



Yates Petroleum Corp.

Eddy County
Waldrip "JY"
#3H
OH

Design: OH

Pathfinder X&Y Report

02 September, 2011

PATHFINDER
A Schlumberger Company

30-015-39301



Pathfinder
Pathfinder X&Y Report

PATHFINDER
A Schlumberger Company

Company:	Yates Petroleum Corp.	Local Co-ordinate Reference:	Well #3H
Project:	Eddy County	TVD Reference:	KB=18.5 @ 3398.50usft (Patterson 101)
Site:	Waldrip "JY"	MD Reference:	KB=18.5 @ 3398.50usft (Patterson 101)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.1 Single User Db

Project:			
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site:	Waldrip "JY"		
Site Position:		Northing:	622,421.000 usft
From:	Map	Easting:	528,415.604 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 42' 39.850 N
		Longitude:	104° 22' 31.245 W
		Grid Convergence:	-0.02 °

Well:	#3H					
Well Position	+N/-S	0.00 usft	Northing:	622,421.000 usft	Latitude:	32° 42' 39.850 N
	+E/-W	0.00 usft	Easting:	528,415.604 usft	Longitude:	104° 22' 31.245 W
Position Uncertainty	0.00 usft		Wellhead Elevation:	usft	Ground Level:	3,380.00 usft

Wellbore:	OH				
Magnetics:	Model Name:	Sample Date:	Declination:	Dip Angle:	Field Strength:
	IGRF2010	8/16/2011	(°)	(°)	(nT)
			7.97	60.49	48,802

Design:	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction:	
	(usft)	(usft)	(usft)	(°)	
	0.00	0.00	0.00	179.92	



Pathfinder
Pathfinder X&Y Report



Company: Yates Petroleum Corp
Project: Eddy County
Site: Waldnp "JY"
Well: #3H
Wellbore: OH
Design: OH

Local Co-ordinate Reference:
TVD Reference: KB=18.5 @ 3398.50usft (Patterson 101)
MD Reference: KB=18.5 @ 3398.50usft (Patterson 101)
North Reference: Grd
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	D Leg (°/100usft)	Northing (usft)	Easting (usft)
2,658.00	24.45	193.97	2,652.30	-746.20	-34.83	-20.04	34.80	11.87	622,386.17	528,395.56
2,690.00	27.61	192.56	2,681.05	-717.45	-48.50	-23.25	48.46	10.06	622,372.50	528,392.35
2,721.00	30.86	190.89	2,708.09	-690.41	-63.32	-26.32	63.28	10.81	622,357.68	528,389.29
2,752.00	34.73	189.48	2,734.15	-664.35	-79.84	-29.28	79.80	12.72	622,341.16	528,386.33
2,784.00	39.31	187.81	2,759.69	-638.81	-98.89	-32.16	98.84	14.65	622,322.11	528,383.45
2,816.00	43.53	184.39	2,783.69	-614.81	-119.93	-34.38	119.88	14.96	622,301.07	528,381.23
2,848.00	47.22	181.75	2,806.16	-592.34	-142.66	-35.58	142.62	12.94	622,278.34	528,380.02
2,880.00	49.86	181.05	2,827.35	-571.15	-166.64	-36.16	166.59	8.41	622,254.36	528,379.44
2,911.00	52.14	181.13	2,846.86	-551.64	-190.72	-36.62	190.67	7.36	622,230.28	528,378.98
2,943.00	56.01	181.40	2,865.63	-532.87	-216.62	-37.20	216.57	12.11	622,204.38	528,378.41
2,974.00	60.41	179.64	2,881.96	-516.54	-242.96	-37.43	242.91	14.99	622,178.04	528,378.18
3,005.00	64.19	178.15	2,896.36	-502.14	-270.40	-36.89	270.35	12.91	622,150.60	528,378.71
3,036.00	67.01	176.74	2,909.17	-489.33	-298.60	-35.63	298.55	10.00	622,122.40	528,379.98
3,067.00	70.35	176.30	2,920.44	-478.06	-327.42	-33.87	327.37	10.85	622,093.58	528,381.73
3,099.00	74.74	175.25	2,930.03	-468.47	-357.86	-31.62	357.81	14.07	622,063.14	528,383.98
3,131.00	78.08	174.72	2,937.55	-460.95	-388.84	-28.90	388.80	10.56	622,032.16	528,386.70
3,163.00	80.72	174.10	2,943.44	-455.06	-420.14	-25.84	420.10	8.47	622,000.86	528,389.77
3,195.00	84.50	174.10	2,947.55	-450.95	-451.70	-22.58	451.67	11.81	621,969.30	528,393.03
3,282.00	88.81	175.51	2,952.63	-445.87	-538.17	-14.72	538.15	5.21	621,882.83	528,400.89
3,345.00	90.66	174.89	2,952.92	-445.58	-600.95	-9.45	600.93	3.10	621,820.05	528,406.16
LP - 3345.00' MD, 2952.92' TVD, -600.95' N, -9.45' E										
3,407.00	90.92	175.33	2,952.07	-446.43	-662.71	-4.16	662.71	0.82	621,758.29	528,411.44
3,470.00	90.59	175.25	2,951.24	-447.26	-725.50	1.01	725.50	0.54	621,695.50	528,416.62
3,533.00	90.57	176.56	2,950.60	-447.90	-788.33	5.51	788.34	2.08	621,632.67	528,421.11
3,596.00	90.40	177.44	2,950.06	-448.44	-851.24	8.81	851.25	1.42	621,569.76	528,424.41
3,691.00	90.31	177.97	2,949.48	-449.02	-946.16	12.61	946.18	0.57	621,474.84	528,428.21
3,786.00	90.22	178.23	2,949.04	-449.46	-1,041.11	15.76	1,041.13	0.29	621,379.89	528,431.36



