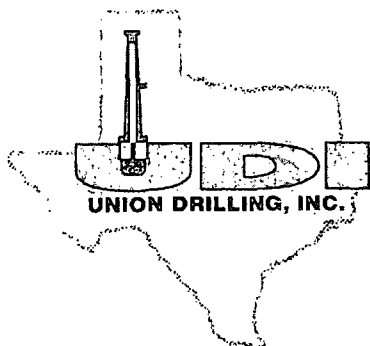




15- 41108



Well Name & Number: Bolivar "BRD" Federal Com #1H

API Number: 30-015-40742

Location: 1980 FSL & 330 FEL, Lot 1, Sec. 33, Township 24S, Range 27E, Eddy County, New Mexico

Operator: Yates Petroleum Corporation

Drilling Contractor: Union Drilling, Inc.

The undersigned hereby certifies that he is an authorized representative of the drilling Contractor who drilled the above described well and that deviation survey tests were conducted and he obtained the following results:

RECORD OF INCLINATION

*11. Measured Depth (feet)	12. Course Length (Hundreds of feet)	*13. Angle of Inclination (Degrees)	14. Displacement per Hundred Feet (Sine of Angle X100)	15. Course Displacement (feet)	16. Accumulative Displacement (feet)
444	444	.7	1.22	5.42	5.42
1259	815	.4	0.70	5.69	11.11
2209	950	2.4	4.19	39.79	50.90
3167	958	.2	0.35	3.34	54.25
4117	950	.4	0.70	6.63	60.88
5066	949	1.1	1.92	18.22	79.10
6015	949	1.8	3.14	29.81	108.91
6775	760	.5	0.87	6.63	115.54
7147	372	6.2	10.82	40.23	155.78
DIRECTIONAL TOOK OVER					

Drilling Contractor: Union Drilling, Inc.

By:

Jack Loyless
Jackie Loyless

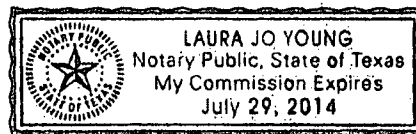
Title: Operations Manager

Subscribed and sworn to before me this 9th Day of April, 2013.

Laura Jo Young
Notary Public

My Commission Expires: July 29, 2014

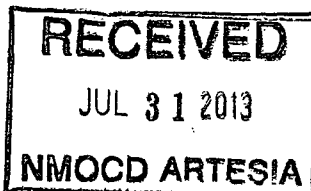
COUNTY OF TAYLOR)
)
STATE OF TEXAS)





Job Number: SVMO-130156
 Company: Yates Petroleum Corporation
 Lease/Well: BOLIVAR BRD FEDERAL COM 1H
 Location: Eddy County, NM
 Rig Name: Sidewinder #223
 RKB: 25'
 G.L. or M.S.L.: GL

State/Country: New Mexico/USA
 Declination: 7.60°
 Grid: East To Grid North
 File name: F:\SURVEY\2013SU~1\YATESMOIBOLIVA~1\1H.SVY
 Date/Time: 18-Mar-13 / 15:31
 Curve Name: Surface - 346' M.D. (Rate Gyro)



WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane .00
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
100.00	.41	48.70	100.00	.24	.27	.24	.36	48.70	.41
200.00	.60	55.58	200.00	.77	.97	.77	1.24	51.61	.20
300.00	.59	70.26	299.99	1.24	1.89	1.24	2.26	56.72	.15
Last Survey Depth Recorded									
346.00	.45	96.34	345.99	1.30	2.29	1.30	2.63	60.44	.59

Yates Petroleum

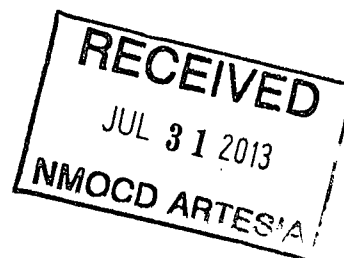
Eddy, NM (NAD-83)
Bolivar BRD Federal Com
#1H

