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Centennial Resource Development, LLC

Lea County, NM (NAD 83 - UTM Zone 13 - True)
Queso Blanco 13 State Com
Queso Blanco 13 State Com 602H

OH

Design: OH

Standard Survey Report

19 December, 2019



Company:	Centennial Resource Development, LLC	Local Co-ordinate Reference:	Well Queso Blanco 13 State Com 602H
Project:	Lea County, NM (NAD 83 - UTM Zone 13 - True)	TVD Reference:	3507.4' GE + 26.5' KB @ 3533.90usft
Site:	Queso Blanco 13 State Com	MD Reference:	3507.4' GE + 26.5' KB @ 3533.90usft
Well:	Queso Blanco 13 State Com 602H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.15 Single User Db

Project	Lea County, NM (NAD 83 - UTM Zone 13 - True)		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Zone 13N (108 W to 102 W)		

Site	Queso Blanco 13 State Com				
Site Position:		Northing:	11,760,184.41 usft	Latitude:	32.387817
From:	Map	Easting:	2,125,768.87 usft	Longitude:	-103.427232
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.84 °

Well	Queso Blanco 13 State Com 602H					
Well Position	+N/-S	0.00 usft	Northing:	11,760,184.41 usft	Latitude:	32.387817
	+E/-W	0.00 usft	Easting:	2,125,768.87 usft	Longitude:	-103.427232
Position Uncertainty	0.00 usft		Wellhead Elevation:	usft	Ground Level:	3,507.40 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	11/14/2019	6.64	60.20	47,801.10941293

Design	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	357.62	

Survey Program	Date	12/19/2019			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
140.50	1,795.50	Survey #1 (OH)	MWD	OWSG MWD - Standard	
1,907.00	18,499.00	Survey #2 (OH)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction	
18,550.00	18,550.00	Survey #3 (OH)	BLIND	OWSG BLIND	

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)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
SHL (QB 13 State Com 602H)										
140.50	1.10	277.69	140.49	0.18	-1.34	0.24	0.78	0.78	0.00	
231.50	1.20	290.69	231.47	0.63	-3.09	0.76	0.31	0.11	14.29	
373.50	1.30	212.69	373.45	-0.20	-5.35	0.03	1.11	0.07	-54.93	
561.50	1.00	205.69	561.41	-3.47	-7.22	-3.17	0.18	-0.16	-3.72	
719.50	0.90	222.69	719.39	-5.62	-8.66	-5.26	0.19	-0.06	10.76	
908.50	1.20	225.69	908.36	-8.10	-11.08	-7.63	0.16	0.16	1.59	
971.50	1.60	240.69	971.34	-8.99	-12.32	-8.47	0.86	0.63	23.81	

