

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.
NMNM07260

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.
NMNM70964X

8. Lease Name and Well No.
INDIAN HILLS UNIT 41

9. API Well No.
30-015-32539

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

11. Sec., T., R., M., or Block and Survey
or Area Sec 16 T21S R24E Mer NMP

12. County or Parish
EDDY

13. State
NM

17. Elevations (DF, KB, RT, GL)*
4017 GL

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

2. Name of Operator
MARATHON OIL COMPANY

Contact: CHARLES KENDRIX
E-Mail: cekendrix@marathonoil.com

3. Address P.O. BOX 3487
HOUSTON, TX 77253-3487

3a. Phone No. (include area code)
Ph: 713.296.2096

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

Sec 16 T21S R24E Mer NMP
At surface SESE Lot P 199FSL 524FEL
Sec 21 T21S R24E Mer NMP
At top prod interval reported below SENE Lot H 1592FNL 1193FEL
Sec 21 T21S R24E Mer NMP
At total depth SENE Lot H 1770FNL 1251FEL

14. Date Spudded
11/01/2003

15. Date T.D. Reached
11/19/2003

16. Date Completed
☐ D & A ☒ Ready to Prod.
12/05/2003

18. Total Depth: MD 8800
TVD 8457

19. Plug Back T.D.: MD 8698
TVD 8359

20. Depth Bridge Plug Set: MD
TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
GAMMA RAY, DUAL SPACED NEUTRON, SPRECTRAL DENSITY

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 Sk. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
12.250	9.625 K 55	36.0		1800		1300		0	0
8.750	7.000 K 55	26.0		8800	7010	1240		0	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	8490							

25. Producing Intervals

26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
INDIAN BASIN U. PENN. ASSOC.	8108	8432	8140 TO 8432		588	SIX INTERVALS 4 SHOTS /FT
B)						
C)						
D)						

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

Depth Interval	Amount and Type of Material
8140 TO 8432	TREATED IN 2' INTERVALS W/100 GAL. 17% CCA SOUR PER FT. 15,000 GALS TOTAL

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
12/05/2003	12/23/2003	24	→	324.0	830.0	1014.0			ELECTRIC PUMP SUB-SURFACE
Choke Size	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
SI	240	200.0	→	324	830	1014	2562	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.	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status	
SI			→						

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

ELECTRONIC SUBMISSION #28336 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

RECEIVE

APR 08 2004

OPERATOR

RECEIVED

APR 08 2004

OPERATOR

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	8118	8442		SAN ANDRES GLORIETA YESO BONE SPRING WOLFCAMP CISCO	1119 2842 3026 5666 7354 8118

32. Additional remarks (include plugging procedure):

A COPY OF THE INCLINATION REPORT, DEVIATION SURVEY, AND LOGS WILL BE SENT TO THE BLM'S ROSWELL OFFICE.

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 #28336 Verified by the BLM Well Information System.
For MARATHON OIL COMPANY, sent to the Carlsbad

Name (please print) CHARLES KENDRIXTitle AUTHORIZED REPRESENTATIVESignature (Electronic Submission)Date 04/05/2004

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.

