Form 3160-4
(August 1999)

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. 1004-0137
Expires: November 30, 2000

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No.: NM-07260

1a. Type of Well: [X] Oil Well [ ] Gas Well [ ] Dry Other

b. Type of Completion: [X] New Well [ ] Work Over [ ] Deepen [ ] Plug Back [ ] Diff.Resvr,. Other

6. If Indian, Allotee or Tribe Name:

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

2. Name of Operator: Marathon Oil Company

8. Lease Name and Well No.: INDIAN HILLS UNIT #44

3. Address: P.O. Box 552 Midland, TX 79702

3a. Phone No. (include area code): 800-351-1417

9. API Well No.: 30-015-32656

4. Location of Well (Report location clearly and in accordance with Federal requirements)*

At surface: 2679' FSL & 1396' FEL, UL G

At top prod. interval reported below: 1447' FNL & 729' FEL, UL H

At total depth: 1315' FNL & 646' FEL, UL H

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

11. Sec., T., R., M., or Block and Survey or Area: SEC. 33, T-21-S, R-24-3

12. County or Parish: EDDY

13. State: NM

14. Date Spudded	15. Date T.D. Reached	16. Date Completed	17. Elevations (DF, RKB, RT, GL)*
4/7/03	4/21/03	[ ] D & A [X] Ready to Prod. 5/20/03	KB-4079'; GL-4062'

18. Total Depth: MD / TVD	19. Plug Back T.D.: MD / TVD	20. Depth Bridge Plug Set: MD / TVD
8600 / 8426	8554 / 8381	8401 / 8228

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)

Spectral Density Dual Spaced Neutron Spectral Gamma

22. Was well cored? [X] No [ ] Yes (Submit analysis)
Was DST run [X] No [ ] Yes (Submit report
Directional Survey? [ ] No [X] Yes (Submit copy)

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
12.25	9.625	36	0	1814		1525		Surface	
8.75	7	23 & 26	0	8599		630		Surface	

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	8401							

25. Producing Intervals / 26. Perforation Record

	Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A)	Upper Penn	7965	8600	7990-8306			Open
B)							
C)							
D)							

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

Depth Interval	Amount and Type of Material
8096-8205	Acid frac 20,000 gals. 17% CCA sour acid
7990-8306	19,000 gals. 17% CCA sour acid

ACCEPTED FOR RECORD
JUL 23 2003
ALEXIS C. SWOBODA
PETROLEUM ENGINEER

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity	Gas Gravity	Production Method
5/18/03	5/27/03	24	→	185	1146	1646			pumping
Choke Size	**Tbg. Press. Flwg. SI**	**Csg. Press.**	**24 Hr.**	**Oil BBL**	**Gas MCF**	**Water BBL**	**Gas: Oil Ratio**	**Well Status**	
	320	220	→				6195	Producing	

28a. Production-Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity	Gas Gravity	Production Method
			→						
Choke Size	**Tbg. Press. Flwg. SI**	**Csg. Press.**	**24 Hr.**	**Oil BBL**	**Gas MCF**	**Water BBL**	**Gas: Oil Ratio**	**Well Status**	
			→						

(See instructions and spaces for additional data on reverse side)

RECEIVED
JUL 2003
OCD - ARTESIA

8b. Production - Interval C

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

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. →	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	Gas Gravity	Production Method

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

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

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
Cisco	7965	8140	Limestone & dolomite	Queen	391
Canyon	8140	TD	Dolomite w/shale interbeds	San Andres	1186
				Glorieta	2766
				Yeso	2938
				Bone Springs Lime	5517
				Tubb	7023
				Wolfcamp	7332
				Cisco	7965
				Canyon	8140

32. Additional remarks (include plugging procedure):

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)*

Name (please print) Ginny Larke Title Engineer Technician

Signature Ginny Larke Date 7/18/03

2003 JUL 22 PM 8:28

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.

