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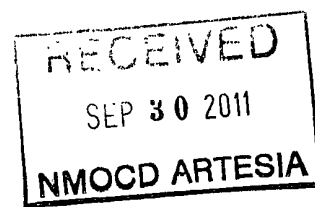
DIRECTIONAL SURVEY REPORT

30-015-37931

YATES PETROLEUM

CHEVRON BOT #6H

EDDY COUNTY, NEW MEXICO



PREPARED BY: FRANCISCO SINISTERRA

Pathfinder Energy Services, Inc.
6213 W. Interstate 20 • Midland, TX • 79706
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Pathfinder

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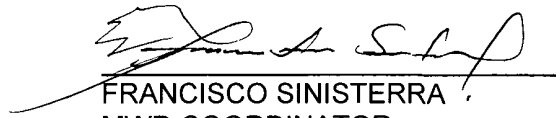


DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) JAY FULTON
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 03-27-11 TO 04-16-11
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: EDDY COUNTY, NM
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:

YATES PETROLEUM
CHEVRON BOT #6H
EDDY COUNTY, NM
RIG: PATRIOT #1
9. SURVEY CERTIFIED FROM: 653 TO 13272 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE
DISPLACED AT 5951.03 FEET ON A BEARING OF 359.21 DEGREES FROM THE
CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 13327 FEET,
ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.


FRANCISCO SINISTERRA
MWD COORDINATOR

PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 03/27/2011
Date Completed: 04/16/2011

YATES PETROLEUM CORPORATION
CHEVRON BOT #6H
EDDY COUNTY, NEW MEXICO
Rig: PATRIOT 5
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers: JAY FULTON
ZACH VEST

Survey Horiz. Reference: WELLHEAD
Ref Coordinates: LAT: 32.14.47.0327 N LON: 104.0.31.5363 W
GRID Reference: NAD83 new mexico east Transverse Mercator
Ref GRID Coord: X: 641681.5720 Y: 453524.6380
North Aligned To: GRID NORTH
Total Magnetic Correction: 7.64° EAST TO GRID
Vertical Section Plane: 359.21
Survey Vert. Reference: 26.50° Rotary Table To Ground
Altitude: 2952.00' Ground To MSL

Measured Depth	13327.00	(feet)
Inclination	91.01	(deg)
Azimuth	0.21	(deg)
True Vertical Depth	7598.22	(feet)
Vertical Section	5951.03	(feet)
Survey X cord	641599.73	(feet)
Survey Y cord	459475.09	(feet)
Survey Lat	32.26275554 N	(deg)
Survey Lon	104.00896663 W	(deg)
Rectangular Corr. N/S	5950.47 N	(feet)
Rectangular Corr. E/W	81.82 W	(feet)
Closure Distance	5951.03	(feet)
Direction of Closure	359.21	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION

