

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB NO. 1004-0137
Expires March 31, 2007

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 3487 Houston, TX 77253-3487

3b. Phone No. (include area code)

713-296-3546

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

SHL UL"A", 705'FNL & 855'FEL, Sec 28, T-21-S, R-24-E

BHL UL"H", 2586'FNL & 1049' FEL, Sec 28, T-21-S, R-24-E (New BHL)

5. Lease Serial No.

NM - 06293

6. If Indian, Allottee or Tribe Name

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

Indian Hills Unit

NNM 70964 A

8. Well Name and No.

Indian Hills Unit No. 49

9. API Well No.

30-015-32723

10. Field and Pool, or Exploratory Area

Indian Basin Upper Penn
Associated (33685)

11. County or Parish, State

Eddy

NM

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

TYPE OF SUBMISSION

☐ Notice of Intent

☒ Subsequent Report

☐ Final Abandonment Notice

TYPE OF ACTION

☐ Acidize

☐ Alter Casing

☐ Casing Repair

☐ Change Plans

☐ Convert to Injection

☐ Deepen

☐ Fracture Treat

☐ New Construction

☐ Plug and Abandon

☐ Plug Back

☐ Production (Start/Resume)

☐ Reclamation

☐ Recomplete

☐ Temporarily Abandon

☐ Water Disposal

☐ Water Shut-Off

☐ Well Integrity

☒ Other Drill to

New Bottom Hole

Location

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.)

Marathon Oil Company has completed operations to drill the Indian Hills Unit No. 49 to a new bottom hole location. Please see the attachment for details of work performed.

New Mexico OCD order, NSL -4638-B, allows for the non-standard bottom hole location for the Indian Hills Unit No. 49 as it has been drilled in the lay down 320 acre spacing on the north half of Section 28.

ACCEPTED FOR RECORD

DEC 28 2005

ALEXIS C. SWOBODA
PETROLEUM ENGINEER

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

Frank M. Krugh

Title

Reg. Compl. Rep. III

Date

12/15/2005

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.

Indian Hills Unit No. 49

Drill to new BHL

- 09/16/2004** Picked up mill assembly. TIH w/ mills picking up drill pipe. Tagged CIBP @ 7675' (pipe measurement +5' to wireline setting) TIH w/ mills. Picked up whipstock assembly. RIH w/ whipstock.
- 09/17/2004** Orient whipstock to 195.7 °. Set whipstock, top @ 7664'. Mill out 7662' to 7663.4' w/ starter mill. POOH pick up watermelon mill. RIH mill out window from 7664 to 7677'. Window is 7662' to 7677 (15 ft) Mill & pump poly sweep to clean up window. POOH w/ lay down mills. TIH w/ directional drilling assembly.
- 09/18/2004** Drill open slide, build curve from 7677' to 7754'. Lost returns @ 7752'. Trip for motor. Turn curve angle setting down on motor. RIH w/ drilling assembly pump pressure on annulus increases f/ 35# to 10353#. Drill open slide with no returns f/ 7754' to 7828'. Work string up and down to move cuttings. Annulus pressure at 1750#. Ran out of water POOH 5 jts to wait on water.
- 09/19/2004** Hauled in 3 loads water. RIH f/ 7828'. Slide drill f/ 7828' to 7892' w/o returns. Trip for motor. Drill f/ 7892' to 7953'. Returns slight and increasing. Short trip to window circulating. RIH Drill open hole f/ 7953' to 7984'. Pumped 8 bbls acid, 1 gal EZ mud, 10 bbls gel to sweep hole. Annular pressure 3662#.
- 09/20/2004** Drill f/ 7984' to 8016'. Circ w/ 70% returns or less. Drill f/ 8016' to 8047'. Wiper trip to window. Drill f/ 8047' to 8110'. Wiper trip to Window. Drill f/ 8110' to 8173'. Wiper trip. Drill f/ 8173' to 8239'. Lost signal to MWD. Pumping gel and 8 bbls acid between wiper trips. POOH to run Precision drilling antenna.
- 09/21/2004** Laid down emitter sub. P/u extended range EM configuration. Change out battery pack in MWD tool. RIH w/ drilling string to 7100' R/u Precision Drilling wnc and run wireline antenna. Cont. in hole w/ drilling assembly to 8239'. Drill f/ 8239' to 8291'. Pump EZ mud and gel sweeps. Spot 10 bbls acid. Made wiper trip. RIH drill f/ 8291' to 8354'. Pumped EZ mud and gel sweeps. Spot 8 bbls acid. Made wiper trip. Drill f/ 8354' to 8432'. Pumped EZ mud and gel sweeps. Spot 8 bbls acid. Made wiper trip. RIH tagged up @ 8375'. Wash / reamed through ledges to 8432'. Drilled f/ 8432' to 8512'. Pumped EZ mud and 10 bbl gel sweeps. Spot 8 bbls acid. Made wiper trip.
- 09/22/2004** RIH tagged tight spot and reamed out at 8405'. Cont. in hole to 8512'. Drill f/ 8512' to 8589'. Pumped EZ mud and 10 bbl gel sweep. Spot 10

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- 09/22/2004** RIH tagged tight spot and reamed out at 8405'. Cont. in hole to 8512'. Drill f/ 8512' to 8589'. Pumped EZ mud and 10 bbl gel sweep. Spot 10

bbls acid. Made wiper trip. Drill f/ 8589' to 8668'. Pumped EZ mud and 10 bbl gel sweeps. Made wiper trip. Drill f/ 8668' to 8746'. Pumped EZ mud and 10 bbl gel sweeps. Spot 10 bbl acid. Made wiper trip. RIH drill f/ 8746' to 8827'. Pumped EZ mud and 10 bbl gel sweep. Spot 10 bbls acid. Made wiper trip. RIH drill f/ 8827' to 8857' pumping EZ mud and 10 gel sweep. Pumped 56 bbls acid. POOH layed down motor and drilling assembly.

