

30-025-45224
HOBBS OCD
SEP 25 2018
RECEIVED



Lea County, NM (NAD 83 NME)

Ares 4 State #202H

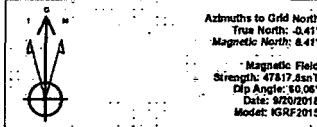
Plan #0.1

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

Geodetic System: US State Plane 1883
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level

WELL DETAILS: #202H

Ground Level: 3581.0
KB = 25 @ 3608.0ursft
Northing: 452481.00 Easting: 778008.00
Latitude: 32° 14' 29.801 N Longitude: 103° 34' 27.534 W



To convert a Magnetic Direction to a Grid Direction, Add 8.41°
To convert a Magnetic Direction to a True Direction, Add 8.82° East
To convert a True Direction to a Grid Direction, Subtract 0.40°

SECTION DETAILS

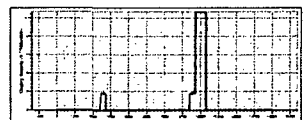
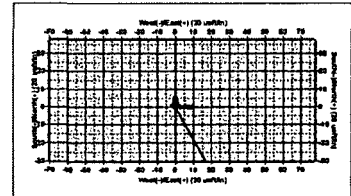
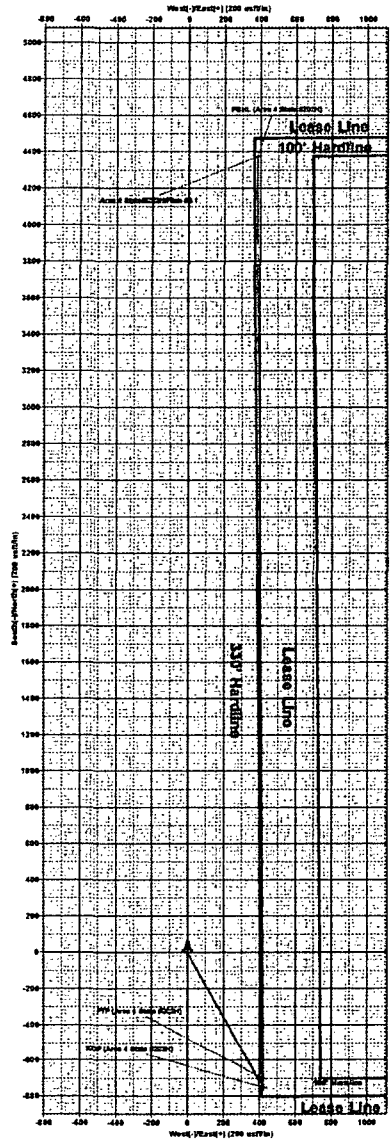
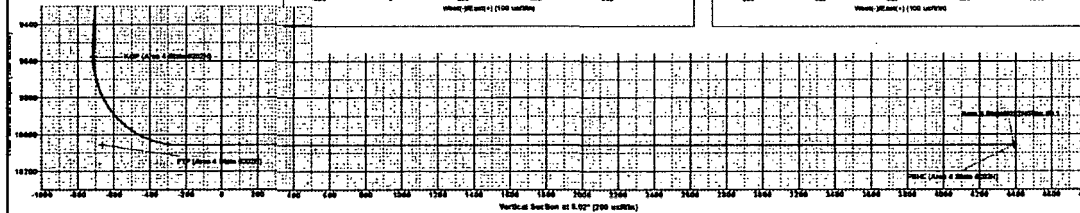
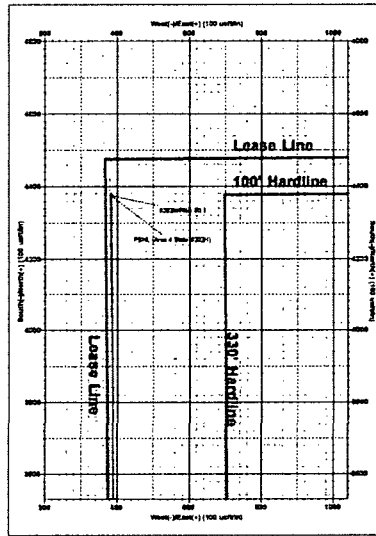
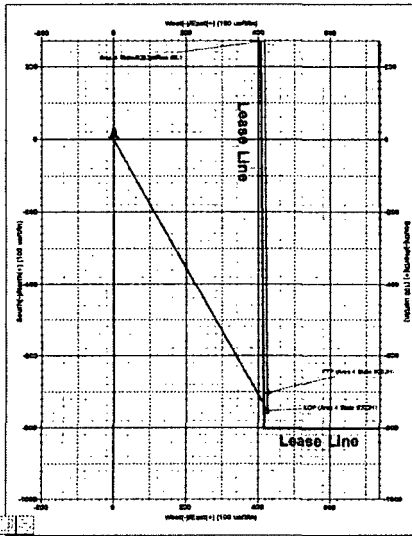
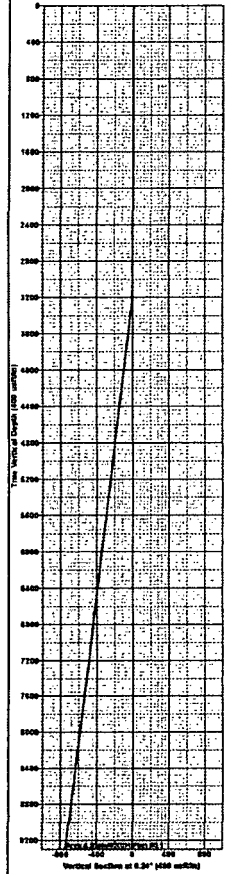
Sec	MID	Inc	Azi	TVD	+N-S	+E-W	Deg	TFace	VFace	Target	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	3000.0	0.00	0.00	3000.0	0.0	0.0	0.00	0.00	0.0		
3	3338.0	7.98	160.47	3338.8	-34.0	13.8	2.00	160.47	-22.7		
4	8238.8	7.98	160.47	8192.2	-728.6	412.4	0.00	0.00	-899.1		
5	9637.8	0.00	0.00	9579.0	-752.0	428.0	2.00	160.00	-711.9		
6	10387.8	90.00	353.53	10056.5	-274.8	422.1	12.00	359.53	-236.8		KOP (Area 4 State #202H)
7	15037.8	90.00	359.53	10056.5	4375.0	384.0	0.00	0.00	4391.8		PBHL (Area 4 State #202H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVI	+N-S	+E-W	Northing	Easting
KOP (Area 4 State #202H)	8879.0	-762.0	426.0	461709.00	778434.00
PBHL (Area 4 State #202H)	10056.5	4375.0	384.0	464838.00	778382.00
FTP (Area 4 State #202H)	10056.5	-702.0	428.0	461759.00	778434.00



