



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Getty 5 Fed Com

#505H

OH

Design: OH

Midland PVA

16 September, 2019



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #505H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3469.0usft
Site:	Getty 5 Fed Com	MD Reference:	KB = 25 @ 3469.0usft
Well:	#505H	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:	Getty 5 Fed Com		
Site Position:		Northing:	420,163.00 usft
From:	Map	Easting:	772,092.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 9' 10.475 N
		Longitude:	103° 35' 15.736 W
		Grid Convergence:	0.40 "

Well:	#505H		
Well Position	+N/-S 0.0 usft	Northing:	420,206.00 usft
	+E/-W 0.0 usft	Easting:	770,849.00 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 9' 10.886 N
		Longitude:	103° 35' 30.191 W
		Ground Level:	3,444.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/13/2018	6.80	59.97	47,740.58783592

Design:	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	356.05	

Survey Program	Date	9/16/2019		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
177.0	18,238.0	Dritech MWD (OH)	MWD	OWSG MWD - Standard



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #505H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3469.0usft
Site:	Getty 5 Fed Corn	MD Reference:	KB = 25 @ 3469.0usft
Well:	#505H	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)
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0
177.0	1.14	177.71	177.0	-1.8	0.1	0.64	0.64	0.00	-1.8	0.0
238.0	1.49	180.00	238.0	-3.2	0.1	0.58	0.57	3.75	-3.2	0.1
326.0	1.85	172.09	325.9	-5.7	0.3	0.48	0.41	-8.99	-5.7	-0.5
417.0	2.11	172.09	416.9	-8.8	0.7	0.29	0.29	0.00	-8.8	-0.5
504.0	2.20	168.84	503.8	-12.0	1.3	0.17	0.10	-3.74	-12.1	-1.1
593.0	2.46	177.98	592.7	-15.6	1.7	0.51	0.29	10.27	-15.7	1.1
680.0	1.85	178.86	679.7	-18.9	1.8	0.70	-0.70	1.01	-18.9	1.4
778.0	1.58	191.51	777.6	-21.8	1.5	0.47	-0.28	12.91	-21.1	5.8
872.0	0.35	193.80	871.6	-23.4	1.2	1.31	-1.31	2.44	-22.4	6.7
966.0	1.14	5.80	965.6	-22.7	1.2	1.58	0.84	182.98	22.5	-3.5
1,061.0	1.41	358.68	1,060.6	-20.6	1.3	0.33	0.28	-7.49	20.6	-0.8
1,114.0	1.23	5.54	1,113.6	-19.4	1.3	0.45	-0.34	12.94	19.2	-3.2
1,251.0	0.88	1.67	1,250.6	-16.9	1.5	0.26	-0.26	-2.82	16.8	-2.0
1,345.0	0.88	351.65	1,344.5	-15.4	1.4	0.16	0.00	-10.66	15.5	0.8
1,440.0	0.97	5.10	1,439.5	-13.9	1.4	0.25	0.09	14.16	13.7	-2.6
1,534.0	1.32	283.89	1,533.5	-12.9	0.4	1.61	0.37	-86.39	3.6	12.3
1,628.0	2.73	267.36	1,627.5	-12.7	-2.9	1.61	1.50	-17.59	-0.8	11.5
1,722.0	3.69	259.89	1,721.3	-13.3	-8.1	1.11	1.02	-7.95	-2.0	9.7
1,816.0	4.92	275.10	1,815.0	-13.5	-15.1	1.77	1.31	16.18	1.4	6.4
1,911.0	5.19	251.98	1,909.7	-14.5	-23.2	2.15	0.28	-24.34	0.6	3.9
2,005.0	5.80	246.71	2,003.3	-17.7	-31.6	0.84	0.65	-5.61	1.1	3.5
2,100.0	6.16	243.90	2,097.7	-21.8	-40.6	0.49	0.38	-2.96	0.9	3.7
2,194.0	6.60	242.05	2,191.2	-26.6	-49.9	0.52	0.47	-1.97	0.2	4.3
2,289.0	6.86	231.15	2,285.5	-32.7	-59.2	1.37	0.27	-11.47	-2.1	5.8
2,383.0	7.56	226.41	2,378.8	-40.5	-68.0	0.98	0.74	-5.04	-5.1	8.5
2,477.0	7.12	228.52	2,472.0	-48.6	-76.9	0.55	-0.47	2.24	-7.5	11.9



