

Submit 1 Copy To Appropriate District Office

District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1287
811 S. First St., Artesia, NM 88210
District III - (505) 334-6161
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3000
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

WELL API NO. 30-025-46273
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No. 322743
7. Lease Name or Unit Agreement Name YARROW 32 STATE
8. Well Number 202H
9. OGRID Number 7377
10. Pool name or Wildcat [59900] TRIPLE X; BONE SPRING
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3667 GL

HENDRY 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	
3. Address of Operator PO BOX 2267, MIDLAND, TX 79702	
4. Well Location Unit Letter <u>P</u> : <u>454</u> feet from the <u>SOUTH</u> line and <u>501</u> feet from the <u>EAST</u> line Section <u>32</u> Township <u>23S</u> Range <u>33E</u> NMPM County <u>LEA CO., NM</u>	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3667 GL	

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

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☒	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL. ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
CLOSED-LOOP SYSTEM ☐			
OTHER: <u>APD CEMENT CHANGES</u>		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 respectfully requests an amendment to our approved APD for this well to reflect the following changes:
Updated cement design to reflect R-111-P requirements and ensure cement integrity in production string

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 Emily Follis TITLE Sr. Regulatory Administrator DATE 8/15/19

Type or print name Emily Follis E-mail address: emily_follis@eog.com PHONE: 432-848-9163

For State Use Only

APPROVED BY: [Signature] TITLE Petroleum Engineer DATE 08/19/19

Conditions of Approval (if any):

MUST BRING CEMENT TO SURFACE ON ALL 3 STAGINGS

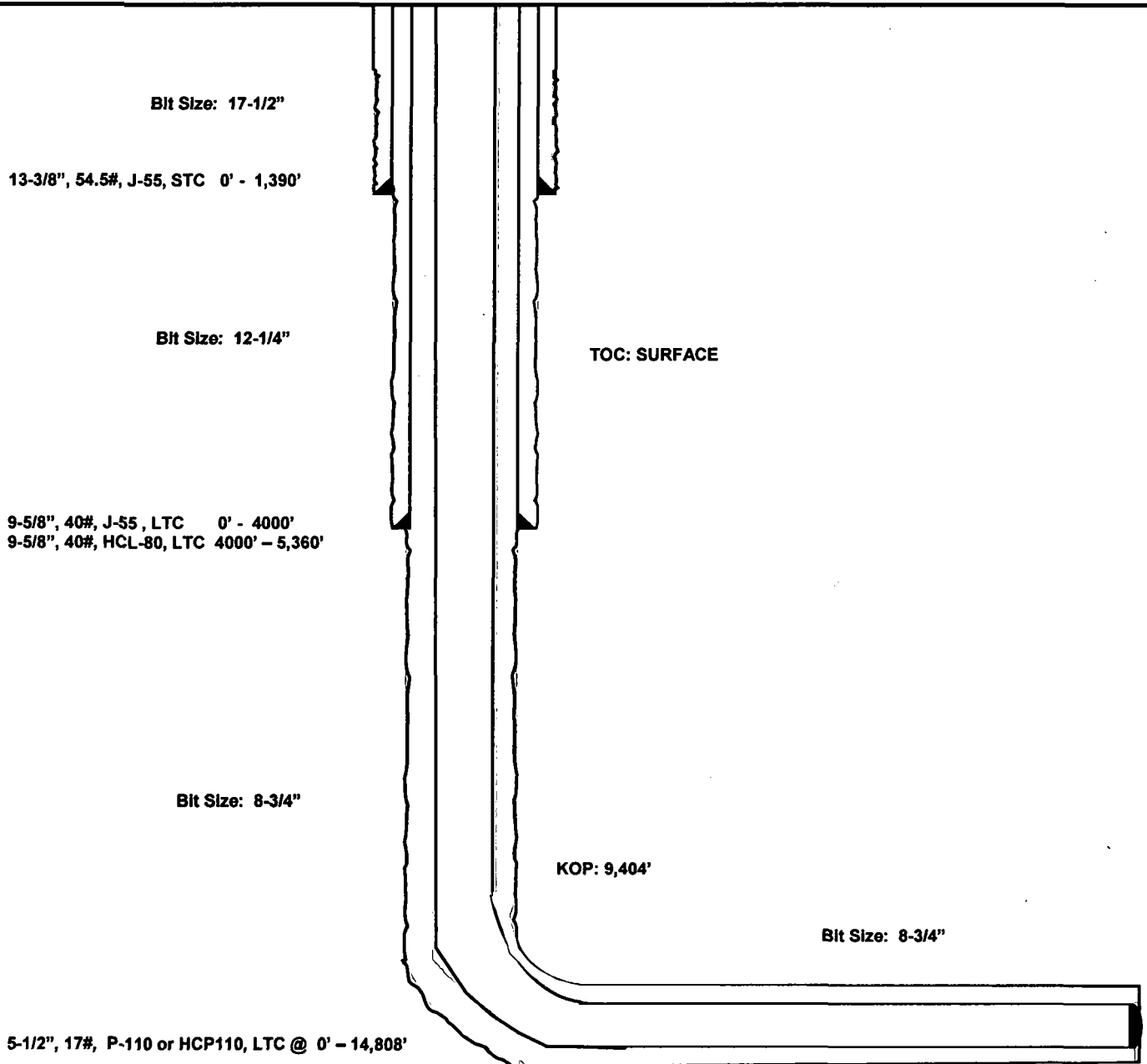
Yarrow 32 State #202H
Lea County, New Mexico