OH

Design: OH

Survey Report - Geographic

01 April, 2013



Survey Report - Geographic



Company:	Yates Petroleum	Local Co-ordinate Reference:	Well #1H:
Project:	Eddy, NM (NAD-83)	TVD Reference:	WELL @ 3270.0usft (Sidewinder #223 - 25' KB)
Site:	Bolivar, BRD, Federal Cor	IMD Reference:	WELL @ 3270.0usft (Sidewinder #223 - 25' KB)
Well:	#1H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Houston R5000 Database

Project:	Eddy, 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:		Bolivar BRD Federal Cor			
Site Position:		Northing:	426,286.16 usft	Latitude:	32° 10' 18.679 N
From:	Map	Easting:	586,302.89 usft	Longitude:	104° 11' 16.823 W
Position Uncertainty:	2.0 usft	Slot Radius:	8-3/4 "	Grid Convergence:	0.08 °

Well:	#1H					
Well Position	+N/-S	0.0 usft	Northing:	426,286.16 usft	Latitude:	32° 10' 18.679 N
	+E/-W	0.0 usft	Easting:	586,302.89 usft	Longitude:	104° 11' 16.823 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,253.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	2/22/2013	7.66	59.99	48,349

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	269.85	

Survey Program		Date: 4/1/2013		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	346.0	Survey #1 - MS Gyro1 (OH)	CB-GYRO-MS	Camera based gyro multishot
444.0	12,002.0	Survey #2 - Crescent1 (OH)	MWD	MWD - Standard
12,063.0	12,063.0	Survey #3 - PTB (OH)	BLIND	Blind drilling, where no tool is applied

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	426,286.16	586,302.89	32° 10' 18.679 N	104° 11' 16.823 W
100.0	0.41	48.70	100.0	0.2	0.3	426,286.40	586,303.16	32° 10' 18.681 N	104° 11' 16.820 W
200.0	0.60	55.58	200.0	0.8	1.0	426,286.93	586,303.86	32° 10' 18.686 N	104° 11' 16.812 W
300.0	0.59	70.26	300.0	1.2	1.9	426,287.40	586,304.78	32° 10' 18.691 N	104° 11' 16.801 W
346.0	0.45	96.34	346.0	1.3	2.3	426,287.46	586,305.18	32° 10' 18.691 N	104° 11' 16.797 W
444.0	0.70	115.50	444.0	1.0	3.2	426,287.16	586,306.10	32° 10' 18.688 N	104° 11' 16.786 W
596.0	0.50	136.90	596.0	0.1	4.5	426,286.28	586,307.40	32° 10' 18.680 N	104° 11' 16.771 W
686.0	0.50	119.00	686.0	-0.4	5.1	426,285.80	586,308.01	32° 10' 18.675 N	104° 11' 16.764 W
879.0	0.50	135.20	879.0	-1.4	6.4	426,284.79	586,309.34	32° 10' 18.665 N	104° 11' 16.748 W
1,069.0	0.20	107.10	1,069.0	-2.1	7.3	426,284.11	586,310.24	32° 10' 18.658 N	104° 11' 16.738 W

