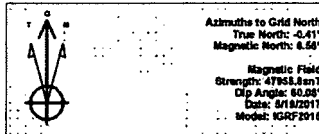




Lea County, NM (NAD 83 NME)

Ares 4 State #703H

Plan #0.5



To convert a Magnetic Direction to a Grid Direction, Add 8.56"
To convert a Magnetic Direction to a True Direction, Add 8.96" East
To convert a True Direction to a Grid Direction, Subtract 0.41"

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

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

WELL DETAILS: #703H

Ground Level: 3586.0
KB = 25' @ 3611.0'ush
Latitude
Longitude

North
Easting
Northing
Easting
Northing
Easting

SECTION DETAILS

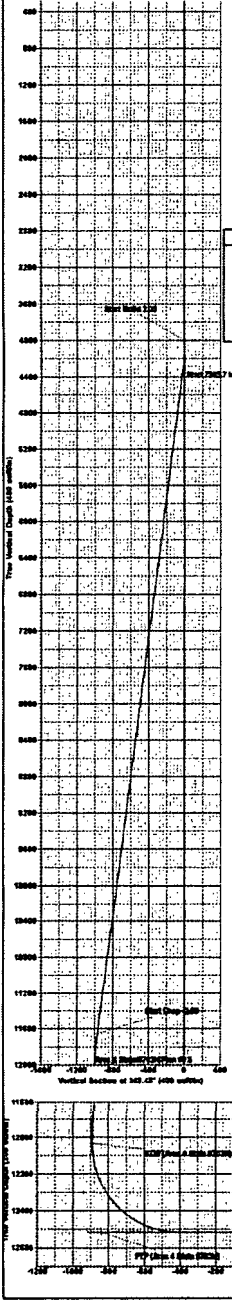
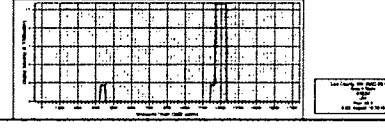
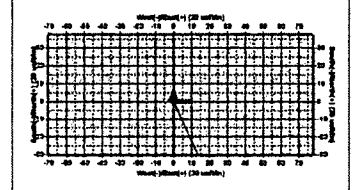
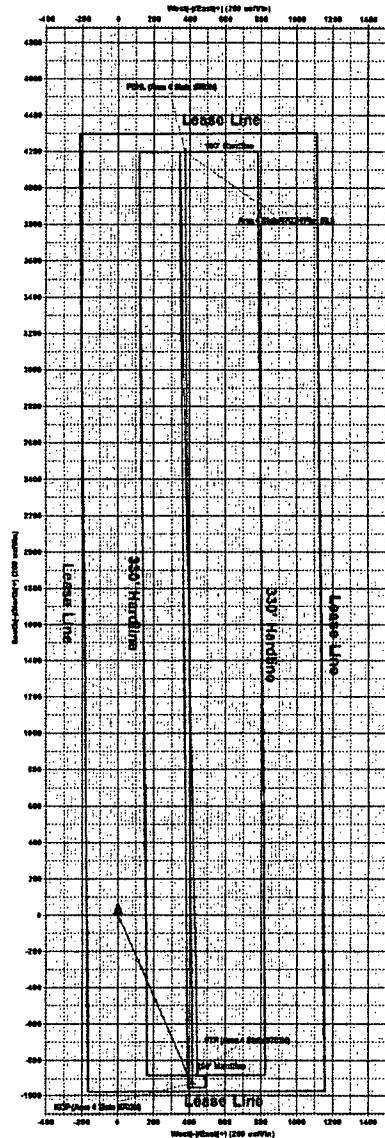
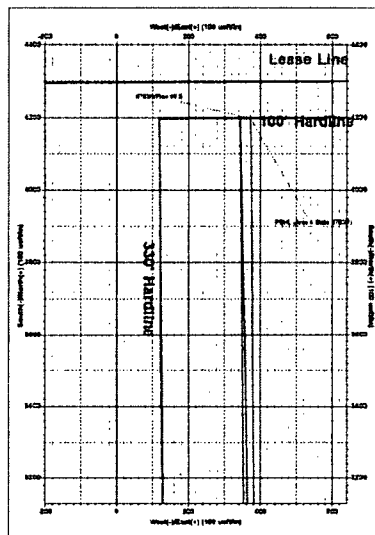
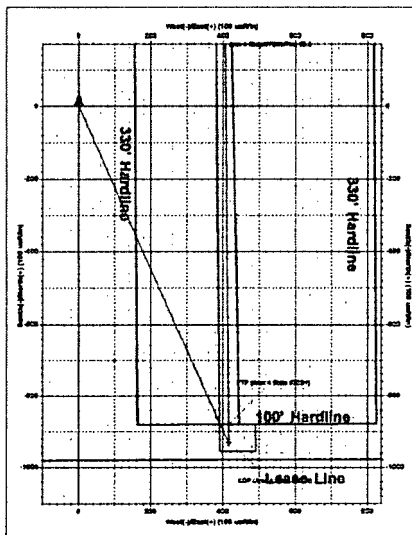
Sec	MD	Inc	Adj	TVL	+W-S	+E-W	Disp	TFace	VFace	Target	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	4000.0	0.00	0.00	4000.0	0.0	0.0	0.00	0.00	0.0		
3	4376.1	7.00	105.97	4376.0	-22.9	10.2	2.00	105.97	-21.9		
4	11724.8	7.00	105.97	11638.8	-869.1	404.8	0.00	0.00	-869.7		
5	12103.9	0.00	0.00	12037.8	-66.1	416.0	2.00	180.00	-66.8		KOP (Ares 4 State #703H)
6	12863.9	90.00	389.63	12816.0	-47.0	411.1	12.00	389.63	-47.4		
7	17804.6	90.00	389.63	12816.0	-47.0	373.0	0.00	0.00	431.5		PB#4 (Ares 4 State #703H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP COORDINATES)