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #505H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3469.0usft
Site:	Getty 5 Fed Com	MD Reference:	KB = 25 @ 3469.0usft
Well:	#505H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (")	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
2,572.0	6.60	229.83	2,566.3	-56.0	-85.4	0.57	-0.55	1.38	-9.0	15.0	
2,666.0	6.60	243.19	2,659.7	-61.9	-94.4	1.63	0.00	14.21	-6.2	18.5	
2,760.0	6.95	251.10	2,753.0	-66.2	-104.6	1.06	0.37	8.41	-4.9	19.1	
2,855.0	6.51	250.40	2,847.4	-69.9	-115.1	0.47	-0.46	-0.74	-6.3	18.3	
2,949.0	6.07	250.14	2,940.8	-73.3	-124.8	0.47	-0.47	-0.28	-6.9	17.6	
3,044.0	5.80	251.10	3,035.3	-76.6	-134.1	0.30	-0.28	1.01	-6.5	16.9	
3,138.0	5.28	251.54	3,128.9	-79.5	-142.7	0.56	-0.55	0.47	-5.7	16.1	
3,232.0	4.92	251.89	3,222.5	-82.1	-150.6	0.38	-0.38	0.37	-4.2	15.2	
3,327.0	4.84	251.45	3,317.2	-84.7	-158.3	0.09	-0.08	-0.46	-2.5	14.3	
3,421.0	5.45	256.64	3,410.8	-87.0	-166.4	0.82	0.65	5.52	0.1	13.0	
3,515.0	5.72	259.63	3,504.3	-88.8	-175.3	0.42	0.29	3.18	1.2	11.0	
3,609.0	5.36	258.66	3,597.9	-90.6	-184.2	0.40	-0.38	-1.03	1.5	8.8	
3,704.0	4.92	259.54	3,692.5	-92.2	-192.6	0.47	-0.46	0.93	2.8	6.6	
3,798.0	4.48	254.62	3,786.2	-93.9	-200.1	0.63	-0.47	-5.23	4.3	5.1	
3,892.0	5.10	252.25	3,879.9	-98.1	-207.6	0.69	0.66	-2.52	6.0	4.1	
3,986.0	5.28	245.30	3,973.5	-99.2	-215.5	0.70	0.19	-7.39	6.9	4.4	
4,080.0	6.16	242.05	4,067.0	-103.4	-223.9	1.00	0.94	-3.46	7.0	5.3	
4,175.0	5.54	242.23	4,161.5	-107.9	-232.5	0.65	-0.65	0.19	7.3	6.0	
4,269.0	4.57	249.70	4,255.2	-111.3	-240.0	1.24	-1.03	7.95	9.6	5.0	
4,363.0	3.87	229.83	4,348.9	-114.7	-245.9	1.71	-0.74	-21.14	10.0	9.5	
4,457.0	3.61	227.37	4,442.7	-118.7	-250.5	0.32	-0.28	-2.62	12.8	13.0	
4,551.0	3.25	217.88	4,536.5	-122.8	-254.4	0.71	-0.38	-10.10	13.6	19.1	
4,645.0	3.08	197.93	4,630.4	-127.3	-256.8	1.18	-0.18	-21.22	7.8	29.0	
4,772.0	3.52	176.57	4,757.2	-134.5	-257.6	1.02	0.35	-16.82	-5.7	41.1	
4,917.0	2.99	175.78	4,902.0	-142.7	-257.0	0.37	-0.37	-0.54	-9.5	55.2	
5,011.0	5.01	222.80	4,995.7	-148.1	-259.6	3.92	2.15	50.02	37.2	50.3	
5,105.0	7.03	238.53	5,089.2	-154.1	-267.3	2.76	2.15	16.73	49.4	40.9	