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

RECEIVED

APR 08 2004

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

Well: Indian Hills Unit #41

Target Azimuth: 199.76

Closure Direction: 209.00

Target TVD: 8450

OCD-ARTESIA

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				
100.00	0.49	218.11	100.00	0.41	-0.34	-0.26	0.43	0.005	2.181	0.49	gyro
200.00	0.26	302.53	200.00	0.76	-0.55	-0.72	0.91	-0.002	0.844	0.53	gyro
300.00	0.52	241.56	300.00	1.05	-0.64	-1.31	1.46	0.003	-0.610	0.45	gyro
400.00	0.43	150.84	399.99	1.63	-1.19	-1.53	1.93	-0.001	-0.907	0.68	gyro
500.00	0.23	128.20	499.99	1.94	-1.64	-1.19	2.02	-0.002	-0.226	0.24	gyro
600.00	0.20	88.58	599.99	1.95	-1.76	-0.85	1.96	0.000	-0.396	0.15	gyro
700.00	0.16	71.63	699.99	1.80	-1.71	-0.55	1.80	0.000	-0.170	0.07	gyro
800.00	0.13	40.39	799.99	1.60	-1.58	-0.34	1.62	0.000	-0.312	0.08	gyro
900.00	0.16	355.44	899.99	1.37	-1.36	-0.28	1.38	0.000	-0.450	0.11	gyro
1000.00	0.22	357.62	999.99	1.06	-1.03	-0.30	1.07	0.001	0.022	0.06	gyro
1100.00	0.36	359.33	1,099.99	0.59	-0.52	-0.31	0.60	0.001	0.017	0.14	gyro
1200.00	0.55	6.47	1,199.98	-0.17	0.27	-0.26	0.37	0.002	0.071	0.20	gyro
1300.00	0.58	24.69	1,299.98	-1.14	1.21	0.01	1.21	0.000	0.182	0.18	gyro
1400.00	0.73	26.61	1,399.97	-2.28	2.24	0.50	2.29	0.002	0.019	0.15	gyro
1500.00	0.95	23.55	1,499.96	-3.74	3.57	1.12	3.74	0.002	-0.031	0.22	gyro
1600.00	0.86	29.67	1,599.95	-5.30	4.98	1.82	5.30	-0.001	0.061	0.13	gyro
1700.00	0.76	50.29	1,699.94	-6.61	6.06	2.71	6.63	-0.001	0.206	0.31	gyro
1800.00	0.30	105.47	1,799.94	-7.20	6.41	3.47	7.29	-0.005	0.552	0.64	gyro
1875.00	0.34	358.67	1,874.94	-7.43	6.58	3.65	7.53	0.001	3.376	0.69	gyro
1950.00	1.58	210.81	1,949.93	-6.62	5.91	3.12	6.69	0.017	-1.971	2.50	mwd
2028.00	3.43	209.06	2,027.85	-3.26	2.95	1.43	3.28	0.024	-0.022	2.37	mwd
2091.00	4.57	208.30	2,090.69	1.08	-0.91	-0.67	1.13	0.018	-0.012	1.81	mwd
2155.00	5.50	205.90	2,154.45	6.65	-5.91	-3.22	6.73	0.015	-0.038	1.49	mwd
2218.00	7.20	203.10	2,217.06	13.60	-12.26	-6.09	13.69	0.027	-0.044	2.74	mwd
2281.00	9.20	202.40	2,279.41	22.57	-20.55	-9.56	22.66	0.032	-0.011	3.18	mwd
2345.00	10.90	200.90	2,342.43	33.73	-30.93	-13.67	33.82	0.027	-0.023	2.69	mwd
2407.00	12.40	202.00	2,403.15	46.24	-42.58	-18.25	46.33	0.024	0.018	2.45	mwd
2471.00	14.10	200.90	2,465.44	60.90	-56.24	-23.61	60.99	0.027	-0.017	2.69	mwd
2535.00	16.00	200.20	2,527.24	77.52	-71.80	-29.43	77.60	0.030	-0.011	2.98	mwd
2598.00	17.70	198.80	2,587.54	95.78	-89.01	-35.52	95.84	0.027	-0.022	2.77	mwd
2661.00	18.90	199.50	2,647.35	115.56	-107.70	-42.01	115.60	0.019	0.011	1.94	mwd
2723.00	19.90	198.90	2,705.83	136.15	-127.15	-48.78	136.18	0.016	-0.010	1.64	mwd
2787.00	19.90	198.90	2,766.01	157.93	-147.76	-55.84	157.96	0.000	0.000	0.00	mwd
2850.00	19.90	199.20	2,825.25	179.38	-168.03	-62.84	179.39	0.000	0.005	0.16	mwd
2914.00	19.20	198.90	2,885.56	200.79	-188.27	-69.83	200.80	-0.011	-0.005	1.10	mwd
2977.00	18.80	199.50	2,945.12	221.30	-207.64	-76.57	221.31	-0.006	0.010	0.71	mwd
3040.00	18.90	198.80	3,004.74	241.65	-226.87	-83.25	241.66	0.002	-0.011	0.39	mwd
3104.00	19.70	199.50	3,065.15	262.80	-246.85	-90.19	262.81	0.013	0.011	1.30	mwd
3166.00	20.30	200.20	3,123.41	284.01	-266.79	-97.39	284.01	0.010	0.011	1.04	mwd
3230.00	19.60	201.30	3,183.57	305.84	-287.21	-105.12	305.85	-0.011	0.017	1.24	mwd
3294.00	19.10	201.30	3,243.95	327.04	-306.97	-112.83	327.05	-0.008	0.000	0.78	mwd
3356.00	18.50	201.70	3,302.64	347.01	-325.56	-120.15	347.02	-0.010	0.006	0.99	mwd
3420.00	18.60	202.00	3,363.32	367.36	-344.46	-127.73	367.38	0.002	0.005	0.22	mwd
3483.00	19.20	203.10	3,422.92	387.74	-363.30	-135.56	387.77	0.010	0.017	1.11	mwd
3546.00	18.90	202.70	3,482.47	408.27	-382.24	-143.56	408.31	-0.005	-0.006	0.52	mwd
3608.00	19.10	200.60	3,541.09	428.44	-401.00	-151.00	428.49	0.003	-0.034	1.15	mwd
3672.00	19.70	200.30	3,601.46	449.70	-420.92	-158.43	449.75	0.009	-0.005	0.95	mwd
3736.00	20.30	199.50	3,661.60	471.59	-441.50	-165.88	471.64	0.009	-0.013	1.03	mwd
3799.00	20.30	198.50	3,720.69	493.44	-462.17	-172.99	493.49	0.000	-0.016	0.55	mwd
3862.00	19.30	197.10	3,779.96	514.77	-482.49	-179.52	514.80	-0.016	-0.022	1.76	mwd
3926.00	19.10	197.80	3,840.40	535.80	-502.56	-185.83	535.82	-0.003	0.011	0.48	mwd
3989.00	19.60	197.10	3,899.84	556.66	-522.48	-192.09	556.67	0.008	-0.011	0.87	mwd
4053.00	20.20	197.10	3,960.02	578.42	-543.30	-198.50	578.42	0.009	0.000	0.94	mwd