Name	TVL	+W-S	+E-W	North	Easting
KOP (Ares 4 State #703H)	12037.8	-66.1	416.0	481711.00	777004.00
PB#4 (Ares 4 State #703H)	12816.0	-47.0	373.0	486839.00	776942.00
FTP (Ares 4 State #703H)	12816.0	-47.0	416.0	481781.00	777004.00





EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Ares 4 State

#703H

OH

Plan: Plan #0.5

Standard Planning Report

10 August, 2018



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Ares 4 State
Well: #703H
Wellbore: OH
Design: Plan #0.5

Local Co-ordinate Reference: Well #703H
TVD Reference: KB = 25' @ 3611.0usft
MD Reference: KB = 25' @ 3611.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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	Ares 4 State		
Site Position:		Northing:	451,993.00 usft
From:	Map	Easting:	777,413.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 14' 25.072 N
		Longitude:	103° 34' 11.215 W
		Grid Convergence:	0.41 °

Well	#703H		
Well Position	+N/-S	649.0 usft	Northing: 452,642.00 usft
	+E/-W	-824.0 usft	Easting: 776,589.00 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Latitude: 32° 14' 31.551 N
			Longitude: 103° 34' 20.755 W
			Ground Level: 3,586.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF2015	5/19/2017	(°)	(°)	(nT)
			6.96	60.08	47,955.83001980

Design	Plan #0.5			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	5.08

Plan Survey Tool Program	Date 8/10/2018			
Depth From	Depth To	Survey (Wellbore)	Tool Name	Remarks
(usft)	(usft)			
1	0.0	17,504.6 Plan #0.5 (OH)	MWD	
			OWSG MWD - Standard	

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)			(usft)			(°/100usft)	(°/100usft)	(°/100usft)		
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	
4,379.1	7.58	155.97	4,378.0	-22.9	10.2	2.00	2.00	0.00	155.97	
11,724.8	7.58	155.97	11,659.5	-908.1	404.8	0.00	0.00	0.00	0.00	
12,103.9	0.00	0.00	12,037.5	-931.0	415.0	2.00	-2.00	0.00	180.00	KOP (Ares 4 State #7
12,853.9	90.00	359.53	12,515.0	-453.6	411.1	12.00	12.00	-0.06	359.53	
17,504.6	90.00	359.53	12,515.0	4,197.0	373.0	0.00	0.00	0.00	0.00	PBHL (Ares 4 State #



Planning Report

Database: EDM 5000.14
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Ares 4 State
 Well: #703H
 Wellbore: OH
 Design: Plan #0.5

Local Co-ordinate Reference:
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:

Well #703H
 KB = 25' @ 3611.0usft
 KB = 25' @ 3611.0usft
 Grid
 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
3,100.0	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	155.97	4,100.0	-1.6	0.7	-1.5	2.00	2.00	0.00
4,200.0	4.00	155.97	4,199.8	-6.4	2.8	-6.1	2.00	2.00	0.00
4,300.0	6.00	155.97	4,299.5	-14.3	6.4	-13.7	2.00	2.00	0.00
4,379.1	7.58	155.97	4,378.0	-22.9	10.2	-21.9	2.00	2.00	0.00
4,400.0	7.58	155.97	4,398.7	-25.4	11.3	-24.3	0.00	0.00	0.00
4,500.0	7.58	155.97	4,497.8	-37.4	16.7	-35.8	0.00	0.00	0.00
4,600.0	7.58	155.97	4,597.0	-49.5	22.1	-47.4	0.00	0.00	0.00
4,700.0	7.58	155.97	4,696.1	-61.5	27.4	-58.9	0.00	0.00	0.00
4,800.0	7.58	155.97	4,795.2	-73.6	32.8	-70.4	0.00	0.00	0.00
4,900.0	7.58	155.97	4,894.3	-85.7	38.2	-81.9	0.00	0.00	0.00
5,000.0	7.58	155.97	4,993.5	-97.7	43.6	-93.5	0.00	0.00	0.00
5,100.0	7.58	155.97	5,092.6	-109.8	48.9	-105.0	0.00	0.00	0.00
5,200.0	7.58	155.97	5,191.7	-121.8	54.3	-116.5	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Ares 4 State
 Well: #703H
 Wellbore: OH
 Design: Plan #0.5