Pathfinder
Pathfinder X&Y Report

PATHFINDER
A Schlumberger Company

Company: Yates Petroleum Corp.
Project: Eddy County
Site: Waldrp "JY"
Well: #3H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #3H
TVD Reference: KB=18.5 @ 3398 50usft (Patterson 101)
MD Reference: KB=18.5 @ 3398 50usft (Patterson 101)
North Reference: Gnd
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey Program: Date 9/2/2011

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
200 00	2,180 00	Gyro Surveys#1 (OH)	NS-GYRO-MS	North sensing gyrocompassing m/s
2,426 00	7,457.00	Pathfinder #2 (OH)	MWD	MWD - Standard

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	D Leg (°/100usft)	Northing (usft)	Easting (usft)
0.00	0 00	0.00	0.00	-3,398.50	0 00	0.00	0.00	0 00	622,421 00	528,415 60
200 00	0 25	166 89	200 00	-3,198.50	-0.42	0.10	0.43	0 12	622,420.58	528,415 70
400 00	0 25	132 45	400.00	-2,998.50	-1.14	0.52	1.15	0 07	622,419 66	528,416 12
600 00	1 00	345 01	599 99	-2,798.51	0 25	0.39	-0 25	0 61	622,421 25	528,415 99
800.00	0.50	268 57	799.98	-2,598.52	1 91	-0.93	-1 91	0 50	622,422 91	528,414 67
1,000 00	0.25	219.25	999.97	-2,398.53	1 55	-2 08	-1.55	0 19	622,422 55	528,413 52
1,200 00	0.25	214 81	1,199.97	-2,198.53	0.86	-2.61	-0 86	0 01	622,421.86	528,413 00
1,400.00	0.25	27 36	1,399 97	-1,998.53	0.88	-2.66	-0 89	0 25	622,421.88	528,412 95
1,600 00	0 25	55 92	1,599 97	-1,798.53	1 52	-2.09	-1.52	0 06	622,422 52	528,413 51
1,800.00	0 25	235 48	1,799.97	-1,598.53	1 51	-2.09	-1 52	0 25	622,422 51	528,413 51
2,000 00	0 50	314 04	1,999 96	-1,398.54	1 87	-3 08	-1.88	0 26	622,422 87	528,412 53
2,180 00	0 75	248.60	2,179 95	-1,218.55	1 99	-4.74	-2 00	0 39	622,422 99	528,410 86
2,426 00	0.88	302 60	2,425.93	-972.57	2 42	-7.83	-2.43	0 30	622,423.42	528,407 77
2,436.00	1 06	299 96	2,435 93	-962.57	2 51	-7.98	-2 52	1 85	622,423 51	528,407 63
2,467.00	1 32	257 07	2,466 92	-931.58	2 57	-8.57	-2 58	2 91	622,423 57	528,407 03
KOP - 2467.00'MD, 2466.92'TVD', 2.57°N, -8.57°E										
2,499 00	3 43	211 72	2,498 90	-899 60	1 67	-9.43	-1 69	8.35	622,422 67	528,406 17
2,531 00	7 30	200.65	2,530 75	-867 75	-1 04	-10 66	1.03	12 46	622,419 96	528,404 95
2,563 00	11.61	197.13	2,562.31	-836 19	-6.03	-12.32	6.01	13 58	622,414 97	528,403 28
2,594 00	16.18	195 46	2,592.40	-806 10	-13.17	-14.39	13 15	14.80	622,407 83	528,401.21
2,626 00	20 66	194.67	2,622 75	-775 75	-22.94	-17 01	22 91	14 02	622,398 06	528,398 59



