

30-025-45224
HOBBS OCD
SEP 25 2018
RECEIVED



Lea County, NM (NAD 83 NME)

Ares 4 State #302H

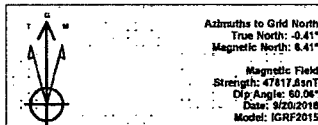
Plan #0.1

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: #302H

Ground Level: 3581.0
KB= 25 @ 3608.0usft
Northing 452491.00 Easting 775994.00
Latitude 32° 14' 30.099 N Longitude 103° 34' 27.693 W



To convert a Magnetic Direction to a Grid Direction, Add 6.41°
To convert a Magnetic Direction to a True Direction, Add 6.82° East
To convert a True Direction to a Grid Direction, Subtract 0.40°

SECTION DETAILS

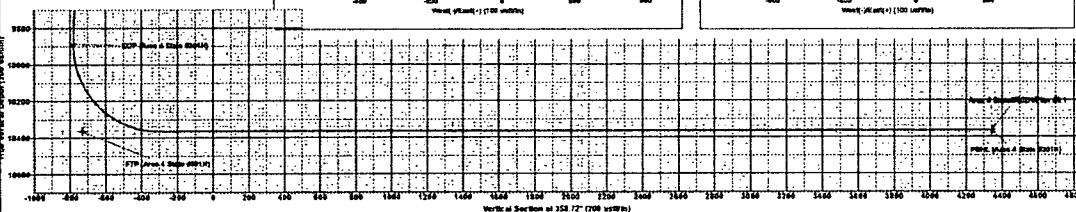
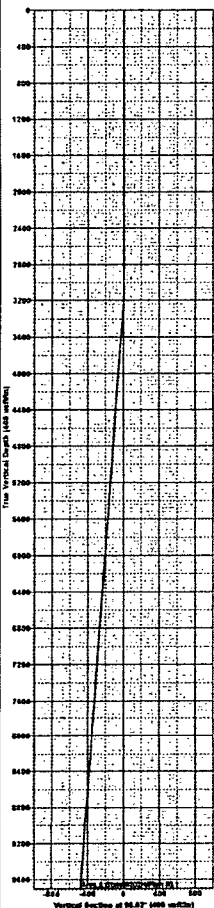
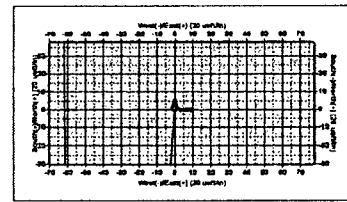
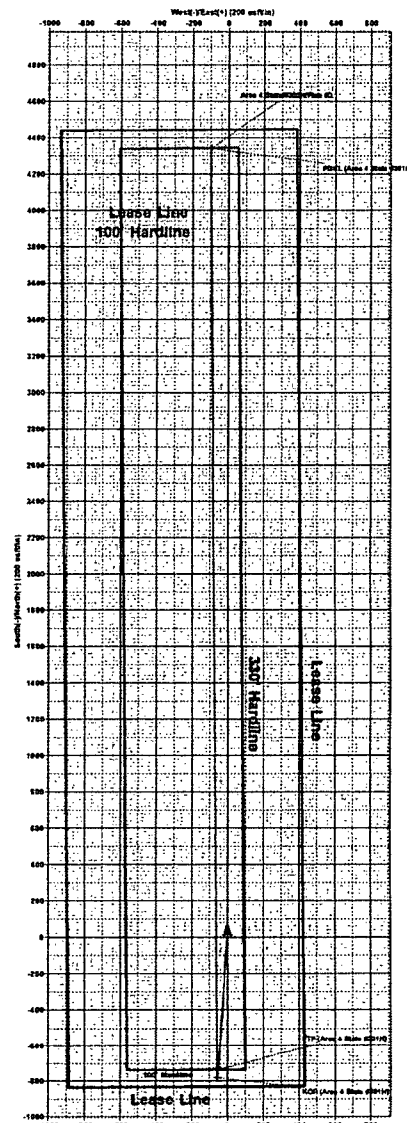
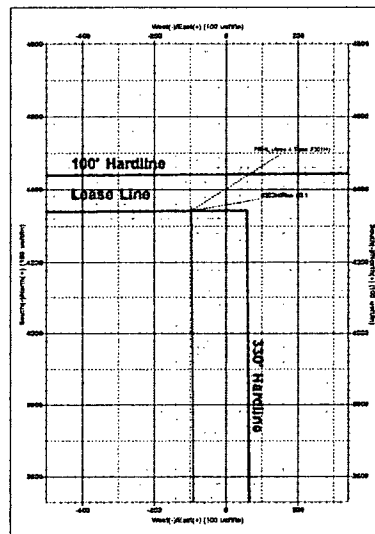
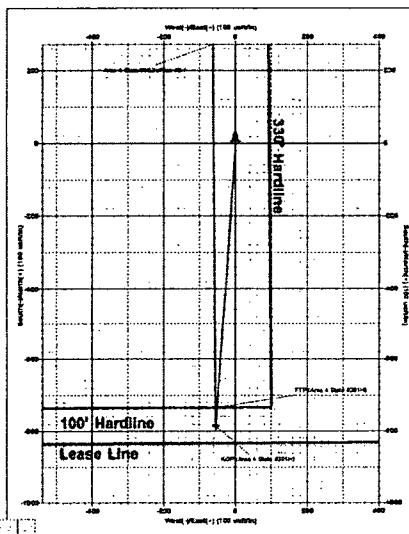
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Disp	TFace	VSecl	Target	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	3200.0	0.00	0.00	3200.0	0.0	0.0	0.00	0.00	0.0		
3	3342.4	8.83	184.01	3341.6	-29.4	-1.4	2.00	184.01	-20.3		
4	8891.3	8.85	184.01	8888.9	-763.8	-53.8	0.00	0.00	-762.2	KOP (Ares 4 State #301H)	
6	8933.7	0.00	0.00	8937.5	-784.0	-65.0	2.00	180.00	-782.8		
8	10683.7	90.00	359.53	10365.0	-306.6	-88.9	12.00	359.53	-305.2	PBHL (Ares 4 State #301H)	
7	15332.4	90.00	359.53	10365.0	4342.0	-47.0	0.00	0.00	4343.1		

