

Submit 1 Copy To Appropriate District

Office

District I - (575) 393-6161

1625 N. French Dr., Hobbs, NM 88240

District II - (575) 748-1283

811 S. First St., Artesia, NM 88210

District III - (505) 334-6178

1000 Rio Brazos Rd., Aztec, NM 87410

District IV - (505) 476-3460

1220 S. St. Francis Dr., Santa Fe, NM

87505

State of New Mexico

Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION

220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-103

Revised July 18, 2013

WELL API NO.

30-025-43757

5. Indicate Type of Lease

STATE ☒ FEE ☐

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

Ares 4 State

8. Well Number 503H (201H)

9. OGRID Number

7377

10. Pool name or Wildcat

Triple X; Bone Spring

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐

2. Name of Operator

EOG Resources, Inc.

3. Address of Operator

P.O. Box 2267 Midland, TX 79702

4. Well Location

Unit Letter O : 773 feet from the South line and 1646 feet from the East line
Section 4 Township 24S Range 33E NMPM County Lea

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

3579' GR

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐ CHANGE PLANS ☒

PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

DOWNHOLE COMMINGLE ☐

CLOSED-LOOP SYSTEM ☐

OTHER: ☐ Chg TVD & CSG ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ P AND A ☐

CASING/CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

EOG Resources requests an amendment to our approved APD for this well to reflect changes in TVD, casing design, and well number.

Change TVD to: 9600' (14448' MD) 2nd Bone Spring Sand completion

Change well number to: Ares 4 State 201H

Change casing as attached.

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE

Stan Wagner
Stan Wagner

TITLE

Regulatory Analyst

DATE

8/10/2017

Type or print name

E-mail address:

PHONE:

432-686-3689

For State Use Only

APPROVED BY:

[Signature]

TITLE

Petroleum Engineer

DATE

08/10/17

Conditions of Approval (if any):

Revised Permit Information 8/9/17:

Well Name: Ares 4 State No. 201H

Location:

SL: 773' FSL & 1646' FEL, Section 4, T-24-S, R-33-E, Lea Co., N.M.

BHL: 230' FNL & 2311' FEL, Section 4, T-24-S, R-33-E, Lea Co., N.M.

Casing Program:

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
17.5"	0 – 1,337'	13.375"	54.5#	J55	STC	1.125	1.25	1.60
12.25"	0-4,000'	9.625"	40#	J-55	LTC	1.125	1.25	1.60
12.25"	4,000'-5,000'	9.625"	40#	HCK-55	LTC	1.125	1.25	1.60
8.75"	0' – 14,448'	5.5"	17#	HCP-110	LTC	1.125	1.25	1.60

Cement Program:

Depth	No. Sacks	Wt. ppg	Yld Ft ³ /ft	Slurry Description
1,337'	525	13.5	1.75	Class C + 2% CaCl ₂ + 4% Gel + 0.25 pps Celloflake (TOC @ Surface)
	300	14.8	1.34	Class C + 2% CaCl ₂
5,000'	1300	12.7	1.90	35:65 Poz:Class C + 6% Gel + 3% CaCl ₂ + 0.5% CPT-45 + 0.45% CPT-20 (TOC @ Surface)
	375	14.8	1.33	Class C + 0.20% CPT-19
14,448'	750	11.0	3.21	50:50 Poz:Class H + 0.4% CPT-503P + 3.0% CPT-45 + 5.0% Gypsum + 5.0% Salt + 0.15% Citric Acid + 0.15% CPT-20A + 1.0% CPT-19 (TOC @ 4,500')
	1400	14.4	1.20	50:50 Poz:Class H + 0.25% CPT-503P + 0.80% CPT-16A + 0.20% CPT-35 + 0.40% CPT-49 + 0.25% CPT-20A

Mud Program:

