

Results of Directional Survey

API number:	30-025-41058		
OGRID:		Operator:	YATES PETROLEUM CORPORATION
		Property:	ATOKA BANK BDJ STATE COM # 3H

surface	ULSTR:	A	17	T 24S	R 33E
				200 FNL	660 FEL

BH Loc	ULSTR:	P	17	T 24S	R 33E
15726	MD	11146.5	TVD	316 FSL	624 FEL
				4964 FNL	

Top Perf/OH	ULSTR:	A	17	T 24S	R 33E
11455	MD	11172.5	TVD	694 FNL	655 FEL

Bot Perf/OH	ULSTR:	P	17	T 24S	R 33E
15635	MD	11147.6	TVD	407 FSL	626 FEL
				4873 FNL	

	MD	N/S	E/W	VD
	11427	-465.80	4.90	11171
TOP PERFS/OH	11455	-493.80	5.43	11172.49
	11459	-497.80	5.50	11172.70
	15610	-4648.10	33.20	11147.80
BOT PERFS/OH	15635	-4673.06	33.63	11147.63
	15668	-4706.00	34.20	11147.40

NEXT TO LAST	15668	-4706.00	34.20	11147.40
LAST READING	15726	-4764.00	35.60	11146.50
TD	15726	-4764.00	35.60	11146.50

Surface Location	200	FN	660	FE
Projected BHL	4964	FN	624	FE
Location of				
Top Perfs/OH	694	FN	655	FE
Bottom Perfs/OH	4873	FN	626	FE

SUMMARY of Subsurface Locations

Surface Location	A-17-24S-33E	200	FN	660	FE	Vert. Depth
Top Perfs/OH	A-17-24S-33E	694	FN	655	FE	11172.49
Bottom Perfs/OH	P-17-24S-33E	4873	FN	626	FE	11147.63
Projected TD	P-17-24S-33E	4964	FN	624	FE	11146.50

APR 14 2014

Yates Petroleum

Lea County, NM (NAD-83)
Atoka Bank BDJ State Com
#3H

OH

Design: OH

Standard Survey Report

14 January, 2014

Survey Report

Company:	Yates Petroleum	Local Co-ordinate Reference:	Well #3H
Project:	Lea County, NM (NAD-83)	TVD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Site:	Atoka Bank BDJ State Com	MD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Houston R5000 Database

Project:	Lea County, NM (NAD-83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site:	Atoka Bank BDJ State Com		
Site Position:	Map	Northing:	446,170.06 usft
From:	Map	Easting:	771,850.92 usft
Position Uncertainty:	2.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 13' 27.839 N
		Longitude:	103° 35' 16.443 W
		Grid Convergence:	0.40 °

Well:	#3H		
Well Position	+N-S	0.0 usft	Northing:
	+E-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 13' 27.839 N
		Longitude:	103° 35' 16.443 W
		Ground Level:	3,602.0 usft

Wellbore:	OH		
Magnetics	Model Name	Sample Date	Declination
	IGRF2010	10/29/2013	7.30
			Dip Angle
			60.13
			Field Strength
			48,376

Design:	OH		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N-S	+E-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			73.69

Survey Program:	Date: 1/14/2014		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
100.0	1,300.0	Survey #1 - Gyro Multishot (OH)	Good_gyro
1,508.0	15,726.0	Survey #2 - Crescent MWD Surveys (OH)	MWD
			Description
			Good Gyro
			MWD - Standard

Survey										
Measured	Inclination	Azimuth	Vertical	+N-S	+E-W	Vertical	Dogleg	Build	Turn	
Depth	(°)	(°)	Depth	(usft)	(usft)	Section	Rate	Rate	Rate	
(usft)			(usft)			(usft)	(°/100usft)	(°/100usft)	(°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
100.0	0.50	62.65	100.0	0.2	0.4	0.4	0.50	0.50	0.00	
200.0	0.60	61.06	200.0	0.7	1.2	1.4	0.10	0.10	-1.59	
300.0	0.56	56.79	300.0	1.2	2.1	2.3	0.06	-0.04	-4.27	
400.0	0.43	53.56	400.0	1.7	2.8	3.2	0.13	-0.13	-3.23	
500.0	0.55	57.48	500.0	2.1	3.5	4.0	0.12	0.12	3.92	
600.0	0.38	71.09	600.0	2.5	4.2	4.8	0.20	-0.17	13.61	
700.0	0.48	67.30	700.0	2.8	4.9	5.5	0.10	0.10	-3.79	
800.0	0.17	82.63	800.0	3.0	5.5	6.1	0.32	-0.31	15.33	
900.0	0.07	66.20	900.0	3.0	5.7	6.3	0.10	-0.10	-16.43	