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

Well: Indian Hills Unit #41

Target Azimuth: 199.76
Target TVD: 8450

Closure Direction: 200

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)
4116.00	19.90	196.70	4,019.20	599.99	-563.97	-204.78	599.99	-0.005	-0.006	0.52	mwd
4180.00	19.90	197.40	4,079.38	621.75	-584.79	-211.16	621.75	0.000	0.011	0.37	mwd
4244.00	18.90	198.80	4,139.75	642.99	-605.00	-217.76	642.99	-0.016	0.022	1.72	mwd
4307.00	18.90	198.80	4,199.35	663.40	-624.32	-224.34	663.40	0.000	0.000	0.00	mwd
4369.00	19.40	198.50	4,257.92	683.73	-643.59	-230.84	683.73	0.008	-0.005	0.82	mwd
4432.00	19.50	199.20	4,317.33	704.71	-663.44	-237.62	704.71	0.002	0.011	0.40	mwd
4496.00	19.70	197.40	4,377.62	726.17	-683.82	-244.36	726.17	0.003	-0.028	0.99	mwd
4559.00	19.90	198.10	4,436.89	747.49	-704.14	-250.86	747.50	0.003	0.011	0.49	mwd
4622.00	20.10	198.20	4,496.09	769.03	-724.62	-257.58	769.04	0.003	0.002	0.32	mwd
4686.00	20.50	197.80	4,556.12	791.23	-745.74	-264.44	791.23	0.006	-0.006	0.66	mwd
4749.00	20.00	197.80	4,615.23	813.02	-766.50	-271.10	813.03	-0.008	0.000	0.79	mwd
4813.00	19.90	198.50	4,675.38	834.85	-787.25	-277.90	834.86	-0.002	0.011	0.40	mwd
4876.00	19.90	197.80	4,734.62	856.28	-807.63	-284.58	856.30	0.000	-0.011	0.38	mwd
4939.00	19.70	197.40	4,793.90	877.61	-827.97	-291.04	877.63	-0.003	-0.006	0.38	mwd
5002.00	20.00	197.80	4,853.16	898.98	-848.36	-297.51	899.01	0.005	0.006	0.52	mwd
5072.00	19.80	198.50	4,918.98	922.80	-871.00	-304.93	922.83	-0.003	0.010	0.44	mwd
5134.00	19.50	198.80	4,977.36	943.65	-890.75	-311.59	943.68	-0.005	0.005	0.51	mwd
5197.00	18.70	199.90	5,036.90	964.26	-910.20	-318.42	964.29	-0.013	0.017	1.39	mwd
5260.00	18.50	199.90	5,096.61	984.35	-929.10	-325.26	984.39	-0.003	0.000	0.32	mwd
5324.00	18.80	198.80	5,157.25	1,004.82	-948.41	-332.04	1,004.85	0.005	-0.017	0.72	mwd
5386.00	19.10	198.80	5,215.88	1,024.95	-967.47	-338.53	1,024.98	0.005	0.000	0.48	mwd
5449.00	19.70	199.20	5,275.31	1,045.87	-987.25	-345.34	1,045.91	0.010	0.006	0.98	mwd
5513.00	19.30	198.10	5,335.64	1,067.23	-1,007.49	-352.17	1,067.27	-0.006	-0.017	0.85	mwd
5576.00	19.80	198.50	5,395.00	1,088.31	-1,027.51	-358.79	1,088.35	0.008	0.006	0.82	mwd
5640.00	20.20	199.50	5,455.14	1,110.19	-1,048.20	-365.92	1,110.24	0.006	0.016	0.82	mwd
5703.00	19.50	198.80	5,514.40	1,131.58	-1,068.41	-372.94	1,131.63	-0.011	-0.011	1.17	mwd
5765.00	18.20	198.80	5,573.07	1,151.61	-1,087.37	-379.40	1,151.66	-0.021	0.000	2.10	mwd