09/23/2004 RIH w/ whipstock retrieving tool and pull whipstock. POOH w/ whipstock and tools laid down. TIH and POH laying down drill pipe. RIH w/ 1007' of 2 7/8" AOH drill pipe w/ muleshoe, X/O, and 2 7/8" tubing. Land muleshoe in curve @ 7814'. Remove flow line. Set tubing slips on hydril. Closed pipe rams and locked down. Install tubing valve. Secured well and released rig.

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Marathon Oil Company
Indian Hills Unit #49

slot #1
INDIAN BASIN
Eddy County New Mexico

S U R V E Y L I S T I N G

by
Baker Hughes INTEQ

Your ref : ST MWD
Our ref : svy2597
License :

Date printed : 26-May-2005
Date created : 20-May-2004
Last revised : 22-Sep-2004

Field is centred on 445535.500,521332.200,-105.00000,N
Structure is centred on 449622.000,529566.600,-105.00000,N

Slot location is n32 27 20.826,w104 29 47.972
Slot Grid coordinates are N 529566.600, E 449622.000
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
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Marathon Oil Company
Indian Hills Unit #49, slot #1
INDIAN BASIN, Eddy County New Mexico

SURVEY LISTING Page 1
Your ref : ST MWD
Last revised : 22-Sep-2004

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
0.00	0.00	0.00	0.00	0.00N	0.00E	0.00	0.00	449622.00 529566.60
100.00	0.16	240.10	100.00	0.07S	0.12W	0.16	0.08	449621.88 529566.53
200.00	0.16	240.04	200.00	0.21S	0.36W	0.00	0.24	449621.64 529566.39
300.00	0.03	180.97	300.00	0.30S	0.48W	0.15	0.35	449621.52 529566.30
400.00	0.01	52.83	400.00	0.33S	0.48W	0.04	0.37	449621.52 529566.27
500.00	0.18	307.11	500.00	0.23S	0.60W	0.18	0.28	449621.40 529566.37
600.00	0.22	71.40	600.00	0.07S	0.54W	0.35	0.12	449621.46 529566.53
700.00	0.37	78.06	700.00	0.06N	0.04W	0.15	-0.05	449621.96 529566.66
800.00	0.52	93.75	799.99	0.10N	0.73E	0.19	-0.16	449622.73 529566.70
900.00	0.63	97.98	899.99	0.01S	1.72E	0.12	-0.15	449623.72 529566.59
1000.00	0.52	92.34	999.98	0.11S	2.72E	0.12	-0.14	449624.72 529566.49
1100.00	0.49	100.30	1099.98	0.20S	3.60E	0.08	-0.13	449625.60 529566.40
1200.00	0.58	119.06	1199.98	0.52S	4.46E	0.20	0.12	449626.46 529566.08
1300.00	0.64	140.56	1299.97	1.20S	5.26E	0.24	0.72	449627.26 529565.40
1400.00	0.67	157.08	1399.96	2.17S	5.84E	0.19	1.63	449627.84 529564.43
1500.00	0.73	172.41	1499.96	3.34S	6.15E	0.20	2.77	449628.15 529563.26
1600.00	0.80	161.02	1599.95	4.63S	6.46E	0.17	4.03	449628.46 529561.97
1700.00	0.71	160.74	1699.94	5.88S	6.89E	0.09	5.23	449628.89 529560.72
1800.00	0.42	137.44	1799.93	6.73S	7.35E	0.36	6.04	449629.35 529559.87
1900.00	0.31	88.53	1899.93	6.99S	7.86E	0.32	6.25	449629.86 529559.61
2000.00	0.27	314.42	1999.93	6.82S	7.97E	0.53	6.07	449629.97 529559.78
2100.00	0.38	95.59	2099.93	6.69S	8.13E	0.61	5.93	449630.13 529559.91
2200.00	0.44	139.40	2199.93	7.01S	8.71E	0.31	6.20	449630.71 529559.59
2300.00	0.59	141.46	2299.93	7.71S	9.28E	0.15	6.84	449631.28 529558.89
2400.00	0.38	148.88	2399.92	8.39S	9.77E	0.22	7.47	449631.77 529558.21
2500.00	0.47	175.99	2499.92	9.09S	9.97E	0.22	8.15	449631.97 529557.51
2600.00	0.77	217.62	2599.91	10.03S	9.59E	0.52	9.12	449631.59 529556.57
2700.00	0.76	217.31	2699.90	11.09S	8.78E	0.01	10.25	449630.78 529555.51
2800.00	0.86	217.79	2799.89	12.21S	7.92E	0.10	11.44	449629.92 529554.39
2900.00	0.90	212.27	2899.88	13.47S	7.04E	0.09	12.77	449629.04 529553.13
3000.00	1.00	214.28	2999.87	14.85S	6.13E	0.11	14.24	449628.13 529551.75
3100.00	0.93	207.88	3099.85	16.29S	5.25E	0.13	15.75	449627.25 529550.31
3200.00	1.20	208.55	3199.84	17.93S	4.37E	0.27	17.46	449626.37 529548.67
3300.00	1.60	207.08	3299.81	20.09S	3.24E	0.40	19.71	449625.24 529546.51
3330.00	1.46	200.16	3329.80	20.82S	2.92E	0.77	20.47	449624.92 529545.78
3458.00	1.76	218.60	3457.75	23.89S	1.13E	0.46	23.69	449623.13 529542.71
3521.00	2.00	213.70	3520.71	25.56S	0.09W	0.46	25.46	449621.91 529541.04
3583.00	2.90	203.40	3582.66	27.90S	1.31W	1.61	27.90	449620.69 529538.70
3647.00	3.50	200.60	3646.56	31.21S	2.64W	0.97	31.32	449619.36 529535.39
3710.00	3.00	203.50	3709.45	34.52S	3.97W	0.84	34.74	449618.03 529532.08
3774.00	4.40	200.30	3773.32	38.36S	5.49W	2.21	38.70	449616.51 529528.24
3837.00	6.50	200.30	3836.03	43.98S	7.57W	3.33	44.48	449614.43 529522.62
3901.00	7.70	198.60	3899.54	51.44S	10.19W	1.90	52.15	449611.81 529515.16
3963.00	8.90	200.30	3960.89	59.87S	13.18W	1.98	60.82	449608.82 529506.73
4026.00	10.40	203.10	4023.00	69.67S	17.10W	2.49	70.94	449604.90 529496.93
4089.00	11.80	204.90	4084.82	80.75S	22.05W	2.29	82.41	449599.95 529485.85
4153.00	11.60	204.90	4147.49	92.52S	27.51W	0.31	94.63	449594.49 529474.08
4216.00	12.00	204.50	4209.15	104.22S	32.89W	0.65	106.78	449589.11 529462.38
4280.00	11.90	201.10	4271.77	116.43S	38.03W	1.11	119.40	449583.97 529450.17
4342.00	12.00	193.60	4332.43	128.66S	41.85W	2.51	131.93	449580.15 529437.94

