Form 3160-4
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No. NM 030482

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

6. If Indian, Allottee or Tribe Name

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

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

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

3. Address P.O. BOX 552 MIDLAND, TX 79702
3a. Phone No. (include area code) Ph: 800.351.1417 Ext: 8104

9. API Well No. 30-015-32875

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
At surface SENW Lot F 1383FNL 1586FWL
At top prod interval reported below SENW Lot F 1383FNL 1586FWL
At total depth SENW Lot F 2384FSL 1979FWL

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

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

12. County or Parish EDDY
13. State NM

14. Date Spudded 08/15/2003
15. Date T.D. Reached 08/27/2003
16. Date Completed ☐ D & A ☒ Ready to Prod. 09/14/2003
17. Elevations (DF, KB, RT, GL)* 3702 GL

18. Total Depth: MD 8315 TVD 8115
19. Plug Back T.D.: MD 8269 TVD 8069
20. Depth Bridge Plug Set: MD TVD

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

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

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

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

24. Tubing Record

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

25. Producing Intervals / 26. Perforation Record

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

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

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

RECEIVED
OCT 2003
OCD - ARTESIA

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
09/14/2003	10/14/2003	24	→	186.0	740.0	2635.0			ELECTRIC PUMP SUB-SURFACE

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
	240	180.0	→					PGW

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
			→					

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

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28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status

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

30. Summary of Porous Zones (Include Aquifers):

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

31. Formation (Log) Markers

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

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

33. Circle enclosed attachments:

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

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

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

Name(*please print*) CHARLES KENDRIX Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission) Date 10/16/2003

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

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

Well Name and Number: Indian Hills Unit #53

Location: Sec. 23, T21S, R24E

Operator: Marathon

Drilling Contractor: McVay Drilling Company

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

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

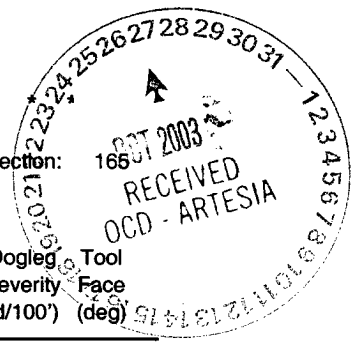
Drilling Contractor: McVay Drilling Company

