



Yates Petroleum Corp.

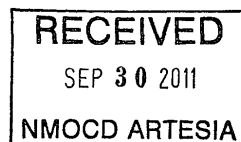
Eddy County
Chevron "BOT"
#6H
ST2

Design: ST2

Pathfinder X&Y Report

09 June, 2011

30-015-37931



PATHFINDER
A Schlumberger Company



Pathfinder
Pathfinder X&Y Report

PATHFINDER
A Schlumberger Company

Company:	Yates Petroleum Corp.	Local Co-ordinate Reference:	Well #6H
Project:	Eddy County	TVD Reference:	Patrol #5 @ 2978.50usft (26.5' KB)
Site:	Chevron "BOT"	MD Reference:	Patrol #5 @ 2978.50usft (26.5' KB)
Well:	#6H	North Reference:	Grid
Wellbore:	ST2	Survey Calculation Method:	Minimum Curvature
Design:	ST2	Database:	EDM 5000.1 Single User Db

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

Site:	Chevron "BOT"				
Site Position:		Northing:	453,328.928 usft	Latitude:	32° 14' 45.066 N
From:	Map	Easting:	642,676.146 usft	Longitude:	104° 0' 19.962 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.17 °

Well	#6H					
Well Position	+N/-S	0.00 usft	Northing:	453,524.638 usft	Latitude:	32° 14' 47.033 N
	+E/-W	0.00 usft	Easting:	641,681.572 usft	Longitude:	104° 0' 31.536 W
Position Uncertainty		3.00 usft	Wellhead Elevation:	usft	Ground Level:	2,952.00 usft

Wellbore:	ST2				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/17/2011	7.80	60.13	48,592

Design:	ST2				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	6,776.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	357.51	



Pathfinder
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Company:	Yates Petroleum Corp.	Local Co-ordinate Reference:	Well #6H
Project:	Eddy County	TVD Reference:	Patriot #5 @ 2978.50usft (26.5 KB)
Site:	Chevron' 'BOT"	MD Reference:	Patriot #5 @ 2978.50usft (26.5 KB)
Well:	#6H	North Reference:	Gnd
Wellbore:	ST2	Survey Calculation Method:	Minimum Curvature
Design:	ST2	Database:	EDM 5000.1 Single User Db

Survey Program		Date	6/9/2011		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
200.00	6,776.00	MWD #2 (OH)	MWD	MWD - Standard	
6,851.00	13,460.00	Survey #1 ST2 MWD (ST2)	MWD	MWD - Standard	

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
0.00	0.00	0.00	0.00	-2,978.50	0.00	0.00	0.00	0.00	453,524.64	641,681.57
200.00	0.63	141.48	200.00	-2,778.50	-0.86	0.68	-0.89	0.31	453,523.78	641,682.26
400.00	0.87	93.89	399.98	-2,578.52	-1.82	2.88	-1.95	0.32	453,522.81	641,684.46
500.00	1.74	108.75	499.95	-2,478.55	-2.36	5.08	-2.58	0.93	453,522.27	641,686.65
653.00	2.20	113.52	652.86	-2,325.64	-4.28	9.97	-4.71	0.32	453,520.36	641,691.54
747.00	0.97	78.50	746.83	-2,231.67	-4.84	12.41	-5.38	1.61	453,519.79	641,693.98
841.00	0.97	101.61	840.81	-2,137.69	-4.84	13.97	-5.45	0.41	453,519.79	641,695.54
1,028.00	0.88	352.91	1,027.80	-1,950.70	-3.74	15.34	-4.40	0.80	453,520.90	641,696.91
1,216.00	1.23	15.85	1,215.77	-1,762.73	-0.36	15.71	-1.05	0.29	453,524.27	641,697.28
1,310.00	1.14	20.73	1,309.75	-1,668.75	1.48	16.32	0.77	0.14	453,526.12	641,697.89
1,404.00	1.14	20.97	1,403.73	-1,574.77	3.23	16.98	2.49	0.01	453,527.87	641,698.56
1,498.00	0.79	36.40	1,497.72	-1,480.78	4.62	17.70	3.85	0.46	453,529.26	641,699.27
1,592.00	0.88	47.52	1,591.71	-1,386.79	5.63	18.62	4.82	0.20	453,530.27	641,700.19
1,696.00	0.70	46.18	1,695.70	-1,282.80	6.61	19.67	5.75	0.17	453,531.25	641,701.24
1,781.00	0.88	46.06	1,780.69	-1,197.81	7.42	20.51	6.53	0.21	453,532.06	641,702.08
1,875.00	0.26	188.79	1,874.69	-1,103.81	7.71	21.00	6.79	1.17	453,532.35	641,702.57
1,969.00	0.26	152.86	1,968.69	-1,009.81	7.31	21.06	6.39	0.17	453,531.95	641,702.64
2,064.00	1.32	116.39	2,063.67	-914.83	6.64	22.14	5.67	1.18	453,531.27	641,703.71
2,158.00	1.93	137.15	2,157.64	-820.86	4.99	24.19	3.94	0.89	453,529.63	641,705.76
2,253.00	1.58	148.06	2,252.59	-725.91	2.71	25.97	1.58	0.51	453,527.35	641,707.54
2,345.00	1.32	121.23	2,344.56	-633.94	1.08	27.55	-0.11	0.78	453,525.72	641,709.12



