



PHOENIX
TECHNOLOGY SERVICES

30-025-46136

October 10, 2019

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

Dear District 1 - Hobbs

Re: Centennial Resources
Hagberry 9 State Com 501H
Lea County, NM
API #30-025-46136
Job No. 65385

HOBBS OCD
OCT 30 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	
Peter Mavrelis	501H	2,005	17,581	9/18/19	9/27/19	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

65385

ENERGY COMPANY

Centennial Resources

WELL NAME

Hagberry 9 State Com 501H

COUNTY & STATE

Lea County, NM

API WELL NUMBER

30-025-46136

PROPOSED DIRECTION

180.01

TIE-IN DATA						
MEASURED DEPTH	VERTICAL DEPTH	INCLIN	AZIMUTH	N-S COORD	E-W COORD	DATA SOURCE
1,856. ft	1,855.00 ft	1.60	300.69	33.93 ft	-47.74 ft	Surface

FIRST SURVEY DATE	FIRST SURVEY DEPTH	INCLIN	AZIMUTH
18-Sep-19	2,005.00 ft	1.01	297.60

SURVEY INSTRUMENT
TYPE

Phoenix MWD Velocity

LAST SURVEY DATE	LAST SURVEY DEPTH	INCLIN	AZIMUTH
27-Sep-19	17,581.00 ft	87.94	178.46

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
27-Sep-19	17,615.00 ft	87.94	178.46

Peter Mavrelis

PRINT YOUR NAME ABOVE

Peter Mavrelis

SIGN YOUR NAME ABOVE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	6.67
DECLINATION OR GRID	DECLINATION

9/27/2019

TODAY'S DATE

TRUE NORTH

MWD SUPERVISOR 1

Ryan Finley

DIRECTIONAL DRILLER 1

Nye Soares

MWD SUPERVISOR 2

Peter Mavrelis

DIRECTIONAL DRILLER 2

Trent Lejeune

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

**Centennial Resources
Development, Inc.**

**Lea County, NM (NAD83 - NME)
Hagberry 9 State Com
501H**

OH / 65385

Survey: Phoenix MWD Surveys

Standard Survey Report

27 September, 2019

Survey Report

Company:	Centennial Resources Development, Inc.	Local Co-ordinate Reference:	Well 501H
Project:	Lea County, NM (NAD83 - NME)	TVD Reference:	RKB @ 3647.50usft (H&P 618)
Site:	Hagberry 9 State Com	MD Reference:	RKB @ 3647.50usft (H&P 618)
Well:	501H	North Reference:	True
Wellbore:	OH / 65385	Survey Calculation Method:	Minimum Curvature
Design:	Surveys H&P 618)	Database:	USA Compass

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

Site	Hagberry 9 State Com				
Site Position:		Northing:	515,142.79 usft	Latitude:	32° 24' 45.323695 N
From:	Map	Easting:	835,460.03 usft	Longitude:	103° 22' 48.866010 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.51 °

Well	501H					
Well Position	+N/-S	0.00 usft	Northing:	515,142.79 usft	Latitude:	32° 24' 45.323695 N
	+E/-W	0.00 usft	Easting:	835,460.03 usft	Longitude:	103° 22' 48.866010 W
Position Uncertainty	1.00 usft	Wellhead Elevation:	usft	Ground Level:	3,622.50 usft	

Wellbore	OH / 65385				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	User Defined	9/17/2019	6.75	60.08	47,974.00000000

Design	Surveys H&P 618)				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	1,856.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	179.49	

Survey Program	Date 9/27/2019				
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
177.00	1,856.00	Invictus MWD Surveys (OH / Surface)	MWD	OWSG MWD - Standard	
2,005.00	17,615.00	Phoenix MWD Surveys (OH / 65385)	MWD+IFR1+MS	OWSG MWD + IFR1 + Multi-Station Correction	