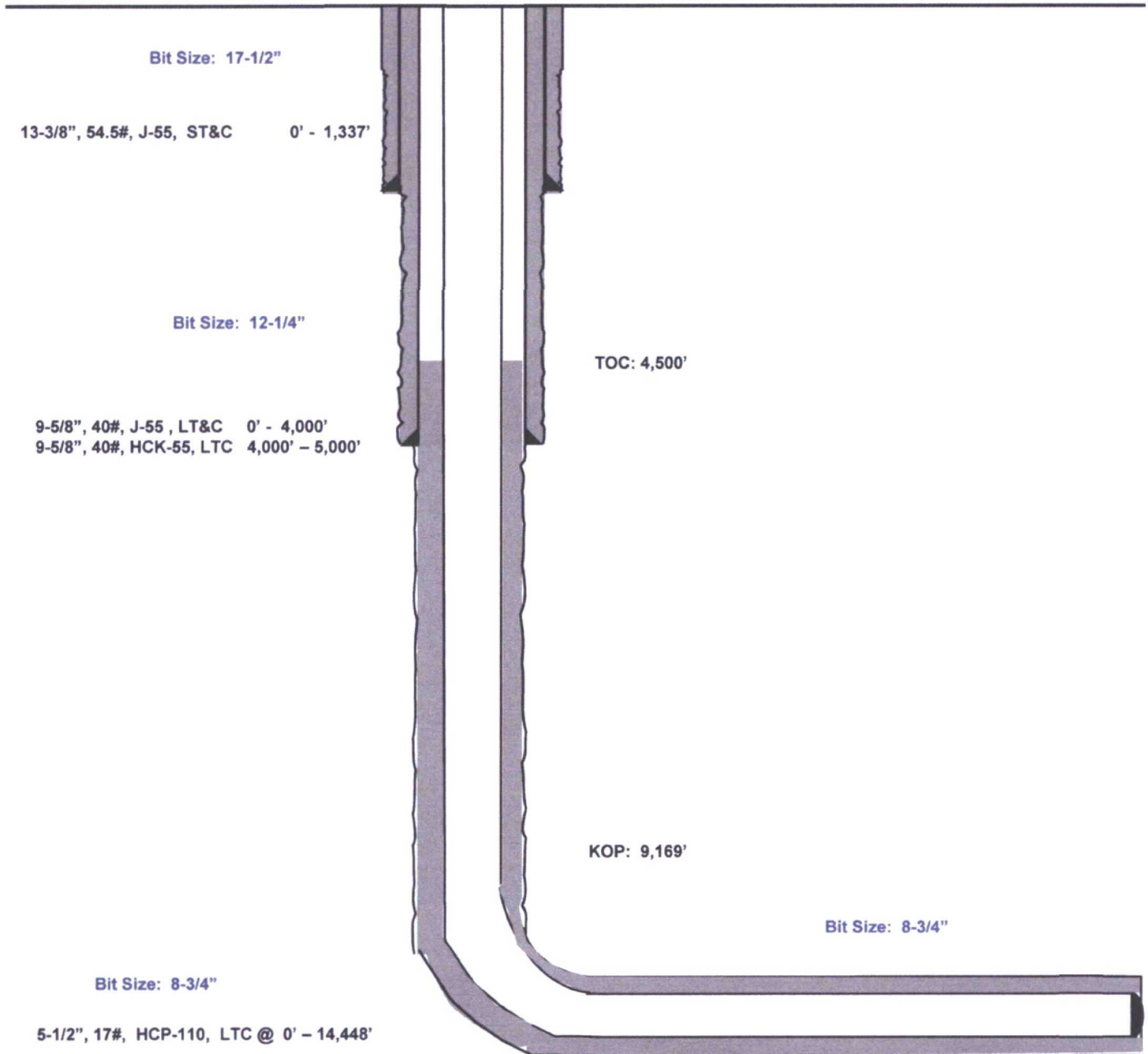
Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1,337'	Fresh - Gel	8.6-8.8	28-34	N/c
1,337' – 5,000'	Brine	8.8-10.0	28-34	N/c
5,000' – 9,169'	Brine	8.8-10.0	28-34	N/c
9,169' – 14,448' Lateral	Brine	8.8-10.0	28-34	N/c

Ares 4 State #201H

773' FSL
1646' FEL
Section 4
T-24-S, R-33-E

Lea County, New Mexico
Proposed Wellbore
Revised 8/9/17
API: 30-025-43757

KB: 3,604'
GL: 3,579'



Lateral: 14,448' MD, 9,600' TVD

BH Location: 230' FNL & 2311' FEL
Section 4
T-24-S, R-33-E



Lea County, NM (NAD 83 NME)

Ares 4 State #201H

HP 651

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: #201H

KB= 25' @ 3604.0usR (HP 651) 3579.0
Northing 850480.00 Easting 776093.00 Latitude 32° 14' 29.488 N Longitude 103° 34' 26.547 W

