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BTA Oil Producers, LLC

Lea County, NM (NAD 83)

Sec 1, T26-S, R32-E

8105 JV-P Mesa #30H

Wellbore #1

Design: Wellbore #1

QES Survey Report

27 November, 2017





Survey Report



Company:	BTA Oil Producers, LLC	Local Co-ordinate Reference:	Well 8105 JV-P Mesa #30H
Project:	Lea County, NM (NAD 83)	TVD Reference:	WELL @ 3391.0usft (Patterson #594)
Site:	Sec 1, T26-S, R32-E	MD Reference:	WELL @ 3391.0usft (Patterson #594)
Well:	8105 JV-P Mesa #30H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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		Sec 1, T26-S, R32-E			
Site Position:		Northing:	393,099.20 usft	Latitude:	32° 4' 43.446 N
From:	Map	Easting:	760,413.30 usft	Longitude:	103° 37' 33.646 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.38 °

Well	8105 JV-P Mesa #30H					
Well Position	+N/-S	0.0 usft	Northing:	393,166.00 usft	Latitude:	32° 4' 44.030 N
	+E/-W	0.0 usft	Easting:	761,608.90 usft	Longitude:	103° 37' 19.745 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,366.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/13/2017	6.93	59.92	47,813.72221767

Design	Wellbore #1				
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	177.67	

Survey Program	Date 11/27/2017				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	745.0	MS Surveys (Wellbore #1)	GYRO-NS	OWSG Gyrocompass Gyro	
906.0	20,030.0	MWD Surveys (Wellbore #1)	MWD default	MWD - Standard	

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)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
100.0	0.20	280.05	100.0	0.0	-0.2	0.0	0.20	0.20	0.00	
200.0	0.11	48.44	200.0	0.1	-0.3	-0.1	0.28	-0.09	128.39	
300.0	0.42	7.05	300.0	0.6	-0.2	-0.6	0.35	0.31	-41.39	
400.0	0.22	313.33	400.0	1.0	-0.2	-1.1	0.34	-0.20	-53.72	
500.0	0.13	18.68	500.0	1.3	-0.4	-1.3	0.20	-0.09	65.35	
600.0	0.09	3.26	600.0	1.5	-0.3	-1.5	0.05	-0.04	-15.42	
700.0	0.38	22.72	700.0	1.9	-0.2	-1.9	0.30	0.29	19.46	
Tie in @ 745' MD / 745' TVD										
745.0	0.38	32.53	745.0	2.1	0.0	-2.1	0.14	0.00	21.80	