CHEVRON BOT #6H

EDDY COUNTY, NEW MEXICO

Rig: PATRIOT 5

PathFinder Office Supervisor: FRANCISCO SINISTERRA

PathFinder Field Engineers: JAY FULTON

ZACH VEST

Survey Horiz. Reference: WELLHEAD

Ref Coordinates: LAT: 32.14.47.0327 N LON: 104.0.31.5363 W

GRID Reference: NAD83 new mexico east Transverse Mercator

Ref GRID Coord: X: 641681.5720 Y: 453524.6380

North Aligned To: GRID NORTH

Total Magnetic Correction: 7.64° EAST TO GRID

Vertical Section Plane: 359.21

Survey Vert. Reference: 26.50' Rotary Table To Ground

Altitude: 2952.00' Ground To MSL

Survey Calculations by RX4 using Minimum Curvature

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL		Closure		DLS
						Rectangular (ft)	Offsets (ft)	Dist (ft)	Dir (deg)	
TIE-IN TO MULTI-SHOT GYROSCOPIC SURVEY @ 500' MD.										
500.00	1.74	108.75	499.95	0.00	-2.43	2.36 S	5.08 E	5.60@	114.92	0.00
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.										
653.00	2.20	113.52	652.86	153.00	-4.42	4.28 S	9.97 E	10.85@	113.22	0.32
747.00	0.97	78.50	746.82	94.00	-5.01	4.84 S	12.41 E	13.32@	111.31	1.61
841.00	0.97	101.61	840.81	94.00	-5.03	4.84 S	13.97 E	14.78@	109.12	0.41
1028.00	0.88	352.91	1027.80	187.00	-3.95	3.73 S	15.34 E	15.79@	103.69	0.81
1216.00	1.23	15.85	1215.77	188.00	-0.58	0.36 S	15.71 E	15.72@	91.32	0.29
1310.00	1.14	20.73	1309.75	94.00	1.26	1.48 N	16.32 E	16.39@	84.80	0.14
1404.00	1.14	20.97	1403.73	94.00	3.00	3.23 N	16.98 E	17.29@	79.23	0.01
1498.00	0.79	36.40	1497.71	94.00	4.38	4.63 N	17.70 E	18.30@	75.35	0.46
1592.00	0.88	47.52	1591.70	94.00	5.38	5.64 N	18.62 E	19.45@	73.16	0.20
1696.00	0.70	46.18	1695.69	104.00	6.34	6.61 N	19.67 E	20.75@	71.41	0.17
1781.00	0.88	46.06	1780.69	85.00	7.14	7.43 N	20.51 E	21.82@	70.10	0.21
1875.00	0.26	188.79	1874.68	94.00	7.43	7.72 N	21.00 E	22.37@	69.82	1.17
1969.00	0.26	152.86	1968.68	94.00	7.03	7.32 N	21.06 E	22.30@	70.85	0.17
2064.00	1.32	116.39	2063.67	95.00	6.33	6.64 N	22.14 E	23.12@	73.31	1.18
2158.00	1.93	137.15	2157.63	94.00	4.66	5.00 N	24.19 E	24.70@	78.33	0.89
2253.00	1.58	148.06	2252.59	95.00	2.35	2.71 N	25.97 E	26.11@	84.04	0.51
2345.00	1.32	121.23	2344.56	92.00	0.71	1.09 N	27.55 E	27.57@	87.74	0.78
2440.00	1.49	131.76	2439.53	95.00	-0.71	0.30 S	29.40 E	29.41@	90.59	0.32
2535.00	2.20	170.31	2534.49	95.00	-3.35	2.92 S	30.63 E	30.77@	95.45	1.46
2628.00	1.67	181.77	2627.43	93.00	-6.46	6.04 S	30.89 E	31.48@	101.06	0.70
2723.00	1.14	195.81	2722.40	95.00	-8.75	8.33 S	30.59 E	31.70@	105.23	0.66
2772.00	0.79	192.92	2771.40	49.00	-9.55	9.13 S	30.38 E	31.72@	106.72	0.72
2916.00	1.06	180.38	2915.38	144.00	-11.84	11.43 S	30.15 E	32.24@	110.76	0.23

