

OPERATOR: Marbob Energy Corp.
WELL/LEASE: Moe Federal #5
COUNTY: Lea County, NM
Sec.34 T17S R32E

30-025-38362

K - 1650/S & 2310/W

**STATE OF NEW MEXICO
DEVIATION REPORT**

<u>Depth</u>	<u>Deviation</u>	<u>Depth</u>	<u>Deviation</u>
305	1		
802	3/4		
1,212	3/4		
1,705	1		
2,211	1		
2,711	2		
2,932	1 1/2		
3,187	2		
3,410	2		
3,661	3		

Patriot Drilling, LLC



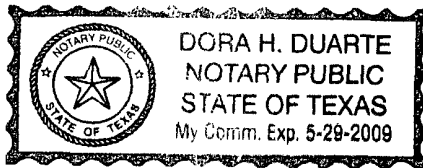
M. Leroy Peterson, Executive Vice-President

The foregoing instrument was acknowledged before me on this 2nd day of January, 2008 by M. Leroy Peterson, Executive Vice-President of Patriot Drilling, LLC.

My Commission Expires: 5/29/2009



Dora H. Duarte
Notary Public for Midland Co., Texas





DEC 04 2007

30-025-38362

DIRECTIONAL SURVEY REPORT

MARBOB ENERGY

MOE FEDERAL #5

Lea
EDDY COUNTY, NEW MEXICO

PREPARED BY: CODY MEBANE

Pathfinder Energy Services, Inc.
6213 W. County Road 112 • Midland, TX • 79706
(432)681-6000

DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) RYAN ROARK
B) Hafa DONARUMMA
C) JESUS GARCIA
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 11/08/07 TO 11/24/07
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: ^{Lea} ~~EDDY~~ COUNTY, NM
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:

MARBOB ENERGY CORPORATION.
MOE FEDERAL #5
^{Lea} ~~EDDY~~ COUNTY, NM
RIG: PATRIOT #6
9. SURVEY CERTIFIED FROM: 3848 TO 9614 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 125.34 FEET ON A BEARING OF 331.13 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 9663 FEET, ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.



CODY MEBANE
M/LWD SERVICE COORDINATOR

PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 11/08/2007
Date Completed: 11/24/2007

MARBOB ENERGY
MOE FEDERAL #5
EDDY COUNTY, NEW MEXICO
Rig: PATRIOT #6
PathFinder Office Supervisor: CODY MEBANE
PathFinder Field Engineers: Ryan R Roark
Hafa Donarumma
Jesus Garcia

Survey Horiz. Reference: WELLHEAD
Ref Coordinates: LAT: 32.47.17.6232 N LON: 103.45.17.2166 W
GRID Reference: NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 677797.8000 Y: 650954.7000
North Aligned To: GRID NORTH
Total Magnetic Correction: 7.82° EAST TO GRID
Vertical Section Plane: 0.00
Survey Vert. Reference: 20.00' Kelly Bushing To Ground
Altitude: 3923.00' Ground To MSL

Measured Depth	9663.00	(feet)
Inclination	0.88	(deg)
Azimuth	179.21	(deg)
True Vertical Depth	9660.61	(feet)
Vertical Section	109.77	(feet)
Survey X cord	677737.29	(feet)
Survey Y cord	651064.47	(feet)
Survey Lat	32.78853128 N	(deg)
Survey Lon	103.75497733 W	(deg)
Rectangular Corr. N/S	109.77 N	(feet)
Rectangular Corr. E/W	60.51 W	(feet)
Closure Distance	125.34	(feet)
Direction of Closure	331.13	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc. Survey Report

MARBOB ENERGY
MOE FEDERAL #5
EDDY COUNTY, NEW MEXICO
Rig:PATRIOT #6
PathFinder Office Supervisor: CODY MEBANE
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Survey Calculations by RX5 V5.11E using Minimum Curvature