Midland PVA

Company: EOG Resources - Midland				Local Co-ordinate Reference:				Well #505H			
Project: Lea County, NM (NAD 83 NME)				TVD Reference:				KB = 25 @ 3469.0usft			
Site: Getty 5 Fed Com				MD Reference:				KB = 25 @ 3469.0usft			
Well: #505H				North Reference:				Grid			
Wellbore: OH				Survey Calculation Method:				Minimum Curvature			
Design: OH				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)	
5,199.0	8.44	241.35	5,182.4	-160.5	-278.3	1.55	1.50	3.00	48.4	38.5	
5,293.0	8.44	242.84	5,275.3	-166.9	-290.5	0.23	0.00	1.59	45.4	39.1	
5,367.0	8.62	247.76	5,368.3	-172.7	-303.2	0.80	0.19	5.23	44.5	35.4	
5,462.0	8.27	248.20	5,462.3	-178.0	-316.1	0.37	-0.37	0.46	40.7	34.8	
5,576.0	8.18	248.38	5,555.3	-182.9	-328.6	0.10	-0.10	0.19	37.1	34.3	
5,671.0	7.91	248.55	5,649.4	-187.8	-340.9	0.29	-0.28	0.18	33.8	33.8	
5,765.0	8.35	250.66	5,742.4	-192.4	-353.4	0.57	0.47	2.24	31.5	32.1	
5,859.0	9.76	253.30	5,835.3	-197.0	-367.5	1.56	1.50	2.81	27.9	29.7	
5,953.0	9.41	251.98	5,927.9	-201.7	-382.4	0.44	-0.37	-1.40	21.3	29.2	
6,047.0	8.79	252.25	6,020.8	-206.2	-396.6	0.66	-0.66	0.29	16.3	28.1	
6,142.0	8.27	251.19	6,114.7	-210.6	-409.9	0.57	-0.55	-1.12	11.5	27.4	
6,236.0	8.18	250.75	6,207.7	-215.0	-422.7	0.12	-0.10	-0.47	7.6	26.7	
6,330.0	5.89	249.08	6,301.0	-219.0	-433.5	2.45	-2.44	-1.78	5.2	26.2	
6,425.0	3.52	252.86	6,395.7	-221.6	-440.8	2.51	-2.49	3.98	7.7	25.2	
6,519.0	2.46	292.06	6,489.6	-221.6	-445.4	2.38	-1.13	41.70	21.5	12.5	
6,614.0	2.29	312.19	6,584.5	-219.6	-448.7	0.89	-0.18	21.19	21.7	2.8	
6,708.0	3.17	357.71	6,678.4	-216.7	-450.2	2.41	0.94	48.43	13.2	-12.2	
6,802.0	2.90	357.45	6,772.3	-210.8	-450.5	0.29	-0.29	-0.28	8.3	-12.2	
6,897.0	2.73	357.63	6,867.2	-206.1	-450.7	0.18	-0.18	0.19	3.6	-12.2	
6,991.0	2.55	351.21	6,961.1	-201.8	-451.1	0.37	-0.19	-6.83	0.6	-12.0	
7,085.0	2.29	351.03	7,055.0	-197.9	-451.7	0.28	-0.28	-0.19	-3.3	-12.0	
7,179.0	2.11	350.95	7,148.9	-194.3	-452.2	0.19	-0.19	-0.09	-6.9	-12.0	
7,273.0	1.76	349.98	7,242.9	-191.2	-452.8	0.37	-0.37	-1.03	-9.8	-12.1	
7,367.0	1.67	344.71	7,336.8	-188.5	-453.4	0.19	-0.10	-5.61	-11.5	-13.1	
7,462.0	1.32	352.35	7,431.8	-186.0	-453.9	0.42	-0.37	8.04	-15.6	-11.3	
7,556.0	1.14	2.11	7,525.8	-184.0	-454.0	0.29	-0.19	10.38	-18.3	-8.3	
7,650.0	0.97	9.58	7,619.7	-182.3	-453.8	0.23	-0.18	7.95	-21.9	-5.6	



