



PHOENIX
TECHNOLOGY SERVICES

November 18, 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 302H
Lea County, NM
API #30-025-46344
Job No. 65515

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	
Ryan Finley	302H	1,908	17,180	10/30/19	11/7/19	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

**Phoenix Technology Services
SURVEY DATA CERTIFICATION**



PHOENIX JOB NUMBER

65515

ENERGY COMPANY

Centennial Resources

WELL NAME

Duck Hunt 1 State Com 302H

COUNTY & STATE

Lea County, NM

API WELL NUMBER

30-025-46344

PROPOSED DIRECTION

179.98

TIE-IN DATA						
MEASURED DEPTH	VERTICAL DEPTH	INCLIN	AZIMUTH	N-S COORD	E-W COORD	DATA SOURCE
1,821. ft	1,820.78 ft	0.60	281.70	-8.68 ft	-21.77 ft	Surface

FIRST SURVEY DATE	FIRST SURVEY DEPTH	INCLIN	AZIMUTH
30-Oct-19	1,908.00 ft	0.84	221.21

SURVEY INSTRUMENT

TYPE

Phoenix MWD Velocity

LAST SURVEY DATE	LAST SURVEY DEPTH	INCLIN	AZIMUTH
7-Nov-19	17,180.00 ft	88.94	178.96

TO THE BEST OF MY KNOWLEDGE I
CERTIFY THIS SURVEY DATA TO BE
TRUE AND CORRECT.

PROJECTED TD SURVEY DATE	PROJECTED TD SURVEY DEPTH	INCLIN	AZIMUTH
7-Nov-19	17,217.00 ft	88.94	178.96

Ryan Finley

PRINT YOUR NAME ABOVE

Ryan Finley

SIGN YOUR NAME ABOVE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	6.62
DECLINATION OR GRID	DECLINATION

TRUE NORTH

MWD SUPERVISOR 1

Ryan Finley

DIRECTIONAL DRILLER 1

Scott Middleton

MWD SUPERVISOR 2

Blake Turner

DIRECTIONAL DRILLER 2

Carlo Jaictin

12329 Cutten Rd., Houston, Texas 777066 (713)337-0600 (Voice), (713)337-0599 (Fax)



PHOENIX
TECHNOLOGY SERVICES

Centennial Resources Development, Inc.

**Lea County, NM (NAD83 - UTM Zone 13)
Duck Hunt 1 State Com
302H**

OH / 65515

Survey: Phoenix MWD Surveys

Standard Survey Report

08 November, 2019





Survey Report



Company:	Centennial Resources Development, Inc.	Local Co-ordinate Reference:	Well 302H
Project:	Lea County, NM (NAD83 - UTM Zone 13)	TVD Reference:	RKB @ 3392.50usft (H&P 618)
Site:	Duck Hunt 1 State Com	MD Reference:	RKB @ 3392.50usft (H&P 618)
Well:	302H	North Reference:	True
Wellbore:	OH / 65515	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (H&P 618)	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 302H

Well Position	+N-S	0.00 usft	Northing:	11,739,902.03 usft	Latitude:	32.331986
	+E-W	0.00 usft	Easting:	2,127,793.24 usft	Longitude:	-103.421643
Position Uncertainty	1.00 usft		Wellhead Elevation:	usft	Ground Level:	3,367.50 usft

Wellbore OH / 65515

Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	User Defined	10/29/2019	6.62	60.03	47,863.00000000

Design Surveys (H&P 618)

Audit Notes:

Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
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Vertical Section:	Depth From (TVD)	+N-S	+E-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.00	0.00	0.00	177.32

Survey Program Date 11/8/2019

From	To	Survey (Wellbore)	Tool Name	Description
(usft)	(usft)			
25.00	1,821.00	Wildfire MWD Surveys (OH / 65515)	MWD	OWSG MWD - Standard
1,908.00	17,217.00	Phoenix MWD Surveys (OH / 65515)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction

Survey

Measured	Inclination	Azimuth	Vertical	+N-S	+E-W	Vertical	Dogleg	Buird	Turn
Depth	(°)	(°)	Depth	(usft)	(usft)	Section	Rate	Rate	Rate
(usft)			(usft)			(usft)	(°/100usft)	(°/100usft)	(°/100usft)
1,821.00	0.60	281.70	1,820.78	-8.68	-21.77	7.65	0.00	0.00	0.00
Tie In									
1,908.00	0.84	221.21	1,907.77	-9.07	-22.64	8.00	0.87	0.28	-69.53
First Phoenix MWD Survey									
2,002.00	0.48	46.08	2,001.77	-9.31	-22.80	8.24	1.40	-0.38	-186.31
2,097.00	2.23	48.23	2,096.74	-7.81	-21.14	6.81	1.84	1.84	2.26
2,191.00	3.68	40.66	2,190.61	-4.30	-17.81	3.46	1.59	1.54	-8.05
2,285.00	4.86	36.46	2,284.35	1.19	-13.48	-1.82	1.30	1.26	-4.47
2,380.00	6.26	35.05	2,378.90	8.67	-8.11	-9.04	1.48	1.47	-1.48



Survey Report



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Site:	Duck Hunt 1 State Com	MD Reference:	RKB @ 3392.50usft (H&P 618)
Well:	302H	North Reference:	True
Wellbore:	OH / 65515	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (H&P 618)	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)
2,474.00	7.12	37.64	2,472.26	17.48	-1.61	-17.53	0.97	0.91	2.76
2,568.00	6.97	37.29	2,565.55	26.63	5.40	-26.35	0.17	-0.16	-0.37
2,663.00	6.76	38.89	2,659.87	35.57	12.41	-34.95	0.30	-0.22	1.68
2,757.00	6.45	39.31	2,753.24	43.96	19.22	-43.01	0.33	-0.33	0.45
2,851.00	5.97	41.08	2,846.69	51.73	25.78	-50.47	0.55	-0.51	1.88
2,946.00	5.87	37.08	2,941.18	59.33	31.96	-57.77	0.45	-0.11	-4.21
3,040.00	5.76	36.11	3,034.70	66.97	37.63	-65.14	0.16	-0.12	-1.03
3,134.00	5.49	37.55	3,128.25	74.35	43.16	-72.25	0.32	-0.29	1.53
3,229.00	5.78	38.81	3,222.79	81.68	48.92	-79.30	0.33	0.31	1.33
3,323.00	5.96	43.15	3,316.30	88.93	55.23	-86.25	0.51	0.19	4.62
3,418.00	6.63	42.93	3,410.72	96.54	62.34	-93.52	0.71	0.71	-0.23
3,512.00	7.25	42.79	3,504.03	104.87	70.06	-101.48	0.66	0.66	-0.15
3,606.00	7.35	45.04	3,597.27	113.47	78.34	-109.68	0.32	0.11	2.39
3,701.00	7.27	38.38	3,691.50	122.48	86.38	-118.30	0.90	-0.08	-7.01