Pathfinder
Pathfinder X&Y Report



Company: Yates Petroleum Corp
Project: Eddy County
Site: Chevron "BOT"
Well: #6H
Wellbore: ST2
Design: ST2

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

Well #6H
Patnot #5 @ 2978.50usft (26.5' KB)
Patnot #5 @ 2978.50usft (26.5' KB)
Grid
Minimum Curvature
EDM 5000.1 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
2,440.00	1.49	131.76	2,439.54	-538.96	-0.31	29.40	-1.58	0.32	453,524.33	641,710.98	
2,535.00	2.20	170.31	2,534.49	-444.01	-2.93	30.63	-4.25	1.46	453,521.71	641,712.20	
2,628.00	1.67	181.77	2,627.44	-351.06	-6.04	30.89	-7.38	0.70	453,518.60	641,712.46	
2,723.00	1.14	195.81	2,722.41	-256.09	-8.33	30.59	-9.65	0.66	453,516.30	641,712.16	
2,772.00	0.79	192.92	2,771.40	-207.10	-9.13	30.38	-10.44	0.72	453,515.51	641,711.95	
2,916.00	1.06	180.30	2,915.38	-63.12	-11.43	30.15	-12.73	0.23	453,513.21	641,711.72	
3,010.00	1.32	169.80	3,009.36	30.86	-13.37	30.34	-14.67	0.36	453,511.27	641,711.91	
3,104.00	1.85	175.73	3,103.33	124.83	-15.95	30.64	-17.26	0.59	453,508.69	641,712.22	
3,198.00	3.52	281.07	3,197.26	218.76	-16.90	27.92	-18.10	4.67	453,507.73	641,709.50	
3,292.00	2.46	288.54	3,291.13	312.63	-15.71	23.18	-16.70	1.20	453,508.93	641,704.75	
3,387.00	1.23	274.22	3,386.08	407.58	-14.99	20.23	-15.85	1.37	453,509.65	641,701.80	
3,481.00	1.23	275.19	3,480.06	501.56	-14.82	18.22	-15.60	0.02	453,509.82	641,699.79	
3,575.00	1.23	273.46	3,574.04	595.54	-14.67	16.21	-15.36	0.04	453,509.97	641,697.78	
3,668.00	1.14	269.89	3,667.02	688.52	-14.61	14.29	-15.22	0.13	453,510.03	641,695.86	
3,856.00	0.88	261.76	3,854.99	876.49	-14.82	10.99	-15.28	0.16	453,509.82	641,692.56	
4,045.00	0.79	259.11	4,043.97	1,065.47	-15.27	8.27	-15.62	0.05	453,509.36	641,689.84	
4,233.00	0.97	297.97	4,231.95	1,253.45	-14.77	5.59	-15.00	0.32	453,509.87	641,687.16	
4,421.00	0.53	271.31	4,419.93	1,441.43	-14.01	3.32	-14.14	0.29	453,510.63	641,684.89	
4,609.00	0.62	272.82	4,607.92	1,629.42	-13.94	1.43	-13.99	0.05	453,510.70	641,683.00	
4,798.00	0.53	272.63	4,796.91	1,818.41	-13.85	-0.46	-13.81	0.05	453,510.79	641,681.11	
4,986.00	0.62	272.20	4,984.90	2,006.40	-13.77	-2.35	-13.65	0.05	453,510.87	641,679.22	
5,174.00	0.62	251.96	5,172.89	2,194.39	-14.04	-4.33	-13.84	0.12	453,510.59	641,677.24	
5,363.00	0.44	254.41	5,361.88	2,383.38	-14.55	-6.00	-14.28	0.10	453,510.08	641,675.57	
5,551.00	0.35	241.19	5,549.88	2,571.38	-15.03	-7.20	-14.70	0.07	453,509.61	641,674.37	
5,739.00	0.35	181.56	5,737.87	2,759.37	-15.88	-7.72	-15.53	0.19	453,508.76	641,673.85	
5,927.00	0.70	163.30	5,925.87	2,947.37	-17.55	-7.40	-17.21	0.20	453,507.09	641,674.17	
6,116.00	0.53	183.03	6,114.86	3,136.36	-19.53	-7.12	-19.20	0.14	453,505.11	641,674.45	



Pathfinder
Pathfinder X&Y Report



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Site: Chevron "BOT"
Well: #6H
Wellbore: ST2
Design: ST2