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
KOP (Ares 4 State #301H)	8937.5	-784.0	-65.0	451707.00	776839.00
PBHL (Ares 4 State #301H)	10365.0	4342.0	-47.0	456833.00	776897.00
FTP (Ares 4 State #301H)	10365.0	-754.0	-65.0	451767.00	776839.00





EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Ares 4 State

#302H

OH

Plan: Plan #0.1

Standard Planning Report

25 September, 2018



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #302H
Company:	EOG Resources - Midland	TVD Reference:	KB= 25 @ 3606.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB= 25 @ 3606.0usft
Site:	Ares 4 State	North Reference:	Grid
Well:	#302H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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:	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	#302H			
Well Position	+N/-S	498.0 usft	Northing:	452,491.00 usft
	+E/-W	-1,419.0 usft	Easting:	775,994.00 usft
Position Uncertainty	0.0 usft		Wellhead Elevation:	Ground Level:
				3,581.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	9/20/2018	6.82	60.06	47,817.56915135

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	358.72

Plan Survey Tool Program	Date	9/20/2018		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	15,332.4 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	
3,342.4	6.85	184.01	3,341.6	-20.4	-1.4	2.00	2.00	0.00	184.01	
9,591.3	6.85	184.01	9,545.9	-763.6	-53.6	0.00	0.00	0.00	0.00	
9,933.7	0.00	0.00	9,887.5	-784.0	-55.0	2.00	-2.00	0.00	180.00 KOP (Ares 4 State #3	
10,683.7	90.00	359.53	10,365.0	-306.6	-58.9	12.00	12.00	-0.06	359.53	
15,332.4	90.00	359.53	10,365.0	4,342.0	-97.0	0.00	0.00	0.00	0.00 PBHL (Ares 4 State #	