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION
CHEVRON BOT #6H
EDDY COUNTY, NEW MEXICO
RIG:PATRIOT 5

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
3010.00	1.32	169.80	3009.36	94.00	-13.78	13.36 S	30.34 E	33.15@	113.77	0.36
3104.00	1.85	175.73	3103.32	94.00	-16.36	15.94 S	30.64 E	34.54@	117.49	0.59
3198.00	3.52	281.07	3197.25	94.00	-17.28	16.90 S	27.92 E	32.64@	121.19	4.67
3292.00	2.46	288.54	3291.13	94.00	-16.02	15.71 S	23.18 E	28.00@	124.12	1.20
3387.00	1.23	274.22	3386.08	95.00	-15.26	14.98 S	20.23 E	25.17@	126.53	1.37
3481.00	1.23	275.19	3480.05	94.00	-15.07	14.82 S	18.22 E	23.48@	129.13	0.02
3575.00	1.23	273.46	3574.03	94.00	-14.89	14.66 S	16.20 E	21.85@	132.15	0.04
3668.00	1.14	269.89	3667.01	93.00	-14.80	14.61 S	14.28 E	20.43@	135.64	0.13
3856.00	0.88	261.76	3854.98	188.00	-14.97	14.82 S	10.98 E	18.44@	143.45	0.16
4045.00	0.79	259.11	4043.96	189.00	-15.38	15.27 S	8.27 E	17.37@	151.57	0.05
4233.00	0.97	297.97	4231.94	188.00	-14.85	14.77 S	5.59 E	15.79@	159.27	0.32
4421.00	0.53	271.31	4419.93	188.00	-14.05	14.00 S	3.32 E	14.39@	166.68	0.29
4609.00	0.62	272.82	4607.92	188.00	-13.95	13.93 S	1.43 E	14.01@	174.14	0.05
4798.00	0.53	272.63	4796.91	189.00	-13.84	13.84 S	0.46 W	13.85@	181.92	0.05
4986.00	0.62	272.20	4984.90	188.00	-13.73	13.76 S	2.35 W	13.96@	189.69	0.05
5174.00	0.62	251.96	5172.89	188.00	-13.98	14.04 S	4.33 W	14.69@	197.15	0.12
5363.00	0.44	254.41	5361.88	189.00	-14.47	14.55 S	6.00 W	15.74@	202.42	0.10
5551.00	0.35	241.19	5549.87	188.00	-14.92	15.02 S	7.20 W	16.66@	205.62	0.07
5739.00	0.35	181.56	5737.87	188.00	-15.77	15.87 S	7.72 W	17.65@	205.94	0.19
5927.00	0.70	163.30	5925.86	188.00	-17.44	17.55 S	7.41 W	19.05@	202.89	0.20
6116.00	0.53	183.03	6114.85	189.00	-19.43	19.53 S	7.12 W	20.78@	200.04	0.14
6304.00	0.62	181.95	6302.84	188.00	-21.31	21.41 S	7.20 W	22.59@	198.59	0.05
6493.00	0.62	168.62	6491.83	189.00	-23.34	23.44 S	7.04 W	24.47@	196.71	0.08
6588.00	0.53	159.13	6586.83	95.00	-24.25	24.35 S	6.78 W	25.28@	195.55	0.14
6776.00	0.79	124.84	6774.82	188.00	-25.83	25.90 S	5.40 W	26.46@	191.78	0.25
6965.00	1.23	164.50	6963.79	189.00	-28.55	28.60 S	3.79 W	28.85@	187.55	0.42
7092.00	5.36	4.14	7090.63	127.00	-23.95	23.99 S	3.00 W	24.18@	187.12	5.14
7124.00	10.29	359.30	7122.33	32.00	-19.60	19.64 S	2.93 W	19.86@	188.47	15.53