SECTION DETAILS

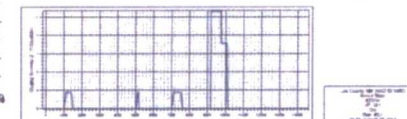
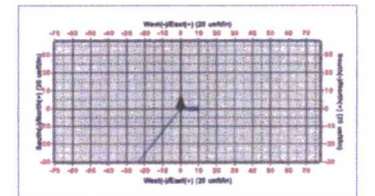
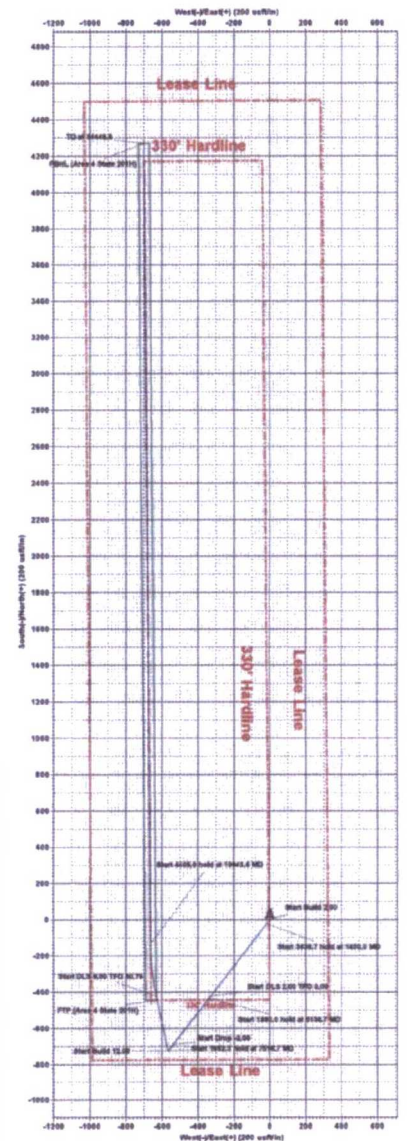
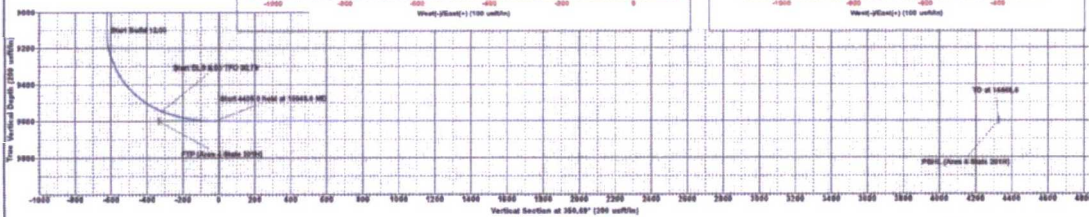
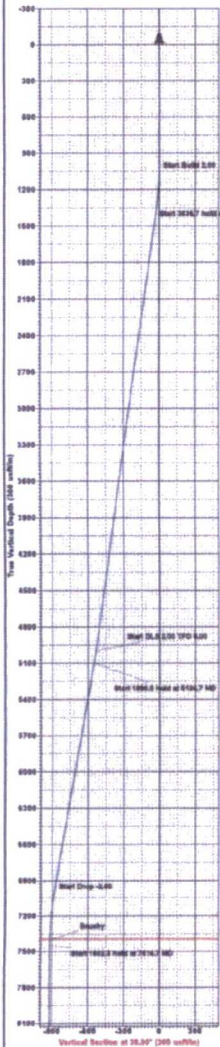
Sec	MD	Inc	Act	TVD	+N-S	+E-W	Dleg	TFace	Vsect	Target	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0		
3	1400.0	0.00	218.00	1383.7	-32.9	-17.2	2.00	218.00	-16.9		
4	8096.7	8.00	218.00	5099.9	-429.8	-328.9	0.00	0.00	-362.1		
5	9196.7	16.00	218.00	5099.9	-433.1	-338.4	2.00	3.00	-272.7		
6	7016.7	10.00	218.00	5955.2	-499.6	-438.6	0.00	0.00	-494.0		
7	7916.7	0.00	0.00	7467.7	-734.7	-696.2	2.00	180.00	-423.6		
8	9196.0	0.00	0.00	9100.0	-734.7	-696.2	0.00	0.00	-423.6		
9	9748.2	89.25	347.81	9546.6	-423.8	-432.3	12.00	347.81	-216.7		
10	10543.8	90.00	358.53	9600.0	-134.9	-463.9	8.00	30.79	-36.7		
11	14448.8	90.00	358.53	9600.0	-4270.0	-700.0	0.00	0.00	-4327.0		PBHL (Ares 4 State 201H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
PBHL (Ares 4 State 201H)	9600.0	-4270.0	-700.0	458709.00	776093.00
FTP (Ares 4 State 201H)	9600.0	-446.0	-481.0	461868.00	776432.00



