

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

FEB 18 2005

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.

~~OOD-ARTESIA~~

5. Lease Serial No.
NMNM07260

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

7. If Unit or CA/Agreement, Name and/or No.
NMNM70964X

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
INDIAN HILLS UNIT 59

2. Name of Operator
MARATHON OIL COMPANY

Contact: CHARLES E KENDRIX
E-Mail: CEKENDRIX@MARATHONOIL.COM

9. API Well No.
30-015-33759-00-S1

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

3b. Phone No. (include area code)
Ph: 713-296-2096
Fx: 713-499-6750

10. Field and Pool, or Exploratory
UPPER PENN

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

Sec 20 T21S R24E NENE Lot 1 1117FNL 641FEL
32.28072 N Lat, 104.30515 W Lon

FEB 18 2005

~~OOD-ARTESIA~~

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			
☐ 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	Production Start-up
	☐ 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 site is ready for final inspection.)

Marathon Oil has completed work to put the Indian Hills Unit No. 59 on produciton. Please see attachment for details of well work performed.

14. I hereby certify that the foregoing is true and correct.	
Electronic Submission #54058 verified by the BLM Well Information System For MARATHON OIL COMPANY, sent to the Carlsbad Committed to AFMSS for processing by LINDA ASKWIG on 02/14/2005 (05LA0383SE)	
Name (Printed/Typed) CHARLES E KENDRIX	Title ENGINEERING TECHNICIAN
Signature (Electronic Submission)	Date 02/14/2005

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By ACCEPTED	Title LES BABYAK PETROLEUM ENGINEER	Date 02/16/2005
	Office Carlsbad	

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.

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.

Indian Hills Unit No. 59

Well completion work

- 01/17/2005** Moved in rigged up pulling unit. RIH w/ bit, scraper, and 6 -4 ¾" drill collars, and 271 jts 2 7/8" tubing. SI
- 01/18/2005** RIH tagged top of liner @ 8774'. Dressed off liner and circulated clean. Pickled tubing and casing w/ 1000 gals HCL reverse circulate clean. Laid down drill collars, scraper, and bit. SI
- 01/19/2005 & 01/20/2005** Rigged up wireline and set bridge plug @ 8744'. Rigged up lubricator and tested to 1000 psi. See Perforation details below:

Top	Bottom	Interval	Gun Number	Shots/ft
8063'	8105'	42'	1,2	4
8109'	8125'	16'	3	4
8140'	8157'	17'	4	4
8168'	8190'	22'	5	4
8195'	8296'	101'	6,7,8,9,10	4
8307'	8492'	185'	11,12,13,14 15,16,17,18	4
Totals:		383'	18 guns	1532

- Picked up 7" PPI packers w/ 2' spacing and MCL. RIH t/ first setting @ 8494'. Set and tested packers. Pick up hole to 8030' set packer. SI
- 01/21/2005** Acidized perfs in 93 - 2' spacings w/ PPI packers w/ 37,400 gals 15% CCA sour acid. Flushed acid, fished retrievable fluid control valve. SI
- 01/22/2005** Acidized remaining 103 - 2" spacings w/ PPI packers w/ 40,200 gals 15% CCA sour acid. 77,600 gallons acid for job. Over flushed w/ fresh water. Rigged up swab line fished fluid control valve and standing valve. PUH 2 stands of tubing. Left packer swinging. SI
- 01/24/2005** Blew down well. POOH w/ packers. RIH w/ sub-pump on 2 7/8" tubing. Installed collar clamps on bottom 100 joints. Nipple up well head. Pump would not start. SI
- 01/25/2005** Blew down well. Nipple down well head. Nipple up BOP. POH w/ hanger checked pigtail. Pump grounded down hole. POOH w/ 2 7/8" tubing and pump. Motor lead had been rubbing on casing. Bands missing on 50 % of the 75 joints above cable clamps. Ordered more cable clamps. RIH w/ kill string and SI.
- 01/26/2005** POOH w/ killstring. PU assemble pump. RIH w/ pump on 272 joints 2 7/8" tubing, bottom of tubing @ 8521', bottom of pump @ 8653'. Two coil tubing strings for chemical treating set @ 8135' & 8420'. Hooked up well head and put well to pumping. First production date 01/27/2005.

