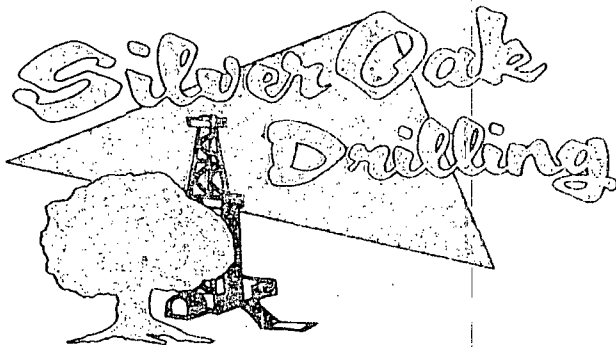




PO Box 1370
Artesia, NM 88211-1370
(505) 748-1288



November 5, 2012

Yates Petroleum Corporation
105 S. 4th
Artesia, NM 88211-1395

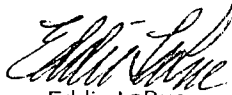
30-015-37510

RE: Martha AIK Federal #11H
1780' FSL & 200' FEL
Sec. 11, T22S, R31E
Eddy County, New Mexico

Dear Sir,

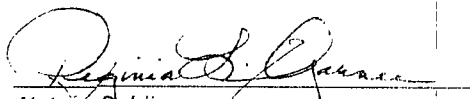
The attached is the Deviation Survey for the above captioned well.

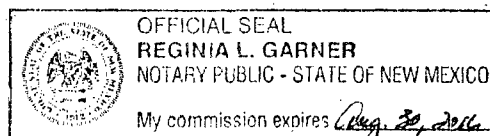
Very truly yours,


Eddie LaRue
Operations Manager

State of New Mexico }
County of Eddy }

The foregoing was acknowledged before me this 5th day of November, 2012.


Notary Public



Pason DataHub Deviation Survey

Well Dossier 1348796795 - MARTHA AIK FEDERAL #11H

# Date	Depth	Deviation	Direction	TVD	Horiz
10/1/2012	210	0.90	0.00	0.00	0.00
10/1/2012	385	1.30	0.00	0.00	0.00
10/2/2012	596	1.90	0.00	0.00	0.00
10/2/2012	750	2.30	0.00	0.00	0.00
10/4/2012	859	255.00	351.57	858.00	0.00
10/4/2012	951	1.23	332.28	950.00	0.00
10/4/2012	1079	0.18	247.21	1078.00	0.00
10/4/2012	1269	0.26	142.01	1268.59	0.00
10/5/2012	1459	0.26	197.03	1458.59	0.00
10/5/2012	1650	0.09	291.83	1649.59	0.00
10/5/2012	1841	0.35	328.99	1840.00	0.00
10/5/2012	2031	0.79	149.69	2029.00	0.00
10/5/2012	2221	0.44	131.28	2220.00	0.00
10/5/2012	2411	1.14	189.19	2410.55	0.00
10/5/2012	2602	2.02	203.23	2601.00	0.00
10/6/2012	2792	3.52	195.20	2791.25	0.00
10/6/2012	2982	4.13	190.44	2980.83	0.00
10/6/2012	3077	3.61	190.60	3075.61	0.00
10/7/2012	3172	4.04	191.67	3170.40	0.00
10/7/2012	3267	5.30	193.05	3265.08	0.00
10/7/2012	3362	5.10	190.40	3359.68	0.00
10/7/2012	3457	4.66	186.85	3454.00	0.00
10/7/2012	3552	3.34	185.02	3549.10	0.00
10/8/2012	3647	1.93	184.74	3644.00	0.00
10/8/2012	3742	0.88	136.67	3738.00	0.00
10/8/2012	3838	1.23	90.18	3834.96	0.00
10/8/2012	3933	1.23	83.97	3929.94	0.00
10/8/2012	4028	0.97	60.18	4024.92	0.00
10/8/2012	4123	0.97	63.40	4119.91	0.00
10/8/2012	4218	0.97	44.77	4214.89	0.00
10/9/2012	4312	0.19	42.30	4308.88	0.00
10/11/2012	4402	0.62	27.79	4398.87	0.00
10/11/2012	4528	0.70	19.55	4524.87	0.00
10/11/2012	4624	0.79	21.67	4620.86	0.00
10/12/2012	4718	0.70	16.75	4714.85	0.00
10/12/2012	4812	0.35	26.60	4808.85	0.00
10/12/2012	4908	0.26	32.64	4904.84	0.00
10/12/2012	5004	0.35	28.22	5000.84	0.00
10/12/2012	5099	0.26	297.41	5095.84	0.00
10/12/2012	5194	0.62	274.42	5190.00	0.00
10/12/2012	5289	0.70	275.61	5285.00	0.00
10/12/2012	5384	0.62	279.87	5380.00	0.00