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)
1,856.00	1.60	300.69	1,855.00	33.93	-47.74	-34.35	0.00	0.00	0.00
Tie In									
2,005.00	1.01	297.60	2,003.96	35.60	-50.69	-36.05	0.40	-0.40	-2.07
First Phoenix MWD Survey									
2,099.00	0.81	126.29	2,097.96	35.59	-50.89	-36.04	1.93	-0.21	-182.24
2,193.00	1.55	78.33	2,191.94	35.45	-49.11	-35.89	1.25	0.79	-51.02
2,288.00	2.75	51.38	2,286.87	37.14	-46.07	-37.54	1.62	1.26	-28.37
2,382.00	4.09	43.97	2,380.70	40.96	-41.98	-41.33	1.50	1.43	-7.88
2,476.00	5.10	42.96	2,474.40	46.43	-36.80	-46.75	1.08	1.07	-1.07

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Site:	Hagberry 9 State Com	MD Reference:	RKB @ 3647.50usft (H&P 618)
Well:	501H	North Reference:	True
Wellbore:	OH / 65385	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)
2,571.00	5.14	44.08	2,569.02	52.57	-30.96	-52.85	0.11	0.04	1.18
2,666.00	4.96	46.83	2,663.65	58.44	-25.01	-58.66	0.32	-0.19	2.89
2,760.00	4.81	47.61	2,757.31	63.88	-19.13	-64.05	0.17	-0.16	0.83
2,855.00	4.78	49.15	2,851.98	69.15	-13.20	-69.27	0.14	-0.03	1.62
2,949.00	5.57	41.47	2,945.60	75.13	-7.22	-75.19	1.12	0.84	-8.17
3,043.00	6.17	40.34	3,039.10	82.40	-0.92	-82.41	0.65	0.64	-1.20
3,138.00	6.25	42.78	3,133.55	90.09	5.89	-90.03	0.29	0.08	2.57
3,232.00	6.19	43.53	3,226.99	97.52	12.86	-97.40	0.11	-0.06	0.80
3,327.00	6.25	35.22	3,321.44	105.46	19.37	-105.28	0.95	0.06	-8.75
3,421.00	6.35	39.87	3,414.87	113.62	25.65	-113.39	0.55	0.11	4.95
3,515.00	6.38	42.01	3,508.29	121.50	32.48	-121.20	0.25	0.03	2.28
3,610.00	6.19	27.01	3,602.73	129.98	38.34	-129.63	1.74	-0.20	-15.79
3,704.00	6.53	25.04	3,696.15	139.34	42.90	-138.95	0.43	0.36	-2.10
3,799.00	6.54	31.28	3,790.53	148.86	48.00	-148.42	0.75	0.01	6.57
3,893.00	5.60	13.46	3,884.01	157.89	51.84	-157.43	2.23	-1.00	-18.96
3,987.00	5.59	4.94	3,977.56	166.91	53.31	-166.43	0.88	-0.01	-9.06