Planning Report

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 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Ares 4 State
 Well: #302H
 Wellbore: OH
 Design: Plan #0.1

Local Co-ordinate Reference: Well #302H
 TVD Reference: KB= 25 @ 3606.0usft
 MD Reference: KB= 25 @ 3606.0usft
 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	2.00	184.01	3,100.0	-1.7	-0.1	-1.7	2.00	2.00	0.00
3,200.0	4.00	184.01	3,199.8	-7.0	-0.5	-6.9	2.00	2.00	0.00
3,300.0	6.00	184.01	3,299.5	-15.7	-1.1	-15.6	2.00	2.00	0.00
3,342.4	6.85	184.01	3,341.6	-20.4	-1.4	-20.3	2.00	2.00	0.00
3,400.0	6.85	184.01	3,398.8	-27.2	-1.9	-27.2	0.00	0.00	0.00
3,500.0	6.85	184.01	3,498.1	-39.1	-2.7	-39.1	0.00	0.00	0.00
3,600.0	6.85	184.01	3,597.3	-51.0	-3.6	-50.9	0.00	0.00	0.00
3,700.0	6.85	184.01	3,696.6	-62.9	-4.4	-62.8	0.00	0.00	0.00
3,800.0	6.85	184.01	3,795.9	-74.8	-5.2	-74.7	0.00	0.00	0.00
3,900.0	6.85	184.01	3,895.2	-86.7	-6.1	-86.5	0.00	0.00	0.00
4,000.0	6.85	184.01	3,994.5	-98.6	-6.9	-98.4	0.00	0.00	0.00
4,100.0	6.85	184.01	4,093.8	-110.5	-7.8	-110.3	0.00	0.00	0.00
4,200.0	6.85	184.01	4,193.1	-122.4	-8.6	-122.2	0.00	0.00	0.00
4,300.0	6.85	184.01	4,292.4	-134.3	-9.4	-134.0	0.00	0.00	0.00
4,400.0	6.85	184.01	4,391.6	-146.2	-10.3	-145.9	0.00	0.00	0.00
4,500.0	6.85	184.01	4,490.9	-158.1	-11.1	-157.8	0.00	0.00	0.00
4,600.0	6.85	184.01	4,590.2	-170.0	-11.9	-169.7	0.00	0.00	0.00
4,700.0	6.85	184.01	4,689.5	-181.9	-12.8	-181.5	0.00	0.00	0.00
4,800.0	6.85	184.01	4,788.8	-193.7	-13.6	-193.4	0.00	0.00	0.00
4,900.0	6.85	184.01	4,888.1	-205.6	-14.4	-205.3	0.00	0.00	0.00
5,000.0	6.85	184.01	4,987.4	-217.5	-15.3	-217.1	0.00	0.00	0.00
5,100.0	6.85	184.01	5,086.6	-229.4	-16.1	-229.0	0.00	0.00	0.00
5,200.0	6.85	184.01	5,185.9	-241.3	-16.9	-240.9	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: #302H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #302H
TVD Reference: KB= 25 @ 3606.0usft
MD Reference: KB= 25 @ 3606.0usft
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	6.85	184.01	5,285.2	-253.2	-17.8	-252.8	0.00	0.00	0.00
5,400.0	6.85	184.01	5,384.5	-265.1	-18.6	-264.6	0.00	0.00	0.00
5,500.0	6.85	184.01	5,483.8	-277.0	-19.4	-276.5	0.00	0.00	0.00
5,600.0	6.85	184.01	5,583.1	-288.9	-20.3	-288.4	0.00	0.00	0.00
5,700.0	6.85	184.01	5,682.4	-300.8	-21.1	-300.2	0.00	0.00	0.00
5,800.0	6.85	184.01	5,781.7	-312.7	-21.9	-312.1	0.00	0.00	0.00
5,900.0	6.85	184.01	5,880.9	-324.6	-22.8	-324.0	0.00	0.00	0.00
6,000.0	6.85	184.01	5,980.2	-336.5	-23.6	-335.9	0.00	0.00	0.00
6,100.0	6.85	184.01	6,079.5	-348.4	-24.4	-347.7	0.00	0.00	0.00
6,200.0	6.85	184.01	6,178.8	-360.3	-25.3	-359.6	0.00	0.00	0.00
6,300.0	6.85	184.01	6,278.1	-372.2	-26.1	-371.5	0.00	0.00	0.00