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:
Well #6H
Patriot #5 @ 2978.50usft (26.5' KB)
Patriot #5 @ 2978.50usft (26.5' KB)
Grid:
Minimum Curvature
EDM 5000.1 Single User Db

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (%/100usft)	Northing (usft)	Easting (usft)
6,304.00	0.62	181.95	6,302.85	3,324.35	-21.41	-7.20	-21.08	0.05	453,503.22	641,674.37
6,493.00	0.62	168.62	6,491.84	3,513.34	-23.44	-7.03	-23.11	0.08	453,501.20	641,674.54
6,588.00	0.53	159.13	6,586.83	3,608.33	-24.35	-6.77	-24.04	0.14	453,500.29	641,674.80
6,776.00	0.79	124.84	6,774.82	3,796.32	-25.91	-5.40	-25.65	0.25	453,498.73	641,676.17
KOP - 6776.00' MD, 0.79° INC, 124.84° AZI, 6774.82' TVD										
6,851.00	0.62	131.57	6,849.81	3,871.31	-26.47	-4.67	-26.24	0.25	453,498.17	641,676.90
6,895.00	0.26	65.97	6,893.81	3,915.31	-26.59	-4.40	-26.37	1.28	453,498.05	641,677.17
KOP - 6895.00' MD, 6893.81' TVD, -26.59° N, -4.40° E										
6,924.00	0.88	0.96	6,922.81	3,944.31	-26.34	-4.34	-26.12	2.78	453,498.30	641,677.23
6,956.00	2.46	353.18	6,954.80	3,976.30	-25.41	-4.42	-25.19	4.98	453,499.23	641,677.15
6,987.00	4.31	353.12	6,985.74	4,007.24	-23.59	-4.64	-23.37	5.97	453,501.04	641,676.94
7,018.00	6.77	352.91	7,016.59	4,038.09	-20.62	-5.00	-20.39	7.94	453,504.01	641,676.57
7,050.00	9.23	350.31	7,048.28	4,069.78	-16.22	-5.67	-15.96	7.77	453,508.42	641,675.91
7,081.00	11.43	349.03	7,078.78	4,100.28	-10.75	-6.67	-10.45	7.13	453,513.88	641,674.90
7,113.00	13.98	347.64	7,109.99	4,131.49	-3.86	-8.10	-3.51	8.03	453,520.77	641,673.47
7,144.00	16.27	346.83	7,139.91	4,161.41	4.02	-9.89	4.45	7.42	453,528.66	641,671.68
7,175.00	18.47	346.77	7,169.50	4,191.00	13.03	-12.01	13.54	7.10	453,537.67	641,669.57
7,207.00	20.14	347.45	7,199.70	4,221.20	23.34	-14.36	23.95	5.27	453,547.98	641,667.21
7,238.00	21.02	347.69	7,228.72	4,250.22	33.99	-16.71	34.68	2.85	453,558.62	641,664.86
7,269.00	21.98	347.57	7,257.56	4,279.06	45.08	-19.14	45.87	3.10	453,569.72	641,662.43
7,300.00	22.60	346.74	7,286.25	4,307.75	56.55	-21.76	57.44	2.24	453,581.19	641,659.82
7,331.00	22.60	346.93	7,314.86	4,336.36	68.15	-24.47	69.15	0.24	453,592.79	641,657.10
7,362.00	24.71	347.57	7,343.26	4,364.76	80.28	-27.21	81.39	6.86	453,604.92	641,654.36
7,394.00	28.40	347.78	7,371.88	4,393.38	94.25	-30.26	95.48	11.53	453,618.89	641,651.31
7,425.00	32.62	347.32	7,398.58	4,420.08	109.62	-33.66	110.98	13.63	453,634.25	641,647.91
7,457.00	37.11	347.28	7,424.83	4,446.33	127.46	-37.68	128.97	14.03	453,652.09	641,643.89
7,488.00	41.68	347.28	7,448.78	4,470.28	146.64	-42.01	148.33	14.74	453,671.28	641,639.56



Pathfinder
Pathfinder X&Y Report



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Project:	Eddy County	TVD Reference:	Patriot #5 @ 2978.50usft (26.5' KB)
Site:	Chevron "BOT"	MD Reference:	Patriot #5 @ 2978.50usft (26.5' KB)
Well:	#6H	North Reference:	Gnd
Wellbore:	ST2	Survey Calculation Method:	Minimum Curvature
Design:	ST2	Database:	EDM 5000.1 Single User Db

