

30-025-45225



Lea County, NM (NAD 83 NME)
 Area 4 State #203H
 Plan #0.2

Azimuths to Grid North
 True North: -0.41°
 Magnetic North: 8.64°

Magnetic Field
 Strength: 47963.2anT
 Dip Angle: 60.08°
 Date: 4/20/2017
 Model: IGRF2016

To convert a Magnetic Direction to a Grid Direction, Add 8.96°
 To convert a Magnetic Direction to a True Direction, Add 8.91° 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
 Ellipsoid: GRS 1980
 Zone: New Mexico Eastern Zone
 System Datum: Mean Sea Level

WELL DETAILS: #203H
 Ground Level: 3584.0
 KB = 25 @ 3609.0usft
 Northing: 451993.00 Easting: 777413.00 Latitude: 32° 14' 29.072 N Longitude: 103° 34' 11.215 W

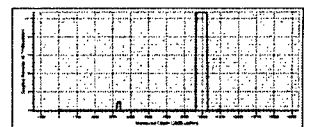
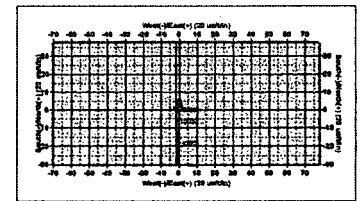
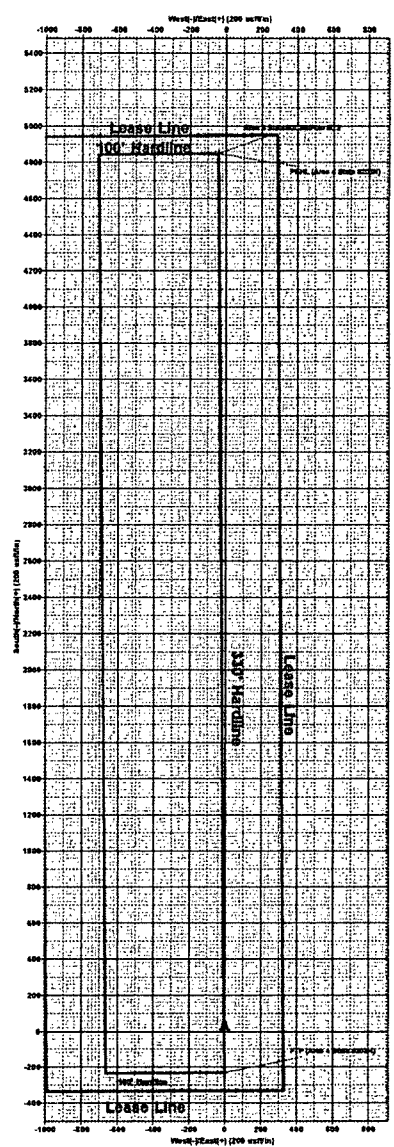
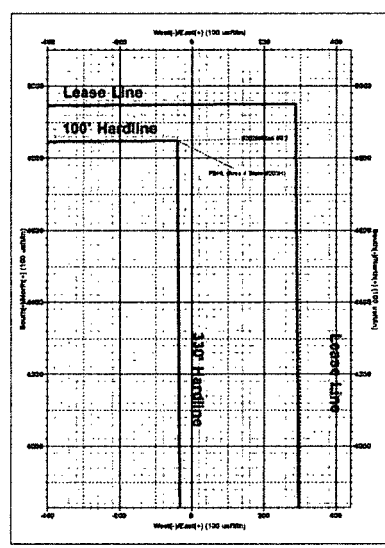
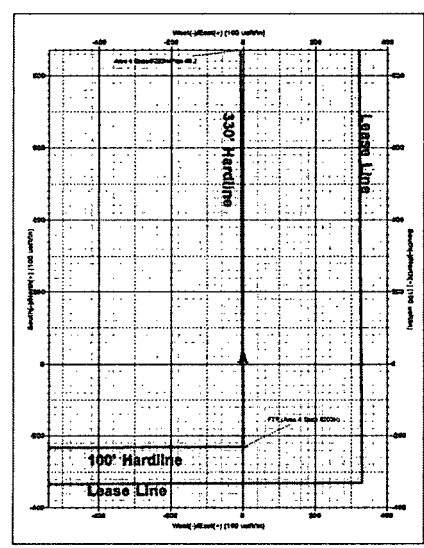
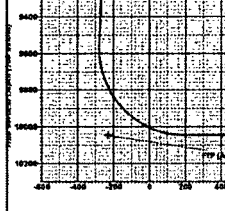
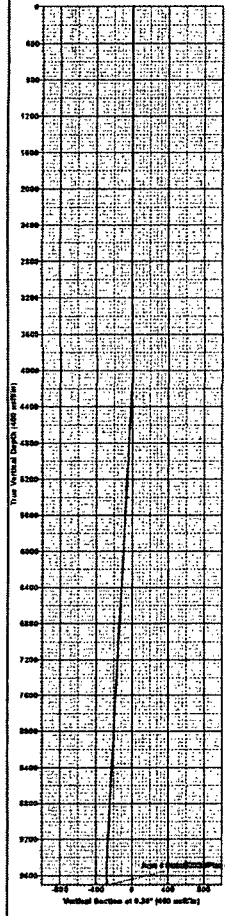
SECTION DETAILS												Target	Annotation
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Diag	TFace	V/Sect				
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0				
2	4000.0	0.00	0.00	4000.0	0.0	0.0	0.00	0.00	0.0				
3	4294.5	2.95	176.76	4294.4	-7.5	0.5	1.00	176.76	-7.6				
4	9581.6	2.95	176.76	9544.5	-371.7	1.2	0.00	0.00	-371.7				
5	10328.1	80.00	353.53	10046.5	189.2	-2.9	12.00	176.77	189.2				
6	14976.1	80.00	353.53	10046.5	4849.0	-41.0	0.00	0.00	4849.2				