Printed: 9/20/2018 10:10 AM
User: [redacted]
Title: [redacted]



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Ares 4 State

#202H

OH

Plan: Plan #0.1

Standard Planning Report

20 September, 2018



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #202H
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:	#202H	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:	Northings:	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	#202H		
Well Position	+N/-S	468.0 usft	Northings: 452,461.00 usft
	+E/-W	-1,405.0 usft	Easting: 776,008.00 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	Ground Level: 3,581.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2015	9/20/2018	6.82
			Dip Angle (°)
			60.06
			Field Strength (nT)
			47,817.52480028

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)
	0.0	0.0	0.0
			Direction (°)
			5.02

Plan Survey Tool Program	Date 9/20/2018		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name
1	0.0	15,037.6 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	
3,398.0	7.96	150.47	3,398.8	-24.0	13.6	2.00	2.00	0.00	150.47	
9,239.8	7.96	150.47	9,182.2	-728.0	412.4	0.00	0.00	0.00	0.00	
9,637.9	0.00	0.00	9,579.0	-752.0	426.0	2.00	-2.00	0.00	180.00	KOP (Ares 4 State #2
10,387.9	90.00	359.53	10,056.5	-274.6	422.1	12.00	12.00	-0.06	359.53	
15,037.6	90.00	359.53	10,056.5	4,375.0	384.0	0.00	0.00	0.00	0.00	PBHL (Ares 4 State #.



Planning Report

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 Project: Lea County, NM (NAD 83 NME)
 Site: Ares 4 State
 Well: #202H
 Wellbore: OH
 Design: Plan #0.1

