

NM OIL CONSERVATION
ARTESTA DISTRICT

MAR 17 2017
RECEIVED

Field Name		Lease Name	Well No.	API No.	Version	Version Tag	
Black River		Mad River 13 State	3H	30015438980000	1	Completed	
Section	Township/Block	Range/Section	County	State		GL (ft)	KB (ft)
13	24S	27E	Eddy	New Mexico		3,102.0	3,124.0
Target N (-S) (ft)	Target E (-W) (ft)	Latitude	Longitude	Operator		Well Status	
-54.53241	-4775.45	32.211285	-104.135825	Caza Oil and Gas, Inc		Completed	
Additional Information							

Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	Coordinate N (-S) (ft)	Coordinate E (-W) (ft)	DLS (deg/100 ft)
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
219.0	0.4	270.8	219.0	0.8	0.0	-0.8	0.18
347.0	0.7	195.0	347.0	1.4	-0.7	-1.4	0.56
516.0	1.2	203.1	516.0	2.4	-3.4	-2.4	0.31
691.0	0.7	192.4	690.9	3.4	-6.1	-3.3	0.30
868.0	1.1	206.1	867.9	4.4	-8.7	-4.3	0.26
1,052.0	1.5	202.5	1,051.9	6.1	-12.5	-6.0	0.22
1,239.0	1.2	211.5	1,238.8	8.1	-16.4	-8.0	0.20
1,430.0	1.1	254.8	1,429.8	11.0	-18.6	-10.8	0.45
1,621.0	0.9	307.3	1,620.8	13.9	-18.2	-13.7	0.47
1,811.0	0.6	327.6	1,810.7	15.6	-16.4	-15.5	0.21
2,002.0	1.5	66.4	2,001.7	13.9	-14.6	-13.7	0.89
2,192.0	3.2	97.8	2,191.6	6.3	-14.3	-6.2	1.09
2,382.0	2.2	57.3	2,381.4	-2.0	-13.1	2.2	1.10
2,571.0	1.8	50.2	2,570.3	-7.4	-9.2	7.5	0.25
2,760.0	1.8	46.5	2,759.2	-11.9	-5.3	11.9	0.06
2,949.0	1.6	45.9	2,948.1	-16.0	-1.4	16.0	0.11
3,140.0	1.5	42.4	3,139.0	-19.6	2.3	19.6	0.07
3,330.0	1.2	33.3	3,329.0	-22.4	5.8	22.3	0.19
3,520.0	1.2	31.9	3,518.9	-24.6	9.2	24.5	0.02
3,710.0	1.0	240.4	3,708.9	-24.2	10.0	24.1	1.12
3,900.0	1.1	240.7	3,898.9	-21.2	8.3	21.1	0.05