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION
CHEVRON BOT #6H
EDDY COUNTY, NEW MEXICO
RIG:PATRIOT 5

Page 03/05

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
7155.00	14.95	358.16	7152.57	31.00	-12.83	12.87 S	3.09 W	13.24@	193.49	15.05
7186.00	19.26	357.36	7182.19	31.00	-3.72	3.77 S	3.45 W	5.11@	222.52	13.92
7218.00	22.60	357.85	7212.07	32.00	7.71	7.65 N	3.93 W	8.60@	332.84	10.45
7249.00	24.27	359.38	7240.52	31.00	20.03	19.98 N	4.22 W	20.42@	348.08	5.73
7281.00	25.94	359.05	7269.49	32.00	33.61	33.55 N	4.41 W	33.84@	352.52	5.24
7313.00	27.79	358.84	7298.04	32.00	48.07	48.01 N	4.67 W	48.24@	354.44	5.79
7344.00	30.69	358.37	7325.08	31.00	63.21	63.15 N	5.04 W	63.35@	355.43	9.38
7376.00	34.65	358.13	7352.02	32.00	80.48	80.41 N	5.57 W	80.60@	356.03	12.38
7407.00	39.04	357.39	7376.82	31.00	99.06	98.98 N	6.31 W	99.18@	356.35	14.23
7439.00	43.35	357.28	7400.89	32.00	120.12	120.03 N	7.29 W	120.25@	356.53	13.47
7470.00	46.43	357.71	7422.85	31.00	141.98	141.88 N	8.24 W	142.12@	356.68	9.98
7502.00	49.42	358.37	7444.29	32.00	165.73	165.62 N	9.05 W	165.86@	356.87	9.47
7533.00	52.23	358.07	7463.87	31.00	189.75	189.64 N	9.80 W	189.89@	357.04	9.10
7564.00	55.31	358.48	7482.19	31.00	214.75	214.63 N	10.55 W	214.89@	357.19	9.99
7596.00	58.39	358.56	7499.69	32.00	241.54	241.41 N	11.24 W	241.67@	357.33	9.63
7627.00	60.59	358.91	7515.43	31.00	268.24	268.11 N	11.83 W	268.37@	357.47	7.16
7658.00	62.78	358.99	7530.13	31.00	295.53	295.39 N	12.33 W	295.65@	357.61	7.07
7690.00	65.25	359.24	7544.15	32.00	324.30	324.15 N	12.77 W	324.40@	357.74	7.75
7721.00	67.97	359.93	7556.46	31.00	352.74	352.60 N	12.98 W	352.84@	357.89	9.01
7753.00	71.14	0.46	7567.63	32.00	382.72	382.58 N	12.87 W	382.80@	358.07	10.03
7784.00	74.13	359.97	7576.88	31.00	412.30	412.16 N	12.76 W	412.36@	358.23	9.76
7816.00	77.12	359.86	7584.83	32.00	443.29	443.16 N	12.81 W	443.34@	358.34	9.35
7847.00	79.32	359.85	7591.15	31.00	473.64	473.50 N	12.89 W	473.68@	358.44	7.10
7879.00	81.51	359.75	7596.48	32.00	505.19	505.05 N	13.00 W	505.22@	358.53	6.85
7910.00	83.89	359.55	7600.42	31.00	535.93	535.80 N	13.18 W	535.96@	358.59	7.70
7953.00	86.97	357.93	7603.85	43.00	578.79	578.65 N	14.13 W	578.82@	358.60	8.09
7984.00	88.72	358.11	7605.01	31.00	609.76	609.60 N	15.20 W	609.79@	358.57	5.68
8047.00	88.99	359.51	7606.27	63.00	672.74	672.58 N	16.51 W	672.78@	358.59	2.26