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

Well Name and Number: Indian Hills Unit #44

Location: Sec. 33, T21S, R24E, Lea County, NM

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	
2	210	11	4309	14 ¾	7222
½	1066	11 ¼	4498	11 ¾	7413
½	1504	10 ¾	4624	11 ¾	7509
¼	1726	10 ¾	4752	13 ¾	7636
¼	1845	11 ¼	5073	13	7700
2	1971	11	5261	14 ½	7764
6 ½	2161	13 ¼	5577	16 ¾	8014
10 ¾	2351	12 ¾	5830	17 ½	8328
14 ½	2752	12 ¼	6018	16 ¼	8329
12 ½	3485	12 ¼	6271	16 ½	8456
12	3739	14 ¼	6525	17	8549
11 ½	3992	14	6714		
12 ¼	4118	13	7031		

Drilling Contractor: McVay Drilling Company

By: _____

Subscribed and sworn to before me this 24th **day of** April, **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 44

Target Azimuth: 30.69
Target TVD: 8500

Closure Direction: 30

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	0.00	0.00	0.00	0.00	0.00	0.00	<==== Tie-in Data				
210	2.00	321.00	209.96	1.27	2.85	-2.31	3.66	0.010	-0.186	0.95	mss
420	1.00	46.00	419.90	4.31	6.97	-3.29	7.71	-0.005	0.405	1.03	mss
636	0.12	329.00	635.89	6.24	8.47	-2.05	8.72	-0.004	-0.356	0.45	mss
851	0.00	29.00	850.89	6.34	8.67	-2.17	8.93	-0.001	0.279	0.06	mss
1,066	0.50	76.00	1,065.89	7.00	8.89	-1.26	8.98	0.002	0.219	0.23	mss
1,280	0.25	276.00	1,279.89	7.47	9.17	-0.82	9.20	-0.001	-0.748	0.35	mss
1,504	0.25	355.00	1,503.88	7.66	9.71	-1.35	9.80	0.000	0.353	0.14	mss
1,726	0.25	80.00	1,725.88	8.37	10.27	-0.91	10.31	0.000	0.383	0.15	mss
1,845	0.09	81.60	1,844.88	8.60	10.33	-0.56	10.35	-0.001	0.013	0.13	mwd
1,908	0.97	36.60	1,907.88	9.16	10.77	-0.20	10.77	0.014	-0.714	1.44	mwd
1,971	2.00	45.10	1,970.86	10.75	11.97	0.90	12.00	0.016	0.135	1.67	mwd
2,035	3.70	41.20	2,034.78	13.86	14.31	3.05	14.63	0.027	-0.061	2.67	mwd
2,099	5.20	41.90	2,098.58	18.74	18.02	6.35	19.11	0.023	0.011	2.35	mwd
2,161	6.40	40.80	2,160.26	24.90	22.73	10.48	25.03	0.019	-0.018	1.94	mwd
2,224	7.80	41.90	2,222.78	32.55	28.57	15.63	32.57	0.022	0.017	2.23	mwd
2,287	9.40	38.40	2,285.07	41.84	35.79	21.68	41.84	0.025	-0.056	2.67	mwd
2,351	10.80	36.30	2,348.07	52.99	44.72	28.48	53.01	0.022	-0.033	2.26	mwd
2,415	12.10	32.05	2,410.80	65.66	55.23	35.59	65.71	0.020	-0.066	2.42	mwd
2,477	13.20	28.90	2,471.30	79.23	66.94	42.46	79.27	0.018	-0.051	2.09	mwd
2,541	14.10	28.50	2,533.49	94.33	80.19	49.71	94.35	0.014	-0.006	1.41	mwd
2,605	14.10	28.50	2,595.56	109.91	93.89	57.15	109.92	0.000	0.000	0.00	mwd
2,668	14.30	27.80	2,656.63	125.35	107.52	64.44	125.35	0.003	-0.011	0.42	mwd
