

HOBBS OCD
SEP 10 2018
30-025-49757



Lea County, NM (NAD 83 NME)

Diamond 31 Fed Com #701H

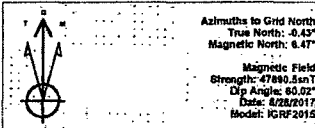
Plan #0.2

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: #701H

KB = 25' @ 3493.0usft
Northing 425998.00 Easting 794400.00 Latitude 32° 10' 6.591 N Longitude 103° 30' 55.743 W



To convert a Magnetic Direction to a Grid Direction, Add 6.47°
To convert a Magnetic Direction to a True Direction, Add 6.90° East
To convert a True Direction to a Grid Direction, Subtract 0.44°

SECTION DETAILS

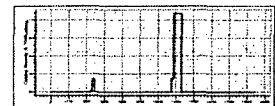
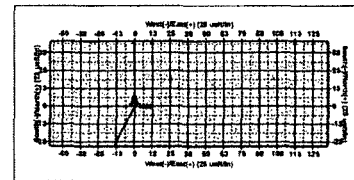
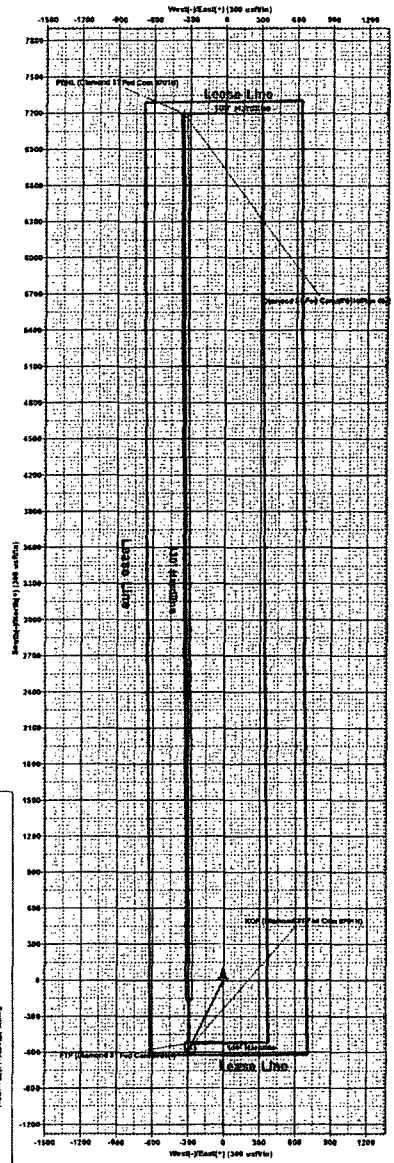
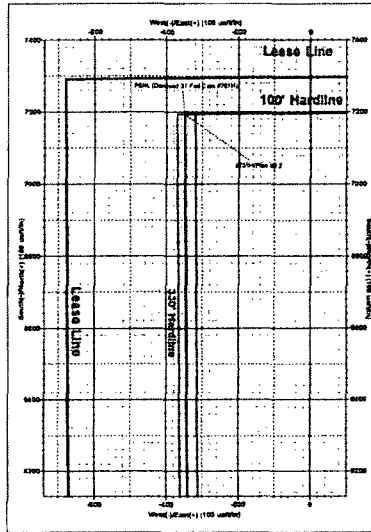
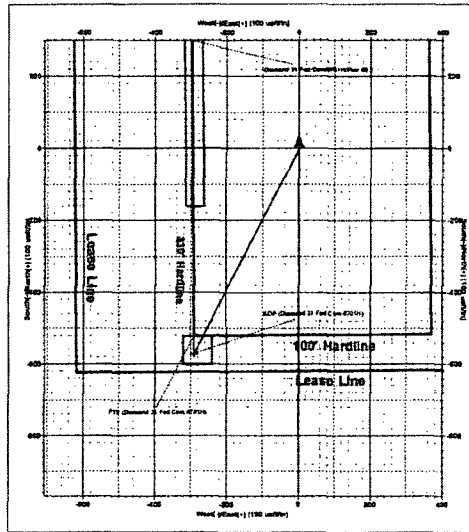
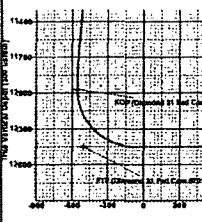
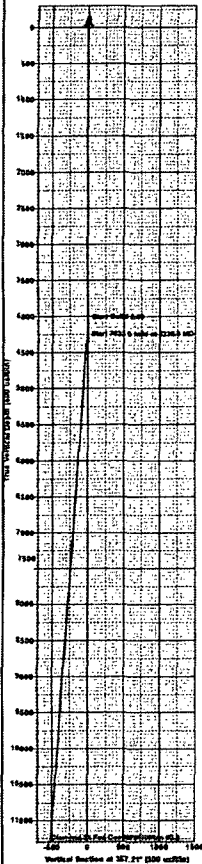
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	4000.0	0.00	0.00	4000.0	0.0	0.0	0.00	0.00	0.0	
3	4236.9	4.74	207.00	4236.6	-8.7	-4.4	2.00	207.00	-8.5	
4	11759.9	4.74	207.00	11733.9	-562.3	-286.6	0.00	0.00	-547.7	
5	11996.7	0.00	0.00	11970.5	-571.0	-281.0	2.00	180.00	-556.2	KOP (Diamond 31 Fed Com #701H)
6	12746.7	90.00	359.56	12448.0	-93.6	-294.6	12.00	359.56	-79.1	
7	20034.5	90.00	359.56	12448.0	7194.0	-350.0	0.00	0.00	7202.5	PBHL (Diamond 31 Fed Com #701H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP COORDINATES)