Survey Report - Geographic



Company:	Yates Petroleum	Local Coordinate Reference:	Well #1H
Project:	Eddy NM (NAD-83)	TVD Reference:	WELL @ 3278.0usft (Sidewinder #223- 25' KB)
Site:	Bolivar BRD Federal Com	MD Reference:	WELL @ 3278.0usft (Sidewinder #223- 25' KB)
Well:	#1H	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)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,259.0	0.40	335.10	1,259.0	-1.6	7.4	426,284.61	586,310.28	32° 10' 18.663 N	104° 11' 16.737 W
1,449.0	0.50	348.00	1,449.0	-0.1	6.9	426,286.03	586,309.82	32° 10' 18.677 N	104° 11' 16.743 W
1,639.0	2.00	80.00	1,638.9	1.2	10.0	426,287.41	586,312.92	32° 10' 18.691 N	104° 11' 16.707 W
1,829.0	3.40	79.40	1,828.7	2.9	18.8	426,289.02	586,321.72	32° 10' 18.707 N	104° 11' 16.604 W
1,924.0	3.80	83.80	1,923.5	3.7	24.7	426,289.88	586,327.62	32° 10' 18.715 N	104° 11' 16.535 W
2,019.0	4.00	89.10	2,018.3	4.1	31.2	426,290.27	586,334.06	32° 10' 18.719 N	104° 11' 16.461 W
2,114.0	3.30	84.70	2,113.1	4.4	37.2	426,290.58	586,340.10	32° 10' 18.722 N	104° 11' 16.390 W
2,209.0	2.40	86.90	2,208.0	4.8	41.9	426,290.94	586,344.81	32° 10' 18.725 N	104° 11' 16.335 W
2,304.0	1.80	87.50	2,302.9	4.9	45.4	426,291.11	586,348.28	32° 10' 18.727 N	104° 11' 16.295 W
2,323.0	1.70	92.40	2,321.9	4.9	46.0	426,291.11	586,348.86	32° 10' 18.727 N	104° 11' 16.288 W
2,407.0	1.80	99.30	2,405.9	4.7	48.5	426,290.85	586,351.41	32° 10' 18.724 N	104° 11' 16.259 W
2,597.0	1.80	104.60	2,595.8	3.4	54.3	426,289.61	586,357.24	32° 10' 18.712 N	104° 11' 16.191 W
2,787.0	1.20	106.40	2,785.7	2.1	59.1	426,288.30	586,362.04	32° 10' 18.699 N	104° 11' 16.135 W
2,977.0	0.40	97.90	2,975.7	1.5	61.7	426,287.65	586,364.60	32° 10' 18.692 N	104° 11' 16.105 W
3,167.0	0.20	48.40	3,165.7	1.6	62.6	426,287.78	586,365.51	32° 10' 18.694 N	104° 11' 16.095 W
3,357.0	0.00	20.20	3,355.7	1.8	62.9	426,288.00	586,365.76	32° 10' 18.696 N	104° 11' 16.092 W
3,547.0	0.20	87.40	3,545.7	1.8	63.2	426,288.01	586,366.09	32° 10' 18.696 N	104° 11' 16.088 W
3,737.0	0.50	279.00	3,735.7	2.0	62.7	426,288.16	586,365.60	32° 10' 18.697 N	104° 11' 16.094 W
3,927.0	0.40	260.00	3,925.7	2.0	61.2	426,288.17	586,364.13	32° 10' 18.698 N	104° 11' 16.111 W
4,117.0	0.40	260.40	4,115.7	1.8	59.9	426,287.94	586,362.82	32° 10' 18.695 N	104° 11' 16.126 W
4,306.0	0.70	237.20	4,304.7	1.0	58.3	426,287.21	586,361.20	32° 10' 18.688 N	104° 11' 16.145 W
4,496.0	0.70	238.60	4,494.6	-0.2	56.3	426,285.98	586,359.23	32° 10' 18.676 N	104° 11' 16.168 W
4,686.0	0.90	234.90	4,684.6	-1.7	54.1	426,284.51	586,357.02	32° 10' 18.662 N	104° 11' 16.193 W
4,876.0	0.70	231.30	4,874.6	-3.2	52.0	426,282.93	586,354.90	32° 10' 18.646 N	104° 11' 16.218 W
5,066.0	1.10	222.60	5,064.6	-5.3	49.9	426,280.86	586,352.76	32° 10' 18.625 N	104° 11' 16.243 W
5,255.0	1.10	225.50	5,253.6	-7.9	47.3	426,278.25	586,350.23	32° 10' 18.600 N	104° 11' 16.273 W