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Ares 4 State

#201H

OH

Plan: Plan #0.1

Standard Planning Report

09 August, 2017

EOG Resources

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well #201H
Company:	EOG Resources - Midland	TVD Reference:	KB= 25' @ 3604.0usft (HP 651)
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB= 25' @ 3604.0usft (HP 651)
Site:	Ares 4 State	North Reference:	Grid
Well:	#201H	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:	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	#201H					
Well Position	+N/-S	437.0 usft	Northing:	452,430.00 usft	Latitude:	32° 14' 29.488 N
	+E/-W	-1,320.0 usft	Easting:	776,093.00 usft	Longitude:	103° 34' 26.547 W
Position Uncertainty	0.0 usft	Wellhead Elevation:		Ground Level:	3,579.0 usft	

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	8/8/2017	6.94	60.08	47,932.52841563

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	350.69

Plan Survey Tool Program	Date 8/8/2017				
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	14,448.4 Plan #0.1 (OH)	MWD		
			MWD - Standard		

EOG Resources

Planning Report

Database: EDM 5000.14 Single User Db
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Ares 4 State
 Well: #201H
 Wellbore: OH
 Design: Plan #0.1

Local Co-ordinate Reference: Well #201H
 TVD Reference: KB= 25' @ 3604.0usft (HP 651)
 MD Reference: KB= 25' @ 3604.0usft (HP 651)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

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	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,400.0	8.00	218.00	1,398.7	-22.0	-17.2	2.00	2.00	0.00	218.00	
5,036.7	8.00	218.00	5,000.0	-420.8	-328.8	0.00	0.00	0.00	0.00	
5,136.7	10.00	218.00	5,098.8	-433.1	-338.4	2.00	2.00	0.00	0.00	
7,016.7	10.00	218.00	6,950.2	-690.4	-539.4	0.00	0.00	0.00	0.00	
7,516.7	0.00	0.00	7,447.7	-724.7	-566.2	2.00	-2.00	0.00	180.00	
9,169.0	0.00	0.00	9,100.0	-724.7	-566.2	0.00	0.00	0.00	0.00	
9,746.2	69.25	347.61	9,546.5	-423.5	-632.3	12.00	12.00	0.00	347.61	
10,043.6	90.00	359.53	9,600.0	-134.9	-663.9	8.00	6.98	4.01	30.79	
14,448.6	90.00	359.53	9,600.0	4,270.0	-700.0	0.00	0.00	0.00	0.00	PBHL (Ares 4 State 2

EOG Resources Planning Report

Database: EDM 5000.14 Single User Db
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Ares 4 State
Well: #201H
Wellbore: OH
Design: Plan #0.1