Name	TVD	N/S	+E/-W	Northing	Eastng
Brushy Top (Diamond 31 Fed Com #701H)	7600.0	-471.0	-293.0	426425.00	794137.00
KOP (Diamond 31 Fed Com #701H)	11970.5	-471.0	-291.0	426426.00	794109.00
FTF (Diamond 31 Fed Com #701H)	12448.0	-421.0	-291.0	426416.00	794109.00
PBHL (Diamond 31 Fed Com #701H)	12448.0	7194.0	-350.0	431190.00	794050.00



Lea County, NM (NAD 83 NME)



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Diamond 31 Fed Com

#701H

OH

Plan: Plan #0.2

Standard Planning Report

06 September, 2018



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #701H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25' @ 3493.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3493.0usft
Site:	Diamond 31 Fed Com	North Reference:	Grid
Well:	#701H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.2		

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	Diamond 31 Fed Com			
Site Position:		Northing:	425,996.00 usft	Latitude: 32° 10' 6.586 N
From:	Map	Easting:	794,470.00 usft	Longitude: 103° 30' 54.929 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.44 °

Well	#701H			
Well Position	+N/-S	0.0 usft	Northing:	425,996.00 usft
	+E/-W	-70.0 usft	Easting:	794,400.00 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:		Ground Level: 3,468.0 usft

Wellbore	OH			
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)
	IGRF2015	8/28/2017	6.90	60.02
				Field Strength (nT) 47,890.45413502

Design	Plan #0.2			
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	357.21

Plan Survey Tool Program	Date 9/6/2018			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1 0.0	20,034.5	Plan #0.2 (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	
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,236.9	4.74	207.00	4,236.6	-8.7	-4.4	2.00	2.00	0.00	207.00	
11,759.9	4.74	207.00	11,733.9	-562.3	-286.6	0.00	0.00	0.00	0.00	
11,996.7	0.00	0.00	11,970.5	-571.0	-291.0	2.00	-2.00	0.00	180.00	KOP (Diamond 31 Fe
12,746.7	90.00	359.56	12,448.0	-93.6	-294.6	12.00	12.00	-0.06	359.56	
20,034.5	90.00	359.56	12,448.0	7,194.0	-350.0	0.00	0.00	0.00	0.00	PBHL (Diamond 31 Fe



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Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3493.0usft
Site:	Diamond 31 Fed Com	North Reference:	Grid
Well:	#701H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.2		

