



PHOENIX
TECHNOLOGY SERVICES

November 21, 2019

Oil Conservation Division
State of New Mexico
1625 N. French Drive
Hobbs, New Mexico 88240

Dear District 1 - Hobbs

Re: Centennial Resources
Duck Hunt 1 State Com 602H
Lea County, NM
API #30-025-46347
Job No. 65514

HOBBS OCD
DEC 10 2019
RECEIVED

Enclosed please find the Survey Data Certification, and the original Plat and one copy of the Survey Report performed on the above referenced well by Phoenix Technology Services, Inc. Other information required by your office is as follows:

Name & Title of Surveyor	Drain Hole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Carlos Hicks	602H	1,898	15,737	10/13/19	10/24/19	MWD

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Best Regards,

Brittany Carley

Brittany Carley
Operations Administrator

SURVEY DATA CERTIFICATION



PHOENIX
TECHNOLOGY SERVICES

Job #: 65514
 Client: Centennial Resources
 County & State: Lea County, New Mexico
 Well: Duck Hunt 1 State Com 602H
 API No: 30-025-46347
 Proposed Direction: 1747.42°

TIE-IN DATA

MD	TVD	INC	AZM	N/-S	E/-W	DATA SOURCE
1825.50 ft	1825.38 ft	1.70°	188.70°	7.18 S	6.03 W	Gyro
Data Source Company:						Centennial

SURVEY DATA

First Survey Date	First Survey Depth	INC	AZM
13-Oct-19	1,898 ft	1.86°	217.36°

Last Survey Date	Last Survey Depth	INC	AZM
24-Oct-19	15,737 ft	86.11°	183.43°

Survey Instrument Type
Phoenix MWD

Projected TD Survey Date	Projected TD Survey Depth	INC	AZM
24-Oct-19	15,779 ft	86.11°	183.43°

CORRECTION INFORMATION

Magnetic Declination Used	6.63 degrees
Grid Convergence Used	0.00 degrees

Corrected to True/Grid North
True North

Total Correction	6.63 degrees
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TO THE BEST OF MY KNOWLEDGE, I
 CERTIFY THIS SURVEY DATA TO BE TRUE
 AND CORRECT.

Carlos Hicks
 Signature
 24-Oct-19
 Date



PHOENIX
TECHNOLOGY SERVICES

Centennial Resources Development, Inc.

Lea County, NM (NAD83 - UTM Zone 13)
Duck Hunt 1 State Com
602H

OH / 65514

Survey: Phoenix MWD Surveys

Standard Survey Report

04 November, 2019





Survey Report



Company: Centennial Resources Development, Inc.
Project: Lea County, NM (NAD83 - UTM Zone 13)
Site: Duck Hunt 1 State Com
Well: 602H
Wellbore: OH / 65514
Design: Surveys (H&P 650)

Local Co-ordinate Reference: Well 602H
TVD Reference: RKB @ 3394.00usft (H&P 650)
MD Reference: RKB @ 3394.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: USA Compass

Project	Lea County, NM (NAD83 - UTM Zone 13)		
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)	Using geodetic scale factor	

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

Well	602H					
Well Position	+N/-S	0.00 usft	Northing:	11,740,201.91 usft	Latitude:	32.332811
	+E/-W	0.00 usft	Easting:	2,127,788.35 usft	Longitude:	-103.421645
Position Uncertainty		1.00 usft	Wellhead Elevation:	usft	Ground Level:	3,367.50 usft

Wellbore	OH / 65514				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	User Defined	10/13/2019	6.63	60.03	47,868.00000000

Design	Surveys (H&P 650)				
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	177.42	

Survey Program	Date 10/25/2019			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
26.50	1,825.50	Wildfire MWD Surveys (OH / 65514)	MWD	OWSG MWD - Standard
1,898.00	15,779.00	Phoenix MWD Surveys (OH / 65514)	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)
1,825.50	1.70	188.70	1,825.38	-7.18	-6.03	6.90	0.00	0.00	0.00
Tie In - OH									
1,898.00	1.86	217.36	1,897.85	-9.18	-6.91	8.86	1.23	0.22	39.53
First Phoenix MWD Survey - OH									
1,992.00	1.11	232.86	1,991.81	-10.94	-8.56	10.55	0.90	-0.80	16.49
2,086.00	0.66	7.48	2,085.81	-10.96	-9.21	10.53	1.75	-0.48	143.21
2,180.00	2.17	25.64	2,179.78	-8.82	-8.37	8.43	1.66	1.61	19.32
2,274.00	3.62	26.98	2,273.66	-4.57	-6.26	4.28	1.54	1.54	1.43
2,368.00	4.03	27.82	2,367.45	1.00	-3.37	-1.15	0.44	0.44	0.89