Revised Wellbore 8/14/19

454' FSL
501' FEL
Section 32
T-23-S, R-33-E

API: 30-025-6273

KB: 3,692'
GL: 3,667'



Lateral: 14,808' MD, 9,835' TVD
BH Location: 100' FNL & 1115' FEL
Section 32
T-23-S, R-33-E

**EOG RESOURCES, INC.
YARROW 32 STATE #202H**

**HOBBS OCD
AUG 19 2019
RECEIVED**

Revised Permit Information 8/14/19:

Well Name: Yarrow 32 State #202H

Location:

SHL: 454' FSL & 501' FEL, Section 32, T-23-S, R-33-E, Lea Co., N.M.

BHL: 100' FNL & 1115' FEL, Section 32, T-23-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' - 1,390'	13.375"	54.5#	J-55	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"	4000' - 5,360'	9.625"	40#	HCL-80	LTC	1.125	1.25	1.60
8.75"	0' - 14,808'	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
1,390'	870	13.5	1.73	Lead: Class C + 4.0% Bentonite + 0.5% CaCl ₂ + 0.25 lb/sk Cello-Flake (TOC @ Surface)
	160	14.8	1.34	Tail: Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
5,360'	540	9.0	3.5	Lead: Class C + 10% NaCl + 6% Bentonite Gel + 3% MagOx (TOC @ Surface)
	380	14.4	1.20	Tail: Class C + 10% NaCl + 3% MagOx
14,808'	1,800	14.4	1.31	1 st Stage (Tail): Class H + 5% Salt (TOC @ 7,400')
	1,400	12.7	3.21	2 nd Stage (Bradenhead squeeze): Class C + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (TOC @ Surface)

Mud Program:

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0' - 1,390'	Fresh - Gel	8.6-8.8	28-34	N/c
1,390' - 5,360'	Brine	10.0-10.2	28-34	N/c
5,360' - 9,404'	Cut Brine	8.4-9.0	28-34	N/c
9,404' - 14,808' Lateral	Oil Base	9.0-9.5	40-42	8-10

HOBBS OCD

AUG 19 2019

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Lea County, NM (NAD 83 NME)

Yarrow 32 State #202H

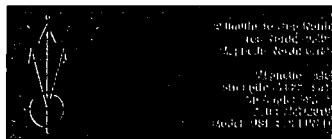
Plan #0.1

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: #202H

KB = 25 @ 3692.0usft
Northing 457365.00 Easting 771921.00 Latitude 32° 15' 16.610 N Longitude 103° 35' 14.722 W



To convert a Magnetic Direction to a Grid Direction, Add 6.18°
To convert a Magnetic Direction to a True Direction, Add 6.58° East
To convert a True Direction to a Grid Direction, Subtract 0.40°