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
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	2.00	207.00	4,100.0	-1.6	-0.8	-1.5	2.00	2.00	0.00
4,200.0	4.00	207.00	4,199.8	-6.2	-3.2	-6.1	2.00	2.00	0.00
4,236.9	4.74	207.00	4,236.6	-8.7	-4.4	-8.5	2.00	2.00	0.00
4,300.0	4.74	207.00	4,299.5	-13.4	-6.8	-13.0	0.00	0.00	0.00
4,400.0	4.74	207.00	4,399.2	-20.7	-10.6	-20.2	0.00	0.00	0.00
4,500.0	4.74	207.00	4,498.8	-28.1	-14.3	-27.4	0.00	0.00	0.00
4,600.0	4.74	207.00	4,598.5	-35.4	-18.1	-34.5	0.00	0.00	0.00
4,700.0	4.74	207.00	4,698.1	-42.8	-21.8	-41.7	0.00	0.00	0.00
4,800.0	4.74	207.00	4,797.8	-50.2	-25.6	-48.9	0.00	0.00	0.00
4,900.0	4.74	207.00	4,897.5	-57.5	-29.3	-56.0	0.00	0.00	0.00
5,000.0	4.74	207.00	4,997.1	-64.9	-33.1	-63.2	0.00	0.00	0.00
5,100.0	4.74	207.00	5,096.8	-72.2	-36.8	-70.4	0.00	0.00	0.00
5,200.0	4.74	207.00	5,196.4	-79.6	-40.6	-77.5	0.00	0.00	0.00



Planning Report

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Company:	EOG Resources - Midland	TVD Reference:	KB = 25' @ 3493.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3493.0usft
Site:	Diamond 31 Fed Com	North Reference:	Grid
Well:	#701H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.2		

