

For your records

PATHFINDER[®]

A Schlumberger Company

DIRECTIONAL SURVEY REPORT

RECEIVED

MAR 20 2012

NMOCD ARTESIA

30-015-38223

YATES PETROLEUM

BUHO BQH STATE #1H

EDDY COUNTY, NEW MEXICO

PREPARED BY: STEVE BIBB

Pathfinder

6213 WCR 112
Midland, Texas 79706
Tel (432)687-1647
Fax (432)687-1544



DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) GEORGE SAKAS
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 09-14-11 TO 09-26-11
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
BUHO BQH STATE #1H
EDDY COUNTY, NM
RIG: PATRIOT 5
9. SURVEY CERTIFIED FROM: 534 TO 11638 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 4901.92 FEET ON A BEARING OF 89.47 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 11720 FEET, ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.



STEVE BIBB
MWD COORDINATOR

PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 10/13/2011
Date Completed: 09/26/2011

YATES PETROLEUM CORPORATION

BUHO BQH STATE #1H

EDDY COUNTY, NM

Rig: PATRIOT 5

PathFinder Office Supervisor: STEVE BIBB

PathFinder Field Engineers: GEORGE SAKAS

CHARLIE SANDIFER

Survey Horiz. Reference: WELLHEAD

Ref Coordinates: LAT: 32.0.18.9028 N LON: 104.2.58.4978 W

GRID Reference: NAD83 new mexico east Transverse Mercator

Ref GRID Coord: X: 629291.9450 Y: 365765.0310

North Aligned To: GRID NORTH

Total Magnetic Correction: 7.61° EAST TO GRID

Vertical Section Plane: 89.51

Survey Vert. Reference: 26.50' Rotary Table To Ground

Altitude: 3001.00' Ground To MSL

Measured Depth	11720.00	(feet)
Inclination	91.36	(deg)
Azimuth	90.58	(deg)
True Vertical Depth	7057.61	(feet)
Vertical Section	4901.92	(feet)
Survey X cord	634193.63	(feet)
Survey Y cord	365810.42	(feet)
Survey Lat	32.00533920 N	(deg)
Survey Lon	104.03376915 W	(deg)
Rectangular Corr. N/S	45.40 N	(feet)
Rectangular Corr. E/W	4901.71 E	(feet)
Closure Distance	4901.92	(feet)
Direction of Closure	89.47	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION

BUHO BQH STATE #1H

EDDY COUNTY, NM

Rig: PATRIOT 5

PathFinder Office Supervisor: STEVE BIBB

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Ref Coordinates: LAT: 32.0.18.9028 N LON: 104.2.58.4978 W