5,446.0	1.20	221.20	5,444.5	-10.7	44.7	426,275.46	586,347.61	32° 10' 18.572 N	104° 11' 16.303 W
5,636.0	1.60	214.50	5,634.5	-14.4	41.9	426,271.78	586,344.80	32° 10' 18.536 N	104° 11' 16.336 W
5,825.0	0.90	199.90	5,823.4	-18.0	39.9	426,268.21	586,342.80	32° 10' 18.500 N	104° 11' 16.359 W
6,015.0	1.80	174.60	6,013.4	-22.3	39.7	426,263.84	586,342.57	32° 10' 18.457 N	104° 11' 16.362 W
6,205.0	3.00	204.80	6,203.2	-29.8	37.9	426,256.35	586,340.77	32° 10' 18.383 N	104° 11' 16.383 W
6,300.0	3.20	217.10	6,298.1	-34.2	35.2	426,251.98	586,338.12	32° 10' 18.340 N	104° 11' 16.414 W
6,395.0	2.50	224.30	6,392.9	-37.8	32.2	426,248.38	586,335.08	32° 10' 18.304 N	104° 11' 16.449 W
6,490.0	1.80	242.20	6,487.9	-40.0	29.4	426,246.20	586,332.31	32° 10' 18.283 N	104° 11' 16.482 W
6,585.0	0.70	296.20	6,582.9	-40.4	27.6	426,245.76	586,330.47	32° 10' 18.278 N	104° 11' 16.503 W
6,680.0	0.70	333.30	6,677.8	-39.6	26.8	426,246.54	586,329.69	32° 10' 18.286 N	104° 11' 16.512 W
6,775.0	0.50	323.30	6,772.8	-38.8	26.3	426,247.39	586,329.18	32° 10' 18.295 N	104° 11' 16.518 W
6,870.0	0.70	281.60	6,867.8	-38.3	25.5	426,247.84	586,328.36	32° 10' 18.299 N	104° 11' 16.527 W
7,060.0	1.60	268.30	7,057.8	-38.2	21.7	426,247.99	586,324.57	32° 10' 18.301 N	104° 11' 16.572 W
7,083.0	1.80	268.40	7,080.8	-38.2	21.0	426,247.97	586,323.89	32° 10' 18.300 N	104° 11' 16.579 W
KOP: 7083.0 MD: 7080.8 TVD: 20.9 VS: 2.1									
7,115.0	2.60	266.20	7,112.8	-38.3	19.8	426,247.91	586,322.67	32° 10' 18.300 N	104° 11' 16.594 W
7,147.0	6.20	267.40	7,144.7	-38.4	17.3	426,247.79	586,320.21	32° 10' 18.299 N	104° 11' 16.622 W
7,178.0	9.90	269.00	7,175.4	-38.5	13.0	426,247.66	586,315.88	32° 10' 18.297 N	104° 11' 16.673 W
7,210.0	13.20	270.20	7,206.7	-38.5	6.6	426,247.63	586,309.47	32° 10' 18.297 N	104° 11' 16.747 W
7,236.6	15.94	271.40	7,232.4	-38.4	-0.1	426,247.73	586,302.78	32° 10' 18.298 N	104° 11' 16.825 W
Cross into 330 Lease: 7236.6 MD: 7232.4 TVD: 15.94 INC: 0.2 VS									
7,242.0	16.50	271.60	7,237.6	-38.4	-1.6	426,247.77	586,301.27	32° 10' 18.299 N	104° 11' 16.843 W
7,273.0	19.90	271.80	7,267.1	-38.1	-11.3	426,248.06	586,291.60	32° 10' 18.302 N	104° 11' 16.955 W
7,305.0	23.60	271.40	7,296.8	-37.8	-23.1	426,248.38	586,279.74	32° 10' 18.305 N	104° 11' 17.093 W
7,337.0	27.30	271.30	7,325.7	-37.5	-36.9	426,248.71	586,266.00	32° 10' 18.308 N	104° 11' 17.253 W
7,368.0	31.70	271.60	7,352.7	-37.1	-52.2	426,249.10	586,250.74	32° 10' 18.312 N	104° 11' 17.431 W
7,400.0	36.20	271.80	7,379.2	-36.5	-70.0	426,249.63	586,232.88	32° 10' 18.318 N	104° 11' 17.638 W
7,432.0	39.20	272.30	7,404.5	-35.8	-89.6	426,250.33	586,213.33	32° 10' 18.325 N	104° 11' 17.866 W
7,463.0	42.10	272.80	7,428.0	-34.9	-109.7	426,251.23	586,193.16	32° 10' 18.334 N	104° 11' 18.101 W