PSH, (Area 4 State #203H)

CASING DETAILS
 No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
PSH, (Area 4 State #203H)	10046.5	4849.0	-41.0	455842.00	777372.00
FTP (Area 4 State #203H)		-230.0	2.0	451763.00	777416.00



Lea County, NM (NAD 83 NME)
 Area 4 State #203H
 Plan #0.2



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Ares 4 State

#203H

OH

Plan: Plan #0.2

Standard Planning Report

20 September, 2018



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #203H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3609.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3609.0usft
Site:	Ares 4 State	North Reference:	Grid
Well:	#203H	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	Ares 4 State				
Site Position:		Northing:	451,993.00 usft	Latitude:	32° 14' 25.072 N
From:	Map	Easting:	777,413.00 usft	Longitude:	103° 34' 11.215 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.41 °

Well	#203H					
Well Position	+N/-S	0.0 usft	Northing:	451,993.00 usft	Latitude:	32° 14' 25.072 N
	+E/-W	0.0 usft	Easting:	777,413.00 usft	Longitude:	103° 34' 11.215 W
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	3,584.0 usft	

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	4/20/2017	6.97	60.08	47,963.23981639

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	359.52

Plan Survey Tool Program	Date 9/20/2018			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	14,976.1 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	
4,294.5	2.95	179.76	4,294.4	-7.6	0.0	1.00	1.00	0.00	179.76	
9,551.6	2.95	179.76	9,544.5	-277.7	1.2	0.00	0.00	0.00	0.00	
10,326.1	90.00	359.53	10,046.5	199.2	-2.9	12.00	11.24	23.21	179.77	
14,976.1	90.00	359.53	10,046.5	4,849.0	-41.0	0.00	0.00	0.00	0.00	PBHL (Ares 4 State #)