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	4.74	207.00	5,296.1	-86.9	-44.3	-84.7	0.00	0.00	0.00
5,400.0	4.74	207.00	5,395.8	-94.3	-48.1	-91.9	0.00	0.00	0.00
5,500.0	4.74	207.00	5,495.4	-101.7	-51.8	-99.0	0.00	0.00	0.00
5,600.0	4.74	207.00	5,595.1	-109.0	-55.6	-106.2	0.00	0.00	0.00
5,700.0	4.74	207.00	5,694.7	-116.4	-59.3	-113.4	0.00	0.00	0.00
5,800.0	4.74	207.00	5,794.4	-123.7	-63.1	-120.5	0.00	0.00	0.00
5,900.0	4.74	207.00	5,894.0	-131.1	-66.8	-127.7	0.00	0.00	0.00
6,000.0	4.74	207.00	5,993.7	-138.5	-70.6	-134.9	0.00	0.00	0.00
6,100.0	4.74	207.00	6,093.4	-145.8	-74.3	-142.0	0.00	0.00	0.00
6,200.0	4.74	207.00	6,193.0	-153.2	-78.1	-149.2	0.00	0.00	0.00
6,300.0	4.74	207.00	6,292.7	-160.5	-81.8	-156.4	0.00	0.00	0.00
6,400.0	4.74	207.00	6,392.3	-167.9	-85.6	-163.5	0.00	0.00	0.00
6,500.0	4.74	207.00	6,492.0	-175.2	-89.3	-170.7	0.00	0.00	0.00
6,600.0	4.74	207.00	6,591.7	-182.6	-93.1	-177.9	0.00	0.00	0.00
6,700.0	4.74	207.00	6,691.3	-190.0	-96.8	-185.0	0.00	0.00	0.00
6,800.0	4.74	207.00	6,791.0	-197.3	-100.6	-192.2	0.00	0.00	0.00
6,900.0	4.74	207.00	6,890.6	-204.7	-104.3	-199.4	0.00	0.00	0.00
7,000.0	4.74	207.00	6,990.3	-212.0	-108.1	-206.5	0.00	0.00	0.00
7,100.0	4.74	207.00	7,089.9	-219.4	-111.8	-213.7	0.00	0.00	0.00
7,200.0	4.74	207.00	7,189.6	-226.8	-115.6	-220.9	0.00	0.00	0.00
7,300.0	4.74	207.00	7,289.3	-234.1	-119.3	-228.0	0.00	0.00	0.00
7,400.0	4.74	207.00	7,388.9	-241.5	-123.1	-235.2	0.00	0.00	0.00
7,500.0	4.74	207.00	7,488.6	-248.8	-126.8	-242.4	0.00	0.00	0.00
7,600.0	4.74	207.00	7,588.2	-256.2	-130.6	-249.5	0.00	0.00	0.00
7,639.8	4.74	207.00	7,628.0	-259.1	-132.1	-252.4	0.00	0.00	0.00
Brushy Top (Diamond 31 Fed Com #701H)									
7,700.0	4.74	207.00	7,687.9	-263.5	-134.3	-256.7	0.00	0.00	0.00
7,800.0	4.74	207.00	7,787.6	-270.9	-138.1	-263.9	0.00	0.00	0.00
7,900.0	4.74	207.00	7,887.2	-278.3	-141.8	-271.0	0.00	0.00	0.00
8,000.0	4.74	207.00	7,986.9	-285.6	-145.6	-278.2	0.00	0.00	0.00
8,100.0	4.74	207.00	8,086.5	-293.0	-149.3	-285.4	0.00	0.00	0.00
8,200.0	4.74	207.00	8,186.2	-300.3	-153.1	-292.5	0.00	0.00	0.00
8,300.0	4.74	207.00	8,285.8	-307.7	-156.8	-299.7	0.00	0.00	0.00
8,400.0	4.74	207.00	8,385.5	-315.1	-160.6	-306.9	0.00	0.00	0.00
8,500.0	4.74	207.00	8,485.2	-322.4	-164.3	-314.0	0.00	0.00	0.00
8,600.0	4.74	207.00	8,584.8	-329.8	-168.1	-321.2	0.00	0.00	0.00
8,700.0	4.74	207.00	8,684.5	-337.1	-171.8	-328.4	0.00	0.00	0.00
8,800.0	4.74	207.00	8,784.1	-344.5	-175.6	-335.5	0.00	0.00	0.00
8,900.0	4.74	207.00	8,883.8	-351.8	-179.3	-342.7	0.00	0.00	0.00
9,000.0	4.74	207.00	8,983.5	-359.2	-183.1	-349.9	0.00	0.00	0.00
9,100.0	4.74	207.00	9,083.1	-366.6	-186.8	-357.0	0.00	0.00	0.00
9,200.0	4.74	207.00	9,182.8	-373.9	-190.6	-364.2	0.00	0.00	0.00
9,300.0	4.74	207.00	9,282.4	-381.3	-194.3	-371.4	0.00	0.00	0.00
9,400.0	4.74	207.00	9,382.1	-388.6	-198.1	-378.6	0.00	0.00	0.00
9,500.0	4.74	207.00	9,481.8	-396.0	-201.8	-385.7	0.00	0.00	0.00
9,600.0	4.74	207.00	9,581.4	-403.4	-205.6	-392.9	0.00	0.00	0.00
9,700.0	4.74	207.00	9,681.1	-410.7	-209.3	-400.1	0.00	0.00	0.00
9,800.0	4.74	207.00	9,780.7	-418.1	-213.1	-407.2	0.00	0.00	0.00
9,900.0	4.74	207.00	9,880.4	-425.4	-216.8	-414.4	0.00	0.00	0.00
10,000.0	4.74	207.00	9,980.0	-432.8	-220.6	-421.6	0.00	0.00	0.00
10,100.0	4.74	207.00	10,079.7	-440.1	-224.3	-428.7	0.00	0.00	0.00
10,200.0	4.74	207.00	10,179.4	-447.5	-228.1	-435.9	0.00	0.00	0.00
10,300.0	4.74	207.00	10,279.0	-454.9	-231.8	-443.1	0.00	0.00	0.00



Planning Report

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 Project: Lea County, NM (NAD 83 NME)
 Site: Diamond 31 Fed Com
 Well: #701H
 Wellbore: OH
 Design: Plan #0.2

