



An Operating Unit of Smith International, Inc.

DIRECTIONAL SURVEY REPORT

30-015-37931

YATES PETROLEUM
CHEVRON BOT #6H – ST1
EDDY COUNTY, NEW MEXICO

RECEIVED

SEP 30 2011

NMOCD ARTESIA

PREPARED BY: FRANCISCO SINISTERRA

Pathfinder Energy Services, Inc.
6213 W. Interstate 20 • Midland, TX • 79706
(432) 681-6000

Pathfinder

6213 W Interstate 20
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Tel 432 687 1647
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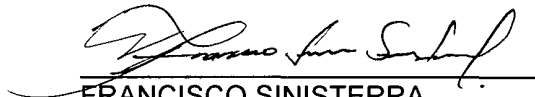


DIRECTIONAL SURVEY COMPANY REPORT:

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 05-07-11
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 – ST1
EDDY COUNTY, NM
RIG: PATRIOT 5
9. SURVEY CERTIFIED FROM: 653 TO 13265 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 6079.14 FEET ON A BEARING OF 0.90 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 13464 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 ST1
EDDY COUNTY, NEW MEXICO
Rig: PATRIOT 5
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers: JAY FULTON
DANIEL BROWN

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: 0.89
Survey Vert. Reference: 26.50' Rotary Table To Ground
Altitude: 2952.00' Ground To MSL

Measured Depth	13464.00	(feet)
Inclination	89.69	(deg)
Azimuth	358.65	(deg)
True Vertical Depth	7610.96	(feet)
Vertical Section	6079.14	(feet)
Survey X cord	641777.56	(feet)
Survey Y cord	459603.01	(feet)
Survey Lat	32.26310570 N	(deg)
Survey Lon	104.00839009 W	(deg)
Rectangular Corr. N/S	6078.39 N	(feet)
Rectangular Corr. E/W	96.01 E	(feet)
Closure Distance	6079.14	(feet)
Direction of Closure	0.90	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION
CHEVRON BOT #6H ST1
EDDY COUNTY, NEW MEXICO
Rig: PATRIOT 5
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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: 0.89
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 Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
TIE-IN TO MULTI-SHOT GYROSCOPIC SURVEY @ 500' MD.										
500.00	1.74	108.75	499.95	0.00	-2.28	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	-4.12	4.28 S	9.97 E	10.85@	113.22	0.32
747.00	0.97	78.50	746.82	94.00	-4.65	4.84 S	12.41 E	13.32@	111.31	1.61
841.00	0.97	101.61	840.81	94.00	-4.62	4.84 S	13.97 E	14.78@	109.12	0.41
1028.00	0.88	352.91	1027.80	187.00	-3.50	3.73 S	15.34 E	15.79@	103.69	0.81
1216.00	1.23	15.85	1215.77	188.00	-0.12	0.36 S	15.71 E	15.72@	91.32	0.29
1310.00	1.14	20.73	1309.75	94.00	1.74	1.48 N	16.32 E	16.39@	84.80	0.14
1404.00	1.14	20.97	1403.73	94.00	3.49	3.23 N	16.98 E	17.29@	79.23	0.01
1498.00	0.79	36.40	1497.71	94.00	4.90	4.63 N	17.70 E	18.30@	75.35	0.46
1592.00	0.88	47.52	1591.70	94.00	5.92	5.64 N	18.62 E	19.45@	73.16	0.20
1696.00	0.70	46.18	1695.69	104.00	6.92	6.61 N	19.67 E	20.75@	71.41	0.17
1781.00	0.88	46.06	1780.69	85.00	7.74	7.43 N	20.51 E	21.82@	70.10	0.21
1875.00	0.26	188.79	1874.68	94.00	8.04	7.72 N	21.00 E	22.37@	69.82	1.17
1969.00	0.26	152.86	1968.68	94.00	7.64	7.32 N	21.06 E	22.30@	70.85	0.17
2064.00	1.32	116.39	2063.67	95.00	6.98	6.64 N	22.14 E	23.12@	73.31	1.18
2158.00	1.93	137.15	2157.63	94.00	5.37	5.00 N	24.19 E	24.70@	78.33	0.89
2253.00	1.58	148.06	2252.59	95.00	3.12	2.71 N	25.97 E	26.11@	84.04	0.51
2345.00	1.32	121.23	2344.56	92.00	1.51	1.09 N	27.55 E	27.57@	87.74	0.78
2440.00	1.49	131.76	2439.53	95.00	0.15	0.30 S	29.40 E	29.41@	90.59	0.32
2536.00	2.20	170.31	2534.49	95.00	-2.45	2.92 S	30.63 E	30.77@	95.45	1.46
2628.00	1.67	181.77	2627.43	93.00	-5.56	6.04 S	30.89 E	31.48@	101.06	0.70
2723.00	1.14	195.81	2722.40	95.00	-7.85	8.33 S	30.59 E	31.70@	105.23	0.66
2772.00	0.79	192.92	2771.40	49.00	-8.66	9.13 S	30.38 E	31.72@	106.72	0.72
2816.00	1.06	180.38	2915.38	144.00	-10.96	11.43 S	30.15 E	32.24@	110.76	0.23