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION
CHEVRON BOT #6H
EDDY COUNTY, NEW MEXICO
RIG: PATRIOT 5

Page 04/05

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
8141.00	88.37	0.52	7608.44	94.00	766.70	766.55 N	16.48 W	766.73@	358.77	1.26
8235.00	89.25	0.54	7610.39	94.00	860.66	860.52 N	15.61 W	860.67@	358.96	0.94
8329.00	89.96	0.60	7611.04	94.00	954.63	954.52 N	14.68 W	954.63@	359.12	0.76
8424.00	90.75	0.91	7610.45	95.00	1049.59	1049.51 N	13.43 W	1049.59@	359.27	0.89
8518.00	90.31	2.24	7609.58	94.00	1143.51	1143.46 N	10.84 W	1143.52@	359.46	1.49
8611.00	90.48	0.43	7608.94	93.00	1236.44	1236.43 N	8.68 W	1236.46@	359.60	1.95
8704.00	90.57	0.23	7608.09	93.00	1329.41	1329.43 N	8.14 W	1329.45@	359.65	0.24
8798.00	90.22	359.10	7607.44	94.00	1423.41	1423.42 N	8.69 W	1423.45@	359.65	1.26
8893.00	89.60	359.94	7607.59	95.00	1518.40	1518.42 N	9.49 W	1518.45@	359.64	1.10
8987.00	89.08	356.69	7608.67	94.00	1612.37	1612.36 N	12.25 W	1612.40@	359.56	3.50
9081.00	89.69	356.89	7609.68	94.00	1706.28	1706.20 N	17.51 W	1706.29@	359.41	0.68
9175.00	88.90	356.46	7610.84	94.00	1800.18	1800.04 N	22.96 W	1800.18@	359.27	0.96
9269.00	90.22	356.21	7611.56	94.00	1894.06	1893.84 N	28.97 W	1894.06@	359.12	1.43
9363.00	90.75	358.71	7610.76	94.00	1988.00	1987.74 N	33.14 W	1988.01@	359.04	2.72
9458.00	89.87	358.59	7610.25	95.00	2083.00	2082.71 N	35.38 W	2083.01@	359.03	0.93
9552.00	90.04	359.38	7610.32	94.00	2177.00	2176.69 N	37.04 W	2177.01@	359.03	0.86
9646.00	91.71	0.40	7608.89	94.00	2270.97	2270.68 N	37.22 W	2270.98@	359.06	2.08
9739.00	91.45	0.54	7606.32	93.00	2363.92	2363.64 N	36.46 W	2363.92@	359.12	0.32
9834.00	90.48	0.59	7604.72	95.00	2458.87	2458.62 N	35.52 W	2458.88@	359.17	1.02
9928.00	90.22	0.94	7604.15	94.00	2552.84	2552.61 N	34.27 W	2552.84@	359.23	0.46
10022.00	89.87	0.67	7604.07	94.00	2646.80	2646.60 N	32.95 W	2646.80@	359.29	0.47
10136.00	88.90	0.15	7605.30	114.00	2760.77	2760.59 N	32.13 W	2760.78@	359.33	0.97
10231.00	89.87	358.40	7606.32	95.00	2855.76	2855.57 N	33.33 W	2855.76@	359.33	2.11
10325.00	90.48	357.87	7606.03	94.00	2949.74	2949.52 N	36.39 W	2949.74@	359.29	0.86
10419.00	90.48	358.14	7605.24	94.00	3043.72	3043.46 N	39.66 W	3043.72@	359.25	0.29
10513.00	89.96	357.79	7604.88	94.00	3137.69	3137.40 N	43.00 W	3137.69@	359.21	0.67
10607.00	90.04	357.97	7604.88	94.00	3231.67	3231.33 N	46.48 W	3231.67@	359.18	0.21
10701.00	87.76	357.43	7606.69	94.00	3325.61	3325.23 N	50.25 W	3325.61@	359.13	2.49