4,089.0	1.0	232.6	4,087.8	-18.2	6.4	18.2	0.09
4,279.0	1.0	253.4	4,277.8	-15.3	5.0	15.3	0.19
4,469.0	0.8	224.9	4,467.8	-12.8	3.6	12.7	0.25
4,659.0	0.9	252.2	4,657.8	-10.4	2.2	10.4	0.22
4,848.0	0.9	248.7	4,846.7	-7.6	1.2	7.6	0.03
5,038.0	0.7	242.4	5,036.7	-5.2	0.1	5.2	0.11
5,227.0	0.6	227.3	5,225.7	-3.4	-1.1	3.4	0.10
5,415.0	0.6	227.7	5,413.7	-1.9	-2.5	2.0	0.00
5,605.0	0.7	236.4	5,603.7	-0.2	-3.8	0.3	0.07
5,789.0	1.5	223.9	5,787.7	2.4	-6.1	-2.3	0.45
5,978.0	1.2	261.2	5,976.6	6.1	-8.2	-6.0	0.48
6,166.0	1.1	344.8	6,164.6	8.5	-6.8	-8.4	0.82
6,355.0	1.4	192.4	6,353.6	9.5	-7.3	-9.4	1.29
6,544.0	1.0	197.2	6,542.5	10.5	-11.1	-10.4	0.22
6,732.0	1.1	256.4	6,730.5	12.8	-13.1	-12.6	0.55
6,921.0	1.3	263.9	6,919.4	16.7	-13.7	-16.5	0.13
7,110.0	0.4	255.9	7,108.4	19.5	-14.1	-19.3	0.48
7,300.0	0.4	26.8	7,298.4	19.8	-13.7	-19.6	0.38
7,488.0	1.5	168.6	7,486.4	19.0	-15.5	-18.9	0.97
7,677.0	0.6	85.6	7,675.4	17.6	-17.9	-17.4	0.82
7,866.0	0.3	97.9	7,864.4	16.1	-17.9	-15.9	0.17
8,055.0	0.5	117.2	8,053.4	14.9	-18.3	-14.7	0.13
8,245.0	1.6	92.8	8,243.3	11.5	-18.8	-11.3	0.61
8,435.0	1.0	57.6	8,433.3	7.5	-18.1	-7.2	0.51
8,623.0	0.7	303.3	8,621.3	7.0	-16.6	-6.8	0.76
8,681.0	0.9	300.4	8,679.3	7.7	-16.1	-7.5	0.35
8,740.0	1.3	267.3	8,738.3	8.8	-15.9	-8.6	1.25
8,787.0	6.8	257.4	8,785.1	12.0	-16.6	-11.8	11.75
8,834.0	12.3	257.8	8,831.5	19.7	-18.2	-19.4	11.70
8,881.0	19.9	256.8	8,876.6	32.4	-21.1	-32.1	16.18
8,929.0	24.5	256.6	8,921.0	50.1	-25.3	-49.8	9.58
8,976.0	30.4	257.4	8,962.7	71.2	-30.1	-70.9	12.58
9,024.0	36.0	257.9	9,002.8	97.0	-35.8	-96.6	11.68
9,071.0	42.1	259.9	9,039.3	126.1	-41.4	-125.6	13.25

Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	TVD (ft)	Vertical Section (ft)	Coordinate N (-S) (ft)	Coordinate E (-W) (ft)	DLS (deg/100 ft)
9,119.0	47.0	261.1	9,073.5	159.3	-47.0	-158.8	10.36
9,166.0	53.2	263.5	9,103.7	195.1	-51.8	-194.5	13.76
9,214.0	58.1	266.2	9,130.7	234.6	-55.3	-234.0	11.21
9,261.0	61.6	267.7	9,154.3	275.2	-57.4	-274.6	7.94
9,308.0	64.6	268.5	9,175.6	317.1	-58.8	-316.4	6.56
9,355.0	66.5	270.4	9,195.1	359.9	-59.2	-359.2	5.47
9,403.0	66.4	270.8	9,214.2	403.9	-58.8	-403.2	0.79
9,450.0	67.0	270.7	9,232.8	447.0	-58.2	-446.4	1.29
9,497.0	69.6	271.8	9,250.2	490.7	-57.2	-490.0	5.94
9,544.0	71.2	271.5	9,266.0	534.9	-56.0	-534.3	3.46
9,592.0	71.4	271.5	9,281.4	580.3	-54.8	-579.7	0.42
9,639.0	72.5	272.8	9,295.9	625.0	-53.1	-624.4	3.52
9,686.0	75.4	273.9	9,308.9	670.0	-50.5	-669.5	6.57
9,733.0	78.1	273.9	9,319.7	715.6	-47.4	-715.1	5.74
9,780.0	83.0	274.4	9,327.4	761.8	-44.0	-761.3	10.48
9,875.0	92.4	277.8	9,331.2	855.9	-33.9	-855.6	10.52
9,973.0	93.8	277.5	9,325.9	952.8	-20.9	-952.6	1.46
10,067.0	92.3	277.0	9,320.9	1,045.7	-9.0	-1,045.7	1.68
10,162.0	91.2	276.5	9,318.0	1,139.9	2.1	-1,140.0	1.27
10,257.0	88.9	274.3	9,317.9	1,234.4	11.1	-1,234.6	3.35
10,352.0	89.9	271.5	9,318.9	1,329.2	15.9	-1,329.4	3.13
10,447.0	88.7	269.4	9,320.1	1,424.1	16.6	-1,424.4	2.55
10,638.0	89.3	269.4	9,323.4	1,615.1	14.6	-1,615.4	0.31
10,733.0	88.3	267.4	9,325.4	1,710.1	12.0	-1,710.3	2.35
10,923.0	87.9	268.1	9,331.7	1,899.9	4.5	-1,900.1	0.42
11,018.0	90.3	270.4	9,333.2	1,994.9	3.3	-1,995.0	3.50
11,114.0	91.3	271.2	9,331.9	2,090.8	4.6	-2,091.0	1.33
11,209.0	91.3	270.9	9,329.7	2,185.7	6.3	-2,186.0	0.32
11,304.0	91.1	270.3	9,327.7	2,280.7	7.3	-2,280.9	0.67
11,399.0	89.6	268.7	9,327.1	2,375.7	6.5	-2,375.9	2.31
11,495.0	89.5	268.7	9,327.9	2,471.7	4.3	-2,471.9	0.10
11,590.0	89.6	269.2	9,328.6	2,566.7	2.6	-2,566.9	0.54
11,685.0	91.3	269.9	9,327.9	2,661.7	1.8	-2,661.9	1.94
11,780.0	89.7	266.6	9,327.1	2,756.6	-1.1	-2,756.8	3.86
11,875.0	92.0	267.3	9,325.7	2,851.5	-6.1	-2,851.7	2.53
11,970.0	92.2	267.2	9,322.2	2,946.4	-10.7	-2,946.5	0.24
12,065.0	92.4	268.0	9,318.4	3,041.3	-14.6	-3,041.3	0.87
12,160.0	92.0	268.4	9,314.7	3,136.2	-17.6	-3,136.2	0.60
12,256.0	91.6	268.7	9,311.7	3,232.1	-20.1	-3,232.1	0.52
12,351.0	91.3	268.3	9,309.3	3,327.1	-22.5	-3,327.1	0.53
12,446.0	91.3	268.8	9,307.1	3,422.1	-24.9	-3,422.0	0.53
12,541.0	91.0	269.4	9,305.2	3,517.0	-26.4	-3,517.0	0.71
12,635.0	90.7	269.9	9,303.8	3,611.0	-27.0	-3,611.0	0.62
12,731.0	91.3	269.7	9,302.2	3,707.0	-27.3	-3,706.9	0.66
12,826.0	92.3	268.9	9,299.2	3,802.0	-28.5	-3,801.9	1.35
12,921.0	93.5	269.1	9,294.4	3,896.8	-30.2	-3,896.7	1.28
13,016.0	93.5	269.9	9,288.6	3,991.7	-31.0	-3,991.6	0.84
13,081.0	92.7	269.8	9,285.1	4,056.6	-31.2	-4,056.5	1.24
13,207.0	93.0	270.7	9,278.8	4,182.4	-30.6	-4,182.3	0.75
13,302.0	89.8	267.0	9,276.5	4,277.3	-32.5	-4,277.2	5.15
13,397.0	88.4	266.8	9,278.0	4,372.2	-37.7	-4,372.1	1.49
13,492.0	88.0	267.0	9,280.9	4,467.1	-42.8	-4,466.9	0.47
13,587.0	88.1	267.6	9,284.2	4,562.0	-47.3	-4,561.7	0.64
13,682.0	87.9	267.9	9,287.5	4,656.9	-51.0	-4,656.6	0.38
13,777.0	87.5	268.5	9,291.3	4,751.8	-54.0	-4,751.5	0.76
13,801.0	87.3	268.8	9,292.4	4,775.8	-54.5	-4,775.5	1.50