



EOG Resources - Midland

Eddy County, NM (NAD 83 NME)

Golden Graham 1 State Com

#721H

OH

30-015-45324

NM OIL CONSERVATION
ARTESIA DISTRICT

OCT 12 2018

RECEIVED

Plan: Plan #0.1

Standard Planning Report

12 October, 2018



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Eddy County, NM (NAD 83 NME)
Site: Golden Graham 1 State Com
Well: #721H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #721H
TVD Reference: KB = 25 @ 2965.0usft
MD Reference: KB = 25 @ 2965.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project	Eddy 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	Golden Graham 1 State Com			
Site Position:		Northing:	387,494.00 usft	Latitude: 32° 3' 53.919 N
From:	Map	Easting:	630,031.00 usft	Longitude: 104° 2' 49.246 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.15 °

Well	#721H			
Well Position	+N/-S	3.0 usft	Northing: 387,497.00 usft	Latitude: 32° 3' 53.947 N
	+E/-W	33.0 usft	Easting: 630,064.00 usft	Longitude: 104° 2' 48.862 W
Position Uncertainty	0.0 usft	Wellhead Elevation:		Ground Level: 2,940.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/11/2018	7.02	59.82	47,661.45733976

Design	Plan #0.1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	359.66

Plan Survey Tool Program	Date	10/12/2018		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1 0.0	20,047.8	Plan #0.1 (OH)	MWD	
			OWSG MWD - Standard	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,084.8	1.70	204.65	3,084.8	-1.1	-0.5	2.00	2.00	0.00	204.65	
9,320.5	1.70	204.65	9,317.7	-168.9	-77.5	0.00	0.00	0.00	0.00	
9,405.3	0.00	0.00	9,402.5	-170.0	-78.0	2.00	-2.00	0.00	180.00	KOP(GG 1 SC #721H)
10,155.3	90.00	0.09	9,880.0	307.5	-77.2	12.00	12.00	0.01	0.09	
20,047.8	90.00	0.09	9,880.0	10,200.0	-61.0	0.00	0.00	0.00	0.00	PBHL(GG 1 SC #721H)



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 Survey Calculation Method: Minimum Curvature

Planned 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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,084.8	1.70	204.65	3,084.8	-1.1	-0.5	-1.1	2.00	2.00	0.00
3,100.0	1.70	204.65	3,100.0	-1.5	-0.7	-1.5	0.00	0.00	0.00
3,200.0	1.70	204.65	3,199.9	-4.2	-1.9	-4.2	0.00	0.00	0.00
3,300.0	1.70	204.65	3,299.9	-6.9	-3.2	-6.9	0.00	0.00	0.00
3,400.0	1.70	204.65	3,399.8	-9.6	-4.4	-9.6	0.00	0.00	0.00
3,500.0	1.70	204.65	3,499.8	-12.3	-5.6	-12.3	0.00	0.00	0.00
3,600.0	1.70	204.65	3,599.8	-15.0	-6.9	-15.0	0.00	0.00	0.00
3,700.0	1.70	204.65	3,699.7	-17.7	-8.1	-17.6	0.00	0.00	0.00
3,800.0	1.70	204.65	3,799.7	-20.4	-9.3	-20.3	0.00	0.00	0.00
3,900.0	1.70	204.65	3,899.6	-23.1	-10.6	-23.0	0.00	0.00	0.00
4,000.0	1.70	204.65	3,999.6	-25.8	-11.8	-25.7	0.00	0.00	0.00
4,100.0	1.70	204.65	4,099.5	-28.4	-13.1	-28.4	0.00	0.00	0.00
4,200.0	1.70	204.65	4,199.5	-31.1	-14.3	-31.0	0.00	0.00	0.00
4,300.0	1.70	204.65	4,299.5	-33.8	-15.5	-33.7	0.00	0.00	0.00
4,400.0	1.70	204.65	4,399.4	-36.5	-16.8	-36.4	0.00	0.00	0.00
4,500.0	1.70	204.65	4,499.4	-39.2	-18.0	-39.1	0.00	0.00	0.00
4,600.0	1.70	204.65	4,599.3	-41.9	-19.2	-41.8	0.00	0.00	0.00
4,700.0	1.70	204.65	4,699.3	-44.6	-20.5	-44.5	0.00	0.00	0.00
4,800.0	1.70	204.65	4,799.2	-47.3	-21.7	-47.1	0.00	0.00	0.00
4,900.0	1.70	204.65	4,899.2	-50.0	-22.9	-49.8	0.00	0.00	0.00
5,000.0	1.70	204.65	4,999.1	-52.7	-24.2	-52.5	0.00	0.00	0.00
5,100.0	1.70	204.65	5,099.1	-55.3	-25.4	-55.2	0.00	0.00	0.00
5,200.0	1.70	204.65	5,199.1	-58.0	-26.6	-57.9	0.00	0.00	0.00