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 1891.22 on azimuth 185.90 degrees from wellhead.

Vertical section is from N 0.00 E 0.00 on azimuth 185.20 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
Indian Hills Unit #49, slot #1
INDIAN BASIN, Eddy County New Mexico

SURVEY LISTING Page 1
Your ref : ST MWD
Last revised : 22-Sep-2004

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	0.00	0.00	0.00N	0.00E	0.00	0.00	449622.00	529566.60
100.00	0.16	240.10	100.00	0.07S	0.12W	0.16	0.08	449621.88	529566.53
200.00	0.16	240.04	200.00	0.21S	0.36W	0.00	0.24	449621.64	529566.39
300.00	0.03	180.97	300.00	0.30S	0.48W	0.15	0.35	449621.52	529566.30
400.00	0.01	52.83	400.00	0.33S	0.48W	0.04	0.37	449621.52	529566.27
500.00	0.18	307.11	500.00	0.23S	0.60W	0.18	0.28	449621.40	529566.37
600.00	0.22	71.40	600.00	0.07S	0.54W	0.35	0.12	449621.46	529566.53
700.00	0.37	78.06	700.00	0.06N	0.04W	0.15	-0.05	449621.96	529566.66
800.00	0.52	93.75	799.99	0.10N	0.73E	0.19	-0.16	449622.73	529566.70
900.00	0.63	97.98	899.99	0.01S	1.72E	0.12	-0.15	449623.72	529566.59
1000.00	0.52	92.34	999.98	0.11S	2.72E	0.12	-0.14	449624.72	529566.49
1100.00	0.49	100.30	1099.98	0.20S	3.60E	0.08	-0.13	449625.60	529566.40
1200.00	0.58	119.06	1199.98	0.52S	4.46E	0.20	0.12	449626.46	529566.08
1300.00	0.64	140.56	1299.97	1.20S	5.26E	0.24	0.72	449627.26	529565.40
1400.00	0.67	157.08	1399.96	2.17S	5.84E	0.19	1.63	449627.84	529564.43
1500.00	0.73	172.41	1499.96	3.34S	6.15E	0.20	2.77	449628.15	529563.26
1600.00	0.80	161.02	1599.95	4.63S	6.46E	0.17	4.03	449628.46	529561.97
1700.00	0.71	160.74	1699.94	5.88S	6.89E	0.09	5.23	449628.89	529560.72
1800.00	0.42	137.44	1799.93	6.73S	7.35E	0.36	6.04	449629.35	529559.87
1900.00	0.31	88.53	1899.93	6.99S	7.86E	0.32	6.25	449629.86	529559.61
2000.00	0.27	314.42	1999.93	6.82S	7.97E	0.53	6.07	449629.97	529559.78
2100.00	0.38	95.59	2099.93	6.69S	8.13E	0.61	5.93	449630.13	529559.91
2200.00	0.44	139.40	2199.93	7.01S	8.71E	0.31	6.20	449630.71	529559.59
2300.00	0.59	141.46	2299.93	7.71S	9.28E	0.15	6.84	449631.28	529558.89
2400.00	0.38	148.88	2399.92	8.39S	9.77E	0.22	7.47	449631.77	529558.21
2500.00	0.47	175.99	2499.92	9.09S	9.97E	0.22	8.15	449631.97	529557.51
2600.00	0.77	217.62	2599.91	10.03S	9.59E	0.52	9.12	449631.59	529556.57
2700.00	0.76	217.31	2699.90	11.09S	8.78E	0.01	10.25	449630.78	529555.51
2800.00	0.86	217.79	2799.89	12.21S	7.92E	0.10	11.44	449629.92	529554.39
2900.00	0.90	212.27	2899.88	13.47S	7.04E	0.09	12.77	449629.04	529553.13
3000.00	1.00	214.28	2999.87	14.85S	6.13E	0.11	14.24	449628.13	529551.75
3100.00	0.93	207.88	3099.85	16.29S	5.25E	0.13	15.75	449627.25	529550.31
3200.00	1.20	208.55	3199.84	17.93S	4.37E	0.27	17.46	449626.37	529548.67
3300.00	1.60	207.08	3299.81	20.09S	3.24E	0.40	19.71	449625.24	529546.51
3330.00	1.46	200.16	3329.80	20.82S	2.92E	0.77	20.47	449624.92	529545.78
3458.00	1.76	218.60	3457.75	23.89S	1.13E	0.46	23.69	449623.13	529542.71
3521.00	2.00	213.70	3520.71	25.56S	0.09W	0.46	25.46	449621.91	529541.04
3583.00	2.90	203.40	3582.66	27.90S	1.31W	1.61	27.90	449620.69	529538.70
3647.00	3.50	200.60	3646.56	31.21S	2.64W	0.97	31.32	449619.36	529535.39
3710.00	3.00	203.50	3709.45	34.52S	3.97W	0.84	34.74	449618.03	529532.08
3774.00	4.40	200.30	3773.32	38.36S	5.49W	2.21	38.70	449616.51	529528.24
3837.00	6.50	200.30	3836.03	43.98S	7.57W	3.33	44.48	449614.43	529522.62
3901.00	7.70	198.60	3899.54	51.44S	10.19W	1.90	52.15	449611.81	529515.16
3963.00	8.90	200.30	3960.89	59.87S	13.18W	1.98	60.82	449608.82	529506.73
4026.00	10.40	203.10	4023.00	69.67S	17.10W	2.49	70.94	449604.90	529496.93
4089.00	11.80	204.90	4084.82	80.75S	22.05W	2.29	82.41	449599.95	529485.85
4153.00	11.60	204.90	4147.49	92.52S	27.51W	0.31	94.63	449594.49	529474.08
4216.00	12.00	204.50	4209.15	104.22S	32.89W	0.65	106.78	449589.11	529462.38
4280.00	11.90	201.10	4271.77	116.43S	38.03W	1.11	119.40	449583.97	529450.17
4342.00	12.00	193.60	4332.43	128.66S	41.85W	2.51	131.93	449580.15	529437.94