Midland PVA

Company: EOG Resources - Midland			Local Co-ordinate Reference:			Well #505H				
Project: Lea County, NM (NAD 83 NME)			TVD Reference:			KB = 25 @ 3469.0usft				
Site: Gatty 5 Fed Com			MD Reference:			KB = 25 @ 3469.0usft				
Well: #505H			North Reference:			Grid				
Wellbore: OH			Survey Calculation Method:			Minimum Curvature				
Design: OH			Database:			EDM 5000.14				
Survey										
MD (usft)	Inc (°)	Az (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	D Leg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
7,745.0	0.88	15.64	7,714.7	-180.8	-453.5	0.14	-0.09	6.38	-23.9	-3.2
7,839.0	0.88	20.92	7,808.7	-178.4	-453.0	0.09	0.00	5.62	-25.6	-0.9
7,933.0	0.62	20.21	7,902.7	-178.3	-452.6	0.28	-0.28	-0.76	-28.8	-1.2
8,028.0	0.35	35.24	7,997.7	-177.6	-452.3	0.31	-0.28	15.82	-27.0	5.9
8,122.0	0.44	48.93	8,091.7	-177.1	-451.8	0.13	0.10	12.44	-25.8	11.3
8,216.0	0.26	65.83	8,185.7	-176.8	-451.4	0.23	-0.19	20.11	-21.3	19.2
8,310.0	0.35	70.75	8,279.7	-176.6	-450.9	0.10	0.10	5.23	-20.1	21.0
8,405.0	0.18	95.71	8,374.7	-176.5	-450.5	0.21	-0.18	26.27	-9.8	27.6
8,499.0	0.44	108.02	8,468.7	-176.6	-450.0	0.28	0.28	13.10	-4.2	29.1
8,593.0	0.79	128.58	8,562.7	-177.1	-449.2	0.43	0.37	21.87	5.3	28.9
8,687.0	0.88	128.76	8,656.7	-178.0	-448.1	0.10	0.10	0.19	4.0	28.8
8,782.0	0.88	138.43	8,751.7	-178.0	-447.0	0.16	0.00	10.18	7.4	27.9
8,876.0	0.70	153.28	8,845.7	-180.0	-446.3	0.29	-0.19	15.80	13.0	25.2
8,970.0	0.70	165.32	8,939.7	-181.1	-445.9	0.16	0.00	12.81	16.8	22.1
9,064.0	0.79	192.48	9,033.6	-182.3	-445.9	0.38	0.10	28.89	23.9	12.2
9,158.0	0.97	183.78	9,127.6	-183.7	-446.1	0.24	0.19	-9.26	20.3	15.6
9,253.0	0.53	176.92	9,222.6	-185.0	-446.1	0.47	-0.46	-7.22	17.1	17.8
9,346.0	0.26	172.88	9,315.6	-185.6	-446.1	0.29	-0.29	-4.34	15.2	19.0
9,441.0	0.97	210.35	9,410.6	-186.5	-446.4	0.82	0.75	39.44	22.6	6.0
9,536.0	1.14	208.74	9,505.6	-188.0	-447.3	0.18	0.18	-1.69	20.7	6.6
9,630.0	0.70	211.99	9,598.6	-189.3	-448.1	0.47	-0.47	3.46	19.5	5.4
9,724.0	0.35	292.68	9,693.6	-189.7	-448.6	0.78	-0.37	85.84	8.1	-17.8
9,818.0	0.97	320.71	9,787.6	-189.0	-449.4	0.72	0.66	29.82	-2.2	-19.4
9,912.0	1.32	330.64	9,881.6	-187.4	-450.4	0.43	0.37	10.56	-7.4	-18.6
10,006.0	0.70	9.67	9,975.6	-185.9	-450.9	0.95	-0.66	41.52	-18.9	-9.1
10,100.0	0.53	55.99	10,069.5	-185.1	-450.4	0.54	-0.18	49.28	-20.4	7.8
10,123.0	0.44	83.58	10,092.5	-185.0	-450.2	1.09	-0.39	119.96	-14.7	16.4



Midland PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Gatty 5 Fed Com
Well: #505H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #505H
TVD Reference: KB = 25 @ 3469.0usft
MD Reference: KB = 25 @ 3469.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

