

HOBBS OCD
SEP 26 2018
30-025-43817



Lea County, NM (NAD 83 NME)

Ares 4 State #301H

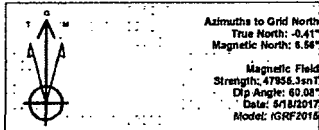
Plan #0.2

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: #301H

Ground Level: 3584.0
KB = 25 @ 3609.0usft
Northing: 451993.00 Easting: 777378.00 Latitude: 32° 14' 25.074 N Longitude: 103° 34' 11.922 W



To convert a Magnetic Direction to a Grid Direction, Add 6.56°
To convert a Magnetic Direction to a True Direction, Add 9.96° East
To convert a True Direction to a Grid Direction, Subtract 0.41°

SECTION DETAILS

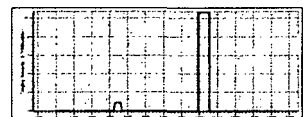
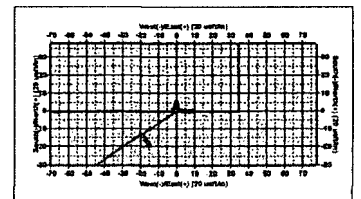
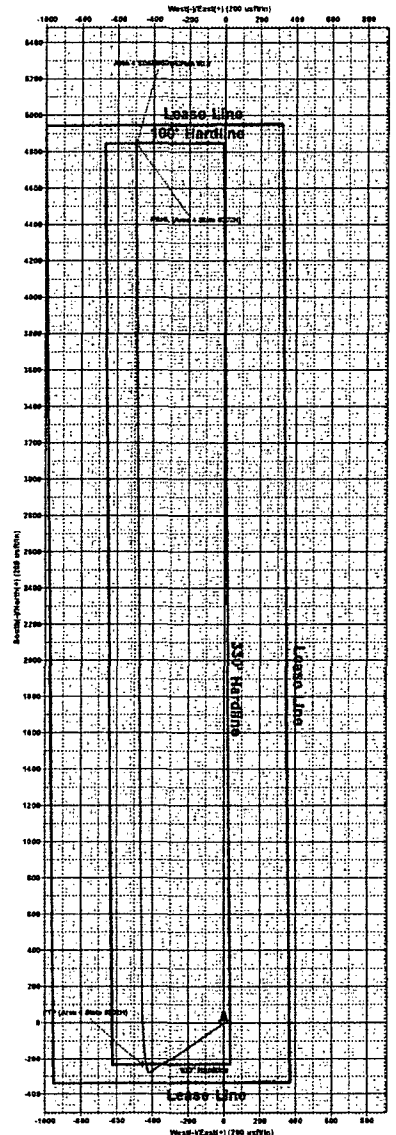
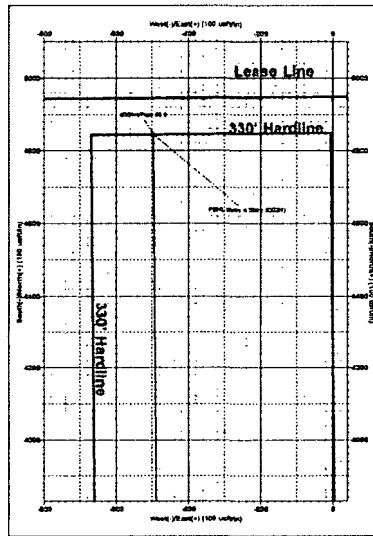
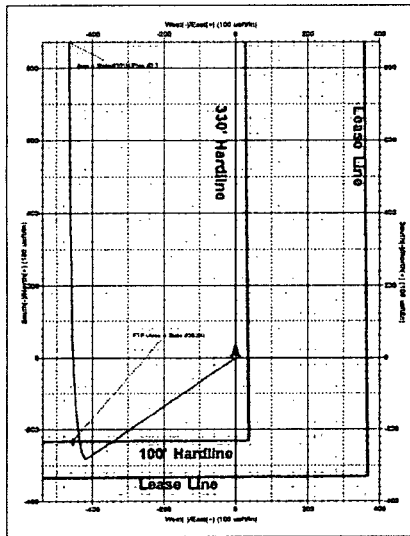
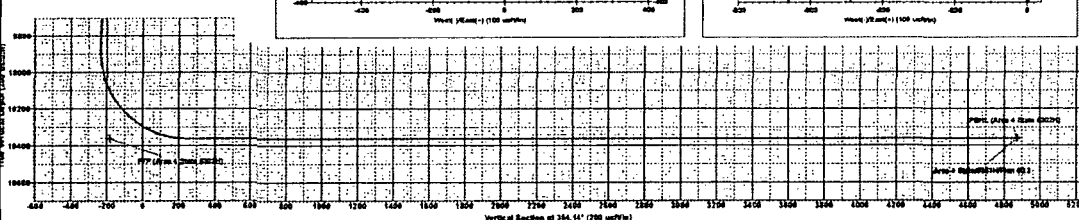
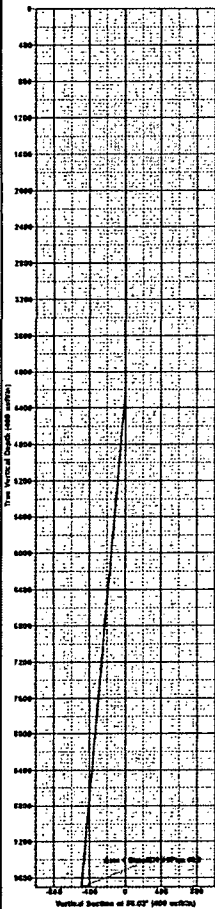
Sec	MD	Inc	ALZ	TVD	+W-S	+E-W	Dleg	TFace	VSect	Target	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	4200.0	0.00	0.00	4200.0	0.0	0.0	0.00	0.00	0.0		
3	4013.4	8.13	234.02	4612.8	-12.8	-19.1	1.00	238.02	-10.8		
4	3882.6	0.13	234.02	3980.3	-291.4	-417.6	0.00	0.00	-237.3		
5	10646.2	90.00	359.53	10360.0	195.2	-458.8	12.00	123.40	241.0		
6	16307.2	90.00	359.53	10360.0	4844.0	-487.0	0.00	0.00	4871.4	PHL (Ares 4 State #302H)	