# Date	Depth	Deviation	Direction	TVD	Horiz
10/12/2012	5479	0.70	284.23	5475.00	0.00
10/12/2012	5575	0.70	280.40	5571.81	0.00
10/12/2012	5670	0.79	284.06	5666.80	0.00
10/12/2012	5764	0.62	282.49	5760.80	0.00
10/12/2012	5860	0.35	197.09	5856.80	0.00
10/13/2012	5955	0.35	201.36	5951.79	0.00
10/13/2012	6049	0.70	149.10	6049.79	0.00
10/13/2012	6144	0.79	141.29	6140.78	0.00
10/13/2012	6239	0.88	144.86	6235.77	0.00
10/13/2012	6334	0.97	140.51	6330.76	0.00
10/13/2012	6434	1.06	143.75	6430.74	0.00
10/14/2012	6495	0.79	167.93	6491.74	0.00
10/14/2012	6526	1.14	243.12	6522.73	0.00
10/14/2012	6557	4.04	263.36	6553.00	0.00
10/14/2012	6587	7.74	266.68	6583.00	0.00
10/14/2012	6618	11.87	267.74	6614.00	0.00
10/14/2012	6649	266.79	15.83	6644.00	0.00
10/14/2012	6680	19.71	266.70	6673.00	34.00
10/14/2012	6711	23.04	267.81	6702.55	45.48
10/14/2012	6742	26.03	269.96	6730.75	58.34
10/14/2012	6773	29.63	272.37	6758.16	72.81
10/14/2012	6804	34.21	275.09	6784.46	89.15
10/15/2012	6836	38.43	273.39	6810.24	108.03
10/15/2012	6867	41.86	272.62	6833.94	127.93
10/15/2012	6898	45.21	272.11	6856.41	149.30
10/15/2012	6930	48.45	272.16	6878.30	172.61
10/15/2012	6961	51.53	272.54	6898.23	196.33
10/15/2012	6992	53.99	272.24	6917.00	221.00
10/15/2012	7023	56.98	271.76	6934.00	246.00
10/15/2012	7055	60.23	272.10	6951.00	274.00
10/15/2012	7086	62.78	272.22	6966.00	301.00
10/15/2012	7117	65.17	271.68	6979.61	328.83
10/16/2012	7148	65.80	270.80	6991.98	357.24
10/16/2012	7179	71.05	270.01	7002.87	386.26
10/16/2012	7210	74.83	269.40	7011.97	415.89
10/16/2012	7241	78.44	268.96	7019.00	446.00
10/16/2012	7272	81.95	268.30	7024.00	476.00
10/16/2012	7303	84.15	268.44	7028.16	507.34
10/16/2012	7335	88.29	268.32	7030.27	539.26
10/16/2012	7366	91.28	268.22	7030.37	570.24
10/17/2012	7452	89.87	269.01	7029.52	0.00
10/17/2012	7546	88.72	269.19	7030.68	750.21
10/18/2012	7640	87.76	269.04	7033.00	844.00
10/18/2012	7733	87.85	269.25	937.00	0.00
10/18/2012	7826	88.29	269.19	7040.26	1030.04

# Date	Depth	Deviation	Direction	TVD	Horiz
10/18/2012	7920	88.90	270.10	7042.56	1124.01
10/19/2012	8075	89.16	270.35	7044.93	1278.98
10/19/2012	8138	89.60	270.36	7045.61	1341.97
10/19/2012	8231	89.96	271.27	7045.97	1434.95
10/19/2012	8324	90.31	271.84	7045.75	1527.90
10/19/2012	8418	90.13	272.96	7345.39	1621.78
10/19/2012	8511	89.78	270.28	7046.00	1714.72
10/19/2012	8605	89.87	265.85	7045.75	1808.71
10/19/2012	8697	89.60	269.82	7406.17	1900.71
10/20/2012	8792	89.96	269.36	7046.54	1995.71
10/25/2012	8891	90.22	267.63	7046.38	2094.69
10/25/2012	8984	90.04	269.60	7046.17	2187.67
10/26/2012	9077	89.87	270.28	7046.00	2280.66
10/26/2012	9171	89.87	271.09	7046.46	2374.46
10/26/2012	9264	90.22	270.95	7046.38	2467.62
10/26/2012	9358	89.87	271.58	7046.31	2561.58
10/26/2012	9451	90.66	271.33	7045.88	2654.53
10/27/2012	9544	90.66	270.91	7044.81	2747.49
10/27/2012	9638	91.80	271.05	7042.79	2841.44
10/27/2012	9731	91.01	270.39	7040.51	2934.40
10/27/2012	9825	91.28	270.49	7038.00	3028.00
10/27/2012	9918	91.54	271.10	7036.00	3121.00
10/27/2012	10016	91.28	271.33	7033.93	3219.25
10/27/2012	10104	91.54	271.72	7031.77	3307.18
10/28/2012	10221	91.36	273.06	7028.80	3424.00
10/29/2012	10315	91.63	273.57	7036.25	3517.77
10/29/2012	10409	89.52	272.01	7025.41	3611.61
10/29/2012	10503	89.08	271.68	7026.56	3705.53
10/29/2012	10596	90.04	269.51	7027.00	3798.00
10/29/2012	10689	89.96	269.74	70.27	3891.00
10/29/2012	10783	89.60	269.58	7027.63	3985.51
10/29/2012	10875	89.52	268.61	7028.92	4077.50
10/30/2012	10969	90.48	267.86	7027.39	4171.47
10/30/2012	11061	89.96	268.25	7027.99	4263.44
10/30/2012	11154	89.43	268.15	7029.37	4356.40
10/30/2012	11247	89.69	268.45	7029.00	4449.00
10/30/2012	11340	89.78	267.33	7029.63	4542.33
10/30/2012	11433	89.08	268.02	7031.59	4700.24

EOF



Yates Petroleum Corp.