4,082.00	5.22	5.26	4,072.14	175.83	54.10	-175.34	0.39	-0.39	0.34
4,176.00	4.88	8.02	4,165.78	184.05	55.05	-183.55	0.44	-0.36	2.94
4,270.00	4.44	11.31	4,259.47	191.57	56.32	-191.06	0.55	-0.47	3.50
4,365.00	4.36	12.21	4,354.19	198.71	57.81	-198.19	0.11	-0.08	0.95
4,459.00	4.18	12.69	4,447.93	205.54	59.32	-205.01	0.20	-0.19	0.51
4,553.00	4.08	16.51	4,541.68	212.09	61.02	-211.54	0.31	-0.11	4.06
4,648.00	3.77	16.16	4,636.46	218.33	62.85	-217.76	0.33	-0.33	-0.37
4,742.00	3.12	18.47	4,730.29	223.72	64.52	-223.14	0.71	-0.69	2.46
4,836.00	2.86	18.18	4,824.16	228.38	66.06	-227.78	0.28	-0.28	-0.31
4,931.00	2.75	17.92	4,919.05	232.80	67.50	-232.19	0.12	-0.12	-0.27
5,025.00	2.84	20.02	5,012.93	237.13	68.99	-236.51	0.15	0.10	2.23
5,120.00	2.70	24.17	5,107.82	241.39	70.71	-240.75	0.26	-0.15	4.37
5,214.00	2.48	21.87	5,201.73	245.29	72.38	-244.64	0.26	-0.23	-2.45
5,308.00	2.45	16.03	5,295.64	249.11	73.69	-248.45	0.27	-0.03	-6.21
5,403.00	2.30	15.42	5,390.56	252.90	74.76	-252.23	0.16	-0.16	-0.64
5,465.00	2.28	14.88	5,452.51	255.29	75.41	-254.61	0.05	-0.03	-0.87
5,569.00	2.16	7.23	5,556.43	259.24	76.18	-258.55	0.31	-0.12	-7.36
5,663.00	0.62	25.77	5,650.40	261.45	76.63	-260.76	1.69	-1.64	19.72
5,757.00	0.40	150.93	5,744.40	261.62	77.01	-260.93	0.97	-0.23	133.15
5,851.00	0.41	143.53	5,838.40	261.06	77.37	-260.37	0.06	0.01	-7.87
5,944.00	0.43	176.92	5,931.39	260.45	77.58	-259.75	0.26	0.02	35.90
6,038.00	0.25	197.03	6,025.39	259.90	77.54	-259.20	0.23	-0.19	21.39
6,132.00	0.24	214.61	6,119.39	259.54	77.37	-258.84	0.08	-0.01	18.70
6,226.00	0.16	243.72	6,213.39	259.32	77.14	-258.63	0.13	-0.09	30.97
6,320.00	0.11	328.67	6,307.39	259.34	76.98	-258.65	0.20	-0.05	90.37
6,415.00	0.11	336.12	6,402.39	259.50	76.89	-258.81	0.02	0.00	7.84
6,509.00	0.22	15.74	6,496.39	259.76	76.91	-259.06	0.16	0.12	42.15