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Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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)	
906.0	0.10	349.90	906.0	2.7	0.2	-2.7	0.19	-0.17	-26.48	
1,097.0	0.30	315.20	1,097.0	3.2	-0.2	-3.2	0.12	0.10	-18.17	
1,287.0	0.50	331.90	1,287.0	4.3	-0.9	-4.3	0.12	0.11	8.79	
1,477.0	0.70	331.80	1,477.0	6.1	-1.8	-6.1	0.11	0.11	-0.05	
1,667.0	0.70	346.00	1,667.0	8.2	-2.7	-8.3	0.09	0.00	7.47	
1,856.0	0.70	341.60	1,855.9	10.4	-3.3	-10.6	0.03	0.00	-2.33	
2,043.0	0.90	347.70	2,042.9	12.9	-4.0	-13.1	0.12	0.11	3.26	
2,233.0	1.00	340.20	2,232.9	16.0	-4.9	-16.2	0.08	0.05	-3.95	
2,423.0	0.70	314.70	2,422.9	18.3	-6.3	-18.6	0.25	-0.16	-13.42	
2,612.0	0.30	303.80	2,611.9	19.4	-7.5	-19.7	0.22	-0.21	-5.77	
2,802.0	0.50	283.60	2,801.9	19.9	-8.7	-20.2	0.13	0.11	-10.63	
2,992.0	0.70	280.20	2,991.9	20.3	-10.7	-20.7	0.11	0.11	-1.79	
3,181.0	3.90	51.70	3,180.7	24.5	-6.7	-24.7	2.33	1.69	69.58	
3,371.0	4.40	63.20	3,370.2	31.8	4.8	-31.6	0.51	0.26	6.05	
3,560.0	4.90	62.10	3,558.6	38.8	18.4	-38.0	0.27	0.26	-0.58	
3,750.0	4.80	61.40	3,747.9	46.4	32.6	-45.1	0.06	-0.05	-0.37	
3,940.0	4.00	54.50	3,937.4	54.1	45.0	-52.2	0.50	-0.42	-3.63	
4,130.0	3.70	57.90	4,126.9	61.2	55.6	-58.9	0.20	-0.16	1.79	
4,319.0	4.00	67.90	4,315.5	66.9	66.8	-64.1	0.39	0.16	5.29	
4,509.0	4.30	84.60	4,505.0	70.1	80.1	-66.8	0.65	0.16	8.79	
4,698.0	4.50	90.80	4,693.5	70.6	94.5	-66.7	0.27	0.11	3.28	
4,862.0	3.80	86.70	4,857.0	70.9	106.4	-66.5	0.46	-0.43	-2.50	
5,052.0	2.80	57.90	5,046.7	73.7	116.6	-68.9	1.00	-0.53	-15.16	
5,241.0	2.90	60.90	5,235.5	78.5	124.7	-73.3	0.09	0.05	1.59	
5,431.0	2.60	52.80	5,425.3	83.4	132.3	-78.0	0.26	-0.16	-4.26	
5,622.0	4.70	10.80	5,615.9	93.7	137.2	-88.1	1.71	1.10	-21.99	
5,812.0	4.20	13.20	5,805.3	108.1	140.3	-102.3	0.28	-0.26	1.26	
6,002.0	4.10	15.00	5,994.8	121.5	143.6	-115.5	0.09	-0.05	0.95	
6,192.0	3.90	15.20	6,184.4	134.3	147.1	-128.2	0.11	-0.11	0.11	
6,381.0	6.80	23.80	6,372.5	150.7	153.3	-144.4	1.59	1.53	4.55	
6,571.0	6.10	44.90	6,561.4	168.2	165.0	-161.3	1.29	-0.37	11.11	
6,760.0	3.90	66.80	6,749.6	177.8	178.0	-170.4	1.52	-1.16	11.59	
6,950.0	3.60	67.40	6,939.2	182.6	189.4	-174.8	0.16	-0.16	0.32	
7,140.0	3.30	61.60	7,128.9	187.5	199.7	-179.3	0.24	-0.16	-3.05	
7,330.0	3.30	66.80	7,318.6	192.3	209.6	-183.6	0.16	0.00	2.74	
7,519.0	4.00	36.60	7,507.2	199.7	218.5	-190.7	1.07	0.37	-15.98	
7,709.0	3.90	40.00	7,696.8	210.0	226.6	-200.6	0.13	-0.05	1.79	
7,899.0	3.30	40.10	7,886.4	219.1	234.3	-209.4	0.32	-0.32	0.05	
8,089.0	2.90	42.20	8,076.1	226.9	241.0	-216.9	0.22	-0.21	1.11	
8,279.0	4.30	18.30	8,265.7	237.2	246.5	-227.0	1.07	0.74	-12.58	
8,469.0	3.80	23.30	8,455.3	249.7	251.2	-239.3	0.32	-0.26	2.63	
8,659.0	3.10	21.30	8,644.9	260.3	255.6	-249.7	0.37	-0.37	-1.05	
8,849.0	4.40	19.20	8,834.5	272.0	259.8	-261.2	0.69	0.68	-1.11	