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
TIE IN @ 3788'MD ASSUMING VERTICAL.										
3788.00	0.00	0.00	3788.00	0.00	0.00	0.00	0.00	0.00@	0.00	0.00
THE FOLLOWING ARE PATHFINDER MWD SURVEYS										
3848.00	2.99	1.76	3847.97	60.00	1.56	1.56 N	0.05 E	1.57@	1.76	4.98
3906.00	2.20	6.41	3905.91	58.00	4.18	4.18 N	0.22 E	4.19@	2.99	1.41
3970.00	2.20	5.80	3969.87	64.00	6.63	6.63 N	0.48 E	6.64@	4.14	0.04
4034.00	2.46	1.58	4033.81	64.00	9.22	9.22 N	0.64 E	9.24@	3.98	0.49
4096.00	2.29	357.54	4095.76	62.00	11.79	11.79 N	0.63 E	11.80@	3.04	0.38
4159.00	0.79	346.20	4158.74	63.00	13.47	13.47 N	0.47 E	13.48@	1.99	2.42
4253.00	0.79	320.80	4252.73	94.00	14.60	14.60 N	0.10 W	14.60@	359.62	0.37
4349.00	0.88	337.50	4348.72	96.00	15.79	15.79 N	0.80 W	15.81@	357.11	0.27
4444.00	1.14	343.12	4443.70	95.00	17.37	17.37 N	1.35 W	17.42@	355.56	0.29
4538.00	1.23	346.29	4537.68	94.00	19.25	19.25 N	1.86 W	19.34@	354.48	0.12
4633.00	1.23	349.80	4632.66	95.00	21.24	21.24 N	2.28 W	21.36@	353.87	0.08
4727.00	0.97	336.44	4726.64	94.00	22.96	22.96 N	2.78 W	23.13@	353.10	0.39
4822.00	1.76	347.34	4821.61	95.00	25.12	25.12 N	3.42 W	25.36@	352.25	0.87
4915.00	2.11	345.23	4914.56	93.00	28.17	28.17 N	4.17 W	28.48@	351.58	0.38
5010.00	0.88	352.97	5009.53	95.00	30.59	30.59 N	4.71 W	30.95@	351.25	1.31
5104.00	1.14	351.47	5103.51	94.00	32.23	32.23 N	4.93 W	32.60@	351.30	0.28
5199.00	1.76	358.94	5198.48	95.00	34.62	34.62 N	5.10 W	35.00@	351.62	0.68
5295.00	2.02	353.93	5294.43	96.00	37.78	37.78 N	5.31 W	38.15@	352.01	0.32
5390.00	2.29	352.97	5389.36	95.00	41.33	41.33 N	5.72 W	41.72@	352.13	0.29
5484.00	2.20	351.12	5483.29	94.00	44.97	44.97 N	6.22 W	45.40@	352.12	0.12
5546.00	2.73	345.58	5545.23	62.00	47.58	47.58 N	6.77 W	48.06@	351.90	0.94

PathFinder Energy Services, Inc.

Survey Report

MARBOB ENERGY
 MOE FEDERAL #5
 EDDY COUNTY, NEW MEXICO
 RIG:PATRIOT #6

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL		Closure		DLS (dg/100ft)
						Rectangular (ft)	Offsets (ft)	Dist (ft)	Dir (deg)	
5642.00	2.37	341.89	5641.14	96.00	51.68	51.68 N	7.96 W	52.29@	351.24	0.41
5706.00	2.11	8.96	5705.09	64.00	54.10	54.10 N	8.19 W	54.72@	351.39	1.69
5770.00	2.20	13.71	5769.05	64.00	56.46	56.46 N	7.71 W	56.98@	352.22	0.31
5834.00	1.32	359.03	5833.02	64.00	58.39	58.39 N	7.44 W	58.86@	352.74	1.53
5929.00	1.41	338.73	5927.99	95.00	60.57	60.57 N	7.88 W	61.08@	352.59	0.52
5993.00	1.67	338.64	5991.97	64.00	62.17	62.17 N	8.50 W	62.75@	352.21	0.41
6086.00	0.79	237.04	6084.95	93.00	63.09	63.09 N	9.54 W	63.80@	351.41	2.14
6180.00	0.44	203.64	6178.95	94.00	62.40	62.40 N	10.22 W	63.24@	350.70	0.52
6273.00	0.26	184.74	6271.94	93.00	61.87	61.87 N	10.38 W	62.73@	350.47	0.23
6366.00	0.62	19.77	6364.94	93.00	62.13	62.13 N	10.23 W	62.97@	350.65	0.94
6428.00	0.88	357.36	6426.94	62.00	62.92	62.92 N	10.14 W	63.73@	350.85	0.63
6521.00	0.97	341.72	6519.92	93.00	64.38	64.38 N	10.42 W	65.22@	350.81	0.29
6617.00	1.14	331.35	6615.91	96.00	65.99	65.99 N	11.13 W	66.92@	350.42	0.27
6713.00	1.06	292.23	6711.89	96.00	67.17	67.17 N	12.41 W	68.30@	349.53	0.77
6809.00	1.85	279.75	6807.86	96.00	67.76	67.76 N	14.76 W	69.35@	347.71	0.88
6904.00	1.85	282.57	6902.81	95.00	68.36	68.36 N	17.77 W	70.63@	345.43	0.10
6913.00	2.11	282.57	6911.81	9.00	68.43	68.43 N	18.07 W	70.77@	345.20	2.89
7006.00	0.88	274.83	7004.77	93.00	68.86	68.86 N	20.46 W	71.83@	343.45	1.34
7100.00	1.14	310.51	7098.76	94.00	69.53	69.53 N	21.89 W	72.89@	342.53	0.71
7193.00	3.43	322.64	7191.68	93.00	72.34	72.34 N	24.28 W	76.30@	341.45	2.50
7256.00	2.64	313.42	7254.59	63.00	74.83	74.83 N	26.48 W	79.38@	340.52	1.47
7318.00	2.29	314.56	7316.53	62.00	76.69	76.69 N	28.40 W	81.77@	339.68	0.57
7382.00	2.20	323.96	7380.48	64.00	78.58	78.58 N	30.03 W	84.12@	339.08	0.59
7477.00	2.11	343.47	7475.42	95.00	81.73	81.73 N	31.60 W	87.62@	338.86	0.77
7573.00	2.29	350.42	7571.35	96.00	85.31	85.31 N	32.42 W	91.27@	339.19	0.34
7667.00	1.23	10.90	7665.30	94.00	88.16	88.16 N	32.54 W	93.97@	339.74	1.29
7763.00	2.64	344.18	7761.25	96.00	91.29	91.29 N	32.95 W	97.06@	340.15	1.71