SECTION DETAILS

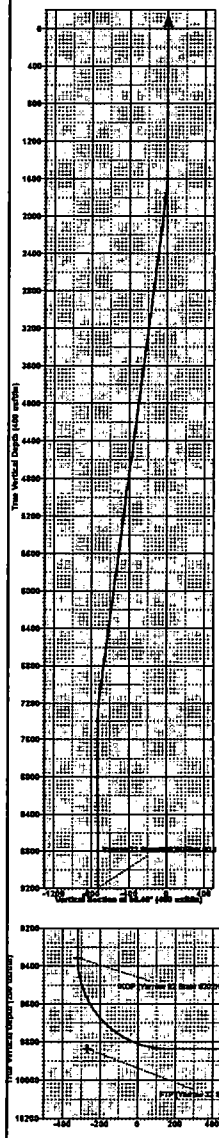
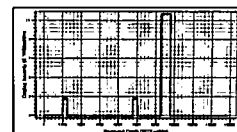
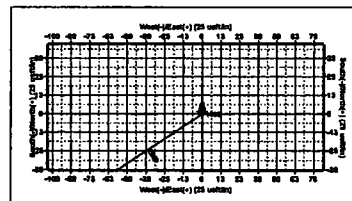
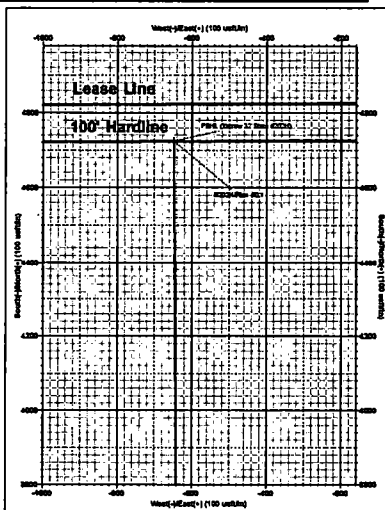
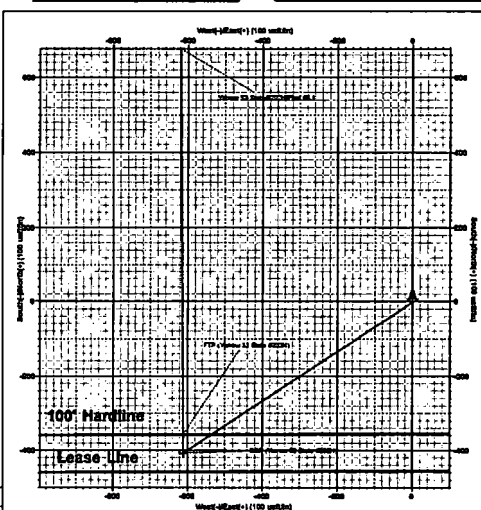
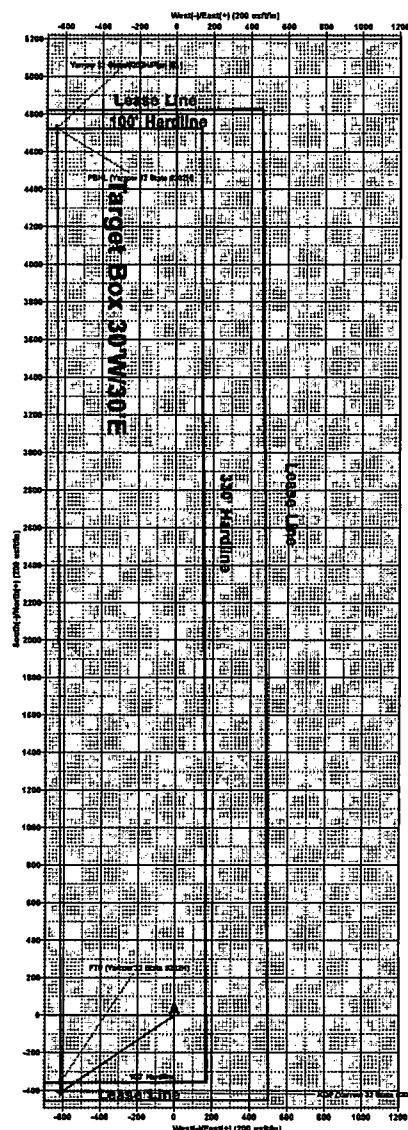
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSeet	Target
	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
	1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	
	1873.5	7.47	236.40	1872.4	-13.5	-20.2	2.00	236.40	-10.6	
	7142.3	7.47	236.40	7096.6	-392.5	-590.8	0.00	0.00	-308.6	
	7815.8	0.00	0.00	7469.0	-406.0	-611.0	2.00	180.00	-319.2	
	9403.8	0.00	0.00	9357.0	-406.0	-611.0	0.00	0.00	-319.2	KOP (Yarrow 32 State #202H)
	10153.8	90.00	359.59	9834.5	71.4	-614.4	12.00	359.59	154.3	
	14807.5	90.00	359.59	9834.5	4725.0	-648.0	0.00	0.00	4769.2	PBHL (Yarrow 32 State #202H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
KOP (Yarrow 32 State #202H)	9357.0	-406.0	-611.0	458359.00	771310.00
PBHL (Yarrow 32 State #202H)	9834.5	4725.0	-648.0	462090.00	771273.00
FTP (Yarrow 32 State #202H)	9834.5	-356.0	-611.0	457009.00	771310.00





EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Yarrow 32 State

#202H

OH

Plan: Plan #0.1

Standard Planning Report

29 July, 2019

HOBBS OCD
AUG 19 2019
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Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #202H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3692.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3692.0usft
Site:	Yarrow 32 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	Yarrow 32 State				
Site Position:		Northing:	457,304.00 usft	Latitude:	32° 15' 18.011 N
From:	Map	Easting:	771,862.00 usft	Longitude:	103° 35' 15.414 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.40

Well	#202H					
Well Position	+N/-S	61.0 usft	Northing:	457,365.00 usft	Latitude:	32° 15' 18.610 N
	+E/-W	59.0 usft	Easting:	771,921.00 usft	Longitude:	103° 35' 14.722 W
Position Uncertainty	0.0 usft	Wellhead Elevation:		Ground Level:	3,667.0 usft	

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	User Defined	6/25/2019	6.59	59.82	47,826.80000000
	User Defined	7/26/2019	6.57	59.80	47,910.00000000
	User Defined	7/27/2019	6.58	59.77	47,822.40000000

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	352.19

Plan Survey Tool Program	Date 7/29/2019			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	14,807.5 Plan #0.1 (OH)	MWD	
			OWSG MWD - Standard	



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #202H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3692.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3692.0usft
Site:	Yarrow 32 State	North Reference:	Grid
Well:	#202H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.1		

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	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,873.5	7.47	236.40	1,872.4	-13.5	-20.2	2.00	2.00	0.00	236.40	
7,142.3	7.47	236.40	7,096.6	-392.5	-590.8	0.00	0.00	0.00	0.00	
7,515.8	0.00	0.00	7,469.0	-406.0	-611.0	2.00	-2.00	0.00	180.00	
9,403.8	0.00	0.00	9,357.0	-406.0	-611.0	0.00	0.00	0.00	0.00	KOP (Yarrow 32 State
10,153.8	90.00	359.59	9,834.5	71.4	-614.4	12.00	12.00	-0.06	359.59	
14,807.5	90.00	359.59	9,834.5	4,725.0	-648.0	0.00	0.00	0.00	0.00	PBHL (Yarrow 32 Stal



Planning Report

Database: EDM 5000.14
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Yarrow 32 State
 Well: #202H
 Wellbore: OH
 Design: Plan #0.1