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 1891.22 on azimuth 185.90 degrees from wellhead.

Vertical section is from N 0.00 E 0.00 on azimuth 185.20 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
Indian Hills Unit #49, slot #1
INDIAN BASIN, Eddy County New Mexico

SURVEY LISTING Page 2
Your ref : ST MWD
Last revised : 22-Sep-2004

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	
4404.00	12.10	183.40	4393.07	141.42S	43.75W	3.43	144.80	449578.25	529425.18
4468.00	12.70	179.60	4455.58	155.15S	44.10W	1.58	158.51	449577.90	529411.45
4531.00	12.50	173.60	4517.06	168.85S	43.29W	2.10	172.08	449578.71	529397.75
4594.00	13.30	170.40	4578.47	182.77S	41.32W	1.70	185.76	449580.68	529383.83
4658.00	12.00	165.50	4640.92	196.47S	38.43W	2.63	199.14	449583.57	529370.13
4721.00	10.80	164.80	4702.68	208.51S	35.24W	1.92	210.84	449586.76	529358.09
4785.00	11.10	166.20	4765.51	220.28S	32.20W	0.63	222.29	449589.80	529346.32
4848.00	11.30	167.20	4827.31	232.18S	29.38W	0.44	233.89	449592.62	529334.42
4912.00	12.00	165.90	4889.99	244.75S	26.37W	1.17	246.13	449595.63	529321.85
4976.00	12.00	165.50	4952.59	257.65S	23.09W	0.13	258.68	449598.91	529308.95
5039.00	11.80	165.90	5014.24	270.23S	19.88W	0.34	270.92	449602.12	529296.37
5103.00	11.80	165.50	5076.89	282.92S	16.64W	0.13	283.26	449605.36	529283.68
5167.00	12.30	165.50	5139.48	295.85S	13.30W	0.78	295.84	449608.70	529270.75
5230.00	11.90	166.20	5201.08	308.66S	10.07W	0.68	308.30	449611.93	529257.94
5294.00	11.90	164.40	5263.70	321.42S	6.72W	0.58	320.71	449615.28	529245.18
5357.00	12.10	163.70	5325.33	334.01S	3.12W	0.39	332.92	449618.88	529232.59
5420.00	12.50	163.40	5386.88	346.89S	0.68E	0.64	345.40	449622.68	529219.71
5483.00	12.60	161.90	5448.37	359.95S	4.76E	0.54	358.04	449626.76	529206.65
5546.00	12.30	162.70	5509.89	372.89S	8.89E	0.55	370.55	449630.89	529193.71
5610.00	12.00	162.00	5572.46	385.72S	12.98E	0.52	382.96	449634.98	529180.88
5672.00	12.20	162.30	5633.08	398.10S	16.96E	0.34	394.92	449638.96	529168.50
5735.00	12.20	163.80	5694.66	410.83S	20.84E	0.50	407.25	449642.84	529155.77
5798.00	12.00	164.80	5756.26	423.54S	24.42E	0.46	419.59	449646.42	529143.06
5859.00	12.00	164.80	5815.93	435.78S	27.74E	0.00	431.47	449649.74	529130.82
5922.00	13.20	162.70	5877.41	448.97S	31.60E	2.04	444.26	449653.60	529117.63
5985.00	13.10	162.70	5938.76	462.65S	35.86E	0.16	457.50	449657.86	529103.95
6049.00	12.50	162.70	6001.17	476.19S	40.08E	0.94	470.60	449662.08	529090.41
6114.00	12.30	164.10	6064.65	489.57S	44.06E	0.56	483.56	449666.06	529077.03
6178.00	12.60	164.50	6127.14	502.85S	47.80E	0.49	496.45	449669.80	529063.75
6241.00	12.40	165.20	6188.65	516.01S	51.36E	0.40	509.23	449673.36	529050.59
6303.00	11.40	166.20	6249.32	528.40S	54.52E	1.65	521.28	449676.52	529038.20
6367.00	11.40	165.20	6312.05	540.65S	57.65E	0.31	533.20	449679.65	529025.95
6430.00	11.70	163.40	6373.78	552.80S	61.06E	0.74	544.99	449683.06	529013.80
6493.00	11.80	161.30	6435.46	565.02S	64.95E	0.70	556.81	449686.95	529001.58
6556.00	10.90	164.40	6497.23	576.86S	68.62E	1.73	568.26	449690.62	528989.74
6620.00	10.90	167.90	6560.07	588.60S	71.52E	1.03	579.70	449693.52	528978.00
6682.00	11.60	169.70	6620.88	600.47S	73.86E	1.26	591.30	449695.86	528966.13
6746.00	12.10	170.10	6683.52	613.41S	76.16E	0.79	603.98	449698.16	528953.19
6809.00	12.70	169.00	6745.05	626.71S	78.62E	1.02	617.00	449700.62	528939.89
6873.00	12.10	163.00	6807.56	640.03S	81.92E	2.22	629.97	449703.92	528926.57
6936.00	11.20	158.50	6869.26	652.04S	86.10E	2.03	641.55	449708.10	528914.56
6999.00	9.90	159.50	6931.19	662.80S	90.24E	2.08	651.90	449712.24	528903.80
7062.00	9.20	165.90	6993.32	672.76S	93.36E	2.02	661.53	449715.36	528893.84
7125.00	9.20	170.10	7055.51	682.61S	95.45E	1.07	671.15	449717.45	528883.99
7188.00	9.90	167.60	7117.64	692.86S	97.48E	1.29	681.17	449719.48	528873.74
7251.00	11.10	168.30	7179.58	704.09S	99.87E	1.92	692.14	449721.87	528862.51
7315.00	11.80	169.00	7242.31	716.54S	102.37E	1.12	704.32	449724.37	528850.06
7379.00	11.90	169.00	7304.95	729.44S	104.88E	0.16	716.94	449726.88	528837.16
7442.00	12.00	171.10	7366.58	742.29S	107.13E	0.71	729.53	449729.13	528824.31
7506.00	11.30	172.20	7429.26	755.08S	109.01E	1.15	742.09	449731.01	528811.52