Eddy County (NAD 83)

Martha AIK Federal

#11H

OH

Design: OH

PathfinderX & Y Report

02 November, 2012

PATHFINDER®

A Schlumberger Company



Pathfinder
PathfinderX & Y Report

PATHFINDER
A Schlumberger Company

Company:	Yates Petroleum Corp.	Local Co-ordinate Reference:	Well #11H
Project:	Eddy County (NAD83)	TVD Reference:	KB = 18 @ 3502.0usft (Silver Oak 10)
Site:	Martha AIK Federal	MD Reference:	KB = 18 @ 3502.0usft (Silver Oak 10)
Well:	#11H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000 - Single User Db

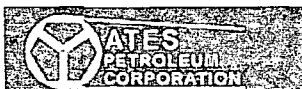
Project: Eddy County (NAD83)			
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site: Martha AIK Federal					
Site Position:		Northing:	512,888.500 usft	Latitude:	32.409183
From:	Map	Easting:	682,912.800 usft	Longitude:	-103.874574
Position Uncertainty:	0.0 usft	Sight Radius:	13-3/16 "	Grid Convergence:	0.25 °

Well: #11H						
Well Position	+N-S	0.0 usft	Northing:	511,100.543 usft	Latitude:	32.403690
	+E-W	0.0 usft	Easting:	724,227.764 usft	Longitude:	-103.740735
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,584.0 usft

Wellbore:	430H				
Magnetics:	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF200510	8/14/2012	7.53	60.32	48,629

Design:	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	N/S	+E/W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.0	0.0	0.0	269.61	



Pathfinder PathfinderX & Y Report



Company:	Yates Petroleum Corp.	Local Co-ordinate Reference:	Well #11H
Project:	Eddy County (NAD 83)	TVD Reference:	KB = 18 @ 3602.0usft (Silver Oak 10)
Site:	Marina Aik Federal	MD Reference:	KB = 18 @ 3602.0usft (Silver Oak 10)
Well:	#11H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM1500011 Single User.Db

Survey Program	Date	From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
	11/2/2012	200.0	300.0	Cyro #1 (OH)	NS-GYRO-MS	North sensing gyrocompassing m/s
		859.0	11,498.0	MWD #2 (OH)	MWD	MWD - Standard

Survey	MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (1/1000usft)	Northing (usft)	Easting (usft)
	0.0	0.00	0.00	0.0	-3,602.0	0.0	0.0	0.0	0.00	511,100.54	724,227.78
	200.0	1.29	16.42	200.0	-3,402.0	2.2	0.6	-0.7	0.64	511,102.70	724,228.42
	400.0	1.35	14.18	399.9	-3,202.1	6.6	1.8	-1.9	0.04	511,107.15	724,229.63
	600.0	1.78	355.67	599.9	-3,002.1	12.0	2.2	-2.3	0.33	511,112.53	724,229.98
	800.0	2.62	347.45	799.7	-2,802.3	19.5	1.0	-1.1	0.45	511,120.09	724,228.75
	859.0	2.55	351.57	858.6	-2,743.4	22.2	0.5	-0.6	0.34	511,122.70	724,228.26
	951.0	1.23	332.28	950.6	-2,651.4	25.1	-0.3	0.1	1.57	511,125.60	724,227.50
	1,079.0	0.18	247.21	1,079.6	-2,523.4	26.2	-1.1	0.9	0.96	511,126.74	724,226.82
	1,269.0	0.26	142.01	1,268.6	-2,333.4	25.7	-1.1	0.9	0.19	511,126.28	724,226.37
	1,459.0	0.26	197.03	1,458.6	-2,143.4	25.0	-1.0	0.8	0.13	511,125.53	724,226.81
	1,650.0	0.09	291.83	1,649.6	-1,952.4	24.6	-1.2	1.1	0.15	511,125.17	724,226.54
	1,841.0	0.35	328.99	1,840.6	-1,761.4	25.2	-1.7	1.5	0.15	511,125.73	724,226.10
	2,030.0	0.79	149.69	2,029.6	-1,572.4	24.6	-1.3	1.2	0.60	511,125.10	724,226.46
	2,221.0	0.44	131.28	2,220.6	-1,381.4	22.9	-0.1	0.0	0.21	511,123.48	724,227.68
	2,411.0	1.14	189.19	2,410.5	-1,191.5	20.6	0.1	-0.3	0.52	511,121.13	724,227.93
	2,601.0	2.02	203.23	2,600.5	-1,001.5	15.6	-1.5	1.4	0.50	511,116.10	724,226.30
	2,792.0	3.52	195.20	2,791.2	-810.8	6.9	-4.3	4.3	0.81	511,107.44	724,223.44
	2,982.0	4.13	190.44	2,980.8	-621.2	-5.5	-7.1	7.2	0.36	511,095.08	724,220.67
	3,077.0	3.61	190.60	3,075.6	-526.4	-11.8	-8.3	8.4	0.55	511,088.77	724,219.50
	3,172.0	4.04	191.67	3,170.4	-431.6	-18.0	-9.5	9.6	0.46	511,082.56	724,218.27
	3,267.0	5.36	193.05	3,265.1	-336.9	-25.6	-11.2	11.4	1.39	511,074.96	724,216.59