Local Co-ordinate Reference: Well #701H
 TVD Reference: KB = 25' @ 3493.0usft
 MD Reference: KB = 25' @ 3493.0usft
 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)
10,400.0	4.74	207.00	10,378.7	-462.2	-235.6	-450.2	0.00	0.00	0.00
10,500.0	4.74	207.00	10,478.3	-469.6	-239.3	-457.4	0.00	0.00	0.00
10,600.0	4.74	207.00	10,578.0	-476.9	-243.1	-464.6	0.00	0.00	0.00
10,700.0	4.74	207.00	10,677.7	-484.3	-246.8	-471.7	0.00	0.00	0.00
10,800.0	4.74	207.00	10,777.3	-491.7	-250.6	-478.9	0.00	0.00	0.00
10,900.0	4.74	207.00	10,877.0	-499.0	-254.3	-486.1	0.00	0.00	0.00
11,000.0	4.74	207.00	10,976.6	-506.4	-258.1	-493.2	0.00	0.00	0.00
11,100.0	4.74	207.00	11,076.3	-513.7	-261.8	-500.4	0.00	0.00	0.00
11,200.0	4.74	207.00	11,175.9	-521.1	-265.6	-507.6	0.00	0.00	0.00
11,300.0	4.74	207.00	11,275.6	-528.4	-269.3	-514.7	0.00	0.00	0.00
11,400.0	4.74	207.00	11,375.3	-535.8	-273.1	-521.9	0.00	0.00	0.00
11,500.0	4.74	207.00	11,474.9	-543.2	-276.8	-529.1	0.00	0.00	0.00
11,600.0	4.74	207.00	11,574.6	-550.5	-280.6	-536.2	0.00	0.00	0.00
11,700.0	4.74	207.00	11,674.2	-557.9	-284.3	-543.4	0.00	0.00	0.00
11,759.9	4.74	207.00	11,733.9	-562.3	-286.6	-547.7	0.00	0.00	0.00
11,800.0	3.93	207.00	11,773.9	-565.0	-287.9	-550.3	2.00	-2.00	0.00
11,900.0	1.93	207.00	11,873.8	-569.5	-290.3	-554.8	2.00	-2.00	0.00
11,996.7	0.00	0.00	11,970.5	-571.0	-291.0	-556.2	2.00	-2.00	0.00
KOP (Diamond 31 Fed Com #701H)									
12,000.0	0.39	359.56	11,973.8	-571.0	-291.0	-556.2	12.00	12.00	0.00
12,025.0	3.39	359.56	11,998.7	-570.2	-291.0	-555.3	12.00	12.00	0.00
12,050.0	6.39	359.56	12,023.7	-568.0	-291.0	-553.2	12.00	12.00	0.00
12,075.0	9.39	359.56	12,048.4	-564.6	-291.0	-549.8	12.00	12.00	0.00
12,100.0	12.39	359.56	12,073.0	-559.9	-291.1	-545.1	12.00	12.00	0.00
12,125.0	15.39	359.56	12,097.2	-553.9	-291.1	-539.1	12.00	12.00	0.00
12,150.0	18.39	359.56	12,121.1	-546.6	-291.2	-531.8	12.00	12.00	0.00
12,175.0	21.39	359.56	12,144.6	-538.1	-291.2	-523.3	12.00	12.00	0.00
12,200.0	24.39	359.56	12,167.7	-528.4	-291.3	-513.6	12.00	12.00	0.00
12,225.0	27.39	359.56	12,190.2	-517.5	-291.4	-502.7	12.00	12.00	0.00
12,250.0	30.39	359.56	12,212.1	-505.4	-291.5	-490.6	12.00	12.00	0.00
12,275.0	33.39	359.56	12,233.3	-492.2	-291.6	-477.4	12.00	12.00	0.00
12,300.0	36.39	359.56	12,253.8	-477.9	-291.7	-463.1	12.00	12.00	0.00
12,325.0	39.39	359.56	12,273.5	-462.5	-291.8	-447.8	12.00	12.00	0.00
12,350.0	42.39	359.56	12,292.4	-446.2	-291.9	-431.5	12.00	12.00	0.00
12,375.0	45.39	359.56	12,310.4	-428.8	-292.1	-414.1	12.00	12.00	0.00
12,400.0	48.39	359.56	12,327.5	-410.6	-292.2	-395.9	12.00	12.00	0.00
FTP (Diamond 31 Fed Com #701H)									
12,425.0	51.39	359.56	12,343.6	-391.5	-292.4	-376.8	12.00	12.00	0.00
12,450.0	54.39	359.56	12,358.7	-371.5	-292.5	-356.9	12.00	12.00	0.00
12,475.0	57.39	359.56	12,372.7	-350.8	-292.7	-336.2	12.00	12.00	0.00
12,500.0	60.39	359.56	12,385.6	-329.4	-292.8	-314.8	12.00	12.00	0.00
12,525.0	63.39	359.56	12,397.4	-307.4	-293.0	-292.8	12.00	12.00	0.00
12,550.0	66.39	359.56	12,408.0	-284.8	-293.2	-270.2	12.00	12.00	0.00
12,575.0	69.39	359.56	12,417.4	-261.6	-293.4	-247.0	12.00	12.00	0.00
12,600.0	72.39	359.56	12,425.6	-238.0	-293.5	-223.4	12.00	12.00	0.00
12,625.0	75.39	359.56	12,432.5	-214.0	-293.7	-199.4	12.00	12.00	0.00
12,650.0	78.39	359.56	12,438.2	-189.6	-293.9	-175.1	12.00	12.00	0.00
12,675.0	81.39	359.56	12,442.6	-165.0	-294.1	-150.5	12.00	12.00	0.00
12,700.0	84.39	359.56	12,445.7	-140.2	-294.3	-125.7	12.00	12.00	0.00
12,725.0	87.39	359.56	12,447.5	-115.3	-294.5	-100.8	12.00	12.00	0.00
12,746.7	90.00	359.56	12,448.0	-93.6	-294.6	-79.1	12.00	12.00	0.00
12,800.0	90.00	359.56	12,448.0	-40.3	-295.0	-25.9	0.00	0.00	0.00
12,900.0	90.00	359.56	12,448.0	59.7	-295.8	74.0	0.00	0.00	0.00
13,000.0	90.00	359.56	12,448.0	159.7	-296.6	173.9	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #701H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25' @ 3493.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3493.0usft
Site:	Diamond 31 Fed Com	North Reference:	Grid
Well:	#701H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.2		