3,795.00	7.31	32.57	3,784.74	132.18	93.29	-127.67	0.79	0.04	-6.18
3,889.00	6.43	38.10	3,878.07	141.36	99.76	-136.54	1.17	-0.94	5.88
3,984.00	5.67	35.00	3,972.54	149.39	105.73	-144.28	0.87	-0.80	-3.26
4,078.00	4.88	33.93	4,066.14	156.51	110.63	-151.17	0.85	-0.84	-1.14
4,172.00	4.20	32.72	4,159.85	162.72	114.72	-157.18	0.73	-0.72	-1.29
4,267.00	4.46	38.41	4,254.57	168.55	118.89	-162.80	0.53	0.27	5.99
4,361.00	5.87	43.32	4,348.19	174.91	124.46	-168.90	1.57	1.50	5.22
4,456.00	7.84	34.44	4,442.51	183.79	131.46	-177.44	2.35	2.07	-9.35
4,550.00	8.75	29.58	4,535.53	195.29	138.62	-188.60	1.22	0.97	-5.17
4,645.00	7.88	29.84	4,629.53	207.23	145.42	-200.20	0.92	-0.92	0.27
4,739.00	7.42	30.37	4,722.69	218.05	151.70	-210.72	0.50	-0.49	0.56
4,833.00	7.08	31.55	4,815.94	228.22	157.80	-220.60	0.39	-0.36	1.26
4,928.00	6.71	32.86	4,910.25	237.88	163.87	-229.95	0.42	-0.39	1.38
5,022.00	6.33	33.52	5,003.64	246.81	169.71	-238.60	0.41	-0.40	0.70
5,117.00	6.12	32.72	5,098.08	255.44	175.34	-246.96	0.24	-0.22	-0.84
5,211.00	5.54	33.14	5,191.60	263.45	180.53	-254.72	0.62	-0.62	0.45
5,305.00	5.13	34.37	5,285.19	270.72	185.39	-261.75	0.45	-0.44	1.31
5,386.00	4.75	35.30	5,365.89	276.45	189.37	-267.29	0.48	-0.47	1.15
5,484.00	4.33	40.42	5,463.58	282.57	194.11	-273.19	0.60	-0.43	5.22
5,578.00	5.58	27.24	5,557.23	289.34	198.50	-279.74	1.79	1.33	-14.02
5,673.00	5.77	23.56	5,651.77	297.82	202.53	-288.03	0.43	0.20	-3.87
5,767.00	6.84	28.95	5,745.20	307.05	207.13	-297.03	1.30	1.14	5.73
5,861.00	6.01	27.96	5,838.60	316.30	212.14	-306.03	0.89	-0.88	-1.05
5,955.00	5.81	28.29	5,932.11	324.83	216.70	-314.35	0.22	-0.21	0.35
6,050.00	6.48	33.85	6,026.56	333.52	221.97	-322.78	0.94	0.71	5.85
6,144.00	5.90	33.70	6,120.01	341.94	227.60	-330.93	0.62	-0.62	-0.16
6,238.00	5.95	32.90	6,213.51	350.05	232.93	-338.78	0.10	0.05	-0.85
6,333.00	5.89	29.85	6,308.00	358.42	238.03	-346.89	0.34	-0.06	-3.21
6,427.00	6.29	31.56	6,401.47	366.99	243.13	-355.22	0.47	0.43	1.82

