



25 - 44692

HOBBS OCD

SEP 07 2018

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Centennial Resource Development, Inc.

Lea Co., NM (NAD83)
Cheddar 3BS Federal Com
1H

OH

Design: OH

Standard Survey Report

02 July, 2018



Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Site: Cheddar 3BS Federal Com
Well: 1H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well 1H
TVD Reference: KB=25' @ 3689.00usft (H&P 650)
MD Reference: KB=25' @ 3689.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14 Single User Db

Project	Lea Co., NM (NAD83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Cheddar 3BS Federal Com		
Site Position:		Northing:	514,921.80 usft
From:	Map	Easting:	735,487.16 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.414016
		Longitude:	-103.704182
		Grid Convergence:	0.34 °

Well	1H		
Well Position	+N/-S	0.00 usft	Northing: 514,921.80 usft
	+E/-W	0.00 usft	Easting: 735,487.16 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
		Latitude:	32.414016
		Longitude:	-103.704182
		Ground Level:	3,664.00 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
	IGRF2015	05/09/18	(°)
			6.93
		Dip Angle	(°)
		60.20	
		Field Strength	(nT)
		47,943.15604542	

Design	OH		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
		Direction	(°)
		58.82	

Survey Program	Date 07/02/18		
From	To	Survey (Wellbore)	Tool Name
(usft)	(usft)		
163.00	21,669.00	MWD Survey (OH)	MWD+IFR1+MS
			OWSG MWD + IFR1 + Multi-Station Correction

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
163.00	0.40	8.95	163.00	0.56	0.09	0.37	0.25	0.25	0.00
First MWD Survey									
247.00	0.90	65.95	246.99	1.12	0.74	1.21	0.90	0.60	67.86
332.00	1.30	123.95	331.98	0.85	2.15	2.28	1.32	0.47	68.24
419.00	0.80	47.95	418.97	0.71	3.42	3.29	1.55	-0.57	-87.36
608.00	1.20	311.95	607.95	2.92	2.92	4.01	0.80	0.21	-50.79
677.00	1.30	66.95	676.94	3.71	3.11	4.58	3.06	0.14	166.67
765.00	0.98	57.80	764.92	4.50	4.66	6.32	0.42	-0.36	-10.40
857.00	1.29	58.19	856.91	5.46	6.21	8.14	0.34	0.34	0.42
948.00	0.67	48.88	947.89	6.35	7.48	9.69	0.70	-0.68	-10.23

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1,040.00	0.40	19.50	1,039.89	7.01	7.99	10.47	0.41	-0.29	-31.93
1,131.00	0.28	68.44	1,130.89	7.39	8.30	10.93	0.33	-0.13	53.78
1,220.00	0.20	5.68	1,219.89	7.62	8.52	11.24	0.29	-0.09	-70.52
1,312.00	0.31	358.52	1,311.88	8.03	8.53	11.46	0.12	0.12	-7.78
1,403.00	0.19	14.36	1,402.88	8.43	8.56	11.69	0.15	-0.13	17.41
1,497.00	0.33	44.84	1,496.88	8.77	8.79	12.06	0.20	0.15	32.43
1,591.00	0.35	46.35	1,590.88	9.16	9.19	12.60	0.02	0.02	1.61
1,685.00	0.37	48.37	1,684.88	9.56	9.63	13.18	0.03	0.02	2.15
1,779.00	0.42	54.85	1,778.88	9.96	10.13	13.83	0.07	0.05	6.89
1,874.00	0.37	26.09	1,873.88	10.43	10.55	14.43	0.21	-0.05	-30.27
1,968.00	0.54	42.61	1,967.87	11.03	10.99	15.11	0.23	0.18	17.57
2,062.00	0.93	60.27	2,061.86	11.74	11.95	16.30	0.48	0.41	18.79
2,156.00	1.13	61.90	2,155.85	12.55	13.43	17.99	0.22	0.21	1.73
2,250.00	1.17	60.62	2,249.83	13.46	15.08	19.87	0.05	0.04	-1.36
2,344.00	1.30	61.73	2,343.81	14.44	16.86	21.90	0.14	0.14	1.18
2,438.00	1.24	58.50	2,437.79	15.47	18.66	23.98	0.10	-0.06	-3.44
2,532.00	1.41	60.49	2,531.76	16.57	20.54	26.15	0.19	0.18	2.12
2,626.00	1.09	66.74	2,625.74	17.50	22.37	28.19	0.37	-0.34	6.65
2,720.00	0.25	128.11	2,719.73	17.72	23.35	29.15	1.06	-0.89	65.29
2,814.00	0.66	213.08	2,813.73	17.14	23.21	28.74	0.73	0.44	90.39
2,908.00	0.48	186.21	2,907.72	16.30	22.88	28.01	0.34	-0.19	-28.59
3,002.00	0.29	156.78	3,001.72	15.69	22.93	27.74	0.29	-0.20	-31.31
3,096.00	0.51	165.29	3,095.72	15.06	23.13	27.59	0.24	0.23	9.05
3,191.00	0.77	227.62	3,190.71	14.22	22.76	26.84	0.74	0.27	65.61
3,285.00	0.92	239.30	3,284.70	13.41	21.65	25.47	0.24	0.16	12.43
3,379.00	0.45	191.04	3,378.70	12.67	20.93	24.46	0.75	-0.50	-51.34
3,473.00	0.63	110.33	3,472.70	12.12	21.34	24.54	0.76	0.19	-85.86
3,567.00	0.92	164.41	3,566.69	11.22	22.03	24.66	0.80	0.31	57.53
3,661.00	1.62	175.76	3,660.66	9.17	22.33	23.85	0.79	0.74	12.07
3,755.00	1.60	182.94	3,754.63	6.53	22.36	22.51	0.22	-0.02	7.64
3,849.00	0.68	169.02	3,848.61	4.67	22.40	21.58	1.01	-0.98	-14.81
3,942.00	0.26	91.87	3,941.60	4.12	22.72	21.57	0.72	-0.45	-82.96
4,036.00	0.08	230.61	4,035.60	4.07	22.88	21.68	0.35	-0.19	147.60
4,131.00	0.49	197.65	4,130.60	3.65	22.71	21.31	0.45	0.43	-34.69
4,225.00	0.73	145.57	4,224.60	2.77	22.92	21.04	0.61	0.26	-55.40
4,319.00	0.94	151.45	4,318.59	1.60	23.63	21.04	0.24	0.22	6.26
4,413.00	0.89	224.73	4,412.58	0.40	23.48	20.30	1.16	-0.05	77.96
4,431.00	0.92	228.10	4,430.58	0.21	23.28	20.02	0.34	0.17	18.72
4,601.00	1.10	250.95	4,600.55	-1.24	20.72	17.08	0.26	0.11	13.44
4,695.00	1.01	250.56	4,694.54	-1.81	19.09	15.39	0.10	-0.10	-0.41
4,789.00	0.88	242.74	4,788.52	-2.42	17.66	13.86	0.19	-0.14	-8.32
4,883.00	0.84	245.33	4,882.51	-3.03	16.39	12.46	0.06	-0.04	2.76
4,977.00	1.12	241.36	4,976.50	-3.76	14.96	10.85	0.31	0.30	-4.22