2,732	14.50	28.50	2,718.62	141.25	121.55	71.95	141.25	0.003	0.011	0.41	mwd
2,796	14.50	28.90	2,780.58	157.26	135.61	79.64	157.26	0.000	0.006	0.16	mwd
2,859	14.50	29.20	2,841.58	173.03	149.39	87.30	173.03	0.000	0.005	0.12	mwd
2,919	14.70	29.60	2,899.64	188.15	162.57	94.73	188.16	0.003	0.007	0.37	mwd
2,982	14.70	29.90	2,960.58	204.13	176.45	102.66	204.14	0.000	0.005	0.12	mwd
3,045	14.40	33.10	3,021.56	219.95	189.94	110.92	219.96	-0.005	0.051	1.36	mwd
3,108	15.10	33.10	3,082.48	235.98	203.38	119.68	235.98	0.011	0.000	1.11	mwd
3,169	14.00	33.40	3,141.53	251.29	216.20	128.08	251.29	-0.018	0.005	1.81	mwd
3,232	14.00	33.10	3,202.65	266.52	228.94	136.44	266.52	0.000	-0.005	0.12	mwd
3,296	13.40	30.30	3,264.83	281.67	241.83	144.41	281.67	-0.009	-0.044	1.40	mwd
3,359	13.90	30.30	3,326.05	296.53	254.67	151.91	296.53	0.008	0.000	0.79	mwd
3,422	12.60	31.30	3,387.38	310.97	267.07	159.30	310.97	-0.021	0.016	2.10	mwd
3,485	12.40	29.90	3,448.88	324.61	278.81	166.24	324.61	-0.003	-0.022	0.58	mwd
3,548	12.30	28.20	3,510.42	338.07	290.58	172.78	338.07	-0.002	-0.027	0.60	mwd
3,612	11.90	28.10	3,573.00	351.48	302.41	179.11	351.48	-0.006	-0.002	0.63	mwd
3,675	12.10	28.20	3,634.63	364.56	313.96	185.29	364.56	0.003	0.002	0.32	mwd
3,739	12.00	28.40	3,697.22	377.91	325.73	191.63	377.91	-0.002	0.003	0.17	mwd
3,802	12.00	29.90	3,758.84	391.00	337.17	198.01	391.01	0.000	0.024	0.50	mwd
3,865	11.70	29.60	3,820.50	403.94	348.40	204.43	403.94	-0.005	-0.005	0.49	mwd
3,929	11.40	29.90	3,883.20	416.75	359.52	210.79	416.76	-0.005	0.005	0.48	mwd
3,992	11.50	29.60	3,944.95	429.26	370.38	216.99	429.26	0.002	-0.005	0.18	mwd
4,055	12.00	28.50	4,006.63	442.08	381.60	223.22	442.09	0.008	-0.017	0.87	mwd
4,118	12.30	29.20	4,068.22	455.33	393.21	229.62	455.34	0.005	0.011	0.53	mwd
4,182	12.20	28.50	4,130.76	468.90	405.10	236.17	468.92	-0.002	-0.011	0.28	mwd
4,245	11.70	28.20	4,192.39	481.94	416.58	242.36	481.96	-0.008	-0.005	0.80	mwd
4,309	11.70	27.10	4,255.06	494.90	428.08	248.39	494.92	0.000	-0.017	0.35	mwd
4,371	11.10	28.50	4,315.84	507.14	438.92	254.10	507.17	-0.010	0.023	1.07	mwd
4,434	10.90	29.60	4,377.68	519.15	449.43	259.93	519.18	-0.003	0.017	0.46	mwd
4,498	11.30	30.70	4,440.48	531.47	460.08	266.12	531.51	0.006	0.017	0.71	mwd
4,560	11.30	28.20	4,501.28	543.61	470.66	272.10	543.65	0.000	-0.040	0.79	mwd
4,624	10.80	28.20	4,564.10	555.87	481.47	277.89	555.91	-0.008	0.000	0.78	mwd