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION
CHEVRON BOT #6H
EDDY COUNTY, NEW MEXICO
RIG:PATRIOT 5

Page 05/05

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets		Closure Dist Dir		DLS (dg/100ft)
						(ft)	(ft)	(ft)	(deg)	
10795.00	88.64	358.12	7609.64	94.00	3419.53	3419.12 N	53.90 W	3419.54@	359.10	1.19
10890.00	89.60	358.72	7611.10	95.00	3514.51	3514.07 N	56.52 W	3514.52@	359.08	1.19
10983.00	90.31	359.59	7611.17	93.00	3607.51	3607.06 N	57.89 W	3607.52@	359.08	1.21
11078.00	90.31	359.41	7610.66	95.00	3702.51	3702.05 N	58.72 W	3702.52@	359.09	0.19
11172.00	91.19	359.70	7609.43	94.00	3796.50	3796.04 N	59.45 W	3796.50@	359.10	0.98
11265.00	91.19	359.55	7607.50	93.00	3889.47	3889.02 N	60.06 W	3889.48@	359.12	0.16
11360.00	91.10	359.81	7605.60	95.00	3984.45	3984.00 N	60.59 W	3984.46@	359.13	0.29
11454.00	91.10	0.16	7603.79	94.00	4078.43	4077.98 N	60.61 W	4078.43@	359.15	0.37
11548.00	90.57	0.19	7602.42	94.00	4172.40	4171.97 N	60.32 W	4172.40@	359.17	0.56
11642.00	90.75	0.34	7601.34	94.00	4266.38	4265.96 N	59.89 W	4266.38@	359.20	0.25
11735.00	91.71	1.22	7599.34	93.00	4359.32	4358.93 N	58.62 W	4359.32@	359.23	1.40
11829.00	90.57	0.62	7597.47	94.00	4453.26	4452.90 N	57.11 W	4453.26@	359.27	1.37
11923.00	89.08	359.67	7597.76	94.00	4547.24	4546.89 N	56.88 W	4547.25@	359.28	1.88
12017.00	89.16	358.41	7599.20	94.00	4641.23	4640.86 N	58.45 W	4641.23@	359.28	1.34
12111.00	89.69	359.30	7600.15	94.00	4735.22	4734.84 N	60.33 W	4735.22@	359.27	1.10
12205.00	89.87	359.57	7600.51	94.00	4829.22	4828.83 N	61.26 W	4829.22@	359.27	0.35
12300.00	89.25	358.29	7601.24	95.00	4924.21	4923.81 N	63.03 W	4924.22@	359.27	1.50
12394.00	89.08	358.45	7602.61	94.00	5018.19	5017.76 N	65.70 W	5018.19@	359.25	0.25
12488.00	88.81	359.12	7604.34	94.00	5112.17	5111.73 N	67.70 W	5112.18@	359.24	0.77
12582.00	89.52	358.86	7605.71	94.00	5206.16	5205.70 N	69.35 W	5206.16@	359.24	0.81
12676.00	89.43	357.80	7606.57	94.00	5300.15	5299.66 N	72.09 W	5300.15@	359.22	1.13
12770.00	90.48	358.99	7606.64	94.00	5394.13	5393.62 N	74.73 W	5394.13@	359.21	1.69
12864.00	90.48	358.54	7605.86	94.00	5488.13	5487.59 N	76.75 W	5488.13@	359.20	0.48
12959.00	90.31	358.50	7605.20	95.00	5583.12	5582.56 N	79.21 W	5583.12@	359.19	0.18
13053.00	91.54	359.43	7603.68	94.00	5677.10	5676.53 N	80.90 W	5677.10@	359.18	1.64
13147.00	91.19	359.69	7601.44	94.00	5771.07	5770.50 N	81.62 W	5771.07@	359.19	0.46
13241.00	90.92	359.82	7599.71	94.00	5865.05	5864.48 N	82.03 W	5865.05@	359.20	0.32
13272.00	91.01	0.21	7599.19	31.00	5896.05	5895.48 N	82.02 W	5896.05@	359.20	1.29

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION
CHEVRON BOT #6H
EDDY COUNTY, NEW MEXICO
RIG: PATRIOT 5

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
STRAIGHT LINE PROJECTION TO BIT @ 13327' MD.										
13327.00	91.01	0.21	7598.22	55.00	5951.03	5950.47 N	81.82 W	5951.03@	359.21	0.00



A Schlumberger Company

TIE-IN SURVEY INFORMATION SHEET**CLIENT INFORMATION**

CLIENT:	YATES PETROLEUM CORPORATION		
LEASE / WELL No.:	CHEVRON "BOT"	6H	
WELL LOCATION:	EDDY COUNTY		
COUNTY / STATE / COUNTRY:	EDDY	NEW MEXICO	USA
RIG:	PATRIOT 5		
API WELL No:	30-015-37931		
JOB No:	700001992 WT-WT		
P.O. / AFE No.	10-127-0		
DIRECTIONAL COMPANY:	PATHFINDER ENERGY SERVICES		