5828.00	17.90	197.80	5,632.97	1,171.13	-1,105.91	-385.53	1,171.18	-0.005	-0.016	0.68	mwd
5890.00	18.60	200.20	5,691.86	1,190.54	-1,124.26	-391.86	1,190.59	0.011	0.039	1.66	mwd
5954.00	18.50	201.30	5,752.53	1,210.89	-1,143.30	-399.07	1,210.94	-0.002	0.017	0.57	mwd
6018.00	18.20	202.00	5,813.28	1,231.03	-1,162.02	-406.50	1,231.07	-0.005	0.011	0.58	mwd
6080.00	18.30	199.20	5,872.16	1,250.44	-1,180.19	-413.33	1,250.48	0.002	-0.045	1.42	mwd
6144.00	18.90	198.10	5,932.82	1,270.85	-1,199.53	-419.85	1,270.89	0.009	-0.017	1.09	mwd
6207.00	19.60	197.10	5,992.29	1,291.60	-1,219.33	-426.13	1,291.65	0.011	-0.016	1.23	mwd
6271.00	19.50	196.00	6,052.60	1,312.98	-1,239.86	-432.23	1,313.04	-0.002	-0.017	0.60	mwd
6334.00	19.10	195.70	6,112.06	1,333.76	-1,259.89	-437.92	1,333.83	-0.006	-0.005	0.65	mwd
6398.00	18.90	197.10	6,172.58	1,354.56	-1,279.88	-443.80	1,354.64	-0.003	0.022	0.78	mwd
6462.00	18.60	198.50	6,233.18	1,375.12	-1,299.47	-450.09	1,375.21	-0.005	0.022	0.85	mwd
6526.00	18.80	198.10	6,293.80	1,395.63	-1,318.95	-456.53	1,395.72	0.003	-0.006	0.37	mwd
6589.00	18.50	198.10	6,353.49	1,415.77	-1,338.10	-462.79	1,415.87	-0.005	0.000	0.48	mwd
6651.00	18.40	196.70	6,412.31	1,435.37	-1,356.82	-468.66	1,435.48	-0.002	-0.023	0.73	mwd
6714.00	19.50	197.10	6,471.89	1,455.80	-1,376.39	-474.61	1,455.92	0.017	0.006	1.76	mwd
6777.00	19.30	200.30	6,531.32	1,476.72	-1,396.21	-481.31	1,476.84	-0.003	0.051	1.72	mwd
6839.00	18.80	199.60	6,589.92	1,496.95	-1,415.23	-488.22	1,497.07	-0.008	-0.011	0.89	mwd
6903.00	18.80	198.80	6,650.51	1,517.58	-1,434.71	-495.00	1,517.70	0.000	-0.012	0.40	mwd
6966.00	20.10	199.50	6,709.91	1,538.55	-1,454.52	-501.88	1,538.68	0.021	0.011	2.10	mwd
7030.00	20.30	198.80	6,769.97	1,560.65	-1,475.40	-509.13	1,560.77	0.003	-0.011	0.49	mwd
7093.00	19.50	199.90	6,829.21	1,582.09	-1,495.63	-516.23	1,582.22	-0.013	0.017	1.40	mwd
7156.00	18.50	201.30	6,888.78	1,602.60	-1,514.83	-523.44	1,602.72	-0.016	0.022	1.74	mwd
7220.00	18.20	200.90	6,949.53	1,622.74	-1,533.63	-530.70	1,622.85	-0.005	-0.006	0.51	mwd
7284.00	19.60	202.00	7,010.07	1,643.46	-1,552.92	-538.28	1,643.57	0.022	0.017	2.26	mwd
7348.00	21.20	203.10	7,070.06	1,665.74	-1,573.52	-546.85	1,665.83	0.025	0.017	2.57	mwd
7411.00	20.20	204.80	7,128.99	1,687.95	-1,593.87	-555.88	1,688.02	-0.016	0.027	1.85	mwd
7475.00	18.90	206.60	7,189.30	1,709.25	-1,613.17	-565.15	1,709.30	-0.020	0.028	2.24	mwd