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION
CHEVRON BOT #6H ST1
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)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
3010.00	1.32	169.80	3009.36	94.00	-12.89	13.36 S 30.34 E	33.15@ 113.77	0.36
3104.00	1.85	175.73	3103.32	94.00	-15.46	15.94 S 30.64 E	34.54@ 117.49	0.59
3198.00	3.52	281.07	3197.25	94.00	-16.47	16.90 S 27.92 E	32.64@ 121.19	4.67
3292.00	2.46	288.54	3291.13	94.00	-15.34	15.71 S 23.18 E	28.00@ 124.12	1.20
3387.00	1.23	274.22	3386.08	95.00	-14.67	14.98 S 20.23 E	25.17@ 126.53	1.37
3481.00	1.23	275.19	3480.05	94.00	-14.53	14.82 S 18.22 E	23.48@ 129.13	0.02
3575.00	1.23	273.46	3574.03	94.00	-14.41	14.66 S 16.20 E	21.85@ 132.15	0.04
3668.00	1.14	269.89	3667.01	93.00	-14.38	14.61 S 14.28 E	20.43@ 135.64	0.13
3856.00	0.88	261.76	3854.98	188.00	-14.64	14.82 S 10.98 E	18.44@ 143.45	0.16
4045.00	0.79	269.11	4043.96	189.00	-15.14	15.27 S 8.27 E	17.37@ 151.57	0.05
4233.00	0.97	297.97	4231.94	188.00	-14.68	14.77 S 5.59 E	15.79@ 159.27	0.32
4421.00	0.53	271.31	4419.93	188.00	-13.95	14.00 S 3.32 E	14.39@ 166.68	0.29
4609.00	0.62	272.82	4607.92	188.00	-13.91	13.93 S 1.43 E	14.01@ 174.14	0.05
4798.00	0.53	272.63	4796.91	189.00	-13.85	13.84 S 0.46 W	13.85@ 181.92	0.05
4986.00	0.62	272.20	4984.90	188.00	-13.80	13.76 S 2.35 W	13.96@ 189.69	0.05
5174.00	0.62	251.96	5172.89	188.00	-14.11	14.04 S 4.33 W	14.69@ 197.15	0.12
5363.00	0.44	254.41	5361.88	189.00	-14.64	14.55 S 6.00 W	15.74@ 202.42	0.10
5551.00	0.35	241.19	5549.87	188.00	-15.13	15.02 S 7.20 W	16.66@ 205.62	0.07
5739.00	0.35	181.86	5737.87	188.00	-15.99	15.87 S 7.72 W	17.65@ 205.94	0.19
5927.00	0.70	163.30	5925.86	188.00	-17.66	17.55 S 7.41 W	19.05@ 202.89	0.20
6116.00	0.53	183.03	6114.85	189.00	-19.63	19.53 S 7.12 W	20.78@ 200.04	0.14
6304.00	0.62	181.95	6302.84	188.00	-21.52	21.41 S 7.20 W	22.59@ 198.59	0.05
6493.00	0.62	168.82	6491.83	189.00	-23.54	23.44 S 7.04 W	24.47@ 196.71	0.08
6588.00	0.53	159.13	6586.83	95.00	-24.45	24.35 S 6.78 W	25.28@ 195.55	0.14
6776.00	0.79	124.84	6774.82	188.00	-25.98	25.90 S 5.40 W	26.46@ 191.78	0.25
6965.00	1.23	164.80	6963.79	189.00	-28.66	28.60 S 3.79 W	28.85@ 187.55	0.42
7092.00	5.36	4.14	7090.63	127.00	-24.04	23.99 S 3.00 W	24.18@ 187.12	5.14
7124.00	10.29	359.30	7122.33	32.00	-19.69	19.64 S 2.93 W	19.86@ 188.47	15.53