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 1891.22 on azimuth 185.90 degrees from wellhead.
Vertical section is from N 0.00 E 0.00 on azimuth 185.20 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
Indian Hills Unit #49, slot #1
INDIAN BASIN, Eddy County New Mexico

SURVEY LISTING Page 2
Your ref : ST MWD
Last revised : 22-Sep-2004

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	
4404.00	12.10	183.40	4393.07	141.42S	43.75W	3.43	144.80	449578.25	529425.18
4468.00	12.70	179.60	4455.58	155.15S	44.10W	1.58	158.51	449577.90	529411.45
4531.00	12.50	173.60	4517.06	168.85S	43.29W	2.10	172.08	449578.71	529397.75
4594.00	13.30	170.40	4578.47	182.77S	41.32W	1.70	185.76	449580.68	529383.83
4658.00	12.00	165.50	4640.92	196.47S	38.43W	2.63	199.14	449583.57	529370.13
4721.00	10.80	164.80	4702.68	208.51S	35.24W	1.92	210.84	449586.76	529358.09
4785.00	11.10	166.20	4765.51	220.28S	32.20W	0.63	222.29	449589.80	529346.32
4848.00	11.30	167.20	4827.31	232.18S	29.38W	0.44	233.89	449592.62	529334.42
4912.00	12.00	165.90	4889.99	244.75S	26.37W	1.17	246.13	449595.63	529321.85
4976.00	12.00	165.50	4952.59	257.65S	23.09W	0.13	258.68	449598.91	529308.95
5039.00	11.80	165.90	5014.24	270.23S	19.88W	0.34	270.92	449602.12	529296.37
5103.00	11.80	165.50	5076.89	282.92S	16.64W	0.13	283.26	449605.36	529283.68
5167.00	12.30	165.50	5139.48	295.85S	13.30W	0.78	295.84	449608.70	529270.75
5230.00	11.90	166.20	5201.08	308.66S	10.07W	0.68	308.30	449611.93	529257.94
5294.00	11.90	164.40	5263.70	321.42S	6.72W	0.58	320.71	449615.28	529245.18
5357.00	12.10	163.70	5325.33	334.01S	3.12W	0.39	332.92	449618.88	529232.59
5420.00	12.50	163.40	5386.88	346.89S	0.68E	0.64	345.40	449622.68	529219.71
5483.00	12.60	161.90	5448.37	359.95S	4.76E	0.54	358.04	449626.76	529206.65
5546.00	12.30	162.70	5509.89	372.89S	8.89E	0.55	370.55	449630.89	529193.71
5610.00	12.00	162.00	5572.46	385.72S	12.98E	0.52	382.96	449634.98	529180.88
5672.00	12.20	162.30	5633.08	398.10S	16.96E	0.34	394.92	449638.96	529168.50
5735.00	12.20	163.80	5694.66	410.83S	20.84E	0.50	407.25	449642.84	529155.77
5798.00	12.00	164.80	5756.26	423.54S	24.42E	0.46	419.59	449646.42	529143.06
5859.00	12.00	164.80	5815.93	435.78S	27.74E	0.00	431.47	449649.74	529130.82
5922.00	13.20	162.70	5877.41	448.97S	31.60E	2.04	444.26	449653.60	529117.63
5985.00	13.10	162.70	5938.76	462.65S	35.86E	0.16	457.50	449657.86	529103.95
6049.00	12.50	162.70	6001.17	476.19S	40.08E	0.94	470.60	449662.08	529090.41
6114.00	12.30	164.10	6064.65	489.57S	44.06E	0.56	483.56	449666.06	529077.03
6178.00	12.60	164.50	6127.14	502.85S	47.80E	0.49	496.45	449669.80	529063.75
6241.00	12.40	165.20	6188.65	516.01S	51.36E	0.40	509.23	449673.36	529050.59
6303.00	11.40	166.20	6249.32	528.40S	54.52E	1.65	521.28	449676.52	529038.20
6367.00	11.40	165.20	6312.05	540.65S	57.65E	0.31	533.20	449679.65	529025.95
6430.00	11.70	163.40	6373.78	552.80S	61.06E	0.74	544.99	449683.06	529013.80
6493.00	11.80	161.30	6435.46	565.02S	64.95E	0.70	556.81	449686.95	529001.58
6556.00	10.90	164.40	6497.23	576.86S	68.62E	1.73	568.26	449690.62	528989.74
6620.00	10.90	167.90	6560.07	588.60S	71.52E	1.03	579.70	449693.52	528978.00
6682.00	11.60	169.70	6620.88	600.47S	73.86E	1.26	591.30	449695.86	528966.13
6746.00	12.10	170.10	6683.52	613.41S	76.16E	0.79	603.98	449698.16	528953.19
6809.00	12.70	169.00	6745.05	626.71S	78.62E	1.02	617.00	449700.62	528939.89
6873.00	12.10	163.00	6807.56	640.03S	81.92E	2.22	629.97	449703.92	528926.57
6936.00	11.20	158.50	6869.26	652.04S	86.10E	2.03	641.55	449708.10	528914.56
6999.00	9.90	159.50	6931.19	662.80S	90.24E	2.08	651.90	449712.24	528903.80
7062.00	9.20	165.90	6993.32	672.76S	93.36E	2.02	661.53	449715.36	528893.84
7125.00	9.20	170.10	7055.51	682.61S	95.45E	1.07	671.15	449717.45	528883.99
7188.00	9.90	167.60	7117.64	692.86S	97.48E	1.29	681.17	449719.48	528873.74
7251.00	11.10	168.30	7179.58	704.09S	99.87E	1.92	692.14	449721.87	528862.51
7315.00	11.80	169.00	7242.31	716.54S	102.37E	1.12	704.32	449724.37	528850.06
7379.00	11.90	169.00	7304.95	729.44S	104.88E	0.16	716.94	449726.88	528837.16
7442.00	12.00	171.10	7366.58	742.29S	107.13E	0.71	729.53	449729.13	528824.31
7506.00	11.30	172.20	7429.26	755.08S	109.01E	1.15	742.09	449731.01	528811.52

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 1891.22 on azimuth 185.90 degrees from wellhead.
Vertical section is from N 0.00 E 0.00 on azimuth 185.20 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
Indian Hills Unit #49, slot #1
INDIAN BASIN, Eddy County New Mexico