Pathfinder
Pathfinder X&Y Report



Company: Yates Petroleum Corp.
Project: Eddy County
Site: Waldrp "JY"
Well: #3H
Wellbore: OH
Design: OH

Local Co-ordinate Reference
TVD Reference: KB=18.5 @ 3398.50usft (Patterson 101)
MD Reference: KB=18.5 @ 3398.50usft (Patterson 101)
North Reference: Gnd
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

MDs (usft)	Inc (°)	Azi (azimuth (°))	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg ("/100usft)	Northing (usft)	Easting (usft)
3,881.00	90.04	178.76	2,948.82	-449.68	-1,136.08	18.26	1,136.10	0.59	621,284.92	528,433.66
3,976.00	89.96	179.55	2,948.82	-449.68	-1,231.07	19.66	1,231.09	0.84	621,189.93	528,435.26
4,072.00	91.45	179.99	2,947.64	-450.86	-1,327.05	20.04	1,327.08	1.62	621,093.95	528,435.65
4,167.00	91.19	180.43	2,945.45	-453.05	-1,422.03	19.69	1,422.05	0.54	620,998.97	528,435.30
4,262.00	91.10	181.66	2,943.55	-454.95	-1,516.99	17.96	1,517.02	1.30	620,904.01	528,433.57
4,357.00	91.36	181.84	2,941.51	-456.99	-1,611.93	15.06	1,611.94	0.33	620,809.07	528,430.67
4,453.00	89.96	182.45	2,940.41	-458.09	-1,707.85	11.47	1,707.86	1.59	620,713.15	528,427.07
4,548.00	90.66	182.72	2,939.89	-458.61	-1,802.75	7.18	1,802.76	0.79	620,618.25	528,422.79
4,644.00	89.87	181.75	2,939.45	-459.05	-1,898.67	3.44	1,898.68	1.30	620,522.33	528,419.04
4,738.00	89.78	181.93	2,939.74	-458.76	-1,992.63	0.42	1,992.62	0.21	620,428.37	528,416.03
4,833.00	90.22	183.16	2,939.74	-458.76	-2,087.53	-3.80	2,087.52	1.38	620,333.47	528,411.81
4,928.00	90.40	184.21	2,939.22	-459.28	-2,182.33	-9.90	2,182.31	1.12	620,238.67	528,405.70
5,022.00	88.64	183.86	2,940.01	-458.49	-2,276.09	-16.52	2,276.06	1.91	620,144.91	528,399.09
5,108.00	88.55	184.04	2,942.12	-456.38	-2,361.86	-22.44	2,361.83	0.23	620,059.14	528,393.17
5,202.00	88.99	182.28	2,944.14	-454.36	-2,455.69	-27.62	2,455.65	1.93	619,965.31	528,387.99
5,298.00	89.25	183.16	2,945.61	-452.89	-2,551.57	-32.17	2,551.52	0.96	619,869.43	528,383.43
5,393.00	89.25	181.14	2,946.86	-451.64	-2,646.49	-35.74	2,646.44	2.13	619,774.51	528,379.87
5,489.00	88.72	181.40	2,948.56	-449.94	-2,742.45	-37.86	2,742.40	0.61	619,678.55	528,377.74
5,584.00	89.43	179.90	2,950.09	-448.41	-2,837.43	-38.94	2,837.37	1.75	619,583.57	528,376.66
5,679.00	90.13	178.50	2,950.45	-448.05	-2,932.42	-37.62	2,932.36	1.65	619,488.58	528,377.99
5,774.00	90.31	179.29	2,950.09	-448.41	-3,027.40	-35.78	3,027.35	0.85	619,393.60	528,379.82
5,869.00	90.40	179.73	2,949.50	-449.00	-3,122.39	-34.97	3,122.34	0.47	619,298.61	528,380.63
5,963.00	89.69	179.99	2,949.43	-449.07	-3,216.39	-34.74	3,216.34	0.80	619,204.61	528,380.86
6,057.00	90.92	179.02	2,948.93	-449.57	-3,310.38	-33.93	3,310.33	1.67	619,110.62	528,381.67
6,153.00	90.57	177.18	2,947.68	-450.82	-3,406.32	-30.75	3,406.27	1.95	619,014.68	528,384.86
6,249.00	90.22	177.44	2,947.02	-451.48	-3,502.21	-26.24	3,502.17	0.45	618,918.79	528,389.36
6,343.00	89.96	178.32	2,946.87	-451.63	-3,596.14	-22.76	3,596.11	0.98	618,824.86	528,392.84