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Well:	302H	North Reference:	True
Wellbore:	OH / 65515	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (H&P 618)	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)
6,521.00	7.27	37.98	6,494.81	376.06	249.48	-363.99	1.32	1.04	6.83
6,616.00	7.16	39.34	6,589.06	385.38	256.94	-372.95	0.21	-0.12	1.43
6,710.00	7.05	38.05	6,682.34	394.45	264.20	-381.67	0.21	-0.12	-1.37
6,805.00	6.98	38.10	6,776.63	403.59	271.36	-390.46	0.07	-0.07	0.05
6,899.00	6.75	36.10	6,869.96	412.55	278.14	-399.09	0.35	-0.24	-2.13
6,994.00	6.64	35.72	6,964.31	421.52	284.64	-407.75	0.12	-0.12	-0.40
7,088.00	6.25	34.94	7,057.71	430.12	290.74	-416.06	0.43	-0.41	-0.83
7,182.00	6.01	35.30	7,151.18	438.33	296.51	-423.99	0.26	-0.26	0.38
7,277.00	5.73	35.31	7,245.68	446.26	302.13	-431.65	0.29	-0.29	0.01
7,371.00	5.40	35.23	7,339.23	453.70	307.39	-438.83	0.35	-0.35	-0.09
7,465.00	4.42	32.24	7,432.89	460.38	311.88	-445.29	1.08	-1.04	-3.18
7,560.00	3.59	30.62	7,527.66	466.04	315.34	-450.78	0.88	-0.87	-1.71
7,654.00	3.42	33.73	7,621.48	470.90	318.40	-455.50	0.27	-0.18	3.31
7,749.00	3.10	32.59	7,716.33	475.42	321.36	-459.88	0.34	-0.34	-1.20
7,843.00	2.93	25.56	7,810.20	479.73	323.76	-464.07	0.43	-0.18	-7.48
7,938.00	3.13	24.63	7,905.06	484.28	325.89	-468.51	0.22	0.21	-0.98
8,032.00	3.19	20.55	7,998.92	489.06	327.88	-473.20	0.25	0.06	-4.34
8,126.00	2.88	13.51	8,092.79	493.81	329.35	-477.87	0.52	-0.33	-7.49
8,220.00	2.62	5.95	8,186.68	498.24	330.12	-482.26	0.47	-0.28	-8.04
8,314.00	2.68	359.38	8,280.58	502.57	330.32	-486.58	0.33	0.06	-6.99
8,409.00	2.18	14.21	8,375.50	506.55	330.74	-490.53	0.84	-0.53	15.61
8,503.00	1.11	52.11	8,469.46	508.84	331.90	-492.76	1.57	-1.14	40.32
8,597.00	0.60	87.83	8,563.45	509.42	333.11	-493.28	0.76	-0.54	38.00
8,691.00	0.25	97.21	8,657.45	509.41	333.80	-493.24	0.38	-0.37	9.98
8,786.00	0.32	198.27	8,752.45	509.13	333.93	-492.96	0.47	0.07	106.38
8,880.00	0.29	261.05	8,846.44	508.84	333.61	-492.69	0.34	-0.03	66.79
8,974.00	0.82	151.81	8,940.44	508.21	333.69	-492.06	1.02	0.56	-116.21
9,068.00	1.97	176.21	9,034.41	506.01	334.12	-489.83	1.35	1.22	25.96
9,101.00	2.28	179.67	9,067.39	504.79	334.16	-488.61	1.02	0.94	10.48
9,193.00	6.90	172.99	9,159.07	497.47	334.84	-481.27	5.05	5.02	-7.26
9,240.00	13.96	170.44	9,205.26	489.07	336.13	-472.81	15.05	15.02	-5.43
9,288.00	11.10	166.83	9,252.12	478.85	338.15	-462.52	6.17	-5.96	-7.52
9,335.00	17.29	176.47	9,297.67	467.47	339.61	-451.07	14.05	13.17	20.51
9,382.00	22.91	181.45	9,341.79	451.33	339.81	-434.95	12.49	11.96	10.60
9,429.00	28.48	182.80	9,384.12	430.98	339.03	-414.66	11.92	11.85	2.87
9,476.00	32.11	182.37	9,424.70	407.30	337.96	-391.05	7.74	7.72	-0.91
9,523.00	36.48	179.73	9,463.52	380.83	337.51	-364.64	9.82	9.30	-5.62
9,571.00	41.11	178.50	9,500.92	350.77	337.99	-334.59	9.78	9.65	-2.56
9,618.00	47.65	176.94	9,534.50	317.95	339.33	-301.73	14.11	13.91	-3.32
9,665.00	52.75	177.10	9,564.57	281.90	341.20	-265.64	10.85	10.85	0.34
9,712.00	55.08	177.48	9,592.25	243.96	342.99	-227.66	5.00	4.96	0.81
9,760.00	58.31	177.23	9,618.61	203.89	344.85	-187.55	6.74	6.73	-0.52
9,807.00	61.72	177.63	9,642.09	163.23	346.67	-146.84	7.29	7.26	0.85
9,854.00	64.04	177.60	9,663.52	121.44	348.41	-105.01	4.94	4.94	-0.06

