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District IV  
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Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-025-46345	<sup>2</sup> Pool Code 2205	<sup>3</sup> Pool Name Antelope Ridge; Bone Spring, North
<sup>4</sup> Property Code 321644	<sup>5</sup> Property Name DUCK HUNT 1 STATE COM	<sup>6</sup> Well Number 401H
<sup>7</sup> GRID No. 372165	<sup>8</sup> Operator Name CENTENNIAL RESOURCE PRODUCTION, LLC	<sup>9</sup> Elevation 3367.8'

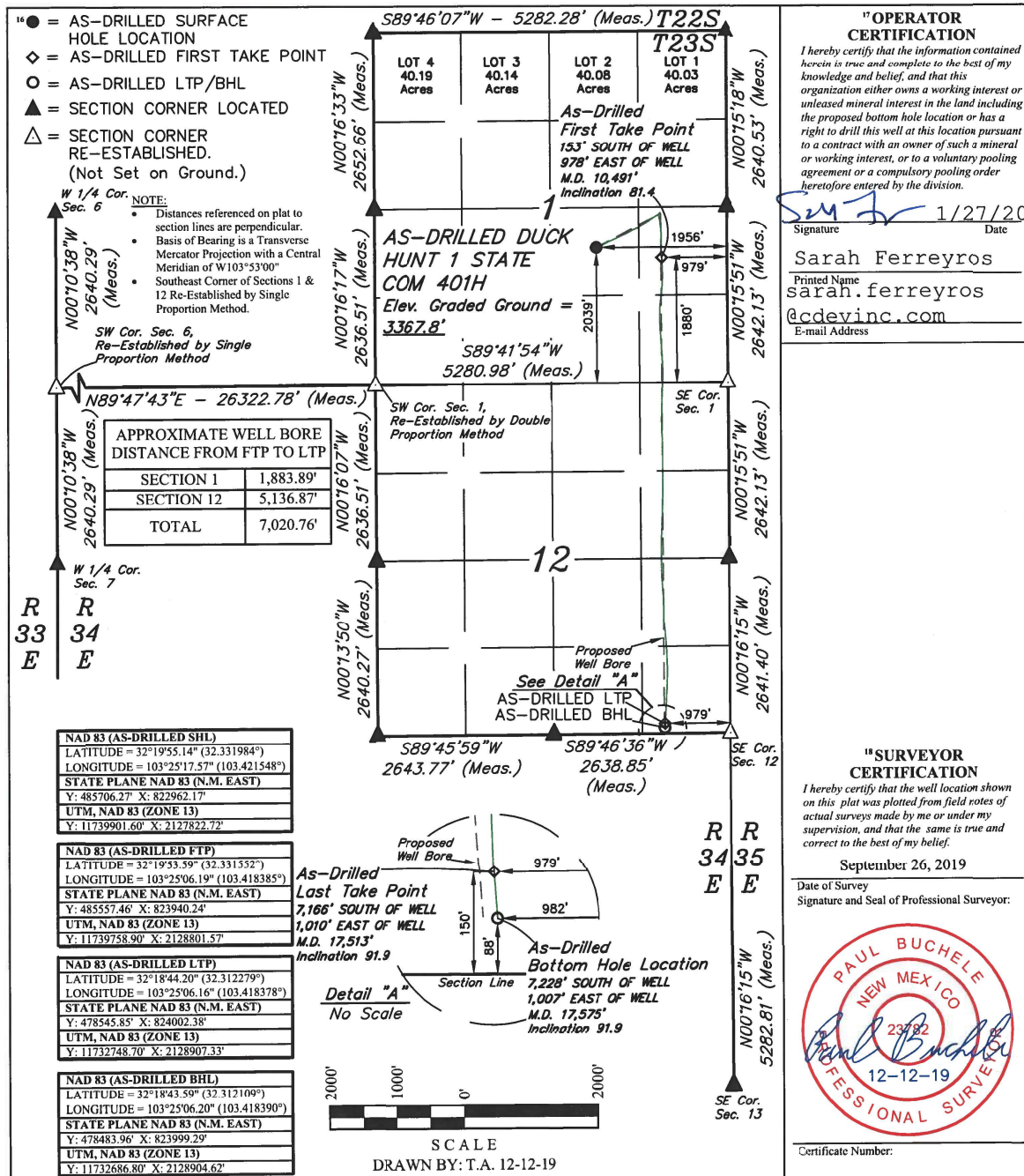
<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	1	23S	34E		2039	SOUTH	1956	EAST	LEA

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	12	23S	34E		88	SOUTH	982	EAST	LEA
<sup>12</sup> Dedicated Acres 240	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.						