Pathfinder
Pathfinder X&Y Report



Company: Yates Petroleum Corp
Project: Eddy County
Site: Waldrip "JY"
Well: #3H
Wellbore: OH
Design: OH

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well #3H
KB=18.5 @ 3398.50usft (Patterson 101)
KB=18.5 @ 3398.50usft (Patterson 101)
Gnd
Minimum Curvature
EDM 5000.1 Single User Db

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
6,438.00	91.10	176.56	2,945.99	-452.51	-3,691.04	-18.52	3,691.01	2.21	618,729.96	528,397.08
6,533.00	91.88	177.53	2,943.52	-454.98	-3,785.88	-13.63	3,785.86	1.31	618,635.12	528,401.98
6,627.00	91.45	177.71	2,940.79	-457.71	-3,879.76	-9.72	3,879.74	0.50	618,541.24	528,405.88
6,722.00	90.75	177.88	2,938.96	-459.54	-3,974.67	-6.07	3,974.66	0.76	618,446.33	528,409.53
6,816.00	89.69	177.44	2,938.60	-459.90	-4,068.59	-2.23	4,068.58	1.22	618,352.41	528,413.37
6,910.00	89.43	178.41	2,939.33	-459.17	-4,162.52	1.17	4,162.52	1.07	618,258.48	528,416.78
7,005.00	88.64	179.11	2,940.93	-457.57	-4,257.49	3.23	4,257.49	1.11	618,163.51	528,418.83
7,099.00	88.20	179.46	2,943.52	-454.98	-4,351.44	4.40	4,351.45	0.60	618,069.56	528,420.00
7,194.00	90.04	182.37	2,944.98	-453.52	-4,446.41	2.88	4,446.41	3.62	617,974.59	528,418.49
7,288.00	90.40	183.51	2,944.62	-453.88	-4,540.28	-1.94	4,540.27	1.27	617,880.72	528,413.67
7,383.00	90.84	184.74	2,943.59	-454.91	-4,635.03	-8.77	4,635.01	1.38	617,785.97	528,406.83
7,411.00	90.48	184.47	2,943.27	-455.23	-4,662.93	-11.02	4,662.91	1.61	617,758.07	528,404.58
7,457.00	90.48	184.47	2,942.88	-455.62	-4,708.79	-14.60	4,708.77	0.00	617,712.21	528,401.00

BHL - 7457.00'MD, 2942.88TVD', -4708.79'N, -14.60'E - PBHL (Waldrip)

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/S (usft)	+E/W (usft)	Comment
2,467.00	2,466.92	2.57	-8.57	KOP - 2467.00'MD, 2466.92TVD', 2.57'N, -8.57'E
3,345.00	2,952.92	-600.95	-9.45	LP - 3345.00'MD, 2952.92TVD', -600.95'N, -9.45'E
7,457.00	2,942.88	-4,708.79	-14.60	BHL - 7457.00'MD, 2942.88TVD', -4708.79'N, -14.60'E

Checked By: _____ Approved By: _____ Date: _____



Project: Eddy County
Site: Waldrip "JY"
Well: #3H
Wellbore: OH
Plan: Plan #1 (#3H/OH)

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Diag	TFace	Vsect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	2472.54	0.00	0.00	2472.54	0.00	0.00	0.00	0.00	0.00	
3	3222.54	90.00	179.92	2950.00	-477.46	0.70	12.00	179.92	477.47	
4	7514.21	90.00	179.92	2950.00	-4769.13	7.02	0.00	0.00	4769.14	PBHL (Waldrip)

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL (Waldrip)	2950.00	-4769.13	7.02	517551.870	528422.620	Point

WELL DETAILS #3H						
Ground Elevation: 3380.00						
RKB Elevation: KB=18.5 @ 3398.50usft (Patterson 101)						
Rig Name: Patterson 101						
+N/-S	+E/-W	Northing	Easting	Latititude	Longitude	Slot
0.00	0.00	822421.000	528415.604	32° 42' 39.850 N	104° 22' 31.245 W	

Azimuths to Grid North
True North: 0.02°
Magnetic North: 7.99°

Magnetic Field
Strength: 48802.2snT
Dip Angle: 60.49°
Date: 8/16/2011
Model: IGRF2010

PROJECT DETAILS: Eddy County
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level
Local North: Grid