PathFinder Energy Services, Inc.

Survey Report

MARBOB ENERGY
 MOE FEDERAL #5
 EDDY COUNTY, NEW MEXICO
 RIG:PATRIOT #6

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL		Closure		DLS (dg/100ft)
						Rectangular (ft)	Offsets (ft)	Dist (ft)	Dir (deg)	
7856.00	2.55	308.85	7854.16	93.00	94.65	94.65 N	35.15 W	100.97@	339.63	1.70
7952.00	1.67	301.64	7950.09	96.00	96.73	96.73 N	38.00 W	103.92@	338.55	0.96
8047.00	1.76	288.19	8045.05	95.00	97.91	97.91 N	40.57 W	105.98@	337.49	0.43
8142.00	0.26	290.74	8140.03	95.00	98.44	98.44 N	42.15 W	107.09@	336.82	1.58
8237.00	1.14	353.67	8235.03	95.00	99.46	99.46 N	42.46 W	108.14@	336.88	1.10
8301.00	2.11	337.94	8299.00	64.00	101.18	101.18 N	42.97 W	109.93@	336.99	1.65
8395.00	1.93	323.52	8392.94	94.00	104.06	104.06 N	44.56 W	113.20@	336.82	0.57
8492.00	0.88	302.08	8489.91	97.00	105.77	105.77 N	46.16 W	115.40@	336.42	1.19
8555.00	0.79	305.42	8552.90	63.00	106.27	106.27 N	46.93 W	116.17@	336.17	0.16
8651.00	1.23	317.63	8648.89	96.00	107.42	107.42 N	48.16 W	117.72@	335.85	0.51
8713.00	2.29	322.29	8710.86	62.00	108.89	108.89 N	49.37 W	119.56@	335.61	1.72
8808.00	2.02	325.98	8805.79	95.00	111.78	111.78 N	51.47 W	123.06@	335.28	0.32
8903.00	1.32	284.85	8900.75	95.00	113.45	113.45 N	53.46 W	125.41@	334.77	1.41
8965.00	1.58	289.07	8962.73	62.00	113.91	113.91 N	54.96 W	126.48@	334.24	0.45
9028.00	1.67	276.50	9025.71	63.00	114.30	114.30 N	56.69 W	127.59@	333.62	0.58
9092.00	1.49	287.93	9089.69	64.00	114.66	114.66 N	58.41 W	128.68@	333.00	0.57
9154.00	1.85	278.00	9151.66	62.00	115.05	115.05 N	60.17 W	129.83@	332.39	0.74
9246.00	0.62	192.65	9243.64	92.00	114.77	114.77 N	61.75 W	130.32@	331.72	2.07
9342.00	0.88	160.57	9339.63	96.00	113.57	113.57 N	61.62 W	129.20@	331.52	0.50
9437.00	0.70	131.75	9434.62	95.00	112.49	112.49 N	60.94 W	127.94@	331.55	0.45
9532.00	0.62	181.23	9529.62	95.00	111.59	111.59 N	60.52 W	126.95@	331.53	0.59
9614.00	0.88	179.21	9611.61	82.00	110.52	110.52 N	60.52 W	126.00@	331.30	0.32
STRAIGHT LINE PROJECTION TO BIT @ 9663' MD										
9663.00	0.88	179.21	9660.61	49.00	109.77	109.77 N	60.51 W	125.34@	331.13	0.00