SURVEY LISTING Page 3
Your ref : ST MWD
Last revised : 22-Sep-2004

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	
7570.00	11.20	171.50	7492.03	767.44S	110.78E	0.26	754.24	449732.78	528799.16
7633.00	12.50	170.10	7553.69	780.20S	112.86E	2.11	766.76	449734.86	528786.40
7669.00	14.10	170.10	7588.72	788.36S	114.28E	4.44	774.76	449736.28	528778.24
7682.00	18.50	175.00	7601.20	791.98S	114.74E	35.43	778.32	449736.74	528774.62
7697.00	26.50	187.70	7615.05	797.68S	114.49E	62.12	784.02	449736.49	528768.92
7714.00	35.20	193.30	7629.63	806.22S	112.86E	53.84	792.68	449734.86	528760.38
7730.00	45.40	199.20	7641.83	816.12S	109.91E	68.01	802.80	449731.91	528750.48
7740.00	50.80	202.00	7648.50	823.08S	107.29E	57.87	809.97	449729.29	528743.52
7752.00	55.50	202.80	7655.70	831.96S	103.63E	39.53	819.14	449725.63	528734.64
7762.00	58.30	205.10	7661.16	839.61S	100.23E	33.99	827.07	449722.23	528726.99
7772.00	61.30	204.10	7666.19	847.47S	96.63E	31.22	835.22	449718.63	528719.13
7783.00	64.30	204.10	7671.22	856.40S	92.63E	27.27	844.48	449714.63	528710.20
7793.00	66.90	204.10	7675.35	864.71S	88.92E	26.00	853.09	449710.92	528701.89
7803.00	69.50	202.20	7679.06	873.24S	85.27E	31.42	861.92	449707.27	528693.36
7813.00	72.00	201.90	7682.36	881.99S	81.72E	25.16	870.96	449703.72	528684.61
7823.00	74.50	200.50	7685.24	890.92S	78.26E	28.37	880.16	449700.26	528675.68
7833.00	77.20	200.10	7687.68	900.02S	74.90E	27.28	889.52	449696.90	528666.58
7843.00	80.20	199.80	7689.64	909.23S	71.55E	30.14	899.00	449693.55	528657.37
7853.00	82.90	199.70	7691.11	918.54S	68.21E	27.02	908.58	449690.21	528648.06
7866.00	85.40	197.50	7692.44	930.80S	64.09E	25.56	921.16	449686.09	528635.80
7878.00	87.90	196.50	7693.14	942.25S	60.59E	22.43	932.88	449682.59	528624.35
7888.00	89.60	195.10	7693.36	951.87S	57.86E	22.02	942.71	449679.86	528614.73
7898.00	90.80	193.00	7693.32	961.57S	55.44E	24.19	952.59	449677.44	528605.03
7910.00	92.90	189.60	7692.93	973.33S	53.09E	33.29	964.51	449675.09	528593.27
7940.00	99.00	189.10	7689.82	1002.76S	48.24E	20.40	994.26	449670.24	528563.84
7973.00	99.81	189.70	7684.43	1034.88S	42.92E	3.04	1026.73	449664.92	528531.72
8004.00	96.40	190.30	7680.06	1065.10S	37.59E	11.17	1057.30	449659.59	528501.50
8035.00	93.00	191.60	7677.52	1095.42S	31.73E	11.74	1088.04	449653.73	528471.18
8067.00	93.60	189.10	7675.68	1126.85S	25.99E	8.02	1119.85	449647.99	528439.75
8098.00	95.80	190.90	7673.14	1157.27S	20.62E	9.16	1150.64	449642.62	528409.33
8129.00	94.80	193.00	7670.28	1187.47S	14.23E	7.48	1181.29	449636.23	528379.13
8155.00	92.80	194.60	7668.55	1212.66S	8.04E	9.84	1206.94	449630.04	528353.94
8186.00	92.50	194.50	7667.12	1242.63S	0.26E	1.02	1237.49	449622.26	528323.97
8218.00	93.00	190.90	7665.58	1273.81S	6.76W	11.35	1269.18	449615.24	528292.79
8249.00	91.80	192.80	7664.29	1304.12S	13.12W	7.24	1299.94	449608.88	528262.48
8280.00	88.70	195.50	7664.15	1334.17S	20.70W	13.26	1330.56	449601.30	528232.43
8311.00	88.90	194.70	7664.80	1364.09S	28.77W	2.66	1361.09	449593.23	528202.51
8342.00	91.80	197.40	7664.61	1393.88S	37.34W	12.78	1391.53	449584.66	528172.72
8374.00	93.80	199.60	7663.05	1424.19S	47.48W	9.28	1422.63	449574.52	528142.41
8405.00	94.40	199.20	7660.83	1453.35S	57.75W	2.32	1452.60	449564.25	528113.25
8436.00	95.60	201.40	7658.13	1482.31S	68.47W	8.06	1482.42	449553.53	528084.29
8467.00	95.40	198.50	7655.16	1511.32S	78.99W	9.33	1512.26	449543.01	528055.28
8500.00	95.70	198.70	7651.96	1542.45S	89.47W	1.09	1544.21	449532.53	528024.15
8531.00	95.60	198.50	7648.91	1571.68S	99.31W	0.72	1574.22	449522.69	527994.92
8563.00	96.10	197.90	7645.65	1601.92S	109.25W	2.43	1605.23	449512.75	527964.68
8595.00	97.10	199.30	7641.97	1632.05S	119.39W	5.35	1636.15	449502.61	527934.55
8626.00	97.70	198.70	7637.98	1661.12S	129.40W	2.73	1666.01	449492.60	527905.48
8658.00	97.20	198.80	7633.83	1691.16S	139.60W	1.59	1696.86	449482.40	527875.44
8689.00	96.30	198.20	7630.19	1720.36S	149.37W	3.48	1726.81	449472.63	527846.24
8720.00	95.30	197.20	7627.05	1749.74S	158.74W	4.55	1756.92	449463.26	527816.86

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 1891.22 on azimuth 185.90 degrees from wellhead.
Vertical section is from N 0.00 E 0.00 on azimuth 185.20 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
Indian Hills Unit #49, slot #1
INDIAN BASIN, Eddy County New Mexico