GRID Reference: NAD83 new mexico east Transverse Mercator

Ref GRID Coord: X: 629291.9450 Y: 365765.0310

North Aligned To: GRID NORTH

Total Magnetic Correction: 7.61° EAST TO GRID

Vertical Section Plane: 89.51

Survey Vert. Reference: 26.50' Rotary Table To Ground

Altitude: 3001.00' Ground To MSL

Survey Calculations by RX5 V6.03E 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)
THE FOLLOWING SURVEYS ARE MULTI SHOT GYRO SURVEYS.										
100.00	1.00	326.55	100.00	0.00	-0.48	0.73 N	0.48 W	0.87@	326.40	0.00
200.00	0.75	309.85	199.99	100.00	-1.45	1.87 N	1.47 W	2.38@	321.96	0.35
300.00	1.25	337.14	299.97	100.00	-2.36	3.30 N	2.39 W	4.07@	324.04	0.68
400.00	1.50	331.44	399.94	100.00	-3.39	5.45 N	3.44 W	6.45@	327.74	0.28
**	TIE-IN TO MULTI SHOT GYRO SURVEY @ 500' MD.									
500.00	1.50	0.73	499.91	100.00	-3.98	7.91 N	4.05 W	8.89@	332.89	0.76
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.										
534.00	1.85	19.72	533.90	34.00	-3.78	8.87 N	3.86 W	9.67@	336.49	1.92
624.00	0.97	284.00	623.88	90.00	-4.02	10.42 N	4.11 W	11.20@	338.49	2.41
687.00	1.14	267.83	686.87	63.00	-5.16	10.53 N	5.25 W	11.77@	333.49	0.54
781.00	1.06	265.18	780.85	94.00	-6.96	10.42 N	7.05 W	12.58@	325.91	0.10
875.00	0.79	174.42	874.84	94.00	-7.77	9.70 N	7.86 W	12.48@	321.00	1.41
970.00	0.97	198.11	969.83	95.00	-7.97	8.29 N	8.04 W	11.55@	315.86	0.42
1064.00	1.32	201.31	1063.81	94.00	-8.63	6.52 N	8.68 W	10.86@	306.91	0.38
1158.00	1.49	193.01	1157.78	94.00	-9.31	4.32 N	9.35 W	10.30@	294.80	0.28
1252.00	1.58	162.99	1251.75	94.00	-9.23	1.89 N	9.25 W	9.44@	281.56	0.85
1347.00	1.06	117.17	1346.73	95.00	-8.08	0.24 N	8.08 W	8.09@	271.69	1.19
1441.00	1.49	123.94	1440.70	94.00	-6.30	0.84 S	6.30 W	6.35@	262.39	0.48
1535.00	1.93	113.60	1534.66	94.00	-3.85	2.16 S	3.83 W	4.40@	240.62	0.57
1630.00	1.76	85.85	1629.61	95.00	-0.93	2.69 S	0.91 W	2.84@	198.68	0.95
1725.00	1.85	50.66	1724.57	95.00	1.72	1.61 S	1.73 E	2.37@	133.00	1.15
1820.00	1.14	43.88	1819.54	95.00	3.57	0.04 N	3.57 E	3.57@	89.38	0.77
1915.00	1.06	13.17	1914.52	95.00	4.44	1.58 N	4.43 E	4.70@	70.41	0.62
1962.00	1.14	27.63	1961.51	47.00	4.76	2.41 N	4.74 E	5.32@	63.04	0.61
2011.00	1.58	48.81	2010.50	49.00	5.51	3.29 N	5.48 E	6.39@	59.01	1.35
2059.00	1.76	59.09	2058.48	48.00	6.64	4.10 N	6.61 E	7.78@	58.16	0.73