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1,129.50	2.00	208.69	1,129.26	-12.49	-15.57	-11.83	0.67	0.25	-20.25
1,287.50	2.40	229.69	1,287.15	-17.05	-19.41	-16.22	0.57	0.25	13.29
1,444.50	2.20	228.69	1,444.02	-21.16	-24.18	-20.14	0.13	-0.13	-0.64
1,571.50	2.00	265.69	1,570.94	-22.94	-28.22	-21.75	1.06	-0.16	29.13
1,697.50	2.10	250.69	1,696.86	-23.87	-32.59	-22.49	0.43	0.08	-11.90
1,795.50	3.00	235.69	1,794.77	-25.91	-36.41	-24.37	1.14	0.92	-15.31
1,907.00	3.10	249.50	1,906.11	-28.61	-41.64	-26.85	0.66	0.09	12.39
2,001.00	4.14	237.74	1,999.92	-31.31	-46.89	-29.33	1.35	1.11	-12.51
2,095.00	6.93	237.74	2,093.48	-36.15	-54.56	-33.85	2.97	2.97	0.00
2,189.00	9.11	210.95	2,186.58	-45.56	-63.18	-42.89	4.54	2.32	-28.50
2,283.00	10.40	202.10	2,279.23	-59.80	-70.20	-56.84	2.10	1.37	-9.41
2,377.00	11.51	192.58	2,371.52	-76.82	-75.44	-73.62	2.25	1.18	-10.13
2,471.00	12.65	181.83	2,463.45	-96.26	-77.81	-92.95	2.68	1.21	-11.44
2,565.00	13.35	173.56	2,555.05	-117.34	-76.92	-114.04	2.11	0.74	-8.80
2,659.00	12.54	170.14	2,646.66	-138.18	-73.96	-134.98	1.19	-0.86	-3.64
2,754.00	11.74	169.53	2,739.53	-157.84	-70.44	-154.78	0.85	-0.84	-0.64
2,848.00	11.23	170.11	2,831.65	-176.26	-67.13	-173.32	0.56	-0.54	0.62
2,942.00	10.88	169.28	2,923.91	-194.00	-63.90	-191.17	0.41	-0.37	-0.88
3,035.00	10.32	169.29	3,015.32	-210.81	-60.72	-208.10	0.60	-0.60	0.01
3,129.00	9.61	167.09	3,107.90	-226.73	-57.40	-224.15	0.86	-0.76	-2.34
3,223.00	10.13	171.87	3,200.51	-242.56	-54.48	-240.08	1.03	0.55	5.09
3,317.00	11.05	176.18	3,292.91	-259.73	-52.71	-257.32	1.29	0.98	4.59
3,411.00	10.72	175.27	3,385.22	-277.43	-51.39	-275.06	0.40	-0.35	-0.97
3,505.00	9.98	173.10	3,477.69	-294.23	-49.69	-291.91	0.89	-0.79	-2.31
3,599.00	10.78	169.56	3,570.15	-310.96	-47.12	-308.74	1.09	0.85	-3.77
3,693.00	11.89	167.22	3,662.32	-329.05	-43.39	-326.97	1.28	1.18	-2.49
3,787.00	11.06	167.02	3,754.44	-347.28	-39.22	-345.35	0.88	-0.88	-0.21
3,881.00	9.82	168.17	3,846.88	-363.91	-35.55	-362.12	1.34	-1.32	1.22
3,975.00	9.41	174.55	3,939.56	-379.41	-33.18	-377.70	1.21	-0.44	6.79
4,069.00	10.11	181.47	4,032.20	-395.31	-32.66	-393.61	1.45	0.74	7.36
4,163.00	10.91	185.01	4,124.63	-412.42	-33.65	-410.66	1.09	0.85	3.77
4,257.00	10.36	186.56	4,217.01	-429.68	-35.39	-427.84	0.66	-0.59	1.65
4,351.00	10.09	188.38	4,309.52	-446.22	-37.56	-444.27	0.45	-0.29	1.94
4,445.00	9.80	191.77	4,402.11	-462.20	-40.39	-460.12	0.69	-0.31	3.61
4,539.00	10.28	188.62	4,494.67	-478.32	-43.28	-476.11	0.78	0.51	-3.35
4,633.00	11.00	185.07	4,587.05	-495.55	-45.33	-493.24	1.04	0.77	-3.78
4,727.00	11.05	184.90	4,679.32	-513.46	-46.89	-511.07	0.06	0.05	-0.18
4,821.00	10.94	182.76	4,771.59	-531.34	-48.09	-528.88	0.45	-0.12	-2.28
4,915.00	10.99	178.74	4,863.88	-549.21	-48.32	-546.73	0.82	0.05	-4.28
5,009.00	10.59	179.86	4,956.21	-566.80	-48.10	-564.32	0.48	-0.43	1.19
5,104.00	10.16	179.35	5,049.66	-583.91	-47.98	-581.41	0.46	-0.45	-0.54
5,197.00	9.73	179.47	5,141.26	-599.97	-47.82	-597.47	0.46	-0.46	0.13
5,291.00	9.57	180.45	5,233.93	-615.73	-47.81	-613.21	0.24	-0.17	1.04