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Planned 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)
5,300.0	1.70	204.65	5,299.0	-60.7	-27.9	-60.6	0.00	0.00	0.00
5,400.0	1.70	204.65	5,399.0	-63.4	-29.1	-63.2	0.00	0.00	0.00
5,500.0	1.70	204.65	5,498.9	-66.1	-30.3	-65.9	0.00	0.00	0.00
5,600.0	1.70	204.65	5,598.9	-68.8	-31.6	-68.6	0.00	0.00	0.00
5,700.0	1.70	204.65	5,698.8	-71.5	-32.8	-71.3	0.00	0.00	0.00
5,800.0	1.70	204.65	5,798.8	-74.2	-34.0	-74.0	0.00	0.00	0.00
5,900.0	1.70	204.65	5,898.8	-76.9	-35.3	-76.6	0.00	0.00	0.00
6,000.0	1.70	204.65	5,998.7	-79.5	-36.5	-79.3	0.00	0.00	0.00
6,100.0	1.70	204.65	6,098.7	-82.2	-37.7	-82.0	0.00	0.00	0.00
6,200.0	1.70	204.65	6,198.6	-84.9	-39.0	-84.7	0.00	0.00	0.00
6,300.0	1.70	204.65	6,298.6	-87.6	-40.2	-87.4	0.00	0.00	0.00
6,400.0	1.70	204.65	6,398.5	-90.3	-41.4	-90.1	0.00	0.00	0.00
6,500.0	1.70	204.65	6,498.5	-93.0	-42.7	-92.7	0.00	0.00	0.00
6,600.0	1.70	204.65	6,598.4	-95.7	-43.9	-95.4	0.00	0.00	0.00
6,700.0	1.70	204.65	6,698.4	-98.4	-45.1	-98.1	0.00	0.00	0.00
6,800.0	1.70	204.65	6,798.4	-101.1	-46.4	-100.8	0.00	0.00	0.00
6,900.0	1.70	204.65	6,898.3	-103.8	-47.6	-103.5	0.00	0.00	0.00
7,000.0	1.70	204.65	6,998.3	-106.4	-48.8	-106.2	0.00	0.00	0.00
7,100.0	1.70	204.65	7,098.2	-109.1	-50.1	-108.8	0.00	0.00	0.00
7,200.0	1.70	204.65	7,198.2	-111.8	-51.3	-111.5	0.00	0.00	0.00
7,300.0	1.70	204.65	7,298.1	-114.5	-52.5	-114.2	0.00	0.00	0.00
7,400.0	1.70	204.65	7,398.1	-117.2	-53.8	-116.9	0.00	0.00	0.00
7,500.0	1.70	204.65	7,498.1	-119.9	-55.0	-119.6	0.00	0.00	0.00
7,600.0	1.70	204.65	7,598.0	-122.6	-56.2	-122.2	0.00	0.00	0.00
7,700.0	1.70	204.65	7,698.0	-125.3	-57.5	-124.9	0.00	0.00	0.00
7,800.0	1.70	204.65	7,797.9	-128.0	-58.7	-127.6	0.00	0.00	0.00
7,900.0	1.70	204.65	7,897.9	-130.7	-59.9	-130.3	0.00	0.00	0.00
8,000.0	1.70	204.65	7,997.8	-133.3	-61.2	-133.0	0.00	0.00	0.00
8,100.0	1.70	204.65	8,097.8	-136.0	-62.4	-135.7	0.00	0.00	0.00
8,200.0	1.70	204.65	8,197.7	-138.7	-63.6	-138.3	0.00	0.00	0.00
8,300.0	1.70	204.65	8,297.7	-141.4	-64.9	-141.0	0.00	0.00	0.00
8,400.0	1.70	204.65	8,397.7	-144.1	-66.1	-143.7	0.00	0.00	0.00
8,500.0	1.70	204.65	8,497.6	-146.8	-67.4	-146.4	0.00	0.00	0.00
8,600.0	1.70	204.65	8,597.6	-149.5	-68.6	-149.1	0.00	0.00	0.00
8,700.0	1.70	204.65	8,697.5	-152.2	-69.8	-151.8	0.00	0.00	0.00
8,800.0	1.70	204.65	8,797.5	-154.9	-71.1	-154.4	0.00	0.00	0.00
8,900.0	1.70	204.65	8,897.4	-157.6	-72.3	-157.1	0.00	0.00	0.00
9,000.0	1.70	204.65	8,997.4	-160.2	-73.5	-159.8	0.00	0.00	0.00
9,100.0	1.70	204.65	9,097.4	-162.9	-74.8	-162.5	0.00	0.00	0.00
9,200.0	1.70	204.65	9,197.3	-165.6	-76.0	-165.2	0.00	0.00	0.00
9,300.0	1.70	204.65	9,297.3	-168.3	-77.2	-167.8	0.00	0.00	0.00
9,320.5	1.70	204.65	9,317.7	-168.9	-77.5	-168.4	0.00	0.00	0.00
9,405.3	0.00	0.00	9,402.5	-170.0	-78.0	-169.5	2.00	-2.00	0.00
KOP(GG 1 SC #721H)									
9,425.0	2.37	0.09	9,422.2	-169.6	-78.0	-169.1	12.00	12.00	0.00
9,450.0	5.37	0.09	9,447.2	-167.9	-78.0	-167.4	12.00	12.00	0.00
9,475.0	8.37	0.09	9,472.0	-164.9	-78.0	-164.4	12.00	12.00	0.00
9,500.0	11.37	0.09	9,496.6	-160.6	-78.0	-160.2	12.00	12.00	0.00
9,525.0	14.37	0.09	9,521.0	-155.1	-78.0	-154.6	12.00	12.00	0.00
9,550.0	17.37	0.09	9,545.0	-148.2	-78.0	-147.8	12.00	12.00	0.00
9,575.0	20.37	0.09	9,568.7	-140.1	-78.0	-139.7	12.00	12.00	0.00
9,600.0	23.37	0.09	9,591.9	-130.8	-77.9	-130.4	12.00	12.00	0.00
9,625.0	26.37	0.09	9,614.6	-120.3	-77.9	-119.9	12.00	12.00	0.00