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MD Reference: RKB @ 3394.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: 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)
2,462.00	4.86	25.29	2,461.16	7.52	-0.12	-7.52	0.91	0.88	-2.69
2,650.00	6.58	24.41	2,648.22	24.53	7.73	-24.16	0.92	0.91	-0.47
2,743.00	7.46	29.29	2,740.52	34.65	12.89	-34.03	1.14	0.95	5.25
2,837.00	8.30	28.80	2,833.63	45.92	19.14	-45.01	0.90	0.89	-0.52
2,931.00	9.38	25.26	2,926.52	58.79	25.68	-57.58	1.29	1.15	-3.77
3,026.00	10.87	23.19	3,020.03	74.03	32.51	-72.49	1.61	1.57	-2.18
3,120.00	11.85	23.93	3,112.19	91.00	39.91	-89.11	1.05	1.04	0.79
3,214.00	12.44	25.41	3,204.09	108.96	48.17	-106.69	0.71	0.63	1.57
3,308.00	12.43	26.70	3,295.88	127.15	57.06	-124.45	0.30	-0.01	1.37
3,402.00	12.37	26.24	3,387.69	145.22	66.06	-142.10	0.12	-0.06	-0.49
3,496.00	11.28	22.76	3,479.70	162.73	74.07	-159.23	1.39	-1.16	-3.70
3,591.00	10.87	22.70	3,572.93	179.56	81.12	-175.72	0.43	-0.43	-0.06
3,685.00	10.87	24.14	3,665.24	195.82	88.16	-191.65	0.29	0.00	1.53
3,779.00	10.89	25.82	3,757.55	211.90	95.66	-207.38	0.34	0.02	1.79
3,873.00	10.29	27.34	3,849.95	227.35	103.38	-222.47	0.70	-0.64	1.62
3,967.00	9.84	27.69	3,942.50	241.92	110.97	-236.68	0.48	-0.48	0.37
4,061.00	9.77	26.50	4,035.13	256.17	118.26	-250.59	0.23	-0.07	-1.27
4,155.00	10.92	25.55	4,127.60	271.35	125.66	-265.41	1.24	1.22	-1.01
4,249.00	11.45	23.81	4,219.81	287.91	133.27	-281.62	0.67	0.56	-1.85
4,343.00	10.77	23.33	4,312.05	304.52	140.51	-297.88	0.73	-0.72	-0.51
4,437.00	10.10	22.41	4,404.50	320.20	147.13	-313.25	0.73	-0.71	-0.98
4,532.00	9.97	22.16	4,498.04	335.52	153.41	-328.27	0.14	-0.14	-0.26
4,626.00	10.72	23.80	4,590.51	351.05	160.01	-343.49	0.86	0.80	1.74
4,720.00	11.78	26.85	4,682.71	367.61	167.87	-359.68	1.29	1.13	3.24
4,814.00	12.22	28.52	4,774.65	384.91	176.95	-376.56	0.60	0.47	1.78
4,908.00	11.93	29.03	4,866.57	402.15	186.42	-393.35	0.33	-0.31	0.54
5,003.00	11.52	29.34	4,959.59	419.01	195.83	-409.77	0.44	-0.43	0.33
5,096.00	11.06	29.54	5,050.79	434.86	204.78	-425.20	0.50	-0.49	0.22
5,190.00	10.42	29.36	5,143.14	450.12	213.39	-440.05	0.68	-0.68	-0.19
5,284.00	10.83	27.00	5,235.53	465.39	221.57	-454.95	0.64	0.44	-2.51
5,378.00	11.03	25.97	5,327.83	481.35	229.52	-470.53	0.30	0.21	-1.10
5,458.00	10.91	25.26	5,406.37	495.07	236.10	-483.94	0.23	-0.15	-0.89
5,551.00	10.56	24.91	5,497.74	510.76	243.44	-499.28	0.38	-0.38	-0.38
5,646.00	10.33	25.44	5,591.16	526.35	250.77	-514.53	0.26	-0.24	0.56
5,740.00	9.95	25.92	5,683.70	541.26	257.94	-529.10	0.41	-0.40	0.51
5,834.00	10.43	25.44	5,776.21	556.25	265.14	-543.75	0.52	0.51	-0.51
5,928.00	10.59	25.14	5,868.64	571.75	272.47	-558.91	0.18	0.17	-0.32
6,022.00	9.96	25.09	5,961.13	586.94	279.58	-573.76	0.67	-0.67	-0.05
6,116.00	8.78	25.09	6,053.87	600.80	286.07	-587.31	1.26	-1.26	0.00
6,211.00	8.26	24.77	6,147.82	613.56	292.01	-599.79	0.55	-0.55	-0.34
6,305.00	8.04	24.23	6,240.87	625.68	297.53	-611.66	0.25	-0.23	-0.57
6,399.00	8.06	22.19	6,333.95	637.78	302.72	-623.51	0.30	0.02	-2.17
6,493.00	8.03	19.93	6,427.02	650.05	307.45	-635.56	0.34	-0.03	-2.40