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

Well: Indian Hills Unit 44

Target Azimuth: 30.69
Target TVD: 8500

Closure Direction: 30

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)
4,694	10.50	27.10	4,632.89	568.79	492.93	283.90	568.84	-0.004	-0.016	0.52	mwd
4,756	10.80	27.50	4,693.82	580.23	503.11	289.15	580.28	0.005	0.006	0.50	mwd
4,820	10.80	26.80	4,756.69	592.19	513.78	294.63	592.26	0.000	-0.011	0.20	mwd
4,883	11.00	25.30	4,818.55	604.07	524.48	299.86	604.15	0.003	-0.024	0.55	mwd
4,946	11.60	26.80	4,880.33	616.37	535.57	305.28	616.47	0.010	0.024	1.06	mwd
5,009	12.70	29.60	4,941.92	629.61	547.24	311.56	629.72	0.017	0.044	1.98	mwd
5,073	12.70	30.70	5,004.35	643.68	559.41	318.62	643.79	0.000	0.017	0.38	mwd
5,136	11.90	29.90	5,065.91	657.10	571.00	325.40	657.21	-0.013	-0.013	1.30	mwd
5,198	11.00	29.60	5,126.67	669.41	581.68	331.51	669.51	-0.015	-0.005	1.45	mwd
5,261	11.00	28.20	5,188.52	681.42	592.20	337.31	681.53	0.000	-0.022	0.42	mwd
5,325	11.80	28.90	5,251.25	694.07	603.31	343.36	694.18	0.013	0.011	1.27	mwd
5,388	11.60	29.90	5,312.94	706.84	614.45	349.63	706.96	-0.003	0.016	0.45	mwd
5,451	11.40	30.30	5,374.68	719.40	625.31	355.93	719.52	-0.003	0.006	0.34	mwd
5,513	12.60	31.70	5,435.32	732.29	636.36	362.58	732.40	0.019	0.023	1.99	mwd
5,577	13.30	32.00	5,497.69	746.62	648.54	370.15	746.73	0.011	0.005	1.10	mwd
5,641	12.90	31.70	5,560.03	761.13	660.86	377.80	761.23	-0.006	-0.005	0.63	mwd
5,704	12.60	31.70	5,621.48	775.03	672.69	385.11	775.12	-0.005	0.000	0.48	mwd
5,767	13.20	32.70	5,682.89	789.09	684.59	392.60	789.18	0.010	0.016	1.02	mwd
5,830	12.80	32.70	5,744.27	803.25	696.51	400.26	803.33	-0.006	0.000	0.63	mwd
5,892	11.60	31.70	5,804.87	816.35	707.60	407.25	816.42	-0.019	-0.016	1.97	mwd
5,956	11.40	31.30	5,867.58	829.11	718.48	413.91	829.18	-0.003	-0.006	0.34	mwd
6,018	12.20	32.00	5,928.27	841.78	729.27	420.57	841.85	0.013	0.011	1.31	mwd
6,081	11.70	31.40	5,989.91	854.83	740.37	427.42	854.89	-0.008	-0.010	0.82	mwd
6,145	11.50	31.00	6,052.60	867.69	751.37	434.09	867.75	-0.003	-0.006	0.34	mwd
6,208	11.80	30.30	6,114.30	880.42	762.32	440.58	880.47	0.005	-0.011	0.53	mwd
6,271	12.30	30.60	6,175.91	893.57	773.66	447.24	893.63	0.008	0.005	0.80	mwd
6,335	12.70	29.90	6,238.40	907.42	785.62	454.22	907.48	0.006	-0.011	0.67	mwd
6,398	13.50	28.50	6,299.76	921.69	798.09	461.18	921.75	0.013	-0.022	1.37	mwd
6,462	14.20	27.50	6,361.90	936.99	811.62	468.37	937.06	0.011	-0.016	1.16	mwd
6,525	14.20	27.50	6,422.97	952.43	825.32	475.50	952.50	0.000	0.000	0.00	mwd
6,588	14.40	29.20	6,484.02	967.97	839.02	482.89	968.06	0.003	0.027	0.74	mwd
6,651	13.70	30.60	6,545.13	983.26	852.28	490.51	983.35	-0.011	0.022	1.24	mwd