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

Well #201H
KB= 25' @ 3604.0usft (HP 651)
KB= 25' @ 3604.0usft (HP 651)
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	2.00	218.00	1,100.0	-1.4	-1.1	-1.2	2.00	2.00	0.00
1,200.0	4.00	218.00	1,199.8	-5.5	-4.3	-4.7	2.00	2.00	0.00
1,300.0	6.00	218.00	1,299.5	-12.4	-9.7	-10.6	2.00	2.00	0.00
1,400.0	8.00	218.00	1,398.7	-22.0	-17.2	-18.9	2.00	2.00	0.00
1,500.0	8.00	218.00	1,497.7	-32.9	-25.7	-28.3	0.00	0.00	0.00
1,600.0	8.00	218.00	1,596.8	-43.9	-34.3	-37.8	0.00	0.00	0.00
1,700.0	8.00	218.00	1,695.8	-54.9	-42.9	-47.2	0.00	0.00	0.00
1,800.0	8.00	218.00	1,794.8	-65.8	-51.4	-56.7	0.00	0.00	0.00
1,900.0	8.00	218.00	1,893.8	-76.8	-60.0	-66.1	0.00	0.00	0.00
2,000.0	8.00	218.00	1,992.9	-87.8	-68.6	-75.5	0.00	0.00	0.00
2,100.0	8.00	218.00	2,091.9	-98.7	-77.1	-85.0	0.00	0.00	0.00
2,200.0	8.00	218.00	2,190.9	-109.7	-85.7	-94.4	0.00	0.00	0.00
2,300.0	8.00	218.00	2,289.9	-120.7	-94.3	-103.8	0.00	0.00	0.00
2,400.0	8.00	218.00	2,389.0	-131.6	-102.8	-113.3	0.00	0.00	0.00
2,500.0	8.00	218.00	2,488.0	-142.6	-111.4	-122.7	0.00	0.00	0.00
2,600.0	8.00	218.00	2,587.0	-153.6	-120.0	-132.1	0.00	0.00	0.00
2,700.0	8.00	218.00	2,686.1	-164.5	-128.6	-141.6	0.00	0.00	0.00
2,800.0	8.00	218.00	2,785.1	-175.5	-137.1	-151.0	0.00	0.00	0.00
2,900.0	8.00	218.00	2,884.1	-186.5	-145.7	-160.5	0.00	0.00	0.00
3,000.0	8.00	218.00	2,983.1	-197.4	-154.3	-169.9	0.00	0.00	0.00
3,100.0	8.00	218.00	3,082.2	-208.4	-162.8	-179.3	0.00	0.00	0.00
3,200.0	8.00	218.00	3,181.2	-219.4	-171.4	-188.8	0.00	0.00	0.00
3,300.0	8.00	218.00	3,280.2	-230.3	-180.0	-198.2	0.00	0.00	0.00
3,400.0	8.00	218.00	3,379.2	-241.3	-188.5	-207.6	0.00	0.00	0.00
3,500.0	8.00	218.00	3,478.3	-252.3	-197.1	-217.1	0.00	0.00	0.00
3,600.0	8.00	218.00	3,577.3	-263.2	-205.7	-226.5	0.00	0.00	0.00
3,700.0	8.00	218.00	3,676.3	-274.2	-214.2	-235.9	0.00	0.00	0.00
3,800.0	8.00	218.00	3,775.3	-285.2	-222.8	-245.4	0.00	0.00	0.00
3,900.0	8.00	218.00	3,874.4	-296.1	-231.4	-254.8	0.00	0.00	0.00
4,000.0	8.00	218.00	3,973.4	-307.1	-239.9	-264.3	0.00	0.00	0.00
4,100.0	8.00	218.00	4,072.4	-318.1	-248.5	-273.7	0.00	0.00	0.00
4,200.0	8.00	218.00	4,171.5	-329.0	-257.1	-283.1	0.00	0.00	0.00
4,300.0	8.00	218.00	4,270.5	-340.0	-265.6	-292.6	0.00	0.00	0.00
4,400.0	8.00	218.00	4,369.5	-351.0	-274.2	-302.0	0.00	0.00	0.00
4,500.0	8.00	218.00	4,468.5	-361.9	-282.8	-311.4	0.00	0.00	0.00
4,600.0	8.00	218.00	4,567.6	-372.9	-291.4	-320.9	0.00	0.00	0.00
4,700.0	8.00	218.00	4,666.6	-383.9	-299.9	-330.3	0.00	0.00	0.00
4,800.0	8.00	218.00	4,765.6	-394.8	-308.5	-339.7	0.00	0.00	0.00
4,900.0	8.00	218.00	4,864.6	-405.8	-317.1	-349.2	0.00	0.00	0.00
5,000.0	8.00	218.00	4,963.7	-416.8	-325.6	-358.6	0.00	0.00	0.00
5,036.7	8.00	218.00	5,000.0	-420.8	-328.8	-362.1	0.00	0.00	0.00
5,100.0	9.27	218.00	5,062.6	-428.3	-334.6	-368.5	2.00	2.00	0.00
5,136.7	10.00	218.00	5,098.8	-433.1	-338.4	-372.7	2.00	2.00	0.00

EOG Resources

Planning Report

Database: EDM 5000.14 Single User Db
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Ares 4 State
 Well: #201H
 Wellbore: OH
 Design: Plan #0.1