Survey	MD (usft)	Inc (")	Azi (azimuth) (")	TVD (usft)	N/S (usft)	EW (usft)	Di-eg ("/100usft)	Build ("/100usft)	Turn ("/100usft)	High to Plan (usft)	Right to Plan (usft)
	10,218.0	3.89	343.92	10,187.5	-182.1	-450.7	3.99	3.42	-104.91	-16.5	-17.5
	10,312.0	18.99	354.46	10,278.4	-163.8	-453.0	16.36	16.28	11.21	-27.4	-12.8
	10,407.0	25.15	358.15	10,367.4	-128.2	-455.2	6.64	6.48	3.88	-37.6	-8.3
	10,500.0	31.39	354.02	10,449.3	-84.3	-458.3	7.03	6.71	4.44	-40.1	-8.9
	10,584.0	40.10	354.73	10,525.5	-29.7	-463.7	9.28	9.27	0.76	-39.3	-3.1
	10,688.0	50.21	0.18	10,591.7	36.7	-466.4	11.51	10.76	5.80	-37.0	1.8
	10,783.0	58.30	357.01	10,647.2	113.7	-468.4	8.93	8.52	-3.34	-33.2	2.3
	10,877.0	65.25	359.65	10,691.6	195.4	-470.7	7.80	7.39	2.81	-29.2	4.7
	10,971.0	70.35	356.65	10,727.1	283.4	-471.2	5.43	5.43	0.00	-11.1	4.6
	11,050.0	82.82	359.82	10,745.3	360.1	-471.6	15.91	15.91	0.22	0.4	4.3
	11,089.0	86.70	0.26	10,747.0	378.1	-471.6	20.03	19.89	2.32	2.1	4.2
	11,163.0	92.15	0.79	10,748.0	473.0	-470.7	5.83	5.80	0.56	3.3	2.6
	11,257.0	91.63	1.05	10,744.8	567.0	-469.2	0.62	-0.55	0.28	0.5	0.4
	11,351.0	91.54	0.88	10,742.3	660.9	-467.6	0.20	-0.10	-0.18	-1.9	-1.9
	11,445.0	91.88	1.23	10,739.4	754.8	-465.9	0.60	0.47	0.37	-4.5	-4.4
	11,540.0	89.96	1.41	10,737.8	849.8	-463.7	2.13	-2.13	0.19	-5.9	-7.3
	11,634.0	88.78	1.23	10,738.0	943.8	-461.5	0.27	-0.19	-0.19	-5.4	-10.2
	11,728.0	89.08	0.53	10,738.9	1,037.8	-460.1	1.05	-0.74	-0.74	-4.2	-12.3
	11,823.0	88.99	0.44	10,740.5	1,132.7	-458.3	0.13	-0.09	-0.09	-2.4	-13.9
	11,917.0	88.55	0.44	10,742.6	1,226.7	-456.6	0.47	-0.47	0.00	-0.1	-15.3
	12,011.0	90.13	0.18	10,743.6	1,320.7	-456.1	1.70	1.68	-0.28	1.2	-16.5
	12,105.0	90.31	0.18	10,743.3	1,414.7	-457.8	0.19	0.19	0.00	1.1	-17.5
	12,200.0	91.71	0.00	10,741.6	1,509.7	-457.6	1.49	1.47	-0.19	-0.4	-18.4
	12,294.0	91.10	0.35	10,739.3	1,603.7	-457.3	0.73	-0.65	0.37	-2.6	-19.4
	12,388.0	90.57	0.79	10,737.9	1,697.6	-456.4	0.73	-0.56	0.47	-4.0	-21.1
	12,482.0	88.16	357.71	10,738.2	1,791.6	-457.6	3.60	-1.50	-3.28	-3.7	-20.5
	12,577.0	89.34	357.36	10,739.4	1,886.5	-461.7	0.41	0.19	-0.37	-2.5	-17.2