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Site:	Atoka Bank BDJ State Com	MD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Houston R5000 Database

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,000.0	0.37	73.26	1,000.0	3.1	6.0	6.7	0.30	0.30	7.06
1,100.0	0.34	81.72	1,100.0	3.3	6.6	7.3	0.06	-0.03	8.46
1,200.0	0.25	66.54	1,200.0	3.4	7.1	7.8	0.12	-0.09	-15.18
1,300.0	0.10	136.74	1,300.0	3.4	7.4	8.1	0.24	-0.15	70.20
1,508.0	0.30	212.60	1,508.0	2.8	7.2	7.7	0.14	0.10	36.47
1,697.0	0.40	292.90	1,697.0	2.7	6.4	6.8	0.24	0.05	42.49
1,887.0	0.10	47.20	1,887.0	3.0	5.9	6.5	0.24	-0.16	60.16
2,077.0	0.20	302.80	2,077.0	3.3	5.7	6.4	0.13	0.05	-54.95
2,267.0	0.20	192.60	2,267.0	3.2	5.4	6.0	0.17	0.00	-58.00
2,456.0	0.30	293.20	2,456.0	3.1	4.8	5.5	0.21	0.05	53.23
2,646.0	0.10	347.90	2,646.0	3.4	4.3	5.1	0.13	-0.11	28.79
2,836.0	0.10	36.50	2,836.0	3.7	4.4	5.3	0.04	0.00	25.58
3,024.0	0.10	131.30	3,024.0	3.7	4.6	5.5	0.08	0.00	50.43
3,211.0	0.30	348.40	3,211.0	4.1	4.6	5.6	0.21	0.11	-76.42
3,401.0	0.20	343.00	3,401.0	4.9	4.4	5.6	0.05	-0.05	-2.84
3,589.0	0.40	38.40	3,589.0	5.7	4.8	6.2	0.18	0.11	29.47
3,780.0	0.20	17.10	3,780.0	6.6	5.3	6.9	0.12	-0.10	-11.15
3,970.0	0.30	59.20	3,970.0	7.1	5.8	7.6	0.11	0.05	22.16
4,160.0	0.10	145.70	4,159.9	7.3	6.3	8.1	0.16	-0.11	45.53
4,349.0	0.20	96.30	4,348.9	7.1	6.7	8.5	0.08	0.05	-26.14
4,533.0	0.80	104.60	4,532.9	6.7	8.3	9.9	0.33	0.33	4.51
4,634.0	0.50	113.70	4,633.9	6.4	9.4	10.8	0.31	-0.30	9.01
4,729.0	0.70	123.40	4,728.9	5.9	10.2	11.5	0.24	0.21	10.21
4,823.0	1.40	121.90	4,822.9	5.0	11.7	12.6	0.75	0.74	-1.60
4,918.0	0.60	133.10	4,917.9	4.0	13.1	13.7	0.86	-0.84	11.79
5,013.0	0.40	134.70	5,012.9	3.4	13.7	14.1	0.21	-0.21	1.68
5,145.0	0.20	100.30	5,144.9	3.1	14.2	14.5	0.20	-0.15	-26.06
5,314.0	0.30	135.90	5,313.9	2.7	14.8	15.0	0.11	0.06	21.07
5,504.0	0.30	98.50	5,503.9	2.3	15.6	15.7	0.10	0.00	-19.68
5,693.0	2.00	99.20	5,692.8	1.7	19.4	19.1	0.90	0.90	0.37
5,788.0	0.40	6.30	5,787.8	1.7	21.1	20.7	2.17	-1.68	-97.79
5,884.0	0.40	234.60	5,883.8	1.9	20.8	20.5	0.76	0.00	-137.19
5,978.0	1.80	233.80	5,977.8	0.8	19.4	18.8	1.49	1.49	-0.85
6,073.0	1.80	161.90	6,072.8	-1.5	18.6	17.5	2.22	0.00	-75.68
6,168.0	0.40	12.00	6,167.8	-2.6	19.2	17.7	2.27	-1.47	-157.79
6,262.0	0.50	5.90	6,261.8	-1.8	19.3	18.0	0.12	0.11	-6.49
6,356.0	0.40	353.90	6,355.7	-1.1	19.3	18.2	0.15	-0.11	-12.77
6,451.0	0.40	348.80	6,450.7	-0.5	19.2	18.3	0.04	0.00	-5.37
6,546.0	0.40	334.90	6,545.7	0.2	19.0	18.3	0.10	0.00	-14.63
6,641.0	0.40	326.20	6,640.7	0.7	18.6	18.1	0.06	0.00	-9.16
6,736.0	0.40	306.50	6,735.7	1.2	18.2	17.8	0.14	0.00	-20.74
6,832.0	0.50	310.30	6,831.7	1.7	17.6	17.4	0.11	0.10	3.96
6,927.0	0.50	292.30	6,926.7	2.1	16.9	16.8	0.16	0.00	-18.95