6,714	14.00	29.90	6,606.30	998.34	865.30	498.11	998.43	0.005	-0.011	0.55	mwd
6,778	13.50	30.60	6,668.47	1,013.55	878.45	505.77	1,013.64	-0.008	0.011	0.82	mwd
6,840	13.60	31.00	6,728.74	1,028.08	890.92	513.21	1,028.17	0.002	0.006	0.22	mwd
6,904	14.00	32.00	6,790.90	1,043.34	903.94	521.19	1,043.43	0.006	0.016	0.73	mwd
6,967	14.10	33.10	6,852.01	1,058.63	916.83	529.42	1,058.71	0.002	0.017	0.45	mwd
7,031	13.10	33.50	6,914.22	1,073.66	929.41	537.68	1,073.73	-0.016	0.006	1.57	mwd
7,095	13.10	33.10	6,976.55	1,088.15	941.53	545.64	1,088.21	0.000	-0.006	0.14	mwd
7,158	13.70	32.40	7,037.84	1,102.74	953.81	553.54	1,102.80	0.010	-0.011	0.99	mwd
7,222	14.70	31.00	7,099.88	1,118.44	967.17	561.78	1,118.49	0.016	-0.022	1.65	mwd
7,254	15.30	31.40	7,130.79	1,126.72	974.26	566.07	1,126.77	0.019	0.013	1.90	mwd
7,318	15.60	31.00	7,192.48	1,143.77	988.84	574.90	1,143.82	0.005	-0.006	0.50	mwd
7,381	13.50	33.80	7,253.45	1,159.59	1,002.21	583.36	1,159.63	-0.033	0.044	3.51	mwd
7,445	11.20	36.90	7,315.97	1,173.23	1,013.39	591.25	1,173.26	-0.036	0.048	3.74	mwd
7,509	11.90	35.90	7,378.67	1,185.98	1,023.71	598.85	1,186.00	0.011	-0.016	1.14	mwd
7,572	12.90	31.70	7,440.20	1,199.48	1,034.95	606.35	1,199.50	0.016	-0.067	2.14	mwd
7,636	13.70	23.30	7,502.49	1,214.14	1,047.99	613.11	1,214.16	0.013	-0.131	3.26	mwd
7,700	13.10	21.10	7,564.75	1,228.81	1,061.72	618.71	1,228.85	-0.009	-0.034	1.23	mwd
7,764	14.3	25.4	7,626.93	1,243.83	1,075.63	624.72	1,243.88	0.019	0.067	2.46	mwd
7,827	16.5	26.8	7,687.66	1,260.50	1,090.64	632.09	1,260.57	0.035	0.022	3.54	mwd
7,888	16.8	28.5	7,746.11	1,277.96	1,106.12	640.20	1,278.03	0.005	0.028	0.94	mwd
7,951	15.5	29.2	7,806.62	1,295.47	1,121.47	648.65	1,295.55	-0.021	0.011	2.09	mwd
8,014	16.80	29.90	7,867.13	1,312.99	1,136.72	657.30	1,313.07	0.021	0.011	2.09	mwd

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

Well: Indian Hills Unit 44

Target Azimuth: 30.69 Closure Direction: 30

Target TVD: 8500

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)
8,076	19.00	31.00	7,926.13	1,332.04	1,153.14	666.96	1,332.13	0.035	0.018	3.59	mwd
8,139	19.30	31.70	7,985.64	1,352.71	1,170.78	677.72	1,352.79	0.005	0.011	0.60	mwd
8,235	16.90	31.70	8,076.88	1,382.53	1,196.16	693.39	1,382.60	-0.025	0.000	2.50	mwd
8,328	17.20	30.30	8,165.80	1,409.79	1,219.53	707.43	1,409.86	0.003	-0.015	0.55	mwd
8,392	16.80	32.00	8,227.00	1,428.50	1,235.55	717.10	1,428.57	-0.006	0.027	1.00	mwd
8,456	16.60	33.10	8,288.30	1,446.88	1,251.05	727.00	1,446.94	-0.003	0.017	0.58	mwd
8,519	16.90	33.10	8,348.63	1,465.02	1,266.26	736.91	1,465.08	0.005	0.000	0.48	mwd
8,600	16.90	33.10	8,426.13	1,488.55	1,285.98	749.77	1,488.59	0.000	0.000	0.00	proj