



HOBBS OGD

FEB 24 2020

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EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Speedy 16 State Com

#202H

OH

Design: OH

Midland PVA

20 December, 2018



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #202H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3602.0usft
Site:	Speedy 16 State Com	MD Reference:	KB = 25 @ 3602.0usft
Well:	#202H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Project	Lea County, NM (NAD 83 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	Speedy 16 State Com		
Site Position:		Northing:	509,397.00 usft
From:	Map	Easting:	772,576.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 23' 53.425 N
		Longitude:	103° 35' 2.858 W
		Grid Convergence:	0.40 °

Well	#202H		
Well Position	+N-S	0.0 usft	Northing:
	+E-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 23' 53.432 N
		Longitude:	103° 35' 2.473 W
		Ground Level:	3,577.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
	IGRF2015	10/30/2018	6.82
			Dip Angle
			60.20
			Field Strength
			47,897.91398158

Design	OH		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N-S	+E-W
	(usft)	(usft)	(usft)
	0.0	0.0	0.0
			Direction
			175.09



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Survey Program		Date 12/20/2018			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
167.0	1,071.0	Drifttech MWD (OH)	MWD	OWSG MWD - Standard	
1,224.0	14,301.0	MS MWD (OH)	MWD	OWSG MWD - Standard	

MD (usft)	Ino (")	Azi (azimuth) (")	TVD (usft)	NPS (usft)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0
167.0	0.35	84.21	167.0	0.2	0.5	0.21	0.21	0.00	0.0	0.0
225.0	0.70	58.68	225.0	0.5	0.9	0.61	0.60	-8.53	0.0	0.0
283.0	0.79	68.52	283.0	0.8	1.6	0.27	0.16	16.97	0.0	0.0
340.0	0.78	78.72	340.0	1.0	2.3	0.25	0.00	17.89	0.0	0.0
399.0	0.82	58.15	399.0	1.3	3.0	0.51	-0.29	-34.88	0.0	0.0
458.0	0.70	75.64	458.0	1.5	3.8	0.37	0.14	29.64	0.0	0.0
515.0	0.70	58.50	515.0	1.8	4.3	0.37	0.00	-30.07	0.0	0.0
603.0	0.70	57.38	603.0	2.4	5.2	0.02	0.00	-1.30	0.0	0.0
666.0	0.79	37.50	666.0	2.9	5.8	0.43	0.14	-31.52	0.0	0.0
757.0	0.87	39.17	757.0	4.0	6.6	0.20	0.20	1.84	0.0	0.0
848.0	1.23	10.43	847.9	5.6	7.3	0.66	0.29	-31.58	0.0	0.0
939.0	1.58	0.85	938.9	7.8	7.5	0.46	0.38	-10.53	0.0	0.0
1,032.0	1.58	354.43	1,031.9	10.4	7.4	0.19	0.00	-8.80	0.0	0.0
1,071.0	1.14	343.53	1,070.8	11.3	7.2	1.30	-1.13	-27.95	0.0	0.0
1,224.0	0.88	327.80	1,223.8	13.7	6.2	0.25	-0.17	-10.28	0.3	0.4
1,314.0	0.70	307.90	1,313.8	14.6	5.4	0.36	-0.20	-22.11	0.3	1.2
1,404.0	0.79	280.40	1,403.8	15.1	4.3	0.41	0.10	-30.56	-1.2	1.3
1,494.0	0.62	284.40	1,493.8	15.3	3.2	0.20	-0.19	4.44	-2.2	1.4
1,589.0	0.79	268.70	1,588.8	15.4	2.1	0.27	0.18	-16.53	-3.7	0.6
1,683.0	0.70	273.50	1,682.8	15.5	0.9	0.12	-0.10	5.11	-4.9	1.0