SURVEY LISTING Page 3
Your ref : ST MWD
Last revised : 22-Sep-2004

Measured Depth	Inclin Degrees	Azimuth Degrees	True Vert Depth	RECTANGULAR COORDINATES		Dogleg Deg/100ft	Vert Sect	GRID COORDS Easting Northing	
7570.00	11.20	171.50	7492.03	767.44S	110.78E	0.26	754.24	449732.78	528799.16
7633.00	12.50	170.10	7553.69	780.20S	112.86E	2.11	766.76	449734.86	528786.40
7669.00	14.10	170.10	7588.72	788.36S	114.28E	4.44	774.76	449736.28	528778.24
7682.00	18.50	175.00	7601.20	791.98S	114.74E	35.43	778.32	449736.74	528774.62
7697.00	26.50	187.70	7615.05	797.68S	114.49E	62.12	784.02	449736.49	528768.92
7714.00	35.20	193.30	7629.63	806.22S	112.86E	53.84	792.68	449734.86	528760.38
7730.00	45.40	199.20	7641.83	816.12S	109.91E	68.01	802.80	449731.91	528750.48
7740.00	50.80	202.00	7648.50	823.08S	107.29E	57.87	809.97	449729.29	528743.52
7752.00	55.50	202.80	7655.70	831.96S	103.63E	39.53	819.14	449725.63	528734.64
7762.00	58.30	205.10	7661.16	839.61S	100.23E	33.99	827.07	449722.23	528726.99
7772.00	61.30	204.10	7666.19	847.47S	96.63E	31.22	835.22	449718.63	528719.13
7783.00	64.30	204.10	7671.22	856.40S	92.63E	27.27	844.48	449714.63	528710.20
7793.00	66.90	204.10	7675.35	864.71S	88.92E	26.00	853.09	449710.92	528701.89
7803.00	69.50	202.20	7679.06	873.24S	85.27E	31.42	861.92	449707.27	528693.36
7813.00	72.00	201.90	7682.36	881.99S	81.72E	25.16	870.96	449703.72	528684.61
7823.00	74.50	200.50	7685.24	890.92S	78.26E	28.37	880.16	449700.26	528675.68
7833.00	77.20	200.10	7687.68	900.02S	74.90E	27.28	889.52	449696.90	528666.58
7843.00	80.20	199.80	7689.64	909.23S	71.55E	30.14	899.00	449693.55	528657.37
7853.00	82.90	199.70	7691.11	918.54S	68.21E	27.02	908.58	449690.21	528648.06
7866.00	85.40	197.50	7692.44	930.80S	64.09E	25.56	921.16	449686.09	528635.80
7878.00	87.90	196.50	7693.14	942.25S	60.59E	22.43	932.88	449682.59	528624.35
7888.00	89.60	195.10	7693.36	951.87S	57.86E	22.02	942.71	449679.86	528614.73
7898.00	90.80	193.00	7693.32	961.57S	55.44E	24.19	952.59	449677.44	528605.03
7910.00	92.90	189.60	7692.93	973.33S	53.09E	33.29	964.51	449675.09	528593.27
7940.00	99.00	189.10	7689.82	1002.76S	48.24E	20.40	994.26	449670.24	528563.84
7973.00	99.81	189.70	7684.43	1034.88S	42.92E	3.04	1026.73	449664.92	528531.72
8004.00	96.40	190.30	7680.06	1065.10S	37.59E	11.17	1057.30	449659.59	528501.50
8035.00	93.00	191.60	7677.52	1095.42S	31.73E	11.74	1088.04	449653.73	528471.18
8067.00	93.60	189.10	7675.68	1126.85S	25.99E	8.02	1119.85	449647.99	528439.75
8098.00	95.80	190.90	7673.14	1157.27S	20.62E	9.16	1150.64	449642.62	528409.33
8129.00	94.80	193.00	7670.28	1187.47S	14.23E	7.48	1181.29	449636.23	528379.13
8155.00	92.80	194.60	7668.55	1212.66S	8.04E	9.84	1206.94	449630.04	528353.94
8186.00	92.50	194.50	7667.12	1242.63S	0.26E	1.02	1237.49	449622.26	528323.97