By: _____

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

_____
Notary Public

My Commission Expires: 8/16/05 **Lea County, New Mexico**



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

Well: Indian Hills Unit 53

Target Azimuth: 164.55
Target TVD: 8199

Closure Direction: 165.07

Calculation Method - Minimum Curvature

Measured Depth (ft)	Inclination (deg.)	Azimuth (deg.)	True Vertical Depth (ft)	Vertical Section (ft)	North/ South (ft)	East/ West (ft)	Closure (ft)	Build Rate (deg/ft)	Walk Rate (deg/ft)	Dogleg Severity (d/100')	Tool Face (deg)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	<==== Tie-in Data				
235.00	0.25	64.00	235.00	-0.09	0.22	0.46	0.51	0.001	0.272	0.11	MSS
481.00	0.40	84.00	481.00	-0.05	0.55	1.80	1.88	0.001	0.081	0.08	MSS
724.00	0.25	139.00	723.99	0.57	0.24	2.99	3.00	-0.001	0.226	0.14	MSS
969.00	0.25	69.00	968.99	1.00	0.03	3.84	3.84	0.000	-0.286	0.12	MSS
1,150.00	0.00	69.00	1,149.99	0.96	0.17	4.21	4.21	-0.001	0.000	0.14	MSS
1,222.00	0.20	94.50	1,221.99	1.00	0.16	4.33	4.34	0.003	0.354	0.28	MWD
1,293.00	0.50	167.20	1,292.99	1.35	-0.15	4.52	4.53	0.004	1.024	0.68	MWD
1,354.00	2.20	175.00	1,353.97	2.77	-1.58	4.69	4.94	0.028	0.128	2.80	MWD
1,416.00	3.40	177.10	1,415.89	5.74	-4.60	4.88	6.71	0.019	0.034	1.94	MWD
1,480.00	4.30	171.80	1,479.75	9.97	-8.87	5.32	10.34	0.014	-0.083	1.51	MWD
1,544.00	5.80	172.80	1,543.50	15.55	-14.46	6.07	15.68	0.023	0.016	2.35	MWD
1,608.00	7.80	174.30	1,607.05	23.03	-21.99	6.90	23.04	0.031	0.023	3.14	MWD
1,671.00	9.70	173.20	1,669.31	32.49	-31.51	7.96	32.50	0.030	-0.017	3.03	MWD
1,735.00	11.50	171.80	1,732.21	44.15	-43.18	9.51	44.21	0.028	-0.022	2.84	MWD
1,798.00	13.00	170.10	1,793.78	57.44	-56.38	11.62	57.56	0.024	-0.027	2.45	MWD
1,862.00	14.40	168.70	1,855.96	72.54	-71.27	14.42	72.72	0.022	-0.022	2.25	MWD
1,926.00	14.70	168.30	1,917.90	88.58	-87.03	17.62	88.79	0.005	-0.006	0.49	MWD
1,988.00	14.90	169.00	1,977.85	104.37	-102.56	20.74	104.63	0.003	0.011	0.43	MWD
2,052.00	14.90	169.40	2,039.70	120.78	-118.72	23.82	121.09	0.000	0.006	0.16	MWD
2,114.00	15.00	168.60	2,099.60	136.72	-134.42	26.88	137.08	0.002	-0.013	0.37	MWD
2,178.00	14.90	165.90	2,161.43	153.21	-150.52	30.52	153.58	-0.002	-0.042	1.10	MWD
2,239.00	14.20	164.10	2,220.47	168.53	-165.32	34.48	168.88	-0.011	-0.030	1.37	MWD
2,303.00	13.90	163.40	2,282.56	184.07	-180.24	38.82	184.37	-0.005	-0.011	0.54	MWD
2,366.00	14.20	163.40	2,343.68	199.36	-194.90	43.19	199.62	0.005	0.000	0.48	MWD
2,430.00	13.60	161.60	2,405.80	214.72	-209.56	47.81	214.94	-0.009	-0.028	1.16	MWD
2,493.00	13.30	160.60	2,467.07	229.35	-223.42	52.56	229.52	-0.005	-0.016	0.60	MWD
2,556.00	13.90	160.90	2,528.31	244.13	-237.41	57.44	244.26	0.010	0.005	0.96	MWD
2,651.00	13.60	163.70	2,620.58	266.69	-258.91	64.31	266.78	-0.003	0.029	0.77	MWD
2,747.00	13.50	166.50	2,713.91	289.17	-280.64	70.09	289.26	-0.001	0.029	0.69	MWD
2,842.00	12.90	165.10	2,806.40	310.86	-301.67	75.41	310.95	-0.006	-0.015	0.72	MWD
2,937.00	13.60	164.40	2,898.87	332.63	-322.68	81.14	332.72	0.007	-0.007	0.76	MWD
3,028.00	13.30	163.70	2,987.38	353.80	-343.03	86.95	353.88	-0.003	-0.008	0.38	MWD
3,123.00	13.90	163.40	3,079.71	376.13	-364.45	93.28	376.20	0.006	-0.003	0.64	MWD
3,218.00	13.50	161.99	3,172.01	398.62	-385.93	99.97	398.67	-0.004	-0.015	0.55	MWD
3,312.00	12.70	158.10	3,263.57	419.85	-405.95	107.21	419.87	-0.009	-0.041	1.27	MWD
3,407.00	13.30	157.80	3,356.13	441.07	-425.76	115.24	441.08	0.006	-0.003	0.64	MWD
3,502.00	14.50	156.40	3,448.35	463.70	-446.78	124.13	463.70	0.013	-0.015	1.31	MWD
3,597.00	14.60	158.10	3,540.30	487.37	-468.79	133.36	487.38	0.001	0.018	0.46	MWD
3,692.00	14.00	162.70	3,632.36	510.75	-490.87	141.24	510.78	-0.006	0.048	1.35	MWD
3,787.00	13.50	168.70	3,724.64	533.30	-512.71	146.83	533.32	-0.005	0.063	1.59	MWD
3,883.00	12.70	165.10	3,818.14	555.03	-533.90	151.74	555.04	-0.008	-0.037	1.19	MWD
3,977.00	12.90	163.40	3,909.81	575.85	-553.94	157.39	575.87	0.002	-0.018	0.45	MWD
4,069.00	13.20	161.60	3,999.43	596.61	-573.75	163.64	596.63	0.003	-0.020	0.55	MWD
4,164.00	13.70	163.00	4,091.83	618.69	-594.80	170.36	618.72	0.005	0.015	0.63	MWD
4,259.00	13.20	164.80	4,184.22	640.78	-616.03	176.49	640.81	-0.005	0.019	0.69	MWD
4,354.00	13.30	165.50	4,276.69	662.55	-637.07	182.07	662.58	0.001	0.007	0.20	MWD
4,449.00	13.50	165.90	4,369.11	684.57	-658.41	187.51	684.59	0.002	0.004	0.23	MWD
4,544.00	13.50	163.40	4,461.48	706.74	-679.79	193.38	706.76	0.000	-0.026	0.61	MWD
4,639.00	13.90	161.90	4,553.78	729.22	-701.26	200.09	729.25	0.004	-0.016	0.56	MWD
4,735.00	12.60	163.00	4,647.22	751.21	-722.24	206.73	751.24	-0.014	0.011	1.38	MWD
4,831.00	12.80	164.40	4,740.87	772.31	-742.49	212.65	772.34	0.002	0.015	0.38	MWD
4,925.00	12.90	160.90	4,832.52	793.20	-762.44	218.89	793.23	0.001	-0.037	0.83	MWD
5,021.00	13.10	158.50	4,926.06	814.71	-782.68	226.38	814.77	0.002	-0.025	0.60	MWD

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

Well: Indian Hills Unit 53

Target Azimuth: 164.55
Target TVD: 8199

Closure Direction: 165

Calculation Method - Minimum Curvature

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