Survey Report



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Well: 602H
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Survey

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6,587.00	7.09	17.45	6,520.21	661.76	311.43	-647.07	1.06	-1.00	-2.64
6,681.00	5.72	18.09	6,613.62	671.75	314.62	-656.90	1.46	-1.46	0.68
6,775.00	4.70	24.62	6,707.23	679.70	317.68	-664.71	1.25	-1.09	6.95
6,869.00	3.20	30.42	6,801.00	685.47	320.61	-670.34	1.65	-1.60	6.17
6,963.00	1.62	40.20	6,894.92	688.74	322.80	-673.51	1.73	-1.68	10.40
7,057.00	1.30	44.32	6,988.89	690.52	324.40	-675.22	0.36	-0.34	4.38
7,152.00	1.26	43.85	7,083.86	692.05	325.88	-676.67	0.04	-0.04	-0.49
7,246.00	0.39	22.77	7,177.85	693.09	326.72	-677.68	0.96	-0.93	-22.43
7,341.00	0.20	272.68	7,272.85	693.39	326.68	-677.98	0.52	-0.20	-115.88
7,434.00	0.24	303.95	7,365.85	693.51	326.35	-678.11	0.13	0.04	33.62
7,528.00	0.24	256.52	7,459.85	693.57	326.00	-678.19	0.21	0.00	-50.46
7,623.00	0.28	208.06	7,554.85	693.32	325.70	-677.96	0.23	0.04	-51.01
7,717.00	0.50	244.96	7,648.85	692.94	325.22	-677.60	0.34	0.23	39.26
7,811.00	0.66	255.69	7,742.84	692.64	324.32	-677.34	0.21	0.17	11.41
7,905.00	0.72	266.48	7,836.83	692.47	323.21	-677.22	0.15	0.06	11.48
7,999.00	0.89	276.08	7,930.83	692.51	321.89	-677.32	0.23	0.18	10.21
8,093.00	1.09	279.62	8,024.81	692.73	320.28	-677.62	0.22	0.21	3.77
8,187.00	1.18	306.19	8,118.79	693.46	318.62	-678.41	0.56	0.10	28.27
8,281.00	1.10	2.53	8,212.78	694.93	317.88	-679.92	1.15	-0.09	59.94
8,375.00	1.18	71.32	8,306.76	696.14	318.84	-681.08	1.37	0.09	73.18
8,469.00	1.53	92.17	8,400.74	696.40	321.01	-681.25	0.64	0.37	22.18
8,562.00	1.37	87.35	8,493.71	696.41	323.36	-681.15	0.22	-0.17	-5.18
8,656.00	1.23	80.85	8,587.68	696.62	325.48	-681.26	0.22	-0.15	-6.91
8,750.00	0.98	82.99	8,681.67	696.88	327.27	-681.44	0.27	-0.27	2.28
8,844.00	0.79	84.18	8,775.65	697.04	328.71	-681.54	0.20	-0.20	1.27
8,938.00	0.68	64.70	8,869.65	697.35	329.86	-681.79	0.29	-0.12	-20.72
9,032.00	0.79	67.37	8,963.64	697.83	330.96	-682.23	0.12	0.12	2.84
9,127.00	0.85	55.03	9,058.63	698.49	332.15	-682.83	0.20	0.06	-12.99
9,220.00	0.67	65.22	9,151.62	699.11	333.20	-683.41	0.24	-0.19	10.96
9,314.00	0.76	92.37	9,245.61	699.32	334.33	-683.56	0.37	0.10	28.88
9,408.00	0.84	103.53	9,339.60	699.13	335.62	-683.31	0.19	0.09	11.87
9,502.00	0.58	135.19	9,433.60	698.63	336.62	-682.77	0.49	-0.28	33.68
9,597.00	1.89	157.47	9,528.57	696.84	337.56	-680.94	1.44	1.38	23.45
9,691.00	1.65	143.95	9,622.53	694.32	338.95	-678.36	0.51	-0.26	-14.38
9,785.00	1.22	120.59	9,716.50	692.71	340.61	-676.68	0.76	-0.46	-24.85
9,879.00	1.07	130.11	9,810.48	691.64	342.14	-675.54	0.26	-0.16	10.13
9,974.00	1.02	141.50	9,905.47	690.41	343.35	-674.25	0.22	-0.05	11.99
10,068.00	1.03	157.53	9,999.45	688.97	344.19	-672.78	0.30	0.01	17.05
10,162.00	1.10	152.78	10,093.44	687.39	344.93	-671.16	0.12	0.07	-5.05
10,256.00	1.53	137.74	10,187.41	685.66	346.19	-669.38	0.58	0.46	-16.00
10,350.00	1.94	144.39	10,281.37	683.43	347.96	-667.08	0.49	0.44	7.07
10,444.00	2.54	142.04	10,375.30	680.50	350.16	-664.05	0.65	0.64	-2.50
10,539.00	2.81	144.36	10,470.19	676.95	352.82	-660.38	0.31	0.28	2.44
10,633.00	3.18	143.94	10,564.06	672.97	355.69	-656.27	0.39	0.39	-0.45