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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)
5,385.00	9.62	179.77	5,326.62	-631.40	-47.84	-628.86	0.13	0.05	-0.72
5,479.00	10.16	180.13	5,419.22	-647.54	-47.82	-645.00	0.58	0.57	0.38
5,645.00	10.18	180.64	5,582.61	-676.85	-48.02	-674.27	0.06	0.01	0.31
5,739.00	10.92	171.06	5,675.03	-693.96	-46.73	-691.41	2.02	0.79	-10.19
5,833.00	11.85	167.21	5,767.18	-712.16	-43.21	-709.75	1.28	0.99	-4.10
5,927.00	11.00	167.02	5,859.32	-730.32	-39.06	-728.06	0.91	-0.90	-0.20
6,021.00	10.53	165.65	5,951.66	-747.38	-34.92	-745.28	0.57	-0.50	-1.46
6,115.00	9.56	167.31	6,044.22	-763.31	-31.07	-761.36	1.08	-1.03	1.77
6,209.00	8.24	167.71	6,137.09	-777.51	-27.92	-775.68	1.41	-1.40	0.43
6,303.00	7.82	166.53	6,230.17	-790.31	-25.00	-788.59	0.48	-0.45	-1.26
6,397.00	8.10	165.36	6,323.26	-802.94	-21.84	-801.34	0.34	0.30	-1.24
6,491.00	8.15	161.14	6,416.32	-815.65	-18.01	-814.20	0.64	0.05	-4.49
6,585.00	8.01	159.83	6,509.38	-828.10	-13.60	-826.82	0.25	-0.15	-1.39
6,679.00	7.47	160.12	6,602.53	-840.00	-9.26	-838.89	0.58	-0.57	0.31
6,773.00	5.96	164.42	6,695.88	-850.44	-5.87	-849.47	1.69	-1.61	4.57
6,867.00	5.08	162.91	6,789.44	-859.12	-3.34	-858.24	0.95	-0.94	-1.61
6,961.00	5.00	156.15	6,883.00	-866.85	-0.46	-866.08	0.64	-0.09	-7.19
7,055.00	3.19	166.84	6,976.84	-873.14	1.79	-872.46	2.08	-1.93	11.37
7,149.00	2.58	179.97	7,070.72	-877.80	2.39	-877.14	0.95	-0.65	13.97
7,243.00	2.34	165.74	7,164.63	-881.78	2.86	-881.14	0.70	-0.26	-15.14
7,338.00	0.64	183.65	7,259.60	-884.19	3.31	-883.56	1.83	-1.79	18.85
7,432.00	0.50	68.82	7,353.60	-884.56	3.66	-883.95	1.03	-0.15	-122.16
7,526.00	0.55	86.37	7,447.59	-884.39	4.49	-883.81	0.18	0.05	18.67
7,620.00	0.89	108.80	7,541.59	-884.59	5.63	-884.06	0.46	0.36	23.86
7,714.00	1.11	117.24	7,635.57	-885.25	7.13	-884.78	0.28	0.23	8.98
7,808.00	0.96	144.07	7,729.56	-886.30	8.40	-885.88	0.53	-0.16	28.54
7,902.00	0.61	15.58	7,823.55	-886.46	9.00	-886.06	1.51	-0.37	-136.69
7,996.00	0.82	2.55	7,917.54	-885.30	9.16	-884.92	0.28	0.22	-13.86
8,090.00	0.83	22.96	8,011.54	-884.00	9.46	-883.63	0.31	0.01	21.71
8,184.00	1.05	19.57	8,105.52	-882.57	10.01	-882.22	0.24	0.23	-3.61
8,278.00	1.01	50.05	8,199.51	-881.22	10.94	-880.91	0.58	-0.04	32.43
8,372.00	0.69	93.45	8,293.50	-880.72	12.14	-880.47	0.74	-0.34	46.17
8,466.00	0.70	96.87	8,387.49	-880.83	13.27	-880.62	0.05	0.01	3.64
8,560.00	0.77	106.57	8,481.48	-881.08	14.45	-880.91	0.15	0.07	10.32
8,654.00	0.70	115.70	8,575.48	-881.50	15.57	-881.39	0.14	-0.07	9.71
8,748.00	0.66	104.31	8,669.47	-881.89	16.61	-881.82	0.15	-0.04	-12.12
8,842.00	0.46	132.77	8,763.47	-882.28	17.41	-882.24	0.36	-0.21	30.28
8,936.00	1.10	171.32	8,857.46	-883.43	17.83	-883.40	0.84	0.68	41.01
9,030.00	2.53	158.13	8,951.41	-886.24	18.74	-886.26	1.57	1.52	-14.03
9,124.00	3.41	156.20	9,045.28	-890.73	20.64	-890.81	0.94	0.94	-2.05
9,219.00	4.03	157.77	9,140.08	-896.40	23.04	-896.58	0.66	0.65	1.65
9,313.00	4.86	157.27	9,233.80	-903.13	25.83	-903.43	0.88	0.88	-0.53
9,407.00	3.44	170.13	9,327.55	-909.58	27.85	-909.96	1.80	-1.51	13.68
9,501.00	3.54	210.59	9,421.39	-914.86	26.86	-915.19	2.57	0.11	43.04