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5,071.00	0.97	258.83	5,070.48	-4.36	13.38	9.19	0.37	-0.16	18.59
5,165.00	1.02	251.26	5,164.47	-4.78	11.80	7.62	0.15	0.05	-8.05
5,259.00	1.13	260.58	5,258.45	-5.20	10.10	5.94	0.22	0.12	9.91
5,354.00	1.09	259.86	5,353.43	-5.51	8.28	4.23	0.04	-0.04	-0.76
5,448.00	1.10	267.46	5,447.42	-5.71	6.50	2.61	0.15	0.01	8.09
5,542.00	0.91	273.47	5,541.40	-5.70	4.85	1.20	0.23	-0.20	6.39
5,636.00	0.90	264.80	5,635.39	-5.73	3.37	-0.08	0.15	-0.01	-9.22
5,730.00	1.01	277.82	5,729.38	-5.68	1.82	-1.39	0.26	0.12	13.85
5,824.00	0.76	276.82	5,823.37	-5.49	0.38	-2.52	0.27	-0.27	-1.06
5,918.00	0.87	278.04	5,917.36	-5.32	-0.95	-3.56	0.12	0.12	1.30
6,012.00	0.72	301.39	6,011.35	-4.91	-2.16	-4.39	0.38	-0.16	24.84
6,106.00	0.75	302.40	6,105.34	-4.27	-3.18	-4.94	0.03	0.03	1.07
6,200.00	0.97	221.16	6,199.33	-4.54	-4.23	-5.97	1.20	0.23	-86.43
6,294.00	2.54	202.18	6,293.29	-7.07	-5.54	-8.40	1.76	1.67	-20.19
6,388.00	3.75	196.80	6,387.14	-11.94	-7.21	-12.35	1.32	1.29	-5.72
6,482.00	4.43	196.43	6,480.90	-18.37	-9.13	-17.32	0.72	0.72	-0.39
6,576.00	4.93	187.04	6,574.59	-25.86	-10.65	-22.50	0.97	0.53	-9.99
6,670.00	5.19	185.63	6,668.23	-34.10	-11.56	-27.55	0.31	0.28	-1.50
6,764.00	5.17	185.78	6,761.84	-42.54	-12.40	-32.64	0.03	-0.02	0.16
6,858.00	5.36	184.68	6,855.44	-51.13	-13.19	-37.76	0.23	0.20	-1.17
6,952.00	5.39	185.51	6,949.03	-59.90	-13.97	-42.97	0.09	0.03	0.88
7,046.00	5.42	186.65	7,042.61	-68.71	-14.91	-48.33	0.12	0.03	1.21
7,140.00	5.50	185.50	7,136.19	-77.60	-15.85	-53.74	0.14	0.09	-1.22
7,234.00	5.44	185.47	7,229.76	-86.52	-16.71	-59.09	0.06	-0.06	-0.03
7,328.00	5.55	192.20	7,323.33	-95.40	-18.10	-64.88	0.70	0.12	7.16
7,422.00	5.44	199.00	7,416.90	-104.06	-20.51	-71.42	0.70	-0.12	7.23
7,516.00	5.27	196.93	7,510.49	-112.40	-23.21	-78.06	0.27	-0.18	-2.20
7,610.00	5.32	200.08	7,604.09	-120.62	-25.97	-84.67	0.31	0.05	3.35
7,704.00	4.96	200.31	7,697.71	-128.52	-28.87	-91.25	0.38	-0.38	0.24
7,798.00	4.97	201.08	7,791.35	-136.13	-31.75	-97.65	0.07	0.01	0.82
7,892.00	5.11	203.09	7,884.99	-143.79	-34.86	-104.27	0.24	0.15	2.14
7,986.00	5.68	201.73	7,978.57	-151.96	-38.22	-111.38	0.62	0.61	-1.45
8,080.00	5.52	199.78	8,072.13	-160.53	-41.47	-118.60	0.26	-0.17	-2.07
8,174.00	4.90	194.14	8,165.74	-168.68	-43.98	-124.97	0.85	-0.66	-6.00
8,268.00	4.33	185.45	8,259.43	-176.11	-45.30	-129.94	0.96	-0.61	-9.24
8,362.00	3.22	186.04	8,353.23	-182.26	-45.92	-133.65	1.18	-1.18	0.63
8,456.00	2.72	187.12	8,447.10	-187.10	-46.47	-136.63	0.54	-0.53	1.15
8,550.00	2.35	200.86	8,541.01	-191.12	-47.43	-139.54	0.75	-0.39	14.62
8,645.00	1.23	217.65	8,635.96	-193.74	-48.75	-142.02	1.29	-1.18	17.67
8,739.00	1.02	224.38	8,729.95	-195.14	-49.95	-143.77	0.26	-0.22	7.16
8,833.00	0.51	188.55	8,823.94	-196.15	-50.60	-144.85	0.72	-0.54	-38.12
8,927.00	1.28	171.83	8,917.93	-197.61	-50.51	-145.53	0.86	0.82	-17.79
9,021.00	1.12	160.62	9,011.90	-199.51	-50.06	-146.13	0.30	-0.17	-11.93