RECEIVED
FEB 16 2005
OCD-ARTESIA

000-ARTESIA

FEB 16 2005

RECEIVED

Marathon Oil Company
IHU 59

slot #1
Indian Basin
EDDY COUNTY, NM.

SURVEY LISTING

by
Baker Hughes INTEQ

Your ref : MWD
Our ref : svy2619
License :

Date printed : 8-Feb-2005
Date created : 26-Jun-2004
Last revised : 1-Feb-2005

Field is centred on n32 30 0.000,w104 30 0
Structure is centred on 444189.700,534264.900,999.00000,N

Slot location is n32 28 7.234,w104 30 51.466
Slot Grid coordinates are N 534264.900, E 444189.700
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 59, slot #1
Indian Basin, EDDY COUNTY, NM.

SURVEY LISTING Page 1
Your ref : MWD
Last revised : 1-Feb-2005

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 C O O R D S Easting Northing	
0.00	0.00	269.00	0.00	0.00N	0.00E	0.00	0.00	444189.70	534264.90
155.00	0.50	54.00	155.00	0.40N	0.55E	0.32	0.08	444190.25	534265.30
311.00	0.75	162.00	310.99	0.17S	1.41E	0.66	1.09	444191.11	534264.73
465.00	0.90	172.00	464.98	2.33S	1.89E	0.13	3.00	444191.59	534262.57
619.00	0.80	179.00	618.96	4.60S	2.08E	0.09	4.79	444191.78	534260.30
769.00	0.90	154.00	768.94	6.71S	2.61E	0.25	6.70	444192.31	534258.19
922.00	1.00	181.00	921.92	9.12S	3.12E	0.30	8.81	444192.82	534255.78
1076.00	1.00	152.00	1075.90	11.65S	3.73E	0.33	11.08	444193.43	534253.25
1230.00	1.00	214.00	1229.88	13.95S	3.61E	0.67	12.68	444193.31	534250.95
1389.00	0.80	227.00	1388.86	15.86S	2.02E	0.18	13.00	444191.72	534249.04
1539.00	1.10	238.00	1538.84	17.34S	0.03E	0.23	12.73	444189.73	534247.56
1699.00	1.00	269.00	1698.82	18.18S	2.67W	0.36	11.51	444187.03	534246.72
1843.00	0.88	264.20	1842.80	18.31S	5.02W	0.10	10.00	444184.68	534246.59
1875.00	0.62	267.40	1874.79	18.34S	5.44W	0.82	9.74	444184.26	534246.56
1907.00	0.62	217.80	1906.79	18.49S	5.72W	1.63	9.66	444183.98	534246.41
1938.00	1.10	188.30	1937.79	18.91S	5.87W	2.06	9.87	444183.83	534245.99
1970.00	1.80	155.00	1969.78	19.67S	5.70W	3.34	10.54	444184.00	534245.23
2002.00	2.50	150.90	2001.76	20.74S	5.15W	2.24	11.70	444184.55	534244.16
2034.00	3.50	144.30	2033.71	22.14S	4.24W	3.30	13.35	444185.46	534242.76
2066.00	4.70	137.00	2065.63	23.89S	2.77W	4.08	15.63	444186.93	534241.01
2098.00	5.50	136.60	2097.50	25.97S	0.83W	2.50	18.47	444188.87	534238.93