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9,595.00	4.68	219.11	9,515.15	-920.33	22.96	-920.49	1.37	1.21	9.06
9,689.00	3.90	222.18	9,608.88	-925.68	18.40	-925.64	0.86	-0.83	3.27
9,783.00	2.15	251.69	9,702.75	-928.60	14.57	-928.41	2.43	-1.86	31.39
9,877.00	1.09	272.49	9,796.71	-929.12	12.01	-928.81	1.27	-1.13	22.13
9,971.00	1.36	333.42	9,890.70	-928.08	10.61	-927.72	1.34	0.29	64.82
10,065.00	1.57	346.34	9,984.67	-925.83	9.81	-925.44	0.42	0.22	13.74
10,159.00	1.40	351.61	10,078.63	-923.44	9.34	-923.04	0.23	-0.18	5.61
10,253.00	0.68	26.29	10,172.62	-921.81	9.42	-921.40	0.98	-0.77	36.89
10,348.00	1.13	8.14	10,267.61	-920.38	9.80	-919.99	0.56	0.47	-19.11
10,442.00	1.40	3.37	10,361.58	-918.31	10.00	-917.93	0.31	0.29	-5.07
10,536.00	1.72	359.00	10,455.55	-915.76	10.04	-915.38	0.36	0.34	-4.65
KOP									
10,630.00	3.41	337.67	10,549.45	-911.76	8.96	-911.34	2.03	1.80	-22.69
10,683.00	4.84	338.69	10,602.32	-908.22	7.55	-907.75	2.70	2.70	1.92
10,742.00	6.21	341.43	10,661.04	-902.87	5.62	-902.33	2.36	2.32	4.64
10,789.00	12.46	341.34	10,707.39	-895.65	3.19	-895.01	13.30	13.30	-0.19
10,836.00	18.35	345.89	10,752.69	-883.66	-0.24	-882.89	12.78	12.53	9.68
10,883.00	24.35	341.75	10,796.44	-867.27	-5.08	-866.31	13.16	12.77	-8.81
10,930.00	28.59	339.57	10,838.51	-847.52	-12.04	-846.29	9.25	9.02	-4.64
10,977.00	32.76	336.74	10,878.93	-825.29	-21.00	-823.70	9.39	8.87	-6.02
11,024.00	37.96	334.79	10,917.24	-800.51	-32.18	-798.48	11.32	11.06	-4.15
11,071.00	40.95	333.71	10,953.53	-773.62	-45.16	-771.07	6.53	6.36	-2.30
11,118.00	45.36	334.83	10,987.81	-744.66	-59.11	-741.56	9.52	9.38	2.38
11,165.00	47.39	337.14	11,020.24	-713.58	-72.94	-709.94	5.60	4.32	4.91
11,212.00	50.04	339.98	11,051.25	-680.71	-85.83	-676.56	7.24	5.64	6.04
11,259.00	53.66	343.62	11,080.28	-645.61	-97.34	-641.00	9.82	7.70	7.74
11,306.00	56.76	344.30	11,107.10	-608.51	-108.00	-603.50	6.70	6.60	1.45
11,353.00	60.48	344.45	11,131.57	-569.88	-118.80	-564.45	7.92	7.91	0.32
11,400.00	64.69	346.51	11,153.20	-529.50	-129.25	-523.67	9.77	8.96	4.38
11,447.00	67.93	350.26	11,172.09	-487.35	-137.89	-481.20	10.04	6.89	7.98
11,494.00	70.64	355.15	11,188.72	-443.77	-143.45	-437.42	11.31	5.77	10.40
11,541.00	74.18	355.55	11,202.92	-399.12	-147.08	-392.66	7.58	7.53	0.85
11,588.00	80.61	354.80	11,213.17	-353.44	-150.94	-346.86	13.77	13.68	-1.60
11,609.18	83.91	354.06	11,216.03	-332.55	-152.98	-325.91	15.95	15.57	-3.49
LP (QB 13 State Com 602H)									
11,635.00	87.93	353.17	11,217.86	-306.96	-155.84	-300.22	15.95	15.58	-3.45
11,682.00	91.83	353.85	11,217.96	-260.27	-161.16	-253.35	8.42	8.30	1.45
11,713.00	92.34	354.21	11,216.83	-229.46	-164.38	-222.43	2.01	1.65	1.16
11,823.00	93.32	349.98	11,211.40	-120.67	-179.48	-113.10	3.94	0.89	-3.85
11,917.00	91.85	351.42	11,207.16	-28.00	-194.66	-19.89	2.19	-1.56	1.53
12,011.00	91.40	350.78	11,204.50	64.83	-209.19	73.47	0.83	-0.48	-0.68
12,105.00	91.04	352.61	11,202.49	157.82	-222.77	166.94	1.98	-0.38	1.95
12,199.00	91.22	354.65	11,200.64	251.21	-233.19	260.69	2.18	0.19	2.17