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

Well #201H
 KB= 25' @ 3604.0usft (HP 651)
 KB= 25' @ 3604.0usft (HP 651)
 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)
5,200.0	10.00	218.00	5,161.1	-441.8	-345.2	-380.1	0.00	0.00	0.00
5,300.0	10.00	218.00	5,259.6	-455.5	-355.9	-391.9	0.00	0.00	0.00
5,400.0	10.00	218.00	5,358.1	-469.2	-366.5	-403.7	0.00	0.00	0.00
5,500.0	10.00	218.00	5,456.6	-482.8	-377.2	-415.5	0.00	0.00	0.00
5,600.0	10.00	218.00	5,555.0	-496.5	-387.9	-427.2	0.00	0.00	0.00
5,700.0	10.00	218.00	5,653.5	-510.2	-398.6	-439.0	0.00	0.00	0.00
5,800.0	10.00	218.00	5,752.0	-523.9	-409.3	-450.8	0.00	0.00	0.00
5,900.0	10.00	218.00	5,850.5	-537.6	-420.0	-462.6	0.00	0.00	0.00
6,000.0	10.00	218.00	5,949.0	-551.3	-430.7	-474.3	0.00	0.00	0.00
6,100.0	10.00	218.00	6,047.4	-564.9	-441.4	-486.1	0.00	0.00	0.00
6,200.0	10.00	218.00	6,145.9	-578.6	-452.1	-497.9	0.00	0.00	0.00
6,300.0	10.00	218.00	6,244.4	-592.3	-462.8	-509.7	0.00	0.00	0.00
6,400.0	10.00	218.00	6,342.9	-606.0	-473.5	-521.4	0.00	0.00	0.00
6,500.0	10.00	218.00	6,441.4	-619.7	-484.1	-533.2	0.00	0.00	0.00
6,600.0	10.00	218.00	6,539.8	-633.4	-494.8	-545.0	0.00	0.00	0.00
6,700.0	10.00	218.00	6,638.3	-647.0	-505.5	-556.8	0.00	0.00	0.00
6,800.0	10.00	218.00	6,736.8	-660.7	-516.2	-568.5	0.00	0.00	0.00
6,900.0	10.00	218.00	6,835.3	-674.4	-526.9	-580.3	0.00	0.00	0.00
7,000.0	10.00	218.00	6,933.8	-688.1	-537.6	-592.1	0.00	0.00	0.00
7,016.7	10.00	218.00	6,950.2	-690.4	-539.4	-594.0	0.00	0.00	0.00
7,100.0	8.33	218.00	7,032.4	-700.8	-547.6	-603.0	2.00	-2.00	0.00
7,200.0	6.33	218.00	7,131.6	-710.9	-555.4	-611.7	2.00	-2.00	0.00
7,300.0	4.33	218.00	7,231.2	-718.2	-561.1	-618.0	2.00	-2.00	0.00
7,400.0	2.33	218.00	7,331.0	-722.8	-564.7	-621.9	2.00	-2.00	0.00
7,469.0	0.95	218.00	7,400.0	-724.4	-565.9	-623.3	2.00	-2.00	0.00
Brushy									
7,500.0	0.33	218.00	7,431.0	-724.6	-566.2	-623.5	2.00	-2.00	0.00
7,516.7	0.00	0.00	7,447.7	-724.7	-566.2	-623.6	2.00	-2.00	0.00
7,600.0	0.00	0.00	7,531.0	-724.7	-566.2	-623.6	0.00	0.00	0.00
7,700.0	0.00	0.00	7,631.0	-724.7	-566.2	-623.6	0.00	0.00	0.00
7,800.0	0.00	0.00	7,731.0	-724.7	-566.2	-623.6	0.00	0.00	0.00
7,900.0	0.00	0.00	7,831.0	-724.7	-566.2	-623.6	0.00	0.00	0.00
8,000.0	0.00	0.00	7,931.0	-724.7	-566.2	-623.6	0.00	0.00	0.00
8,100.0	0.00	0.00	8,031.0	-724.7	-566.2	-623.6	0.00	0.00	0.00
8,200.0	0.00	0.00	8,131.0	-724.7	-566.2	-623.6	0.00	0.00	0.00
8,300.0	0.00	0.00	8,231.0	-724.7	-566.2	-623.6	0.00	0.00	0.00
8,400.0	0.00	0.00	8,331.0	-724.7	-566.2	-623.6	0.00	0.00	0.00
8,500.0	0.00	0.00	8,431.0	-724.7	-566.2	-623.6	0.00	0.00	0.00
8,600.0	0.00	0.00	8,531.0	-724.7	-566.2	-623.6	0.00	0.00	0.00
8,700.0	0.00	0.00	8,631.0	-724.7	-566.2	-623.6	0.00	0.00	0.00
8,800.0	0.00	0.00	8,731.0	-724.7	-566.2	-623.6	0.00	0.00	0.00
8,900.0	0.00	0.00	8,831.0	-724.7	-566.2	-623.6	0.00	0.00	0.00
9,000.0	0.00	0.00	8,931.0	-724.7	-566.2	-623.6	0.00	0.00	0.00
9,100.0	0.00	0.00	9,031.0	-724.7	-566.2	-623.6	0.00	0.00	0.00
9,169.0	0.00	0.00	9,100.0	-724.7	-566.2	-623.6	0.00	0.00	0.00
9,175.0	0.72	347.61	9,106.0	-724.6	-566.2	-623.5	12.00	12.00	0.00
9,200.0	3.72	347.61	9,131.0	-723.7	-566.4	-622.6	12.00	12.00	0.00
9,225.0	6.72	347.61	9,155.8	-721.5	-566.9	-620.3	12.00	12.00	0.00
9,250.0	9.72	347.61	9,180.6	-718.0	-567.7	-616.7	12.00	12.00	0.00
9,275.0	12.72	347.61	9,205.1	-713.2	-568.7	-611.9	12.00	12.00	0.00
9,300.0	15.72	347.61	9,229.3	-707.2	-570.0	-605.7	12.00	12.00	0.00
9,325.0	18.72	347.61	9,253.2	-700.0	-571.6	-598.3	12.00	12.00	0.00
9,350.0	21.71	347.61	9,276.7	-691.6	-573.5	-589.7	12.00	12.00	0.00