Local Co-ordinate Reference: Well #703H
 TVD Reference: KB = 25' @ 3611.0usft
 MD Reference: KB = 25' @ 3611.0usft
 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)
5,300.0	7.58	155.97	5,290.8	-133.9	59.7	-128.0	0.00	0.00	0.00
5,400.0	7.58	155.97	5,390.0	-145.9	65.0	-139.6	0.00	0.00	0.00
5,500.0	7.58	155.97	5,489.1	-158.0	70.4	-151.1	0.00	0.00	0.00
5,600.0	7.58	155.97	5,588.2	-170.0	75.8	-162.6	0.00	0.00	0.00
5,700.0	7.58	155.97	5,687.3	-182.1	81.2	-174.2	0.00	0.00	0.00
5,800.0	7.58	155.97	5,786.5	-194.1	86.5	-185.7	0.00	0.00	0.00
5,900.0	7.58	155.97	5,885.6	-206.2	91.9	-197.2	0.00	0.00	0.00
6,000.0	7.58	155.97	5,984.7	-218.2	97.3	-208.7	0.00	0.00	0.00
6,100.0	7.58	155.97	6,083.8	-230.3	102.6	-220.3	0.00	0.00	0.00
6,200.0	7.58	155.97	6,183.0	-242.3	108.0	-231.8	0.00	0.00	0.00
6,300.0	7.58	155.97	6,282.1	-254.4	113.4	-243.3	0.00	0.00	0.00
6,400.0	7.58	155.97	6,381.2	-266.4	118.8	-254.9	0.00	0.00	0.00
6,500.0	7.58	155.97	6,480.4	-278.5	124.1	-266.4	0.00	0.00	0.00
6,600.0	7.58	155.97	6,579.5	-290.5	129.5	-277.9	0.00	0.00	0.00
6,700.0	7.58	155.97	6,678.6	-302.6	134.9	-289.4	0.00	0.00	0.00
6,800.0	7.58	155.97	6,777.7	-314.6	140.2	-301.0	0.00	0.00	0.00
6,900.0	7.58	155.97	6,876.9	-326.7	145.6	-312.5	0.00	0.00	0.00
7,000.0	7.58	155.97	6,976.0	-338.7	151.0	-324.0	0.00	0.00	0.00
7,100.0	7.58	155.97	7,075.1	-350.8	156.4	-335.6	0.00	0.00	0.00
7,200.0	7.58	155.97	7,174.2	-362.8	161.7	-347.1	0.00	0.00	0.00
7,300.0	7.58	155.97	7,273.4	-374.9	167.1	-358.6	0.00	0.00	0.00
7,400.0	7.58	155.97	7,372.5	-386.9	172.5	-370.1	0.00	0.00	0.00
7,500.0	7.58	155.97	7,471.6	-399.0	177.8	-381.7	0.00	0.00	0.00
7,600.0	7.58	155.97	7,570.7	-411.0	183.2	-393.2	0.00	0.00	0.00
7,700.0	7.58	155.97	7,669.9	-423.1	188.6	-404.7	0.00	0.00	0.00
7,800.0	7.58	155.97	7,769.0	-435.1	194.0	-416.3	0.00	0.00	0.00
7,900.0	7.58	155.97	7,868.1	-447.2	199.3	-427.8	0.00	0.00	0.00
8,000.0	7.58	155.97	7,967.2	-459.2	204.7	-439.3	0.00	0.00	0.00
8,100.0	7.58	155.97	8,066.4	-471.3	210.1	-450.8	0.00	0.00	0.00
8,200.0	7.58	155.97	8,165.5	-483.3	215.5	-462.4	0.00	0.00	0.00
8,300.0	7.58	155.97	8,264.6	-495.4	220.8	-473.9	0.00	0.00	0.00
8,400.0	7.58	155.97	8,363.7	-507.4	226.2	-485.4	0.00	0.00	0.00
8,500.0	7.58	155.97	8,462.9	-519.5	231.6	-497.0	0.00	0.00	0.00
8,600.0	7.58	155.97	8,562.0	-531.5	236.9	-508.5	0.00	0.00	0.00
8,700.0	7.58	155.97	8,661.1	-543.6	242.3	-520.0	0.00	0.00	0.00
8,800.0	7.58	155.97	8,760.2	-555.6	247.7	-531.5	0.00	0.00	0.00
8,900.0	7.58	155.97	8,859.4	-567.7	253.1	-543.1	0.00	0.00	0.00
9,000.0	7.58	155.97	8,958.5	-579.7	258.4	-554.6	0.00	0.00	0.00
9,100.0	7.58	155.97	9,057.6	-591.8	263.8	-566.1	0.00	0.00	0.00
9,200.0	7.58	155.97	9,156.7	-603.9	269.2	-577.7	0.00	0.00	0.00
9,300.0	7.58	155.97	9,255.9	-615.9	274.5	-589.2	0.00	0.00	0.00
9,400.0	7.58	155.97	9,355.0	-628.0	279.9	-600.7	0.00	0.00	0.00
9,500.0	7.58	155.97	9,454.1	-640.0	285.3	-612.2	0.00	0.00	0.00
9,600.0	7.58	155.97	9,553.3	-652.1	290.7	-623.8	0.00	0.00	0.00
9,700.0	7.58	155.97	9,652.4	-664.1	296.0	-635.3	0.00	0.00	0.00
9,800.0	7.58	155.97	9,751.5	-676.2	301.4	-646.8	0.00	0.00	0.00
9,900.0	7.58	155.97	9,850.6	-688.2	306.8	-658.4	0.00	0.00	0.00
10,000.0	7.58	155.97	9,949.8	-700.3	312.1	-669.9	0.00	0.00	0.00
10,100.0	7.58	155.97	10,048.9	-712.3	317.5	-681.4	0.00	0.00	0.00
10,200.0	7.58	155.97	10,148.0	-724.4	322.9	-692.9	0.00	0.00	0.00
10,300.0	7.58	155.97	10,247.1	-736.4	328.3	-704.5	0.00	0.00	0.00
10,400.0	7.58	155.97	10,346.3	-748.5	333.6	-716.0	0.00	0.00	0.00
10,500.0	7.58	155.97	10,445.4	-760.5	339.0	-727.5	0.00	0.00	0.00
10,600.0	7.58	155.97	10,544.5	-772.6	344.4	-739.0	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Ares 4 State
 Well: #703H
 Wellbore: OH
 Design: Plan #0.5