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

Well: Indian Hills Unit #41

Target Azimuth: 199.76

Closure Direction: 200

Target TVD: 8450

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)
7539.00	17.80	208.70	7,250.05	1,729.21	-1,631.02	-574.49	1,729.24	-0.017	0.033	2.01	mwd
7603.00	17.60	209.40	7,311.02	1,748.41	-1,648.03	-583.94	1,748.42	-0.003	0.011	0.46	mwd
7666.00	17.00	209.00	7,371.17	1,766.89	-1,664.38	-593.08	1,766.89	-0.010	-0.006	0.97	mwd
7729.00	16.90	209.40	7,431.43	1,785.01	-1,680.42	-602.04	1,785.01	-0.002	0.006	0.24	mwd
7793.00	17.30	207.30	7,492.60	1,803.61	-1,696.98	-610.97	1,803.61	0.006	-0.033	1.15	mwd
7857.00	18.00	201.30	7,553.59	1,822.93	-1,714.65	-618.93	1,822.93	0.011	-0.094	3.04	mwd
7919.00	17.70	198.10	7,612.61	1,841.93	-1,732.53	-625.34	1,841.93	-0.005	-0.052	1.65	mwd
7983.00	17.20	197.10	7,673.66	1,861.11	-1,750.82	-631.14	1,861.11	-0.008	-0.016	0.91	mwd
8045.00	17.00	197.80	7,732.92	1,879.32	-1,768.21	-636.61	1,879.32	-0.003	0.011	0.46	mwd
8108.00	16.50	198.10	7,793.25	1,897.47	-1,785.49	-642.20	1,897.47	-0.008	0.005	0.81	mwd
8800.00	16.50	198.00	8,456.75	2,093.92	-1,972.35	-703.10	2,093.93	0.000	0.000	0.00	proj



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

Well Name and Number: Indian Hills Unit # 41

Location: Sec 16, 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	319	19 ¼	3294	18 ½	5954
¼	624	19 ¾	3608	18 ¼	6080
½	933	20 ½	3799	19 ½	6271
½	1239	18 ¾	4307	18 ½	6589
½	1552	19 ¾	4496	21 ¼	7347
¾	1777	20	4622	17 ¾	7539
3 ½	2028	19 ¾	4813	17	7665
4 ¼	2091	19 ¾	4939	18 ¼	7855
5 ¼	2155	20	5002	16 ½	8108
¼	2281	18 ½	5260		
16	2535	19	5386		
19 ¾	2850	20 ¼	5640		
19 ¾	3104	17 ¾	5828		

RECEIVED

APR 08 2004

OGB-ARTESIA

Drilling Contractor: McVay Drilling Company

By: [Signature]

Subscribed and sworn to before me this 25th day of November, 2003

[Signature]
Notary Public

My Commission Expires: 8-16-05

Lea County, New Mexico