EOG Resources

Planning Report

Database: EDM 5000.14 Single User Db
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Ares 4 State
Well: #201H
Wellbore: OH
Design: Plan #0.1

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

Well #201H
KB= 25' @ 3604.0usft (HP 651)
KB= 25' @ 3604.0usft (HP 651)
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)
9,375.0	24.71	347.61	9,299.6	-682.0	-575.6	-579.9	12.00	12.00	0.00
9,400.0	27.71	347.61	9,322.1	-671.2	-577.9	-568.9	12.00	12.00	0.00
9,425.0	30.71	347.61	9,343.9	-659.3	-580.6	-556.7	12.00	12.00	0.00
9,450.0	33.71	347.61	9,365.0	-646.2	-583.4	-543.4	12.00	12.00	0.00
9,475.0	36.71	347.61	9,385.5	-632.2	-586.5	-529.0	12.00	12.00	0.00
9,500.0	39.71	347.61	9,405.1	-617.1	-589.8	-513.5	12.00	12.00	0.00
9,525.0	42.71	347.61	9,423.9	-601.0	-593.4	-497.1	12.00	12.00	0.00
9,550.0	45.71	347.61	9,441.8	-584.0	-597.1	-479.7	12.00	12.00	0.00
9,575.0	48.71	347.61	9,458.8	-566.0	-601.0	-461.4	12.00	12.00	0.00
9,600.0	51.71	347.61	9,474.8	-547.3	-605.2	-442.2	12.00	12.00	0.00
9,625.0	54.71	347.61	9,489.8	-527.7	-609.5	-422.2	12.00	12.00	0.00
9,650.0	57.71	347.61	9,503.7	-507.4	-613.9	-401.4	12.00	12.00	0.00
9,675.0	60.71	347.61	9,516.5	-486.5	-618.5	-380.0	12.00	12.00	0.00
9,700.0	63.71	347.61	9,528.1	-464.9	-623.3	-357.9	12.00	12.00	0.00
9,725.0	66.71	347.61	9,538.6	-442.7	-628.1	-335.3	12.00	12.00	0.00
9,746.2	69.25	347.61	9,546.5	-423.5	-632.3	-315.7	12.00	12.00	0.00
9,750.0	69.51	347.78	9,547.9	-420.0	-633.1	-312.1	8.00	6.88	4.37
9,800.0	72.96	349.91	9,564.0	-373.6	-642.3	-264.8	8.00	6.90	4.27
9,850.0	76.44	351.97	9,577.2	-326.0	-649.8	-216.6	8.00	6.95	4.12
9,900.0	79.93	353.97	9,587.4	-277.4	-655.8	-167.7	8.00	6.98	4.00
9,950.0	83.43	355.93	9,594.6	-228.1	-660.2	-118.3	8.00	7.00	3.91
10,000.0	86.94	357.86	9,598.8	-178.4	-662.9	-68.8	8.00	7.02	3.86
10,043.6	90.00	359.53	9,600.0	-134.9	-663.9	-25.7	8.00	7.03	3.83
10,100.0	90.00	359.53	9,600.0	-78.4	-664.3	30.1	0.00	0.00	0.00
10,200.0	90.00	359.53	9,600.0	21.6	-665.1	128.9	0.00	0.00	0.00
10,300.0	90.00	359.53	9,600.0	121.6	-666.0	227.7	0.00	0.00	0.00
10,400.0	90.00	359.53	9,600.0	221.6	-666.8	326.5	0.00	0.00	0.00
10,500.0	90.00	359.53	9,600.0	321.6	-667.6	425.3	0.00	0.00	0.00
10,600.0	90.00	359.53	9,600.0	421.6	-668.4	524.1	0.00	0.00	0.00
10,700.0	90.00	359.53	9,600.0	521.6	-669.3	622.9	0.00	0.00	0.00
10,800.0	90.00	359.53	9,600.0	621.5	-670.1	721.7	0.00	0.00	0.00
10,900.0	90.00	359.53	9,600.0	721.5	-670.9	820.6	0.00	0.00	0.00
11,000.0	90.00	359.53	9,600.0	821.5	-671.7	919.4	0.00	0.00	0.00
11,100.0	90.00	359.53	9,600.0	921.5	-672.5	1,018.2	0.00	0.00	0.00
11,200.0	90.00	359.53	9,600.0	1,021.5	-673.4	1,117.0	0.00	0.00	0.00
11,300.0	90.00	359.53	9,600.0	1,121.5	-674.2	1,215.8	0.00	0.00	0.00
11,400.0	90.00	359.53	9,600.0	1,221.5	-675.0	1,314.6	0.00	0.00	0.00
11,500.0	90.00	359.53	9,600.0	1,321.5	-675.8	1,413.4	0.00	0.00	0.00
11,600.0	90.00	359.53	9,600.0	1,421.5	-676.6	1,512.2	0.00	0.00	0.00
11,700.0	90.00	359.53	9,600.0	1,521.5	-677.5	1,611.1	0.00	0.00	0.00
11,800.0	90.00	359.53	9,600.0	1,621.5	-678.3	1,709.9	0.00	0.00	0.00
11,900.0	90.00	359.53	9,600.0	1,721.5	-679.1	1,808.7	0.00	0.00	0.00
12,000.0	90.00	359.53	9,600.0	1,821.5	-679.9	1,907.5	0.00	0.00	0.00
12,100.0	90.00	359.53	9,600.0	1,921.5	-680.7	2,006.3	0.00	0.00	0.00
12,200.0	90.00	359.53	9,600.0	2,021.5	-681.6	2,105.1	0.00	0.00	0.00
12,300.0	90.00	359.53	9,600.0	2,121.5	-682.4	2,203.9	0.00	0.00	0.00
12,400.0	90.00	359.53	9,600.0	2,221.5	-683.2	2,302.7	0.00	0.00	0.00
12,500.0	90.00	359.53	9,600.0	2,321.5	-684.0	2,401.6	0.00	0.00	0.00
12,600.0	90.00	359.53	9,600.0	2,421.5	-684.8	2,500.4	0.00	0.00	0.00
12,700.0	90.00	359.53	9,600.0	2,521.5	-685.7	2,599.2	0.00	0.00	0.00
12,800.0	90.00	359.53	9,600.0	2,621.5	-686.5	2,698.0	0.00	0.00	0.00
12,900.0	90.00	359.53	9,600.0	2,721.5	-687.3	2,796.8	0.00	0.00	0.00
13,000.0	90.00	359.53	9,600.0	2,821.5	-688.1	2,895.6	0.00	0.00	0.00
13,100.0	90.00	359.53	9,600.0	2,921.5	-688.9	2,994.4	0.00	0.00	0.00