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Survey										
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7,023.0	0.40	281.20	7,022.7	2.3	16.2	16.2	0.14	-0.10	-11.56	
7,118.0	0.40	266.90	7,117.7	2.4	15.5	15.6	0.10	0.00	-15.05	
7,212.0	0.40	264.20	7,211.7	2.3	14.9	14.9	0.02	0.00	-2.87	
7,307.0	0.40	252.00	7,306.7	2.2	14.2	14.3	0.09	0.00	-12.84	
7,403.0	0.20	238.10	7,402.7	2.0	13.8	13.8	0.22	-0.21	-14.48	
7,498.0	0.30	254.00	7,497.7	1.8	13.4	13.4	0.13	0.11	16.74	
7,592.0	0.40	227.00	7,591.7	1.6	12.9	12.8	0.20	0.11	-28.72	
7,687.0	0.40	226.90	7,686.7	1.1	12.4	12.2	0.00	0.00	-0.11	
7,782.0	0.40	247.20	7,781.7	0.7	11.9	11.6	0.15	0.00	21.37	
7,875.0	0.40	233.50	7,874.7	0.4	11.3	11.0	0.10	0.00	-14.73	
7,970.0	0.40	235.60	7,969.7	0.0	10.8	10.4	0.02	0.00	2.21	
8,066.0	0.20	205.70	8,065.7	-0.3	10.4	9.9	0.26	-0.21	-31.15	
8,161.0	0.20	189.30	8,160.7	-0.6	10.3	9.7	0.06	0.00	-17.26	
8,256.0	0.10	181.20	8,255.7	-0.9	10.3	9.7	0.11	-0.11	-8.53	
8,351.0	0.40	233.10	8,350.7	-1.1	10.0	9.3	0.37	0.32	54.63	
8,447.0	0.40	195.60	8,446.7	-1.7	9.7	8.8	0.27	0.00	-39.06	
8,542.0	0.90	275.70	8,541.7	-1.9	8.8	8.0	0.97	0.53	84.32	
8,635.0	0.70	255.70	8,634.7	-2.0	7.6	6.7	0.37	-0.22	-21.51	
8,730.0	0.70	270.20	8,729.7	-2.1	6.4	5.6	0.19	0.00	15.26	
8,825.0	0.70	263.30	8,824.7	-2.2	5.3	4.4	0.09	0.00	-7.26	
8,919.0	0.90	298.90	8,918.7	-1.9	4.1	3.4	0.56	0.21	37.87	
9,014.0	0.80	271.90	9,013.7	-1.5	2.7	2.2	0.43	-0.11	-28.42	
9,110.0	0.70	271.40	9,109.6	-1.5	1.5	1.0	0.10	-0.10	-0.52	
9,204.0	0.70	257.10	9,203.6	-1.6	0.4	-0.1	0.19	0.00	-15.21	
9,299.0	0.60	279.90	9,298.6	-1.6	-0.7	-1.1	0.29	-0.11	24.00	
9,394.0	0.90	292.90	9,393.6	-1.3	-1.9	-2.2	0.36	0.32	13.68	
9,488.0	1.10	306.50	9,487.6	-0.4	-3.3	-3.3	0.33	0.21	14.47	
9,582.0	2.50	330.30	9,581.6	1.9	-5.0	-4.3	1.66	1.49	25.32	
9,646.0	1.70	326.30	9,645.5	3.9	-6.2	-4.9	1.27	-1.25	-6.25	
9,678.0	1.60	311.90	9,677.5	4.6	-6.8	-5.3	1.33	-0.31	-45.00	
9,772.0	1.00	315.10	9,771.5	6.0	-8.4	-6.4	0.64	-0.64	3.40	
9,866.0	0.30	35.30	9,865.5	6.8	-8.8	-6.6	1.06	-0.74	85.32	
9,960.0	0.60	321.80	9,959.5	7.4	-9.0	-6.6	0.63	0.32	-78.19	
10,055.0	1.10	304.20	10,054.5	8.3	-10.1	-7.3	0.59	0.53	-18.53	
10,150.0	1.00	253.00	10,149.5	8.6	-11.6	-8.7	0.96	-0.11	-53.89	
10,244.0	0.20	242.30	10,243.4	8.3	-12.5	-9.7	0.86	-0.85	-11.38	
10,339.0	0.40	241.90	10,338.4	8.0	-13.0	-10.2	0.21	0.21	-0.42	
10,433.0	0.80	237.90	10,432.4	7.5	-13.8	-11.2	0.43	0.43	-4.26	
10,527.0	0.30	231.80	10,526.4	7.0	-14.6	-12.0	0.53	-0.53	-6.49	
10,622.0	0.30	237.30	10,621.4	6.7	-15.0	-12.5	0.03	0.00	5.79	
10,645.0	0.40	273.40	10,644.4	6.7	-15.1	-12.6	1.03	0.43	156.96	
10,676.0	0.40	254.70	10,675.4	6.7	-15.3	-12.8	0.42	0.00	-60.32	
10,690.0	1.74	188.80	10,689.4	6.5	-15.4	-13.0	11.57	9.58	-470.71	