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)	
13,100.0	90.00	359.56	12,448.0	259.7	-297.3	273.8	0.00	0.00	0.00	
13,200.0	90.00	359.56	12,448.0	359.7	-298.1	373.8	0.00	0.00	0.00	
13,300.0	90.00	359.56	12,448.0	459.7	-298.8	473.7	0.00	0.00	0.00	
13,400.0	90.00	359.56	12,448.0	559.7	-299.6	573.6	0.00	0.00	0.00	
13,500.0	90.00	359.56	12,448.0	659.7	-300.4	673.5	0.00	0.00	0.00	
13,600.0	90.00	359.56	12,448.0	759.7	-301.1	773.4	0.00	0.00	0.00	
13,700.0	90.00	359.56	12,448.0	859.7	-301.9	873.3	0.00	0.00	0.00	
13,800.0	90.00	359.56	12,448.0	959.7	-302.6	973.3	0.00	0.00	0.00	
13,900.0	90.00	359.56	12,448.0	1,059.7	-303.4	1,073.2	0.00	0.00	0.00	
14,000.0	90.00	359.56	12,448.0	1,159.7	-304.2	1,173.1	0.00	0.00	0.00	
14,100.0	90.00	359.56	12,448.0	1,259.7	-304.9	1,273.0	0.00	0.00	0.00	
14,200.0	90.00	359.56	12,448.0	1,359.7	-305.7	1,372.9	0.00	0.00	0.00	
14,300.0	90.00	359.56	12,448.0	1,459.7	-306.4	1,472.8	0.00	0.00	0.00	
14,400.0	90.00	359.56	12,448.0	1,559.7	-307.2	1,572.7	0.00	0.00	0.00	
14,500.0	90.00	359.56	12,448.0	1,659.7	-307.9	1,672.7	0.00	0.00	0.00	
14,600.0	90.00	359.56	12,448.0	1,759.7	-308.7	1,772.6	0.00	0.00	0.00	
14,700.0	90.00	359.56	12,448.0	1,859.7	-309.5	1,872.5	0.00	0.00	0.00	
14,800.0	90.00	359.56	12,448.0	1,959.7	-310.2	1,972.4	0.00	0.00	0.00	
14,900.0	90.00	359.56	12,448.0	2,059.6	-311.0	2,072.3	0.00	0.00	0.00	
15,000.0	90.00	359.56	12,448.0	2,159.6	-311.7	2,172.2	0.00	0.00	0.00	
15,100.0	90.00	359.56	12,448.0	2,259.6	-312.5	2,272.2	0.00	0.00	0.00	
15,200.0	90.00	359.56	12,448.0	2,359.6	-313.3	2,372.1	0.00	0.00	0.00	
15,300.0	90.00	359.56	12,448.0	2,459.6	-314.0	2,472.0	0.00	0.00	0.00	
15,400.0	90.00	359.56	12,448.0	2,559.6	-314.8	2,571.9	0.00	0.00	0.00	
15,500.0	90.00	359.56	12,448.0	2,659.6	-315.5	2,671.8	0.00	0.00	0.00	
15,600.0	90.00	359.56	12,448.0	2,759.6	-316.3	2,771.7	0.00	0.00	0.00	
15,700.0	90.00	359.56	12,448.0	2,859.6	-317.1	2,871.7	0.00	0.00	0.00	