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Well:	#202H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	NPS (usft)	ENW (usft)	DLeg (°/100usft)	Bulld (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
1,778.0	0.79	269.90	1,777.8	15.5	-0.4	0.11	0.09	-3.79	-6.1	0.7	
1,872.0	0.70	282.80	1,871.8	15.6	-1.6	0.20	-0.10	13.72	-7.0	2.2	
1,968.0	0.31	308.60	1,965.8	15.9	-2.3	0.47	-0.41	27.45	-6.2	5.3	
2,061.0	0.22	318.90	2,060.8	16.2	-2.7	0.11	-0.09	10.84	-5.6	6.3	
2,155.0	0.22	23.70	2,154.8	16.5	-2.7	0.25	0.00	68.94	3.1	7.9	
2,250.0	0.31	11.80	2,249.8	16.9	-2.6	0.11	0.09	-12.53	1.0	8.3	
2,345.0	2.68	50.40	2,344.7	18.6	-0.8	2.57	2.49	40.63	3.5	6.1	
2,439.0	4.00	48.80	2,438.8	22.1	3.4	1.41	1.40	-1.70	-1.7	6.1	
2,534.0	5.88	68.00	2,533.2	26.3	10.4	2.59	2.08	18.11	-4.8	6.7	
2,628.0	7.38	68.90	2,626.6	30.5	20.5	1.53	1.49	3.09	-9.3	5.7	
2,723.0	7.52	69.00	2,720.8	34.9	32.0	0.15	0.15	0.11	-12.7	3.5	
2,817.0	7.52	68.30	2,814.0	39.4	43.4	0.10	0.00	-0.74	-15.5	0.9	
2,912.0	7.52	70.20	2,908.2	43.8	55.1	0.26	0.00	2.00	-18.3	-1.0	
3,006.0	6.68	63.00	3,001.4	48.4	65.7	1.30	-0.89	-7.66	-19.9	-5.4	
3,100.0	6.81	64.80	3,094.8	53.2	75.6	0.26	0.14	1.91	-21.5	-6.3	
3,195.0	6.51	72.90	3,189.1	57.2	85.9	1.04	-0.32	8.53	-23.7	-5.5	
3,289.0	6.51	60.70	3,282.5	61.4	95.6	1.47	0.00	-12.98	-22.8	-12.5	
3,383.0	6.51	59.10	3,375.9	66.7	104.8	0.19	0.00	-1.70	-23.3	-14.0	
3,477.0	5.32	62.70	3,469.4	71.5	113.3	1.33	-1.27	3.83	-24.0	-13.6	
3,572.0	5.01	66.60	3,564.0	75.1	121.0	0.48	-0.33	4.11	-23.7	-13.6	
3,667.0	5.48	47.70	3,658.7	79.8	128.2	1.88	0.48	-19.89	-16.7	-20.6	
3,761.0	5.80	43.70	3,752.2	88.3	134.8	0.54	0.34	-4.26	-14.8	-20.2	
3,855.0	5.01	43.60	3,845.8	92.7	140.9	0.84	-0.84	-0.11	-14.0	-18.3	
3,950.0	3.78	50.00	3,940.5	97.7	146.1	1.39	-1.28	6.74	-13.3	-15.3	
4,044.0	4.48	53.70	4,034.3	101.9	151.5	0.80	0.74	3.94	-11.2	-14.1	
4,137.0	5.71	53.30	4,126.9	106.8	158.1	1.32	1.32	-0.43	-9.6	-13.9	
4,232.0	6.81	52.30	4,221.3	113.1	166.3	1.16	1.16	-1.05	-9.8	-13.7	