Survey	MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
	7,520.00	46.78	347.38	7,471.70	4,493.20	168.41	-46.90	170.29	15.94	453,693.05	641,634.67
	7,551.00	51.79	347.52	7,491.92	4,513.42	191.34	-52.01	193.42	16.16	453,715.98	641,629.56
	7,582.00	56.89	348.33	7,509.98	4,531.48	215.97	-57.27	218.25	16.59	453,740.60	641,624.30
	7,614.00	61.73	349.02	7,526.31	4,547.81	242.94	-62.67	245.43	15.24	453,767.58	641,618.90
	7,645.00	65.69	349.07	7,540.04	4,561.54	270.22	-67.95	272.92	12.78	453,794.86	641,613.62
	7,677.00	69.03	349.35	7,552.35	4,573.85	299.23	-73.48	302.14	10.47	453,823.87	641,608.10
	7,708.00	73.07	349.63	7,562.42	4,583.92	328.05	-78.82	331.17	13.06	453,852.69	641,602.75
	7,739.00	77.29	349.47	7,570.35	4,591.85	357.52	-84.26	360.84	13.62	453,882.15	641,597.32
	7,771.00	80.90	348.43	7,576.40	4,597.90	388.35	-90.28	391.91	11.72	453,912.99	641,591.29
	7,802.00	83.10	348.11	7,580.71	4,602.21	418.41	-96.52	422.20	7.17	453,943.04	641,585.05
	7,833.00	85.74	348.14	7,583.73	4,605.23	448.60	-102.87	452.64	8.52	453,973.23	641,578.70
	7,915.00	89.08	349.07	7,587.43	4,608.93	528.89	-119.05	533.56	4.23	454,053.52	641,562.52
LP - 7915.00' MD, 7587.43' TVD, 528.89' N, 119.05' E											
	7,947.00	89.78	348.69	7,587.75	4,609.25	560.28	-125.22	565.19	2.49	454,084.92	641,556.35
	7,979.00	90.40	349.05	7,587.70	4,609.20	591.68	-131.40	596.83	2.24	454,116.32	641,550.17
	8,010.00	91.36	349.93	7,587.22	4,608.72	622.16	-137.05	627.52	4.20	454,146.79	641,544.52
	8,042.00	91.71	350.38	7,586.37	4,607.87	653.67	-142.52	659.25	1.78	454,178.31	641,539.05
	8,081.00	91.01	350.05	7,585.44	4,606.94	692.10	-149.15	697.92	1.98	454,216.73	641,532.42
	8,112.00	90.84	350.59	7,584.94	4,606.44	722.65	-154.36	728.67	1.83	454,247.29	641,527.21
	8,144.00	91.01	350.25	7,584.42	4,605.92	754.20	-159.68	760.42	1.19	454,278.84	641,521.89
	8,175.00	90.66	351.26	7,583.97	4,605.47	784.79	-164.66	791.21	3.45	454,309.43	641,516.91
	8,207.00	89.96	352.12	7,583.80	4,605.30	816.46	-169.29	823.04	3.47	454,341.09	641,512.28
	8,238.00	88.99	352.46	7,584.08	4,605.58	847.17	-173.45	853.91	3.32	454,371.81	641,508.12
	8,270.00	89.16	354.07	7,584.60	4,606.10	878.95	-177.20	885.82	5.06	454,403.59	641,504.37
	8,302.00	90.40	355.56	7,584.72	4,606.22	910.82	-180.09	917.78	6.06	454,435.45	641,501.48
	8,333.00	90.40	356.33	7,584.51	4,606.01	941.74	-182.28	948.77	2.48	454,466.37	641,499.29
	8,365.00	89.96	356.67	7,584.41	4,605.91	973.68	-184.24	980.76	1.74	454,498.31	641,497.33