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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)	Bulld Rate (°/100usft)	Turn Rate (°/100usft)
9,901.00	67.06	178.48	9,682.97	78.68	349.87	-62.24	6.65	6.43	1.87
9,949.00	72.14	180.28	9,699.69	33.71	350.34	-17.29	11.15	10.58	3.75
9,996.00	76.05	180.25	9,712.57	-11.48	350.14	27.84	8.32	8.32	-0.06
10,043.00	79.10	179.53	9,722.68	-57.37	350.23	73.69	6.66	6.49	-1.53
10,090.00	82.75	180.46	9,730.10	-103.78	350.23	120.04	8.01	7.77	1.98
10,138.00	88.12	181.85	9,733.91	-151.60	349.26	167.76	11.55	11.19	2.90
10,232.00	89.30	181.12	9,736.03	-245.54	346.83	261.49	1.48	1.26	-0.78
10,295.00	89.65	181.03	9,736.61	-308.52	345.64	324.35	0.57	0.56	-0.14
10,390.00	90.10	181.14	9,736.82	-403.51	343.84	419.14	0.49	0.47	0.12
10,484.00	90.02	180.25	9,736.72	-497.50	342.70	512.98	0.95	-0.09	-0.95
10,578.00	89.13	178.54	9,737.41	-591.49	343.70	606.91	2.05	-0.95	-1.82
10,673.00	89.39	178.48	9,738.64	-686.45	346.17	701.88	0.28	0.27	-0.06
10,767.00	90.01	178.98	9,739.13	-780.42	348.25	795.85	0.85	0.66	0.53
10,862.00	90.47	179.80	9,738.74	-875.41	349.26	890.79	0.99	0.48	0.86
10,956.00	90.53	180.32	9,737.91	-969.41	349.16	984.68	0.56	0.06	0.55
11,051.00	90.38	180.61	9,737.16	-1,064.40	348.39	1,079.53	0.34	-0.16	0.31
11,145.00	90.35	181.33	9,736.56	-1,158.39	346.80	1,173.34	0.77	-0.03	0.77
11,239.00	90.32	181.76	9,736.01	-1,252.35	344.27	1,267.08	0.46	-0.03	0.46
11,334.00	90.16	182.36	9,735.61	-1,347.29	340.85	1,361.75	0.65	-0.17	0.63
11,428.00	90.29	182.47	9,735.25	-1,441.20	336.89	1,455.38	0.18	0.14	0.12
11,522.00	90.45	182.88	9,734.64	-1,535.10	332.50	1,548.97	0.47	0.17	0.44
11,617.00	90.30	182.65	9,734.02	-1,629.99	327.92	1,643.54	0.29	-0.16	-0.24
11,711.00	90.35	182.23	9,733.48	-1,723.90	323.92	1,737.16	0.45	0.05	-0.45
11,806.00	90.45	181.43	9,732.82	-1,818.85	320.89	1,831.86	0.85	0.11	-0.84
11,901.00	90.69	181.11	9,731.87	-1,913.82	318.78	1,926.63	0.42	0.25	-0.34
11,995.00	90.55	180.44	9,730.86	-2,007.81	317.51	2,020.46	0.73	-0.15	-0.71
12,089.00	90.47	179.82	9,730.02	-2,101.80	317.30	2,114.34	0.67	-0.09	-0.66
12,183.00	90.58	179.33	9,729.16	-2,195.79	317.99	2,208.26	0.53	0.12	-0.52
12,278.00	90.32	179.20	9,728.41	-2,290.78	319.21	2,303.20	0.31	-0.27	-0.14
12,372.00	89.90	178.51	9,728.23	-2,384.76	321.09	2,397.17	0.86	-0.45	-0.73
12,467.00	90.45	178.68	9,727.94	-2,479.73	323.42	2,492.14	0.61	0.58	0.18
12,561.00	89.95	177.76	9,727.61	-2,573.69	326.34	2,586.13	1.11	-0.53	-0.98
12,656.00	90.01	177.88	9,727.65	-2,668.62	329.95	2,681.13	0.14	0.06	0.13
12,750.00	89.93	178.06	9,727.70	-2,762.56	333.28	2,775.12	0.21	-0.09	0.19
12,845.00	90.16	179.06	9,727.62	-2,857.53	335.67	2,870.10	1.08	0.24	1.05
12,939.00	89.78	179.13	9,727.67	-2,951.52	337.15	2,964.05	0.41	-0.40	0.07
13,034.00	90.18	179.14	9,727.70	-3,046.51	338.59	3,059.00	0.42	0.42	0.01
13,128.00	89.44	178.88	9,728.02	-3,140.49	340.21	3,152.96	0.83	-0.79	-0.28
13,222.00	89.47	178.87	9,728.91	-3,234.47	342.06	3,246.92	0.03	0.03	-0.01
13,316.00	89.67	178.51	9,729.62	-3,328.44	344.21	3,340.89	0.44	0.21	-0.38
13,410.00	89.73	178.24	9,730.11	-3,422.40	346.87	3,434.88	0.29	0.06	-0.29
13,504.00	89.35	178.27	9,730.86	-3,516.35	349.74	3,528.86	0.41	-0.40	0.03
13,598.00	90.01	179.34	9,731.39	-3,610.33	351.70	3,622.83	1.34	0.70	1.14