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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)
9,650.0	29.37	0.09	9,636.7	-108.6	-77.9	-108.2	12.00	12.00	0.00
9,675.0	32.37	0.09	9,658.1	-95.8	-77.9	-95.3	12.00	12.00	0.00
9,700.0	35.37	0.09	9,678.9	-81.9	-77.9	-81.4	12.00	12.00	0.00
9,725.0	38.37	0.09	9,698.9	-66.9	-77.8	-66.4	12.00	12.00	0.00
9,750.0	41.37	0.09	9,718.1	-50.9	-77.8	-50.4	12.00	12.00	0.00
9,775.0	44.37	0.09	9,736.4	-33.8	-77.8	-33.4	12.00	12.00	0.00
9,800.0	47.37	0.09	9,753.8	-15.9	-77.7	-15.4	12.00	12.00	0.00
9,825.0	50.37	0.09	9,770.2	2.9	-77.7	3.4	12.00	12.00	0.00
9,850.0	53.37	0.09	9,785.7	22.6	-77.7	23.0	12.00	12.00	0.00
9,875.0	56.37	0.09	9,800.0	43.0	-77.7	43.5	12.00	12.00	0.00
9,900.0	59.37	0.09	9,813.3	64.2	-77.6	64.7	12.00	12.00	0.00
9,925.0	62.37	0.09	9,825.5	86.0	-77.6	86.5	12.00	12.00	0.00
9,950.0	65.37	0.09	9,836.5	108.5	-77.5	108.9	12.00	12.00	0.00
9,968.5	67.59	0.09	9,843.9	125.4	-77.5	125.9	12.00	12.00	0.00
FTP(GG 1 SC #721H)									
9,975.0	68.37	0.09	9,846.3	131.5	-77.5	131.9	12.00	12.00	0.00
10,000.0	71.37	0.09	9,854.9	154.9	-77.5	155.4	12.00	12.00	0.00
10,025.0	74.37	0.09	9,862.3	178.8	-77.4	179.3	12.00	12.00	0.00
10,050.0	77.37	0.09	9,868.4	203.1	-77.4	203.5	12.00	12.00	0.00
10,075.0	80.37	0.09	9,873.2	227.6	-77.3	228.0	12.00	12.00	0.00
10,100.0	83.37	0.09	9,876.8	252.3	-77.3	252.8	12.00	12.00	0.00
10,125.0	86.37	0.09	9,879.0	277.2	-77.3	277.7	12.00	12.00	0.00
10,150.0	89.37	0.09	9,879.9	302.2	-77.2	302.7	12.00	12.00	0.00
10,155.3	90.00	0.09	9,880.0	307.5	-77.2	307.9	12.00	12.00	0.00
10,200.0	90.00	0.09	9,880.0	352.2	-77.1	352.7	0.00	0.00	0.00
10,300.0	90.00	0.09	9,880.0	452.2	-77.0	452.7	0.00	0.00	0.00
10,400.0	90.00	0.09	9,880.0	552.2	-76.8	552.7	0.00	0.00	0.00
10,500.0	90.00	0.09	9,880.0	652.2	-76.7	652.7	0.00	0.00	0.00
10,600.0	90.00	0.09	9,880.0	752.2	-76.5	752.7	0.00	0.00	0.00
10,700.0	90.00	0.09	9,880.0	852.2	-76.3	852.6	0.00	0.00	0.00
10,800.0	90.00	0.09	9,880.0	952.2	-76.2	952.6	0.00	0.00	0.00
10,900.0	90.00	0.09	9,880.0	1,052.2	-76.0	1,052.6	0.00	0.00	0.00
11,000.0	90.00	0.09	9,880.0	1,152.2	-75.8	1,152.6	0.00	0.00	0.00
11,100.0	90.00	0.09	9,880.0	1,252.2	-75.7	1,252.6	0.00	0.00	0.00
11,200.0	90.00	0.09	9,880.0	1,352.2	-75.5	1,352.6	0.00	0.00	0.00
11,300.0	90.00	0.09	9,880.0	1,452.2	-75.3	1,452.6	0.00	0.00	0.00
11,400.0	90.00	0.09	9,880.0	1,552.2	-75.2	1,552.6	0.00	0.00	0.00
11,500.0	90.00	0.09	9,880.0	1,652.2	-75.0	1,652.6	0.00	0.00	0.00
11,600.0	90.00	0.09	9,880.0	1,752.2	-74.8	1,752.6	0.00	0.00	0.00
11,700.0	90.00	0.09	9,880.0	1,852.2	-74.7	1,852.6	0.00	0.00	0.00
11,800.0	90.00	0.09	9,880.0	1,952.2	-74.5	1,952.6	0.00	0.00	0.00
11,900.0	90.00	0.09	9,880.0	2,052.2	-74.4	2,052.6	0.00	0.00	0.00
12,000.0	90.00	0.09	9,880.0	2,152.2	-74.2	2,152.6	0.00	0.00	0.00
12,100.0	90.00	0.09	9,880.0	2,252.2	-74.0	2,252.6	0.00	0.00	0.00
12,200.0	90.00	0.09	9,880.0	2,352.2	-73.9	2,352.6	0.00	0.00	0.00
12,300.0	90.00	0.09	9,880.0	2,452.2	-73.7	2,452.6	0.00	0.00	0.00
12,400.0	90.00	0.09	9,880.0	2,552.2	-73.5	2,552.6	0.00	0.00	0.00
12,500.0	90.00	0.09	9,880.0	2,652.2	-73.4	2,652.6	0.00	0.00	0.00
12,600.0	90.00	0.09	9,880.0	2,752.2	-73.2	2,752.6	0.00	0.00	0.00
12,700.0	90.00	0.09	9,880.0	2,852.2	-73.0	2,852.6	0.00	0.00	0.00
12,800.0	90.00	0.09	9,880.0	2,952.2	-72.9	2,952.6	0.00	0.00	0.00
12,900.0	90.00	0.09	9,880.0	3,052.2	-72.7	3,052.6	0.00	0.00	0.00
13,000.0	90.00	0.09	9,880.0	3,152.2	-72.6	3,152.6	0.00	0.00	0.00
13,100.0	90.00	0.09	9,880.0	3,252.2	-72.4	3,252.6	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14
 Company: EOG Resources - Midland
 Project: Eddy County, NM (NAD 83 NME)
 Site: Golden Graham 1 State Com
 Well: #721H
 Wellbore: OH
 Design: Plan #0.1