Planning Report

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Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3609.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3609.0usft
Site:	Ares 4 State	North Reference:	Grid
Well:	#203H	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	1.00	179.76	4,100.0	-0.9	0.0	-0.9	1.00	1.00	0.00
4,200.0	2.00	179.76	4,200.0	-3.5	0.0	-3.5	1.00	1.00	0.00
4,294.5	2.95	179.76	4,294.4	-7.6	0.0	-7.6	1.00	1.00	0.00
4,300.0	2.95	179.76	4,299.9	-7.8	0.0	-7.8	0.00	0.00	0.00
4,400.0	2.95	179.76	4,399.7	-13.0	0.1	-13.0	0.00	0.00	0.00
4,500.0	2.95	179.76	4,499.6	-18.1	0.1	-18.1	0.00	0.00	0.00
4,600.0	2.95	179.76	4,599.5	-23.3	0.1	-23.3	0.00	0.00	0.00
4,700.0	2.95	179.76	4,699.3	-28.4	0.1	-28.4	0.00	0.00	0.00
4,800.0	2.95	179.76	4,799.2	-33.5	0.1	-33.5	0.00	0.00	0.00
4,900.0	2.95	179.76	4,899.1	-38.7	0.2	-38.7	0.00	0.00	0.00
5,000.0	2.95	179.76	4,998.9	-43.8	0.2	-43.8	0.00	0.00	0.00
5,100.0	2.95	179.76	5,098.8	-49.0	0.2	-49.0	0.00	0.00	0.00
5,200.0	2.95	179.76	5,198.7	-54.1	0.2	-54.1	0.00	0.00	0.00