Midland PVA

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 Well: #202H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #202H
 TVD Reference: KB = 25 @ 3602.0usft
 MD Reference: KB = 25 @ 3602.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	NIS (usft)	EW (usft)	DLog (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
4,326.0	7.21	48.00	4,314.6	120.4	175.1	0.70	0.43	-4.57	-10.5	-13.6
4,420.0	6.68	50.00	4,407.9	127.9	183.7	0.62	-0.56	2.13	-12.5	-12.2
4,514.0	5.80	50.80	4,501.4	134.4	191.8	0.94	-0.84	0.85	-13.1	-11.3
4,608.0	4.80	50.40	4,595.0	140.0	198.4	0.96	-0.86	-0.43	-12.0	-10.7
4,689.0	4.22	52.40	4,675.7	144.0	203.4	0.86	-0.84	2.47	-10.3	-9.8
4,778.0	3.74	51.40	4,764.5	147.8	208.2	0.54	-0.54	-1.12	-7.0	-9.4
4,872.0	5.41	51.10	4,858.2	152.5	214.1	1.78	1.78	-0.32	-4.7	-8.9
4,967.0	5.49	52.90	4,952.8	158.0	221.2	0.20	0.08	1.89	-4.1	-8.2
5,061.0	5.49	52.40	5,046.3	163.5	228.3	0.05	0.00	-0.53	-3.2	-7.9
5,155.0	5.58	52.80	5,139.9	169.0	235.8	0.10	0.10	0.43	-2.5	-7.5
5,250.0	5.80	50.80	5,234.4	174.8	242.9	0.33	0.23	-2.32	-1.7	-7.0
5,344.0	5.19	48.00	5,328.0	180.7	249.8	0.70	-0.65	-2.77	-0.6	-6.1
5,439.0	5.10	45.50	5,422.6	186.5	256.0	0.25	-0.09	-2.63	0.9	-4.7
5,533.0	5.01	44.40	5,516.2	192.4	261.8	0.14	-0.10	-1.17	2.4	-3.0
5,627.0	6.51	50.40	5,609.8	198.7	268.8	1.72	1.60	6.38	2.5	-2.1
5,722.0	6.29	52.00	5,704.2	205.4	277.1	0.30	-0.23	1.68	1.7	-1.5
5,816.0	6.20	52.90	5,797.8	211.8	285.2	0.14	-0.10	0.96	1.3	-1.1
5,910.0	6.20	49.30	5,891.1	218.0	293.1	0.41	0.00	-3.83	1.0	-0.4
6,005.0	6.42	46.70	5,985.5	225.0	300.8	0.38	0.23	-2.74	0.4	0.8
6,099.0	6.68	46.20	6,078.9	232.3	308.6	0.28	0.28	-0.53	-0.6	2.3
6,193.0	6.42	45.10	6,172.3	239.8	316.3	0.31	-0.28	-1.17	-1.7	3.8
6,287.0	6.68	44.50	6,265.6	247.5	323.8	0.29	0.28	-0.64	-2.8	5.5
6,382.0	6.59	50.60	6,360.0	254.9	331.9	0.75	-0.09	6.42	-3.3	7.1
6,476.0	6.20	45.10	6,453.4	261.9	339.7	0.77	-0.41	-5.85	-4.7	7.9
6,571.0	5.89	43.00	6,547.9	269.0	346.6	0.40	-0.33	-2.21	-5.3	9.5
6,665.0	2.81	40.00	6,641.6	274.3	351.4	3.28	-3.28	-3.19	-3.4	11.5
6,760.0	2.20	41.50	6,736.5	277.5	354.1	0.65	-0.64	1.58	2.2	13.9



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 Site: Speedy 16 State Corn
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 Wellbore: OH
 Design: OH