2129.00	6.10	135.60	2128.34	28.22S	1.35E	1.96	21.60	444191.05	534236.68
2161.00	6.90	136.30	2160.14	30.83S	3.87E	2.51	25.22	444193.57	534234.07
2193.00	7.00	134.50	2191.90	33.58S	6.58E	0.75	29.09	444196.28	534231.32
2225.00	7.40	129.90	2223.65	36.27S	9.56E	2.19	33.09	444199.26	534228.63
2257.00	8.20	131.70	2255.35	39.11S	12.84E	2.61	37.40	444202.54	534225.79
2286.00	9.00	133.40	2284.03	42.05S	16.03E	2.89	41.72	444205.73	534222.85
2318.00	9.90	130.60	2315.59	45.56S	19.94E	3.16	46.96	444209.64	534219.34
2350.00	10.50	132.70	2347.09	49.33S	24.17E	2.21	52.60	444213.87	534215.57
2382.00	11.30	130.90	2378.51	53.36S	28.68E	2.72	58.62	444218.38	534211.54
2413.00	12.10	130.20	2408.87	57.44S	33.46E	2.62	64.86	444223.16	534207.46
2445.00	12.90	129.90	2440.11	61.90S	38.76E	2.51	71.74	444228.46	534203.00
2477.00	14.00	128.50	2471.23	66.60S	44.53E	3.58	79.11	444234.23	534198.30
2508.00	14.60	128.80	2501.27	71.38S	50.51E	1.95	86.68	444240.21	534193.52
2540.00	15.50	127.00	2532.17	76.48S	57.07E	3.17	94.88	444246.77	534188.42
2571.00	16.00	127.40	2562.01	81.57S	63.77E	1.65	103.17	444253.47	534183.33
2634.00	16.50	127.80	2622.49	92.33S	77.74E	0.81	120.56	444267.44	534172.57
2697.00	17.20	127.40	2682.78	103.47S	92.21E	1.13	138.56	444281.91	534161.43
2760.00	17.40	127.40	2742.93	114.85S	107.09E	0.32	157.03	444296.79	534150.05
2823.00	17.00	127.80	2803.12	126.21S	121.85E	0.66	175.40	444311.55	534138.69
2886.00	15.80	128.50	2863.55	137.20S	135.84E	1.93	192.97	444325.54	534127.70
2949.00	15.60	128.50	2924.20	147.81S	149.18E	0.32	209.83	444338.88	534117.09
3012.00	16.10	129.20	2984.81	158.60S	162.58E	0.85	226.85	444352.28	534106.30
3076.00	16.80	128.50	3046.19	169.97S	176.70E	1.14	244.79	444366.40	534094.93
3138.00	16.40	128.80	3105.60	181.03S	190.53E	0.66	262.30	444380.23	534083.87
3202.00	15.90	132.30	3167.08	192.59S	204.06E	1.71	279.98	444393.76	534072.31
3266.00	16.20	133.70	3228.58	204.66S	217.00E	0.77	297.63	444406.70	534060.24
3329.00	16.70	134.80	3289.01	217.11S	229.77E	0.94	315.45	444419.47	534047.79
3392.00	17.10	134.80	3349.28	230.02S	242.77E	0.63	333.74	444432.47	534034.88
3455.00	17.00	136.20	3409.52	243.19S	255.72E	0.67	352.21	444445.42	534021.71