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9,115.00	1.05	186.22	9,105.89	-201.23	-49.84	-146.84	0.52	-0.07	27.23
9,209.00	1.10	171.47	9,199.87	-202.98	-49.80	-147.71	0.30	0.05	-15.69
9,303.00	0.40	296.61	9,293.87	-203.73	-49.96	-148.23	1.46	-0.74	133.13
9,397.00	0.84	23.67	9,387.86	-202.95	-49.98	-147.84	0.97	0.47	92.62
9,491.00	1.04	358.80	9,481.85	-201.47	-49.72	-146.85	0.48	0.21	-26.46
9,585.00	1.23	305.39	9,575.83	-200.03	-50.56	-146.83	1.10	0.20	-56.82
9,678.00	0.71	304.14	9,668.82	-199.13	-51.85	-147.47	0.56	-0.56	-1.34
9,772.00	1.22	305.33	9,762.81	-198.22	-53.15	-148.11	0.54	0.54	1.27
9,866.00	0.54	336.97	9,856.80	-197.24	-54.14	-148.44	0.86	-0.72	33.66
9,960.00	0.16	9.46	9,950.79	-196.70	-54.29	-148.30	0.44	-0.40	34.56
10,053.00	0.48	129.96	10,043.79	-196.82	-53.97	-148.08	0.62	0.34	129.57
10,147.00	0.34	211.52	10,137.79	-197.31	-53.82	-148.21	0.58	-0.15	86.77
10,241.00	1.09	68.29	10,231.79	-197.22	-53.13	-147.57	1.47	0.80	-152.37
10,335.00	0.79	129.44	10,325.78	-197.30	-51.80	-146.47	1.05	-0.32	65.05
10,429.00	1.36	180.04	10,419.76	-198.83	-51.30	-146.84	1.12	0.61	53.83
10,523.00	1.55	206.30	10,513.73	-201.08	-51.87	-148.49	0.73	0.20	27.94
10,617.00	0.91	226.66	10,607.71	-202.73	-52.97	-150.29	0.81	-0.68	21.66
10,711.00	0.56	213.42	10,701.70	-203.63	-53.77	-151.43	0.41	-0.37	-14.09
10,805.00	0.95	228.12	10,795.69	-204.53	-54.60	-152.62	0.46	0.41	15.64
10,900.00	1.53	32.66	10,890.68	-203.99	-54.50	-152.25	2.59	0.61	173.20
10,990.00	1.56	17.70	10,980.65	-201.81	-53.48	-150.25	0.45	0.03	-16.62
11,082.00	1.05	6.11	11,072.63	-199.78	-53.01	-148.79	0.62	-0.55	-12.60
11,178.00	8.98	1.78	11,168.18	-191.40	-52.68	-144.18	8.26	8.26	-4.51
11,210.00	14.02	3.24	11,199.53	-185.03	-52.39	-140.63	15.78	15.75	4.56
11,241.00	18.13	3.25	11,229.31	-176.47	-51.90	-135.77	13.26	13.26	0.03
11,273.00	19.96	358.03	11,259.56	-166.03	-51.81	-130.29	7.81	5.72	-16.31
11,304.00	22.28	357.24	11,288.48	-154.88	-52.27	-124.91	7.54	7.48	-2.55
11,335.00	24.51	357.74	11,316.93	-142.58	-52.81	-119.00	7.22	7.19	1.61
11,367.00	26.11	358.14	11,345.86	-128.91	-53.30	-112.34	5.03	5.00	1.25
11,398.00	29.13	1.04	11,373.32	-114.54	-53.38	-104.98	10.66	9.74	9.35
11,430.00	32.94	1.82	11,400.74	-98.05	-52.97	-96.08	11.97	11.91	2.44
11,461.00	35.66	2.19	11,426.34	-80.60	-52.35	-86.52	8.80	8.77	1.19
11,508.00	40.80	2.61	11,463.25	-51.55	-51.13	-70.43	10.95	10.94	0.89
11,555.00	46.49	2.62	11,497.25	-19.15	-49.65	-52.39	12.11	12.11	0.02
11,603.00	50.89	2.64	11,528.92	16.85	-48.00	-32.33	9.17	9.17	0.04
11,650.00	54.94	2.82	11,557.26	54.30	-46.21	-11.42	8.62	8.62	0.38
11,697.00	57.98	3.94	11,583.23	93.40	-43.89	10.81	6.77	6.47	2.38
11,744.00	61.62	4.19	11,606.86	133.91	-41.01	34.25	7.76	7.74	0.53
11,791.00	66.03	3.23	11,627.59	175.99	-38.29	58.37	9.56	9.38	-2.04
11,838.00	70.76	1.94	11,644.89	219.63	-36.33	82.64	10.38	10.06	-2.74
11,885.00	73.55	1.47	11,659.29	264.34	-35.00	106.93	6.01	5.94	-1.00
11,932.00	79.32	1.13	11,670.31	310.00	-33.96	131.46	12.30	12.28	-0.72
11,979.00	82.95	0.74	11,677.56	356.43	-33.21	156.14	7.77	7.72	-0.83
12,055.00	88.88	0.99	11,682.97	432.19	-32.06	196.35	7.81	7.80	0.33