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Survey Report

YATES PETROLEUM CORPORATION
CHEVRON BOT #6H ST1
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)
7155.00	14.95	358.16	7152.57	31.00	-12.92	12.87 S	3.09 W	13.24@	193.49	15.05
7186.00	19.26	357.36	7182.19	31.00	-3.82	3.77 S	3.45 W	5.11@	222.52	13.92
7218.00	22.60	357.85	7212.07	32.00	7.59	7.65 N	3.93 W	8.60@	332.84	10.45
7249.00	24.27	359.38	7240.52	31.00	19.91	19.98 N	4.22 W	20.42@	348.08	5.73
7281.00	25.94	359.05	7269.49	32.00	33.48	33.55 N	4.41 W	33.84@	352.52	5.24
7313.00	27.79	358.84	7298.04	32.00	47.93	48.01 N	4.67 W	48.24@	354.44	5.79
7344.00	30.69	358.37	7325.08	31.00	63.06	63.15 N	5.04 W	63.35@	355.43	9.38
7376.00	34.65	358.13	7352.02	32.00	80.31	80.41 N	5.57 W	80.60@	356.03	12.38
7407.00	39.04	357.39	7376.82	31.00	98.87	98.98 N	6.31 W	99.18@	356.35	14.23
7439.00	43.35	357.28	7400.89	32.00	119.90	120.03 N	7.29 W	120.25@	356.53	13.47
7470.00	46.43	357.71	7422.85	31.00	141.74	141.88 N	8.24 W	142.12@	356.68	9.98
7502.00	49.42	358.37	7444.29	32.00	165.46	165.62 N	9.05 W	165.86@	356.87	9.47
7533.00	52.23	358.07	7463.87	31.00	189.46	189.64 N	9.80 W	189.89@	357.04	9.10
7564.00	55.31	358.48	7482.19	31.00	214.44	214.63 N	10.55 W	214.89@	357.19	9.99
7596.00	58.39	358.56	7499.69	32.00	241.20	241.41 N	11.24 W	241.67@	357.33	9.63
7627.00	60.59	358.91	7515.43	31.00	267.89	268.11 N	11.83 W	268.37@	357.47	7.16
7658.00	62.78	358.99	7530.13	31.00	295.16	295.39 N	12.33 W	295.65@	357.61	7.07
7690.00	65.25	359.24	7544.15	32.00	323.91	324.15 N	12.77 W	324.40@	357.74	7.75
7721.00	67.97	359.93	7556.46	31.00	352.36	352.60 N	12.98 W	352.84@	357.89	9.01
7753.00	71.14	0.46	7567.63	32.00	382.33	382.58 N	12.87 W	382.80@	358.07	10.03
7784.00	74.13	359.97	7576.88	31.00	411.92	412.16 N	12.76 W	412.36@	358.23	9.76
7816.00	77.12	359.86	7584.83	32.00	442.91	443.16 N	12.81 W	443.34@	358.34	9.35
7847.00	79.32	359.85	7591.15	31.00	473.25	473.50 N	12.89 W	473.68@	358.44	7.10
7879.00	81.51	359.75	7596.48	32.00	504.79	505.05 N	13.00 W	505.22@	358.53	6.85
7927.00	84.77	0.13	7602.22	48.00	552.43	552.70 N	13.05 W	552.86@	358.65	6.84
7958.00	86.00	2.48	7604.71	31.00	583.33	583.59 N	12.34 W	583.72@	358.79	8.53
7989.00	86.35	3.29	7606.78	31.00	614.24	614.48 N	10.78 W	614.58@	358.99	2.84
8021.00	87.14	4.39	7608.59	32.00	646.15	646.36 N	8.64 W	646.42@	359.23	4.23