Local Co-ordinate Reference: Well #721H
 TVD Reference: KB = 25 @ 2965.0usft
 MD Reference: KB = 25 @ 2965.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Planned 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)
13,200.0	90.00	0.09	9,880.0	3,352.2	-72.2	3,352.6	0.00	0.00	0.00
13,300.0	90.00	0.09	9,880.0	3,452.2	-72.1	3,452.6	0.00	0.00	0.00
13,400.0	90.00	0.09	9,880.0	3,552.2	-71.9	3,552.6	0.00	0.00	0.00
13,500.0	90.00	0.09	9,880.0	3,652.2	-71.7	3,652.6	0.00	0.00	0.00
13,600.0	90.00	0.09	9,880.0	3,752.2	-71.6	3,752.6	0.00	0.00	0.00
13,700.0	90.00	0.09	9,880.0	3,852.2	-71.4	3,852.6	0.00	0.00	0.00
13,800.0	90.00	0.09	9,880.0	3,952.2	-71.2	3,952.6	0.00	0.00	0.00
13,900.0	90.00	0.09	9,880.0	4,052.2	-71.1	4,052.6	0.00	0.00	0.00
14,000.0	90.00	0.09	9,880.0	4,152.2	-70.9	4,152.6	0.00	0.00	0.00
14,100.0	90.00	0.09	9,880.0	4,252.2	-70.8	4,252.6	0.00	0.00	0.00
14,200.0	90.00	0.09	9,880.0	4,352.2	-70.6	4,352.5	0.00	0.00	0.00
14,300.0	90.00	0.09	9,880.0	4,452.2	-70.4	4,452.5	0.00	0.00	0.00
14,400.0	90.00	0.09	9,880.0	4,552.2	-70.3	4,552.5	0.00	0.00	0.00
14,500.0	90.00	0.09	9,880.0	4,652.2	-70.1	4,652.5	0.00	0.00	0.00
14,600.0	90.00	0.09	9,880.0	4,752.2	-69.9	4,752.5	0.00	0.00	0.00
14,700.0	90.00	0.09	9,880.0	4,852.2	-69.8	4,852.5	0.00	0.00	0.00
14,800.0	90.00	0.09	9,880.0	4,952.2	-69.6	4,952.5	0.00	0.00	0.00
14,900.0	90.00	0.09	9,880.0	5,052.2	-69.4	5,052.5	0.00	0.00	0.00
15,000.0	90.00	0.09	9,880.0	5,152.2	-69.3	5,152.5	0.00	0.00	0.00
15,100.0	90.00	0.09	9,880.0	5,252.2	-69.1	5,252.5	0.00	0.00	0.00
15,200.0	90.00	0.09	9,880.0	5,352.2	-68.9	5,352.5	0.00	0.00	0.00
15,300.0	90.00	0.09	9,880.0	5,452.2	-68.8	5,452.5	0.00	0.00	0.00
15,400.0	90.00	0.09	9,880.0	5,552.2	-68.6	5,552.5	0.00	0.00	0.00
15,500.0	90.00	0.09	9,880.0	5,652.2	-68.5	5,652.5	0.00	0.00	0.00
15,600.0	90.00	0.09	9,880.0	5,752.2	-68.3	5,752.5	0.00	0.00	0.00
15,700.0	90.00	0.09	9,880.0	5,852.2	-68.1	5,852.5	0.00	0.00	0.00
15,800.0	90.00	0.09	9,880.0	5,952.2	-68.0	5,952.5	0.00	0.00	0.00