Survey Report



Company:	Centennial Resources Development, Inc.	Local Co-ordinate Reference:	Well 302H
Project:	Lea County, NM (NAD83 - UTM Zone 13)	TVD Reference:	RKB @ 3392.50usft (H&P 618)
Site:	Duck Hunt 1 State Com	MD Reference:	RKB @ 3392.50usft (H&P 618)
Well:	302H	North Reference:	True
Wellbore:	OH / 65515	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (H&P 618)	Database:	USA Compass

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Bulld Rate (°/100usft)	Turn Rate (°/100usft)
13,692.00	88.50	179.60	9,732.61	-3,704.32	352.57	3,716.75	1.63	-1.61	0.28
13,786.00	88.88	180.40	9,734.76	-3,798.29	352.57	3,810.62	0.94	0.40	0.85
13,880.00	88.36	180.36	9,737.02	-3,892.26	351.94	3,904.46	0.55	-0.55	-0.04
13,974.00	88.96	180.06	9,739.22	-3,986.23	351.60	3,998.31	0.71	0.64	-0.32
14,069.00	89.27	180.13	9,740.69	-4,081.22	351.44	4,093.19	0.33	0.33	0.07
14,163.00	88.71	180.34	9,742.35	-4,175.21	351.05	4,187.05	0.64	-0.60	0.22
14,258.00	89.05	180.56	9,744.20	-4,270.19	350.31	4,281.89	0.43	0.36	0.23
14,352.00	88.87	181.06	9,745.91	-4,364.16	348.98	4,375.70	0.57	-0.19	0.53
14,446.00	88.70	181.48	9,747.90	-4,458.12	346.90	4,469.46	0.48	-0.18	0.45
14,540.00	89.04	181.94	9,749.76	-4,552.05	344.09	4,563.17	0.61	0.36	0.49
14,635.00	88.93	181.80	9,751.44	-4,646.99	340.99	4,657.85	0.19	-0.12	-0.15
14,729.00	89.59	183.21	9,752.65	-4,740.89	336.88	4,751.46	1.66	0.70	1.50
14,823.00	88.90	183.93	9,753.89	-4,834.70	331.03	4,844.89	1.06	-0.73	0.77
14,917.00	88.62	182.47	9,755.93	-4,928.53	325.79	4,938.37	1.58	-0.30	-1.55
15,011.00	89.01	180.99	9,757.87	-5,022.46	322.95	5,032.07	1.63	0.41	-1.57
15,105.00	89.21	180.44	9,759.33	-5,116.44	321.78	5,125.89	0.62	0.21	-0.59
15,200.00	88.99	180.07	9,760.82	-5,211.43	321.35	5,220.75	0.45	-0.23	-0.39
15,294.00	88.04	179.57	9,763.26	-5,305.39	321.65	5,314.63	1.14	-1.01	-0.53
15,388.00	89.04	178.96	9,765.65	-5,399.35	322.85	5,408.55	1.25	1.06	-0.65
15,482.00	88.30	178.92	9,767.83	-5,493.31	324.59	5,502.48	0.79	-0.79	-0.04
15,576.00	89.04	178.63	9,770.02	-5,587.27	326.60	5,596.43	0.85	0.79	-0.31
15,670.00	89.01	178.49	9,771.62	-5,681.22	328.96	5,690.39	0.15	-0.03	-0.15
15,764.00	88.91	178.40	9,773.32	-5,775.17	331.51	5,784.36	0.14	-0.11	-0.10
15,859.00	89.07	178.32	9,775.00	-5,870.12	334.23	5,879.33	0.19	0.17	-0.08
15,953.00	88.96	177.82	9,776.61	-5,964.05	337.40	5,973.30	0.54	-0.12	-0.53
16,047.00	88.45	178.15	9,778.74	-6,057.97	340.70	6,067.27	0.65	-0.54	0.35
16,142.00	88.54	178.48	9,781.23	-6,152.89	343.49	6,162.23	0.36	0.09	0.35
16,236.00	89.04	179.48	9,783.22	-6,246.86	345.17	6,256.16	1.19	0.53	1.06
16,330.00	88.33	180.00	9,785.37	-6,340.83	345.59	6,350.05	0.94	-0.76	0.55
16,424.00	88.59	180.34	9,787.90	-6,434.80	345.32	6,443.90	0.46	0.28	0.36
16,518.00	88.54	181.25	9,790.25	-6,528.76	344.01	6,537.70	0.97	-0.05	0.97
16,612.00	88.74	181.85	9,792.49	-6,622.69	341.47	6,631.42	0.67	0.21	0.64
16,706.00	88.82	182.05	9,794.49	-6,716.62	338.27	6,725.09	0.23	0.09	0.21
16,801.00	88.76	181.43	9,796.49	-6,811.55	335.39	6,819.79	0.66	-0.06	-0.65
16,895.00	88.50	181.08	9,798.74	-6,905.50	333.33	6,913.54	0.46	-0.28	-0.37
16,989.00	88.33	180.16	9,801.34	-6,999.46	332.31	7,007.34	0.99	-0.18	-0.98
17,083.00	88.59	179.26	9,803.87	-7,093.43	332.79	7,101.23	1.00	0.28	-0.96
17,180.00	88.94	178.96	9,805.96	-7,190.39	334.29	7,198.16	0.48	0.36	-0.31

Final Phoenix MWD Survey

17,217.00	88.94	178.96	9,806.64	-7,227.38	334.97	7,235.14	0.00	0.00	0.00
Projection to TD									