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Project:	Eddy County	TVD Reference:	Patriot #5 @ 2978.50usft (26.5' KB)
Site:	Chevron "BOT"	MD Reference:	Patriot #5 @ 2978.50usft (26.5' KB)
Well:	#6H	North Reference:	Grid
Wellbore:	ST2	Survey Calculation Method:	Minimum Curvature
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MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
8,396.00	88.55	357.17	7,584.81	4,606.31	1,004.63	-185.90	1,011.76	4.83	454,529.27	641,495.67
8,428.00	86.61	357.97	7,586.16	4,607.66	1,036.57	-187.26	1,043.73	6.56	454,561.21	641,494.31
8,459.00	86.61	357.88	7,587.99	4,609.49	1,067.49	-188.38	1,074.67	0.29	454,592.13	641,493.19
8,491.00	87.58	358.15	7,589.62	4,611.12	1,099.43	-189.49	1,106.63	3.15	454,624.07	641,492.09
8,522.00	88.29	358.01	7,590.73	4,612.23	1,130.40	-190.52	1,137.61	2.33	454,655.03	641,491.05
8,554.00	88.20	357.83	7,591.71	4,613.21	1,162.36	-191.68	1,169.59	0.63	454,687.00	641,489.89
8,586.00	87.93	358.69	7,592.79	4,614.29	1,194.33	-192.66	1,201.57	2.82	454,718.97	641,488.92
8,618.00	88.11	358.76	7,593.90	4,615.40	1,226.30	-193.37	1,233.54	0.60	454,750.94	641,488.20
8,649.00	89.16	359.04	7,594.64	4,616.14	1,257.28	-193.96	1,264.52	3.51	454,781.92	641,487.61
8,681.00	89.60	359.41	7,594.98	4,616.48	1,289.28	-194.39	1,296.51	1.80	454,813.92	641,487.18
8,713.00	88.64	359.45	7,595.47	4,616.97	1,321.27	-194.71	1,328.49	3.00	454,845.91	641,486.86
8,745.00	87.93	359.21	7,596.43	4,617.93	1,353.26	-195.09	1,360.46	2.34	454,877.90	641,486.48
8,777.00	88.72	358.07	7,597.37	4,618.87	1,385.23	-195.85	1,392.43	4.33	454,909.87	641,485.73
8,808.00	90.22	358.18	7,597.65	4,619.15	1,416.22	-196.86	1,423.43	4.85	454,940.85	641,484.71
8,840.00	90.84	358.53	7,597.36	4,618.86	1,448.20	-197.78	1,455.43	2.22	454,972.84	641,483.79
8,871.00	91.36	358.65	7,596.76	4,618.26	1,479.19	-198.54	1,486.41	1.72	455,003.82	641,483.03
8,903.00	90.66	358.74	7,596.20	4,617.70	1,511.17	-199.27	1,518.40	2.21	455,035.81	641,482.30
8,935.00	89.87	359.25	7,596.05	4,617.55	1,543.17	-199.83	1,550.39	2.94	455,067.80	641,481.74
8,966.00	88.37	359.06	7,596.53	4,618.03	1,574.16	-200.29	1,581.37	4.88	455,098.80	641,481.28
8,998.00	87.32	358.89	7,597.73	4,619.23	1,606.13	-200.86	1,613.34	3.32	455,130.77	641,480.71
9,029.00	87.49	357.62	7,599.13	4,620.63	1,637.08	-201.80	1,644.30	4.13	455,161.72	641,479.77
9,061.00	88.90	357.26	7,600.14	4,621.64	1,669.03	-203.23	1,676.29	4.55	455,193.67	641,478.34
9,093.00	89.43	357.24	7,600.61	4,622.11	1,700.99	-204.77	1,708.28	1.66	455,225.63	641,476.80
9,124.00	89.34	357.56	7,600.94	4,622.44	1,731.96	-206.17	1,739.28	1.07	455,256.60	641,475.40
9,155.00	89.34	358.05	7,601.30	4,622.80	1,762.94	-207.36	1,770.28	1.58	455,287.57	641,474.21
9,187.00	89.60	358.57	7,601.59	4,623.09	1,794.92	-208.30	1,802.28	1.82	455,319.56	641,473.27
9,219.00	89.34	358.53	7,601.89	4,623.39	1,826.91	-209.11	1,834.27	0.82	455,351.55	641,472.46



Pathfinder
Pathfinder X&Y Report



Company: Yates Petroleum Corp.
Project: Eddy County
Site: Chevron "BOT"
Well: #6H
Wellbore: ST2
Design: ST2