Survey Report - Geographic



Company:	Yates Petroleum	Local Co-ordinate Reference:	Well #1H
Project:	Eddy NM (NAD:83)	TVD Reference:	WELL @ 3278.0usft (Sidewinder #223 - 25 KB)
Site:	Bolivar BRD Federal Com	MD Reference:	WELL @ 3278.0usft (Sidewinder #223 - 25 KB)
Well:	#1H	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)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
7,495.0	44.00	273.40	7,451.4	-33.7	-131.5	426,252.41	586,171.35	32° 10' 18.346 N	104° 11' 18.354 W
7,527.0	47.00	272.70	7,473.8	-32.5	-154.3	426,253.63	586,148.56	32° 10' 18.359 N	104° 11' 18.619 W
7,558.0	50.90	271.40	7,494.2	-31.7	-177.7	426,254.45	586,125.20	32° 10' 18.367 N	104° 11' 18.891 W
7,590.0	53.80	269.80	7,513.7	-31.5	-203.0	426,254.71	586,099.87	32° 10' 18.370 N	104° 11' 19.186 W
7,621.0	56.50	269.30	7,531.4	-31.7	-228.5	426,254.51	586,074.43	32° 10' 18.368 N	104° 11' 19.482 W
7,653.0	59.80	269.70	7,548.3	-31.9	-255.6	426,254.27	586,047.26	32° 10' 18.366 N	104° 11' 19.798 W
7,685.0	63.30	270.20	7,563.6	-31.9	-283.8	426,254.25	586,019.12	32° 10' 18.367 N	104° 11' 20.125 W
7,716.0	66.00	270.70	7,576.8	-31.7	-311.8	426,254.47	585,991.11	32° 10' 18.369 N	104° 11' 20.451 W
7,748.0	69.00	271.30	7,589.1	-31.2	-341.3	426,254.99	585,961.56	32° 10' 18.375 N	104° 11' 20.795 W
7,780.0	71.80	271.60	7,599.8	-30.4	-371.5	426,255.75	585,931.42	32° 10' 18.383 N	104° 11' 21.146 W
7,811.0	74.40	272.00	7,608.8	-29.5	-401.1	426,256.69	585,901.78	32° 10' 18.392 N	104° 11' 21.491 W
7,843.0	78.10	272.00	7,616.4	-28.4	-432.2	426,257.77	585,870.72	32° 10' 18.403 N	104° 11' 21.852 W
7,875.0	80.90	271.30	7,622.3	-27.5	-463.6	426,258.68	585,839.27	32° 10' 18.413 N	104° 11' 22.218 W
7,906.0	84.10	271.10	7,626.3	-26.8	-494.3	426,259.32	585,808.55	32° 10' 18.420 N	104° 11' 22.575 W
7,944.0	89.60	269.80	7,628.4	-26.5	-532.3	426,259.62	585,770.62	32° 10' 18.423 N	104° 11' 23.017 W
8,039.0	91.00	270.40	7,627.9	-26.4	-627.3	426,259.78	585,675.63	32° 10' 18.426 N	104° 11' 24.122 W
EOD: 8039.0 MD: 7627.9 TVD: 9100 INC: 627.3 VS: 1.0									
8,133.0	89.60	270.00	7,627.4	-26.1	-721.3	426,260.11	585,581.63	32° 10' 18.430 N	104° 11' 25.216 W
8,228.0	90.10	270.50	7,627.7	-25.6	-816.3	426,260.52	585,486.63	32° 10' 18.436 N	104° 11' 26.321 W
8,323.0	90.60	270.50	7,627.1	-24.8	-911.3	426,261.35	585,391.64	32° 10' 18.445 N	104° 11' 27.426 W
8,418.0	89.90	271.10	7,626.7	-23.5	-1,006.2	426,262.68	585,296.65	32° 10' 18.459 N	104° 11' 28.531 W
8,513.0	89.60	271.60	7,627.1	-21.2	-1,101.2	426,264.92	585,201.68	32° 10' 18.483 N	104° 11' 29.636 W
8,608.0	89.60	271.30	7,627.7	-18.8	-1,196.2	426,267.32	585,106.71	32° 10' 18.508 N	104° 11' 30.741 W
8,703.0	89.60	271.60	7,628.4	-16.4	-1,291.1	426,269.73	585,011.74	32° 10' 18.533 N	104° 11' 31.846 W
8,798.0	89.40	272.10	7,629.2	-13.4	-1,386.1	426,272.79	584,916.80	32° 10' 18.565 N	104° 11' 32.951 W
8,893.0	89.20	271.10	7,630.4	-10.7	-1,481.0	426,275.45	584,821.84	32° 10' 18.592 N	104° 11' 34.056 W