Local Co-ordinate Reference: Well #703H
 TVD Reference: KB = 25' @ 3611.0usft
 MD Reference: KB = 25' @ 3611.0usft
 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)
10,700.0	7.58	155.97	10,643.6	-784.6	349.7	-750.6	0.00	0.00	0.00
10,800.0	7.58	155.97	10,742.8	-796.7	355.1	-762.1	0.00	0.00	0.00
10,900.0	7.58	155.97	10,841.9	-808.7	360.5	-773.6	0.00	0.00	0.00
11,000.0	7.58	155.97	10,941.0	-820.8	365.9	-785.2	0.00	0.00	0.00
11,100.0	7.58	155.97	11,040.1	-832.8	371.2	-796.7	0.00	0.00	0.00
11,200.0	7.58	155.97	11,139.3	-844.9	376.6	-808.2	0.00	0.00	0.00
11,300.0	7.58	155.97	11,238.4	-856.9	382.0	-819.7	0.00	0.00	0.00
11,400.0	7.58	155.97	11,337.5	-869.0	387.4	-831.3	0.00	0.00	0.00
11,500.0	7.58	155.97	11,436.6	-881.0	392.7	-842.8	0.00	0.00	0.00
11,600.0	7.58	155.97	11,535.8	-893.1	398.1	-854.3	0.00	0.00	0.00
11,700.0	7.58	155.97	11,634.9	-905.1	403.5	-865.9	0.00	0.00	0.00
11,724.8	7.58	155.97	11,659.5	-908.1	404.8	-868.7	0.00	0.00	0.00
11,800.0	6.08	155.97	11,734.1	-916.3	408.4	-876.5	2.00	-2.00	0.00
11,900.0	4.08	155.97	11,833.7	-924.4	412.0	-884.3	2.00	-2.00	0.00
12,000.0	2.08	155.97	11,933.6	-929.3	414.2	-889.0	2.00	-2.00	0.00
12,103.9	0.00	0.00	12,037.5	-931.0	415.0	-890.6	2.00	-2.00	0.00
KOP (Ares 4 State #703H)									
12,125.0	2.53	359.53	12,058.6	-930.5	415.0	-890.1	12.00	12.00	0.00
12,150.0	5.53	359.53	12,083.5	-928.8	415.0	-888.4	12.00	12.00	0.00
12,175.0	8.53	359.53	12,108.3	-925.7	415.0	-885.4	12.00	12.00	0.00
12,200.0	11.53	359.53	12,132.9	-921.4	414.9	-881.0	12.00	12.00	0.00
12,225.0	14.53	359.53	12,157.3	-915.7	414.9	-875.4	12.00	12.00	0.00
12,250.0	17.53	359.53	12,181.3	-908.8	414.8	-868.5	12.00	12.00	0.00
12,275.0	20.53	359.53	12,204.9	-900.7	414.8	-860.4	12.00	12.00	0.00
12,300.0	23.53	359.53	12,228.1	-891.3	414.7	-851.1	12.00	12.00	0.00
12,325.0	26.53	359.53	12,250.8	-880.7	414.6	-840.6	12.00	12.00	0.00
12,350.0	29.53	359.53	12,272.8	-869.0	414.5	-828.9	12.00	12.00	0.00
12,375.0	32.53	359.53	12,294.2	-856.1	414.4	-816.1	12.00	12.00	0.00
12,400.0	35.53	359.53	12,315.0	-842.1	414.3	-802.1	12.00	12.00	0.00
12,425.0	38.53	359.53	12,334.9	-827.1	414.1	-787.2	12.00	12.00	0.00
12,450.0	41.53	359.53	12,354.1	-811.0	414.0	-771.1	12.00	12.00	0.00
12,475.0	44.53	359.53	12,372.3	-793.9	413.9	-754.2	12.00	12.00	0.00
12,500.0	47.53	359.53	12,389.7	-775.9	413.7	-736.3	12.00	12.00	0.00
12,502.8	47.87	359.53	12,391.6	-773.8	413.7	-734.2	12.00	12.00	0.00
FTP (Ares 4 State #703H)									
12,525.0	50.53	359.53	12,406.1	-757.1	413.6	-717.5	12.00	12.00	0.00
12,550.0	53.53	359.53	12,421.5	-737.4	413.4	-697.9	12.00	12.00	0.00
12,575.0	56.53	359.53	12,435.8	-716.9	413.2	-677.5	12.00	12.00	0.00
12,600.0	59.53	359.53	12,449.0	-695.7	413.1	-656.4	12.00	12.00	0.00
12,625.0	62.53	359.53	12,461.1	-673.8	412.9	-634.6	12.00	12.00	0.00
12,650.0	65.53	359.53	12,472.1	-651.3	412.7	-612.2	12.00	12.00	0.00
12,675.0	68.53	359.53	12,481.8	-628.3	412.5	-589.3	12.00	12.00	0.00
12,700.0	71.53	359.53	12,490.4	-604.8	412.3	-565.9	12.00	12.00	0.00
12,725.0	74.53	359.53	12,497.7	-580.9	412.1	-542.2	12.00	12.00	0.00
12,750.0	77.53	359.53	12,503.7	-556.7	411.9	-518.0	12.00	12.00	0.00
12,775.0	80.53	359.53	12,508.5	-532.1	411.7	-493.6	12.00	12.00	0.00
12,800.0	83.53	359.53	12,511.9	-507.4	411.5	-468.9	12.00	12.00	0.00
12,825.0	86.53	359.53	12,514.1	-482.5	411.3	-444.2	12.00	12.00	0.00
12,850.0	89.53	359.53	12,514.9	-457.5	411.1	-419.3	12.00	12.00	0.00
12,853.9	90.00	359.53	12,515.0	-453.6	411.1	-415.4	12.00	12.00	0.00
12,900.0	90.00	359.53	12,515.0	-407.5	410.7	-369.5	0.00	0.00	0.00
13,000.0	90.00	359.53	12,515.0	-307.5	409.9	-270.0	0.00	0.00	0.00
13,100.0	90.00	359.53	12,515.0	-207.5	409.1	-170.5	0.00	0.00	0.00
13,200.0	90.00	359.53	12,515.0	-107.5	408.3	-70.9	0.00	0.00	0.00