15,800.0	90.00	359.56	12,448.0	2,959.6	-317.8	2,971.6	0.00	0.00	0.00	
15,900.0	90.00	359.56	12,448.0	3,059.6	-318.6	3,071.5	0.00	0.00	0.00	
16,000.0	90.00	359.56	12,448.0	3,159.6	-319.3	3,171.4	0.00	0.00	0.00	
16,100.0	90.00	359.56	12,448.0	3,259.6	-320.1	3,271.3	0.00	0.00	0.00	
16,200.0	90.00	359.56	12,448.0	3,359.6	-320.9	3,371.2	0.00	0.00	0.00	
16,300.0	90.00	359.56	12,448.0	3,459.6	-321.6	3,471.2	0.00	0.00	0.00	
16,400.0	90.00	359.56	12,448.0	3,559.6	-322.4	3,571.1	0.00	0.00	0.00	
16,500.0	90.00	359.56	12,448.0	3,659.6	-323.1	3,671.0	0.00	0.00	0.00	
16,600.0	90.00	359.56	12,448.0	3,759.6	-323.9	3,770.9	0.00	0.00	0.00	
16,700.0	90.00	359.56	12,448.0	3,859.6	-324.7	3,870.8	0.00	0.00	0.00	
16,800.0	90.00	359.56	12,448.0	3,959.6	-325.4	3,970.7	0.00	0.00	0.00	
16,900.0	90.00	359.56	12,448.0	4,059.6	-326.2	4,070.6	0.00	0.00	0.00	
17,000.0	90.00	359.56	12,448.0	4,159.6	-326.9	4,170.5	0.00	0.00	0.00	
17,100.0	90.00	359.56	12,448.0	4,259.6	-327.7	4,270.5	0.00	0.00	0.00	
17,200.0	90.00	359.56	12,448.0	4,359.6	-328.5	4,370.4	0.00	0.00	0.00	
17,300.0	90.00	359.56	12,448.0	4,459.6	-329.2	4,470.3	0.00	0.00	0.00	
17,400.0	90.00	359.56	12,448.0	4,559.6	-330.0	4,570.2	0.00	0.00	0.00	
17,500.0	90.00	359.56	12,448.0	4,659.6	-330.7	4,670.1	0.00	0.00	0.00	
17,600.0	90.00	359.56	12,448.0	4,759.6	-331.5	4,770.1	0.00	0.00	0.00	
17,700.0	90.00	359.56	12,448.0	4,859.6	-332.3	4,870.0	0.00	0.00	0.00	
17,800.0	90.00	359.56	12,448.0	4,959.6	-333.0	4,969.9	0.00	0.00	0.00	
17,900.0	90.00	359.56	12,448.0	5,059.6	-333.8	5,069.8	0.00	0.00	0.00	
18,000.0	90.00	359.56	12,448.0	5,159.6	-334.5	5,169.7	0.00	0.00	0.00	
18,100.0	90.00	359.56	12,448.0	5,259.6	-335.3	5,269.6	0.00	0.00	0.00	
18,200.0	90.00	359.56	12,448.0	5,359.6	-336.1	5,369.6	0.00	0.00	0.00	
18,300.0	90.00	359.56	12,448.0	5,459.6	-336.8	5,469.5	0.00	0.00	0.00	
18,400.0	90.00	359.56	12,448.0	5,559.5	-337.6	5,569.4	0.00	0.00	0.00	