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



Intent ☐ As Drilled ☒

API # <b>30-025-46345</b>			
Operator Name: Centennial Resource Production, LLC		Property Name: Duck Hunt 1 State Com	Well Number 401H

Kick Off Point (KOP)

UL I	Section 1	Township 23S	Range 34E	Lot I	Feet 1880	From N/S S	Feet 979	From E/W E	County Lea
Latitude 32.331552					Longitude -103.418385			NAD 83	

First Take Point (FTP)

UL I	Section 1	Township 23S	Range 34E	Lot I	Feet 1880	From N/S S	Feet 979	From E/W E	County Lea
Latitude 32.331552					Longitude -103.418385			NAD 83	

Last Take Point (LTP)

UL P	Section 12	Township 23S	Range 34E	Lot P	Feet 150	From N/S S	Feet 979	From E/W E	County Lea
Latitude 32.312279					Longitude -103.418378			NAD 83	

Is this well the defining well for the Horizontal Spacing Unit? ☐ No

Is this well an infill well? ☐ Yes

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API # <b>30-025-46344</b>			
Operator Name: Centennial Resource Prod, LLC		Property Name: Duck Hunt 1 State Com	Well Number 302H

KZ 06/29/2018

# **Centennial Resources Development, Inc.**

**Lea County, NM (NAD83 - UTM Zone 13)  
Duck Hunt 1 State Com  
401H**

**OH / 65516**

**Survey: Phoenix MWD Surveys**

## **Standard Survey Report**

**28 October, 2019**



# Survey Report

<b>Company:</b>	Centennial Resources Development, Inc.	<b>Local Co-ordinate Reference:</b>	Well 401H
<b>Project:</b>	Lea County, NM (NAD83 - UTM Zone 13)	<b>TVD Reference:</b>	RKB @ 3392.50usft (H&P 618)
<b>Site:</b>	Duck Hunt 1 State Com	<b>MD Reference:</b>	RKB @ 3392.50usft (H&P 618)
<b>Well:</b>	401H	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH / 65516	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Surveys (H&P 618)	<b>Database:</b>	USA Compass

<b>Project</b>	Lea County, NM (NAD83 - UTM Zone 13)		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Fee	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Zone 13N (108 W to 102 W)		Using geodetic scale factor

<b>Site</b>	Duck Hunt 1 State Com		
<b>Site Position:</b>		<b>Northing:</b>	11,740,221.78 usft
<b>From:</b>	Map	<b>Easting:</b>	2,129,032.10 usft
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "
		<b>Latitude:</b>	32.332815
		<b>Longitude:</b>	-103.417617
		<b>Grid Convergence:</b>	0.85 °

<b>Well</b>	401H		
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b> 11,739,902.52 usft
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b> 2,127,823.23 usft
<b>Position Uncertainty</b>	1.00 usft	<b>Wellhead Elevation:</b>	usft
		<b>Latitude:</b>	32.331986
		<b>Longitude:</b>	-103.421546
		<b>Ground Level:</b>	3,367.50 usft

<b>Wellbore</b>	OH / 65516		
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>
	User Defined	10/15/2019	6.63
			<b>Dip Angle (°)</b> 60.03
			<b>Field Strength (nT)</b> 47,867.00000000

<b>Design</b>	Surveys (H&P 618)		
<b>Audit Notes:</b>			
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL
		<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>
	0.00	0.00	0.00
			<b>Direction (°)</b> 172.37

<b>Survey Program</b>	<b>Date</b>	10/28/2019		
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
25.00	1,821.00	Wildfire MWD Surveys (OH / 65516)	MWD	OWSG MWD - Standard
1,921.00	17,575.00	Phoenix MWD Surveys (OH / 65516)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction

<b>Survey</b>									
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Vertical Section (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>
1,821.00	1.30	221.70	1,820.76	-4.14	-19.57	1.50	0.00	0.00	0.00
<b>Tie In</b>									
1,907.00	0.91	231.36	1,906.74	-5.29	-20.75	2.49	0.50	-0.45	11.23
<b>First Phoenix MWD Survey</b>									
2,002.00	0.87	230.38	2,001.73	-6.22	-21.89	3.26	0.05	-0.04	-1.03
2,097.00	0.96	237.82	2,096.72	-7.11	-23.12	3.97	0.16	0.09	7.83
2,191.00	0.97	108.89	2,190.71	-7.78	-23.04	4.66	1.85	0.01	-137.16
2,285.00	2.76	77.11	2,284.66	-7.54	-20.08	4.80	2.13	1.90	-33.81
2,379.00	4.27	71.59	2,378.48	-5.93	-14.55	3.94	1.64	1.61	-5.87



## Survey Report

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<b>Site:</b>	Duck Hunt 1 State Com	<b>MD Reference:</b>	RKB @ 3392.50usft (H&P 618)
<b>Well:</b>	401H	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH / 65516	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Surveys (H&P 618)	<b>Database:</b>	USA Compass

## 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)
2,474.00	5.34	67.21	2,473.15	-3.10	-7.12	2.12	1.19	1.13	-4.61
2,568.00	6.31	68.75	2,566.66	0.47	1.73	-0.24	1.05	1.03	1.64
2,663.00	7.47	69.29	2,660.97	4.55	12.37	-2.86	1.22	1.22	0.57
2,757.00	8.63	66.12	2,754.05	9.56	24.54	-6.22	1.32	1.23	-3.37
2,851.00	9.41	64.00	2,846.88	15.79	37.89	-10.62	0.90	0.83	-2.26
2,946.00	9.85	64.21	2,940.54	22.73	52.19	-15.60	0.46	0.46	0.22
3,040.00	10.08	63.24	3,033.13	29.93	66.77	-20.80	0.30	0.24	-1.03
3,134.00	11.13	64.29	3,125.52	37.57	82.29	-26.31	1.14	1.12	1.12
3,228.00	12.99	62.79	3,217.44	46.34	99.86	-32.67	2.01	1.98	-1.60
3,323.00	14.46	62.23	3,309.73	56.74	119.86	-40.33	1.55	1.55	-0.59
3,417.00	15.09	62.74	3,400.62	67.82	141.12	-48.48	0.68	0.67	0.54
3,512.00	15.56	63.40	3,492.24	79.19	163.50	-56.78	0.53	0.49	0.69
3,606.00	14.93	64.38	3,582.93	90.07	185.70	-64.61	0.72	-0.67	1.04
3,700.00	15.27	64.63	3,673.69	100.61	207.80	-72.13	0.37	0.36	0.27