Local Co-ordinate Reference: Well #202H
 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	150.47	3,100.0	-1.5	0.9	-1.4	2.00	2.00	0.00
3,200.0	4.00	150.47	3,199.8	-6.1	3.4	-5.7	2.00	2.00	0.00
3,300.0	6.00	150.47	3,299.5	-13.7	7.7	-12.9	2.00	2.00	0.00
3,398.0	7.96	150.47	3,396.8	-24.0	13.6	-22.7	2.00	2.00	0.00
3,400.0	7.96	150.47	3,398.7	-24.3	13.7	-23.0	0.00	0.00	0.00
3,500.0	7.96	150.47	3,497.7	-36.3	20.6	-34.4	0.00	0.00	0.00
3,600.0	7.96	150.47	3,596.8	-48.4	27.4	-45.8	0.00	0.00	0.00
3,700.0	7.96	150.47	3,695.8	-60.4	34.2	-57.2	0.00	0.00	0.00
3,800.0	7.96	150.47	3,794.8	-72.5	41.0	-68.6	0.00	0.00	0.00
3,900.0	7.96	150.47	3,893.9	-84.5	47.9	-80.0	0.00	0.00	0.00
4,000.0	7.96	150.47	3,992.9	-96.6	54.7	-91.4	0.00	0.00	0.00
4,100.0	7.96	150.47	4,092.0	-108.6	61.5	-102.8	0.00	0.00	0.00
4,200.0	7.96	150.47	4,191.0	-120.7	68.4	-114.2	0.00	0.00	0.00
4,300.0	7.96	150.47	4,290.0	-132.7	75.2	-125.6	0.00	0.00	0.00
4,400.0	7.96	150.47	4,389.1	-144.8	82.0	-137.0	0.00	0.00	0.00
4,500.0	7.96	150.47	4,488.1	-156.8	88.8	-148.4	0.00	0.00	0.00
4,600.0	7.96	150.47	4,587.1	-168.9	95.7	-159.9	0.00	0.00	0.00
4,700.0	7.96	150.47	4,686.2	-180.9	102.5	-171.3	0.00	0.00	0.00
4,800.0	7.96	150.47	4,785.2	-193.0	109.3	-182.7	0.00	0.00	0.00
4,900.0	7.96	150.47	4,884.2	-205.0	116.1	-194.1	0.00	0.00	0.00
5,000.0	7.96	150.47	4,983.3	-217.1	123.0	-205.5	0.00	0.00	0.00
5,100.0	7.96	150.47	5,082.3	-229.1	129.8	-216.9	0.00	0.00	0.00
5,200.0	7.96	150.47	5,181.4	-241.2	136.6	-228.3	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: #202H
 Wellbore: OH
 Design: Plan #0.1