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP COORDINATES)

Name	TVD	+W-S	+E-W	Northing	Easting
PHL (Ares 4 State #302H)	10360.0	4844.0	-487.0	458239.00	776881.00
FTP (Ares 4 State #302H)	12360.0	-237.0	-458.0	451761.00	776823.00





EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Ares 4 State

#301H

OH

Plan: Plan #0.2

Standard Planning Report

25 September, 2018

**HOBBS OCD
SEP 26 2018
RECEIVED**



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #301H
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:	#301H	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:	From:	Map	
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
Northing:	451,993.00 usft	Latitude:	32° 14' 25.072 N
Easting:	777,413.00 usft	Longitude:	103° 34' 11.215 W
Grid Convergence:	0.41 °		

Well	#301H					
Well Position	+N/-S	0.0 usft	Northing:	451,993.00 usft	Latitude:	32° 14' 25.074 N
	+E/-W	-35.0 usft	Easting:	777,378.00 usft	Longitude:	103° 34' 11.622 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,584.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	5/18/2017	6.96	60.08	47,955.33132544

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	354.14

Plan Survey Tool Program	Date 9/20/2018			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	15,307.2 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	
4,513.4	5.13	236.02	4,512.8	-12.8	-19.1	1.00	1.00	0.00	236.02	
9,882.6	5.13	236.02	9,860.3	-281.4	-417.5	0.00	0.00	0.00	0.00	
10,656.2	90.00	359.53	10,360.0	195.2	-458.8	12.00	10.97	15.97	123.40	
15,307.2	90.00	359.53	10,360.0	4,846.0	-497.0	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: #301H
 Wellbore: OH
 Design: Plan #0.2