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #701H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25' @ 3493.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25' @ 3493.0usft
Site:	Diamond 31 Fed Com	North Reference:	Grid
Well:	#701H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.2		

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)	
18,500.0	90.00	359.56	12,448.0	5,659.5	-338.3	5,669.3	0.00	0.00	0.00	
18,600.0	90.00	359.56	12,448.0	5,759.5	-339.1	5,769.2	0.00	0.00	0.00	
18,700.0	90.00	359.56	12,448.0	5,859.5	-339.9	5,869.1	0.00	0.00	0.00	
18,800.0	90.00	359.56	12,448.0	5,959.5	-340.6	5,969.0	0.00	0.00	0.00	
18,900.0	90.00	359.56	12,448.0	6,059.5	-341.4	6,069.0	0.00	0.00	0.00	
19,000.0	90.00	359.56	12,448.0	6,159.5	-342.1	6,168.9	0.00	0.00	0.00	
19,100.0	90.00	359.56	12,448.0	6,259.5	-342.9	6,268.8	0.00	0.00	0.00	
19,200.0	90.00	359.56	12,448.0	6,359.5	-343.7	6,368.7	0.00	0.00	0.00	
19,300.0	90.00	359.56	12,448.0	6,459.5	-344.4	6,468.6	0.00	0.00	0.00	
19,400.0	90.00	359.56	12,448.0	6,559.5	-345.2	6,568.5	0.00	0.00	0.00	
19,500.0	90.00	359.56	12,448.0	6,659.5	-345.9	6,668.5	0.00	0.00	0.00	
19,600.0	90.00	359.56	12,448.0	6,759.5	-346.7	6,768.4	0.00	0.00	0.00	
19,700.0	90.00	359.56	12,448.0	6,859.5	-347.5	6,868.3	0.00	0.00	0.00	
19,800.0	90.00	359.56	12,448.0	6,959.5	-348.2	6,968.2	0.00	0.00	0.00	
19,900.0	90.00	359.56	12,448.0	7,059.5	-349.0	7,068.1	0.00	0.00	0.00	
20,000.0	90.00	359.56	12,448.0	7,159.5	-349.7	7,168.0	0.00	0.00	0.00	
20,034.5	90.00	359.56	12,448.0	7,194.0	-350.0	7,202.5	0.00	0.00	0.00	
PBHL (Diamond 31 Fed Com #701H)										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
KOP (Diamond 31 Fed C - hit/miss target - Shape - Polygon	0.00	0.00	11,970.5	-571.0	-291.0	425,425.00	794,109.00	32° 10' 0.963 N	103° 30' 59.179 W	
Point 1			11,970.5	50.0	-30.0	425,475.00	794,079.00			
Point 2			11,970.5	50.0	50.0	425,475.00	794,159.00			
Point 3			11,970.5	-30.0	50.0	425,395.00	794,159.00			
Point 4			11,970.5	-30.0	-30.0	425,395.00	794,079.00			
FTP (Diamond 31 Fed C - plan misses target center by 163.4usft at 12400.0usft MD (12327.5 TVD, -410.6 N, -292.2 E) - Point	0.00	0.00	12,448.0	-521.0	-291.0	425,475.00	794,109.00	32° 10' 1.458 N	103° 30' 59.174 W	
PBHL (Diamond 31 Fed - plan hits target center - Rectangle (sides W50.0 H0.0 D7,355.0)	90.00	359.56	12,448.0	7,194.0	-350.0	433,190.00	794,050.00	32° 11' 17.803 N	103° 30' 59.179 W	