Planning Report

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Company:	Eog Resources - Midland	TVD Reference:	KB = 25 @ 3609.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3609.0usft
Site:	Ares 4 State	North Reference:	Grid
Well:	#203H	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	2.95	179.76	5,298.5	-59.2	0.2	-59.2	0.00	0.00	0.00
5,400.0	2.95	179.76	5,398.4	-64.4	0.3	-64.4	0.00	0.00	0.00
5,500.0	2.95	179.76	5,498.3	-69.5	0.3	-69.5	0.00	0.00	0.00
5,600.0	2.95	179.76	5,598.1	-74.6	0.3	-74.6	0.00	0.00	0.00
5,700.0	2.95	179.76	5,698.0	-79.8	0.3	-79.8	0.00	0.00	0.00
5,800.0	2.95	179.76	5,797.9	-84.9	0.4	-84.9	0.00	0.00	0.00
5,900.0	2.95	179.76	5,897.7	-90.1	0.4	-90.1	0.00	0.00	0.00
6,000.0	2.95	179.76	5,997.6	-95.2	0.4	-95.2	0.00	0.00	0.00
6,100.0	2.95	179.76	6,097.5	-100.3	0.4	-100.3	0.00	0.00	0.00
6,200.0	2.95	179.76	6,197.4	-105.5	0.4	-105.5	0.00	0.00	0.00
6,300.0	2.95	179.76	6,297.2	-110.6	0.5	-110.6	0.00	0.00	0.00
6,400.0	2.95	179.76	6,397.1	-115.7	0.5	-115.7	0.00	0.00	0.00
6,500.0	2.95	179.76	6,497.0	-120.9	0.5	-120.9	0.00	0.00	0.00
6,600.0	2.95	179.76	6,596.8	-126.0	0.5	-126.0	0.00	0.00	0.00
6,700.0	2.95	179.76	6,696.7	-131.2	0.5	-131.2	0.00	0.00	0.00
6,800.0	2.95	179.76	6,796.6	-136.3	0.6	-136.3	0.00	0.00	0.00
6,900.0	2.95	179.76	6,896.4	-141.4	0.6	-141.4	0.00	0.00	0.00
7,000.0	2.95	179.76	6,996.3	-146.6	0.6	-146.6	0.00	0.00	0.00
7,100.0	2.95	179.76	7,096.2	-151.7	0.6	-151.7	0.00	0.00	0.00
7,200.0	2.95	179.76	7,196.0	-156.8	0.7	-156.8	0.00	0.00	0.00
7,300.0	2.95	179.76	7,295.9	-162.0	0.7	-162.0	0.00	0.00	0.00
7,400.0	2.95	179.76	7,395.8	-167.1	0.7	-167.1	0.00	0.00	0.00
7,500.0	2.95	179.76	7,495.6	-172.3	0.7	-172.3	0.00	0.00	0.00
7,600.0	2.95	179.76	7,595.5	-177.4	0.7	-177.4	0.00	0.00	0.00
7,700.0	2.95	179.76	7,695.4	-182.5	0.8	-182.5	0.00	0.00	0.00
7,800.0	2.95	179.76	7,795.2	-187.7	0.8	-187.7	0.00	0.00	0.00
7,900.0	2.95	179.76	7,895.1	-192.8	0.8	-192.8	0.00	0.00	0.00
8,000.0	2.95	179.76	7,995.0	-197.9	0.8	-197.9	0.00	0.00	0.00
8,100.0	2.95	179.76	8,094.8	-203.1	0.8	-203.1	0.00	0.00	0.00
8,200.0	2.95	179.76	8,194.7	-208.2	0.9	-208.2	0.00	0.00	0.00
8,300.0	2.95	179.76	8,294.6	-213.4	0.9	-213.4	0.00	0.00	0.00
8,400.0	2.95	179.76	8,394.4	-218.5	0.9	-218.5	0.00	0.00	0.00
8,500.0	2.95	179.76	8,494.3	-223.6	0.9	-223.6	0.00	0.00	0.00
8,600.0	2.95	179.76	8,594.2	-228.8	1.0	-228.8	0.00	0.00	0.00
8,700.0	2.95	179.76	8,694.1	-233.9	1.0	-233.9	0.00	0.00	0.00
8,800.0	2.95	179.76	8,793.9	-239.0	1.0	-239.0	0.00	0.00	0.00
8,900.0	2.95	179.76	8,893.8	-244.2	1.0	-244.2	0.00	0.00	0.00
9,000.0	2.95	179.76	8,993.7	-249.3	1.0	-249.3	0.00	0.00	0.00
9,100.0	2.95	179.76	9,093.5	-254.5	1.1	-254.5	0.00	0.00	0.00
9,200.0	2.95	179.76	9,193.4	-259.6	1.1	-259.6	0.00	0.00	0.00
9,300.0	2.95	179.76	9,293.3	-264.7	1.1	-264.7	0.00	0.00	0.00
9,400.0	2.95	179.76	9,393.1	-269.9	1.1	-269.9	0.00	0.00	0.00
9,500.0	2.95	179.76	9,493.0	-275.0	1.1	-275.0	0.00	0.00	0.00
9,551.6	2.95	179.76	9,544.5	-277.7	1.2	-277.7	0.00	0.00	0.00
9,575.0	0.13	184.58	9,567.9	-278.3	1.2	-278.3	12.00	-12.00	20.59
9,600.0	2.87	359.29	9,592.9	-277.7	1.1	-277.7	12.00	10.92	698.83
9,625.0	5.87	359.41	9,617.8	-275.8	1.1	-275.8	12.00	12.00	0.49
9,650.0	8.87	359.45	9,642.6	-272.6	1.1	-272.6	12.00	12.00	0.16
9,675.0	11.87	359.47	9,667.2	-268.1	1.1	-268.1	12.00	12.00	0.08
9,700.0	14.87	359.49	9,691.5	-262.3	1.0	-262.3	12.00	12.00	0.05
9,725.0	17.87	359.49	9,715.5	-255.3	0.9	-255.3	12.00	12.00	0.03
9,750.0	20.87	359.50	9,739.1	-247.0	0.9	-247.0	12.00	12.00	0.02
9,775.0	23.87	359.50	9,762.2	-237.5	0.8	-237.5	12.00	12.00	0.02
9,800.0	26.87	359.51	9,784.8	-226.8	0.7	-226.8	12.00	12.00	0.01