Local Co-ordinate Reference: Well #301H
 TVD Reference: KB = 25 @ 3609.0usft
 MD Reference: KB = 25 @ 3609.0usft
 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)
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	236.02	4,100.0	-0.5	-0.7	-0.4	1.00	1.00	0.00
4,200.0	2.00	236.02	4,200.0	-2.0	-2.9	-1.6	1.00	1.00	0.00
4,300.0	3.00	236.02	4,299.9	-4.4	-6.5	-3.7	1.00	1.00	0.00
4,400.0	4.00	236.02	4,399.7	-7.8	-11.6	-6.6	1.00	1.00	0.00
4,500.0	5.00	236.02	4,499.4	-12.2	-18.1	-10.3	1.00	1.00	0.00
4,513.4	5.13	236.02	4,512.8	-12.8	-19.1	-10.8	1.00	1.00	0.00
4,600.0	5.13	236.02	4,599.0	-17.2	-25.5	-14.5	0.00	0.00	0.00
4,700.0	5.13	236.02	4,698.6	-22.2	-32.9	-18.7	0.00	0.00	0.00
4,800.0	5.13	236.02	4,798.2	-27.2	-40.3	-22.9	0.00	0.00	0.00
4,900.0	5.13	236.02	4,897.8	-32.2	-47.8	-27.1	0.00	0.00	0.00
5,000.0	5.13	236.02	4,997.4	-37.2	-55.2	-31.4	0.00	0.00	0.00
5,100.0	5.13	236.02	5,097.0	-42.2	-62.6	-35.6	0.00	0.00	0.00
5,200.0	5.13	236.02	5,196.6	-47.2	-70.0	-39.8	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #301H
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:	#301H	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	5.13	236.02	5,296.2	-52.2	-77.4	-44.0	0.00	0.00	0.00	
5,400.0	5.13	236.02	5,395.8	-57.2	-84.9	-48.2	0.00	0.00	0.00	
5,500.0	5.13	236.02	5,495.4	-62.2	-92.3	-52.5	0.00	0.00	0.00	
5,600.0	5.13	236.02	5,595.0	-67.2	-99.7	-56.7	0.00	0.00	0.00	
5,700.0	5.13	236.02	5,694.6	-72.2	-107.1	-60.9	0.00	0.00	0.00	
5,800.0	5.13	236.02	5,794.2	-77.2	-114.5	-65.1	0.00	0.00	0.00	
5,900.0	5.13	236.02	5,893.7	-82.2	-122.0	-69.3	0.00	0.00	0.00	
6,000.0	5.13	236.02	5,993.3	-87.2	-129.4	-73.5	0.00	0.00	0.00	
6,100.0	5.13	236.02	6,092.9	-92.2	-136.8	-77.8	0.00	0.00	0.00	
6,200.0	5.13	236.02	6,192.5	-97.2	-144.2	-82.0	0.00	0.00	0.00	
6,300.0	5.13	236.02	6,292.1	-102.2	-151.6	-86.2	0.00	0.00	0.00	
6,400.0	5.13	236.02	6,391.7	-107.2	-159.1	-90.4	0.00	0.00	0.00	
6,500.0	5.13	236.02	6,491.3	-112.2	-166.5	-94.6	0.00	0.00	0.00	
6,600.0	5.13	236.02	6,590.9	-117.2	-173.9	-98.9	0.00	0.00	0.00	
6,700.0	5.13	236.02	6,690.5	-122.2	-181.3	-103.1	0.00	0.00	0.00	
6,800.0	5.13	236.02	6,790.1	-127.2	-188.7	-107.3	0.00	0.00	0.00	
6,900.0	5.13	236.02	6,889.7	-132.2	-196.2	-111.5	0.00	0.00	0.00	
7,000.0	5.13	236.02	6,989.3	-137.2	-203.6	-115.7	0.00	0.00	0.00	
7,100.0	5.13	236.02	7,088.9	-142.2	-211.0	-120.0	0.00	0.00	0.00	