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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)
9,038.0	3.10	18.50	9,023.1	283.7	263.8	-272.7	0.69	-0.69	-0.37
9,202.0	2.80	9.50	9,186.9	291.8	265.9	-280.8	0.34	-0.18	-5.49
9,340.0	8.40	189.40	9,324.5	285.2	264.8	-274.2	8.12	4.06	130.36
9,435.0	20.90	190.60	9,416.2	261.6	260.5	-250.8	13.16	13.16	1.26
9,530.0	30.40	181.30	9,501.8	220.8	256.9	-210.2	10.83	10.00	-9.79
9,624.0	38.30	178.10	9,579.4	167.8	257.3	-157.2	8.62	8.40	-3.40
9,719.0	47.00	182.90	9,649.2	103.6	256.5	-93.1	9.77	9.16	5.05
9,815.0	51.00	183.00	9,712.1	31.2	252.8	-20.9	4.17	4.17	0.10
330' HL Crossed @ 9851.0' MD / 9734.3' TVD									
9,851.0	53.02	179.28	9,734.3	2.9	252.2	7.4	9.89	5.61	-10.33
9,909.0	56.50	173.70	9,767.8	-44.4	255.2	54.7	9.89	6.00	-9.62
10,004.0	68.00	171.60	9,812.0	-127.6	266.0	138.3	12.26	12.11	-2.21
10,099.0	77.60	173.00	9,840.0	-217.4	278.1	228.6	10.20	10.11	1.47
10,194.0	84.60	176.20	9,854.7	-310.8	286.9	322.2	8.08	7.37	3.37
10,316.0	86.30	176.70	9,864.4	-432.2	294.4	443.8	1.45	1.39	0.41
10,506.0	89.90	176.90	9,870.7	-621.7	305.0	633.6	1.90	1.89	0.11
10,601.0	88.40	176.90	9,872.1	-716.6	310.2	728.6	1.58	-1.58	0.00
10,696.0	89.40	176.70	9,873.9	-811.4	315.5	823.6	1.07	1.05	-0.21
10,791.0	91.10	176.40	9,873.5	-906.2	321.2	918.6	1.82	1.79	-0.32
10,886.0	90.10	178.10	9,872.5	-1,001.1	325.8	1,013.5	2.08	-1.05	1.79
10,981.0	90.70	178.60	9,871.8	-1,096.1	328.5	1,108.5	0.82	0.63	0.53
11,076.0	93.10	178.50	9,868.7	-1,191.0	330.9	1,203.5	2.53	2.53	-0.11
11,171.0	90.90	179.00	9,865.4	-1,285.9	333.0	1,298.4	2.37	-2.32	0.53
11,266.0	87.80	179.50	9,866.5	-1,380.9	334.2	1,393.3	3.31	-3.26	0.53
11,361.0	89.20	179.90	9,868.9	-1,475.8	334.7	1,488.2	1.53	1.47	0.42
11,456.0	87.80	179.20	9,871.4	-1,570.8	335.4	1,583.1	1.65	-1.47	-0.74
11,550.0	87.80	178.60	9,875.0	-1,664.7	337.3	1,677.1	0.64	0.00	-0.64
11,645.0	88.40	178.50	9,878.2	-1,759.6	339.7	1,772.0	0.64	0.63	-0.11
11,740.0	89.20	178.50	9,880.2	-1,854.6	342.1	1,867.0	0.84	0.84	0.00
11,835.0	90.00	178.10	9,880.8	-1,949.5	345.0	1,962.0	0.94	0.84	-0.42
11,930.0	91.30	177.90	9,879.8	-2,044.5	348.3	2,056.9	1.38	1.37	-0.21
12,025.0	88.00	178.60	9,880.3	-2,139.4	351.2	2,151.9	3.55	-3.47	0.74
12,120.0	88.20	179.20	9,883.5	-2,234.3	353.0	2,246.8	0.67	0.21	0.63
12,214.0	89.30	179.00	9,885.5	-2,328.3	354.5	2,340.8	1.19	1.17	-0.21
12,309.0	90.40	179.20	9,885.8	-2,423.3	356.0	2,435.8	1.18	1.16	0.21
12,404.0	91.10	178.60	9,884.5	-2,518.3	357.8	2,530.7	0.97	0.74	-0.63
12,499.0	91.70	178.30	9,882.2	-2,613.2	360.4	2,625.7	0.71	0.63	-0.32
12,594.0	92.10	179.20	9,879.1	-2,708.1	362.4	2,720.6	1.04	0.42	0.95
12,689.0	92.90	179.20	9,874.9	-2,803.0	363.8	2,815.5	0.84	0.84	0.00
12,784.0	90.40	179.70	9,872.2	-2,898.0	364.7	2,910.4	2.68	-2.63	0.53
12,878.0	87.00	180.40	9,874.3	-2,991.9	364.6	3,004.3	3.69	-3.62	0.74
12,973.0	87.20	180.40	9,879.1	-3,086.8	363.9	3,099.1	0.21	0.21	0.00
13,068.0	88.10	180.20	9,883.0	-3,181.7	363.4	3,193.9	0.97	0.95	-0.21
13,162.0	89.50	180.60	9,885.0	-3,275.7	362.8	3,287.7	1.55	1.49	0.43