6,400.0	6.85	184.01	6,377.4	-384.0	-26.9	-383.4	0.00	0.00	0.00
6,500.0	6.85	184.01	6,476.7	-395.9	-27.8	-395.2	0.00	0.00	0.00
6,600.0	6.85	184.01	6,575.9	-407.8	-28.6	-407.1	0.00	0.00	0.00
6,700.0	6.85	184.01	6,675.2	-419.7	-29.4	-419.0	0.00	0.00	0.00
6,800.0	6.85	184.01	6,774.5	-431.6	-30.3	-430.8	0.00	0.00	0.00
6,900.0	6.85	184.01	6,873.8	-443.5	-31.1	-442.7	0.00	0.00	0.00
7,000.0	6.85	184.01	6,973.1	-455.4	-31.9	-454.6	0.00	0.00	0.00
7,100.0	6.85	184.01	7,072.4	-467.3	-32.8	-466.5	0.00	0.00	0.00
7,200.0	6.85	184.01	7,171.7	-479.2	-33.6	-478.3	0.00	0.00	0.00
7,300.0	6.85	184.01	7,271.0	-491.1	-34.5	-490.2	0.00	0.00	0.00
7,400.0	6.85	184.01	7,370.2	-503.0	-35.3	-502.1	0.00	0.00	0.00
7,500.0	6.85	184.01	7,469.5	-514.9	-36.1	-513.9	0.00	0.00	0.00
7,600.0	6.85	184.01	7,568.8	-526.8	-37.0	-525.8	0.00	0.00	0.00
7,700.0	6.85	184.01	7,668.1	-538.7	-37.8	-537.7	0.00	0.00	0.00
7,800.0	6.85	184.01	7,767.4	-550.6	-38.6	-549.6	0.00	0.00	0.00
7,900.0	6.85	184.01	7,866.7	-562.5	-39.5	-561.4	0.00	0.00	0.00
8,000.0	6.85	184.01	7,966.0	-574.3	-40.3	-573.3	0.00	0.00	0.00
8,100.0	6.85	184.01	8,065.2	-586.2	-41.1	-585.2	0.00	0.00	0.00
8,200.0	6.85	184.01	8,164.5	-598.1	-42.0	-597.0	0.00	0.00	0.00
8,300.0	6.85	184.01	8,263.8	-610.0	-42.8	-608.9	0.00	0.00	0.00
8,400.0	6.85	184.01	8,363.1	-621.9	-43.6	-620.8	0.00	0.00	0.00
8,500.0	6.85	184.01	8,462.4	-633.8	-44.5	-632.7	0.00	0.00	0.00
8,600.0	6.85	184.01	8,561.7	-645.7	-45.3	-644.5	0.00	0.00	0.00
8,700.0	6.85	184.01	8,661.0	-657.6	-46.1	-656.4	0.00	0.00	0.00
8,800.0	6.85	184.01	8,760.3	-669.5	-47.0	-668.3	0.00	0.00	0.00
8,900.0	6.85	184.01	8,859.5	-681.4	-47.8	-680.2	0.00	0.00	0.00
9,000.0	6.85	184.01	8,958.8	-693.3	-48.6	-692.0	0.00	0.00	0.00
9,100.0	6.85	184.01	9,058.1	-705.2	-49.5	-703.9	0.00	0.00	0.00
9,200.0	6.85	184.01	9,157.4	-717.1	-50.3	-715.8	0.00	0.00	0.00
9,300.0	6.85	184.01	9,256.7	-729.0	-51.1	-727.6	0.00	0.00	0.00
9,400.0	6.85	184.01	9,356.0	-740.9	-52.0	-739.5	0.00	0.00	0.00
9,500.0	6.85	184.01	9,455.3	-752.8	-52.8	-751.4	0.00	0.00	0.00
9,591.3	6.85	184.01	9,545.9	-763.6	-53.6	-762.2	0.00	0.00	0.00
9,600.0	6.67	184.01	9,554.5	-764.6	-53.6	-763.2	2.00	-2.00	0.00
9,700.0	4.67	184.01	9,654.1	-774.5	-54.3	-773.1	2.00	-2.00	0.00
9,800.0	2.67	184.01	9,753.8	-780.9	-54.8	-779.5	2.00	-2.00	0.00
9,900.0	0.67	184.01	9,853.8	-783.8	-55.0	-782.4	2.00	-2.00	0.00
9,933.7	0.00	0.00	9,887.5	-784.0	-55.0	-782.6	2.00	-2.00	0.00
KOP (Ares 4 State #301H)									
9,950.0	1.96	359.53	9,903.8	-783.7	-55.0	-782.3	12.00	12.00	0.00
9,975.0	4.96	359.53	9,928.7	-782.2	-55.0	-780.8	12.00	12.00	0.00
10,000.0	7.96	359.53	9,953.6	-779.4	-55.0	-778.0	12.00	12.00	0.00