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 2318.09 on azimuth 137.87 degrees from wellhead.

Vertical section is from N 0.00 E 0.00 on azimuth 137.13 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 59, slot #1
Indian Basin, EDDY COUNTY, NM.

SURVEY LISTING Page 2
Your ref : MWD
Last revised : 1-Feb-2005

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 C O O R D S Easting Northing	
3518.00	16.30	137.60	3469.87	256.37S	268.05E	1.28	370.26	444457.75	534008.53
3582.00	16.70	135.90	3531.24	269.60S	280.51E	0.98	388.43	444470.21	533995.30
3645.00	16.70	136.20	3591.58	282.64S	293.07E	0.14	406.53	444482.77	533982.26
3708.00	16.90	136.90	3651.89	295.86S	305.59E	0.45	424.74	444495.29	533969.04
3772.00	17.10	136.20	3713.10	309.44S	318.46E	0.45	443.45	444508.16	533955.46
3836.00	17.50	136.60	3774.20	323.22S	331.59E	0.65	462.48	444521.29	533941.68
3898.00	17.40	137.60	3833.35	336.84S	344.24E	0.51	481.07	444533.94	533928.06
3961.00	17.20	138.70	3893.50	350.80S	356.74E	0.61	499.80	444546.44	533914.10
4025.00	16.00	139.40	3954.83	364.60S	368.73E	1.90	518.08	444558.43	533900.30
4087.00	15.30	141.10	4014.53	377.46S	379.43E	1.35	534.77	444569.13	533887.44
4150.00	16.20	140.80	4075.16	390.74S	390.20E	1.43	551.84	444579.90	533874.16
4214.00	16.30	139.70	4136.61	404.50S	401.65E	0.51	569.72	444591.35	533860.40
4277.00	16.80	138.70	4197.00	418.09S	413.38E	0.91	587.65	444603.08	533846.81
4341.00	16.80	138.30	4258.27	431.94S	425.64E	0.18	606.15	444615.34	533832.96
4405.00	16.80	139.70	4319.54	445.90S	437.77E	0.63	624.63	444627.47	533819.00
4467.00	16.70	138.70	4378.90	459.43S	449.45E	0.49	642.49	444639.15	533805.47
4531.00	16.70	139.70	4440.21	473.35S	461.46E	0.45	660.87	444651.16	533791.55
4594.00	16.70	139.70	4500.55	487.15S	473.17E	0.00	678.95	444662.87	533777.75
4657.00	16.70	140.80	4560.89	501.07S	484.75E	0.50	697.03	444674.45	533763.83
4720.00	16.70	139.40	4621.23	514.96S	496.36E	0.64	715.11	444686.06	533749.94
4781.00	16.30	139.70	4679.72	528.14S	507.60E	0.67	732.42	444697.30	533736.76
4845.00	16.50	138.30	4741.12	541.78S	519.46E	0.69	750.47	444709.16	533723.12
4908.00	16.60	138.00	4801.51	555.15S	531.43E	0.21	768.42	444721.13	533709.75
4971.00	16.20	139.00	4861.95	568.47S	543.22E	0.78	786.20	444732.92	533696.43
5035.00	15.80	138.70	4923.47	581.75S	554.82E	0.64	803.83	444744.52	533683.15
5098.00	16.00	139.70	4984.06	594.82S	566.10E	0.54	821.08	444755.80	533670.08
5168.00	16.40	139.00	5051.28	609.63S	578.82E	0.64	840.59	444768.52	533655.27
5231.00	17.10	138.30	5111.60	623.26S	590.82E	1.16	858.74	444780.52	533641.64
5294.00	18.00	137.30	5171.67	637.33S	603.58E	1.51	877.74	444793.28	533627.57
5357.00	18.10	135.80	5231.57	651.50S	617.01E	0.75	897.26	444806.71	533613.40
5419.00	17.40	136.90	5290.62	665.17S	630.06E	1.25	916.15	444819.76	533599.73
5483.00	16.60	136.90	5351.82	678.84S	642.84E	1.25	934.87	444832.54	533586.06
5546.00	16.30	135.80	5412.24	691.74S	655.15E	0.69	952.70	444844.85	533573.16
5609.00	16.30	136.60	5472.71	704.51S	667.39E	0.36	970.38	444857.09	533560.39
5672.00	15.90	137.30	5533.24	717.27S	679.32E	0.71	987.85	444869.02	533547.63
5736.00	16.10	136.20	5594.76	730.12S	691.41E	0.57	1005.49	444881.11	533534.78
5799.00	16.90	135.20	5655.17	742.92S	703.90E	1.35	1023.38	444893.60	533521.98
5861.00	17.50	134.50	5714.39	755.85S	716.90E	1.02	1041.70	444906.60	533509.05
5925.00	16.50	135.10	5775.60	769.03S	730.18E	1.59	1060.39	444919.88	533495.87
5988.00	15.50	136.20	5836.15	781.45S	742.32E	1.66	1077.75	444932.02	533483.45
6057.00	14.70	135.80	5902.77	794.38S	754.81E	1.17	1095.72	444944.51	533470.52
6115.00	14.80	136.90	5958.86	805.06S	765.00E	0.51	1110.49	444954.70	533459.84
6177.00	15.30	136.60	6018.73	816.79S	776.03E	0.82	1126.59	444965.73	533448.11
6241.00	15.90	135.80	6080.38	829.21S	787.95E	1.00	1143.80	444977.65	533435.69
6304.00	16.30	134.40	6140.90	841.58S	800.28E	0.88	1161.25	444989.98	533423.32
6368.00	16.30	134.10	6202.33	854.12S	813.15E	0.13	1179.19	445002.85	533410.78
6430.00	16.90	134.10	6261.75	866.44S	825.87E	0.97	1196.88	445015.57	533398.46
6493.00	16.80	134.80	6322.04	879.23S	838.90E	0.36	1215.12	445028.60	533385.67
6557.00	16.30	133.40	6383.39	891.92S	851.99E	1.00	1233.33	445041.69	533372.98
6620.00	16.30	133.70	6443.86	904.10S	864.81E	0.13	1250.97	445054.51	533360.80