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13,257.0	88.30	181.10	9,886.8	-3,370.7	361.4	3,382.6	1.37	-1.26	0.53
13,352.0	88.80	182.20	9,889.2	-3,465.6	358.6	3,477.3	1.27	0.53	1.16
13,447.0	90.10	182.50	9,890.1	-3,560.5	354.7	3,572.0	1.40	1.37	0.32
13,541.0	91.00	182.30	9,889.2	-3,654.4	350.8	3,665.7	0.98	0.96	-0.21
13,636.0	92.10	182.50	9,886.7	-3,749.3	346.8	3,760.3	1.18	1.16	0.21
13,731.0	89.00	181.80	9,885.8	-3,844.2	343.3	3,855.0	3.35	-3.26	-0.74
13,826.0	88.80	181.80	9,887.6	-3,939.2	340.3	3,949.7	0.21	-0.21	0.00
13,921.0	90.20	182.20	9,888.4	-4,034.1	337.0	4,044.5	1.53	1.47	0.42
14,016.0	91.10	182.00	9,887.3	-4,129.0	333.5	4,139.2	0.97	0.95	-0.21
14,111.0	92.60	181.60	9,884.3	-4,223.9	330.5	4,233.9	1.63	1.58	-0.42
14,205.0	89.30	179.70	9,882.7	-4,317.9	329.4	4,327.7	4.05	-3.51	-2.02
14,300.0	89.90	178.80	9,883.4	-4,412.9	330.7	4,422.7	1.14	0.63	-0.95
14,395.0	91.60	177.90	9,882.1	-4,507.8	333.4	4,517.7	2.02	1.79	-0.95
14,489.0	88.30	178.60	9,882.2	-4,601.8	336.3	4,611.6	3.59	-3.51	0.74
14,584.0	88.60	179.30	9,884.8	-4,696.7	338.0	4,706.6	0.80	0.32	0.74
14,679.0	90.00	182.20	9,885.9	-4,791.7	336.8	4,801.4	3.39	1.47	3.05
14,774.0	87.80	181.10	9,887.8	-4,886.6	334.0	4,896.2	2.59	-2.32	-1.16
14,869.0	88.10	181.10	9,891.2	-4,981.6	332.2	4,990.9	0.32	0.32	0.00
14,963.0	88.30	180.90	9,894.1	-5,075.5	330.6	5,084.7	0.30	0.21	-0.21
15,059.0	89.50	181.80	9,896.0	-5,171.4	328.3	5,180.5	1.56	1.25	0.94
15,153.0	91.00	182.00	9,895.5	-5,265.4	325.2	5,274.3	1.61	1.60	0.21