15,900.0	90.00	0.09	9,880.0	6,052.2	-67.8	6,052.5	0.00	0.00	0.00
16,000.0	90.00	0.09	9,880.0	6,152.2	-67.6	6,152.5	0.00	0.00	0.00
16,100.0	90.00	0.09	9,880.0	6,252.2	-67.5	6,252.5	0.00	0.00	0.00
16,200.0	90.00	0.09	9,880.0	6,352.2	-67.3	6,352.5	0.00	0.00	0.00
16,300.0	90.00	0.09	9,880.0	6,452.2	-67.1	6,452.5	0.00	0.00	0.00
16,400.0	90.00	0.09	9,880.0	6,552.2	-67.0	6,552.5	0.00	0.00	0.00
16,500.0	90.00	0.09	9,880.0	6,652.2	-66.8	6,652.5	0.00	0.00	0.00
16,600.0	90.00	0.09	9,880.0	6,752.2	-66.7	6,752.5	0.00	0.00	0.00
16,700.0	90.00	0.09	9,880.0	6,852.2	-66.5	6,852.5	0.00	0.00	0.00
16,800.0	90.00	0.09	9,880.0	6,952.2	-66.3	6,952.5	0.00	0.00	0.00
16,900.0	90.00	0.09	9,880.0	7,052.2	-66.2	7,052.5	0.00	0.00	0.00
17,000.0	90.00	0.09	9,880.0	7,152.2	-66.0	7,152.5	0.00	0.00	0.00
17,100.0	90.00	0.09	9,880.0	7,252.2	-65.8	7,252.5	0.00	0.00	0.00
17,200.0	90.00	0.09	9,880.0	7,352.2	-65.7	7,352.5	0.00	0.00	0.00
17,300.0	90.00	0.09	9,880.0	7,452.2	-65.5	7,452.5	0.00	0.00	0.00
17,400.0	90.00	0.09	9,880.0	7,552.2	-65.3	7,552.5	0.00	0.00	0.00
17,500.0	90.00	0.09	9,880.0	7,652.2	-65.2	7,652.5	0.00	0.00	0.00
17,600.0	90.00	0.09	9,880.0	7,752.2	-65.0	7,752.4	0.00	0.00	0.00
17,700.0	90.00	0.09	9,880.0	7,852.2	-64.8	7,852.4	0.00	0.00	0.00
17,800.0	90.00	0.09	9,880.0	7,952.2	-64.7	7,952.4	0.00	0.00	0.00
17,900.0	90.00	0.09	9,880.0	8,052.2	-64.5	8,052.4	0.00	0.00	0.00
18,000.0	90.00	0.09	9,880.0	8,152.2	-64.4	8,152.4	0.00	0.00	0.00
18,100.0	90.00	0.09	9,880.0	8,252.2	-64.2	8,252.4	0.00	0.00	0.00
18,200.0	90.00	0.09	9,880.0	8,352.2	-64.0	8,352.4	0.00	0.00	0.00
18,300.0	90.00	0.09	9,880.0	8,452.2	-63.9	8,452.4	0.00	0.00	0.00
18,400.0	90.00	0.09	9,880.0	8,552.2	-63.7	8,552.4	0.00	0.00	0.00
18,500.0	90.00	0.09	9,880.0	8,652.2	-63.5	8,652.4	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
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Site: Golden Graham 1 State Com
Well: #721H
Wellbore: OH
Design: Plan #0.1