Company: Centennial Resource Development, Inc.
 Project: Lea Co., NM (NAD83)
 Site: Cheddar 3BS Federal Corn
 Well: 1H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well 1H
 TVD Reference: KB=25' @ 3689.00usft (H&P 650)
 MD Reference: KB=25' @ 3689.00usft (H&P 650)
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14 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)
12,149.00	90.36	0.75	11,683.59	526.18	-30.63	246.24	1.60	1.57	-0.26
12,243.00	91.85	0.54	11,681.78	620.15	-29.58	295.80	1.60	1.59	-0.22
12,337.00	92.02	359.35	11,678.60	714.09	-29.67	344.37	1.28	0.18	-1.27
12,431.00	91.54	358.41	11,675.68	808.03	-31.50	391.43	1.12	-0.51	-1.00
12,524.00	91.34	358.12	11,673.35	900.96	-34.32	437.14	0.38	-0.22	-0.31
12,618.00	93.06	357.70	11,669.74	994.82	-37.74	482.81	1.88	1.83	-0.45
12,713.00	91.74	358.00	11,665.76	1,089.67	-41.30	528.88	1.42	-1.39	0.32
12,807.00	91.26	358.25	11,663.30	1,183.59	-44.38	574.88	0.58	-0.51	0.27
12,900.00	90.45	358.48	11,661.91	1,276.54	-47.03	620.73	0.91	-0.87	0.25
12,994.00	89.50	357.90	11,661.95	1,370.49	-50.00	666.84	1.18	-1.01	-0.62
13,088.00	90.70	357.45	11,661.79	1,464.41	-53.81	712.21	1.36	1.28	-0.48
13,182.00	89.89	357.17	11,661.30	1,558.30	-58.23	757.05	0.91	-0.86	-0.30
13,276.00	89.66	357.72	11,661.67	1,652.21	-62.42	802.09	0.63	-0.24	0.59
13,370.00	90.73	357.16	11,661.35	1,746.11	-66.61	847.12	1.28	1.14	-0.60
13,464.00	92.22	357.10	11,658.93	1,839.96	-71.32	891.69	1.59	1.59	-0.06
13,558.00	91.34	358.02	11,656.01	1,933.83	-75.32	936.87	1.35	-0.94	0.98
13,652.00	90.14	358.50	11,654.80	2,027.78	-78.17	983.07	1.37	-1.28	0.51
13,747.00	88.09	0.20	11,656.27	2,122.75	-79.25	1,031.33	2.80	-2.16	1.79
13,802.00	88.88	0.03	11,657.72	2,177.73	-79.14	1,059.89	1.47	1.44	-0.31
13,841.00	89.33	359.92	11,658.33	2,216.73	-79.16	1,080.06	1.19	1.15	-0.28
13,888.00	90.06	359.74	11,658.58	2,263.72	-79.30	1,104.28	1.60	1.55	-0.38
13,934.00	90.64	359.52	11,658.30	2,309.72	-79.59	1,127.84	1.35	1.26	-0.48
13,982.00	89.72	359.61	11,658.15	2,357.72	-79.96	1,152.38	1.93	-1.92	0.19
14,028.00	88.60	0.32	11,658.82	2,403.71	-79.99	1,176.17	2.88	-2.43	1.54
14,076.00	89.30	0.30	11,659.70	2,451.71	-79.73	1,201.25	1.46	1.46	-0.04
14,123.00	88.35	1.52	11,660.67	2,498.69	-78.98	1,226.21	3.29	-2.02	2.60
14,217.00	89.52	1.25	11,662.41	2,592.64	-76.71	1,276.80	1.28	1.24	-0.29
14,311.00	88.96	1.52	11,663.66	2,686.61	-74.44	1,327.40	0.66	-0.60	0.29
14,405.00	88.40	1.69	11,665.83	2,780.54	-71.80	1,378.29	0.62	-0.60	0.18
14,499.00	89.36	1.06	11,667.66	2,874.50	-69.55	1,428.87	1.22	1.02	-0.67
14,593.00	88.21	1.03	11,669.66	2,968.46	-67.84	1,478.98	1.22	-1.22	-0.03
14,688.00	87.39	1.03	11,673.30	3,063.37	-66.13	1,529.59	0.86	-0.86	0.00
14,782.00	87.93	0.33	11,677.14	3,157.29	-65.02	1,579.17	0.94	0.57	-0.74
14,876.00	87.93	0.45	11,680.54	3,251.22	-64.38	1,628.36	0.13	0.00	0.13
14,970.00	88.91	359.84	11,683.13	3,345.19	-64.14	1,677.21	1.23	1.04	-0.65
15,064.00	88.49	0.14	11,685.26	3,439.16	-64.15	1,725.86	0.55	-0.45	0.32
15,157.00	89.50	359.38	11,686.89	3,532.14	-64.54	1,773.67	1.36	1.09	-0.82
15,252.00	89.41	359.68	11,687.80	3,627.14	-65.32	1,822.19	0.33	-0.09	0.32
15,346.00	90.64	358.93	11,687.76	3,721.13	-66.46	1,869.88	1.53	1.31	-0.80
15,440.00	90.42	359.53	11,686.89	3,815.11	-67.73	1,917.46	0.68	-0.23	0.64
15,534.00	91.37	358.87	11,685.42	3,909.09	-69.04	1,965.00	1.23	1.01	-0.70
15,628.00	91.09	358.83	11,683.40	4,003.05	-70.92	2,012.04	0.30	-0.30	-0.04
15,722.00	91.91	358.57	11,680.94	4,096.99	-73.06	2,058.85	0.92	0.87	-0.28

Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Site: Cheddar 3BS Federal Com
Well: 1H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well 1H
TVD Reference: KB=25' @ 3689.00usft (H&P 650)
MD Reference: KB=25' @ 3689.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14 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)
15,816.00	91.82	358.31	11,677.88	4,190.91	-75.61	2,105.29	0.29	-0.10	-0.28
15,863.00	92.05	358.41	11,676.29	4,237.86	-76.96	2,128.46	0.53	0.49	0.21
15,910.00	90.98	358.55	11,675.05	4,284.83	-78.20	2,151.71	2.30	-2.28	0.30
15,942.00	89.92	359.43	11,674.80	4,316.82	-78.77	2,167.79	4.31	-3.31	2.75
15,973.00	88.91	0.18	11,675.12	4,347.82	-78.87	2,183.75	4.06	-3.26	2.42
16,004.00	88.79	0.52	11,675.74	4,378.81	-78.69	2,199.96	1.16	-0.39	1.10
16,036.00	88.49	1.24	11,676.50	4,410.80	-78.19	2,216.94	2.44	-0.94	2.25
16,067.00	87.70	1.68	11,677.53	4,441.77	-77.40	2,233.66	2.92	-2.55	1.42
16,098.00	87.39	1.78	11,678.86	4,472.73	-76.47	2,250.49	1.05	-1.00	0.32
16,130.00	87.78	1.60	11,680.20	4,504.69	-75.53	2,267.84	1.34	1.22	-0.56
16,193.00	87.59	2.08	11,682.75	4,567.60	-73.51	2,302.14	0.82	-0.30	0.76
16,286.00	87.70	1.47	11,686.57	4,660.48	-70.63	2,352.70	0.67	0.12	-0.66
16,381.00	87.81	2.57	11,690.29	4,755.35	-67.28	2,404.68	1.16	0.12	1.16
16,475.00	88.49	1.94	11,693.33	4,849.22	-63.58	2,456.45	0.99	0.72	-0.67
16,569.00	89.55	1.35	11,694.93	4,943.17	-60.89	2,507.40	1.29	1.13	-0.63
16,663.00	90.53	1.07	11,694.87	5,037.15	-58.90	2,557.76	1.08	1.04	-0.30
16,757.00	90.34	1.12	11,694.16	5,131.13	-57.11	2,607.96	0.21	-0.20	0.05
16,851.00	90.39	1.07	11,693.56	5,225.11	-55.31	2,658.16	0.08	0.05	-0.05
16,945.00	91.43	0.66	11,692.06	5,319.09	-53.89	2,708.03	1.19	1.11	-0.44
17,039.00	91.09	0.74	11,690.00	5,413.06	-52.74	2,757.67	0.37	-0.36	0.09
17,133.00	90.06	0.40	11,689.05	5,507.04	-51.81	2,807.13	1.15	-1.10	-0.36
17,227.00	90.67	0.10	11,688.45	5,601.04	-51.40	2,856.16	0.72	0.65	-0.32
17,321.00	90.98	0.84	11,687.10	5,695.03	-50.63	2,905.48	0.85	0.33	0.79
17,415.00	90.36	1.53	11,686.00	5,789.00	-48.68	2,955.80	0.99	-0.66	0.73
17,509.00	90.90	0.66	11,684.97	5,882.98	-46.89	3,006.00	1.09	0.57	-0.93
17,603.00	90.20	0.15	11,684.07	5,976.97	-46.22	3,055.23	0.92	-0.74	-0.54
17,698.00	89.10	0.28	11,684.65	6,071.96	-45.86	3,104.72	1.17	-1.16	0.14
17,729.00	88.04	359.90	11,685.42	6,102.95	-45.82	3,120.81	3.63	-3.42	-1.23
17,792.00	88.41	1.09	11,687.37	6,165.92	-45.27	3,153.88	1.98	0.59	1.89
17,886.00	88.80	358.67	11,689.66	6,259.89	-45.47	3,202.36	2.61	0.41	-2.57
17,980.00	89.61	357.88	11,690.96	6,353.83	-48.30	3,248.59	1.20	0.86	-0.84
18,074.00	89.55	357.71	11,691.65	6,447.76	-51.92	3,294.13	0.19	-0.06	-0.18
18,168.00	88.96	357.28	11,692.88	6,541.66	-56.02	3,339.23	0.78	-0.63	-0.46
18,265.00	89.22	358.67	11,694.42	6,638.59	-59.45	3,386.49	1.46	0.27	1.43
18,359.00	89.75	0.10	11,695.26	6,732.57	-60.46	3,434.29	1.62	0.56	1.52
18,453.00	91.15	359.88	11,694.52	6,826.57	-60.48	3,482.95	1.51	1.49	-0.23
18,547.00	91.57	358.97	11,692.29	6,920.54	-61.42	3,530.79	1.07	0.45	-0.97
18,641.00	90.25	0.13	11,690.80	7,014.52	-62.16	3,578.83	1.87	-1.40	1.23
18,735.00	90.67	1.28	11,690.04	7,108.51	-61.00	3,628.48	1.30	0.45	1.22
18,828.00	91.04	0.25	11,688.66	7,201.49	-59.76	3,677.69	1.18	0.40	-1.11
18,922.00	90.34	359.93	11,687.52	7,295.48	-59.61	3,726.48	0.82	-0.74	-0.34
19,016.00	90.17	0.85	11,687.11	7,389.47	-58.97	3,775.70	1.00	-0.18	0.98
19,111.00	89.47	2.14	11,687.40	7,484.44	-56.49	3,826.99	1.54	-0.74	1.36

Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Site: Cheddar 3BS Federal Com
Well: 1H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well 1H
TVD Reference: KB=25' @ 3689.00usft (H&P 650)
MD Reference: KB=25' @ 3689.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14 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)
19,204.00	89.86	1.34	11,687.95	7,577.39	-53.67	3,877.53	0.96	0.42	-0.86
19,298.00	89.92	0.26	11,688.13	7,671.38	-52.36	3,927.32	1.15	0.06	-1.15
19,392.00	90.34	359.41	11,687.92	7,765.38	-52.63	3,975.76	1.01	0.45	-0.90
19,486.00	89.83	359.95	11,687.78	7,859.38	-53.15	4,023.98	0.79	-0.54	0.57
19,580.00	90.00	1.68	11,687.92	7,953.37	-51.81	4,073.79	1.85	0.18	1.84
19,674.00	90.17	0.83	11,687.78	8,047.34	-49.76	4,124.21	0.92	0.18	-0.90
19,768.00	89.69	1.14	11,687.89	8,141.33	-48.14	4,174.26	0.61	-0.51	0.33
19,862.00	90.03	1.06	11,688.12	8,235.31	-46.34	4,224.47	0.37	0.36	-0.09
19,956.00	90.22	0.46	11,687.92	8,329.30	-45.09	4,274.20	0.67	0.20	-0.64
20,050.00	90.00	1.10	11,687.73	8,423.29	-43.81	4,323.96	0.72	-0.23	0.68
20,144.00	90.67	0.31	11,687.19	8,517.28	-42.65	4,373.62	1.10	0.71	-0.84
20,238.00	91.09	359.51	11,685.74	8,611.27	-42.80	4,422.16	0.96	0.45	-0.85
20,332.00	91.63	359.50	11,683.51	8,705.24	-43.61	4,470.12	0.57	0.57	-0.01
20,380.00	90.90	359.96	11,682.45	8,753.23	-43.84	4,494.77	1.80	-1.52	0.96
20,426.00	91.15	359.78	11,681.63	8,799.22	-43.94	4,518.50	0.67	0.54	-0.39
20,520.00	90.11	0.32	11,680.59	8,893.21	-43.86	4,567.23	1.25	-1.11	0.57
20,565.00	89.55	1.00	11,680.73	8,938.21	-43.34	4,590.98	1.96	-1.24	1.51
20,613.00	89.72	0.63	11,681.03	8,986.20	-42.66	4,616.41	0.85	0.35	-0.77
20,658.00	89.66	0.20	11,681.28	9,031.20	-42.33	4,639.99	0.96	-0.13	-0.96
20,707.00	89.97	359.85	11,681.44	9,080.20	-42.31	4,665.38	0.95	0.63	-0.71
20,752.00	89.36	0.15	11,681.70	9,125.20	-42.31	4,688.68	1.51	-1.36	0.67
20,801.00	88.80	359.43	11,682.49	9,174.19	-42.49	4,713.89	1.86	-1.14	-1.47
20,895.00	89.58	359.10	11,683.81	9,268.17	-43.70	4,761.52	0.90	0.83	-0.35
20,940.00	89.86	358.84	11,684.03	9,313.17	-44.51	4,784.13	0.85	0.62	-0.58
20,989.00	90.25	358.77	11,683.99	9,362.15	-45.53	4,808.62	0.81	0.80	-0.14
21,083.00	89.08	357.77	11,684.54	9,456.11	-48.37	4,854.84	1.64	-1.24	-1.06
21,177.00	89.94	357.05	11,685.34	9,550.01	-52.61	4,899.82	1.19	0.91	-0.77
21,271.00	90.73	356.87	11,684.79	9,643.87	-57.60	4,944.16	0.86	0.84	-0.19
21,365.00	91.32	356.77	11,683.11	9,737.71	-62.81	4,988.29	0.64	0.63	-0.11
21,460.00	91.71	355.93	11,680.60	9,832.48	-68.86	5,032.19	0.97	0.41	-0.88
21,554.00	92.30	355.06	11,677.31	9,926.14	-76.24	5,074.37	1.12	0.63	-0.93
21,613.00	92.55	354.60	11,674.81	9,984.84	-81.55	5,100.22	0.89	0.42	-0.78
Last MWD Survey									
21,669.00	92.55	354.60	11,672.32	10,040.54	-86.81	5,124.55	0.00	0.00	0.00
PTB @ 21669'									