7,200.0	5.13	236.02	7,188.5	-147.2	-218.4	-124.2	0.00	0.00	0.00	
7,300.0	5.13	236.02	7,288.1	-152.2	-225.9	-128.4	0.00	0.00	0.00	
7,400.0	5.13	236.02	7,387.7	-157.2	-233.3	-132.6	0.00	0.00	0.00	
7,500.0	5.13	236.02	7,487.3	-162.2	-240.7	-136.8	0.00	0.00	0.00	
7,600.0	5.13	236.02	7,586.9	-167.2	-248.1	-141.0	0.00	0.00	0.00	
7,700.0	5.13	236.02	7,686.5	-172.2	-255.5	-145.3	0.00	0.00	0.00	
7,800.0	5.13	236.02	7,786.1	-177.2	-263.0	-149.5	0.00	0.00	0.00	
7,900.0	5.13	236.02	7,885.7	-182.2	-270.4	-153.7	0.00	0.00	0.00	
8,000.0	5.13	236.02	7,985.3	-187.2	-277.8	-157.9	0.00	0.00	0.00	
8,100.0	5.13	236.02	8,084.9	-192.2	-285.2	-162.1	0.00	0.00	0.00	
8,200.0	5.13	236.02	8,184.5	-197.2	-292.6	-166.4	0.00	0.00	0.00	
8,300.0	5.13	236.02	8,284.1	-202.2	-300.1	-170.6	0.00	0.00	0.00	
8,400.0	5.13	236.02	8,383.7	-207.2	-307.5	-174.8	0.00	0.00	0.00	
8,500.0	5.13	236.02	8,483.3	-212.2	-314.9	-179.0	0.00	0.00	0.00	
8,600.0	5.13	236.02	8,582.9	-217.3	-322.3	-183.2	0.00	0.00	0.00	
8,700.0	5.13	236.02	8,682.5	-222.3	-329.7	-187.5	0.00	0.00	0.00	
8,800.0	5.13	236.02	8,782.1	-227.3	-337.2	-191.7	0.00	0.00	0.00	
8,900.0	5.13	236.02	8,881.7	-232.3	-344.6	-195.9	0.00	0.00	0.00	
9,000.0	5.13	236.02	8,981.3	-237.3	-352.0	-200.1	0.00	0.00	0.00	
9,100.0	5.13	236.02	9,080.9	-242.3	-359.4	-204.3	0.00	0.00	0.00	
9,200.0	5.13	236.02	9,180.5	-247.3	-366.9	-208.5	0.00	0.00	0.00	
9,300.0	5.13	236.02	9,280.1	-252.3	-374.3	-212.8	0.00	0.00	0.00	
9,400.0	5.13	236.02	9,379.7	-257.3	-381.7	-217.0	0.00	0.00	0.00	
9,500.0	5.13	236.02	9,479.3	-262.3	-389.1	-221.2	0.00	0.00	0.00	
9,600.0	5.13	236.02	9,578.9	-267.3	-396.5	-225.4	0.00	0.00	0.00	
9,700.0	5.13	236.02	9,678.5	-272.3	-404.0	-229.6	0.00	0.00	0.00	
9,800.0	5.13	236.02	9,778.1	-277.3	-411.4	-233.9	0.00	0.00	0.00	
9,882.6	5.13	236.02	9,860.3	-281.4	-417.5	-237.3	0.00	0.00	0.00	
9,900.0	4.35	259.71	9,877.7	-282.0	-418.8	-237.8	12.00	-4.51	135.95	
9,925.0	4.84	297.36	9,902.6	-281.6	-420.7	-237.3	12.00	1.98	150.63	
9,950.0	6.78	320.47	9,927.5	-280.0	-422.5	-235.4	12.00	7.75	92.40	
9,975.0	9.30	332.30	9,952.3	-277.1	-424.4	-232.3	12.00	10.07	47.32	
10,000.0	12.04	338.96	9,976.8	-272.9	-426.3	-228.0	12.00	10.96	26.66	
10,025.0	14.88	343.15	10,001.1	-267.4	-428.2	-222.3	12.00	11.36	16.75	
10,050.0	17.77	346.01	10,025.1	-260.6	-430.0	-215.4	12.00	11.56	11.44	