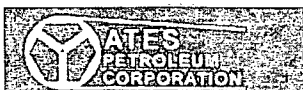
Pathfinder PathfinderX & Y Report

PATHFINDER
A Schlumberger Company

Company: Yates Petroleum Corp.
Project: Eddy County (NAD 83)
Site: Martha Alk Federal
Well: #11H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #11H
TVD Reference: KB - 18 @ 3602.0usft (Silver Oak 10)
MD Reference: KB - 18 @ 3602.0usft (Silver Oak 10)
North Reference: Grid
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)	DLeg (1/100usft)	Northing (usft)	Easting (usft)
3,362.0	5.10	190.04	3,359.7	-242.3	-34.1	-12.9	13.2	0.40	511,066.48	724,214.35
3,457.0	4.66	186.85	3,454.3	-147.7	-42.1	-14.1	14.4	0.54	511,058.49	724,213.66
3,552.0	3.34	185.02	3,549.1	-52.9	-48.6	-14.8	15.2	1.40	511,051.90	724,212.96
3,647.0	1.93	184.74	3,644.0	42.0	-53.0	-15.2	15.6	1.46	511,047.55	724,212.58
3,742.0	0.83	136.67	3,739.0	137.0	-55.1	-14.8	15.2	1.57	511,045.42	724,212.95
3,837.0	1.23	90.18	3,834.0	232.0	-55.7	-13.3	13.7	0.94	511,044.89	724,214.47
3,933.0	1.23	83.97	3,929.9	327.9	-55.5	-11.3	11.6	0.14	511,044.99	724,216.52
4,028.0	0.97	50.18	4,024.9	422.9	-55.0	-9.5	9.9	0.55	511,045.50	724,218.24
4,123.0	0.97	63.40	4,119.9	517.9	-54.3	-8.1	8.5	0.06	511,046.26	724,219.65
4,217.0	0.97	44.77	4,213.9	611.9	-53.4	-6.9	7.2	0.33	511,047.18	724,220.92
4,312.0	0.79	42.30	4,308.9	706.9	-52.3	-5.9	6.2	0.19	511,048.24	724,221.93
4,402.0	0.62	29.79	4,398.9	796.9	-51.4	-5.2	5.5	0.25	511,049.12	724,222.59
4,528.0	0.70	19.55	4,524.9	922.9	-50.1	-4.6	4.9	0.11	511,050.44	724,223.19
4,624.0	0.79	21.67	4,620.9	1,018.9	-48.9	-4.2	4.5	0.10	511,051.60	724,223.63
4,718.0	0.70	16.75	4,714.8	1,112.8	-47.8	-3.6	4.1	0.12	511,052.75	724,224.03
4,812.0	0.35	26.60	4,808.8	1,206.8	-47.0	-3.5	3.8	0.38	511,053.56	724,224.33
4,908.0	0.26	32.64	4,904.8	1,302.8	-46.5	-3.2	3.5	0.10	511,054.01	724,224.58
5,004.0	0.35	28.22	5,000.8	1,398.8	-46.1	-3.0	3.3	0.10	511,054.45	724,224.83
5,099.0	0.26	297.41	5,095.8	1,493.8	-45.7	-3.0	3.3	0.46	511,054.80	724,224.78
5,194.0	0.62	274.42	5,190.8	1,588.8	-45.6	-3.7	4.0	0.41	511,054.94	724,224.07
5,289.0	0.70	275.61	5,285.8	1,683.8	-45.5	-4.8	5.1	0.09	511,055.04	724,222.98
5,384.0	0.62	279.87	5,380.8	1,778.8	-45.4	-5.9	6.2	0.10	511,055.18	724,221.90
5,479.0	0.70	284.23	5,475.8	1,873.8	-45.1	-7.0	7.3	0.10	511,055.41	724,220.83
5,575.0	0.70	280.40	5,571.8	1,969.8	-44.9	-8.1	8.4	0.05	511,055.66	724,219.69
5,670.0	0.79	284.06	5,666.8	2,064.8	-44.6	-9.3	9.6	0.11	511,055.93	724,218.48
5,764.0	0.62	282.49	5,760.8	2,158.8	-44.3	-10.4	10.7	0.18	511,056.20	724,217.35
5,860.0	0.35	197.09	5,856.8	2,254.8	-44.5	-11.0	11.3	0.72	511,056.03	724,216.76



Pathfinder

PathfinderX & Y Report

PATHFINDER
A Schlumberger Company

Company:	Yates Petroleum Corp	Local Co-ordinate Reference:	Well #11H
Project:	Eddy County (NAD 83)	TVD Reference:	KB = 13 @ 3602.0usft (Silver Oak 10)
Site:	Martha ALK Federal	MD Reference:	KB = 18 @ 3602.0usft (Silver Oak 10)
Well:	#11H	North Reference:	Grid
Wellbore:	CH	Survey Calculation Method:	Minimum Curvature
Design:	CH	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)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
5,955.0	0.35	201.36	5,951.8	2,349.8	-45.1	-11.2	11.5	0.03	511,055.48	724,218.57
6,049.0	0.70	149.10	6,045.8	2,443.8	-45.8	-11.0	11.3	0.59	511,054.72	724,216.76
6,144.0	0.79	141.29	6,140.8	2,538.8	-46.8	-10.3	10.6	0.14	511,053.71	724,217.47
6,239.0	0.88	144.86	6,235.8	2,633.8	-47.9	-9.5	9.8	0.11	511,052.60	724,218.30
6,334.0	0.97	140.51	6,330.8	2,728.8	-49.2	-8.6	8.9	0.12	511,051.39	724,219.23
6,434.0	1.06	143.75	6,430.7	2,828.7	-50.6	-7.5	7.8	0.11	511,049.99	724,220.31
6,495.0	0.79	167.93	6,491.7	2,889.7	-51.4	-7.0	7.4	0.77	511,049.12	724,220.74
6,526.0	1.14	243.12	6,522.7	2,920.7	-51.8	-7.3	7.6	3.90	511,048.77	724,220.51
6,557.0	4.04	263.36	6,553.7	2,951.7	-52.0	-8.6	9.0	9.67	511,048.51	724,219.15
KOP=6557.0 MD=6553.7 TVD=52.0 N=8.6 E=0.0										
6,587.0	7.74	266.68	6,583.5	2,981.5	-52.3	-11.7	12.1	12.38	511,048.27	724,216.09
6,618.0	11.87	267.24	6,614.1	3,012.1	-52.6	-17.0	17.3	13.33	511,047.99	724,210.81
6,649.0	15.83	266.79	6,644.2	3,042.2	-52.9	-24.4	24.7	12.78	511,047.60	724,203.40
6,680.0	19.70	266.70	6,673.7	3,071.7	-53.5	-33.8	34.2	12.46	511,047.06	724,193.99
6,711.0	23.04	267.81	6,702.5	3,100.5	-54.0	-45.1	45.5	10.85	511,046.63	724,182.68
6,742.0	26.03	269.96	6,730.7	3,128.7	-54.2	-58.0	58.3	10.06	511,046.30	724,169.81
6,773.0	29.63	272.37	6,758.2	3,156.2	-53.9	-72.4	72.8	12.16	511,046.61	724,155.34
6,804.0	34.21	275.09	6,784.5	3,182.5	-52.8	-88.8	89.1	15.48	511,047.70	724,139.00
6,836.0	38.43	273.39	6,810.2	3,208.2	-51.5	-107.7	108.0	13.56	511,049.09	724,120.10
6,867.0	41.86	272.62	6,833.9	3,231.9	-50.4	-127.6	128.0	11.18	511,050.13	724,100.15
6,898.0	45.20	272.11	6,856.4	3,254.4	-49.5	-149.0	149.3	10.83	511,051.01	724,078.82
6,930.0	48.45	272.16	6,878.3	3,276.3	-48.7	-172.3	172.6	10.16	511,051.88	724,055.50
6,961.0	51.53	272.54	6,898.2	3,296.2	-47.7	-196.0	196.3	9.98	511,052.85	724,031.78
6,992.0	53.99	272.24	6,917.0	3,315.0	-46.7	-220.7	221.0	7.97	511,053.88	724,007.12
7,023.0	56.98	271.76	6,934.5	3,332.5	-45.8	-246.2	246.5	9.73	511,054.77	723,981.60
7,055.0	60.23	272.10	6,951.2	3,349.2	-44.9	-273.5	273.8	10.20	511,055.69	723,954.30
7,086.0	62.78	272.22	6,966.0	3,364.0	-43.8	-300.7	301.0	8.23	511,056.72	723,927.08