Survey Report

Company: Centennial Resources Development, Inc.
Project: Lea County, NM (NAD83 - NME)
Site: Hagberry 9 State Com
Well: 501H
Wellbore: OH / 65385
Design: Surveys H&P 618)

Local Co-ordinate Reference: Well 501H
TVD Reference: RKB @ 3647.50usft (H&P 618)
MD Reference: RKB @ 3647.50usft (H&P 618)
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)
6,603.00	0.22	19.31	6,590.39	260.10	77.01	-259.41	0.01	0.00	3.80
6,697.00	0.22	92.16	6,684.39	260.27	77.25	-259.57	0.28	0.00	77.50
6,791.00	0.36	147.81	6,778.39	260.01	77.59	-259.31	0.32	0.15	59.20
6,885.00	0.40	187.73	6,872.39	259.43	77.71	-258.73	0.28	0.04	42.47
6,979.00	0.36	227.72	6,966.39	258.91	77.44	-258.21	0.28	-0.04	42.54
7,073.00	0.38	233.11	7,060.38	258.52	76.97	-257.83	0.04	0.02	5.73
7,167.00	0.64	212.52	7,154.38	257.90	76.44	-257.20	0.33	0.28	-21.90
7,261.00	0.74	209.06	7,248.37	256.92	75.87	-256.24	0.12	0.11	-3.68
7,355.00	0.85	193.85	7,342.36	255.71	75.40	-255.03	0.25	0.12	-16.18
7,449.00	0.88	183.92	7,436.35	254.32	75.19	-253.64	0.16	0.03	-10.56
7,543.00	0.92	167.98	7,530.34	252.86	75.30	-252.18	0.27	0.04	-16.96
7,637.00	0.93	159.59	7,624.33	251.41	75.72	-250.72	0.14	0.01	-8.93
7,731.00	0.81	158.65	7,718.32	250.07	76.23	-249.38	0.13	-0.13	-1.00
7,825.00	0.90	143.82	7,812.31	248.86	76.90	-248.16	0.25	0.10	-15.78
7,919.00	0.95	144.85	7,906.30	247.62	77.79	-246.92	0.06	0.05	1.10
8,014.00	0.72	147.49	8,001.29	246.48	78.56	-245.77	0.25	-0.24	2.78
8,108.00	0.89	150.80	8,095.28	245.34	79.24	-244.63	0.19	0.18	3.52
8,202.00	1.24	165.86	8,189.26	243.72	79.84	-243.00	0.47	0.37	16.02
8,296.00	1.49	175.30	8,283.23	241.51	80.19	-240.79	0.36	0.27	10.04
8,390.00	1.75	179.51	8,377.20	238.86	80.30	-238.14	0.30	0.28	4.48
8,485.00	1.62	161.63	8,472.16	236.14	80.74	-235.41	0.57	-0.14	-18.82
8,579.00	1.82	136.56	8,566.11	233.79	82.18	-233.05	0.82	0.21	-26.67
8,673.00	1.84	126.19	8,660.07	231.82	84.43	-231.06	0.35	0.02	-11.03
8,767.00	2.02	120.36	8,754.01	230.09	87.08	-229.30	0.28	0.19	-6.20
8,862.00	2.17	122.58	8,848.95	228.27	90.04	-227.46	0.18	0.16	2.34
8,956.00	2.36	132.80	8,942.88	226.00	92.95	-225.16	0.47	0.20	10.87
9,050.00	1.88	137.17	9,036.81	223.55	95.42	-222.70	0.54	-0.51	4.65
9,145.00	1.65	131.51	9,131.77	221.50	97.51	-220.63	0.30	-0.24	-5.96
9,239.00	1.31	141.69	9,225.74	219.76	99.19	-218.87	0.46	-0.36	10.83
9,333.00	2.28	173.54	9,319.69	217.06	100.06	-216.16	1.44	1.03	33.88
9,427.00	2.70	177.82	9,413.60	212.99	100.36	-212.09	0.49	0.45	4.55
9,460.00	2.43	181.45	9,446.57	211.52	100.37	-210.61	0.95	-0.82	11.00
9,560.00	2.21	170.41	9,546.49	207.50	100.64	-206.59	0.50	-0.22	-11.04
9,654.00	7.22	176.98	9,640.14	199.81	101.25	-198.90	5.35	5.33	6.99
9,748.00	16.27	176.82	9,732.08	180.72	102.29	-179.80	9.63	9.63	-0.17
9,795.00	21.79	179.29	9,776.49	165.41	102.77	-164.49	11.87	11.74	5.26
9,843.00	25.18	182.40	9,820.51	146.29	102.45	-145.38	7.52	7.06	6.48
9,890.00	29.41	182.42	9,862.27	124.77	101.54	-123.86	9.00	9.00	0.04
9,937.00	33.45	180.89	9,902.36	100.27	100.86	-99.37	8.76	8.60	-3.26
9,984.00	40.03	180.01	9,940.01	72.18	100.65	-71.28	14.04	14.00	-1.87
10,031.00	44.55	182.10	9,974.77	40.57	100.04	-39.68	10.07	9.62	4.45
10,078.00	46.56	181.82	10,007.68	7.03	98.90	-6.15	4.30	4.28	-0.60
10,125.00	49.70	181.41	10,039.04	-27.95	97.91	28.82	6.71	6.68	-0.87
10,187.00	54.43	181.83	10,077.15	-76.81	96.53	77.67	7.65	7.63	0.68