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Ares 4 State
Well: #703H
Wellbore: OH
Design: Plan #0.5

Local Co-ordinate Reference: Well #703H
TVD Reference: KB = 25' @ 3611.0usft
MD Reference: KB = 25' @ 3611.0usft
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)
13,300.0	90.00	359.53	12,515.0	-7.5	407.4	28.6	0.00	0.00	0.00
13,400.0	90.00	359.53	12,515.0	92.5	406.6	128.1	0.00	0.00	0.00
13,500.0	90.00	359.53	12,515.0	192.5	405.8	227.7	0.00	0.00	0.00
13,600.0	90.00	359.53	12,515.0	292.5	405.0	327.2	0.00	0.00	0.00
13,700.0	90.00	359.53	12,515.0	392.5	404.2	426.7	0.00	0.00	0.00
13,800.0	90.00	359.53	12,515.0	492.5	403.3	526.3	0.00	0.00	0.00
13,900.0	90.00	359.53	12,515.0	592.5	402.5	625.8	0.00	0.00	0.00
14,000.0	90.00	359.53	12,515.0	692.5	401.7	725.3	0.00	0.00	0.00
14,100.0	90.00	359.53	12,515.0	792.5	400.9	824.9	0.00	0.00	0.00
14,200.0	90.00	359.53	12,515.0	892.5	400.1	924.4	0.00	0.00	0.00
14,300.0	90.00	359.53	12,515.0	992.5	399.2	1,023.9	0.00	0.00	0.00
14,400.0	90.00	359.53	12,515.0	1,092.5	398.4	1,123.4	0.00	0.00	0.00
14,500.0	90.00	359.53	12,515.0	1,192.5	397.6	1,223.0	0.00	0.00	0.00
14,600.0	90.00	359.53	12,515.0	1,292.5	396.8	1,322.5	0.00	0.00	0.00
14,700.0	90.00	359.53	12,515.0	1,392.5	396.0	1,422.0	0.00	0.00	0.00
14,800.0	90.00	359.53	12,515.0	1,492.5	395.2	1,521.6	0.00	0.00	0.00
14,900.0	90.00	359.53	12,515.0	1,592.4	394.3	1,621.1	0.00	0.00	0.00
15,000.0	90.00	359.53	12,515.0	1,692.4	393.5	1,720.6	0.00	0.00	0.00
15,100.0	90.00	359.53	12,515.0	1,792.4	392.7	1,820.2	0.00	0.00	0.00
15,200.0	90.00	359.53	12,515.0	1,892.4	391.9	1,919.7	0.00	0.00	0.00
15,300.0	90.00	359.53	12,515.0	1,992.4	391.1	2,019.2	0.00	0.00	0.00
15,400.0	90.00	359.53	12,515.0	2,092.4	390.2	2,118.8	0.00	0.00	0.00
15,500.0	90.00	359.53	12,515.0	2,192.4	389.4	2,218.3	0.00	0.00	0.00
15,600.0	90.00	359.53	12,515.0	2,292.4	388.6	2,317.8	0.00	0.00	0.00
15,700.0	90.00	359.53	12,515.0	2,392.4	387.8	2,417.4	0.00	0.00	0.00
15,800.0	90.00	359.53	12,515.0	2,492.4	387.0	2,516.9	0.00	0.00	0.00
15,900.0	90.00	359.53	12,515.0	2,592.4	386.1	2,616.4	0.00	0.00	0.00
16,000.0	90.00	359.53	12,515.0	2,692.4	385.3	2,716.0	0.00	0.00	0.00