15,248.0	92.90	182.00	9,892.3	-5,360.3	321.9	5,368.9	2.00	2.00	0.00
15,343.0	91.60	180.10	9,888.6	-5,455.2	320.1	5,463.7	2.42	-1.37	-2.00
15,438.0	92.70	179.20	9,885.0	-5,550.1	320.7	5,558.6	1.50	1.16	-0.95
15,532.0	90.10	177.90	9,882.7	-5,644.0	323.1	5,652.5	3.09	-2.77	-1.38
15,627.0	90.10	176.70	9,882.6	-5,738.9	327.6	5,747.5	1.26	0.00	-1.26
15,721.0	91.40	175.60	9,881.3	-5,832.7	333.9	5,841.5	1.81	1.38	-1.17
15,816.0	89.30	176.00	9,880.7	-5,927.4	340.8	5,936.4	2.25	-2.21	0.42
15,911.0	88.60	174.80	9,882.5	-6,022.1	348.5	6,031.3	1.46	-0.74	-1.26
16,006.0	90.20	174.40	9,883.5	-6,116.7	357.4	6,126.2	1.74	1.68	-0.42
16,101.0	86.40	175.50	9,886.3	-6,211.3	365.8	6,221.0	4.16	-4.00	1.16
16,196.0	86.80	176.20	9,891.9	-6,305.8	372.6	6,315.8	0.85	0.42	0.74
16,291.0	86.40	175.30	9,897.6	-6,400.4	379.7	6,410.6	1.04	-0.42	-0.95
16,385.0	86.30	175.30	9,903.6	-6,493.9	387.3	6,504.3	0.11	-0.11	0.00
16,480.0	85.70	176.70	9,910.2	-6,588.4	393.9	6,599.0	1.60	-0.63	1.47
16,575.0	88.60	179.70	9,914.9	-6,683.3	396.9	6,693.9	4.39	3.05	3.16
16,670.0	90.80	180.40	9,915.4	-6,778.2	396.8	6,788.8	2.43	2.32	0.74
16,764.0	91.60	180.10	9,913.4	-6,872.2	396.4	6,882.7	0.91	0.85	-0.32
16,859.0	93.60	180.20	9,909.1	-6,967.1	396.2	6,977.5	2.11	2.11	0.11
16,954.0	91.10	180.40	9,905.2	-7,062.0	395.7	7,072.3	2.64	-2.63	0.21
17,049.0	89.70	178.80	9,904.6	-7,157.0	396.4	7,167.2	2.24	-1.47	-1.68
17,144.0	90.50	178.30	9,904.4	-7,252.0	398.8	7,262.2	0.99	0.84	-0.53
17,236.0	91.00	177.80	9,903.2	-7,343.9	401.9	7,354.2	0.77	0.54	-0.54