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION
BUHO BQH STATE #1H
EDDY COUNTY, NM
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)
2106.00	1.67	70.00	2105.46	47.00	7.91	4.71 N	7.87 E	9.17@	59.11	0.72
2155.00	1.14	75.17	2154.44	49.00	9.06	5.08 N	9.01 E	10.35@	60.60	1.11
2199.00	0.88	88.57	2198.44	44.00	9.82	5.20 N	9.77 E	11.07@	61.99	0.79
2247.00	1.58	86.66	2246.42	48.00	10.85	5.25 N	10.80 E	12.01@	64.10	1.46
2294.00	2.02	88.41	2293.40	47.00	12.32	5.31 N	12.28 E	13.38@	66.62	0.94
2388.00	1.76	88.63	2387.35	94.00	15.42	5.39 N	15.38 E	16.29@	70.69	0.28
2437.00	2.29	90.04	2436.32	49.00	17.15	5.41 N	17.11 E	17.94@	72.47	1.09
2482.00	1.06	92.50	2481.30	45.00	18.47	5.39 N	18.42 E	19.19@	73.70	2.74
2562.00	0.44	19.09	2561.29	80.00	19.31	5.64 N	19.26 E	20.07@	73.67	1.28
2739.00	0.88	248.66	2738.29	177.00	18.27	5.79 N	18.22 E	19.12@	72.36	0.68
2930.00	0.18	338.05	2929.28	191.00	16.79	5.54 N	16.74 E	17.63@	71.70	0.47
3120.00	0.09	347.95	3119.28	190.00	16.65	5.96 N	16.60 E	17.64@	70.25	0.05
3310.00	0.00	152.81	3309.28	190.00	16.62	6.11 N	16.57 E	17.66@	69.77	0.05
3501.00	0.09	204.93	3500.28	191.00	16.55	5.97 N	16.50 E	17.55@	70.12	0.05
3691.00	0.09	178.11	3690.28	190.00	16.49	5.68 N	16.45 E	17.40@	70.93	0.02
3882.00	0.18	202.55	3881.28	191.00	16.38	5.26 N	16.34 E	17.16@	72.16	0.05
4072.00	0.18	206.72	4071.28	190.00	16.13	4.72 N	16.09 E	16.76@	73.66	0.01
4261.00	0.44	211.24	4260.27	189.00	15.61	3.83 N	15.58 E	16.04@	76.19	0.14
4450.00	0.44	205.83	4449.27	189.00	14.91	2.56 N	14.88 E	15.10@	80.26	0.02
4638.00	0.44	196.49	4637.26	188.00	14.38	1.21 N	14.37 E	14.42@	85.17	0.04
4826.00	0.79	173.08	4825.25	188.00	14.31	0.76 S	14.32 E	14.34@	93.06	0.23
4920.00	0.62	201.82	4919.24	94.00	14.19	1.88 S	14.21 E	14.33@	97.54	0.41
5015.00	0.88	235.03	5014.24	95.00	13.39	2.78 S	13.42 E	13.70@	101.69	0.52
5110.00	0.97	238.10	5109.22	95.00	12.10	3.62 S	12.14 E	12.66@	106.60	0.11
5204.00	0.88	267.15	5203.21	94.00	10.70	4.07 S	10.74 E	11.49@	110.78	0.50
5298.00	0.97	258.96	5297.20	94.00	9.20	4.26 S	9.24 E	10.17@	114.77	0.17
5392.00	0.88	250.27	5391.19	94.00	7.74	4.66 S	7.78 E	9.07@	120.92	0.18
5486.00	0.79	239.45	5485.18	94.00	6.49	5.23 S	6.54 E	8.38@	128.66	0.19