Company:	Centennial Resource Development, LLC	Local Co-ordinate Reference:	Well Queso Blanco 13 State Com 602H
Project:	Lea County, NM (NAD 83 - UTM Zone 13 - True)	TVD Reference:	3507.4' GE + 26.5' KB @ 3533.90usft
Site:	Queso Blanco 13 State Com	MD Reference:	3507.4' GE + 26.5' KB @ 3533.90usft
Well:	Queso Blanco 13 State Com 602H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.15 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)	
12,294.00	90.99	353.60	11,198.81	345.70	-242.92	355.49	1.13	-0.24	-1.11	
12,388.00	90.87	357.84	11,197.28	439.40	-249.93	449.41	4.51	-0.13	4.51	
12,482.00	91.25	358.34	11,195.54	533.33	-253.06	543.39	0.67	0.40	0.53	
12,576.00	91.20	358.32	11,193.53	627.27	-255.80	637.36	0.06	-0.05	-0.02	
12,670.00	91.29	358.32	11,191.49	721.21	-258.56	731.33	0.10	0.10	0.00	
12,764.00	91.34	357.31	11,189.33	815.11	-262.14	825.30	1.08	0.05	-1.07	
12,858.00	91.27	357.97	11,187.19	909.01	-266.01	919.28	0.71	-0.07	0.70	
12,953.00	91.27	357.65	11,185.09	1,003.92	-269.64	1,014.25	0.34	0.00	-0.34	
13,047.00	91.19	357.95	11,183.07	1,097.82	-273.24	1,108.23	0.33	-0.09	0.32	
13,141.00	91.04	359.18	11,181.24	1,191.78	-275.60	1,202.20	1.32	-0.16	1.31	
13,235.00	91.23	0.16	11,179.38	1,285.75	-276.14	1,296.12	1.06	0.20	1.04	
13,329.00	91.20	359.96	11,177.39	1,379.73	-276.04	1,390.01	0.22	-0.03	-0.21	
13,423.00	90.99	359.16	11,175.59	1,473.71	-276.76	1,483.94	0.88	-0.22	-0.85	
13,517.00	91.18	0.15	11,173.81	1,567.69	-277.33	1,577.86	1.07	0.20	1.05	
13,611.00	91.27	0.12	11,171.80	1,661.67	-277.11	1,671.75	0.10	0.10	-0.03	
13,705.00	91.19	359.32	11,169.78	1,755.65	-277.57	1,765.67	0.86	-0.09	-0.85	
13,799.00	91.57	0.03	11,167.52	1,849.62	-278.10	1,859.58	0.86	0.40	0.76	
13,893.00	91.60	359.69	11,164.92	1,943.58	-278.33	1,953.47	0.36	0.03	-0.36	
13,987.00	91.69	359.87	11,162.22	2,037.54	-278.69	2,047.36	0.21	0.10	0.19	