8,988.0	89.40	271.40	7,631.6	-8.6	-1,576.0	426,277.52	584,726.87	32° 10' 18.614 N	104° 11' 35.160 W
9,083.0	89.40	270.90	7,632.6	-6.7	-1,671.0	426,279.42	584,631.90	32° 10' 18.634 N	104° 11' 36.265 W
9,178.0	89.60	270.90	7,633.4	-5.2	-1,766.0	426,280.92	584,536.91	32° 10' 18.650 N	104° 11' 37.371 W
9,273.0	89.20	271.30	7,634.4	-3.4	-1,861.0	426,282.74	584,441.94	32° 10' 18.669 N	104° 11' 38.476 W
9,368.0	89.00	270.70	7,635.9	-1.8	-1,955.9	426,284.40	584,346.96	32° 10' 18.687 N	104° 11' 39.581 W
9,463.0	89.60	271.10	7,637.0	-0.3	-2,050.9	426,285.89	584,251.98	32° 10' 18.703 N	104° 11' 40.686 W
9,558.0	89.60	270.20	7,637.7	0.8	-2,145.9	426,286.97	584,156.99	32° 10' 18.715 N	104° 11' 41.791 W
9,653.0	90.80	270.70	7,637.4	1.5	-2,240.9	426,287.71	584,062.00	32° 10' 18.723 N	104° 11' 42.896 W
9,748.0	91.30	270.50	7,635.6	2.5	-2,335.9	426,288.71	583,967.02	32° 10' 18.734 N	104° 11' 44.001 W
9,843.0	91.70	271.30	7,633.1	4.0	-2,430.8	426,290.20	583,872.06	32° 10' 18.750 N	104° 11' 45.106 W
9,938.0	91.30	270.70	7,630.6	5.7	-2,525.8	426,291.86	583,777.11	32° 10' 18.768 N	104° 11' 46.211 W
10,033.0	90.80	269.70	7,628.9	6.0	-2,620.8	426,292.19	583,682.13	32° 10' 18.772 N	104° 11' 47.316 W
10,128.0	93.30	270.90	7,625.5	6.5	-2,715.7	426,292.68	583,587.20	32° 10' 18.778 N	104° 11' 48.420 W
10,223.0	92.40	269.50	7,620.8	6.9	-2,810.6	426,293.02	583,492.32	32° 10' 18.783 N	104° 11' 49.524 W
10,318.0	91.30	269.30	7,617.7	5.9	-2,905.5	426,292.02	583,397.38	32° 10' 18.774 N	104° 11' 50.629 W
10,413.0	93.30	268.60	7,613.9	4.1	-3,000.4	426,290.28	583,302.48	32° 10' 18.758 N	104° 11' 51.733 W
10,508.0	94.10	269.10	7,607.8	2.2	-3,095.2	426,288.38	583,207.69	32° 10' 18.740 N	104° 11' 52.836 W
10,603.0	91.80	267.70	7,602.9	-0.4	-3,190.0	426,285.73	583,112.87	32° 10' 18.715 N	104° 11' 53.939 W
10,698.0	92.40	268.30	7,599.4	-3.7	-3,284.9	426,282.42	583,017.99	32° 10' 18.684 N	104° 11' 55.043 W
10,793.0	92.90	268.80	7,595.0	-6.1	-3,379.8	426,280.01	582,923.12	32° 10' 18.661 N	104° 11' 56.147 W
10,888.0	92.00	269.30	7,590.9	-7.7	-3,474.7	426,278.44	582,828.22	32° 10' 18.647 N	104° 11' 57.251 W
10,983.0	94.70	270.00	7,585.4	-8.3	-3,569.5	426,277.86	582,733.40	32° 10' 18.642 N	104° 11' 58.355 W
11,078.0	94.00	269.00	7,578.2	-9.1	-3,664.2	426,277.03	582,638.68	32° 10' 18.635 N	104° 11' 59.457 W
11,173.0	94.10	270.20	7,571.5	-9.8	-3,759.0	426,276.37	582,543.92	32° 10' 18.630 N	104° 11' 56.559 W
11,268.0	92.00	270.70	7,566.4	-9.0	-3,853.8	426,277.12	582,449.06	32° 10' 18.638 N	104° 12' 1.663 W
11,363.0	90.80	270.20	7,564.1	-8.3	-3,948.8	426,277.86	582,354.09	32° 10' 18.647 N	104° 12' 2.768 W
11,458.0	90.30	269.00	7,563.2	-9.0	-4,043.8	426,277.20	582,259.10	32° 10' 18.641 N	104° 12' 3.873 W
11,553.0	89.60	268.60	7,563.3	-11.0	-4,138.8	426,275.21	582,164.12	32° 10' 18.623 N	104° 12' 4.978 W
11,648.0	88.70	267.70	7,564.7	-14.0	-4,233.7	426,272.14	582,069.19	32° 10' 18.594 N	104° 12' 6.083 W