Pathfinder

PathfinderX & Y Report

PATHFINDER
A Schlumberger Company

Company:	Yates Petroleum Corp.	Local Co-ordinate Reference:	Well # 11H
Project:	Eddy County (NAD 83)	TVD Reference:	KB = 18 @ 3602.0usft (Silver Oak 10)
Site:	Martha AIK Federal	MD Reference:	KS = 18 @ 3602.0usft (Silver Oak 10)
Well:	# 11H	North Reference:	Ord
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	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)	Dleg (°/100usft)	Northing (usft)	Easting (usft)
7,117.0	65.16	271.68	6,979.6	3,377.6	-42.9	-328.5	328.8	7.84	511,057.66	723,899.24
7,148.0	67.80	270.80	6,992.0	3,390.0	-42.3	-357.0	357.2	8.90	511,058.26	723,870.83
7,179.0	71.05	270.01	7,002.9	3,400.9	-42.1	-386.0	386.3	10.75	511,058.48	723,841.81
7,210.0	74.83	269.40	7,012.0	3,410.0	-42.2	-415.6	415.9	12.34	511,058.32	723,812.18
7,241.0	78.44	268.96	7,019.1	3,417.1	-42.7	-445.8	446.0	11.73	511,057.89	723,782.03
7,272.0	81.95	268.30	7,024.4	3,422.4	-43.4	-476.3	476.6	11.52	511,057.16	723,751.49
7,303.0	84.15	268.44	7,028.2	3,426.2	-44.3	-507.0	507.3	7.11	511,056.29	723,720.73
7,335.0	88.29	268.32	7,030.3	3,428.3	-45.2	-539.0	539.3	12.94	511,055.38	723,688.82
7,366.0	91.23	268.22	7,030.4	3,428.4	-46.1	-569.9	570.2	9.65	511,054.45	723,657.84
LP 7366.0 MD 7030.4 TVD -46.1 N -569.9 E										
7,452.0	89.87	269.01	7,029.5	3,427.5	-48.2	-655.9	656.2	1.88	511,052.37	723,571.87
7,546.0	88.72	269.19	7,030.7	3,428.7	-49.7	-749.9	750.2	1.24	511,050.89	723,477.89
7,640.0	87.76	269.04	7,033.6	3,431.6	-51.1	-843.8	844.2	1.03	511,049.44	723,383.95
7,733.0	87.85	269.25	7,037.1	3,435.1	-52.5	-935.8	937.1	0.25	511,048.05	723,291.03
7,826.0	88.29	269.19	7,040.3	3,438.3	-53.8	-1,029.7	1,030.0	0.48	511,046.79	723,198.09
7,920.0	88.90	270.10	7,042.6	3,440.6	-54.3	-1,123.7	1,124.0	1.17	511,046.21	723,104.12
8,013.0	89.25	269.96	7,044.1	3,442.1	-54.3	-1,216.6	1,217.0	0.41	511,046.26	723,011.13
8,075.0	89.16	270.35	7,044.9	3,442.9	-54.1	-1,278.6	1,279.0	0.55	511,046.42	722,949.14
8,138.0	89.60	270.36	7,045.6	3,443.6	-53.7	-1,341.6	1,342.0	0.70	511,046.81	722,886.15
8,231.0	89.96	271.27	7,046.0	3,444.0	-52.4	-1,434.6	1,434.9	1.05	511,048.14	722,793.16
8,324.0	90.31	271.84	7,045.7	3,443.7	-49.9	-1,527.6	1,527.9	0.72	511,050.66	722,700.19
8,418.0	90.13	272.96	7,045.4	3,443.4	-45.9	-1,621.5	1,621.8	1.21	511,054.60	722,606.23
8,511.0	89.78	270.28	7,045.5	3,443.5	-43.3	-1,714.5	1,714.7	2.91	511,057.23	722,513.32
8,605.0	89.87	269.85	7,045.7	3,443.7	-43.2	-1,808.5	1,808.7	0.47	511,057.33	722,419.32
8,697.0	89.60	269.82	7,046.2	3,444.2	-43.5	-1,900.5	1,900.7	0.30	511,057.07	722,327.33
8,792.0	89.96	269.36	7,046.5	3,444.5	-44.2	-1,995.5	1,995.7	0.61	511,056.39	722,232.33
8,891.0	90.22	267.63	7,046.4	3,444.4	-46.8	-2,094.4	2,094.7	1.77	511,053.79	722,133.37