Survey Report



Company:	Centennial Resources Development, Inc.	Local Co-ordinate Reference:	Well 302H
Project:	Lea County, NM (NAD83 - UTM Zone 13)	TVD Reference:	RKB @ 3392.50usft (H&P 618)
Site:	Duck Hunt 1 State Com	MD Reference:	RKB @ 3392.50usft (H&P 618)
Well:	302H	North Reference:	True
Wellbore:	OH / 65515	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (H&P 618)	Database:	USA Compass

Survey Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,821.00	1,820.78	-8.68	-21.77	Tie In
1,908.00	1,907.77	-9.07	-22.64	First Phoenix MWD Survey
17,180.00	9,805.96	-7,190.39	334.29	Final Phoenix MWD Survey
17,217.00	9,806.65	-7,227.38	334.96	Projection to TD

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

AMENDED REPORT

1 API Number		2 Pool Code		3 Pool Name	
4 Property Code		5 Property Name DUCK HUNT 1 STATE COM			6 Well Number #302H
7 OGRID No.		8 Operator Name CENTENNIAL RESOURCE PRODUCTION, LLC			9 Elevation 3366.2'

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	1985	EAST	LEA

UL or lot no. O	Section 12	Township 23S	Range 34E	Lot Idn	Feet from the 100	North/South line SOUTH	Feet from the 1649	East/West line EAST	County LEA
¹² Dedicated Acres 240		¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ Order No.			

LINE TABLE

LINE	DIRECTION	LENGTH
L1	N33°28'15"E	602.66'
L2	S89°46'36"W	2638.65'

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature _____ Date _____

Printed Name _____

E-mail Address _____

"SURVEYOR CERTIFICATION"

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

November 08, 2018

Date of Survey _____
Signature and Seal of Professional Surveyor: _____

PAUL BUCHELE
NEW MEXICO
23/82
08-22-19
PROFESSIONAL SURVEYOR

Certificate Number: _____

NOTE:

- Distances referenced on plat to section lines are perpendicular.
- Basis of Bearing is a Transverse Mercator Projection with a Central Meridian of W103°53'00"
- Southeast Corner of Sections 1 & 12 Re-Established by Single Proportion Method.

NAD 83 (SURFACE HOLE LOCATION)

LATITUDE = 32°19'55.15" (32.331986°)
LONGITUDE = 103°25'17.91" (103.421643°)
STATE PLANE NAD 83 (N.M. EAST)
Y: 485706.89' X: 822932.69'
UTM, NAD 83 (ZONE 13)
Y: 11739902.03' X: 2127793.24'

NAD 83 (FIRST TAKE POINT)

LATITUDE = 32°20'00.11" (32.333364°)
LONGITUDE = 103°25'14.02" (103.420560°)
STATE PLANE NAD 83 (N.M. EAST)
Y: 486210.93' X: 823262.90'
UTM, NAD 83 (ZONE 13)
Y: 11740408.05' X: 2128120.26'

