSGPR	Slip and Cut Drill Line
	09:15 - 12:00	2.75	TRIP		CSGPR	TIH W/ BIT #5 & tag @ 8530. P/U kelly & install rotating rubber.
	12:00 - 13:00	1.00	WASHR		CSGPR	Wash 170' of fill from 8530 to TD 8700 w/ no returns. Pumped sweep.
	13:00 - 13:45	0.75	DOHR		CSGPR	Drill Open Hole (Rotary) w/ returns building to 50%.
	13:45 - 15:00	1.25	CANDC		CSGPR	Pump sweep & circulate out. Spot 100 BBL., 80 vis pill. R/U Bull Rogers & held pre-job meeting.
	15:00 - 22:30	7.50	LDDP		CSGPR	Lay down DP. Break kelly. L/D BHA.
	22:30 - 00:00	1.50	RURDEQ		CSGPR	Pre-job safety meeting. RU to run 7" csg.
	00:00 - 06:00	6.00	RSCL		CSGPR	Run 7" 26# & 23# csg. w/ one shoe jt. placing ECP & DV 118 jts. above shoe to set packer @ 3425'-3438' from surface. Have 155 jts. in, 40jts. from TD.
5/30/2002	06:00 - 08:30	2.50	RSCL		CSGPR	Finish RIH w/ 7" csg. Washed down 90' t/ btm.
	08:30 - 09:30	1.00	CANDC		CSGPR	Circulate w/ rig pump while rigging down casers. Held safety meeting f/ cement job.
	09:30 - 13:45	4.25	COPS		CSGPR	Cement w/ 625 sks foam cement tailed w/ 100 sks H . Circulated to reserve pit. Plug down @ 12:30 A.M. Cir. 60 sks foam cement to pit. Set ECP w/ 3300 psi. Open & closed D.V. tool w/ to 2750 psi. Pumped 100 sks C down backside f/ cap. Shut-in.
	13:45 - 17:00	3.25	WOC		CSGPR	WO Cement. Jetted pit's ,R/D flow line & cleaned out choke manifold.
	17:00 - 20:30	3.50	NDNUW		XMBO	Picked up stack. Set slips. Cut off 7" csg. Pulled stack. R/U wellhead & tested to 3000 psi. Released rig @ 20:30HR
	20:30 - 00:00	3.50	RDMO		RDMO	RD Rig.

Marathon Oil Company
Cementing Report

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Legal Well Name: INDIAN HILLS UNIT NO. 40
Common Well Name: INDIAN HILLS UNIT NO. 40
Event Name: ORIGINAL COMPLETION

Report #: 1
Start: 4/24/2002

Spud Date: 4/3/2002
Report Date: 5/29/2002
End:

Cement Job Type: Primary

Primary	Squeeze Open Hole	Squeeze Casing	Plug
Hole Size: 8.750 (in)	Hole Size:	Hole Size:	Hole Size:
TMD Set: 8,718.0 (ft)	SQ TMD: (ft)	TMD Set:	Top Set: (ft)
Date Set: 5/29/2002	SQ Date:	Date Set:	BTM set: (ft)
Csg Type: PRODUCTION CASIN	SQ Type:	Csg Type:	Plug Date:
Csg Size: 0.228 (in)		SQ TMD:	Plug Type:
		SQ Date:	Drilled Out:
Cmtd. Csg: PRODUCTION CASIN	Cmtd. Csg:	Cmtd. Csg:	Cmtd. Csg:

Cement Co: HALLIBURTON

Cementer:

Pipe Movement: NO MOVEMENT

Pipe Movement

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

Stage No: 1 of 1

Type: PRIM CMT 1ST STAGE	Start Mix Cmt: :	Disp Avg Rate: (bbl/min)	Returns:
Volume Excess %:	Start Slurry Displ: :	Disp Max Rate: (bbl/min)	Total Mud Lost: (bbl)
Meas. From:	Start Displ: :	Bump Plug: Y	Cmt Vol to Surf: 250.00 (bbl)
Time Circ Prior	End Pumping: :	Press Prior: (psi)	
To Cementing:	End Pump Date:	Press Bumped: 3,300 (psi)	Ann Flow After: N
Mud Circ Rate: (gpm)	Top Plug: N	Press Held: 5 (min)	Mixing Method:
Mud Circ Press: (psi)	Bottom Plug: N	Float Held: Y	Density Meas By:

Mud Data

Type: Density: (ppg) Visc: (s/qt) PV/YP: (cp)/(lb/100ft²) Gels 10 sec: (lb/100ft²) Gels 10 min: (lb/100ft²)
Bottom Hole Circulating Temperature: (°F) Bottom Hole Static Temperature: (°F)
Displacement Fluid Type: Density: (ppg) Volume: (bbl)

Stage No: 1 Slurry No: 1 of 2

Slurry Data

Fluid Type: SPACER	Description: FOAM	Class: CLASS H	Purpose: FILLER CEM
Slurry Interval: (ft) To: (ft)	Cmt Vol: 625 (sk)	Density: 2.4 (ppg)	Yield: 1.44 (ft ³ /sk)
Water Source:	Slurry Vol 20.0 (bbl)	Water Vol: (bbl)	Other Vol: (l)
			Mix Water: (gal/sk)
			Foam Job: Y