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6,854.0	2.20	42.80	6,830.5	280.2	356.5	0.05	0.00	1.38	5.9	15.4	
6,949.0	2.20	39.80	6,925.4	282.9	358.9	0.12	0.00	-3.16	5.4	16.6	
7,043.0	1.80	42.90	7,019.3	285.4	361.1	0.44	-0.43	3.30	4.0	16.6	
7,138.0	1.32	41.50	7,114.3	287.3	362.8	0.51	-0.51	-1.47	1.0	16.7	
7,232.0	1.10	61.30	7,208.3	288.5	364.3	0.50	-0.23	21.06	4.7	15.7	
7,326.0	0.82	77.00	7,302.3	289.1	365.6	0.56	-0.51	16.70	7.4	14.1	
7,421.0	0.82	74.80	7,397.3	289.3	366.6	0.03	0.00	-2.32	5.8	14.4	
7,515.0	1.01	88.50	7,491.2	289.5	367.9	0.46	0.41	14.57	7.7	12.7	
7,610.0	0.79	87.10	7,586.2	289.4	369.4	0.27	-0.23	9.05	8.1	11.5	
7,704.0	1.01	116.90	7,680.2	289.0	370.8	0.40	0.23	21.06	10.1	8.3	
7,799.0	1.19	132.80	7,775.2	287.9	372.3	0.37	0.19	16.74	10.2	5.5	
7,894.0	1.19	138.60	7,870.2	286.5	373.6	0.13	0.00	6.11	8.7	4.5	
7,988.0	1.80	148.90	7,964.2	284.5	375.1	0.71	0.65	10.96	6.9	3.1	
8,083.0	1.80	158.00	8,059.1	281.8	376.4	0.30	0.00	9.58	4.4	2.2	
8,177.0	2.11	159.00	8,153.1	278.9	377.6	0.33	0.33	1.06	1.2	2.1	
8,271.0	1.98	158.20	8,247.0	275.7	378.8	0.14	-0.14	-0.85	-2.2	2.1	
8,366.0	2.11	170.60	8,341.9	272.5	379.7	0.48	0.14	13.05	-5.0	2.9	
8,461.0	2.11	169.20	8,436.9	269.0	380.3	0.05	0.00	-1.47	-6.6	2.7	
8,555.0	2.51	180.10	8,530.8	265.3	380.6	0.63	0.43	11.60	-11.7	4.6	
8,649.0	2.51	181.80	8,624.7	261.2	380.5	0.08	0.00	1.81	-15.7	5.0	
8,744.0	3.30	188.20	8,719.6	256.4	380.2	0.66	0.83	4.63	-20.0	6.4	
8,838.0	3.08	185.30	8,813.4	251.2	379.7	0.24	-0.23	-0.96	-25.4	6.0	
8,872.0	2.68	180.50	8,847.4	248.5	379.6	1.37	-1.18	-14.12	-27.5	3.8	
8,930.0	5.82	175.39	8,905.2	245.1	379.8	5.62	5.59	-8.80	-31.7	1.3	
KOP 8930.0' MD; 8905.2' TVD; 245.1°; 379.8°; 5.92											
8,967.0	8.00	174.30	8,941.9	240.7	380.2	5.62	5.61	-2.96	-33.5	0.9	



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Design:	OH	Database:	EDM 5000.14