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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)
10,025.0	10.96	359.53	9,978.2	-775.3	-55.1	-773.9	12.00	12.00	0.00
10,050.0	13.96	359.53	10,002.6	-769.9	-55.1	-768.5	12.00	12.00	0.00
10,075.0	16.96	359.53	10,026.7	-763.2	-55.2	-761.8	12.00	12.00	0.00
10,100.0	19.96	359.53	10,050.5	-755.3	-55.2	-753.9	12.00	12.00	0.00
10,125.0	22.96	359.53	10,073.7	-746.2	-55.3	-744.8	12.00	12.00	0.00
10,150.0	25.96	359.53	10,096.5	-735.8	-55.4	-734.4	12.00	12.00	0.00
10,175.0	28.96	359.53	10,118.7	-724.3	-55.5	-722.9	12.00	12.00	0.00
10,200.0	31.96	359.53	10,140.2	-711.6	-55.6	-710.2	12.00	12.00	0.00
10,225.0	34.96	359.53	10,161.1	-697.9	-55.7	-696.4	12.00	12.00	0.00
10,250.0	37.96	359.53	10,181.2	-683.0	-55.8	-681.6	12.00	12.00	0.00
10,275.0	40.96	359.53	10,200.5	-667.1	-56.0	-665.7	12.00	12.00	0.00
10,300.0	43.96	359.53	10,218.9	-650.3	-56.1	-648.8	12.00	12.00	0.00
10,325.0	46.96	359.53	10,236.4	-632.4	-56.2	-631.0	12.00	12.00	0.00
10,334.2	48.06	359.53	10,242.7	-625.6	-56.3	-624.2	12.00	12.00	0.00
FTP (Ares 4 State #301H)									
10,350.0	49.96	359.53	10,253.0	-613.7	-56.4	-612.3	12.00	12.00	0.00
10,375.0	52.96	359.53	10,268.6	-594.2	-56.6	-592.8	12.00	12.00	0.00
10,400.0	55.96	359.53	10,283.1	-573.8	-56.7	-572.4	12.00	12.00	0.00
10,425.0	58.96	359.53	10,296.6	-552.8	-56.9	-551.4	12.00	12.00	0.00
10,450.0	61.96	359.53	10,308.9	-531.0	-57.1	-529.6	12.00	12.00	0.00
10,475.0	64.96	359.53	10,320.1	-508.7	-57.3	-507.3	12.00	12.00	0.00
10,500.0	67.96	359.53	10,330.1	-485.8	-57.4	-484.3	12.00	12.00	0.00
10,525.0	70.96	359.53	10,338.8	-462.3	-57.6	-460.9	12.00	12.00	0.00
10,550.0	73.96	359.53	10,346.4	-438.5	-57.8	-437.1	12.00	12.00	0.00
10,575.0	76.96	359.53	10,352.6	-414.3	-58.0	-412.9	12.00	12.00	0.00
10,600.0	79.96	359.53	10,357.6	-389.8	-58.2	-388.4	12.00	12.00	0.00
10,625.0	82.96	359.53	10,361.4	-365.1	-58.4	-363.7	12.00	12.00	0.00