Survey Report - Geographic



Company:	Yates Petroleum	Local Co-ordinate Reference:	Well #11
Project:	Eddy, NM (NAD-83)	TVD Reference:	WELL @ 3278.0usft (Sidewinder #223 - 25' KB)
Site:	Bolivar BRD Federal Com	MD Reference:	WELL @ 3278.0usft (Sidewinder #223 - 25' KB)
Well:	#11	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)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
11,742.0	90.80	269.00	7,565.1	-16.7	-4,327.7	426,269.44	581,975.23	32° 10' 18.568 N	104° 12' 7.176 W
11,837.0	91.00	269.00	7,563.6	-18.4	-4,422.6	426,267.78	581,880.26	32° 10' 18.553 N	104° 12' 8.281 W
11,932.0	91.30	268.60	7,561.7	-20.4	-4,517.6	426,265.79	581,785.30	32° 10' 18.534 N	104° 12' 9.386 W
12,002.0	91.00	268.60	7,560.3	-22.1	-4,587.6	426,264.08	581,715.33	32° 10' 18.518 N	104° 12' 10.200 W
12,063.0	91.00	268.60	7,559.2	-23.6	-4,648.5	426,262.59	581,654.36	32° 10' 18.504 N	104° 12' 10.910 W
BHL - 12063.0' MD, 7559.2' TVD, 91.00° INC, 268.60° AZI, -23.6° N, -4648.5' E, -4648.6' VS									

Measured Depth (usft)	Vertical Depth (usft)	N/S (usft)	E/W (usft)	Comment
7,083.0	7,080.8	-38.2	21.0	KOP - 7083.0' MD, 7080.8' TVD, -20.9° VS
7,236.6	7,232.4	-38.4	-0.1	Cross into 330' Lease - 7236.6' MD, 7232.4' TVD, 15.94° INC, 0.2° VS
8,039.0	7,627.9	-26.4	-627.3	EOC - 8039.0' MD, 7627.9' TVD, 91.00° INC, 627.3° VS
12,063.0	7,559.2	-23.6	-4,648.5	BHL - 12063.0' MD, 7559.2' TVD, 91.00° INC, 268.60° AZI, -23.6° N, -4648.5' E,

Checked By: _____ Approved By: _____ Date: _____