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

Well #6H
Patriot #5 @ 2978.50usft (26.5 KB)
Patriot #5 @ 2978.50usft (26.5 KB)
Grid:
Minimum Curvature
EDM 5000.1 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
9,250.00	89.16	358.68	7,602.30	4,623.80	1,857.90	-209.87	1,865.26	0.76	455,382.53	641,471.70	
9,282.00	89.87	358.87	7,602.57	4,624.07	1,889.89	-210.55	1,897.25	2.30	455,414.53	641,471.02	
9,313.00	91.28	358.97	7,602.26	4,623.76	1,920.88	-211.14	1,928.24	4.56	455,445.52	641,470.43	
9,345.00	91.80	358.82	7,601.40	4,622.90	1,952.86	-211.75	1,960.22	1.69	455,477.50	641,469.82	
9,377.00	91.71	358.62	7,600.42	4,621.92	1,984.84	-212.47	1,992.20	0.69	455,509.48	641,469.10	
9,408.00	91.10	358.19	7,599.66	4,621.16	2,015.82	-213.33	2,023.18	2.41	455,540.46	641,468.24	
9,440.00	89.43	358.04	7,599.51	4,621.01	2,047.80	-214.38	2,055.18	5.24	455,572.44	641,467.19	
9,472.00	88.64	358.09	7,600.05	4,621.55	2,079.78	-215.46	2,087.17	2.47	455,604.41	641,466.11	
9,503.00	88.64	358.54	7,600.78	4,622.28	2,110.75	-216.38	2,118.16	1.45	455,635.39	641,465.20	
9,535.00	88.99	359.34	7,601.44	4,622.94	2,142.74	-216.97	2,150.14	2.73	455,667.38	641,464.60	
9,566.00	89.60	0.10	7,601.83	4,623.33	2,173.74	-217.12	2,181.12	3.14	455,698.38	641,464.45	
9,598.00	90.22	0.19	7,601.88	4,623.38	2,205.74	-217.04	2,213.08	1.96	455,730.38	641,464.53	
9,629.00	90.13	0.10	7,601.78	4,623.28	2,236.74	-216.96	2,244.05	0.41	455,761.38	641,464.61	
9,661.00	89.87	0.17	7,601.78	4,623.28	2,268.74	-216.88	2,276.02	0.84	455,793.38	641,464.69	
9,707.00	89.96	359.76	7,601.85	4,623.35	2,314.74	-216.91	2,321.98	0.91	455,839.38	641,464.66	
9,739.00	89.78	359.70	7,601.92	4,623.42	2,346.74	-217.06	2,353.95	0.59	455,871.37	641,464.51	
9,770.00	89.34	359.68	7,602.16	4,623.66	2,377.74	-217.23	2,384.93	1.42	455,902.37	641,464.34	
9,802.00	88.90	359.73	7,602.65	4,624.15	2,409.73	-217.40	2,416.90	1.38	455,934.37	641,464.18	
9,834.00	88.64	359.82	7,603.34	4,624.84	2,441.72	-217.52	2,448.87	0.86	455,966.36	641,464.05	
9,866.00	88.99	359.79	7,604.00	4,625.50	2,473.72	-217.63	2,480.84	1.10	455,998.35	641,463.94	
9,897.00	89.43	359.41	7,604.43	4,625.93	2,504.71	-217.85	2,511.81	1.88	456,029.35	641,463.73	
9,929.00	89.60	359.57	7,604.70	4,626.20	2,536.71	-218.13	2,543.79	0.73	456,061.35	641,463.44	
9,961.00	89.87	359.81	7,604.85	4,626.35	2,568.71	-218.30	2,575.77	1.13	456,093.35	641,463.27	
9,992.00	90.04	359.60	7,604.87	4,626.37	2,599.71	-218.46	2,606.75	0.87	456,124.35	641,463.11	
10,024.00	90.31	359.76	7,604.77	4,626.27	2,631.71	-218.64	2,638.72	0.98	456,156.35	641,462.93	
10,056.00	90.22	359.68	7,604.63	4,626.13	2,663.71	-218.80	2,670.70	0.38	456,188.35	641,462.77	
10,118.00	91.19	359.62	7,603.86	4,625.36	2,725.70	-219.18	2,732.65	1.57	456,250.34	641,462.39	



Pathfinder
Pathfinder X&Y Report



Company: Yates Petroleum Corp.
Project: Eddy County
Site: Chevron "BOT"
Well: #6H
Wellbore: ST2
Design: ST2

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

Well #6H
Patriot #5 @ 2978.50usft (26.5' KB)
Patriot #5 @ 2978.50usft (26.5' KB)
Grid
Minimum Curvature
EDM 5000:1 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northings (usft)	Easting (usft)	
10,149.00	91.63	359.92	7,603.10	4,624.60	2,756.69	-219.30	2,763.62	1.72	456,281.33	641,462.27	
10,213.00	90.66	0.10	7,601.82	4,623.32	2,820.68	-219.29	2,827.54	1.54	456,345.32	641,462.28	
10,276.00	90.22	359.73	7,601.34	4,622.84	2,883.68	-219.38	2,890.48	0.91	456,408.31	641,462.19	
10,339.00	89.52	358.98	7,601.48	4,622.98	2,946.67	-220.09	2,953.45	1.63	456,471.31	641,461.48	
10,402.00	89.78	359.12	7,601.86	4,623.36	3,009.66	-221.14	3,016.43	0.47	456,534.30	641,460.43	
10,434.00	89.87	359.00	7,601.96	4,623.46	3,041.66	-221.66	3,048.41	0.47	456,566.29	641,459.91	
10,498.00	90.57	359.70	7,601.72	4,623.22	3,105.65	-222.39	3,112.38	1.55	456,630.29	641,459.18	
10,529.00	90.40	359.37	7,601.45	4,622.95	3,136.65	-222.64	3,143.36	1.20	456,661.29	641,458.93	
10,593.00	89.78	358.96	7,601.35	4,622.85	3,200.64	-223.57	3,207.33	1.16	456,725.28	641,458.00	
10,624.00	89.43	358.67	7,601.57	4,623.07	3,231.63	-224.21	3,238.32	1.47	456,756.27	641,457.36	
10,656.00	88.81	357.94	7,602.06	4,623.56	3,263.62	-225.16	3,270.32	2.99	456,788.25	641,456.41	
10,720.00	89.52	357.95	7,602.99	4,624.49	3,327.57	-227.46	3,334.31	1.11	456,852.21	641,454.12	
10,751.00	89.16	358.00	7,603.35	4,624.85	3,358.55	-228.55	3,365.30	1.17	456,883.18	641,453.02	
10,815.00	90.66	358.43	7,603.45	4,624.95	3,422.51	-230.54	3,429.30	2.44	456,947.15	641,451.03	
10,846.00	91.36	358.85	7,602.90	4,624.40	3,453.50	-231.28	3,460.29	2.63	456,978.14	641,450.29	
10,909.00	91.80	358.63	7,601.17	4,622.67	3,516.46	-232.66	3,523.25	0.78	457,041.10	641,448.91	
10,941.00	91.54	358.59	7,600.23	4,621.73	3,548.44	-233.44	3,555.23	0.82	457,073.07	641,448.13	
10,973.00	90.48	358.19	7,599.67	4,621.17	3,580.42	-234.34	3,587.22	3.54	457,105.06	641,447.23	
11,005.00	89.69	358.03	7,599.62	4,621.12	3,612.40	-235.39	3,619.22	2.52	457,137.04	641,446.18	
11,100.00	89.60	357.96	7,600.21	4,621.71	3,707.34	-238.72	3,714.21	0.12	457,231.98	641,442.85	
11,163.00	89.87	359.04	7,600.50	4,622.00	3,770.32	-240.37	3,777.20	1.77	457,294.96	641,441.20	
11,195.00	89.69	359.83	7,600.62	4,622.12	3,802.32	-240.68	3,809.18	2.53	457,326.95	641,440.89	
11,227.00	90.31	0.12	7,600.62	4,622.12	3,834.32	-240.70	3,841.15	2.14	457,358.95	641,440.87	
11,290.00	90.04	359.66	7,600.43	4,621.93	3,897.31	-240.82	3,904.10	0.85	457,421.95	641,440.75	
11,354.00	90.22	0.35	7,600.29	4,621.79	3,961.31	-240.81	3,968.04	1.11	457,485.95	641,440.76	
11,386.00	90.40	0.21	7,600.11	4,621.61	3,993.31	-240.66	4,000.00	0.71	457,517.95	641,440.92	
11,418.00	89.60	359.68	7,600.11	4,621.61	4,025.31	-240.69	4,031.97	3.00	457,549.95	641,440.89	