14,081.00	91.62	0.21	11,159.50	2,131.50	-278.62	2,141.24	0.37	-0.07	0.36	
14,175.00	91.93	359.79	11,156.59	2,225.46	-278.62	2,235.11	0.56	0.33	-0.45	
14,269.00	91.91	358.64	11,153.44	2,319.39	-279.91	2,329.02	1.22	-0.02	-1.22	
14,363.00	91.76	359.90	11,150.43	2,413.34	-281.11	2,422.93	1.35	-0.16	1.34	
14,457.00	91.79	0.29	11,147.52	2,507.29	-280.95	2,516.80	0.42	0.03	0.41	
14,551.00	91.76	0.64	11,144.61	2,601.24	-280.19	2,610.64	0.37	-0.03	0.37	
14,645.00	91.72	0.39	11,141.76	2,695.20	-279.35	2,704.48	0.27	-0.04	-0.27	
14,739.00	91.71	359.59	11,138.94	2,789.15	-279.36	2,798.35	0.85	-0.01	-0.85	
14,833.00	91.19	0.64	11,136.56	2,883.12	-279.17	2,892.23	1.25	-0.55	1.12	
14,927.00	91.36	358.55	11,134.47	2,977.09	-279.84	2,986.15	2.23	0.18	-2.22	
15,021.00	91.12	359.22	11,132.44	3,071.05	-281.67	3,080.10	0.76	-0.26	0.71	
15,115.00	91.62	359.35	11,130.19	3,165.01	-282.84	3,174.03	0.55	0.53	0.14	
15,209.00	91.32	358.76	11,127.78	3,258.97	-284.39	3,267.97	0.70	-0.32	-0.63	
15,303.00	91.23	359.01	11,125.69	3,352.93	-286.22	3,361.93	0.28	-0.10	0.27	
15,397.00	90.78	358.96	11,124.04	3,446.90	-287.88	3,455.89	0.48	-0.48	-0.05	
15,491.00	90.77	359.75	11,122.77	3,540.88	-288.94	3,549.83	0.84	-0.01	0.84	
15,585.00	90.98	1.04	11,121.33	3,634.87	-288.29	3,643.71	1.39	0.22	1.37	
15,678.00	90.92	2.22	11,119.79	3,727.82	-285.65	3,736.47	1.27	-0.06	1.27	
15,772.00	90.98	1.46	11,118.23	3,821.76	-282.63	3,830.20	0.81	0.06	-0.81	
15,866.00	90.91	2.51	11,116.68	3,915.68	-279.37	3,923.91	1.12	-0.07	1.12	
15,966.00	91.08	1.41	11,114.94	4,015.61	-275.95	4,023.61	1.11	0.17	-1.10	
16,005.81	91.01	1.61	11,114.22	4,055.40	-274.90	4,063.32	0.54	-0.18	0.51	
S13/12 Crossing										
16,054.00	90.92	1.86	11,113.41	4,103.56	-273.44	4,111.38	0.54	-0.18	0.51	
16,148.00	90.85	1.80	11,111.96	4,197.50	-270.44	4,205.11	0.10	-0.07	-0.06	