Local Co-ordinate Reference: Well #202H
 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	7.96	150.47	5,280.4	-253.2	143.4	-239.7	0.00	0.00	0.00
5,400.0	7.96	150.47	5,379.4	-265.3	150.3	-251.1	0.00	0.00	0.00
5,500.0	7.96	150.47	5,478.5	-277.3	157.1	-262.5	0.00	0.00	0.00
5,600.0	7.96	150.47	5,577.5	-289.4	163.9	-273.9	0.00	0.00	0.00
5,700.0	7.96	150.47	5,676.5	-301.4	170.7	-285.3	0.00	0.00	0.00
5,800.0	7.96	150.47	5,775.6	-313.5	177.6	-296.7	0.00	0.00	0.00
5,900.0	7.96	150.47	5,874.6	-325.5	184.4	-308.1	0.00	0.00	0.00
6,000.0	7.96	150.47	5,973.6	-337.6	191.2	-319.6	0.00	0.00	0.00
6,100.0	7.96	150.47	6,072.7	-349.6	198.1	-331.0	0.00	0.00	0.00
6,200.0	7.96	150.47	6,171.7	-361.7	204.9	-342.4	0.00	0.00	0.00
6,300.0	7.96	150.47	6,270.8	-373.7	211.7	-353.8	0.00	0.00	0.00
6,400.0	7.96	150.47	6,369.8	-385.8	218.5	-365.2	0.00	0.00	0.00
6,500.0	7.96	150.47	6,468.8	-397.8	225.4	-376.6	0.00	0.00	0.00
6,600.0	7.96	150.47	6,567.9	-409.9	232.2	-388.0	0.00	0.00	0.00
6,700.0	7.96	150.47	6,666.9	-421.9	239.0	-399.4	0.00	0.00	0.00
6,800.0	7.96	150.47	6,765.9	-434.0	245.8	-410.8	0.00	0.00	0.00
6,900.0	7.96	150.47	6,865.0	-446.0	252.7	-422.2	0.00	0.00	0.00
7,000.0	7.96	150.47	6,964.0	-458.1	259.5	-433.6	0.00	0.00	0.00
7,100.0	7.96	150.47	7,063.0	-470.1	266.3	-445.0	0.00	0.00	0.00
7,200.0	7.96	150.47	7,162.1	-482.2	273.1	-456.4	0.00	0.00	0.00
7,300.0	7.96	150.47	7,261.1	-494.2	280.0	-467.9	0.00	0.00	0.00
7,400.0	7.96	150.47	7,360.2	-506.3	286.8	-479.3	0.00	0.00	0.00
7,500.0	7.96	150.47	7,459.2	-518.3	293.6	-490.7	0.00	0.00	0.00
7,600.0	7.96	150.47	7,558.2	-530.4	300.5	-502.1	0.00	0.00	0.00
7,700.0	7.96	150.47	7,657.3	-542.4	307.3	-513.5	0.00	0.00	0.00
7,800.0	7.96	150.47	7,756.3	-554.5	314.1	-524.9	0.00	0.00	0.00
7,900.0	7.96	150.47	7,855.3	-566.5	320.9	-536.3	0.00	0.00	0.00
8,000.0	7.96	150.47	7,954.4	-578.6	327.8	-547.7	0.00	0.00	0.00
8,100.0	7.96	150.47	8,053.4	-590.6	334.6	-559.1	0.00	0.00	0.00
8,200.0	7.96	150.47	8,152.4	-602.7	341.4	-570.5	0.00	0.00	0.00
8,300.0	7.96	150.47	8,251.5	-614.7	348.2	-581.9	0.00	0.00	0.00
8,400.0	7.96	150.47	8,350.5	-626.8	355.1	-593.3	0.00	0.00	0.00
8,500.0	7.96	150.47	8,449.6	-638.8	361.9	-604.7	0.00	0.00	0.00
8,600.0	7.96	150.47	8,548.6	-650.9	368.7	-616.1	0.00	0.00	0.00
8,700.0	7.96	150.47	8,647.6	-662.9	375.5	-627.6	0.00	0.00	0.00
8,800.0	7.96	150.47	8,746.7	-675.0	382.4	-639.0	0.00	0.00	0.00
8,900.0	7.96	150.47	8,845.7	-687.0	389.2	-650.4	0.00	0.00	0.00
9,000.0	7.96	150.47	8,944.7	-699.1	396.0	-661.8	0.00	0.00	0.00
9,100.0	7.96	150.47	9,043.8	-711.1	402.8	-673.2	0.00	0.00	0.00
9,200.0	7.96	150.47	9,142.8	-723.2	409.7	-684.6	0.00	0.00	0.00
9,239.8	7.96	150.47	9,182.2	-728.0	412.4	-689.1	0.00	0.00	0.00
9,300.0	6.76	150.47	9,241.9	-734.7	416.2	-695.5	2.00	-2.00	0.00
9,400.0	4.76	150.47	9,341.4	-743.4	421.1	-703.7	2.00	-2.00	0.00
9,500.0	2.76	150.47	9,441.2	-749.1	424.4	-709.1	2.00	-2.00	0.00
9,600.0	0.76	150.47	9,541.1	-751.8	425.9	-711.7	2.00	-2.00	0.00
9,637.9	0.00	0.00	9,579.0	-752.0	426.0	-711.9	2.00	-2.00	0.00
KOP (Ares 4 State #202H)									
9,650.0	1.46	359.53	9,591.1	-751.8	426.0	-711.7	12.00	12.00	0.00
9,675.0	4.46	359.53	9,616.1	-750.6	426.0	-710.4	12.00	12.00	0.00
9,700.0	7.46	359.53	9,641.0	-748.0	426.0	-707.9	12.00	12.00	0.00
9,725.0	10.46	359.53	9,665.7	-744.1	425.9	-704.0	12.00	12.00	0.00
9,750.0	13.46	359.53	9,690.1	-738.9	425.9	-698.8	12.00	12.00	0.00
9,775.0	16.46	359.53	9,714.3	-732.4	425.8	-692.4	12.00	12.00	0.00