Pathfinder
Pathfinder X&Y Report



Company: Yates Petroleum Corp.
Project: Eddy County
Site: Chevron "BOT"
Well: #6H
Wellbore: ST2
Design: ST2

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

Well #6H
Patnot #5 @ 2978.50usft (26.5' KB)
Patnot #5 @ 2978.50usft (26.5' KB)
Grid:
Minimum Curvature
EDM 5000.1 Single User Db

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
11,481.00	89.52	359.70	7,600.60	4,622.10	4,088.31	-241.03	4,094.92	0.13	457,612.95	641,440.54
11,576.00	89.69	359.99	7,601.25	4,622.75	4,183.31	-241.28	4,189.84	0.35	457,707.95	641,440.29
11,608.00	89.96	359.45	7,601.35	4,622.85	4,215.31	-241.44	4,221.82	1.89	457,739.94	641,440.13
11,671.00	89.08	359.66	7,601.88	4,623.38	4,278.30	-241.93	4,284.77	1.44	457,802.94	641,439.64
11,734.00	88.81	358.95	7,603.04	4,624.54	4,341.29	-242.69	4,347.73	1.21	457,865.92	641,438.88
11,766.00	89.08	358.63	7,603.63	4,625.13	4,373.27	-243.37	4,379.72	1.31	457,897.91	641,438.20
11,861.00	89.78	359.37	7,604.57	4,626.07	4,468.25	-245.03	4,474.68	1.07	457,992.89	641,436.54
11,956.00	91.80	1.02	7,603.26	4,624.76	4,563.23	-244.70	4,569.56	2.75	458,087.87	641,436.87
12,052.00	91.28	0.97	7,600.68	4,622.18	4,659.19	-243.04	4,665.35	0.54	458,183.82	641,438.53
12,147.00	91.63	0.99	7,598.27	4,619.77	4,754.14	-241.41	4,760.14	0.37	458,278.78	641,440.16
12,242.00	90.31	0.87	7,596.66	4,618.16	4,849.11	-239.87	4,854.96	1.40	458,373.75	641,441.70
12,273.00	90.04	0.35	7,596.57	4,618.07	4,880.11	-239.54	4,885.91	1.89	458,404.75	641,442.03
12,336.00	91.01	0.62	7,595.99	4,617.49	4,943.10	-239.01	4,948.82	1.60	458,467.74	641,442.56
12,432.00	90.92	359.84	7,594.37	4,615.87	5,039.09	-238.62	5,044.70	0.82	458,563.73	641,442.95
12,527.00	88.81	359.98	7,594.60	4,616.10	5,134.08	-238.77	5,139.61	2.23	458,658.72	641,442.80
12,622.00	87.85	359.52	7,597.37	4,618.87	5,229.04	-239.19	5,234.50	1.12	458,753.68	641,442.38
12,717.00	89.16	358.32	7,599.84	4,621.34	5,323.99	-240.98	5,329.43	1.87	458,848.63	641,440.59
12,812.00	88.02	357.89	7,602.18	4,623.68	5,418.91	-244.12	5,424.40	1.28	458,943.54	641,437.45
12,907.00	88.64	358.20	7,604.95	4,626.45	5,513.81	-247.36	5,519.35	0.73	459,038.45	641,434.21
13,003.00	89.08	357.71	7,606.86	4,628.36	5,609.73	-250.78	5,615.33	0.69	459,134.37	641,430.79
13,066.00	89.78	357.85	7,607.49	4,628.99	5,672.68	-253.22	5,678.32	1.13	459,197.32	641,428.35
13,098.00	90.22	358.55	7,607.49	4,628.99	5,704.66	-254.23	5,710.32	2.58	459,229.30	641,427.34
13,162.00	90.48	358.89	7,607.10	4,628.60	5,768.64	-255.66	5,774.31	0.67	459,293.28	641,425.91
13,194.00	90.22	358.71	7,606.90	4,628.40	5,800.64	-256.33	5,806.30	0.99	459,325.28	641,425.24
13,289.00	91.45	357.90	7,605.52	4,627.02	5,895.58	-259.14	5,901.27	1.55	459,420.22	641,422.43
13,384.00	91.54	358.34	7,603.04	4,624.54	5,990.50	-262.25	5,996.24	0.47	459,515.14	641,419.32