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #203H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3609.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3609.0usft
Site:	Ares 4 State	North Reference:	Grid
Well:	#203H	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)	
9,825.0	29.87	359.51	9,806.8	-214.9	0.6	-214.9	12.00	12.00	0.01	
9,850.0	32.87	359.51	9,828.1	-201.9	0.5	-201.9	12.00	12.00	0.01	
9,875.0	35.87	359.51	9,848.8	-187.8	0.4	-187.8	12.00	12.00	0.01	
9,900.0	38.87	359.52	9,868.6	-172.6	0.2	-172.6	12.00	12.00	0.01	
9,925.0	41.87	359.52	9,887.7	-156.4	0.1	-156.4	12.00	12.00	0.01	
9,950.0	44.87	359.52	9,905.9	-139.2	-0.1	-139.2	12.00	12.00	0.01	
9,975.0	47.87	359.52	9,923.1	-121.1	-0.2	-121.1	12.00	12.00	0.00	
FTP (Ares 4 State #203H)										
10,000.0	50.87	359.52	9,939.4	-102.2	-0.4	-102.2	12.00	12.00	0.00	
10,025.0	53.87	359.52	9,954.7	-82.4	-0.5	-82.4	12.00	12.00	0.00	
10,050.0	56.87	359.52	9,968.9	-61.8	-0.7	-61.8	12.00	12.00	0.00	
10,075.0	59.87	359.52	9,982.0	-40.5	-0.9	-40.5	12.00	12.00	0.00	
10,100.0	62.87	359.52	9,994.0	-18.6	-1.1	-18.6	12.00	12.00	0.00	
10,125.0	65.87	359.52	10,004.8	3.9	-1.2	3.9	12.00	12.00	0.00	
10,150.0	68.87	359.53	10,014.4	27.0	-1.4	27.0	12.00	12.00	0.00	
10,175.0	71.87	359.53	10,022.8	50.6	-1.6	50.6	12.00	12.00	0.00	
10,200.0	74.87	359.53	10,029.9	74.5	-1.8	74.5	12.00	12.00	0.00	
10,225.0	77.87	359.53	10,035.8	98.8	-2.0	98.8	12.00	12.00	0.00	
10,250.0	80.87	359.53	10,040.4	123.4	-2.2	123.4	12.00	12.00	0.00	
10,275.0	83.87	359.53	10,043.8	148.1	-2.4	148.2	12.00	12.00	0.00	
10,300.0	86.87	359.53	10,045.8	173.1	-2.6	173.1	12.00	12.00	0.00	
10,326.1	90.00	359.53	10,046.5	199.2	-2.9	199.2	12.00	12.00	0.00	
10,400.0	90.00	359.53	10,046.5	273.0	-3.5	273.1	0.00	0.00	0.00	
10,500.0	90.00	359.53	10,046.5	373.0	-4.3	373.1	0.00	0.00	0.00	
10,600.0	90.00	359.53	10,046.5	473.0	-5.1	473.1	0.00	0.00	0.00	
10,700.0	90.00	359.53	10,046.5	573.0	-5.9	573.1	0.00	0.00	0.00	
10,800.0	90.00	359.53	10,046.5	673.0	-6.7	673.1	0.00	0.00	0.00	
10,900.0	90.00	359.53	10,046.5	773.0	-7.6	773.1	0.00	0.00	0.00	
11,000.0	90.00	359.53	10,046.5	873.0	-8.4	873.1	0.00	0.00	0.00	
11,100.0	90.00	359.53	10,046.5	973.0	-9.2	973.1	0.00	0.00	0.00	
11,200.0	90.00	359.53	10,046.5	1,073.0	-10.0	1,073.1	0.00	0.00	0.00	
11,300.0	90.00	359.53	10,046.5	1,173.0	-10.8	1,173.1	0.00	0.00	0.00	
11,400.0	90.00	359.53	10,046.5	1,273.0	-11.7	1,273.1	0.00	0.00	0.00	
11,500.0	90.00	359.53	10,046.5	1,373.0	-12.5	1,373.1	0.00	0.00	0.00	
11,600.0	90.00	359.53	10,046.5	1,473.0	-13.3	1,473.1	0.00	0.00	0.00	
11,700.0	90.00	359.53	10,046.5	1,573.0	-14.1	1,573.1	0.00	0.00	0.00	
11,800.0	90.00	359.53	10,046.5	1,673.0	-14.9	1,673.1	0.00	0.00	0.00	
11,900.0	90.00	359.53	10,046.5	1,773.0	-15.8	1,773.1	0.00	0.00	0.00	
12,000.0	90.00	359.53	10,046.5	1,873.0	-16.6	1,873.1	0.00	0.00	0.00	
12,100.0	90.00	359.53	10,046.5	1,973.0	-17.4	1,973.1	0.00	0.00	0.00	
12,200.0	90.00	359.53	10,046.5	2,073.0	-18.2	2,073.1	0.00	0.00	0.00	
12,300.0	90.00	359.53	10,046.5	2,173.0	-19.0	2,173.1	0.00	0.00	0.00	
12,400.0	90.00	359.53	10,046.5	2,273.0	-19.9	2,273.1	0.00	0.00	0.00	
12,500.0	90.00	359.53	10,046.5	2,373.0	-20.7	2,373.1	0.00	0.00	0.00	
12,600.0	90.00	359.53	10,046.5	2,473.0	-21.5	2,473.1	0.00	0.00	0.00	
12,700.0	90.00	359.53	10,046.5	2,573.0	-22.3	2,573.1	0.00	0.00	0.00	
12,800.0	90.00	359.53	10,046.5	2,673.0	-23.1	2,673.1	0.00	0.00	0.00	
12,900.0	90.00	359.53	10,046.5	2,773.0	-24.0	2,773.1	0.00	0.00	0.00	
13,000.0	90.00	359.53	10,046.5	2,872.9	-24.8	2,873.1	0.00	0.00	0.00	
13,100.0	90.00	359.53	10,046.5	2,972.9	-25.6	2,973.1	0.00	0.00	0.00	
13,200.0	90.00	359.53	10,046.5	3,072.9	-26.4	3,073.1	0.00	0.00	0.00	
13,300.0	90.00	359.53	10,046.5	3,172.9	-27.3	3,173.1	0.00	0.00	0.00	
13,400.0	90.00	359.53	10,046.5	3,272.9	-28.1	3,273.1	0.00	0.00	0.00	