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION
BUHO BQH STATE #1H
EDDY COUNTY, NM
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 (ft)	Offsets (ft)	Closure Dist (ft)	Dir (deg)	DLS (dg/100ft)
5581.00	1.14	297.56	5580.17	95.00	5.09	5.13 S	5.14 E	7.26@	134.94	1.04
5675.00	0.97	291.14	5674.15	94.00	3.53	4.41 S	3.57 E	5.67@	141.02	0.22
5769.00	0.97	292.10	5768.14	94.00	2.05	3.82 S	2.09 E	4.35@	151.35	0.02
5863.00	0.62	23.39	5862.13	94.00	1.53	3.06 S	1.55 E	3.43@	153.07	1.24
5957.00	0.26	52.66	5956.13	94.00	1.90	2.46 S	1.92 E	3.12@	141.97	0.44
6052.00	0.26	153.63	6051.13	95.00	2.17	2.52 S	2.19 E	3.34@	139.02	0.42
6146.00	0.00	164.85	6145.13	94.00	2.26	2.71 S	2.29 E	3.55@	139.89	0.28
6241.00	0.62	204.16	6240.13	95.00	2.05	3.18 S	2.08 E	3.80@	146.89	0.65
6335.00	1.49	179.53	6334.11	94.00	1.84	4.87 S	1.88 E	5.22@	158.91	1.02
6430.00	0.62	196.07	6429.09	95.00	1.69	6.60 S	1.75 E	6.82@	165.18	0.96
6486.00	0.88	235.47	6485.09	56.00	1.25	7.13 S	1.31 E	7.25@	169.62	1.00
6545.00	1.41	234.07	6544.08	59.00	0.28	7.81 S	0.35 E	7.82@	177.47	0.90
6576.00	2.37	114.99	6575.07	31.00	0.55	8.31 S	0.62 E	8.33@	175.75	10.63
6607.00	8.00	95.32	6605.93	31.00	3.27	8.78 S	3.35 E	9.40@	159.12	18.78
6638.00	13.81	90.36	6636.36	31.00	9.12	9.00 S	9.20 E	12.87@	134.38	18.97
6670.00	18.99	88.42	6667.04	32.00	18.16	8.88 S	18.23 E	20.28@	115.98	16.28
6702.00	22.34	87.74	6696.98	32.00	29.44	8.50 S	29.52 E	30.72@	106.07	10.50
6734.00	25.15	87.47	6726.27	32.00	42.32	7.96 S	42.39 E	43.13@	100.64	8.79
6765.00	28.31	88.00	6753.95	31.00	56.25	7.41 S	56.32 E	56.81@	97.50	10.22
6797.00	31.57	89.28	6781.68	32.00	72.22	7.04 S	72.28 E	72.63@	95.57	10.38
6829.00	35.17	89.24	6808.40	32.00	89.82	6.82 S	89.88 E	90.14@	94.34	11.25
6861.00	38.60	89.49	6833.99	32.00	109.02	6.60 S	109.08 E	109.28@	93.46	10.73
6892.00	41.77	89.71	6857.67	31.00	129.02	6.47 S	129.08 E	129.25@	92.87	10.24
6924.00	44.76	89.39	6880.97	32.00	150.95	6.29 S	151.01 E	151.14@	92.39	9.37
6956.00	47.48	89.19	6903.15	32.00	174.02	6.01 S	174.07 E	174.18@	91.98	8.51
6988.00	51.00	88.65	6924.04	32.00	198.25	5.55 S	198.30 E	198.38@	91.60	11.07
7019.00	53.99	88.60	6942.91	31.00	222.84	4.96 S	222.89 E	222.94@	91.27	9.65
7051.00	56.63	89.45	6961.12	32.00	249.14	4.51 S	249.19 E	249.23@	91.04	8.53