Survey Report

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Wellbore:	OH / 65385	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)
10,219.00	57.38	182.34	10,095.08	-103.29	95.56	104.14	9.31	9.22	1.59
10,266.00	63.04	183.74	10,118.43	-144.00	93.38	144.83	12.32	12.04	2.98
10,313.00	68.10	184.32	10,137.86	-186.68	90.37	187.47	10.82	10.77	1.23
10,360.00	73.49	185.37	10,153.31	-230.88	86.62	231.65	11.66	11.47	2.23
10,407.00	76.59	183.70	10,165.45	-276.14	83.04	276.87	7.44	6.60	-3.55
10,454.00	81.22	182.31	10,174.49	-322.19	80.62	322.89	10.27	9.85	-2.96
10,511.00	87.58	180.51	10,180.05	-378.87	79.23	379.56	11.59	11.16	-3.16
10,554.00	88.75	180.01	10,181.43	-421.84	79.04	422.53	2.96	2.72	-1.16
10,657.00	88.95	180.31	10,183.49	-524.82	78.75	525.50	0.35	0.19	0.29
10,752.00	88.82	182.57	10,185.34	-619.77	76.36	620.42	2.38	-0.14	2.38
10,846.00	89.04	182.51	10,187.10	-713.66	72.20	714.27	0.24	0.23	-0.06
10,940.00	89.10	181.17	10,188.62	-807.59	69.18	808.18	1.43	0.06	-1.43
11,034.00	89.02	181.12	10,190.16	-901.56	67.30	902.13	0.10	-0.09	-0.05
11,128.00	89.02	180.94	10,191.77	-995.53	65.61	996.08	0.19	0.00	-0.19
11,223.00	89.08	180.46	10,193.35	-1,090.51	64.45	1,091.04	0.51	0.06	-0.51
11,317.00	89.02	180.24	10,194.91	-1,184.50	63.88	1,185.02	0.24	-0.06	-0.23
11,411.00	88.87	181.28	10,196.64	-1,278.47	62.63	1,278.98	1.12	-0.16	1.11
11,506.00	88.88	181.01	10,198.50	-1,373.44	60.73	1,373.92	0.28	0.01	-0.28
11,600.00	88.56	181.02	10,200.60	-1,467.40	59.07	1,467.87	0.34	-0.34	0.01
11,694.00	88.68	180.45	10,202.87	-1,561.36	57.86	1,561.82	0.62	0.13	-0.61
11,789.00	88.62	180.17	10,205.10	-1,656.33	57.35	1,656.78	0.30	-0.06	-0.29
11,883.00	88.67	180.24	10,207.33	-1,750.31	57.01	1,750.75	0.09	0.05	0.07
11,977.00	88.59	180.44	10,209.57	-1,844.28	56.46	1,844.71	0.23	-0.09	0.21
12,072.00	88.63	181.03	10,211.88	-1,939.24	55.24	1,939.66	0.62	0.04	0.62
12,166.00	88.82	180.75	10,213.97	-2,033.21	53.78	2,033.61	0.36	0.20	-0.30
12,261.00	88.38	180.78	10,216.29	-2,128.17	52.51	2,128.55	0.46	-0.46	0.03
12,355.00	88.25	180.19	10,219.06	-2,222.13	51.71	2,222.50	0.64	-0.14	-0.63
12,450.00	88.19	179.39	10,222.01	-2,317.08	52.06	2,317.45	0.84	-0.06	-0.84
12,544.00	87.74	178.46	10,225.34	-2,411.00	53.82	2,411.39	1.10	-0.48	-0.99
12,639.00	87.67	178.47	10,229.15	-2,505.89	56.37	2,506.29	0.07	-0.07	0.01
12,733.00	87.54	178.69	10,233.08	-2,599.78	58.69	2,600.20	0.27	-0.14	0.23
12,828.00	87.68	178.51	10,237.04	-2,694.67	61.01	2,695.11	0.24	0.15	-0.19
12,922.00	87.53	178.81	10,240.97	-2,788.56	63.21	2,789.01	0.36	-0.16	0.32
13,017.00	88.30	179.13	10,244.42	-2,883.48	64.92	2,883.95	0.88	0.81	0.34
13,112.00	88.38	178.85	10,247.17	-2,978.43	66.59	2,978.90	0.31	0.08	-0.29
13,206.00	88.21	178.60	10,249.97	-3,072.36	68.68	3,072.85	0.32	-0.18	-0.27
13,301.00	88.18	178.52	10,252.96	-3,167.29	71.07	3,167.79	0.09	-0.03	-0.08
13,396.00	88.24	179.15	10,255.93	-3,262.22	73.00	3,262.74	0.67	0.06	0.66
13,490.00	88.41	178.86	10,258.68	-3,356.17	74.63	3,356.70	0.36	0.18	-0.31
13,585.00	88.16	178.73	10,261.52	-3,451.10	76.63	3,451.65	0.30	-0.26	-0.14
13,679.00	88.05	179.10	10,264.63	-3,545.03	78.41	3,545.59	0.41	-0.12	0.39
13,774.00	87.87	178.91	10,268.01	-3,639.96	80.05	3,640.53	0.28	-0.19	-0.20
13,868.00	88.24	179.01	10,271.20	-3,733.89	81.76	3,734.47	0.41	0.39	0.11