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MD Reference: KB = 25 @ 2965.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned 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)
18,600.0	90.00	0.09	9,880.0	8,752.2	-63.4	8,752.4	0.00	0.00	0.00
18,700.0	90.00	0.09	9,880.0	8,852.2	-63.2	8,852.4	0.00	0.00	0.00
18,800.0	90.00	0.09	9,880.0	8,952.2	-63.0	8,952.4	0.00	0.00	0.00
18,900.0	90.00	0.09	9,880.0	9,052.2	-62.9	9,052.4	0.00	0.00	0.00
19,000.0	90.00	0.09	9,880.0	9,152.2	-62.7	9,152.4	0.00	0.00	0.00
19,100.0	90.00	0.09	9,880.0	9,252.2	-62.6	9,252.4	0.00	0.00	0.00
19,200.0	90.00	0.09	9,880.0	9,352.2	-62.4	9,352.4	0.00	0.00	0.00
19,300.0	90.00	0.09	9,880.0	9,452.2	-62.2	9,452.4	0.00	0.00	0.00
19,400.0	90.00	0.09	9,880.0	9,552.2	-62.1	9,552.4	0.00	0.00	0.00
19,500.0	90.00	0.09	9,880.0	9,652.2	-61.9	9,652.4	0.00	0.00	0.00
19,600.0	90.00	0.09	9,880.0	9,752.2	-61.7	9,752.4	0.00	0.00	0.00
19,700.0	90.00	0.09	9,880.0	9,852.2	-61.6	9,852.4	0.00	0.00	0.00
19,800.0	90.00	0.09	9,880.0	9,952.2	-61.4	9,952.4	0.00	0.00	0.00
19,900.0	90.00	0.09	9,880.0	10,052.2	-61.2	10,052.4	0.00	0.00	0.00
20,000.0	90.00	0.09	9,880.0	10,152.2	-61.1	10,152.4	0.00	0.00	0.00
20,047.8	90.00	0.09	9,880.0	10,200.0	-61.0	10,200.2	0.00	0.00	0.00