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #505H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3469.0usft
Site:	Getty 5 Fed Com	MD Reference:	KB = 25 @ 3469.0usft
Well:	#505H	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)
12,671.0	89.34	357.28	10,740.5	1,980.4	-466.1	0.09	0.00	-0.09	-1.3	-13.5
12,765.0	89.43	357.28	10,741.5	2,074.3	-470.6	0.10	0.10	0.00	-0.3	-9.7
12,860.0	89.52	357.36	10,742.4	2,169.2	-475.0	0.13	0.09	0.08	0.6	-6.0
12,954.0	88.11	356.84	10,744.3	2,263.1	-479.8	1.60	-1.50	-0.55	2.6	-2.0
13,048.0	88.20	357.80	10,747.3	2,356.9	-484.2	1.03	0.10	1.02	5.6	1.7
13,142.0	90.13	357.71	10,748.7	2,450.8	-487.8	2.06	2.05	-0.10	7.0	4.7
13,236.0	89.96	357.19	10,748.6	2,544.7	-492.0	0.58	-0.18	-0.55	7.0	8.1
13,331.0	89.87	357.98	10,748.8	2,639.6	-496.0	0.84	-0.09	0.83	7.2	11.4
13,425.0	89.69	358.15	10,749.1	2,733.6	-499.2	0.26	-0.19	0.18	7.5	13.9
13,519.0	89.60	356.92	10,749.7	2,827.5	-503.2	1.31	-0.10	-1.31	8.2	17.2
13,613.0	90.04	358.51	10,750.0	2,921.4	-507.0	1.76	0.47	1.69	8.5	20.2
13,707.0	90.04	358.68	10,749.9	3,015.4	-509.3	0.18	0.00	0.18	8.5	21.8
13,802.0	89.43	0.61	10,750.4	3,110.4	-509.9	2.13	-0.64	2.03	8.9	21.7
13,896.0	89.25	1.85	10,751.5	3,204.3	-507.9	1.33	-0.19	1.32	10.1	18.9
13,989.0	89.52	0.44	10,752.5	3,297.3	-506.0	1.54	0.29	-1.52	11.1	16.4
14,084.0	90.22	2.72	10,752.7	3,392.3	-503.4	2.51	0.74	2.40	11.3	13.0
14,178.0	90.48	1.93	10,752.1	3,486.2	-499.6	0.88	0.28	-0.84	10.8	8.5
14,272.0	90.22	2.90	10,751.5	3,580.1	-495.6	1.07	-0.28	1.03	10.2	3.8
14,367.0	90.22	359.56	10,751.2	3,675.1	-493.6	3.52	0.00	-3.52	9.9	1.1
14,461.0	89.96	359.56	10,751.0	3,769.1	-494.3	0.28	-0.28	0.00	9.8	1.1
14,555.0	89.25	359.30	10,751.7	3,863.1	-495.2	0.80	-0.76	-0.28	10.5	1.3
14,650.0	91.10	0.18	10,751.4	3,958.1	-495.7	2.16	1.95	0.93	10.2	1.0
14,744.0	90.92	0.70	10,749.7	4,052.0	-494.9	0.59	-0.19	0.55	8.6	-0.4
14,839.0	91.01	0.53	10,748.1	4,147.0	-493.9	0.20	0.09	-0.18	7.0	-2.2
14,933.0	90.66	359.91	10,746.7	4,241.0	-493.6	0.76	-0.37	-0.66	5.7	-3.2
15,026.0	90.40	359.56	10,745.9	4,334.0	-494.0	0.47	-0.28	-0.38	4.8	-3.5
15,121.0	90.04	0.53	10,745.5	4,429.0	-493.9	1.09	-0.38	1.02	4.5	-4.3