Survey Report

Company:	Centennial Resources Development, Inc.	Local Co-ordinate Reference:	Well 501H
Project:	Lea County, NM (NAD83 - NME)	TVD Reference:	RKB @ 3647.50usft (H&P 618)
Site:	Hagberry 9 State Com	MD Reference:	RKB @ 3647.50usft (H&P 618)
Well:	501H	North Reference:	True
Wellbore:	OH / 65385	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)
13,963.00	88.30	178.51	10,274.07	-3,828.82	83.81	3,829.42	0.53	0.06	-0.53
14,058.00	87.99	178.83	10,277.15	-3,923.75	86.02	3,924.36	0.47	-0.33	0.34
14,152.00	87.88	179.28	10,280.53	-4,017.67	87.57	4,018.29	0.49	-0.12	0.48
14,246.00	88.02	180.48	10,283.90	-4,111.61	87.76	4,112.23	1.28	0.15	1.28
14,341.00	88.16	180.51	10,287.06	-4,206.56	86.94	4,207.16	0.15	0.15	0.03
14,435.00	88.24	180.25	10,290.01	-4,300.51	86.32	4,301.10	0.29	0.09	-0.28
14,530.00	88.02	182.01	10,293.11	-4,395.43	84.45	4,396.01	1.87	-0.23	1.85
14,625.00	89.24	180.76	10,295.39	-4,490.38	82.15	4,490.93	1.84	1.28	-1.32
14,719.00	89.19	180.33	10,296.67	-4,584.36	81.26	4,584.90	0.46	-0.05	-0.46
14,814.00	88.45	180.59	10,298.63	-4,679.34	80.50	4,679.87	0.83	-0.78	0.27
14,908.00	89.04	181.00	10,300.69	-4,773.31	79.19	4,773.82	0.76	0.63	0.44
15,002.00	88.82	180.71	10,302.44	-4,867.28	77.79	4,867.78	0.39	-0.23	-0.31
15,097.00	89.39	181.25	10,303.93	-4,962.25	76.17	4,962.73	0.83	0.60	0.57
15,191.00	90.27	180.56	10,304.21	-5,056.24	74.68	5,056.70	1.19	0.94	-0.73
15,285.00	90.27	180.05	10,303.76	-5,150.24	74.18	5,150.69	0.54	0.00	-0.54
15,379.00	90.19	180.30	10,303.39	-5,244.23	73.89	5,244.68	0.28	-0.09	0.27
15,474.00	90.16	180.54	10,303.10	-5,339.23	73.20	5,339.67	0.25	-0.03	0.25
15,568.00	89.95	180.58	10,303.01	-5,433.23	72.28	5,433.66	0.23	-0.22	0.04
15,662.00	89.61	180.58	10,303.37	-5,527.22	71.33	5,527.64	0.36	-0.36	0.00
15,757.00	89.79	180.80	10,303.86	-5,622.21	70.18	5,622.62	0.30	0.19	0.23
15,851.00	89.52	181.17	10,304.43	-5,716.20	68.57	5,716.58	0.49	-0.29	0.39
15,946.00	89.76	180.79	10,305.03	-5,811.18	66.94	5,811.55	0.47	0.25	-0.40
16,040.00	89.44	180.76	10,305.68	-5,905.17	65.67	5,905.52	0.34	-0.34	-0.03
16,135.00	89.59	181.63	10,306.49	-6,000.15	63.69	6,000.47	0.93	0.16	0.92
16,229.00	89.67	180.95	10,307.09	-6,094.12	61.57	6,094.43	0.73	0.09	-0.72
16,323.00	89.28	181.73	10,307.96	-6,188.09	59.38	6,188.37	0.93	-0.41	0.83
16,418.00	89.28	181.92	10,309.15	-6,283.03	56.35	6,283.29	0.20	0.00	0.20
16,512.00	89.21	181.77	10,310.39	-6,376.98	53.32	6,377.20	0.18	-0.07	-0.16
16,607.00	88.78	180.38	10,312.06	-6,471.94	51.54	6,472.14	1.53	-0.45	-1.46
16,701.00	88.11	179.29	10,314.61	-6,565.91	51.81	6,566.11	1.36	-0.71	-1.16
16,795.00	87.71	178.94	10,318.03	-6,659.83	53.26	6,660.04	0.57	-0.43	-0.37
16,890.00	88.30	178.78	10,321.34	-6,754.75	55.15	6,754.98	0.64	0.62	-0.17
16,984.00	87.77	179.31	10,324.56	-6,848.69	56.72	6,848.92	0.80	-0.56	0.56
17,079.00	88.16	178.40	10,327.94	-6,943.61	58.62	6,943.85	1.04	0.41	-0.96
17,173.00	88.27	178.24	10,330.87	-7,037.52	61.37	7,037.79	0.21	0.12	-0.17
17,268.00	87.91	180.17	10,334.03	-7,132.45	62.69	7,132.73	2.07	-0.38	2.03
17,362.00	88.10	179.87	10,337.30	-7,226.40	62.65	7,226.67	0.38	0.20	-0.32
17,457.00	88.11	179.47	10,340.45	-7,321.34	63.20	7,321.61	0.42	0.01	-0.42
17,551.00	88.28	178.79	10,343.41	-7,415.28	64.63	7,415.57	0.75	0.18	-0.72
17,581.00	87.94	178.46	10,344.40	-7,445.26	65.35	7,445.55	1.58	-1.13	-1.10
Final Phoenix MWD Survey									
17,615.00	87.94	178.46	10,345.62	-7,479.22	66.26	7,479.52	0.00	0.00	0.00
Projection to TD									