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Ares 4 State
Well: #301H
Wellbore: OH
Design: Plan #0.2

Local Co-ordinate Reference: Well #301H
TVD Reference: KB = 25 @ 3609.0usft
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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)
10,075.0	20.69	348.09	10,048.7	-252.6	-431.9	-207.2	12.00	11.69	8.31
10,100.0	23.63	349.67	10,071.9	-243.3	-433.7	-197.8	12.00	11.76	6.33
10,125.0	26.58	350.92	10,094.5	-232.9	-435.4	-187.2	12.00	11.81	5.00
10,150.0	29.54	351.93	10,116.6	-221.2	-437.2	-175.5	12.00	11.85	4.06
10,175.0	32.51	352.78	10,138.0	-208.5	-438.9	-162.6	12.00	11.87	3.38
10,200.0	35.48	353.50	10,158.7	-194.6	-440.6	-148.6	12.00	11.89	2.87
10,225.0	38.46	354.12	10,178.7	-179.6	-442.2	-133.6	12.00	11.91	2.48
10,250.0	41.44	354.66	10,197.9	-163.7	-443.8	-117.5	12.00	11.92	2.18
10,275.0	44.42	355.15	10,216.2	-146.7	-445.3	-100.5	12.00	11.93	1.93
10,300.0	47.41	355.58	10,233.6	-128.8	-446.7	-82.6	12.00	11.93	1.74
10,306.0	48.13	355.68	10,237.6	-124.4	-447.1	-78.1	12.00	11.94	1.64
FTP (Ares 4 State #302H)									
10,325.0	50.39	355.98	10,250.0	-110.0	-448.1	-63.7	12.00	11.94	1.56
10,350.0	53.38	356.34	10,265.4	-90.4	-449.4	-44.1	12.00	11.95	1.45
10,375.0	56.37	356.67	10,279.8	-70.0	-450.7	-23.6	12.00	11.95	1.34
10,400.0	59.35	356.99	10,293.1	-48.9	-451.8	-2.5	12.00	11.95	1.25
10,425.0	62.34	357.28	10,305.3	-27.1	-452.9	19.3	12.00	11.96	1.18
10,450.0	65.33	357.56	10,316.3	-4.6	-453.9	41.7	12.00	11.96	1.11
10,475.0	68.32	357.82	10,326.1	18.3	-454.9	64.6	12.00	11.96	1.06
10,500.0	71.31	358.08	10,334.8	41.8	-455.7	88.0	12.00	11.96	1.02
10,525.0	74.30	358.32	10,342.1	65.6	-456.4	111.9	12.00	11.96	0.98
10,550.0	77.30	358.56	10,348.3	89.9	-457.1	136.0	12.00	11.96	0.95
10,575.0	80.29	358.80	10,353.1	114.4	-457.7	160.5	12.00	11.97	0.93
10,600.0	83.28	359.02	10,356.7	139.1	-458.1	185.1	12.00	11.97	0.92
10,625.0	86.27	359.25	10,359.0	164.0	-458.5	209.9	12.00	11.97	0.90
10,650.0	89.26	359.47	10,360.0	189.0	-458.8	234.8	12.00	11.97	0.90
10,656.2	90.00	359.53	10,360.0	195.2	-458.8	241.0	12.00	11.97	0.90
10,700.0	90.00	359.53	10,360.0	239.0	-459.2	284.6	0.00	0.00	0.00
10,800.0	90.00	359.53	10,360.0	339.0	-460.0	384.1	0.00	0.00	0.00
10,900.0	90.00	359.53	10,360.0	439.0	-460.8	483.7	0.00	0.00	0.00
11,000.0	90.00	359.53	10,360.0	539.0	-461.7	583.3	0.00	0.00	0.00
11,100.0	90.00	359.53	10,360.0	639.0	-462.5	682.8	0.00	0.00	0.00
11,200.0	90.00	359.53	10,360.0	739.0	-463.3	782.4	0.00	0.00	0.00
11,300.0	90.00	359.53	10,360.0	839.0	-464.1	881.9	0.00	0.00	0.00
11,400.0	90.00	359.53	10,360.0	939.0	-464.9	981.5	0.00	0.00	0.00
11,500.0	90.00	359.53	10,360.0	1,039.0	-465.8	1,081.1	0.00	0.00	0.00
11,600.0	90.00	359.53	10,360.0	1,138.9	-466.6	1,180.6	0.00	0.00	0.00
11,700.0	90.00	359.53	10,360.0	1,238.9	-467.4	1,280.2	0.00	0.00	0.00
11,800.0	90.00	359.53	10,360.0	1,338.9	-468.2	1,379.7	0.00	0.00	0.00
11,900.0	90.00	359.53	10,360.0	1,438.9	-469.1	1,479.3	0.00	0.00	0.00