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
163.00	163.00	0.56	0.09	First MWD Survey
21,613.00	11,674.81	9,984.84	-81.55	Last MWD Survey
21,669.00	11,672.32	10,040.54	-86.81	PTB @ 21669'



Survey Report



Company: Centennial Resource Development, Inc.
Project: Lea Co., NM (NAD83)
Site: Cheddar 3BS Federal Com
Well: 1H
Wellbore: OH
Design: OH

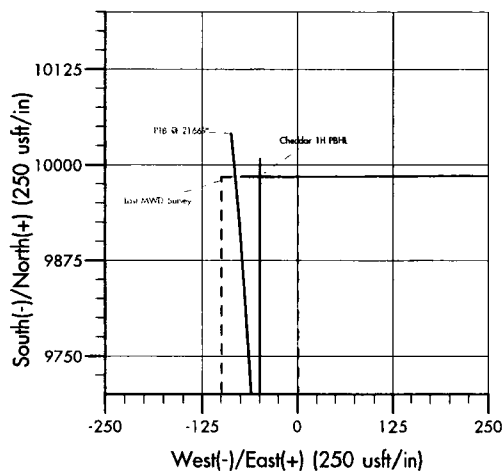
Local Co-ordinate Reference: Well 1H
TVD Reference: KB=25' @ 3689.00usft (H&P 650)
MD Reference: KB=25' @ 3689.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14 Single User Db