Local Co-ordinate Reference: Well #202H
 TVD Reference: KB = 25 @ 3692.0usft
 MD Reference: KB = 25 @ 3692.0usft
 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	2.00	236.40	1,600.0	-1.0	-1.5	-0.8	2.00	2.00	0.00
1,700.0	4.00	236.40	1,699.8	-3.9	-5.8	-3.0	2.00	2.00	0.00
1,800.0	6.00	236.40	1,799.5	-8.7	-13.1	-6.8	2.00	2.00	0.00
1,873.5	7.47	236.40	1,872.4	-13.5	-20.2	-10.6	2.00	2.00	0.00
1,900.0	7.47	236.40	1,898.7	-15.4	-23.1	-12.1	0.00	0.00	0.00
2,000.0	7.47	236.40	1,997.9	-22.6	-33.9	-17.7	0.00	0.00	0.00
2,100.0	7.47	236.40	2,097.0	-29.8	-44.8	-23.4	0.00	0.00	0.00
2,200.0	7.47	236.40	2,196.2	-36.9	-55.6	-29.0	0.00	0.00	0.00
2,300.0	7.47	236.40	2,295.3	-44.1	-66.4	-34.7	0.00	0.00	0.00
2,400.0	7.47	236.40	2,394.5	-51.3	-77.3	-40.4	0.00	0.00	0.00
2,500.0	7.47	236.40	2,493.6	-58.5	-88.1	-46.0	0.00	0.00	0.00
2,600.0	7.47	236.40	2,592.8	-65.7	-98.9	-51.7	0.00	0.00	0.00
2,700.0	7.47	236.40	2,691.9	-72.9	-109.7	-57.3	0.00	0.00	0.00
2,800.0	7.47	236.40	2,791.1	-80.1	-120.6	-63.0	0.00	0.00	0.00
2,900.0	7.47	236.40	2,890.2	-87.3	-131.4	-68.6	0.00	0.00	0.00
3,000.0	7.47	236.40	2,989.4	-94.5	-142.2	-74.3	0.00	0.00	0.00
3,100.0	7.47	236.40	3,088.5	-101.7	-153.1	-80.0	0.00	0.00	0.00
3,200.0	7.47	236.40	3,187.7	-108.9	-163.9	-85.6	0.00	0.00	0.00
3,300.0	7.47	236.40	3,286.8	-116.1	-174.7	-91.3	0.00	0.00	0.00
3,400.0	7.47	236.40	3,386.0	-123.3	-185.5	-96.9	0.00	0.00	0.00
3,500.0	7.47	236.40	3,485.1	-130.5	-196.4	-102.6	0.00	0.00	0.00
3,600.0	7.47	236.40	3,584.3	-137.7	-207.2	-108.2	0.00	0.00	0.00
3,700.0	7.47	236.40	3,683.4	-144.9	-218.0	-113.9	0.00	0.00	0.00
3,800.0	7.47	236.40	3,782.6	-152.1	-228.8	-119.6	0.00	0.00	0.00
3,900.0	7.47	236.40	3,881.7	-159.3	-239.7	-125.2	0.00	0.00	0.00
4,000.0	7.47	236.40	3,980.9	-166.5	-250.5	-130.9	0.00	0.00	0.00
4,100.0	7.47	236.40	4,080.0	-173.7	-261.3	-136.5	0.00	0.00	0.00
4,200.0	7.47	236.40	4,179.2	-180.8	-272.2	-142.2	0.00	0.00	0.00
4,300.0	7.47	236.40	4,278.4	-188.0	-283.0	-147.8	0.00	0.00	0.00
4,400.0	7.47	236.40	4,377.5	-195.2	-293.8	-153.5	0.00	0.00	0.00
4,500.0	7.47	236.40	4,476.7	-202.4	-304.6	-159.2	0.00	0.00	0.00
4,600.0	7.47	236.40	4,575.8	-209.6	-315.5	-164.8	0.00	0.00	0.00
4,700.0	7.47	236.40	4,675.0	-216.8	-326.3	-170.5	0.00	0.00	0.00
4,800.0	7.47	236.40	4,774.1	-224.0	-337.1	-176.1	0.00	0.00	0.00
4,900.0	7.47	236.40	4,873.3	-231.2	-348.0	-181.8	0.00	0.00	0.00
5,000.0	7.47	236.40	4,972.4	-238.4	-358.8	-187.4	0.00	0.00	0.00
5,100.0	7.47	236.40	5,071.6	-245.6	-369.6	-193.1	0.00	0.00	0.00
5,200.0	7.47	236.40	5,170.7	-252.8	-380.4	-198.8	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #202H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3692.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3692.0usft
Site:	Yarrow 32 State	North Reference:	Grid
Well:	#202H	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)
5,300.0	7.47	236.40	5,269.9	-260.0	-391.3	-204.4	0.00	0.00	0.00
5,400.0	7.47	236.40	5,369.0	-267.2	-402.1	-210.1	0.00	0.00	0.00
5,500.0	7.47	236.40	5,468.2	-274.4	-412.9	-215.7	0.00	0.00	0.00
5,600.0	7.47	236.40	5,567.3	-281.6	-423.7	-221.4	0.00	0.00	0.00