10,650.0	85.96	359.53	10,363.8	-340.2	-58.6	-338.8	12.00	12.00	0.00
10,675.0	88.96	359.53	10,364.9	-315.3	-58.8	-313.9	12.00	12.00	0.00
10,683.7	90.00	359.53	10,365.0	-306.6	-58.9	-305.2	12.00	12.00	0.00
10,700.0	90.00	359.53	10,365.0	-290.3	-59.0	-288.9	0.00	0.00	0.00
10,800.0	90.00	359.53	10,365.0	-190.3	-59.9	-188.9	0.00	0.00	0.00
10,900.0	90.00	359.53	10,365.0	-90.3	-60.7	-88.9	0.00	0.00	0.00
11,000.0	90.00	359.53	10,365.0	9.7	-61.5	11.1	0.00	0.00	0.00
11,100.0	90.00	359.53	10,365.0	109.7	-62.3	111.1	0.00	0.00	0.00
11,200.0	90.00	359.53	10,365.0	209.7	-63.1	211.1	0.00	0.00	0.00
11,300.0	90.00	359.53	10,365.0	309.7	-64.0	311.1	0.00	0.00	0.00
11,400.0	90.00	359.53	10,365.0	409.7	-64.8	411.1	0.00	0.00	0.00
11,500.0	90.00	359.53	10,365.0	509.7	-65.6	511.1	0.00	0.00	0.00
11,600.0	90.00	359.53	10,365.0	609.7	-66.4	611.0	0.00	0.00	0.00
11,700.0	90.00	359.53	10,365.0	709.7	-67.2	711.0	0.00	0.00	0.00
11,800.0	90.00	359.53	10,365.0	809.7	-68.1	811.0	0.00	0.00	0.00
11,900.0	90.00	359.53	10,365.0	909.7	-68.9	911.0	0.00	0.00	0.00
12,000.0	90.00	359.53	10,365.0	1,009.7	-69.7	1,011.0	0.00	0.00	0.00
12,100.0	90.00	359.53	10,365.0	1,109.7	-70.5	1,111.0	0.00	0.00	0.00
12,200.0	90.00	359.53	10,365.0	1,209.7	-71.3	1,211.0	0.00	0.00	0.00
12,300.0	90.00	359.53	10,365.0	1,309.7	-72.2	1,311.0	0.00	0.00	0.00
12,400.0	90.00	359.53	10,365.0	1,409.7	-73.0	1,411.0	0.00	0.00	0.00
12,500.0	90.00	359.53	10,365.0	1,509.7	-73.8	1,511.0	0.00	0.00	0.00
12,600.0	90.00	359.53	10,365.0	1,609.7	-74.6	1,610.9	0.00	0.00	0.00
12,700.0	90.00	359.53	10,365.0	1,709.7	-75.4	1,710.9	0.00	0.00	0.00
12,800.0	90.00	359.53	10,365.0	1,809.7	-76.3	1,810.9	0.00	0.00	0.00
12,900.0	90.00	359.53	10,365.0	1,909.7	-77.1	1,910.9	0.00	0.00	0.00
13,000.0	90.00	359.53	10,365.0	2,009.7	-77.9	2,010.9	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: #302H
 Wellbore: OH
 Design: Plan #0.1