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Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
KOP: 10690.0' MD, 10689.4' TVD									
10,708.0	3.80	181.70	10,707.4	5.6	-15.5	-13.3	11.57	11.44	-39.45
10,740.0	7.90	180.50	10,739.2	2.3	-15.5	-14.2	12.82	12.81	-3.75
10,771.0	12.70	176.60	10,769.7	-3.2	-15.3	-15.6	15.64	15.48	-12.58
10,802.0	17.10	173.40	10,799.7	-11.1	-14.6	-17.1	14.43	14.19	-10.32
10,834.0	20.70	173.40	10,829.9	-21.4	-13.4	-18.9	11.25	11.25	0.00
10,866.0	24.10	173.40	10,859.5	-33.5	-12.0	-20.9	10.63	10.63	0.00
10,897.0	28.00	173.60	10,887.4	-47.1	-10.5	-23.3	12.58	12.58	0.65
10,929.0	31.40	173.70	10,915.2	-62.8	-8.7	-26.0	10.63	10.63	0.31
10,961.0	34.10	174.80	10,942.1	-80.0	-7.0	-29.2	8.64	8.44	3.44
10,992.0	36.60	178.10	10,967.4	-97.9	-5.9	-33.2	10.14	8.06	10.65
11,024.0	39.90	180.70	10,992.5	-117.7	-5.7	-38.5	11.47	10.31	8.13
11,042.0	41.93	180.58	11,006.1	-129.5	-5.8	-42.0	11.30	11.29	-0.66
Cross into 330' Lease: 11042.0' MD, 41.93' INC, 180.58' AZ									
11,055.0	43.40	180.50	11,015.7	-138.3	-5.9	-44.5	11.30	11.29	-0.62
11,087.0	47.00	179.20	11,038.2	-161.0	-5.8	-50.8	11.61	11.25	-4.06
11,119.0	49.90	178.00	11,059.4	-185.0	-5.3	-57.0	9.49	9.06	-3.75
11,150.0	53.20	177.20	11,078.7	-209.2	-4.2	-62.8	10.84	10.65	-2.58
11,182.0	56.90	177.30	11,097.0	-235.4	-3.0	-69.0	11.57	11.56	0.31
11,214.0	61.20	176.50	11,113.5	-262.8	-1.5	-75.2	13.61	13.44	-2.50
11,245.0	64.50	176.80	11,127.6	-290.3	0.1	-81.4	10.68	10.65	0.97
11,277.0	68.40	177.70	11,140.4	-319.6	1.5	-88.3	12.46	12.19	2.81
11,309.0	72.50	178.60	11,151.1	-349.8	2.5	-95.8	13.08	12.81	2.81
11,332.0	76.50	178.80	11,157.3	-371.9	3.0	-101.6	17.41	17.39	0.87
11,364.0	80.90	178.80	11,163.5	-403.3	3.7	-109.7	13.75	13.75	0.00
11,395.0	82.90	178.90	11,167.9	-434.0	4.3	-117.8	6.46	6.45	0.32
11,427.0	86.10	178.90	11,171.0	-465.8	4.9	-126.1	10.00	10.00	0.00
11,459.0	87.80	178.80	11,172.7	-497.8	5.5	-134.5	5.32	5.31	-0.31
11,523.0	89.20	178.90	11,174.3	-561.7	6.8	-151.2	2.19	2.19	0.16
EOC: 11523.0' MD, 11174.3' TVD, 89.20' INC, 178.90' AZ, -151.8' VS									
11,618.0	89.80	178.90	11,175.2	-656.7	8.6	-176.1	0.63	0.63	0.00
11,713.0	89.20	179.80	11,176.0	-751.7	9.7	-201.8	1.14	-0.63	0.95
11,808.0	90.30	180.40	11,176.4	-846.7	9.5	-228.6	1.32	1.16	0.63
11,903.0	89.30	180.20	11,176.7	-941.7	9.0	-255.7	1.07	-1.05	-0.21
11,998.0	90.60	180.20	11,176.8	-1,036.7	8.7	-282.7	1.37	1.37	0.00
12,093.0	89.60	179.80	11,176.7	-1,131.7	8.7	-309.4	1.13	-1.05	-0.42
12,188.0	91.30	180.30	11,175.9	-1,226.7	8.6	-336.2	1.87	1.79	0.53
12,284.0	91.30	179.90	11,173.7	-1,322.7	8.5	-363.3	0.42	0.00	-0.42
12,378.0	90.00	180.30	11,172.7	-1,416.6	8.3	-389.8	1.45	-1.38	0.43
12,474.0	90.90	179.70	11,171.9	-1,512.6	8.3	-416.8	1.13	0.94	-0.63
12,569.0	90.30	179.80	11,170.9	-1,607.6	8.7	-443.0	0.64	-0.63	0.11
12,663.0	91.20	179.40	11,169.7	-1,701.6	9.4	-468.8	1.05	0.96	-0.43
12,758.0	90.30	179.40	11,168.4	-1,796.6	10.4	-494.5	0.95	-0.95	0.00
12,853.0	91.40	179.20	11,167.0	-1,891.6	11.5	-520.1	1.18	1.16	-0.21