Planning Report

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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)
9,800.0	19.46	359.53	9,738.0	-724.7	425.8	-684.7	12.00	12.00	0.00
9,825.0	22.46	359.53	9,761.4	-715.8	425.7	-675.8	12.00	12.00	0.00
9,850.0	25.46	359.53	9,784.2	-705.6	425.6	-665.7	12.00	12.00	0.00
9,875.0	28.46	359.53	9,806.5	-694.3	425.5	-654.4	12.00	12.00	0.00
9,900.0	31.46	359.53	9,828.2	-681.8	425.4	-642.0	12.00	12.00	0.00
9,925.0	34.46	359.53	9,849.1	-668.2	425.3	-628.5	12.00	12.00	0.00
9,950.0	37.46	359.53	9,869.4	-653.6	425.2	-613.9	12.00	12.00	0.00
9,975.0	40.46	359.53	9,888.8	-637.8	425.1	-598.2	12.00	12.00	0.00
10,000.0	43.46	359.53	9,907.4	-621.1	424.9	-581.6	12.00	12.00	0.00
10,025.0	46.46	359.53	9,925.1	-603.5	424.8	-564.0	12.00	12.00	0.00
10,039.8	48.24	359.53	9,935.1	-592.6	424.7	-553.2	12.00	12.00	0.00
FTP (Ares 4 State #202H)									
10,050.0	49.46	359.53	9,941.8	-584.9	424.6	-545.5	12.00	12.00	0.00
10,075.0	52.46	359.53	9,957.6	-565.5	424.5	-526.2	12.00	12.00	0.00
10,100.0	55.46	359.53	9,972.3	-545.3	424.3	-506.1	12.00	12.00	0.00
10,125.0	58.46	359.53	9,985.9	-524.3	424.1	-485.2	12.00	12.00	0.00
10,150.0	61.46	359.53	9,998.4	-502.7	424.0	-463.7	12.00	12.00	0.00
10,175.0	64.46	359.53	10,009.8	-480.4	423.8	-441.5	12.00	12.00	0.00
10,200.0	67.46	359.53	10,020.0	-457.6	423.6	-418.8	12.00	12.00	0.00
10,225.0	70.46	359.53	10,029.0	-434.3	423.4	-395.6	12.00	12.00	0.00
10,250.0	73.46	359.53	10,036.7	-410.5	423.2	-371.9	12.00	12.00	0.00
10,275.0	76.46	359.53	10,043.2	-386.4	423.0	-347.9	12.00	12.00	0.00
10,300.0	79.46	359.53	10,048.4	-361.9	422.8	-323.6	12.00	12.00	0.00
10,325.0	82.46	359.53	10,052.3	-337.2	422.6	-299.0	12.00	12.00	0.00
10,350.0	85.46	359.53	10,055.0	-312.4	422.4	-274.2	12.00	12.00	0.00
10,375.0	88.46	359.53	10,056.3	-287.4	422.2	-249.4	12.00	12.00	0.00
10,387.9	90.00	359.53	10,056.5	-274.6	422.1	-236.6	12.00	12.00	0.00
10,400.0	90.00	359.53	10,056.5	-262.4	422.0	-224.5	0.00	0.00	0.00
10,500.0	90.00	359.53	10,056.5	-162.4	421.2	-125.0	0.00	0.00	0.00
10,600.0	90.00	359.53	10,056.5	-62.4	420.4	-25.4	0.00	0.00	0.00
10,700.0	90.00	359.53	10,056.5	37.6	419.5	74.1	0.00	0.00	0.00
10,800.0	90.00	359.53	10,056.5	137.6	418.7	173.7	0.00	0.00	0.00
10,900.0	90.00	359.53	10,056.5	237.6	417.9	273.2	0.00	0.00	0.00
11,000.0	90.00	359.53	10,056.5	337.6	417.1	372.7	0.00	0.00	0.00
11,100.0	90.00	359.53	10,056.5	437.6	416.3	472.3	0.00	0.00	0.00
11,200.0	90.00	359.53	10,056.5	537.6	415.4	571.8	0.00	0.00	0.00
11,300.0	90.00	359.53	10,056.5	637.6	414.6	671.4	0.00	0.00	0.00
11,400.0	90.00	359.53	10,056.5	737.6	413.8	770.9	0.00	0.00	0.00
11,500.0	90.00	359.53	10,056.5	837.6	413.0	870.5	0.00	0.00	0.00
11,600.0	90.00	359.53	10,056.5	937.6	412.2	970.0	0.00	0.00	0.00
11,700.0	90.00	359.53	10,056.5	1,037.5	411.3	1,069.5	0.00	0.00	0.00
11,800.0	90.00	359.53	10,056.5	1,137.5	410.5	1,169.1	0.00	0.00	0.00
11,900.0	90.00	359.53	10,056.5	1,237.5	409.7	1,268.6	0.00	0.00	0.00