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10,727.00	3.58	149.55	10,657.90	668.33	358.71	-651.50	0.55	0.43	5.97
10,821.00	3.54	161.11	10,751.72	663.05	361.14	-646.12	0.76	-0.04	12.30
10,876.00	3.16	170.26	10,806.63	659.95	361.95	-642.99	1.19	-0.69	16.64
10,908.00	2.95	166.71	10,838.58	658.28	362.29	-641.31	0.88	-0.66	-11.09
10,955.00	4.85	170.91	10,885.47	655.14	362.88	-638.14	4.09	4.04	8.94
11,002.00	9.21	179.39	10,932.11	649.42	363.23	-632.41	9.51	9.28	18.04
11,049.00	16.06	184.69	10,977.94	639.16	362.74	-622.19	14.77	14.57	11.28
11,096.00	21.29	186.86	11,022.45	624.20	361.19	-607.31	11.22	11.13	4.62
11,143.00	23.89	187.21	11,065.84	606.28	358.97	-589.51	5.54	5.53	0.74
11,190.00	27.22	184.93	11,108.24	586.13	356.86	-569.47	7.39	7.09	-4.85
11,237.00	31.34	182.67	11,149.23	563.20	355.36	-546.63	9.07	8.77	-4.81
11,284.00	36.02	181.56	11,188.33	537.16	354.42	-520.66	10.04	9.96	-2.36
11,331.00	39.75	182.38	11,225.42	508.32	353.41	-491.90	8.01	7.94	1.74
11,378.00	44.63	182.04	11,260.23	476.79	352.20	-460.45	10.39	10.38	-0.72
11,425.00	50.25	180.36	11,292.01	442.19	351.50	-425.92	12.24	11.96	-3.57
11,472.00	53.13	179.46	11,321.14	405.32	351.56	-389.08	6.31	6.13	-1.91
11,519.00	56.35	175.85	11,348.27	366.99	353.16	-350.72	9.29	6.85	-7.68
11,566.00	61.59	175.06	11,372.49	326.86	356.36	-310.49	11.24	11.15	-1.68
11,613.00	68.76	176.28	11,392.22	284.35	359.56	-267.88	15.44	15.26	2.60
11,660.00	73.69	177.77	11,407.34	239.93	361.86	-223.39	10.91	10.49	3.17
11,707.00	77.08	177.46	11,419.20	194.49	363.75	-177.92	7.24	7.21	-0.66
11,754.00	79.93	178.22	11,428.56	148.47	365.49	-131.87	6.27	6.06	1.62
11,801.00	82.39	179.13	11,435.78	102.05	366.56	-85.44	5.57	5.23	1.94
11,848.00	88.18	178.25	11,439.65	55.24	367.63	-38.64	12.46	12.32	-1.87
11,879.00	89.44	178.31	11,440.29	24.26	368.56	-7.65	4.07	4.06	0.19
11,901.00	88.18	177.95	11,440.75	2.28	369.28	14.35	5.96	-5.73	-1.64
11,976.00	89.08	177.92	11,442.54	-72.65	371.98	89.32	1.20	1.20	-0.04
12,023.00	88.29	180.71	11,443.62	-119.63	372.54	136.28	6.17	-1.68	5.94
12,069.00	87.90	183.42	11,445.15	-165.57	370.89	182.10	5.95	-0.85	5.89
12,119.00	88.71	183.33	11,446.63	-215.46	367.95	231.81	1.63	1.62	-0.18
12,163.00	89.61	183.66	11,447.27	-259.37	365.26	275.55	2.18	2.05	0.75
12,257.00	89.50	183.69	11,448.00	-353.18	359.24	368.99	0.12	-0.12	0.03
12,351.00	89.64	182.82	11,448.71	-447.02	353.90	462.50	0.94	0.15	-0.93
12,445.00	89.89	182.25	11,449.09	-540.93	349.74	556.13	0.66	0.27	-0.61
12,539.00	89.52	181.55	11,449.58	-634.88	346.63	649.84	0.84	-0.39	-0.74
12,633.00	89.10	181.27	11,450.71	-728.84	344.32	743.60	0.54	-0.45	-0.30
12,728.00	89.10	181.42	11,452.20	-823.80	342.09	838.37	0.16	0.00	0.16
12,822.00	89.24	180.62	11,453.56	-917.78	340.41	932.17	0.86	0.15	-0.85
12,916.00	89.41	180.59	11,454.67	-1,011.77	339.42	1,026.02	0.18	0.18	-0.03
13,010.00	88.82	180.13	11,456.12	-1,105.75	338.83	1,119.88	0.80	-0.63	-0.49
13,104.00	89.41	179.91	11,457.57	-1,199.74	338.80	1,213.77	0.67	0.63	-0.23
13,198.00	90.11	180.20	11,457.97	-1,293.74	338.71	1,307.67	0.81	0.74	0.31
13,292.00	89.52	179.66	11,458.27	-1,387.74	338.82	1,401.58	0.85	-0.63	-0.57