Pathfinder PathfinderX & Y Report

PATHFINDER
A Schlumberger Company

Company:	Yates Petroleum Corp.	Local Co-ordinate Reference:	Well #11H
Project:	Eddy County (NAD 83)	TVD Reference:	KB = 18 @ 3602.0usft (Silver Oak #10)
Site:	Martha Alk Federal	MD Reference:	KB = 18 @ 3602.0usft (Silver Oak #10)
Well:	#11H	North Reference:	Grid = 1
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	CH	Database:	EDM5000.1 Single User Db

MD (usft)	Incl (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLcg (100usft)	Northing (usft)	Easting (usft)
8,964.0	90.04	269.60	7,046.2	3,444.2	-49.0	-2,187.4	2,187.7	2.13	511,051.54	722,040.40
9,077.0	89.87	270.28	7,046.2	3,444.2	-49.1	-2,280.4	2,280.7	0.75	511,051.44	721,947.40
9,171.0	89.87	271.09	7,046.5	3,444.5	-48.0	-2,374.4	2,374.6	0.86	511,052.57	721,853.41
9,264.0	90.22	270.95	7,046.4	3,444.4	-46.3	-2,467.4	2,467.6	0.41	511,054.22	721,760.42
9,358.0	89.87	271.58	7,046.3	3,444.3	-44.2	-2,561.3	2,561.6	0.77	511,056.30	721,666.45
9,451.0	90.66	271.33	7,045.9	3,443.9	-41.9	-2,654.3	2,654.5	0.89	511,058.66	721,573.48
9,544.0	90.66	270.91	7,044.8	3,442.8	-40.1	-2,747.3	2,747.5	0.45	511,060.48	721,480.50
9,638.0	91.80	271.05	7,042.8	3,440.8	-38.5	-2,841.2	2,841.4	1.22	511,062.08	721,386.54
9,731.0	91.01	270.39	7,040.5	3,438.5	-37.3	-2,934.2	2,934.4	1.11	511,063.25	721,293.58
9,825.0	91.28	270.49	7,038.6	3,436.6	-36.6	-3,028.2	3,028.4	0.31	511,063.97	721,199.60
9,918.0	91.54	271.10	7,036.3	3,434.3	-35.3	-3,121.1	3,121.3	0.71	511,065.26	721,106.63
10,016.0	91.28	271.35	7,033.9	3,431.9	-33.2	-3,219.1	3,219.2	0.35	511,067.34	721,008.69
10,104.0	91.54	271.72	7,031.8	3,429.8	-30.9	-3,307.0	3,307.2	0.53	511,069.68	720,920.74
10,221.0	91.36	273.06	7,028.8	3,426.8	-26.0	-3,423.9	3,424.0	1.16	511,074.56	720,803.89
10,315.0	91.63	273.57	7,026.3	3,424.3	-20.5	-3,517.7	3,517.8	0.61	511,079.99	720,710.06
10,409.0	89.52	272.01	7,025.4	3,423.4	-16.0	-3,611.6	3,611.6	2.79	511,084.57	720,616.20
10,503.0	89.08	271.68	7,026.6	3,424.6	-12.9	-3,705.5	3,705.5	0.59	511,087.59	720,522.26
10,596.0	90.04	269.51	7,027.3	3,425.3	-12.0	-3,798.5	3,798.5	2.55	511,088.56	720,429.27
10,689.0	89.96	269.74	7,027.3	3,425.3	-12.6	-3,891.5	3,891.5	0.26	511,087.95	720,336.27
10,783.0	89.60	269.58	7,027.6	3,425.6	-13.2	-3,985.5	3,985.5	0.42	511,087.39	720,242.28
10,875.0	89.52	268.61	7,028.3	3,426.3	-14.6	-4,077.5	4,077.5	1.06	511,085.94	720,150.29
10,969.0	90.48	267.86	7,028.3	3,426.3	-17.5	-4,171.4	4,171.5	1.30	511,083.04	720,056.34
11,061.0	89.96	268.25	7,028.0	3,426.0	-20.6	-4,263.4	4,263.4	0.71	511,079.92	719,964.39
11,154.0	89.43	268.15	7,028.5	3,426.5	-23.5	-4,356.3	4,356.4	0.58	511,077.00	719,871.44
11,247.0	89.69	268.45	7,029.2	3,427.2	-26.3	-4,449.3	4,449.4	0.43	511,074.24	719,778.48
11,340.0	89.78	267.33	7,029.6	3,427.6	-29.7	-4,542.2	4,542.3	1.21	511,070.82	719,685.55
11,433.0	89.08	268.02	7,030.5	3,428.5	-33.5	-4,635.2	4,635.3	1.06	511,067.05	719,592.63



Pathfinder PathfinderX & Y Report

PATHFINDER
A Schlumberger Company

Company: Ates Petroleum Corp
Project: Eddy County (NAD 83)
Site: Martha Aik Federal
Well: #111
Wellbore: CH
Design: C-1