5,700.0	7.47	236.40	5,666.5	-288.8	-434.6	-227.0	0.00	0.00	0.00
5,800.0	7.47	236.40	5,765.6	-296.0	-445.4	-232.7	0.00	0.00	0.00
5,900.0	7.47	236.40	5,864.8	-303.2	-456.2	-238.4	0.00	0.00	0.00
6,000.0	7.47	236.40	5,963.9	-310.4	-467.1	-244.0	0.00	0.00	0.00
6,100.0	7.47	236.40	6,063.1	-317.5	-477.9	-249.7	0.00	0.00	0.00
6,200.0	7.47	236.40	6,162.2	-324.7	-488.7	-255.3	0.00	0.00	0.00
6,300.0	7.47	236.40	6,261.4	-331.9	-499.5	-261.0	0.00	0.00	0.00
6,400.0	7.47	236.40	6,360.5	-339.1	-510.4	-266.6	0.00	0.00	0.00
6,500.0	7.47	236.40	6,459.7	-346.3	-521.2	-272.3	0.00	0.00	0.00
6,600.0	7.47	236.40	6,558.8	-353.5	-532.0	-278.0	0.00	0.00	0.00
6,700.0	7.47	236.40	6,658.0	-360.7	-542.9	-283.6	0.00	0.00	0.00
6,800.0	7.47	236.40	6,757.1	-367.9	-553.7	-289.3	0.00	0.00	0.00
6,900.0	7.47	236.40	6,856.3	-375.1	-564.5	-294.9	0.00	0.00	0.00
7,000.0	7.47	236.40	6,955.4	-382.3	-575.3	-300.6	0.00	0.00	0.00
7,100.0	7.47	236.40	7,054.6	-389.5	-586.2	-306.2	0.00	0.00	0.00
7,142.3	7.47	236.40	7,096.6	-392.5	-590.8	-308.6	0.00	0.00	0.00
7,200.0	6.32	236.40	7,153.8	-396.4	-596.5	-311.6	2.00	-2.00	0.00
7,300.0	4.32	236.40	7,253.4	-401.5	-604.2	-315.7	2.00	-2.00	0.00
7,400.0	2.32	236.40	7,353.2	-404.7	-609.0	-318.2	2.00	-2.00	0.00
7,500.0	0.32	236.40	7,453.2	-406.0	-611.0	-319.2	2.00	-2.00	0.00
7,515.8	0.00	0.00	7,469.0	-406.0	-611.0	-319.2	2.00	-2.00	0.00
7,600.0	0.00	0.00	7,553.2	-406.0	-611.0	-319.2	0.00	0.00	0.00
7,700.0	0.00	0.00	7,653.2	-406.0	-611.0	-319.2	0.00	0.00	0.00
7,800.0	0.00	0.00	7,753.2	-406.0	-611.0	-319.2	0.00	0.00	0.00
7,900.0	0.00	0.00	7,853.2	-406.0	-611.0	-319.2	0.00	0.00	0.00
8,000.0	0.00	0.00	7,953.2	-406.0	-611.0	-319.2	0.00	0.00	0.00
8,100.0	0.00	0.00	8,053.2	-406.0	-611.0	-319.2	0.00	0.00	0.00
8,200.0	0.00	0.00	8,153.2	-406.0	-611.0	-319.2	0.00	0.00	0.00
8,300.0	0.00	0.00	8,253.2	-406.0	-611.0	-319.2	0.00	0.00	0.00
8,400.0	0.00	0.00	8,353.2	-406.0	-611.0	-319.2	0.00	0.00	0.00
8,500.0	0.00	0.00	8,453.2	-406.0	-611.0	-319.2	0.00	0.00	0.00
8,600.0	0.00	0.00	8,553.2	-406.0	-611.0	-319.2	0.00	0.00	0.00
8,700.0	0.00	0.00	8,653.2	-406.0	-611.0	-319.2	0.00	0.00	0.00
8,800.0	0.00	0.00	8,753.2	-406.0	-611.0	-319.2	0.00	0.00	0.00
8,900.0	0.00	0.00	8,853.2	-406.0	-611.0	-319.2	0.00	0.00	0.00
9,000.0	0.00	0.00	8,953.2	-406.0	-611.0	-319.2	0.00	0.00	0.00
9,100.0	0.00	0.00	9,053.2	-406.0	-611.0	-319.2	0.00	0.00	0.00
9,200.0	0.00	0.00	9,153.2	-406.0	-611.0	-319.2	0.00	0.00	0.00
9,300.0	0.00	0.00	9,253.2	-406.0	-611.0	-319.2	0.00	0.00	0.00
9,403.8	0.00	0.00	9,357.0	-406.0	-611.0	-319.2	0.00	0.00	0.00
KOP (Yarrow 32 State #202H)									
9,425.0	2.54	359.59	9,378.2	-405.5	-611.0	-318.8	12.00	12.00	0.00
9,450.0	5.54	359.59	9,403.1	-403.8	-611.0	-317.0	12.00	12.00	0.00
9,475.0	8.54	359.59	9,427.9	-400.7	-611.0	-314.0	12.00	12.00	0.00
9,500.0	11.54	359.59	9,452.5	-396.3	-611.1	-309.6	12.00	12.00	0.00
9,525.0	14.54	359.59	9,476.9	-390.7	-611.1	-304.1	12.00	12.00	0.00
9,550.0	17.54	359.59	9,500.9	-383.8	-611.2	-297.2	12.00	12.00	0.00
9,575.0	20.54	359.59	9,524.5	-375.6	-611.2	-289.1	12.00	12.00	0.00
9,600.0	23.54	359.59	9,547.7	-366.3	-611.3	-279.8	12.00	12.00	0.00