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 2318.09' on azimuth 137.87 degrees from wellhead.
Vertical section is from N 0.00 E 0.00 on azimuth 137.13 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 59, slot #1
Indian Basin, EDDY COUNTY, NM.

SURVEY LISTING Page 3
Your ref : MWD
Last revised : 1-Feb-2005

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
6683.00	16.60	134.50	6504.28	916.52S	877.62E	0.60	1268.79	445067.32	533348.38
6746.00	17.10	134.80	6564.58	929.35S	890.61E	0.81	1287.03	445080.31	533335.55
6810.00	17.40	135.50	6625.70	942.81S	903.99E	0.57	1306.00	445093.69	533322.09
6873.00	17.70	135.10	6685.76	956.31S	917.35E	0.51	1324.99	445107.05	533308.59
6937.00	17.60	135.10	6746.75	970.05S	931.05E	0.16	1344.38	445120.75	533294.85
7001.00	17.50	133.70	6807.77	983.56S	944.84E	0.68	1363.66	445134.54	533281.34
7065.00	17.10	134.40	6868.88	996.79S	958.52E	0.70	1382.66	445148.22	533268.11
7129.00	17.10	135.50	6930.05	1010.08S	971.84E	0.51	1401.46	445161.54	533254.82
7191.00	17.60	135.50	6989.23	1023.27S	984.79E	0.81	1419.95	445174.49	533241.63
7255.00	18.00	135.50	7050.16	1037.22S	998.51E	0.63	1439.50	445188.21	533227.68
7319.00	17.90	135.90	7111.05	1051.34S	1012.28E	0.25	1459.22	445201.98	533213.56
7381.00	16.60	139.10	7170.26	1064.88S	1024.71E	2.60	1477.60	445214.41	533200.02
7445.00	15.50	141.00	7231.76	1078.43S	1036.08E	1.90	1495.27	445225.78	533186.47
7508.00	14.90	141.10	7292.56	1091.28S	1046.46E	0.95	1511.75	445236.16	533173.62
7572.00	15.20	138.30	7354.37	1103.95S	1057.21E	1.23	1528.34	445246.91	533160.95
7635.00	15.40	136.90	7415.13	1116.22S	1068.42E	0.67	1544.97	445258.12	533148.68
7697.00	16.00	135.50	7474.82	1128.33S	1080.04E	1.14	1561.74	445269.74	533136.57
7761.00	16.80	136.50	7536.22	1141.33S	1092.59E	1.33	1579.80	445282.29	533123.57
7824.00	16.40	139.00	7596.59	1154.64S	1104.69E	1.30	1597.80	445294.39	533110.26
7888.00	16.40	139.70	7657.99	1168.35S	1116.46E	0.31	1615.85	445306.16	533096.55
7952.00	16.10	140.80	7719.43	1182.12S	1127.91E	0.67	1633.74	445317.61	533082.78
8015.00	15.50	141.80	7780.05	1195.51S	1138.64E	1.05	1650.84	445328.34	533069.39
8174.00	16.90	143.20	7932.73	1230.71S	1165.62E	0.91	1695.00	445355.32	533034.19
8300.00	18.40	144.10	8052.80	1261.48S	1188.26E	1.21	1732.95	445377.96	533003.42
8400.00	18.30	145.00	8147.71	1287.13S	1206.51E	0.30	1764.17	445396.21	532977.77
8500.00	17.70	146.00	8242.82	1312.59S	1224.02E	0.67	1794.74	445413.72	532952.31
8600.00	18.50	148.20	8337.87	1338.68S	1240.88E	1.05	1825.34	445430.58	532926.22
8700.00	18.20	147.30	8432.79	1365.30S	1257.68E	0.41	1856.28	445447.38	532899.60
8800.00	17.70	146.60	8527.92	1391.14S	1274.48E	0.54	1886.64	445464.18	532873.76