Survey Report

Company:	Centennial Resources Development, Inc.	Local Co-ordinate Reference:	Well 501H
Project:	Lea County, NM (NAD83 - NME)	TVD Reference:	RKB @ 3647.50usft (H&P 618)
Site:	Hagberry 9 State Corn	MD Reference:	RKB @ 3647.50usft (H&P 618)
Well:	501H	North Reference:	True
Wellbore:	OH / 65385	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)	
1,856.00	1,855.00	33.93	-47.74	Tie In
2,005.00	2,003.96	35.60	-50.69	First Phoenix MWD Survey
17,581.00	10,344.40	-7,445.26	65.34	Final Phoenix MWD Survey
17,615.00	10,345.62	-7,479.22	66.26	Projection to TD

District I
 1633 N. French Dr., Hobbs, NM 88240
 Phone: (575) 393-6161 Fax: (575) 393-0720
 District II
 811 S. Ford St., Azusa, NM 88210
 Phone: (575) 748-1283 Fax: (575) 748-0720
 District III
 1000 Rio Grande Road, Azusa, NM 87410
 Phone: (505) 334-6178 Fax: (505) 334-6170
 District IV
 1220 S. St. Francis Dr., Santa Fe, NM 87505
 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

1 API Number 90-025 46176	2 Pool Code 98136	3 Pool Name WC-025 G-07 S223505N; Bone Spring
4 Property Code 725758	5 Property Name HAGBERRY 9 STATE COM	6 Well Number 501H
7 Section No. 372165	8 Operator Name CENTENNIAL RESOURCE PRODUCTION, LLC	9 Elevation 3622.5'