3,795.00	15.38	64.68	3,765.31	111.35	230.49	-79.77	0.12	0.12	0.05
3,889.00	13.44	66.08	3,856.35	121.12	251.75	-86.62	2.10	-2.06	1.49
3,983.00	12.48	65.44	3,947.95	129.77	270.97	-92.64	1.03	-1.02	-0.68
4,078.00	11.56	66.67	4,040.87	137.80	289.05	-98.21	1.01	-0.97	1.29
4,172.00	10.78	66.40	4,133.09	145.05	305.75	-103.17	0.83	-0.83	-0.29
4,267.00	11.17	63.63	4,226.35	152.70	322.14	-108.57	0.69	0.41	-2.92
4,361.00	11.52	64.20	4,318.51	160.83	338.74	-114.43	0.39	0.37	0.61
4,456.00	12.33	64.54	4,411.46	169.32	356.44	-120.49	0.86	0.85	0.36
4,550.00	11.96	63.86	4,503.36	177.92	374.25	-126.65	0.42	-0.39	-0.72
4,645.00	14.27	62.54	4,595.87	187.66	393.48	-133.75	2.45	2.43	-1.39
4,739.00	14.32	64.02	4,686.96	198.09	414.21	-141.34	0.39	0.05	1.57
4,833.00	14.21	64.25	4,778.06	208.20	435.05	-148.59	0.13	-0.12	0.24
4,928.00	13.99	64.06	4,870.20	218.29	455.88	-155.82	0.24	-0.23	-0.20
5,022.00	13.86	63.81	4,961.44	228.23	476.20	-162.98	0.15	-0.14	-0.27
5,117.00	13.41	63.94	5,053.76	238.09	496.31	-170.08	0.47	-0.47	0.14
5,211.00	14.24	63.65	5,145.04	248.01	516.46	-177.24	0.89	0.88	-0.31
5,305.00	15.39	63.11	5,235.91	258.78	537.94	-185.06	1.23	1.22	-0.57
5,390.00	15.21	64.24	5,317.90	268.73	558.04	-192.25	0.41	-0.21	1.33
5,481.00	15.15	64.26	5,405.72	279.08	579.51	-199.66	0.07	-0.07	0.02
5,576.00	15.48	64.89	5,497.35	289.85	602.17	-207.33	0.39	0.35	0.66
5,670.00	15.77	64.89	5,587.88	300.60	625.09	-214.94	0.31	0.31	0.00
5,765.00	15.77	59.70	5,679.31	312.59	647.93	-223.79	1.48	0.00	-5.46
5,859.00	15.21	59.02	5,769.89	325.38	669.53	-233.60	0.63	-0.60	-0.72
5,953.00	14.65	59.09	5,860.72	337.83	690.30	-243.19	0.60	-0.60	0.07
6,048.00	13.95	58.96	5,952.77	349.91	710.42	-252.48	0.74	-0.74	-0.14
6,142.00	14.05	58.81	6,043.98	361.66	729.89	-261.55	0.11	0.11	-0.16
6,236.00	13.58	58.89	6,135.26	373.27	749.10	-270.50	0.50	-0.50	0.09
6,330.00	13.46	58.79	6,226.66	384.64	767.90	-279.28	0.13	-0.13	-0.11
6,425.00	13.62	57.23	6,319.02	396.43	786.77	-288.45	0.42	0.17	-1.64