Company:	Centennial Resources Development, Inc.	Local Co-ordinate Reference:	Well 602H
Project:	Lea County, NM (NAD83 - UTM Zone 13)	TVD Reference:	RKB @ 3394.00usft (H&P 650)
Site:	Duck Hunt 1 State Com	MD Reference:	RKB @ 3394.00usft (H&P 650)
Well:	602H	North Reference:	True
Wellbore:	OH / 65514	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (H&P 650)	Database:	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)
13,386.00	89.24	179.45	11,459.29	-1,481.73	339.55	1,495.51	0.37	-0.30	-0.22
13,480.00	89.64	178.62	11,460.21	-1,575.71	341.13	1,589.47	0.98	0.43	-0.88
13,574.00	89.47	177.81	11,460.94	-1,669.66	344.06	1,683.46	0.88	-0.18	-0.86
13,669.00	89.78	177.16	11,461.56	-1,764.57	348.23	1,778.45	0.76	0.33	-0.68
13,763.00	90.92	178.36	11,460.98	-1,858.49	351.90	1,872.45	1.76	1.21	1.28
13,825.00	93.78	178.93	11,458.44	-1,920.41	353.37	1,934.37	4.70	4.61	0.92
13,856.00	93.47	178.52	11,456.48	-1,951.34	354.06	1,965.30	1.66	-1.00	-1.32
13,951.00	90.25	176.83	11,453.40	-2,046.20	357.91	2,060.24	3.83	-3.39	-1.78
14,045.00	88.68	177.10	11,454.28	-2,140.06	362.89	2,154.23	1.69	-1.67	0.29
14,139.00	88.40	176.57	11,456.67	-2,233.89	368.08	2,248.19	0.64	-0.30	-0.56
14,193.00	86.98	176.31	11,458.85	-2,287.74	371.43	2,302.14	2.67	-2.63	-0.48
14,233.00	87.14	176.62	11,460.90	-2,327.61	373.89	2,342.08	0.87	0.40	0.78
14,280.00	87.23	176.88	11,463.21	-2,374.48	376.55	2,389.02	0.58	0.19	0.55
14,327.00	87.73	177.17	11,465.27	-2,421.37	378.99	2,435.97	1.23	1.06	0.62
14,374.00	88.24	178.12	11,466.93	-2,468.30	380.92	2,482.94	2.29	1.09	2.02
14,421.00	88.12	178.74	11,468.42	-2,515.26	382.20	2,529.91	1.34	-0.26	1.32
14,468.00	86.69	178.68	11,470.55	-2,562.19	383.26	2,576.85	3.05	-3.04	-0.13
14,515.00	86.67	179.35	11,473.27	-2,609.11	384.07	2,623.75	1.42	-0.04	1.43
14,562.00	87.00	180.25	11,475.86	-2,656.04	384.23	2,670.64	2.04	0.70	1.91
14,609.00	87.45	181.04	11,478.14	-2,702.98	383.70	2,717.51	1.93	0.96	1.68