EOG Resources

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well #201H
Company:	EOG Resources - Midland	TVD Reference:	KB= 25' @ 3604.0usft (HP 651)
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB= 25' @ 3604.0usft (HP 651)
Site:	Ares 4 State	North Reference:	Grid
Well:	#201H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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)	
13,200.0	90.00	359.53	9,600.0	3,021.5	-689.8	3,093.3	0.00	0.00	0.00	
13,300.0	90.00	359.53	9,600.0	3,121.5	-690.6	3,192.1	0.00	0.00	0.00	
13,400.0	90.00	359.53	9,600.0	3,221.5	-691.4	3,290.9	0.00	0.00	0.00	
13,500.0	90.00	359.53	9,600.0	3,321.5	-692.2	3,389.7	0.00	0.00	0.00	
13,600.0	90.00	359.53	9,600.0	3,421.5	-693.0	3,488.5	0.00	0.00	0.00	
13,700.0	90.00	359.53	9,600.0	3,521.5	-693.9	3,587.3	0.00	0.00	0.00	
13,800.0	90.00	359.53	9,600.0	3,621.4	-694.7	3,686.1	0.00	0.00	0.00	
13,900.0	90.00	359.53	9,600.0	3,721.4	-695.5	3,784.9	0.00	0.00	0.00	
14,000.0	90.00	359.53	9,600.0	3,821.4	-696.3	3,883.8	0.00	0.00	0.00	
14,100.0	90.00	359.53	9,600.0	3,921.4	-697.1	3,982.6	0.00	0.00	0.00	
14,200.0	90.00	359.53	9,600.0	4,021.4	-698.0	4,081.4	0.00	0.00	0.00	
14,300.0	90.00	359.53	9,600.0	4,121.4	-698.8	4,180.2	0.00	0.00	0.00	
14,400.0	90.00	359.53	9,600.0	4,221.4	-699.6	4,279.0	0.00	0.00	0.00	
14,448.6	90.00	359.53	9,600.0	4,270.0	-700.0	4,327.0	0.00	0.00	0.00	

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 201H)	0.00	0.00	9,600.0	-445.0	-661.0	451,985.00	775,432.00	32° 14' 25.131 N	103° 34' 34.280 W
- plan misses target center by 64.2usft at 9750.0usft MD (9547.9 TVD, -420.0 N, -633.1 E)									
- Point									
PBHL (Ares 4 State 201)	90.00	179.53	9,600.0	4,270.0	-700.0	456,700.00	775,393.00	32° 15' 11.790 N	103° 34' 34.347 W
- plan hits target center									
- Rectangle (sides W60.0 H0.0 D4,715.0)									

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
7,469.0	7,400.0	Brushy		0.00		