# Survey Report

<b>Company:</b>	Centennial Resources Development, Inc.	<b>Local Co-ordinate Reference:</b>	Well 401H
<b>Project:</b>	Lea County, NM (NAD83 - UTM Zone 13)	<b>TVD Reference:</b>	RKB @ 3392.50usft (H&P 618)
<b>Site:</b>	Duck Hunt 1 State Com	<b>MD Reference:</b>	RKB @ 3392.50usft (H&P 618)
<b>Well:</b>	401H	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH / 65516	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Surveys (H&P 618)	<b>Database:</b>	USA Compass

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)	
6,519.00	12.05	54.51	6,410.67	408.11	804.06	-297.74	1.79	-1.67	-2.89	
6,614.00	11.94	54.56	6,503.59	419.57	820.14	-306.96	0.12	-0.12	0.05	
6,708.00	11.73	53.61	6,595.59	430.88	835.76	-316.09	0.30	-0.22	-1.01	
6,802.00	11.48	52.92	6,687.67	442.18	850.91	-325.29	0.30	-0.27	-0.73	
6,897.00	10.69	54.79	6,780.90	452.96	865.65	-334.02	0.91	-0.83	1.97	
6,991.00	9.78	58.79	6,873.40	462.13	879.61	-341.25	1.23	-0.97	4.26	
7,086.00	9.27	59.43	6,967.09	470.20	893.09	-347.46	0.55	-0.54	0.67	
7,180.00	8.88	58.85	7,059.92	477.80	905.82	-353.30	0.43	-0.41	-0.62	
7,274.00	7.04	60.25	7,153.01	484.42	917.03	-358.37	1.97	-1.96	1.49	
7,369.00	5.73	70.17	7,247.42	488.91	926.55	-361.56	1.80	-1.38	10.44	
7,463.00	5.51	69.89	7,340.97	492.06	935.20	-363.53	0.24	-0.23	-0.30	
7,557.00	3.71	67.81	7,434.66	494.76	942.26	-365.27	1.92	-1.91	-2.21	
7,652.00	2.95	66.56	7,529.50	496.89	947.34	-366.71	0.80	-0.80	-1.32	
7,746.00	2.57	66.55	7,623.39	498.69	951.50	-367.94	0.40	-0.40	-0.01	
7,841.00	2.16	46.66	7,718.31	500.77	954.75	-369.57	0.96	-0.43	-20.94	
7,935.00	2.00	34.18	7,812.25	503.34	956.96	-371.82	0.51	-0.17	-13.28	
8,029.00	1.92	19.24	7,906.19	506.19	958.40	-374.45	0.55	-0.09	-15.89	
8,123.00	1.83	3.65	8,000.14	509.17	959.02	-377.33	0.55	-0.10	-16.59	
8,218.00	2.06	359.29	8,095.09	512.39	959.09	-380.51	0.29	0.24	-4.59	
8,312.00	0.75	319.36	8,189.06	514.55	958.67	-382.70	1.66	-1.39	-42.48	
8,406.00	0.94	289.24	8,283.05	515.27	957.54	-383.57	0.51	0.20	-32.04	
8,500.00	1.06	282.44	8,377.04	515.71	955.97	-384.22	0.18	0.13	-7.23	
8,594.00	1.25	294.36	8,471.02	516.32	954.18	-385.06	0.32	0.20	12.68	
8,689.00	1.08	291.67	8,566.00	517.08	952.41	-386.04	0.19	-0.18	-2.83	
8,783.00	0.78	288.19	8,659.98	517.60	950.98	-386.76	0.32	-0.32	-3.70	
8,877.00	0.85	164.07	8,753.98	517.13	950.56	-386.34	1.53	0.07	-132.04	
8,971.00	0.52	223.24	8,847.97	516.15	950.46	-385.39	0.78	-0.35	62.95	
9,065.00	0.69	191.46	8,941.97	515.29	950.05	-384.58	0.39	0.18	-33.81	
9,160.00	1.22	194.12	9,036.96	513.75	949.69	-383.10	0.56	0.56	2.80	
9,254.00	1.93	192.61	9,130.92	511.23	949.10	-380.69	0.76	0.76	-1.61	
9,348.00	2.63	212.31	9,224.85	507.86	947.61	-377.55	1.11	0.74	20.96	
9,443.00	4.08	235.05	9,319.68	504.08	943.67	-374.33	2.04	1.53	23.94	
9,476.00	4.54	240.75	9,352.59	502.77	941.57	-373.31	1.90	1.39	17.27	
9,523.00	4.78	222.42	9,399.44	500.42	938.62	-371.36	3.20	0.51	-39.00	
9,570.00	9.09	188.78	9,446.10	495.30	936.74	-366.54	12.24	9.17	-71.57	
9,617.00	17.18	177.13	9,491.84	484.68	936.52	-356.04	18.03	17.21	-24.79	
9,665.00	19.96	173.59	9,537.34	469.45	937.79	-340.78	6.25	5.79	-7.38	
9,712.00	24.59	167.70	9,580.82	451.92	940.77	-323.00	10.93	9.85	-12.53	
9,759.00	27.49	168.56	9,623.05	431.73	945.00	-302.43	6.22	6.17	1.83	
9,806.00	33.09	170.41	9,663.62	408.42	949.29	-278.76	12.08	11.91	3.94	
9,854.00	36.67	172.33	9,702.99	381.29	953.39	-251.33	7.80	7.46	4.00	
9,901.00	40.63	175.08	9,739.69	352.12	956.58	-221.99	9.18	8.43	5.85	
9,948.00	44.05	175.09	9,774.43	320.59	959.29	-190.38	7.28	7.28	0.02	
9,995.00	47.49	174.62	9,807.21	287.05	962.31	-156.74	7.35	7.32	-1.00	