Survey										
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9,039.7	13.75	177.58	9,013.3	227.0	381.1	7.95	7.91	4.51	-34.5	3.5
FTP Crossing 8039.7 MD; 9013.3 TVD; 227.0; 381.1; 13.75										
9,082.0	15.52	178.10	9,034.8	221.4	381.3	7.95	7.93	2.35	-34.3	4.0
9,157.0	25.01	183.30	9,123.9	188.5	380.5	10.18	9.99	5.47	-32.1	5.7
9,251.0	33.89	185.20	9,205.7	142.5	377.0	9.50	9.45	2.02	-29.1	2.3
9,345.0	45.80	185.50	9,277.7	82.6	371.4	12.87	12.87	0.32	-27.2	-4.2
9,440.0	55.81	179.87	9,337.8	9.2	368.1	11.55	10.84	-5.82	-26.3	-9.8
9,535.0	64.31	177.07	9,385.0	-73.1	370.4	9.23	8.84	-3.05	-24.8	-8.8
9,629.0	73.19	177.42	9,419.0	-160.5	374.6	9.45	9.45	0.37	-21.1	-5.1
9,719.0	84.00	178.53	9,438.8	-248.5	376.9	12.23	12.01	2.34	-18.3	-3.2
9,817.0	90.20	180.14	9,441.7	-348.4	377.1	6.38	6.33	0.62	-15.2	-3.7
9,911.0	90.42	179.97	9,441.2	-440.4	377.1	0.30	0.23	-0.18	-15.5	-4.5
10,006.0	90.42	179.61	9,440.5	-535.4	377.4	0.38	0.00	-0.38	-15.9	-4.9
10,100.0	90.42	179.70	9,439.8	-629.4	378.0	0.10	0.00	0.10	-16.4	-5.1
10,194.0	90.81	179.79	9,438.8	-723.4	378.4	0.43	0.41	0.10	-17.2	-5.4
10,288.0	91.30	179.97	9,437.1	-817.3	378.6	0.58	0.52	0.19	-18.4	-6.0
10,383.0	91.91	180.49	9,434.4	-912.3	378.2	0.84	0.84	0.55	-20.6	-7.1
10,477.0	89.80	180.14	9,433.0	-1,008.3	377.7	2.28	-2.24	-0.37	-21.5	-8.3
10,571.0	89.89	180.23	9,433.3	-1,100.3	377.4	0.14	0.10	0.10	-20.8	-9.4
10,666.0	90.51	180.49	9,432.9	-1,195.3	378.8	0.71	0.65	0.27	-20.6	-10.7
10,761.0	90.90	181.11	9,431.8	-1,290.3	375.5	0.77	0.41	0.65	-21.3	-12.8
10,855.0	88.40	179.79	9,432.3	-1,384.2	374.7	3.01	-2.66	-1.40	-20.3	-14.3
10,950.0	88.22	179.53	9,435.1	-1,479.2	375.3	0.33	-0.19	-0.27	-17.0	-14.4
11,044.0	88.62	179.53	9,437.7	-1,573.2	376.1	0.43	0.43	0.00	-13.9	-14.4
11,139.0	88.88	179.70	9,439.8	-1,668.1	376.7	0.33	0.27	0.18	-11.3	-14.5
11,233.0	89.71	179.70	9,441.0	-1,762.1	377.2	0.88	0.88	0.00	-9.7	-14.7
11,327.0	90.51	180.14	9,440.8	-1,856.1	377.3	0.97	0.85	0.47	-9.4	-15.3



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #202H
Project:	Las County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3602.0usft
Site:	Speedy 16 State Com	MD Reference:	KB = 25 @ 3602.0usft
Well:	#202H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