Checked By: _____	Approved By: _____	Date: _____
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WELL DETAILS: 1H						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.00	0.00	514921.80	735487.16	32.414016	-103.704182	

WELLBORE TARGET DETAILS (LAT/LONG)						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
Cheddar 1H PBHL	11668.15	9984.25	-49.59	524905.59	735378.80	Point
Cheddar 1H Target Line	11697.00	0.00	0.00	514921.80	735487.16	Rectangle (Sides: 10.00 W1.00)
Cheddar 1H FTP	11703.00	85.86	-40.11	515007.42	735446.55	Point

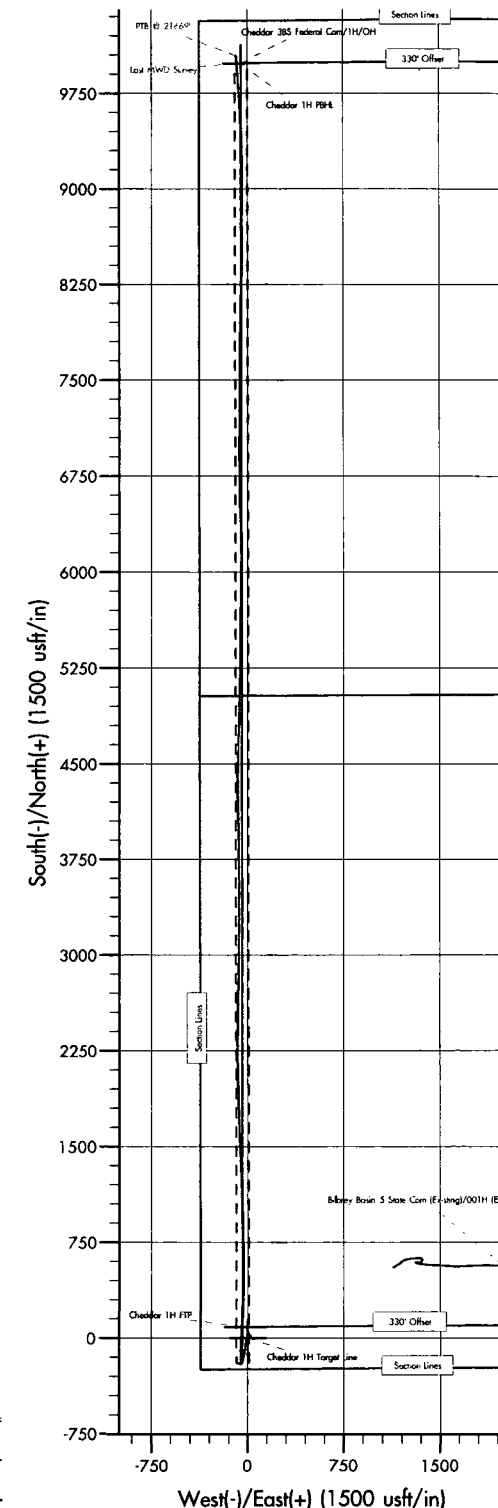
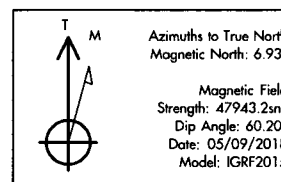
SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6197.00	0.00	0.00	6197.00	0.00	0.00	0.00	0.00	0.00	Build 1"/100'
6796.82	6.00	191.67	6795.72	-30.72	-6.35	1.00	191.67	-30.69	1396' Hold
8193.59	6.00	191.67	8184.85	-173.66	-35.87	0.00	0.00	-173.48	Drop 1.5"/100'
8593.47	0.00	0.00	8584.00	-194.14	-40.11	1.50	180.00	-193.94	2544' Hold
11138.19	0.00	0.00	11128.72	-194.14	-40.11	0.00	0.00	-193.94	Build 10"/100'
12040.19	90.20	359.95	11701.67	380.82	-40.64	10.00	359.95	381.01	9603' Hold
21643.69	90.20	359.95	11668.15	9984.25	-49.59	0.00	0.00	9984.38	TD at 21643.69



TARGET LINE: 11697' KBTVD @ 0' VS, INC = 90.05°

Formation Tops	
TVDPath	Formation
4596.00	Cherry Canyon
5508.00	Manzanita Lime
5753.00	Brushy Canyon
6847.13	Bone Spring Lime
8584.68	Leonard Shale
8750.68	First Bone Spring Sand
9587.68	Second Bone Spring Carb
10272.68	Second Bone Spring Sand
10744.68	Third Bone Spring Carb
11314.57	Third Bone Spring Sand
11677.25	Top of Window

CASING DETAILS	
No casing data is available	



Plan: Plan #2 (1H/OH)

Created By: [Name] Date: 8/24/2018