Survey Report

Company:	Yates Petroleum	Local Co-ordinate Reference:	Well #3H
Project:	Lea County, NM (NAD-83)	TVD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Site:	Atoka Bank-BDJ State Com	MD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Houston R5000 Database

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,948.0	91.00	179.10	11,165.0	-1,986.6	12.9	-545.4	0.43	-0.42	-0.11
13,044.0	90.90	179.50	11,163.5	-2,082.5	14.1	-571.2	0.43	-0.10	0.42
13,139.0	90.60	179.10	11,162.2	-2,177.5	15.3	-596.8	0.53	-0.32	-0.42
13,234.0	90.60	179.50	11,161.2	-2,272.5	16.4	-622.3	0.42	0.00	0.42
13,329.0	90.00	179.00	11,160.7	-2,367.5	17.7	-647.8	0.82	-0.63	-0.53
13,424.0	89.50	178.90	11,161.1	-2,462.5	19.4	-672.8	0.54	-0.53	-0.11
13,519.0	90.40	179.40	11,161.2	-2,557.5	20.8	-698.1	1.08	0.95	0.53
13,614.0	89.60	178.20	11,161.2	-2,652.4	22.8	-722.9	1.52	-0.84	-1.26
13,709.0	90.70	179.20	11,161.0	-2,747.4	25.0	-747.5	1.56	1.16	1.05
13,804.0	90.20	179.00	11,160.2	-2,842.4	26.5	-772.7	0.57	-0.53	-0.21
13,898.0	91.20	180.00	11,159.1	-2,936.4	27.3	-798.3	1.50	1.06	1.06
13,992.0	91.30	180.20	11,157.0	-3,030.4	27.1	-824.9	0.24	0.11	0.21
14,087.0	90.90	180.80	11,155.2	-3,125.3	26.3	-852.3	0.76	-0.42	0.63
14,182.0	89.90	181.10	11,154.5	-3,220.3	24.7	-880.5	1.10	-1.05	0.32
14,277.0	89.70	181.00	11,154.9	-3,315.3	23.0	-908.9	0.24	-0.21	-0.11
14,371.0	89.20	180.90	11,155.8	-3,409.3	21.4	-936.7	0.54	-0.53	-0.11
14,466.0	89.70	179.60	11,156.7	-3,504.3	21.0	-963.8	1.47	0.53	-1.37
14,561.0	89.40	178.70	11,157.4	-3,599.3	22.4	-989.1	1.00	-0.32	-0.95
14,654.0	90.80	178.80	11,157.3	-3,692.3	24.4	-1,013.3	1.51	1.51	0.11
14,756.0	90.70	179.70	11,155.9	-3,794.2	25.8	-1,040.7	0.89	-0.10	0.88
14,852.0	91.80	179.60	11,153.8	-3,890.2	26.4	-1,067.0	1.15	1.15	-0.10
14,946.0	91.40	180.30	11,151.2	-3,984.2	26.4	-1,093.3	0.86	-0.43	0.74
15,042.0	91.40	180.00	11,148.9	-4,080.1	26.2	-1,120.5	0.31	0.00	-0.31