Test Data

Thickening Time:	Temperature: (°F)	Compressive Strength 1:	Time	Temp	Pressure
Free Water: (%)	Temperature: (°F)	Compressive Strength 2:		(°F)	(psi)
Fluid Loss: (cc)	Temperature: (°F)			(°F)	(psi)
Fluid Loss Pressure: (°F)					

Marathon Oil Company

Cementing Report

Page 2 of 2

Legal Well Name: INDIAN HILLS UNIT NO. 40	Report #: 1	Spud Date: 4/3/2002
Common Well Name: INDIAN HILLS UNIT NO. 40	Start: 4/24/2002	Report Date: 5/29/2002
Event Name: ORIGINAL COMPLETION		End:

Stage No: 1 Slurry No: 2 of 2

Slurry Data

Fluid Type: TAIL	Description: OTHER	Class: CLASS H	Purpose: SHOE INTEG
Slurry Interval: (ft) To: (ft)	Cmt Vol: 100 (sk)	Density: (ppg)	Yield: 1.44 (ft³/sk)
Water Source: Frac. Tank	Slurry Vol: (bbl)	Water Vol: (bbl)	Other Vol: (l)
			Mix Water: (gal/sk)
			Foam Job: N

Test Data

	Time	Temp	Pressure
Thickening Time:	Temperature: (°F)	Compressive Strength 1:	(°F) (psi)
Free Water: (%)	Temperature: (°F)	Compressive Strength 2:	(°F) (psi)
Fluid Loss: (cc)	Temperature: (°F)		
Fluid Loss Pressure: (°F)			

Casing Test

Shoe Test

Liner Top Test

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

Log/Survey Evaluation

Interpretation Summary

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

Remarks

Capped backside w. 100 sks C w/ 800 psi on backside. Shut-in for 3hr's before setting slips. & cutting off.

Casing Report

Legal Well Name: INDIAN HILLS UNIT NO. 40
 Common Well Name: INDIAN HILLS UNIT NO. 40
 Event Name: ORIGINAL COMPLETION

Report #: 1
 Start: 4/24/2002

Spud Date: 4/3/2002
 Report Date: 5/29/2002
 End:

General Information

String Type: PRODUCTION CASING #1 Permanent Datum: KELLY BUSHING Hole Size: 8,720.0 (ft)
 Hole TVD: 8,639.0 (ft) KB-Datum: 0.00 (ft) Water TMD: (lb)
 3round Level: 4,205.00 (ft) CF Elevation: (ft) Liner Overlap: (ft)
 Circ Hours: (hr) Mud Lost: (bbl) KB to Cutoff: 16.50 (ft) Days From Spud: (days)

Casing Flange / Wellhead

Manufacturer: WoodGroup Model: FMC C-22 Top Hub/Flange: 11.000 (in) / 3,000 (psi)
 Hanger Model: Packoff Model: Compression BTM Hub/Flange: 11.000 (in) / 3,000 (psi)

Actual TMD Set: 8,720.000 (ft)

Integral Casing Detail

Item	Size (in)	Weight (lb/ft)	Grade	Drift (in)	Threads	JTS	Length (ft)	Top (ft)	IMU Torq. (ft-lb)	THD	Manufacturer	Model	Cond.	Max OD (in)	Min ID (in)	Comp. Name
CASING JOINT(S)	7.000	26.0	K-55	6.151	8 ROUND	2	67.170	16.50							6.276	
CASING JOINT(S)	7.000	26.0	K-55		8 ROUND	75	3,334.890	83.67							6.276	
PUP JOINT	7.000				8 ROUND	1	7.300	3,418.56								
STAGE COLLAR	7.000				8 ROUND	1	2.200	3,425.86								
WACKER	7.000				8 ROUND	1	10.000	3,428.06								
CASING JOINT(S)	7.000	23.0	K-55		8 ROUND	26	1,158.620	3,438.06							6.366	
CASING JOINT(S)	7.000	26.0	K-55		8 ROUND	91	4,075.040	4,596.68							6.276	
CASING FLOAT COLLA	7.000				8 ROUND	1	1.500	8,671.72								
CASING JOINT(S)	7.000				8 ROUND	1	45.280	8,673.22								
CASING FLOAT SHOE	7.000	26.0	K-55		8 ROUND	1	1.500	8,718.50								

Non-Integral Casing Accessories

Accessory	Manufacturer	Number	Spacing (ft)	Top (ft)	Interval Bottom (ft)	How Fixed
CENTRALIZER	Weatherford	1	8,696.0			CLAMPED
CENTRALIZER	Weatherford	14	90.0	7,346.0		BOLTED

Casing Report

Legal Well Name: INDIAN HILLS UNIT NO. 40
 Common Well Name: INDIAN HILLS UNIT NO. 40
 Event Name: ORIGINAL COMPLETION

Report #: 1
 Start: 4/24/2002

Spud Date: 4/3/2002
 Report Date: 5/29/2002
 End:

Remarks

2 fts. of 26# & 6 fts. of 23# leftover.