# Survey Report

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Survey									
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10,043.00	50.07	175.37	9,838.83	251.09	965.46	-120.67	5.50	5.38	1.56
10,090.00	52.28	176.85	9,868.30	214.56	967.94	-84.14	5.30	4.70	3.15
10,137.00	55.75	178.51	9,895.91	176.57	969.46	-46.28	7.92	7.38	3.53
10,184.00	61.19	180.19	9,920.48	136.52	969.90	-6.54	11.97	11.57	3.57
10,231.00	66.55	180.14	9,941.17	94.34	969.78	35.26	11.40	11.40	-0.11
10,278.00	72.09	178.62	9,957.77	50.39	970.27	78.88	12.17	11.79	-3.23
10,326.00	75.41	179.22	9,971.20	4.32	971.13	124.66	7.02	6.92	1.25
10,373.00	77.41	178.08	9,982.24	-41.34	972.21	170.06	4.86	4.26	-2.43
10,420.00	77.43	177.56	9,992.48	-87.18	973.95	215.73	1.08	0.04	-1.11
10,467.00	78.46	177.46	10,002.29	-133.10	975.95	261.50	2.20	2.19	-0.21
10,515.00	84.37	178.15	10,009.45	-180.51	977.77	308.73	12.39	12.31	1.44
10,610.00	90.44	177.80	10,013.75	-275.31	981.12	403.14	6.40	6.39	-0.37
10,667.00	90.70	177.32	10,013.19	-332.25	983.55	459.90	0.96	0.46	-0.84
10,762.00	90.86	180.50	10,011.89	-427.21	985.35	554.26	3.35	0.17	3.35
10,856.00	89.71	182.33	10,011.43	-521.18	983.03	647.09	2.30	-1.22	1.95
10,951.00	90.42	185.94	10,011.32	-615.91	976.18	740.07	3.87	0.75	3.80
11,045.00	90.86	187.28	10,010.27	-709.28	965.36	831.18	1.50	0.47	1.43
11,139.00	90.87	186.78	10,008.85	-802.56	953.86	922.11	0.53	0.01	-0.53
11,234.00	92.24	184.30	10,006.27	-897.08	944.69	1,014.56	2.98	1.44	-2.61
11,328.00	91.70	181.24	10,003.04	-990.90	940.15	1,106.95	3.30	-0.57	-3.25
11,422.00	90.25	178.43	10,001.44	-1,084.87	940.42	1,200.13	3.36	-1.54	-2.99
11,517.00	89.42	176.87	10,001.71	-1,179.79	944.32	1,294.73	1.86	-0.87	-1.64
11,611.00	89.04	177.01	10,002.98	-1,273.65	949.34	1,388.42	0.43	-0.40	0.15
11,706.00	89.14	176.74	10,004.48	-1,368.49	954.51	1,483.11	0.30	0.11	-0.28
11,800.00	88.48	175.67	10,006.44	-1,462.26	960.73	1,576.88	1.34	-0.70	-1.14
11,895.00	88.41	175.74	10,009.01	-1,556.96	967.85	1,671.68	0.10	-0.07	0.07
11,989.00	88.61	176.89	10,011.46	-1,650.73	973.89	1,765.43	1.24	0.21	1.22
12,083.00	88.53	178.14	10,013.80	-1,744.62	977.96	1,859.02	1.33	-0.09	1.33
12,178.00	90.27	179.80	10,014.80	-1,839.59	979.67	1,953.38	2.53	1.83	1.75
12,272.00	89.95	180.65	10,014.62	-1,933.59	979.30	2,046.49	0.97	-0.34	0.90
12,367.00	90.86	181.67	10,013.95	-2,028.56	977.38	2,140.37	1.44	0.96	1.07
12,461.00	92.72	182.71	10,011.01	-2,122.44	973.79	2,232.94	2.27	1.98	1.11
12,555.00	92.38	182.41	10,006.83	-2,216.25	969.59	2,325.37	0.48	-0.36	-0.32
12,650.00	92.47	182.26	10,002.81	-2,311.09	965.72	2,418.85	0.18	0.09	-0.16
12,744.00	92.41	181.81	9,998.81	-2,404.95	962.39	2,511.43	0.48	-0.06	-0.48
12,839.00	92.27	181.19	9,994.93	-2,499.83	959.90	2,605.15	0.67	-0.15	-0.65
12,934.00	92.24	180.38	9,991.19	-2,594.75	958.60	2,699.06	0.85	-0.03	-0.85
13,028.00	91.49	179.22	9,988.13	-2,688.70	958.93	2,792.22	1.47	-0.80	-1.23
13,122.00	89.85	177.69	9,987.03	-2,782.65	961.47	2,885.67	2.39	-1.74	-1.63
13,217.00	89.25	177.63	9,987.78	-2,877.57	965.35	2,980.27	0.63	-0.63	-0.06
13,311.00	89.36	178.78	9,988.92	-2,971.51	968.29	3,073.77	1.23	0.12	1.22
13,405.00	88.98	180.10	9,990.28	-3,065.50	969.21	3,167.04	1.46	-0.40	1.40
13,498.00	89.65	180.86	9,991.39	-3,158.49	968.43	3,259.11	1.09	0.72	0.82



## Survey Report

<b>Company:</b>	Centennial Resources Development, Inc.	<b>Local Co-ordinate Reference:</b>	Well 401H
<b>Project:</b>	Lea County, NM (NAD83 - UTM Zone 13)	<b>TVD Reference:</b>	RKB @ 3392.50usft (H&P 618)
<b>Site:</b>	Duck Hunt 1 State Com	<b>MD Reference:</b>	RKB @ 3392.50usft (H&P 618)
<b>Well:</b>	401H	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH / 65516	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Surveys (H&P 618)	<b>Database:</b>	USA Compass