12,000.0	90.00	359.53	10,360.0	1,538.9	-469.9	1,578.8	0.00	0.00	0.00
12,100.0	90.00	359.53	10,360.0	1,638.9	-470.7	1,678.4	0.00	0.00	0.00
12,200.0	90.00	359.53	10,360.0	1,738.9	-471.5	1,778.0	0.00	0.00	0.00
12,300.0	90.00	359.53	10,360.0	1,838.9	-472.3	1,877.5	0.00	0.00	0.00
12,400.0	90.00	359.53	10,360.0	1,938.9	-473.2	1,977.1	0.00	0.00	0.00
12,500.0	90.00	359.53	10,360.0	2,038.9	-474.0	2,076.6	0.00	0.00	0.00
12,600.0	90.00	359.53	10,360.0	2,138.9	-474.8	2,176.2	0.00	0.00	0.00
12,700.0	90.00	359.53	10,360.0	2,238.9	-475.6	2,275.8	0.00	0.00	0.00
12,800.0	90.00	359.53	10,360.0	2,338.9	-476.4	2,375.3	0.00	0.00	0.00
12,900.0	90.00	359.53	10,360.0	2,438.9	-477.3	2,474.9	0.00	0.00	0.00
13,000.0	90.00	359.53	10,360.0	2,538.9	-478.1	2,574.4	0.00	0.00	0.00
13,100.0	90.00	359.53	10,360.0	2,638.9	-478.9	2,674.0	0.00	0.00	0.00
13,200.0	90.00	359.53	10,360.0	2,738.9	-479.7	2,773.5	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #301H
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:	#301H	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)
13,300.0	90.00	359.53	10,360.0	2,838.9	-480.5	2,873.1	0.00	0.00	0.00
13,400.0	90.00	359.53	10,360.0	2,938.9	-481.4	2,972.7	0.00	0.00	0.00
13,500.0	90.00	359.53	10,360.0	3,038.9	-482.2	3,072.2	0.00	0.00	0.00
13,600.0	90.00	359.53	10,360.0	3,138.9	-483.0	3,171.8	0.00	0.00	0.00
13,700.0	90.00	359.53	10,360.0	3,238.9	-483.8	3,271.3	0.00	0.00	0.00
13,800.0	90.00	359.53	10,360.0	3,338.9	-484.6	3,370.9	0.00	0.00	0.00
13,900.0	90.00	359.53	10,360.0	3,438.9	-485.5	3,470.5	0.00	0.00	0.00
14,000.0	90.00	359.53	10,360.0	3,538.9	-486.3	3,570.0	0.00	0.00	0.00
14,100.0	90.00	359.53	10,360.0	3,638.9	-487.1	3,669.6	0.00	0.00	0.00
14,200.0	90.00	359.53	10,360.0	3,738.9	-487.9	3,769.1	0.00	0.00	0.00
14,300.0	90.00	359.53	10,360.0	3,838.9	-488.7	3,868.7	0.00	0.00	0.00
14,400.0	90.00	359.53	10,360.0	3,938.9	-489.6	3,968.2	0.00	0.00	0.00
14,500.0	90.00	359.53	10,360.0	4,038.9	-490.4	4,067.8	0.00	0.00	0.00
14,600.0	90.00	359.53	10,360.0	4,138.8	-491.2	4,167.4	0.00	0.00	0.00
14,700.0	90.00	359.53	10,360.0	4,238.8	-492.0	4,266.9	0.00	0.00	0.00
14,800.0	90.00	359.53	10,360.0	4,338.8	-492.8	4,366.5	0.00	0.00	0.00
14,900.0	90.00	359.53	10,360.0	4,438.8	-493.7	4,466.0	0.00	0.00	0.00
15,000.0	90.00	359.53	10,360.0	4,538.8	-494.5	4,565.6	0.00	0.00	0.00
15,100.0	90.00	359.53	10,360.0	4,638.8	-495.3	4,665.2	0.00	0.00	0.00
15,200.0	90.00	359.53	10,360.0	4,738.8	-496.1	4,764.7	0.00	0.00	0.00
15,307.2	90.00	359.53	10,360.0	4,846.0	-497.0	4,871.4	0.00	0.00	0.00
PBHL (Ares 4 State #302H)									

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									
FTP (Ares 4 State #302H)	0.00	0.01	10,360.0	-232.0	-455.0	451,761.00	776,923.00	32° 14' 22.810 N	103° 34' 16.939 W
- plan misses target center by 163.2usft at 10306.0usft MD (10237.6 TVD, -124.4 N, -447.1 E)									
- Point									
PBHL (Ares 4 State #301H)	0.00	0.00	10,360.0	4,846.0	-497.0	456,839.00	776,881.00	32° 15' 13.061 N	103° 34' 17.008 W
- plan hits target center									
- Point									