Local Co-ordinate Reference: Well # 111
TVD Reference: KB -18 @ 3602.0usft (Silver Oak 10)
MD Reference: KB -18 @ 3602.0usft (Silver Oak 10)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.1 Single User Db

Survey

MD (usft)	INC (°)	Azimuth (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	D Leg (°/100usft)	Northing (usft)	Easting (usft)
11,498.0	99.06	268.02	7,031.6	3,429.6	-35.7	-4,700.1	4,700.2	0.00	511,064.80	719,527.66
PROJECTED BHL - 11498.0 'MD, 7031.6 'TVD, -35.7 'N, -4700.1 'E - FNL:862', FWL:378', FSL:455'										

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/S (usft)	+E/W (usft)	
6,557.0	6,553.7	-52.0	-8.6	KOP - 6557.0 'MD, 6553.7 'TVD, -52.0 'N, -8.6 'E
7,366.0	7,030.4	-48.1	-569.9	LP - 7366.0 'MD, 7030.4 'TVD, -48.1 'N, -569.9 'E
11,498.0	7,031.6	-35.7	-4,700.1	PROJECTED BHL - 11498.0 'MD, 7031.6 'TVD, -35.7 'N, -4700.1 'E
11,498.0	7,031.6	-35.7	-4,700.1	FNL:862', FWL:378', FSL:455'

Checked By: _____ Approved By: _____ Date: _____



Project: Eddy County (NAD 83)
Site: Martha AIK Federal
Well: #11H
Wellbore: OH
Plan: Plan #3

PROJECT DETAILS: Eddy County (NAD 83)
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



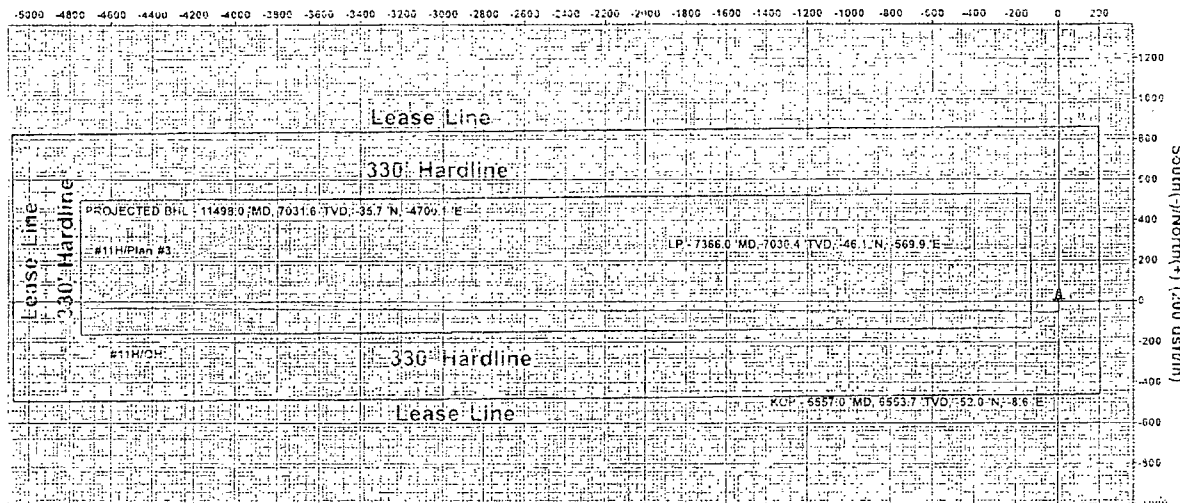
A Schlumberger Company

WELL DETAILS: #11H

Ground Elevation: 3584.0
RKB Elevation: KB = 18 @ 3602.0m (Silver Oak 10)
Rig Name: Silver Oak 10

N/S	E/W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	51109.543	724227.754	32.403690	-103.745735	

West(-)/East(+) (200 usft/in)