## 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)
13,592.00	89.96	180.62	9,991.71	-3,252.48	967.22	3,352.10	0.42	0.33	-0.26
13,686.00	88.34	179.80	9,993.11	-3,346.46	966.87	3,445.21	1.93	-1.72	-0.87
13,780.00	88.70	180.22	9,995.53	-3,440.43	966.85	3,538.34	0.59	0.38	0.45
13,875.00	89.61	180.47	9,996.94	-3,535.42	966.28	3,632.41	0.99	0.96	0.26
13,969.00	89.21	180.80	9,997.90	-3,629.41	965.24	3,725.43	0.55	-0.43	0.35
14,063.00	88.79	180.50	9,999.54	-3,723.39	964.17	3,818.44	0.55	-0.45	-0.32
14,158.00	89.41	181.27	10,001.04	-3,818.36	962.71	3,912.38	1.04	0.65	0.81
14,252.00	88.94	181.92	10,002.39	-3,912.32	960.09	4,005.15	0.85	-0.50	0.69
14,346.00	88.99	182.38	10,004.09	-4,006.23	956.56	4,097.77	0.49	0.05	0.49
14,440.00	89.11	182.52	10,005.65	-4,100.13	952.55	4,190.31	0.20	0.13	0.15
14,535.00	89.11	181.96	10,007.12	-4,195.05	948.83	4,283.89	0.59	0.00	-0.59
14,629.00	89.02	181.87	10,008.66	-4,288.99	945.69	4,376.58	0.14	-0.10	-0.10
14,723.00	89.56	181.55	10,009.82	-4,382.94	942.89	4,469.32	0.67	0.57	-0.34
14,817.00	90.07	180.65	10,010.12	-4,476.92	941.08	4,562.23	1.10	0.54	-0.96
14,912.00	89.62	179.24	10,010.38	-4,571.91	941.18	4,656.40	1.56	-0.47	-1.43
15,006.00	88.90	179.65	10,011.59	-4,665.90	942.09	4,749.68	0.88	-0.77	0.44
15,100.00	89.92	180.63	10,012.56	-4,759.89	941.86	4,842.80	1.50	1.09	1.04
15,194.00	90.07	179.07	10,012.57	-4,853.89	942.10	4,936.00	1.67	0.16	-1.66
15,288.00	89.93	177.76	10,012.57	-4,947.85	944.70	5,029.48	1.40	-0.15	-1.39
15,382.00	89.47	176.85	10,013.06	-5,041.75	949.12	5,123.13	1.08	-0.49	-0.97
15,476.00	89.59	175.80	10,013.83	-5,135.55	955.15	5,216.90	1.12	0.13	-1.12
15,570.00	89.58	176.19	10,014.51	-5,229.32	961.71	5,310.71	0.42	-0.01	0.41
15,665.00	87.53	177.67	10,016.91	-5,324.14	966.80	5,405.37	2.66	-2.16	1.53
15,759.00	90.95	181.03	10,018.16	-5,418.10	967.86	5,498.64	5.10	3.64	3.57
15,853.00	91.26	178.42	10,016.34	-5,512.07	968.31	5,591.84	2.80	0.33	-2.73
15,947.00	89.92	176.39	10,015.38	-5,605.96	972.57	5,685.46	2.59	-1.43	-2.13
16,042.00	87.90	174.28	10,017.18	-5,700.62	980.29	5,780.31	3.07	-2.13	-2.22
16,136.00	88.07	174.79	10,020.49	-5,794.14	989.24	5,874.18	0.57	0.18	0.54
16,230.00	87.43	175.42	10,024.18	-5,887.72	997.25	5,968.00	0.96	-0.68	0.67
16,324.00	88.53	177.58	10,027.49	-5,981.48	1,002.99	6,061.69	2.58	1.17	2.30
16,355.00	87.91	177.36	10,028.46	-6,012.43	1,004.36	6,092.56	2.12	-2.00	-0.71
16,418.00	88.45	177.22	10,030.46	-6,075.33	1,007.33	6,155.29	0.89	0.86	-0.22
16,481.00	88.13	177.17	10,032.34	-6,138.23	1,010.42	6,218.04	0.51	-0.51	-0.06
16,513.00	88.04	177.02	10,033.41	-6,170.17	1,012.04	6,249.91	0.55	-0.28	-0.47
16,517.00	87.88	177.32	10,033.55	-6,174.16	1,012.23	6,253.90	8.50	-4.00	7.50
16,549.00	88.42	177.43	10,034.58	-6,206.11	1,013.70	6,285.76	1.72	1.69	0.34
16,580.00	88.54	177.37	10,035.40	-6,237.07	1,015.10	6,316.63	0.43	0.39	-0.19
16,612.00	89.07	177.99	10,036.07	-6,269.04	1,016.40	6,348.48	2.55	1.66	1.94
16,643.00	89.39	177.97	10,036.49	-6,300.01	1,017.49	6,379.33	1.03	1.03	-0.06
16,674.00	90.16	179.45	10,036.61	-6,331.00	1,018.19	6,410.14	5.38	2.48	4.77
16,706.00	90.58	180.84	10,036.40	-6,363.00	1,018.11	6,441.85	4.54	1.31	4.34
16,737.00	91.09	181.21	10,035.95	-6,393.99	1,017.55	6,472.49	2.03	1.65	1.19
16,769.00	91.66	180.82	10,035.18	-6,425.98	1,016.99	6,504.12	2.16	1.78	-1.22