8900.00	17.90	146.50	8623.13	1416.64S	1291.33E	0.20	1916.80	445481.03	532848.26
8984.00	18.30	146.30	8702.98	1438.38S	1305.78E	0.48	1942.56	445495.48	532826.52
9046.00	17.10	143.90	8762.04	1453.84S	1316.55E	2.26	1961.22	445506.25	532811.06
9109.00	15.70	141.80	8822.48	1468.03S	1327.28E	2.41	1978.91	445516.98	532796.87
9173.00	14.70	138.30	8884.24	1480.90S	1338.03E	2.12	1995.66	445527.73	532784.00
9236.00	15.40	137.60	8945.08	1493.04S	1348.99E	1.15	2012.02	445538.69	532771.86
9300.00	15.90	137.90	9006.70	1505.82S	1360.60E	0.79	2029.28	445550.30	532759.08
9363.00	16.90	137.20	9067.14	1518.94S	1372.61E	1.62	2047.07	445562.31	532745.96
9426.00	16.90	133.40	9127.42	1531.95S	1385.48E	1.75	2065.36	445575.18	532732.95
9489.00	17.10	128.80	9187.67	1544.05S	1399.36E	2.16	2083.67	445589.06	532720.85
9553.00	15.60	126.00	9249.08	1555.01S	1413.65E	2.65	2101.42	445603.35	532709.89
9615.00	14.50	124.20	9308.95	1564.27S	1426.82E	1.93	2117.17	445616.52	532700.63
9678.00	13.30	126.40	9370.11	1573.00S	1439.17E	2.08	2131.98	445628.87	532691.90
9741.00	13.10	127.40	9431.44	1581.64S	1450.68E	0.48	2146.13	445640.38	532683.26
9805.00	13.30	130.90	9493.75	1590.86S	1462.00E	1.29	2160.60	445651.70	532674.04
9869.00	13.10	134.10	9556.06	1600.73S	1472.78E	1.18	2175.16	445662.48	532664.17
9932.00	13.40	134.10	9617.39	1610.78S	1483.15E	0.48	2189.58	445672.85	532654.12
9995.00	13.50	133.00	9678.66	1620.88S	1493.77E	0.44	2204.20	445683.47	532644.02
10059.00	13.50	135.10	9740.89	1631.26S	1504.50E	0.77	2219.12	445694.20	532633.64
10122.00	13.50	135.50	9802.15	1641.72S	1514.85E	0.15	2233.82	445704.55	532623.18
10216.00	12.00	139.40	9893.83	1656.96S	1528.90E	1.84	2254.55	445718.60	532607.94

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 2318.09 on azimuth 137.87 degrees from wellhead.

Vertical section is from N 0.00 E 0.00 on azimuth 137.13 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 59,slot #1
Indian Basin,EDDY COUNTY, NM.

SURVEY LISTING Page 4
Your ref : MWD
Last revised : 1-Feb-2005

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 C O O R D S Easting Northing	
10312.00	10.90	142.90	9987.92	1671.78S	1540.87E	1.35	2273.56	445730.57	532593.12
10408.00	10.10	152.90	10082.32	1686.51S	1550.18E	2.07	2290.69	445739.88	532578.39
10503.00	12.00	173.00	10175.59	1703.74S	1555.18E	4.49	2306.72	445744.88	532561.16
10575.00	13.00	188.00	10245.90	1719.19S	1554.96E	4.70	2317.89	445744.66	532545.71

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 2318.09 on azimuth 137.87 degrees from wellhead.
Vertical section is from N 0.00 E 0.00 on azimuth 137.13 degrees.
Grid is mercator - New Mexico East (3001).
Grid coordinates in FEET and computed using the Clarke - 1866 spheroid
Presented by Baker Hughes INTEQ