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #505H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3469.0usft
Site:	Getty 5 Fed Com	MD Reference:	KB = 25 @ 3469.0usft
Well:	#505H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	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)	
15,215.0	89.78	359.38	10,745.7	4,523.0	-494.0	1.25	-0.28	-1.22	4.4	-4.9	
15,309.0	89.60	359.82	10,746.2	4,617.0	-494.7	0.51	-0.19	0.47	4.0	-5.0	
15,403.0	89.34	0.18	10,747.0	4,711.0	-494.7	0.47	-0.28	0.38	4.0	-5.7	
15,498.0	88.81	0.53	10,748.6	4,806.0	-494.1	0.67	-0.56	0.37	4.6	-7.0	
15,592.0	88.29	359.38	10,751.0	4,899.9	-494.1	1.34	-0.55	-1.22	6.1	-7.7	
15,686.0	89.52	359.12	10,752.8	4,993.9	-495.4	1.34	1.31	-0.28	7.0	-7.2	
15,780.0	89.52	0.18	10,753.5	5,087.9	-495.9	1.13	0.00	1.13	6.9	-7.3	
15,875.0	88.99	0.00	10,754.8	5,182.9	-495.8	0.59	-0.56	-0.19	7.3	-8.2	
15,970.0	89.60	0.18	10,755.9	5,277.9	-495.6	0.67	0.64	0.19	7.5	-9.0	
16,064.0	89.87	359.82	10,756.4	5,371.9	-495.6	0.48	0.29	-0.38	7.1	-9.8	
16,158.0	89.87	359.56	10,756.6	5,465.9	-496.1	0.28	0.00	-0.28	6.4	-10.0	
16,252.0	89.60	0.53	10,757.0	5,559.9	-496.1	1.07	-0.29	1.03	6.0	-10.8	
16,346.0	89.96	0.97	10,757.4	5,653.9	-494.8	0.60	0.38	0.47	5.4	-12.7	
16,440.0	90.04	0.61	10,757.4	5,747.9	-493.5	0.39	0.09	-0.38	4.6	-14.7	
16,535.0	89.52	0.70	10,757.8	5,842.9	-492.5	0.56	-0.55	0.09	4.0	-16.5	
16,629.0	89.60	359.74	10,758.5	5,936.9	-492.1	1.02	0.09	-1.02	3.9	-17.6	
16,723.0	89.78	0.00	10,759.0	6,030.9	-492.3	0.34	0.19	0.28	3.7	-18.1	
16,817.0	90.04	0.79	10,759.1	6,124.9	-491.7	0.88	0.28	0.84	3.4	-19.5	
16,911.0	90.40	1.32	10,759.8	6,218.8	-489.9	0.68	0.38	0.56	2.5	-21.9	
17,005.0	90.84	359.12	10,757.8	6,312.8	-489.6	2.39	0.47	-2.34	1.0	-23.0	
17,099.0	91.01	358.68	10,756.2	6,406.8	-491.4	0.50	0.18	-0.47	-1.0	-21.9	
17,193.0	90.75	358.07	10,754.8	6,500.7	-494.0	0.71	-0.28	-0.65	-2.9	-19.9	
17,288.0	90.22	357.63	10,754.0	6,595.7	-497.6	0.73	-0.56	-0.46	-4.2	-17.1	
17,382.0	91.10	359.21	10,752.9	6,689.6	-500.2	1.92	0.94	1.68	-5.7	-15.2	
17,476.0	90.92	358.59	10,751.2	6,783.6	-502.0	0.69	-0.19	-0.66	-7.9	-14.1	
17,571.0	90.66	359.74	10,749.9	6,878.6	-503.4	1.24	-0.27	1.21	-9.6	-13.5	
17,665.0	91.10	359.03	10,748.5	6,972.6	-504.4	0.89	0.47	-0.76	-11.6	-13.2	



Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #505H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3469.0usft
Site:	Gatty 5 Fed Com	MD Reference:	KB = 25 @ 3469.0usft
Well:	#505H	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)
17,759.0	90.75	357.63	10,747.0	7,066.5	-507.1	1.54	-0.37	-1.49	-13.6	-11.1
17,854.0	90.04	357.98	10,746.3	7,161.4	-510.8	0.83	-0.75	0.37	-14.7	-8.2
17,948.0	90.46	357.89	10,745.9	7,255.4	-514.2	0.48	0.47	-0.10	-15.6	-5.6
18,042.0	89.87	356.84	10,745.6	7,349.3	-518.5	1.29	-0.65	-1.12	-16.4	-2.0
18,137.0	89.78	356.22	10,745.9	7,444.1	-524.2	0.66	-0.09	-0.65	-16.5	3.1
18,174.0	89.78	356.48	10,746.0	7,481.0	-526.6	0.70	0.00	0.70	-16.6	5.1
18,238.0	89.78	356.48	10,746.3	7,544.9	-530.5	0.00	0.00	0.00	-16.7	8.6