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Survey Report

YATES PETROLEUM CORPORATION
CHEVRON BOT #6H ST1
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)
8051.00	88.72	5.23	7609.68	30.00	676.06	676.23 N	6.13 W	676.26@	359.48	5.96
8083.00	89.52	5.86	7610.17	32.00	707.95	708.08 N	3.04 W	708.09@	359.75	3.18
8145.00	90.92	6.77	7609.93	62.00	769.67	769.70 N	3.78 E	769.71@	0.28	2.69
8240.00	91.63	7.50	7607.82	95.00	864.08	863.94 N	15.58 E	864.08@	1.03	1.07
8334.00	90.57	7.04	7606.01	94.00	957.48	957.17 N	27.47 E	957.56@	1.64	1.23
8428.00	90.40	7.62	7605.22	94.00	1050.88	1050.39 N	39.46 E	1051.14@	2.15	0.64
8522.00	89.25	7.32	7605.51	94.00	1144.26	1143.59 N	51.68 E	1144.76@	2.59	1.26
8617.00	88.64	7.02	7607.25	95.00	1238.67	1237.83 N	63.54 E	1239.46@	2.94	0.72
8710.00	89.08	7.01	7609.10	93.00	1331.12	1330.12 N	74.89 E	1332.23@	3.22	0.47
8805.00	88.81	7.72	7610.85	95.00	1425.50	1424.32 N	87.07 E	1426.98@	3.50	0.80
8899.00	90.31	6.88	7611.57	94.00	1518.91	1517.55 N	99.01 E	1520.78@	3.73	1.83
8994.00	90.84	7.19	7610.62	95.00	1613.35	1611.83 N	110.65 E	1615.62@	3.93	0.65
9089.00	90.57	6.21	7609.45	95.00	1707.86	1706.17 N	121.73 E	1710.51@	4.08	1.07
9184.00	90.75	5.90	7608.36	95.00	1802.47	1800.64 N	131.75 E	1805.45@	4.18	0.38
9278.00	89.69	4.97	7608.00	94.00	1896.17	1894.21 N	140.65 E	1899.43@	4.25	1.50
9373.00	89.69	3.57	7608.51	95.00	1991.00	1988.94 N	147.73 E	1994.42@	4.25	1.47
9467.00	89.08	4.12	7609.52	94.00	2084.87	2082.73 N	154.03 E	2088.41@	4.23	0.87
9561.00	88.72	2.40	7611.33	94.00	2178.77	2176.55 N	159.37 E	2182.38@	4.19	1.87
9655.00	89.34	0.70	7612.92	94.00	2272.74	2270.50 N	161.92 E	2276.27@	4.08	1.92
9748.00	89.60	358.97	7613.78	93.00	2365.72	2363.49 N	161.65 E	2369.02@	3.91	1.88
9842.00	91.28	358.76	7613.06	94.00	2459.65	2457.47 N	159.79 E	2462.66@	3.72	1.80
9936.00	90.66	359.16	7611.46	94.00	2553.59	2551.44 N	158.08 E	2556.33@	3.55	0.78
10031.00	90.22	359.01	7610.73	95.00	2648.54	2646.42 N	156.56 E	2651.05@	3.39	0.49
10125.00	90.39	359.45	7610.23	94.00	2742.50	2740.41 N	155.30 E	2744.81@	3.24	0.50
10220.00	89.94	359.72	7609.96	95.00	2837.47	2835.41 N	154.61 E	2839.62@	3.12	0.55
10313.00	90.75	359.98	7609.40	93.00	2930.45	2928.41 N	154.37 E	2932.47@	3.02	0.92
10407.00	90.22	359.67	7608.60	94.00	3024.43	3022.40 N	154.08 E	3026.33@	2.92	0.65
10501.00	90.48	359.72	7608.03	94.00	3118.41	3116.40 N	153.58 E	3120.18@	2.82	0.28