Survey Report



Company:	BTA Oil Producers, LLC	Local Co-ordinate Reference:	Well 8105 JV-P Mesa #30H
Project:	Lea County, NM (NAD 83)	TVD Reference:	WELL @ 3391.0usft (Patterson #594)
Site:	Sec 1, T26-S, R32-E	MD Reference:	WELL @ 3391.0usft (Patterson #594)
Well:	8105 JV-P Mesa #30H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

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)
17,331.0	90.80	177.80	9,901.7	-7,438.8	405.5	7,449.2	0.21	-0.21	0.00
17,425.0	91.50	177.90	9,899.8	-7,532.8	409.1	7,543.2	0.75	0.74	0.11
17,520.0	89.30	178.80	9,899.2	-7,627.7	411.8	7,638.1	2.50	-2.32	0.95
17,615.0	89.30	179.20	9,900.3	-7,722.7	413.4	7,733.1	0.42	0.00	0.42
17,710.0	90.30	178.50	9,900.6	-7,817.7	415.4	7,828.1	1.28	1.05	-0.74
17,805.0	91.10	179.30	9,899.5	-7,912.6	417.2	7,923.1	1.19	0.84	0.84
17,900.0	87.80	179.50	9,900.4	-8,007.6	418.2	8,018.0	3.48	-3.47	0.21
17,994.0	87.30	179.50	9,904.4	-8,101.5	419.0	8,111.9	0.53	-0.53	0.00
18,089.0	88.70	179.70	9,907.7	-8,196.5	419.7	8,206.8	1.49	1.47	0.21
18,184.0	90.00	179.70	9,908.8	-8,291.5	420.2	8,301.7	1.37	1.37	0.00
18,279.0	90.80	179.30	9,908.1	-8,386.5	421.0	8,396.6	0.94	0.84	-0.42
18,374.0	92.10	179.20	9,905.7	-8,481.4	422.2	8,491.6	1.37	1.37	-0.11
18,470.0	89.60	180.10	9,904.3	-8,577.4	422.8	8,587.5	2.77	-2.60	0.94
18,563.0	89.30	180.10	9,905.2	-8,670.4	422.7	8,680.4	0.32	-0.32	0.00
18,658.0	90.00	179.70	9,905.8	-8,765.4	422.8	8,775.3	0.85	0.74	-0.42
18,753.0	91.40	179.90	9,904.6	-8,860.4	423.1	8,870.3	1.49	1.47	0.21
18,848.0	88.20	179.70	9,905.0	-8,955.4	423.5	8,965.2	3.37	-3.37	-0.21
18,942.0	88.30	179.20	9,907.8	-9,049.3	424.4	9,059.1	0.54	0.11	-0.53
19,037.0	89.40	179.00	9,909.7	-9,144.3	425.9	9,154.0	1.18	1.16	-0.21
19,131.0	89.70	178.50	9,910.5	-9,238.3	427.9	9,248.0	0.62	0.32	-0.53
19,225.0	90.30	178.10	9,910.5	-9,332.2	430.7	9,342.0	0.77	0.64	-0.43
19,320.0	91.30	177.80	9,909.1	-9,427.1	434.1	9,437.0	1.10	1.05	-0.32
19,415.0	88.60	179.00	9,909.2	-9,522.1	436.8	9,532.0	3.11	-2.84	1.26
19,510.0	88.80	179.30	9,911.4	-9,617.1	438.2	9,626.9	0.38	0.21	0.32
19,605.0	89.90	179.20	9,912.5	-9,712.0	439.4	9,721.9	1.16	1.16	-0.11
19,700.0	88.60	179.70	9,913.7	-9,807.0	440.3	9,816.8	1.47	-1.37	0.53
19,794.0	89.20	179.30	9,915.5	-9,901.0	441.1	9,910.8	0.77	0.64	-0.43
19,889.0	90.60	179.30	9,915.7	-9,996.0	442.3	10,005.7	1.47	1.47	0.00
330' HL Crossed @ 19928.1' MD / 9915.1' TVD									
19,928.1	91.10	179.25	9,915.1	-10,035.1	442.8	10,044.8	1.28	1.28	-0.12
19,975.0	91.70	179.20	9,914.0	-10,082.0	443.4	10,091.7	1.28	1.28	-0.12
TD @ 20030.0' MD / 9912.3' TVD									
20,030.0	91.70	179.20	9,912.3	-10,136.9	444.2	10,146.6	0.00	0.00	0.00

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
745.0	745.0	2.1	0.0	Tie in @ 745' MD / 745' TVD
9,851.0	9,734.3	2.9	252.2	330' HL Crossed @ 9851.0' MD / 9734.3' TVD
19,928.1	9,915.1	-10,035.1	442.8	330' HL Crossed @ 19928.1' MD / 9915.1' TVD
20,030.0	9,912.3	-10,136.9	444.2	TD @ 20030.0' MD / 9912.3' TVD



Survey Report



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Well:	8105 JV-P Mesa #30H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Checked By: _____	Approved By: _____	Date: _____
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