MD (usft)	Inc (")	Azi (azimuth) (")	TVD (usft)	N/S (usft)	E/W (usft)	DLeg ("/100usft)	Build ("/100usft)	Turn ("/100usft)	High to Plan (usft)	Right to Plan (usft)
11,421.0	90.90	180.32	9,439.8	-1,950.1	376.9	0.46	0.41	0.19	-10.1	-16.5
11,515.0	91.52	180.49	9,437.6	-2,044.1	376.3	0.68	0.68	0.18	-11.6	-17.9
11,609.0	92.22	180.41	9,434.6	-2,138.0	375.5	0.75	0.74	-0.09	-14.2	-19.3
11,704.0	93.19	179.87	9,430.1	-2,232.9	375.2	1.12	1.02	-0.46	-18.2	-20.4
11,788.0	90.51	177.33	9,427.1	-2,326.8	377.4	4.00	-2.85	-2.81	-20.7	-18.9
11,892.0	91.12	177.42	9,425.7	-2,420.7	381.7	0.68	0.65	0.10	-21.6	-15.3
11,987.0	91.60	177.24	9,423.5	-2,515.6	388.2	0.54	0.51	-0.19	-23.4	-11.6
12,081.0	92.70	178.03	9,419.9	-2,609.5	390.0	1.44	1.17	0.84	-26.4	-8.5
12,175.0	90.88	177.88	9,417.2	-2,703.3	393.4	2.16	-2.15	-0.18	-28.6	-5.9
12,269.0	91.52	177.94	9,415.4	-2,797.3	396.9	0.80	0.89	0.09	-29.7	-3.2
12,363.0	88.40	177.07	9,415.4	-2,891.2	400.9	3.45	-3.32	-0.93	-28.9	0.2
12,458.0	88.88	176.71	9,417.7	-2,986.0	406.1	0.83	0.51	-0.38	-25.9	4.6
12,552.0	89.19	178.85	9,419.3	-3,079.9	409.9	2.09	0.33	2.06	-23.6	7.7
12,646.0	89.49	179.26	9,420.4	-3,173.9	411.6	0.72	0.32	0.65	-21.8	8.7
12,741.0	88.31	179.70	9,422.2	-3,268.9	412.5	1.33	-1.24	0.46	-19.3	8.8
12,835.0	88.40	179.97	9,424.9	-3,362.8	412.8	0.30	0.10	0.29	-15.9	8.3
12,929.0	88.70	180.67	9,427.3	-3,456.8	412.2	0.81	0.32	0.74	-12.8	7.1
13,024.0	88.49	181.02	9,428.8	-3,551.8	410.8	0.91	0.83	0.37	-10.5	4.9
13,117.0	90.20	181.20	9,429.0	-3,644.7	409.0	0.79	0.78	0.19	-8.6	2.4
13,212.0	90.59	181.72	9,428.4	-3,739.7	406.8	0.68	0.41	0.55	-9.5	-0.8
13,307.0	89.71	179.61	9,428.1	-3,834.7	405.5	2.41	-0.93	-2.22	-9.0	-2.6
13,401.0	90.11	179.00	9,428.3	-3,928.7	406.6	0.78	0.43	-0.65	-8.1	-2.2
13,496.0	90.11	179.26	9,428.1	-4,023.7	408.1	0.27	0.00	0.27	-7.6	-1.5
13,590.0	90.20	179.53	9,427.8	-4,117.7	409.1	0.30	0.10	0.28	-7.2	-1.3
13,684.0	90.11	179.44	9,427.6	-4,211.7	409.9	0.14	-0.10	-0.10	-6.8	-1.1
13,779.0	90.51	180.32	9,427.0	-4,306.7	410.1	1.02	0.42	0.93	-6.7	-1.7
13,874.0	91.12	180.85	9,425.7	-4,401.6	409.1	0.85	0.64	0.56	-7.4	-3.4



Midland PVA

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Speedy 18 State Com
 Well: #202H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #202H
 TVD Reference: KB = 25 @ 3602.0usft
 MD Reference: KB = 25 @ 3602.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.14

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
13,968.0	92.40	180.76	9,422.8	-4,495.6	407.6	1.37	1.36	-0.10	-9.6	-5.5
14,016.0	93.01	180.49	9,420.5	-4,543.5	407.3	1.39	1.27	-0.56	-11.5	-6.4
14,063.0	93.32	180.41	9,417.9	-4,590.5	406.9	0.68	0.66	-0.17	-13.8	-7.1
14,157.0	93.01	180.05	9,412.8	-4,684.3	406.6	0.50	-0.33	-0.38	-18.3	-8.2
14,245.0	93.98	180.23	9,407.4	-4,772.2	406.3	1.12	1.10	0.20	-23.1	-9.1
Last MWD Survey (MD = 14245.0)										
14,301.0	93.98	180.23	9,403.5	-4,828.0	406.1	0.00	0.00	0.00	-26.6	-9.8
Projection to Bit (MD = 14301.0)										

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/S (usft)	+E/W (usft)	
8,930.0	8,905.2	245.1	379.8	KOP 8930.0' MD; 8905.2' TVD; 245.1'; 379.8'; 5.92
9,039.7	9,013.3	227.0	381.1	FTP Crossing 9039.7' MD; 9013.3' TVD; 227.0'; 381.1'; 13.75
14,245.0	9,407.4	-4,772.2	406.3	Last MWD Survey (MD = 14245.0)
14,301.0	9,403.5	-4,828.0	406.1	Projection to Bit (MD = 14301.0)

Checked By: _____ Approved By: _____ Date: _____

I certify this survey to be true and correct to the best of my belief and knowledge.