Company:	Centennial Resource Development, LLC	Local Co-ordinate Reference:	Well Queso Blanco 13 State Com 602H
Project:	Lea County, NM (NAD 83 - UTM Zone 13 - True)	TVD Reference:	3507.4' GE + 26.5' KB @ 3533.90usft
Site:	Queso Blanco 13 State Com	MD Reference:	3507.4' GE + 26.5' KB @ 3533.90usft
Well:	Queso Blanco 13 State Com 602H	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.15 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)
16,242.00	90.55	2.64	11,110.81	4,291.42	-266.80	4,298.80	0.95	-0.32	0.89
16,336.00	90.57	2.42	11,109.89	4,385.33	-262.65	4,392.45	0.23	0.02	-0.23
16,430.00	90.69	2.81	11,108.86	4,479.22	-258.36	4,486.09	0.43	0.13	0.41
16,524.00	90.81	2.01	11,107.63	4,573.13	-254.41	4,579.75	0.86	0.13	-0.85
16,618.00	90.53	0.52	11,106.53	4,667.10	-252.34	4,673.55	1.61	-0.30	-1.59
16,713.00	90.24	359.35	11,105.89	4,762.09	-252.44	4,768.47	1.27	-0.31	-1.23
16,807.00	90.10	1.16	11,105.61	4,856.09	-252.03	4,862.37	1.93	-0.15	1.93
16,901.00	90.84	359.60	11,104.84	4,950.08	-251.40	4,956.25	1.84	0.79	-1.66
16,995.00	90.04	359.65	11,104.12	5,044.08	-252.02	5,050.19	0.85	-0.85	0.05
17,089.00	90.29	0.13	11,103.84	5,138.07	-252.20	5,144.12	0.58	0.27	0.51
17,183.00	90.63	359.49	11,103.09	5,232.07	-252.51	5,238.04	0.77	0.36	-0.68
17,277.00	90.20	359.00	11,102.41	5,326.06	-253.75	5,332.00	0.69	-0.46	-0.52
17,371.00	90.36	0.59	11,101.95	5,420.05	-254.09	5,425.93	1.70	0.17	1.69
17,465.00	90.25	359.53	11,101.45	5,514.05	-253.99	5,519.84	1.13	-0.12	-1.13
17,559.00	90.39	359.13	11,100.92	5,608.04	-255.09	5,613.80	0.45	0.15	-0.43
17,653.00	90.13	359.28	11,100.50	5,702.03	-256.39	5,707.76	0.32	-0.28	0.16
17,747.00	90.32	358.81	11,100.13	5,796.02	-257.96	5,801.73	0.54	0.20	-0.50
17,841.00	90.50	358.47	11,099.46	5,889.99	-260.19	5,895.71	0.41	0.19	-0.36
17,935.00	90.36	359.07	11,098.75	5,983.97	-262.21	5,989.69	0.66	-0.15	0.64
18,029.00	90.55	358.86	11,098.00	6,077.95	-263.90	6,083.66	0.30	0.20	-0.22
18,123.00	89.65	359.13	11,097.84	6,171.93	-265.55	6,177.63	1.00	-0.96	0.29
18,218.00	90.57	358.85	11,097.66	6,266.92	-267.23	6,272.61	1.01	0.97	-0.29
18,311.00	90.66	358.89	11,096.66	6,359.89	-269.06	6,365.58	0.11	0.10	0.04
18,405.00	90.45	358.46	11,095.75	6,453.86	-271.23	6,459.56	0.51	-0.22	-0.46
18,499.00	89.36	358.85	11,095.90	6,547.83	-273.44	6,553.54	1.23	-1.16	0.41
18,539.68	89.36	358.85	11,096.36	6,588.51	-274.26	6,594.21	0.00	0.00	0.00
PBHL (QB 13 State Com 602H)									
18,550.00	89.36	358.85	11,096.47	6,598.82	-274.46	6,604.53	0.00	0.00	0.00
BHL									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
10,536.00	10,455.55	-915.76	10.04	KOP
16,005.81	11,114.22	4,055.40	-274.90	S13/12 Crossing
18,550.00	11,096.47	6,598.82	-274.46	BHL

Checked By: _____ Approved By: _____ Date: _____