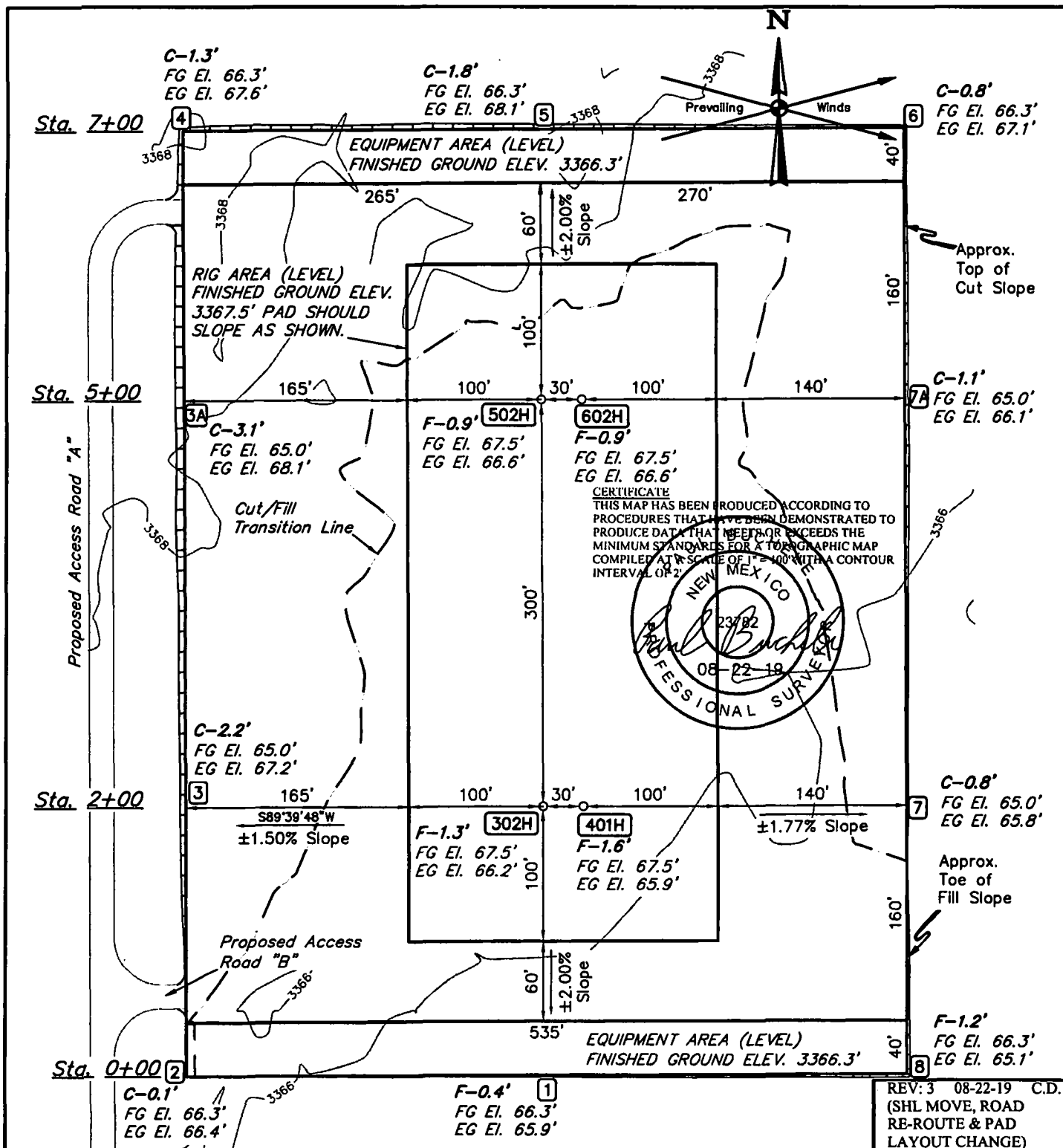
NAD 83 (LTP/BHL)

LATITUDE = 32°18'43.72" (32.312143°)
LONGITUDE = 103°25'13.98" (103.420549°)
STATE PLANE NAD 83 (N.M. EAST)
Y: 478490.78' X: 823332.07'
UTM, NAD 83 (ZONE 13)
Y: 11732689.47' X: 2128237.46'

SCALE

REV: 3 08-22-19 C.D. (SHL MOVE)

- = SURFACE HOLE LOCATION
- ◆ = FIRST TAKE POINT
- = LTP/BHL
- ▲ = SECTION CORNER LOCATED
- △ = SECTION CORNER RE-ESTABLISHED. (Not Set on Ground.)



NOTE: Earthwork Calculations Require Fill @ the Location Stakes For Balance. All Fill is to be Compacted to a Minimum of 95% of the Maximum Dry Density Obtained by AASHTO Method t-99.

NOTES:

- Contours shown at 2' intervals.
- Underground utilities shown on this sheet are for visualization purposes only, actual locations to be determined prior to construction.
- Cut/Fill slopes 2:1 (Typ.).
- Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103°53'00"

CENTENNIAL RESOURCE PRODUCTION, LLC

DUCK HUNT 1 STATE COM #302H, #401H, #502H & #602H
NW 1/4 SE 1/4, SECTION 1, T23S, R34E, N.M.P.M.
LEA COUNTY, NEW MEXICO



UELS, LLC
 Corporate Office * 85 South 200 East
 Vernal, UT 84078 * (435) 789-1017

SURVEYED BY	B.B., M.W.	11-08-18	SCALE
DRAWN BY	C.D.	11-19-18	1" = 100'
LOCATION LAYOUT		FIGURE #1	

REV: 3 08-22-19 C.D.
 (SHL MOVE, ROAD
 RE-ROUTE & PAD
 LAYOUT CHANGE)