8218.00	93.00	190.90	7665.58	1273.81S	6.76W	11.35	1269.18	449615.24	528292.79
8249.00	91.80	192.80	7664.29	1304.12S	13.12W	7.24	1299.94	449608.88	528262.48
8280.00	88.70	195.50	7664.15	1334.17S	20.70W	13.26	1330.56	449601.30	528232.43
8311.00	88.90	194.70	7664.80	1364.09S	28.77W	2.66	1361.09	449593.23	528202.51
8342.00	91.80	197.40	7664.61	1393.88S	37.34W	12.78	1391.53	449584.66	528172.72
8374.00	93.80	199.60	7663.05	1424.19S	47.48W	9.28	1422.63	449574.52	528142.41
8405.00	94.40	199.20	7660.83	1453.35S	57.75W	2.32	1452.60	449564.25	528113.25
8436.00	95.60	201.40	7658.13	1482.31S	68.47W	8.06	1482.42	449553.53	528084.29
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8531.00	95.60	198.50	7648.91	1571.68S	99.31W	0.72	1574.22	449522.69	527994.92
8563.00	96.10	197.90	7645.65	1601.92S	109.25W	2.43	1605.23	449512.75	527964.68
8595.00	97.10	199.30	7641.97	1632.05S	119.39W	5.35	1636.15	449502.61	527934.55
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8689.00	96.30	198.20	7630.19	1720.36S	149.37W	3.48	1726.81	449472.63	527846.24
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Marathon Oil Company
Indian Hills Unit #49, slot #1
INDIAN BASIN, Eddy County New Mexico

SURVEY LISTING Page 4
Your ref : ST MWD
Last revised : 22-Sep-2004

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
8750.00	95.60	196.20	7624.21	1778.34S	167.32W	3.47	1786.19	449454.68
8781.00	96.30	196.00	7620.99	1807.97S	175.87W	2.35	1816.46	449446.13
8814.00	96.20	193.70	7617.40	1839.67S	184.28W	6.93	1848.80	449437.72
8857.00	96.20	193.70	7612.76	1881.20S	194.40W	0.00	1891.08	449427.60

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SURVEY LISTING Page 4
Your ref : ST MWD
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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
8750.00	95.60	196.20	7624.21	1778.34S	167.32W	3.47	1786.19	449454.68
8781.00	96.30	196.00	7620.99	1807.97S	175.87W	2.35	1816.46	449446.13
8814.00	96.20	193.70	7617.40	1839.67S	184.28W	6.93	1848.80	449437.72
8857.00	96.20	193.70	7612.76	1881.20S	194.40W	0.00	1891.08	449427.60

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Marathon Oil Company
Indian Hills Unit #49, slot #1
INDIAN BASIN, Eddy County New Mexico

SURVEY LISTING Page 5
Your ref : ST MWD
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				Comments in wellpath
				=====
MD	TVD	Rectangular Coords.		Comment
8857.00	7612.76	1881.20S	194.40W	Projection to TD

NO PROPOSAL

Marathon Oil Company
Indian Hills Unit #49, slot #1
INDIAN BASIN, Eddy County New Mexico

SURVEY LISTING Page 5
Your ref : ST MWD
Last revised : 22-Sep-2004

				Comments in wellpath
				=====
MD	TVD	Rectangular Coords.		Comment
8857.00	7612.76	1881.20S	194.40W	Projection to TD

NO PROPOSAL