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
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

WELL API NO. 30-025-43004 ✓
5. Indicate Type of Lease STATE ■ FEE ☐ ✓
6. State Oil & Gas Lease No.

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.)

7. Lease Name or Unit Agreement Name: Leghorn 32 State ✓
1. Type of Well: Oil Well ■ Gas Well ☐ Other
8. Well Number 201H
2. Name of Operator: EOG Resources, Inc. ✓
9. OGRID Number 7377 ✓
3. Address of Operator: P.O. Box 2267 Midland, TX 79702
10. Pool name or Wildcat: Red Tank; Bone Spring, East

OCD – HOBBS
07/22/2016
RECEIVED

4. Well Location
Unit Letter A : 200 feet from the North line and 50 feet from the East line
Section 32 Township 22S Range 33E NMPM County Lea ✓

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 3591' GR

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:	☐			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, Inc. requests an amendment to our approved APD for this well to reflect a change in TVD and well number as shown on the attachments.

TVD change from 15810' MD, 11010' TVD (2nd BS Sand) TO: 14296' MD, 9491' TVD (Upper BS Shale)

Additionally, EOG requests the well number be changed from 501H to 201H to reflect a Upper BS Shale completion.

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 TITLE Regulatory Analyst DATE 7/22/2016

Type or print name Stan Wagner E-mail address: PHONE: 432-686-3689

For State Use Only

APPROVED BY: TITLE **Petroleum Engineer** DATE **07/22/2016**

Conditions of Approval (if any):

KZ

Revised Permit Information 7/21/16:

OCD – HOBBS
07/22/2016
RECEIVED

Well Name: Leghorn 32 State No. 201H

Location:
SL: 200' FNL & 50' FEL, Section 32, T-22-S, R-33-E, Lea Co., N.M.
BHL: 230' FSL & 330' FWL, Section 33, T-22-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 – 1,150'	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'-5,100'	9.625"	40#	HCK-55	LTC	1.125	1.25	1.60
8.75"	0' – 14,296'	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
1,150'	525	13.5	1.75	Class C + 2% CaCl2 + 4% Gel + 0.25 pps Celloflake
	300	14.8	1.34	Class C + 2% CaCl2
5,100'	1300	12.7	1.90	35:65 Poz:Class C + 6% Gel + 3% CaCl2 + 0.5% CPT-45 + 0.45% CPT-20
	375	14.8	1.33	Class C + 0.20% CPT-19
14,296'	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
	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:

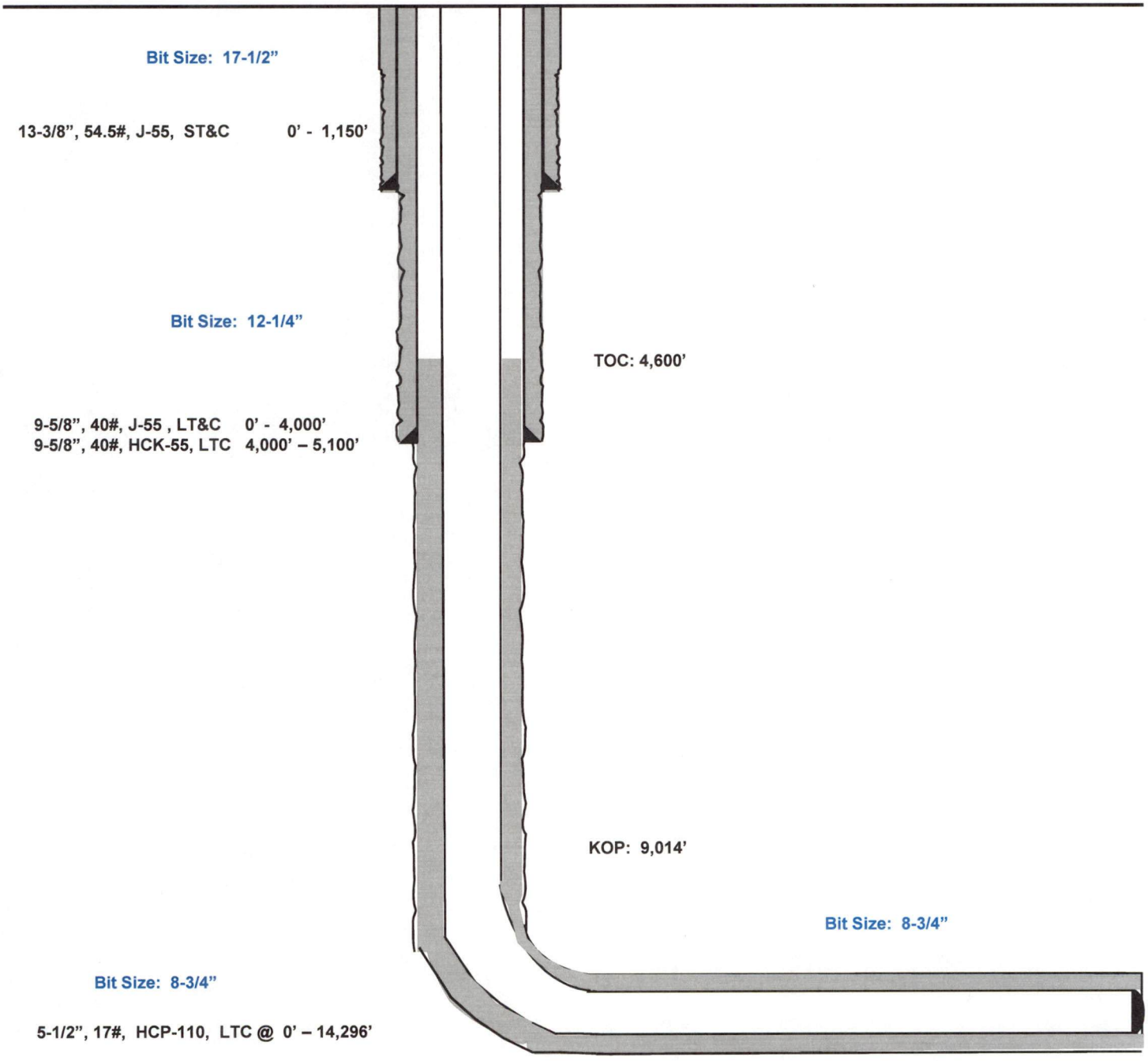
Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1,150'	Fresh - Gel	8.6-8.8	28-34	N/c
1,150' – 5,100'	Brine	8.8-10.0	28-34	N/c
5,100' – 9,014'	Brine	8.8-10.0	28-34	N/c
9,014' – 14,296' Lateral	Brine	8.8-10.0	28-34	N/c

Leghorn 32 State #201H

Lea County, New Mexico
Proposed Wellbore
Revised 7/21/16
API: 30-025-43004

200' FNL
50' FEL
Section 32
T-22-S, R-33-E

KB: 3,616'
GL: 3,591'



Lateral: 14,296' MD, 9,491' TVD

BH Location: 230' FSL & 330' FWL
Section 33
T-22-S, R-33-E

eog resources

Lea County, NM (NAD 27 NME)

Leghorn 32 State #201H

Plan #0.3

PROJECT DETAILS: Lea County, NM (NAD 27 NME)

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

Azimuths to Grid North
True North: -0.40°
Magnetic North: 6.64°

Magnetic Field
Strength: 48083.0snT
Dip Angle: 60.19°
Date: 10/13/2016
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.64°
To convert a Magnetic Direction to a True Direction, Add 7.04° East
To convert a True Direction to a Grid Direction, Subtract 0.40°

WELL DETAILS: #201H

Ground Level: 3591.0
KB = 25 @ 3616.0usft

Northing	Easting	Latitude	Longitude
493618.00	730880.00	32° 21' 17.478 N	103° 35' 8.382 W