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Survey Report

YATES PETROLEUM CORPORATION
CHEVRON BOT #6H ST1
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 (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
10596.00	90.04	358.81	7607.60	95.00	3213.37	3211.39 N	152.36 E	3215.00@	2.72	1.06
10690.00	89.34	359.34	7608.11	94.00	3307.32	3305.38 N	150.84 E	3308.82@	2.61	0.93
10784.00	89.43	358.47	7609.12	94.00	3401.26	3399.35 N	149.05 E	3402.62@	2.51	0.93
10879.00	89.78	359.36	7609.77	95.00	3496.20	3494.33 N	147.25 E	3497.43@	2.41	1.01
10973.00	89.96	359.89	7609.99	94.00	3590.17	3588.33 N	146.63 E	3591.32@	2.34	0.60
11067.00	91.01	1.81	7609.19	94.00	3684.17	3682.31 N	148.03 E	3685.28@	2.30	2.33
11161.00	88.55	358.58	7609.55	94.00	3778.14	3776.29 N	148.35 E	3779.20@	2.25	4.32
11255.00	89.52	359.76	7611.13	94.00	3872.08	3870.26 N	146.99 E	3873.05@	2.17	1.62
11379.00	91.19	359.24	7610.37	124.00	3996.04	3994.25 N	145.91 E	3996.91@	2.09	1.41
11473.00	91.36	359.07	7608.27	94.00	4089.97	4088.22 N	144.52 E	4090.77@	2.02	0.25
11568.00	90.92	358.05	7606.38	95.00	4184.87	4183.17 N	142.13 E	4185.58@	1.95	1.17
11663.00	91.10	358.67	7604.71	95.00	4279.76	4278.11 N	139.41 E	4280.38@	1.87	0.68
11757.00	89.69	358.63	7604.06	94.00	4373.69	4372.08 N	137.20 E	4374.23@	1.80	1.50
11851.00	88.90	358.42	7605.22	94.00	4467.60	4466.04 N	134.78 E	4468.08@	1.73	0.87
11945.00	88.81	358.46	7607.10	94.00	4561.49	4559.99 N	132.22 E	4561.91@	1.66	0.10
12040.00	88.55	358.52	7609.28	95.00	4656.38	4654.93 N	129.72 E	4656.74@	1.60	0.28
12134.00	88.72	357.94	7611.52	94.00	4750.26	4748.86 N	126.82 E	4750.55@	1.53	0.64
12228.00	89.34	357.84	7613.12	94.00	4844.11	4842.78 N	123.36 E	4844.35@	1.46	0.67
12323.00	89.43	358.35	7614.13	95.00	4938.99	4937.72 N	120.20 E	4939.19@	1.39	0.54
12417.00	90.84	358.63	7613.91	94.00	5032.91	5031.69 N	117.72 E	5033.07@	1.34	1.53
12511.00	90.31	358.57	7612.97	94.00	5126.83	5125.66 N	115.42 E	5126.95@	1.29	0.57
12604.00	91.10	358.58	7611.83	93.00	5219.75	5218.62 N	113.11 E	5219.84@	1.24	0.85
12698.00	91.19	358.86	7609.95	94.00	5313.66	5312.58 N	111.01 E	5313.74@	1.20	0.31
12793.00	90.66	359.08	7608.41	95.00	5408.59	5407.55 N	109.30 E	5408.65@	1.16	0.60
12887.00	90.31	358.87	7607.62	94.00	5502.54	5501.53 N	107.62 E	5502.58@	1.12	0.43
12981.00	90.22	359.13	7607.18	94.00	5596.49	5595.51 N	105.98 E	5596.52@	1.09	0.29
13076.00	89.60	358.98	7607.33	95.00	5691.44	5690.50 N	104.42 E	5691.46@	1.05	0.67
13170.00	88.81	358.93	7608.64	94.00	5785.37	5784.48 N	102.70 E	5785.39@	1.02	0.84

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION
CHEVRON BOT #6H ST1
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		Closure Dist Dir		DLS
						(ft)	(ft)	(ft)	(deg)	(dg/100ft)
13265.00	89.69	358.65	7609.88	95.00	5880.30	5879.44 N	100.70 E	5880.31@	0.98	0.97
STRAIGHT LINE PROJECTION TO BIT @ 13464' MD.										
13464.00	89.69	358.65	7610.96	199.00	6079.14	6078.39 N	96.01 E	6079.14@	0.90	0.00



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 Degs

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 Degs.