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION
BUHO BQH STATE #1H
EDDY COUNTY, NM
RIG:PATRIOT 5

Page 04/06

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)
7083.00	59.09	90.58	6978.14	32.00	276.24	4.52 S	276.28 E	276.32@	90.94	8.25
7115.00	63.93	90.31	6993.40	32.00	304.35	4.74 S	304.40 E	304.44@	90.89	15.14
7146.00	68.68	90.34	7005.86	31.00	332.72	4.90 S	332.78 E	332.81@	90.84	15.32
7178.00	73.34	89.91	7016.27	32.00	362.97	4.96 S	363.03 E	363.06@	90.78	14.62
7216.00	77.65	89.17	7025.78	38.00	399.75	4.67 S	399.81 E	399.83@	90.67	11.50
7248.00	82.83	88.30	7031.21	32.00	431.28	3.97 S	431.32 E	431.34@	90.53	16.41
7279.00	86.53	88.27	7034.08	31.00	462.13	3.04 S	462.17 E	462.18@	90.38	11.94
7311.00	88.29	89.22	7035.53	32.00	494.09	2.34 S	494.13 E	494.14@	90.27	6.25
7343.00	88.64	89.34	7036.38	32.00	526.08	1.94 S	526.12 E	526.12@	90.21	1.16
7406.00	88.29	89.68	7038.07	63.00	589.06	1.40 S	589.09 E	589.09@	90.14	0.77
7438.00	87.85	89.30	7039.15	32.00	621.04	1.12 S	621.07 E	621.07@	90.10	1.82
7533.00	88.20	88.86	7042.42	95.00	715.98	0.40 N	716.00 E	716.00@	89.97	0.59
7628.00	89.16	89.19	7044.61	95.00	810.95	2.02 N	810.96 E	810.96@	89.86	1.07
7723.00	90.13	88.90	7045.20	95.00	905.94	3.60 N	905.95 E	905.95@	89.77	1.07
7819.00	89.52	88.61	7045.49	96.00	1001.93	5.69 N	1001.92 E	1001.94@	89.67	0.70
7914.00	90.22	88.47	7045.71	95.00	1096.92	8.11 N	1096.89 E	1096.92@	89.58	0.75
8009.00	89.60	88.15	7045.86	95.00	1191.90	10.91 N	1191.85 E	1191.90@	89.48	0.74
8105.00	89.52	88.37	7046.59	96.00	1287.87	13.83 N	1287.80 E	1287.88@	89.38	0.24
8200.00	89.69	88.67	7047.25	95.00	1382.86	16.28 N	1382.77 E	1382.86@	89.33	0.36
8295.00	89.78	89.05	7047.69	95.00	1477.85	18.17 N	1477.75 E	1477.86@	89.30	0.41
8390.00	89.52	89.39	7048.27	95.00	1572.85	19.46 N	1572.74 E	1572.86@	89.29	0.45
8485.00	88.64	89.35	7049.79	95.00	1667.83	20.51 N	1667.72 E	1667.84@	89.30	0.93
8580.00	88.29	89.71	7052.34	95.00	1762.80	21.29 N	1762.68 E	1762.81@	89.31	0.53
8676.00	88.29	89.81	7055.20	96.00	1858.75	21.69 N	1858.64 E	1858.76@	89.33	0.10
8771.00	88.20	90.25	7058.11	95.00	1953.71	21.64 N	1953.59 E	1953.71@	89.37	0.47
8866.00	88.81	90.00	7060.59	95.00	2048.67	21.43 N	2048.56 E	2048.67@	89.40	0.69
8960.00	88.46	90.20	7062.83	94.00	2142.64	21.27 N	2142.53 E	2142.64@	89.43	0.43
9055.00	89.52	89.97	7064.51	95.00	2237.61	21.13 N	2237.51 E	2237.61@	89.46	1.14

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION
BUHO BQH STATE #1H
EDDY COUNTY, NM
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)
9149.00	89.96	89.28	7064.93	94.00	2331.61	21.74 N	2331.51 E	2331.61@	89.47	0.87
9243.00	89.52	89.76	7065.36	94.00	2425.61	22.53 N	2425.51 E	2425.61@	89.47	0.69
9337.00	90.48	89.84	7065.36	94.00	2519.61	22.86 N	2519.50 E	2519.61@	89.48	1.03
9432.00	90.48	89.84	7064.56	95.00	2614.60	23.12 N	2614.50 E	2614.60@	89.49	0.00
9527.00	90.22	90.01	7063.98	95.00	2709.60	23.25 N	2709.50 E	2709.60@	89.51	0.33
9621.00	90.84	89.83	7063.11	94.00	2803.59	23.38 N	2803.49 E	2803.59@	89.52	0.69
9715.00	91.10	89.57	7061.52	94.00	2897.58	23.87 N	2897.48 E	2897.58@	89.53	0.39
9809.00	91.10	89.36	7059.72	94.00	2991.56	24.75 N	2991.46 E	2991.56@	89.53	0.22
9904.00	91.45	89.49	7057.60	95.00	3086.54	25.70 N	3086.43 E	3086.54@	89.52	0.39
9998.00	90.13	89.63	7056.31	94.00	3180.53	26.42 N	3180.42 E	3180.53@	89.52	1.41
10092.00	90.13	89.49	7056.09	94.00	3274.52	27.15 N	3274.41 E	3274.53@	89.53	0.15
10186.00	89.87	90.09	7056.09	94.00	3368.52	27.49 N	3368.41 E	3368.52@	89.53	0.70
10281.00	89.34	89.23	7056.75	95.00	3463.52	28.05 N	3463.41 E	3463.52@	89.54	1.06
10374.00	89.16	89.31	7057.97	93.00	3556.51	29.24 N	3556.39 E	3556.51@	89.53	0.21
10468.00	89.16	89.41	7059.34	94.00	3650.50	30.29 N	3650.38 E	3650.50@	89.52	0.11
10562.00	90.31	88.49	7059.78	94.00	3744.49	32.01 N	3744.36 E	3744.49@	89.51	1.57
10656.00	89.25	88.95	7060.14	94.00	3838.48	34.11 N	3838.33 E	3838.48@	89.49	1.23
10750.00	87.67	87.76	7062.67	94.00	3932.42	36.81 N	3932.25 E	3932.42@	89.46	2.10
10845.00	86.70	88.24	7067.33	95.00	4027.27	40.12 N	4027.08 E	4027.28@	89.43	1.14
10939.00	87.93	88.26	7071.74	94.00	4121.15	42.99 N	4120.93 E	4121.15@	89.40	1.31
11033.00	91.54	89.79	7072.17	94.00	4215.12	44.59 N	4214.90 E	4215.13@	89.39	4.17
11128.00	91.89	90.29	7069.33	95.00	4310.08	44.52 N	4309.85 E	4310.08@	89.41	0.64
11222.00	90.04	89.29	7067.74	94.00	4404.06	44.86 N	4403.83 E	4404.06@	89.42	2.24
11316.00	91.71	89.79	7066.31	94.00	4498.04	45.62 N	4497.82 E	4498.05@	89.42	1.85
11411.00	90.40	89.67	7064.56	95.00	4593.02	46.07 N	4592.80 E	4593.03@	89.43	1.38
11505.00	91.54	89.69	7062.97	94.00	4687.01	46.59 N	4686.78 E	4687.01@	89.43	1.21
11599.00	91.45	90.36	7060.51	94.00	4780.97	46.55 N	4780.75 E	4780.98@	89.44	0.72
11638.00	91.36	90.58	7059.56	39.00	4819.96	46.23 N	4819.74 E	4819.96@	89.45	0.61