WELL SITE INFORMATION

TOTAL MAGNETIC CORRECTION (TMC):			
On Wall Plat:	7.64	LWD Calculated:	7.64
		Agreed Upon:	7.64
X =	641681.572000	Feet	Y = 453524 638000
			Feet
SITE LATITUDE:	32.246398	SITE LONGITUDE:	104.00876
GRID SYSTEM:	TRUE ☐ UTM ☒ LAMBERT ☐	ZONE:	NEW MEXICO EAST
PROPOSED DRIFT DIRECTION:	359.21		
KELLY BUSHING ELEVATION:	26.5		
ALTITUDE:	2952	Feet	WATER DEPTH:
			Feet

TIE-IN SURVEY

MEASURED DEPTH:	0		
DRIFT ANGLE:	0		
DRIFT DIRECTION:	0		
TRUE VERTICAL DEPTH:	0		
VERTICAL SECTION:	359.21		
RECTANGULAR COORDINATE (N / S) :	0		
RECTANGULAR COORDINATE (E / W) :	0		
CLOSURE DISTANCE / DIRECTION:	0	0	
SURVEY CALCULATION METHOD:	AA ☐	MC ☒	RC ☐ BT ☐
SOURCE OF TIE-IN DATA (COMPANY):			
COPY OF TIE-IN SURVEY REPORT	☐ YES ☒ NO		

WELL PLAN

KICKOFF DEPTH:	590	TOTAL DEPTH:	7700
KICKOFF ANGLE:	0	MAX ANGLE:	0

PES Engineers:

JAY FULTON

ZACH VEST

**Signature of both field engineers required if applicable

Directional Driller:

IRBY LEJEUNE

DATE: 27-Mar-2011



A Schlumberger Company **PathFinder Energy Services, Inc.**

Magnetic & Grid Calculations

YATES PETROLEUM
CHEVRON BOT #6H
EDDY COUNTY, NEW MEXICO
Rig: PATRIOT 5

Thu Mar 24 09:54:59 2011

Coordinates

Latitude: 32.246398 N (32 deg. 14 min. 47.0327 sec.)
Longitude: 104.008760 W (-104 deg. 0 min. 31.5363 sec.)
Elevation: 2978.50 feet.
Calculation Date: Mar/24/2011

Magnetic Calculations

Model: IGRF2010
Dip Angle: 60.1369 degrees
Total Magnetic Field: 0.48607 gauss
Magnetic Declination: 7.814890 degrees
Horizontal Intensity: 0.242027 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.814890 Degr.

Transverse Mercator Grid Calculations NAD83

Grid System: Transverse Mercator: new mexico east
Ellipsoid: GRS80
X: 641681.5720 feet
Y: 453524.6380 feet
True to Grid: (convergence) -0.173181 degrees
Magnetic to Grid: 7.641709 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.641709 Degr.

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

Field
Calculation

YATES PETROLEUM CORPORATION
CHEVRON "BOT" #6H
EDDY COUNTY
Rig: PATRIOT 5

Sun Mar 27 23:20:19 2011

Coordinates

Latitude: 32.246398 N (32 deg. 14 min. 47.0327 sec.)
Longitude: 104.008760 W (-104 deg. 0 min. 31.5363 sec.)
Elevation: 2978.50 feet.
Calculation Date: Mar/27/2011

Magnetic Calculations

Model: IGRF2010
Dip Angle: 60.1367 degrees
Total Magnetic Field: 0.48606 gauss
Magnetic Declination: 7.813891 degrees
Horizontal Intensity: 0.242024 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.813891 Degr

Transverse Mercator Grid Calculations NAD83

Grid System: Transverse Mercator: new mexico east
Ellipsoid: GRS80
X: 641681.5720 feet
Y: 453524.6380 feet
True to Grid: (convergence) -0.173181 degrees
Magnetic to Grid: 7.640710 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.640710 Degr.