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #203H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3609.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3609.0usft
Site:	Ares 4 State	North Reference:	Grid
Well:	#203H	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)
13,500.0	90.00	359.53	10,046.5	3,372.9	-28.9	3,373.1	0.00	0.00	0.00
13,600.0	90.00	359.53	10,046.5	3,472.9	-29.7	3,473.1	0.00	0.00	0.00
13,700.0	90.00	359.53	10,046.5	3,572.9	-30.5	3,573.1	0.00	0.00	0.00
13,800.0	90.00	359.53	10,046.5	3,672.9	-31.4	3,673.1	0.00	0.00	0.00
13,900.0	90.00	359.53	10,046.5	3,772.9	-32.2	3,773.1	0.00	0.00	0.00
14,000.0	90.00	359.53	10,046.5	3,872.9	-33.0	3,873.1	0.00	0.00	0.00
14,100.0	90.00	359.53	10,046.5	3,972.9	-33.8	3,973.1	0.00	0.00	0.00
14,200.0	90.00	359.53	10,046.5	4,072.9	-34.6	4,073.1	0.00	0.00	0.00
14,300.0	90.00	359.53	10,046.5	4,172.9	-35.5	4,173.1	0.00	0.00	0.00
14,400.0	90.00	359.53	10,046.5	4,272.9	-36.3	4,273.1	0.00	0.00	0.00
14,500.0	90.00	359.53	10,046.5	4,372.9	-37.1	4,373.1	0.00	0.00	0.00
14,600.0	90.00	359.53	10,046.5	4,472.9	-37.9	4,473.1	0.00	0.00	0.00
14,700.0	90.00	359.53	10,046.5	4,572.9	-38.7	4,573.1	0.00	0.00	0.00
14,800.0	90.00	359.53	10,046.5	4,672.9	-39.6	4,673.1	0.00	0.00	0.00
14,900.0	90.00	359.53	10,046.5	4,772.9	-40.4	4,773.1	0.00	0.00	0.00
14,976.1	90.00	359.53	10,046.5	4,849.0	-41.0	4,849.2	0.00	0.00	0.00
PBHL (Ares 4 State #203H)									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N-S (usft)	+E-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
hit/miss target									
- Shape									
PBHL (Ares 4 State #203H)	0.00	0.00	10,046.5	4,849.0	-41.0	456,842.00	777,372.00	32° 15' 13.056 N	103° 34' 11.291 W
- plan hits target center									
- Point									
FTP (Ares 4 State #203H)	0.00	0.01	10,046.5	-230.0	2.0	451,763.00	777,415.00	32° 14' 22.796 N	103° 34' 11.210 W
- plan misses target center by 164.6usft at 9975.0usft MD (9923.1 TVD, -121.1 N, -0.2 E)									
- Point									