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			Comment
		+N/S (usft)	+E/W (usft)		
10,197.0	10,166.5	-183.2	-450.4		KOP, MD:10197.0', TVD:10166.5', N/S:-183.2', E/W:-450.4', INC:2.86
10,343.8	10,309.3	-153.0	-453.9		FTP Crossing, MD:10343.8', TVD:10309.3', N/S:-153.0', E/W:-453.9', INC:21.04
18,174.0	10,746.0	7,481.0	-526.6		Last MWD Survey (MD=18174.0')
18,238.0	10,746.3	7,544.9	-530.5		Projection to Bit (MD=18238.0')

Checked By: _____	Approved By: _____	Date: _____
-------------------	--------------------	-------------



Lea County, NM (NAD 83 NME)

Getty 5 Fed Com #505H

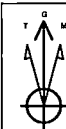
Plan #1

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: #505H

KB = 25 @ 3469.8usft 3444.0
Northing 420206.00 Easting 770849.00 Latitude 32° 9' 10.988 N Longitude 103° 35' 30.191 W



Azimuths to Grid North
True North: -0.40°
Magnetic North: 6.40°

Magnetic Field
Strength: 47740.6nT
Dip Angle: 59.97°
Date: 12/13/2018
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.40°
To convert a Magnetic Direction to a True Direction, Add 6.80° East
To convert a True Direction to a Grid Direction, Subtract 6.39°

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.00	0.00	0.00	0.0	
2	1500.0	0.00	0.00	1500.0	0.0	0.00	0.00	0.00	0.0	
3	1800.0	6.00	246.33	1799.5	-6.3	-14.4	2.00	246.33	-5.3	
4	6335.9	6.00	246.33	6310.5	-196.7	-448.6	0.00	0.00	-165.3	
5	6635.9	0.00	0.00	6610.0	-203.0	-463.0	2.00	180.00	-170.6	
6	10197.9	0.00	0.00	10172.0	-203.0	-463.0	0.00	0.00	-170.6	
7	11095.6	90.15	359.56	10745.0	371.5	-467.4	10.00	359.56	402.8	
8	12198.7	90.15	359.56	10742.0	1470.7	-475.7	0.00	0.00	1500.0	TGT#1 (Getty 5 FC #505H)
9	12205.5	90.02	359.56	10742.0	1477.5	-475.8	2.00	-180.00	1506.7	
10	15204.4	90.02	359.56	10741.0	4476.3	-458.6	0.00	0.00	4300.0	TGT#2 (Getty 5 FC #505H)
11	15232.3	89.46	359.56	10741.1	4504.2	-458.6	2.00	180.00	4527.9	
12	16707.3	89.46	359.56	10755.0	5979.1	-510.0	0.00	0.00	6000.0	TGT#3 (Getty 5 FC #505H)
13	16719.8	89.71	359.56	10755.1	5991.6	-510.1	2.00	0.00	6012.5	
14	18283.3	89.71	359.56	10763.0	7555.0	-522.0	0.00	0.00	7573.0	PBHL (Getty 5 FC #505H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
TGT#1 (Getty 5 FC #505H)	10742.0	1470.7	-475.7	421676.70	770373.27
TGT#2 (Getty 5 FC #505H)	10741.0	4476.3	-458.6	424682.30	770350.41
TGT#3 (Getty 5 FC #505H)	10755.0	5979.1	-510.0	426185.10	770330.59
PBHL (Getty 5 FC #505H)	10763.0	7555.0	-522.0	427761.00	770327.09
Brushy Top (Getty 5 FC #505H)	7557.0	-203.0	-463.0	420023.00	770386.00
FTP (Getty 5 FC #505H)	10746.0	-153.0	-463.0	420053.00	770396.00