# Survey Report

<b>Company:</b>	Centennial Resources Development, Inc.	<b>Local Co-ordinate Reference:</b>	Well 401H
<b>Project:</b>	Lea County, NM (NAD83 - UTM Zone 13)	<b>TVD Reference:</b>	RKB @ 3392.50usft (H&P 618)
<b>Site:</b>	Duck Hunt 1 State Com	<b>MD Reference:</b>	RKB @ 3392.50usft (H&P 618)
<b>Well:</b>	401H	<b>North Reference:</b>	True
<b>Wellbore:</b>	OH / 65516	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Surveys (H&P 618)	<b>Database:</b>	USA Compass

## 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)
16,800.00	91.95	181.49	10,034.21	-6,456.96	1,016.36	6,534.74	2.35	0.94	2.16
16,831.00	91.90	182.79	10,033.17	-6,487.92	1,015.21	6,565.27	4.19	-0.16	4.19
16,863.00	92.16	182.74	10,032.03	-6,519.86	1,013.66	6,596.72	0.83	0.81	-0.16
16,894.00	92.07	182.73	10,030.89	-6,550.80	1,012.19	6,627.20	0.29	-0.29	-0.03
16,957.00	92.37	182.27	10,028.45	-6,613.70	1,009.44	6,689.17	0.87	0.48	-0.73
16,989.00	92.89	182.02	10,026.98	-6,645.64	1,008.24	6,720.67	1.80	1.63	-0.78
17,020.00	92.18	181.94	10,025.61	-6,676.59	1,007.17	6,751.21	2.30	-2.29	-0.26
17,051.00	90.32	182.63	10,024.93	-6,707.56	1,005.94	6,781.73	6.40	-6.00	2.23
17,083.00	89.16	183.32	10,025.08	-6,739.51	1,004.28	6,813.19	4.22	-3.63	2.16
17,177.00	89.98	183.43	10,025.78	-6,833.35	998.74	6,905.45	0.88	0.87	0.12
17,271.00	90.98	183.22	10,024.99	-6,927.18	993.29	6,997.74	1.09	1.06	-0.22
17,366.00	91.96	183.24	10,022.56	-7,022.00	987.94	7,091.00	1.03	1.03	0.02
17,459.00	91.13	183.46	10,020.05	-7,114.81	982.51	7,182.27	0.92	-0.89	0.24
17,513.00	91.86	183.35	10,018.64	-7,168.70	979.30	7,235.25	1.37	1.35	-0.20
<b>Final Phoenix MWD Survey</b>									
17,575.00	91.86	183.35	10,016.63	-7,230.56	975.68	7,296.08	0.00	0.00	0.00
<b>Projection to TD</b>									

## Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,821.00	1,820.76	-4.14	-19.57	Tie In
1,907.00	1,906.74	-5.29	-20.75	First Phoenix MWD Survey
17,513.00	10,018.64	-7,168.70	979.30	Final Phoenix MWD Survey
17,575.00	10,016.63	-7,230.56	975.68	Projection to TD