SECTION DETAILS

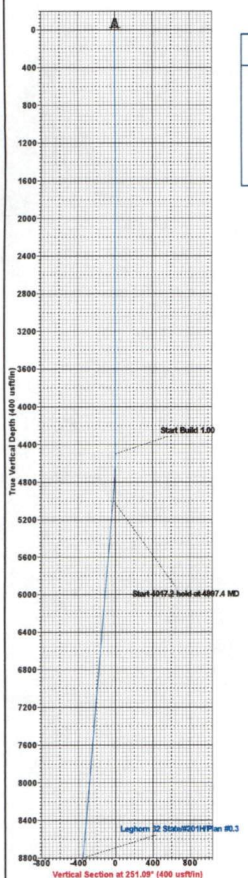
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	4500.0	0.00	0.00	4500.0	0.0	0.0	0.00	0.00	0.0	
3	4997.4	4.97	66.30	4996.8	8.7	19.8	1.00	66.30	-6.9	
4	9014.6	4.97	66.30	8998.9	148.7	338.7	0.00	0.00	-118.1	
5	9780.9	90.00	179.39	9491.0	-328.1	383.1	12.00	113.02	360.7	
6	14296.1	90.00	179.39	9491.0	-4843.0	431.0	0.00	0.00	4862.1	PBHL(LH 32 ST #201H)

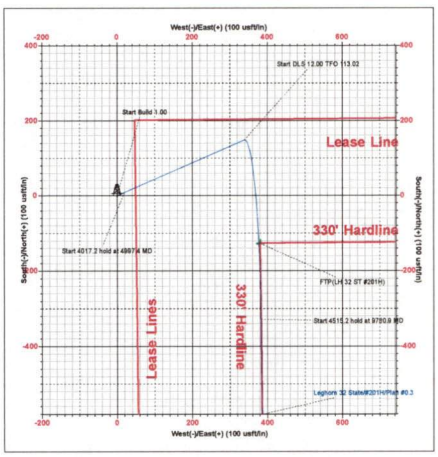
CASING DETAILS

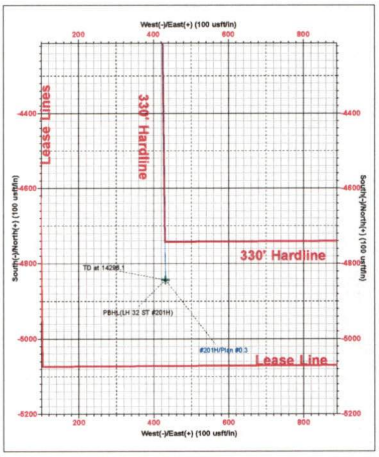
No casing data is available

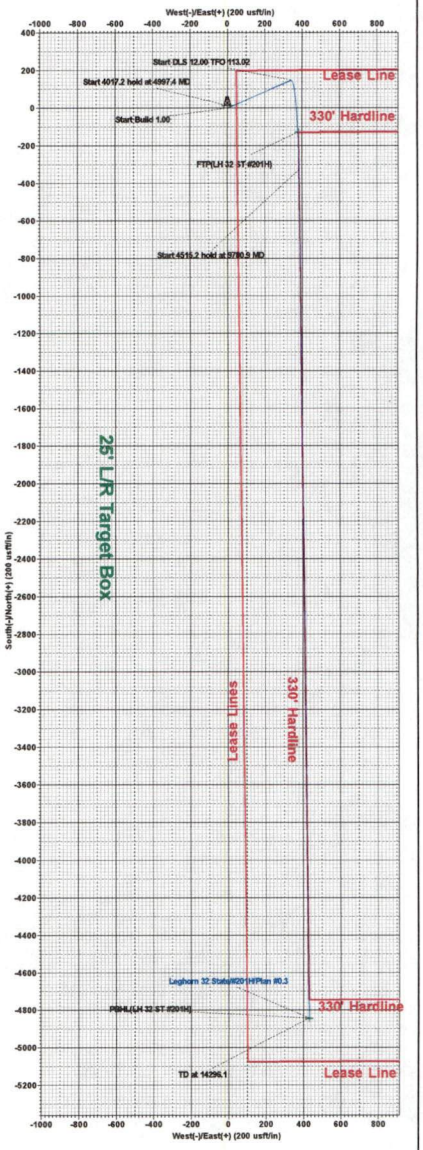
WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