Kay Maddox 02/20/2020
 Signed Date



Lea County, NM (NAD 83 NME)

Speedy 16 State Com #202H

Plan #1

PROJECT DETAILS: Lea County, NM (NAD 83 NME)

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

WELL DETAILS: #202H

KB = 25 @ 3602.0ust 3577.0
Northing 609398.00 Easting 772509.00
Latitude 32° 23' 53.432 N Longitude 103° 35' 2.473 W



To convert a Magnetic Direction to a Grid Direction, Add 6.42°
To convert a Magnetic Direction to a True Direction, Add 6.42° East
To convert a True Direction to a Grid Direction, Subtract 6.42°

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Diag	TFace	VSect	Target
1	1071.0	1.14	343.53	1070.8	11.3	7.2	0.00	0.00	-10.6	
2	1271.0	1.14	343.53	1270.8	15.1	6.1	0.00	0.00	-14.6	
3	1356.0	0.00	0.00	1354.8	16.2	5.8	1.00	180.00	-15.6	
4	2390.2	0.00	0.00	2390.0	16.2	5.8	0.00	0.00	-15.6	
5	2690.0	0.00	54.83	2689.3	25.2	16.6	2.00	54.83	-23.6	
6	6724.6	0.00	54.83	6701.7	256.0	353.2	0.00	0.00	-235.9	
7	7024.4	0.00	0.00	7001.0	177.0	378.0	2.00	180.00	-243.8	
8	8907.5	0.00	0.00	8884.1	277.0	378.0	0.00	0.00	-243.8	Brushy Top(Speedy 16 State Com #202H)
9	9808.9	90.14	179.55	9487.1	-297.4	350.5	10.00	179.55	328.8	
10	10231.3	90.14	179.55	9486.0	-719.8	353.8	0.00	0.00	750.0	TGT#1(Speedy 16 State Com #201H)
11	10238.9	90.29	179.55	9458.0	-727.3	353.3	2.00	0.00	757.5	
12	12187.3	90.29	179.55	9448.0	-2675.7	399.1	0.00	0.00	2700.0	TGT#2(Speedy 16 State Com #201H)
13	12194.8	90.44	179.55	9446.0	-2683.0	399.1	2.00	0.00	2707.3	
14	13491.3	90.44	179.55	9438.0	-3979.8	409.2	0.00	0.00	4000.0	TGT#3(Speedy 16 State Com #201H)
15	13493.4	90.40	179.55	9438.0	-3981.7	409.3	2.00	180.00	4002.1	
16	14355.7	90.40	179.55	9430.0	-4544.0	419.0	0.00	0.00	4591.8	PBHL(Speedy 16 State Com #202H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (NAD CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
Brushy Top(Speedy 16 State Com #202H)	7021.0	277.0	378.0	609478.00	772555.00
PBHL(Speedy 16 State Com #202H)	9430.0	-2644.0	419.0	609454.00	772520.00
TGT#1(Speedy 16 State Com #201H)	9438.0	-3979.8	409.2	609418.40	772018.25
TGT#2(Speedy 16 State Com #201H)	9448.0	-2675.7	399.1	609722.30	772035.96
TGT#3(Speedy 16 State Com #201H)	9458.0	-719.8	353.8	609576.20	772962.79
FTP(Speedy 16 State Com #202H)	9458.0	227.0	378.0	609825.00	772962.00