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Yarrow 32 State
Well: #202H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #202H
TVD Reference: KB = 25 @ 3692.0usft
MD Reference: KB = 25 @ 3692.0usft
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)
9,625.0	26.54	359.59	9,570.3	-355.7	-611.4	-269.3	12.00	12.00	0.00
9,650.0	29.54	359.59	9,592.4	-343.9	-611.4	-257.7	12.00	12.00	0.00
9,675.0	32.54	359.59	9,613.8	-331.0	-611.5	-244.9	12.00	12.00	0.00
9,700.0	35.54	359.59	9,634.5	-317.1	-611.6	-231.0	12.00	12.00	0.00
9,725.0	38.54	359.59	9,654.5	-302.0	-611.7	-216.1	12.00	12.00	0.00
9,750.0	41.54	359.59	9,673.6	-285.9	-611.9	-200.1	12.00	12.00	0.00
9,775.0	44.54	359.59	9,691.9	-268.9	-612.0	-183.2	12.00	12.00	0.00
9,800.0	47.54	359.59	9,709.3	-250.9	-612.1	-165.4	12.00	12.00	0.00
9,802.7	47.86	359.59	9,711.1	-248.9	-612.1	-163.4	12.00	12.00	0.00
FTP (Yarrow 32 State #202H)									
9,825.0	50.54	359.59	9,725.6	-232.0	-612.3	-146.6	12.00	12.00	0.00
9,850.0	53.54	359.59	9,741.0	-212.3	-612.4	-127.1	12.00	12.00	0.00
9,875.0	56.54	359.59	9,755.3	-191.8	-612.5	-106.8	12.00	12.00	0.00
9,900.0	59.54	359.59	9,768.6	-170.6	-612.7	-85.8	12.00	12.00	0.00
9,925.0	62.54	359.59	9,780.7	-148.7	-612.9	-64.1	12.00	12.00	0.00
9,950.0	65.54	359.59	9,791.6	-126.2	-613.0	-41.8	12.00	12.00	0.00
9,975.0	68.54	359.59	9,801.4	-103.2	-613.2	-18.9	12.00	12.00	0.00
10,000.0	71.54	359.59	9,809.9	-79.7	-613.4	4.4	12.00	12.00	0.00
10,025.0	74.54	359.59	9,817.2	-55.8	-613.5	28.1	12.00	12.00	0.00
10,050.0	77.54	359.59	9,823.2	-31.6	-613.7	52.1	12.00	12.00	0.00
10,075.0	80.54	359.59	9,828.0	-7.0	-613.9	76.5	12.00	12.00	0.00
10,100.0	83.54	359.59	9,831.4	17.7	-614.1	101.0	12.00	12.00	0.00
10,125.0	86.54	359.59	9,833.6	42.6	-614.2	125.7	12.00	12.00	0.00
10,150.0	89.54	359.59	9,834.4	67.6	-614.4	150.5	12.00	12.00	0.00
10,153.8	90.00	359.59	9,834.5	71.4	-614.4	154.3	12.00	12.00	0.00
10,200.0	90.00	359.59	9,834.5	117.6	-614.8	200.1	0.00	0.00	0.00
10,300.0	90.00	359.59	9,834.5	217.6	-615.5	299.2	0.00	0.00	0.00
10,400.0	90.00	359.59	9,834.5	317.6	-616.2	398.4	0.00	0.00	0.00
10,500.0	90.00	359.59	9,834.5	417.6	-616.9	497.6	0.00	0.00	0.00
10,600.0	90.00	359.59	9,834.5	517.6	-617.7	596.7	0.00	0.00	0.00
10,700.0	90.00	359.59	9,834.5	617.6	-618.4	695.9	0.00	0.00	0.00
10,800.0	90.00	359.59	9,834.5	717.6	-619.1	795.1	0.00	0.00	0.00
10,900.0	90.00	359.59	9,834.5	817.6	-619.8	894.2	0.00	0.00	0.00
11,000.0	90.00	359.59	9,834.5	917.6	-620.5	993.4	0.00	0.00	0.00
11,100.0	90.00	359.59	9,834.5	1,017.6	-621.3	1,092.6	0.00	0.00	0.00
11,200.0	90.00	359.59	9,834.5	1,117.6	-622.0	1,191.7	0.00	0.00	0.00
11,300.0	90.00	359.59	9,834.5	1,217.6	-622.7	1,290.9	0.00	0.00	0.00
11,400.0	90.00	359.59	9,834.5	1,317.6	-623.4	1,390.1	0.00	0.00	0.00
11,500.0	90.00	359.59	9,834.5	1,417.6	-624.2	1,489.2	0.00	0.00	0.00
11,600.0	90.00	359.59	9,834.5	1,517.6	-624.9	1,588.4	0.00	0.00	0.00
11,700.0	90.00	359.59	9,834.5	1,617.6	-625.6	1,687.6	0.00	0.00	0.00
11,800.0	90.00	359.59	9,834.5	1,717.6	-626.3	1,786.8	0.00	0.00	0.00
11,900.0	90.00	359.59	9,834.5	1,817.6	-627.0	1,885.9	0.00	0.00	0.00
12,000.0	90.00	359.59	9,834.5	1,917.6	-627.8	1,985.1	0.00	0.00	0.00
12,100.0	90.00	359.59	9,834.5	2,017.6	-628.5	2,084.3	0.00	0.00	0.00
12,200.0	90.00	359.59	9,834.5	2,117.6	-629.2	2,183.4	0.00	0.00	0.00
12,300.0	90.00	359.59	9,834.5	2,217.6	-629.9	2,282.6	0.00	0.00	0.00
12,400.0	90.00	359.59	9,834.5	2,317.6	-630.6	2,381.8	0.00	0.00	0.00
12,500.0	90.00	359.59	9,834.5	2,417.6	-631.4	2,480.9	0.00	0.00	0.00
12,600.0	90.00	359.59	9,834.5	2,517.6	-632.1	2,580.1	0.00	0.00	0.00
12,700.0	90.00	359.59	9,834.5	2,617.6	-632.8	2,679.3	0.00	0.00	0.00
12,800.0	90.00	359.59	9,834.5	2,717.6	-633.5	2,778.4	0.00	0.00	0.00
12,900.0	90.00	359.59	9,834.5	2,817.6	-634.2	2,877.6	0.00	0.00	0.00
13,000.0	90.00	359.59	9,834.5	2,917.6	-635.0	2,976.8	0.00	0.00	0.00