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION
BUHO BQH STATE #1H
EDDY COUNTY, NM
RIG:PATRIOT 5

Page 06/06

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 @ 11720'								
11720.00	91.36	90.58	7057.61	82.00	4901.92	45.40 N 4901.71 E	4901.92@ 89.47	0.00

** The survey data at tie-in point was furnished by a recognized survey company and entered as submitted. Survey stations above the tie-in point represent recalculated data by PathFinder Energy Services, Inc. and may reflect minor changes due to rounding differences between survey programs. Only survey stations taken by qualified PathFinder personnel are subject to certification.



A Schlumberger Company

TIE-IN SURVEY INFORMATION SHEET

CLIENT INFORMATION

CLIENT:	YATES PETROLEUM CORPORATION		
LEASE / WELL No.:	BUHO "BQH" STATE	#1H	
WELL LOCATION:	EDDY COUNTY		
COUNTY / STATE / COUNTRY:	EDDY	NM	USA
RIG:	PATRIOT 5		
API WELL No:	30-015-38223		
JOB No:	700003747 WT-WT		
P.O. / AFE No.			
DIRECTIONAL COMPANY:	PATHFINDER ENERGY SERVICES		

WELL SITE INFORMATION

TOTAL MAGNETIC CORRECTION (TMC):			
<i>On Wall Plat:</i>		<i>LWD Calculated:</i>	
X = 629291.945000 Feet		Y = 365765.031000 Feet	
SITE LATITUDE: 32.005251		SITE LONGITUDE: 104.049583	
GRID SYSTEM: TRUE ☐ UTM ☒ LAMBERT ☐		ZONE: NEW MEXICO EAST	
PROPOSED DRIFT DIRECTION:		89.51	
KELLY BUSHING ELEVATION:		26.5	
ALTITUDE: 3001 Feet		WATER DEPTH: Feet	