EOW

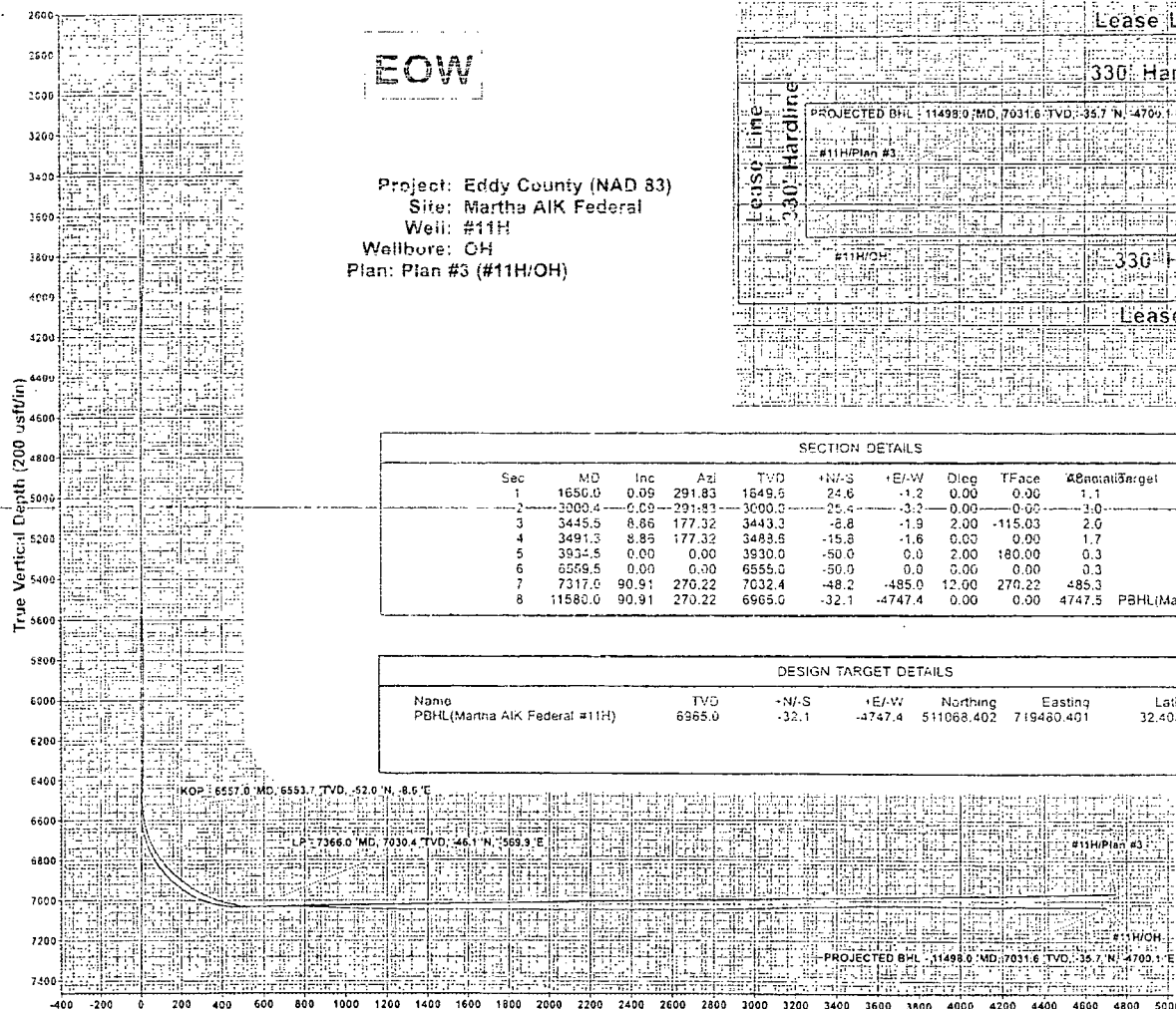
Project: Eddy County (NAD 83)
Site: Martha AIK Federal
Well: #11H
Wellbore: OH
Plan: Plan #3 (#11H/OH)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	N/S	E/W	Dleg	TFace	Annotation
1	1650.0	0.09	291.83	1649.6	-1.2	0.00	0.00	0.00	1.1
2	3000.4	0.09	291.83	3000.3	-2.4	-3.2	0.00	0.00	3.0
3	3445.5	8.86	177.32	3443.3	-8.8	-1.9	2.00	-115.03	2.0
4	3491.3	8.85	177.32	3483.5	-15.8	-1.6	0.00	0.00	1.7
5	3934.5	0.00	0.00	3930.0	-50.0	0.0	2.00	180.00	0.3
6	6559.5	0.00	0.00	6555.0	-50.0	0.0	0.00	0.00	0.3
7	7317.0	90.91	270.22	7032.4	-48.2	-485.0	12.00	270.22	485.3
8	11580.0	90.91	270.22	6965.0	-32.1	-4747.4	0.00	0.00	4747.5 PBHL(Martha AIK Federal #11H)

DESIGN TARGET DETAILS

Name	TVD	N/S	E/W	Northing	Easting	Latitude	Longitude
PBHL(Martha AIK Federal #11H)	6965.0	-32.1	-4747.4	511068.402	719460.401	32.403673	-103.756118



Vertical Section at 269.61° (200 usft/in)



Azimuths to Grid North
True North: -0.32°
Magnetic North: 7.21°

Magnetic Field
Strength: 48629.2snT
Dip Angle: 60.32°
Date: 8/14/2012
Model: IGRF200510

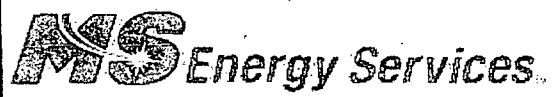
Plan: Plan #3 (#11H/OH)

Created By: Sam Biffle Date: 11/08, November 02 2012

Checked: _____ Date: _____

Notes:
1. This is a preliminary drawing.
2. All dimensions are in feet unless otherwise noted.
3. All elevations are in feet unless otherwise noted.
4. All bearings are in degrees unless otherwise noted.
5. All distances are in feet unless otherwise noted.

37510
30-015-40499



Job Number: SVMO-120013
 Company: Yates Petroleum Corporation
 Lease/Well: MARTHA AIK FEDERAL 11H
 Location: Eddy County, NM
 Rig Name: Silver Oak #10
 RKB: 18'
 G.L. or M.S.L.: GL

State/Country: New Mexico/USA
 Declination: 7.21°
 Grid: East To Grid North
 File name: F:\SURVEY\2012SU-1\YATES\MO\MARTHA-1\11H.SVY
 Date/Time: 08-Oct-12 / 15:41
 Curve Name: Surface - 800' M.D. (Rate Gyro)

RECEIVED
 FEB 28 2013
 NMOCD ARTESIA

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 269.61
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

We hereby certify that our survey data from
Surface MD to 800' MD is, to the best of
 our knowledge a true and accurate account of
 the well bore.
Joshua Smith 10/8/12
 MS Energy Services Date

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
200.00	1.29	16.42	199.98	2.16	.64	-.65	2.25	16.42	.64
400.00	1.35	14.18	399.93	6.60	1.85	-1.89	6.86	15.65	.04
600.00	1.78	355.67	599.86	11.98	2.19	-2.27	12.18	10.37	.33
Last-Survey Depth Recorded									
800.00	2.62	347.45	799.71	19.54	.96	-1.10	19.57	2.83	.45