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #202H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3692.0usft
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3692.0usft
Site:	Yarrow 32 State	North Reference:	Grid
Well:	#202H	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)
13,100.0	90.00	359.59	9,834.5	3,017.5	-635.7	3,075.9	0.00	0.00	0.00
13,200.0	90.00	359.59	9,834.5	3,117.5	-636.4	3,175.1	0.00	0.00	0.00
13,300.0	90.00	359.59	9,834.5	3,217.5	-637.1	3,274.3	0.00	0.00	0.00
13,400.0	90.00	359.59	9,834.5	3,317.5	-637.9	3,373.4	0.00	0.00	0.00
13,500.0	90.00	359.59	9,834.5	3,417.5	-638.6	3,472.6	0.00	0.00	0.00
13,600.0	90.00	359.59	9,834.5	3,517.5	-639.3	3,571.8	0.00	0.00	0.00
13,700.0	90.00	359.59	9,834.5	3,617.5	-640.0	3,670.9	0.00	0.00	0.00
13,800.0	90.00	359.59	9,834.5	3,717.5	-640.7	3,770.1	0.00	0.00	0.00
13,900.0	90.00	359.59	9,834.5	3,817.5	-641.5	3,869.3	0.00	0.00	0.00
14,000.0	90.00	359.59	9,834.5	3,917.5	-642.2	3,968.4	0.00	0.00	0.00
14,100.0	90.00	359.59	9,834.5	4,017.5	-642.9	4,067.6	0.00	0.00	0.00
14,200.0	90.00	359.59	9,834.5	4,117.5	-643.6	4,166.8	0.00	0.00	0.00
14,300.0	90.00	359.59	9,834.5	4,217.5	-644.3	4,266.0	0.00	0.00	0.00
14,400.0	90.00	359.59	9,834.5	4,317.5	-645.1	4,365.1	0.00	0.00	0.00
14,500.0	90.00	359.59	9,834.5	4,417.5	-645.8	4,464.3	0.00	0.00	0.00
14,600.0	90.00	359.59	9,834.5	4,517.5	-646.5	4,563.5	0.00	0.00	0.00
14,700.0	90.00	359.59	9,834.5	4,617.5	-647.2	4,662.6	0.00	0.00	0.00
14,807.5	90.00	359.59	9,834.5	4,725.0	-648.0	4,769.2	0.00	0.00	0.00

PBHL (Yarrow 32 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 (Yarrow 32 State #1 - hit/miss target - Shape - Point)	0.00	0.00	9,357.0	-406.0	-611.0	456,959.00	771,310.00	32° 15' 14.635 N	103° 35' 21.870 W
PBHL (Yarrow 32 State #1 - plan hits target center - Point)	0.00	0.00	9,834.5	4,725.0	-648.0	462,090.00	771,273.00	32° 16' 5.410 N	103° 35' 21.887 W
FTP (Yarrow 32 State #2 - plan misses target center by 163.4usft at 9802.7usft MD (9711.1 TVD, -248.9 N, -612.1 E) - Point)	0.00	0.00	9,834.5	-356.0	-611.0	457,009.00	771,310.00	32° 15' 15.130 N	103° 35' 21.866 W