15,136.0	89.00	179.90	11,148.5	-4,174.1	26.3	-1,146.8	2.56	-2.55	-0.11
15,229.0	89.90	179.40	11,149.4	-4,267.1	26.8	-1,172.4	1.11	0.97	-0.54
15,324.0	90.20	179.50	11,149.3	-4,362.1	27.7	-1,198.2	0.33	0.32	0.11
15,420.0	90.50	178.20	11,148.8	-4,458.1	29.7	-1,223.3	1.39	0.31	-1.35
15,515.0	90.30	179.10	11,148.1	-4,553.1	31.9	-1,247.8	0.97	-0.21	0.95
15,610.0	90.00	179.40	11,147.8	-4,648.1	33.2	-1,273.3	0.45	-0.32	0.32
15,668.0	90.90	178.60	11,147.4	-4,706.0	34.2	-1,288.6	2.08	1.55	-1.38
15,726.0	90.90	178.60	11,146.5	-4,764.0	35.6	-1,303.5	0.00	0.00	0.00
Northing: 441405.79 / Easting: 771885.95 - BHL: 15726.0' MD, 11146.5' TVD, 90.90° INC, 178.60° AZ, -4764.3' +N/-S, 35.0' +E/-W, -1304.1' V									

Design Targets									
Target Name	Dip Angle	Dip Dir	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
330' Lease Crossing	0.00	0.00	0.0	-130.1	-5.6	446,039.98	771,845.29	32° 13' 26.552 N	103° 35' 16.519 W
- actual wellpath misses target center by 130.2usft at 0.0usft MD (0.0 TVD, 0.0 N, 0.0 E)									
- Point									

Survey Report

Company:	Yates Petroleum	Local Co-ordinate Reference:	Well #3H
Project:	Lea County, NM (NAD-83)	TVD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Site:	Aloka Bank BDJ State Com	MD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Houston R5000 Database

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
10,690.0	10,689.4	6.5	-15.4	KOP: 10690.0' MD, 10689.4' TVD
11,042.0	11,006.1	-129.5	-5.8	Cross into 330' Lease: 11042.0' MD, 41.93° INC, 180.58° AZ
11,523.0	11,174.3	-561.7	6.8	EOC: 11523.0' MD, 11174.3' TVD, 89.20° INC, 178.90° AZ, -151.8° VS
15,726.0	11,146.5	-4,764.0	35.6	Northing: 441405.79 / Easting: 771885.95
15,726.0	11,146.5	-4,764.0	35.6	BHL: 15726.0' MD, 11146.5' TVD, 90.90° INC, 178.60° AZ, -4764.3' +N/-S, 35.0

Checked By: _____	Approved By: _____	Date: _____
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