PBHL(GG 1 SC #721H)

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP(GG 1 SC #721H) - plan hits target center - Point	0.00	0.00	9,402.5	-170.0	-78.0	387,327.00	629,986.00	32° 3' 52.267 N	104° 2' 49.774 W
PBHL(GG 1 SC #721H) - plan hits target center - Point	0.00	0.00	9,880.0	10,200.0	-61.0	397,697.00	630,003.00	32° 5' 34.890 N	104° 2' 49.256 W
FTP(GG 1 SC #721H) - plan misses target center by 39.3usft at 9968.5usft MD (9843.9 TVD, 125.4 N, -77.5 E) - Point	0.00	0.00	9,880.0	110.0	-78.0	387,607.00	629,986.00	32° 3' 55.038 N	104° 2' 49.765 W



Eddy County, NM (NAD 83 NME)
Golden Graham 1 State Com #721H
Plan #0.1

Azimuths to Grid North
True North: -0.15°
Magnetic North: 0.67°

Magnetic Field
Strength: 47681.8 nT
Dip Angle: 66.82°
Date: 10/11/2018
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 0.82°
To convert a Magnetic Direction to a True Direction, Add 7.02° East
To convert a True Direction to a Grid Direction, Subtract 0.15°

PROJECT DETAILS: Eddy 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: #721H

KB = 25 @ 2965.0' surf	2940.0
Northing	387497.00
Eastings	830664.00
Latitude	32° 3' 53.947' N
Longitude	104° 2' 48.842' W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/S	+E/W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0	
3	3084.8	1.70	204.65	3084.8	-1.1	-0.5	2.00	204.65	-1.1	
4	9320.5	1.70	204.65	9317.7	-169.9	-77.5	0.00	0.00	-169.4	
5	9405.3	0.00	0.00	9402.5	-170.0	-78.0	2.00	180.00	-169.5	KOP(GG 1 SC #721H)
6	10155.3	80.00	0.00	9880.0	-307.5	-77.2	12.00	0.00	-307.9	
7	20047.8	80.00	0.00	9880.0	10200.0	-61.0	0.00	0.00	10200.2	PRH(GG 1 SC #721H)

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/S	+E/W	Northing	Eastings
KOP(GG 1 SC #721H)	8462.6	-170.0	-78.0	387337.00	829988.00
PTP(GG 1 SC #721H)	9880.0	110.0	-78.0	387607.00	829988.00
PRH(GG 1 SC #721H)	9880.0	10200.0	-61.0	387637.00	830003.00