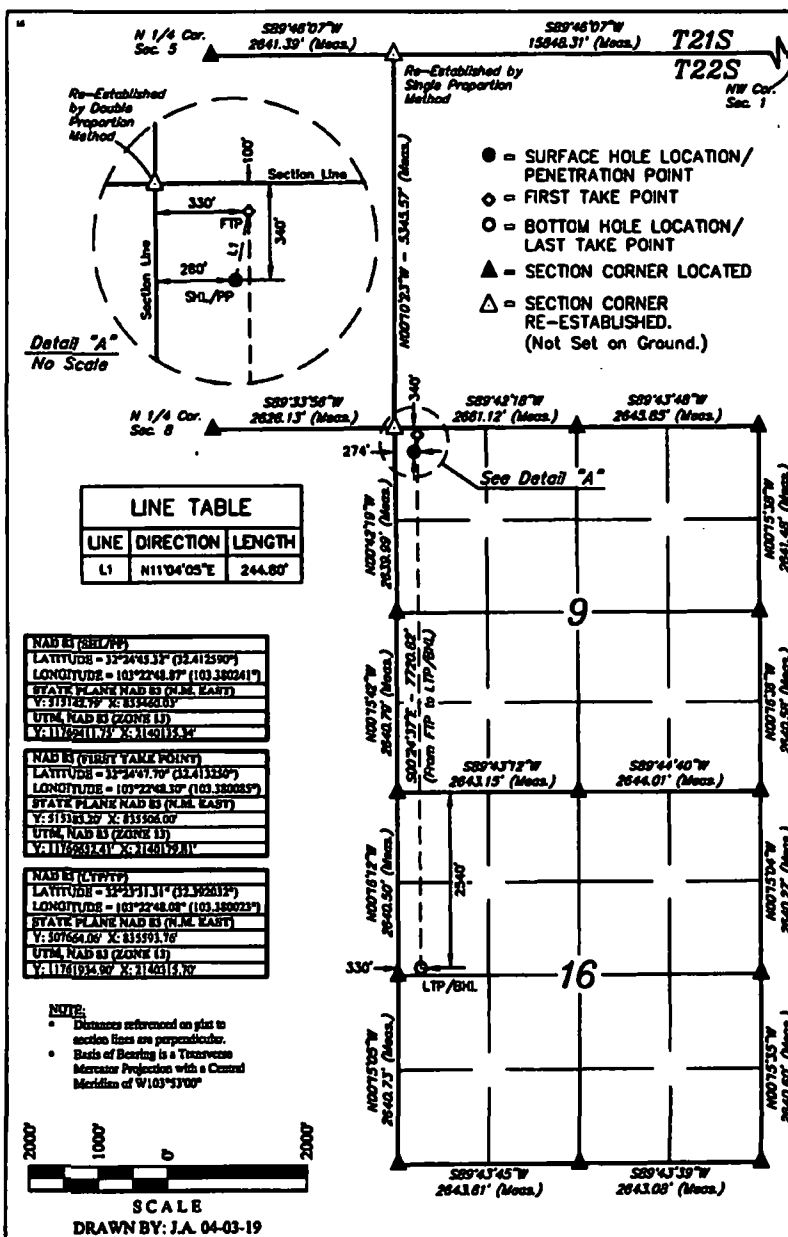
= Surface Location

UL or lot no.	Section	Township	Range	Lot No.	Feet from the	North/South line	Feet from the	East/West line	County
D	9	22S	35E		340	NORTH	280	WEST	LEA

= Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot No.	Feet from the	North/South line	Feet from the	East/West line	County
E	16	22S	35E		2540	NORTH	330	WEST	LEA

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



"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 selected 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.

Sarah Ferreyros
 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.

April 01, 2019

Date of Survey
 Signature and Seal of Professional Surveyor:

PAUL BUCHELE
 NEW MEXICO
 23462
 04-03-19
 PROFESSIONAL SURVEYOR

Certificate Number:

HOBBS OCD
 JUN 17 2019
 RECEIVED