14,656.00	87.34	182.14	11,480.28	-2,749.91	382.40	2,764.34	2.35	-0.23	2.34
14,703.00	87.59	182.95	11,482.36	-2,796.82	380.32	2,811.10	1.80	0.53	1.72
14,750.00	88.21	183.51	11,484.08	-2,843.71	377.67	2,857.83	1.78	1.32	1.19
14,797.00	88.26	183.77	11,485.53	-2,890.59	374.69	2,904.53	0.56	0.11	0.55
14,891.00	89.38	183.91	11,487.46	-2,984.36	368.39	2,997.92	1.20	1.19	0.15
14,985.00	89.41	183.44	11,488.45	-3,078.16	362.37	3,091.35	0.50	0.03	-0.50
15,079.00	88.07	183.60	11,490.52	-3,171.96	356.60	3,184.80	1.44	-1.43	0.17
15,173.00	88.68	183.82	11,493.19	-3,265.72	350.52	3,278.19	0.69	0.65	0.23
15,267.00	89.05	183.46	11,495.05	-3,359.52	344.55	3,371.62	0.55	0.39	-0.38
15,361.00	88.54	182.97	11,497.02	-3,453.35	339.28	3,465.12	0.75	-0.54	-0.52
15,456.00	88.94	182.39	11,499.11	-3,548.22	334.84	3,559.70	0.74	0.42	-0.61
15,549.00	88.01	181.90	11,501.59	-3,641.12	331.36	3,652.35	1.13	-1.00	-0.53
15,644.00	85.49	182.88	11,506.97	-3,735.88	327.41	3,746.83	2.85	-2.65	1.03
15,737.00	86.11	183.43	11,513.79	-3,828.48	322.30	3,839.11	0.89	0.67	0.59
Final Phoenix MWD Survey - OH									
15,779.00	86.11	183.43	11,516.63	-3,870.31	319.79	3,880.79	0.00	0.00	0.00
Projection to TD - OH									



Survey Report



Company: Centennial Resources Development, Inc.
Project: Lea County, NM (NAD83 - UTM Zone 13)
Site: Duck Hunt 1 State Com
Well: 602H
Wellbore: OH / 65514
Design: Surveys (H&P 650)

Local Co-ordinate Reference: Well 602H
TVD Reference: RKB @ 3394.00usft (H&P 650)
MD Reference: RKB @ 3394.00usft (H&P 650)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: USA Compass

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,825.50	1,825.38	-7.18	-6.03	Tie In - OH
1,898.00	1,897.85	-9.18	-6.91	First Phoenix MWD Survey - OH
15,737.00	11,513.79	-3,828.48	322.30	Final Phoenix MWD Survey - OH
15,779.00	11,516.63	-3,870.31	319.79	Projection to TD - OH