16,100.0	90.00	359.53	12,515.0	2,792.4	384.5	2,815.5	0.00	0.00	0.00
16,200.0	90.00	359.53	12,515.0	2,892.4	383.7	2,915.0	0.00	0.00	0.00
16,300.0	90.00	359.53	12,515.0	2,992.4	382.9	3,014.5	0.00	0.00	0.00
16,400.0	90.00	359.53	12,515.0	3,092.4	382.0	3,114.1	0.00	0.00	0.00
16,500.0	90.00	359.53	12,515.0	3,192.4	381.2	3,213.6	0.00	0.00	0.00
16,600.0	90.00	359.53	12,515.0	3,292.4	380.4	3,313.1	0.00	0.00	0.00
16,700.0	90.00	359.53	12,515.0	3,392.4	379.6	3,412.7	0.00	0.00	0.00
16,800.0	90.00	359.53	12,515.0	3,492.4	378.8	3,512.2	0.00	0.00	0.00
16,900.0	90.00	359.53	12,515.0	3,592.4	378.0	3,611.7	0.00	0.00	0.00
17,000.0	90.00	359.53	12,515.0	3,692.4	377.1	3,711.3	0.00	0.00	0.00
17,100.0	90.00	359.53	12,515.0	3,792.4	376.3	3,810.8	0.00	0.00	0.00
17,200.0	90.00	359.53	12,515.0	3,892.4	375.5	3,910.3	0.00	0.00	0.00
17,300.0	90.00	359.53	12,515.0	3,992.4	374.7	4,009.9	0.00	0.00	0.00
17,400.0	90.00	359.53	12,515.0	4,092.4	373.9	4,109.4	0.00	0.00	0.00
17,504.6	90.00	359.53	12,515.0	4,197.0	373.0	4,213.5	0.00	0.00	0.00

PBHL (Ares 4 State #703H)



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Ares 4 State
Well: #703H
Wellbore: OH
Design: Plan #0.5

Local Co-ordinate Reference: Well #703H
TVD Reference: KB = 25' @ 3611.0usft
MD Reference: KB = 25' @ 3611.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
KOP (Ares 4 State #703	0.00	0.00	12,037.5	-931.0	415.0	451,711.00	777,004.00	32° 14' 22.310 N	103° 34' 16.000 W
- plan hits target center									
- Point									
FTP (Ares 4 State #703H	0.00	0.00	12,515.0	-881.0	415.0	451,761.00	777,004.00	32° 14' 22.805 N	103° 34' 15.996 W
- plan misses target center by 163.4usft at 12502.8usft MD (12391.6 TVD, -773.8 N, 413.7 E)									
- Point									
PBHL (Ares 4 State #703H	0.00	0.00	12,515.0	4,197.0	373.0	456,839.00	776,962.00	32° 15' 13.055 N	103° 34' 16.065 W
- plan hits target center									
- Polygon									
Point 1			12,515.0	-5,077.6	72.0	451,761.40	777,034.00		
Point 2			12,515.0	-5,077.7	117.0	451,761.30	777,079.00		
Point 3			12,515.0	-5,152.5	117.3	451,686.50	777,079.30		
Point 4			12,515.0	-5,152.8	17.8	451,686.20	776,979.80		
Point 5			12,515.0	0.1	-29.1	456,839.10	776,932.90		