12,000.0	90.00	359.53	10,056.5	1,337.5	408.9	1,368.2	0.00	0.00	0.00
12,100.0	90.00	359.53	10,056.5	1,437.5	408.1	1,467.7	0.00	0.00	0.00
12,200.0	90.00	359.53	10,056.5	1,537.5	407.2	1,567.3	0.00	0.00	0.00
12,300.0	90.00	359.53	10,056.5	1,637.5	406.4	1,666.8	0.00	0.00	0.00
12,400.0	90.00	359.53	10,056.5	1,737.5	405.6	1,766.3	0.00	0.00	0.00
12,500.0	90.00	359.53	10,056.5	1,837.5	404.8	1,865.9	0.00	0.00	0.00
12,600.0	90.00	359.53	10,056.5	1,937.5	404.0	1,965.4	0.00	0.00	0.00
12,700.0	90.00	359.53	10,056.5	2,037.5	403.1	2,065.0	0.00	0.00	0.00
12,800.0	90.00	359.53	10,056.5	2,137.5	402.3	2,164.5	0.00	0.00	0.00
12,900.0	90.00	359.53	10,056.5	2,237.5	401.5	2,264.0	0.00	0.00	0.00
13,000.0	90.00	359.53	10,056.5	2,337.5	400.7	2,363.6	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: #202H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #202H
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	10,056.5	2,437.5	399.9	2,463.1	0.00	0.00	0.00	
13,200.0	90.00	359.53	10,056.5	2,537.5	399.1	2,562.7	0.00	0.00	0.00	
13,300.0	90.00	359.53	10,056.5	2,637.5	398.2	2,662.2	0.00	0.00	0.00	
13,400.0	90.00	359.53	10,056.5	2,737.5	397.4	2,761.8	0.00	0.00	0.00	
13,500.0	90.00	359.53	10,056.5	2,837.5	396.6	2,861.3	0.00	0.00	0.00	
13,600.0	90.00	359.53	10,056.5	2,937.5	395.8	2,960.8	0.00	0.00	0.00	
13,700.0	90.00	359.53	10,056.5	3,037.5	395.0	3,060.4	0.00	0.00	0.00	
13,800.0	90.00	359.53	10,056.5	3,137.5	394.1	3,159.9	0.00	0.00	0.00	
13,900.0	90.00	359.53	10,056.5	3,237.5	393.3	3,259.5	0.00	0.00	0.00	
14,000.0	90.00	359.53	10,056.5	3,337.5	392.5	3,359.0	0.00	0.00	0.00	
14,100.0	90.00	359.53	10,056.5	3,437.5	391.7	3,458.5	0.00	0.00	0.00	
14,200.0	90.00	359.53	10,056.5	3,537.5	390.9	3,558.1	0.00	0.00	0.00	
14,300.0	90.00	359.53	10,056.5	3,637.5	390.0	3,657.6	0.00	0.00	0.00	
14,400.0	90.00	359.53	10,056.5	3,737.5	389.2	3,757.2	0.00	0.00	0.00	
14,500.0	90.00	359.53	10,056.5	3,837.5	388.4	3,856.7	0.00	0.00	0.00	
14,600.0	90.00	359.53	10,056.5	3,937.5	387.6	3,956.3	0.00	0.00	0.00	
14,700.0	90.00	359.53	10,056.5	4,037.4	386.8	4,055.8	0.00	0.00	0.00	
14,800.0	90.00	359.53	10,056.5	4,137.4	385.9	4,155.3	0.00	0.00	0.00	
14,900.0	90.00	359.53	10,056.5	4,237.4	385.1	4,254.9	0.00	0.00	0.00	
15,000.0	90.00	359.53	10,056.5	4,337.4	384.3	4,354.4	0.00	0.00	0.00	
15,037.6	90.00	359.53	10,056.5	4,375.0	384.0	4,391.8	0.00	0.00	0.00	
PBHL (Ares 4 State #202H)										

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 #202 - hit/miss target - Shape - Point	0.00	0.00	9,579.0	-752.0	426.0	451,709.00	776,434.00	32° 14' 22.330 N	103° 34' 22.636 W
FTP (Ares 4 State #202H - plan misses target center by 163.4usft at 10039.8usft MD (9935.1 TVD, -592.6 N, 424.7 E) - Point	0.00	0.00	10,056.5	-702.0	426.0	451,759.00	776,434.00	32° 14' 22.825 N	103° 34' 22.632 W
PBHL (Ares 4 State #202H - plan hits target center - Point	0.00	0.00	10,056.5	4,375.0	384.0	456,836.00	776,392.00	32° 15' 13.065 N	103° 34' 22.703 W