TIE-IN SURVEY

MEASURED DEPTH:	500		
DRIFT ANGLE:	0.73		
DRIFT DIRECTION:	89.51		
TRUE VERTICAL DEPTH:	499.91		
VERTICAL SECTION:	1.5		
RECTANGULAR COORDINATE (N / S) :	7.91		
RECTANGULAR COORDINATE (E / W) :	-4.05		
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:	TOTAL DEPTH:
KICKOFF ANGLE:	MAX ANGLE:

PES Engineers: G SAKAS
C SANDIFER

**Signature of both field engineers required if applicable

Directional Driller: IRBY LEJUENE

DATE: 13-Sep-2011



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

Magnetic & Grid Calculations

Yates Petroleum Corp.
Buho "BQH" State #1H
Eddy County, New Mexico
Rig:Patriot #5

Mon Sep 12 14:25:20 2011

Coordinates

Latitude: 32.005251 N (32 deg. 0 min. 18.9028 sec.)
Longitude: 104.049583 W (-104 deg. 2 min. 58.4978 sec.)
Elevation: 3027.50 feet.
Calculation Date: Sep/12/2011

Magnetic Calculations

Model: IGRF2010
Dip Angle: 59.8935 degrees
Total Magnetic Field: 0.48409 gauss
Magnetic Declination: 7.756931 degrees
Horizontal Intensity: 0.242823 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.756931 Degr

Transverse Mercator Grid Calculations NAD83

Grid System: Transverse Mercator: new mexico east
Ellipsoid: GRS80
X: 629291.9450 feet
Y: 365765.0310 feet
True to Grid: (convergence) -0.150388 degrees
Magnetic to Grid: 7.606543 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.606543 Degr.

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

YATES PETROLEUM CORPORATION
BUHO BQH STATE #1H
BONE SPRING

Tue Sep 13 17:21:53 2011

Coordinates

Latitude: 32.005251 N (32 deg. 0 min. 18.9028 sec.)
Longitude: 104.049583 W (-104 deg. 2 min. 58.4978 sec.)
Elevation: 3027.50 feet.
Calculation Date: Sep/13/2011

Field

Magnetic Calculations

Model: IGRF2010
Dip Angle: 59.8934 degrees
Total Magnetic Field: 0.48409 gauss
Magnetic Declination: 7.756598 degrees
Horizontal Intensity: 0.242822 gauss

To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.756598 Degr.

Transverse Mercator Grid Calculations NAD83

Grid System: Transverse Mercator: new mexico east
Ellipsoid: GRS80
X: 629291.9450 feet
Y: 365765.0310 feet
True to Grid: (convergence) -0.150388 degrees
Magnetic to Grid: 7.606211 degrees

To Convert a Magnetic Dir. to a GRID dir. Add 7.606211 Degr.

DISTRICT I

1625 N. French Dr., Hobbs, NM 88240

DISTRICT II

1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV

1820 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102

Revised July 16, 2010

Submit one copy to appropriate
District Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-38223	Pool Code	Pool Name Hay Hollow Bone Spring
Property Code 38259	Property Name BUHO "BQH" STATE	Well Number 1H
OGRID No. 25575	Operator Name YATES PETROLEUM CORP.	Elevation 3001'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	35	26 S	28 E		480	NORTH	75	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	36	26 S	28 E		480	NORTH	330	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

SURFACE LOCATION
 Lat - N 32°00'18.90"
 Long - W 104°02'58.50"
 NMSPCE- N 365765.031
 (NAD-83)

PROPOSED BOTTOM HOLE LOCATION
 Lat - N 32°00'19.22"
 Long - W 104°01'53.46"
 NMSPCE- E 634892.288
 (NAD-83)

Penetration Point 430' FNL & 355' FWL

Producing Zone

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Cy Cowan 7/27/11
 Signature Date

Cy Cowan
 Printed Name

cy@yatespetroleum.com
 Email Address

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.

GARY L. JONES
 Date Surveyed MEXICO
 Signature & Seal of Professional Surveyor

Certificate No. Gary L. Jones 7977

BASIN SURVEYS 24931

RECEIVED
 JUL 28 2011
 NMOCD ARTESIA