Local Co-ordinate Reference: Well #302H
 TVD Reference: KB= 25 @ 3606.0usft
 MD Reference: KB= 25 @ 3606.0usft
 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)
13,100.0	90.00	359.53	10,365.0	2,109.7	-78.7	2,110.9	0.00	0.00	0.00
13,200.0	90.00	359.53	10,365.0	2,209.7	-79.5	2,210.9	0.00	0.00	0.00
13,300.0	90.00	359.53	10,365.0	2,309.7	-80.3	2,310.9	0.00	0.00	0.00
13,400.0	90.00	359.53	10,365.0	2,409.7	-81.2	2,410.9	0.00	0.00	0.00
13,500.0	90.00	359.53	10,365.0	2,509.7	-82.0	2,510.9	0.00	0.00	0.00
13,600.0	90.00	359.53	10,365.0	2,609.6	-82.8	2,610.8	0.00	0.00	0.00
13,700.0	90.00	359.53	10,365.0	2,709.6	-83.6	2,710.8	0.00	0.00	0.00
13,800.0	90.00	359.53	10,365.0	2,809.6	-84.4	2,810.8	0.00	0.00	0.00
13,900.0	90.00	359.53	10,365.0	2,909.6	-85.3	2,910.8	0.00	0.00	0.00
14,000.0	90.00	359.53	10,365.0	3,009.6	-86.1	3,010.8	0.00	0.00	0.00
14,100.0	90.00	359.53	10,365.0	3,109.6	-86.9	3,110.8	0.00	0.00	0.00
14,200.0	90.00	359.53	10,365.0	3,209.6	-87.7	3,210.8	0.00	0.00	0.00
14,300.0	90.00	359.53	10,365.0	3,309.6	-88.5	3,310.8	0.00	0.00	0.00
14,400.0	90.00	359.53	10,365.0	3,409.6	-89.4	3,410.8	0.00	0.00	0.00
14,500.0	90.00	359.53	10,365.0	3,509.6	-90.2	3,510.8	0.00	0.00	0.00
14,600.0	90.00	359.53	10,365.0	3,609.6	-91.0	3,610.7	0.00	0.00	0.00
14,700.0	90.00	359.53	10,365.0	3,709.6	-91.8	3,710.7	0.00	0.00	0.00
14,800.0	90.00	359.53	10,365.0	3,809.6	-92.6	3,810.7	0.00	0.00	0.00
14,900.0	90.00	359.53	10,365.0	3,909.6	-93.5	3,910.7	0.00	0.00	0.00
15,000.0	90.00	359.53	10,365.0	4,009.6	-94.3	4,010.7	0.00	0.00	0.00
15,100.0	90.00	359.53	10,365.0	4,109.6	-95.1	4,110.7	0.00	0.00	0.00
15,200.0	90.00	359.53	10,365.0	4,209.6	-95.9	4,210.7	0.00	0.00	0.00
15,300.0	90.00	359.53	10,365.0	4,309.6	-96.7	4,310.7	0.00	0.00	0.00
15,332.4	90.00	359.53	10,365.0	4,342.0	-97.0	4,343.1	0.00	0.00	0.00
PBHL (Ares 4 State #301H)									

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP (Ares 4 State #301 - hit/miss target - Shape - Point	0.00	0.00	9,887.5	-784.0	-55.0	451,707.00	775,939.00	32° 14' 22.345 N	103° 34' 28.400 W
PBHL (Ares 4 State #301 - plan hits target center - Point	0.00	0.00	10,365.0	4,342.0	-97.0	456,833.00	775,897.00	32° 15' 13.070 N	103° 34' 28.467 W
FTP (Ares 4 State #301) - plan misses target center by 163.4usft at 10334.2usft MD (10242.7 TVD, -625.6 N, -56.3 E) - Point	0.00	0.00	10,365.0	-734.0	-55.0	451,757.00	775,939.00	32° 14' 22.840 N	103° 34' 28.395 W