Pathfinder
Pathfinder X&Y Report



Company:	Yates Petroleum Corp.	Local Co-ordinate Reference:	Well #6H
Project:	Eddy County	TVD Reference:	Patriot #5 @ 2978.50usft (26.5' KB)
Site:	Chevron "BOT"	MD Reference:	Patriot #5 @ 2978.50usft (26.5' KB)
Well:	#6H	North Reference:	Grid
Wellbore:	ST2	Survey Calculation Method:	Minimum Curvature
Design:	ST2	Database:	EDM:5000.1 Single User Db

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)	
13,460.00	91.54	358.34	7,601.00	4,622.50	6,066.44	-264.45	6,072.20	0.00	459,591.08	641,417.12	
BHL - 13460.00'MD, 7601.00'TVD', 6066.44'N, -264.45'E - ST02 BHL (Chev#6) - ST1 BHL (Chev#6) - PBHL (Chev#6H)											

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			Comment
		+N/-S (usft)	+E/-W (usft)		
6,776.00	6,774.82	-25.91	-5.40	KOP-6776.00'MD, 0.79'INC, 124.84'AZI, 6774.82'TVD	
6,895.00	6,893.81	-26.59	-4.40	KOP - 6895.00'MD, 6893.81'TVD', -26.59'N, -4.40'E	
7,915.00	7,587.43	528.89	-119.05	LP - 7915.00'MD, 7587.43'TVD', 528.89'N, -119.05'E	
13,460.00	7,601.00	6,066.44	-264.45	BHL - 13460.00'MD, 7601.00'TVD', 6066.44'N, -264.45'E	

Checked By: _____	Approved By: _____	Date: _____
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Project: Eddy County
Site: Chevron "BOT"
Well: #6H
Wellbore: ST2
Plan: Design #1 (#6H/ST2)

PATHFINDER
A Schlumberger Company

SECTION DETAILS										
MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	V Sect	Target	
6776.00	0.75	124.84	6774.62	-25.81	-5.40	0.00	0.00	-25.65		
6900.00	1.03	154.62	6898.80	-27.40	-4.23	0.42	78.77	-27.19		
7978.92	90.00	347.00	7590.00	634.94	-154.45	8.43	-187.82	641.06		
4 8388.92	90.00	359.30	7590.00	1041.23	-203.26	3.00	90.00	1049.09		
5 13431.47	90.00	359.30	7590.00	6083.40	-264.86	0.00	0.00	6089.16	ST02 BHL (Chev#6)	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)						
Name	TVD	+N-S	+E-W	Northing	Easting	Shape
PBHL (Chev#6H)	7525.00	6097.73	-83.80	459622.368	641597.771	Point
ST02 BHL (Chev#6)	7590.00	6083.39	-265.11	459608.028	641416.462	Point
ST1 BHL (Chev#6)	7610.00	6100.19	94.80	459624.831	641776.376	Point

WELL DETAILS #6H						
Ground Elevation: 2952.00						
RKB Elevation: Palmet #5 @ 2978.50usft (26.5' KB)						
Rig Name: 26.5' KB						
+N-S	+E-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	453524.638	641681.572	32° 14' 47.033 N	104° 0' 31.536 W	

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



Azimuths to Grid North
True North: -0.17°
Magnetic North: 7.62°

Magnetic Field
Strength: 48592.2snT
Dip Angle: 60.13°
Date: 5/17/2011
Model: IGRF2010