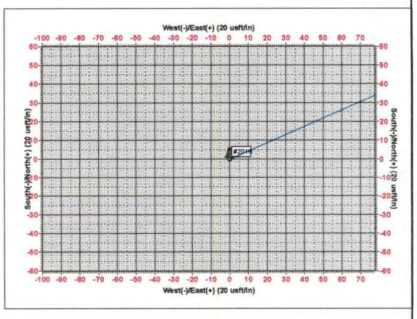
Name	TVD	+N/-S	+E/-W	Northing	Easting
FTP(LH 32 ST #201H)	9491.0	-127.0	381.0	493491.00	731261.00
PBHL(LH 32 ST #201H)	9491.0	-4843.0	431.0	488775.00	731311.00

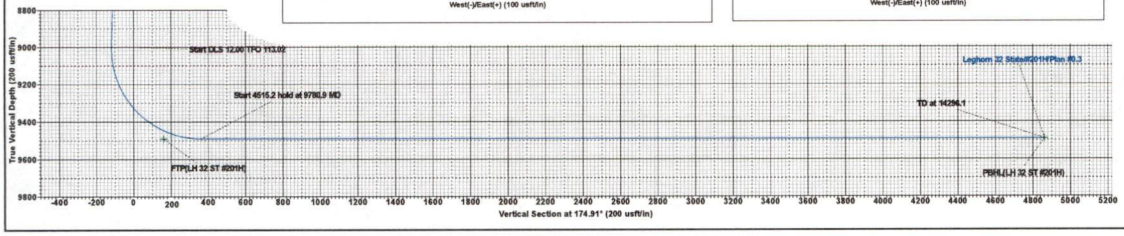












eog resources

EOG Resources - Midland

Lea County, NM (NAD 27 NME)
Leghorn 32 State
#201H

OH

Plan: Plan #0.3

Standard Planning Report

21 July, 2016

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #201H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3616.0usft
Project:	Lea County, NM (NAD 27 NME)	**MD Reference:**	KB = 25 @ 3616.0usft
Site:	Leghorn 32 State	**North Reference:**	Grid
Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.3		

Project	Lea County, NM (NAD 27 NME)		
Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Leghorn 32 State				
Site Position:		**Northing:**	493,618.00 usft	**Latitude:**	32° 21' 17.478 N
From:	Map	**Easting:**	730,880.00 usft	**Longitude:**	103° 35' 8.382 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.40 °

Well	#201H					
Well Position	**+N/-S**	0.0 usft	**Northing:**	493,618.00 usft	**Latitude:**	32° 21' 17.478 N
	+E/-W	0.0 usft	**Easting:**	730,880.00 usft	**Longitude:**	103° 35' 8.382 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	0.0 usft	**Ground Level:**	3,591.0 usft

Wellbore	OH			
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2015	10/13/2016	7.04	60.19	48,083

Design	Plan #0.3				
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	174.91	

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	
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,997.4	4.97	66.30	4,996.8	8.7	19.8	1.00	1.00	0.00	66.30	
9,014.6	4.97	66.30	8,998.9	148.7	338.7	0.00	0.00	0.00	0.00	
9,780.9	90.00	179.39	9,491.0	-328.1	383.1	12.00	11.10	14.76	113.02	
14,296.1	90.00	179.39	9,491.0	-4,843.0	431.0	0.00	0.00	0.00	0.00	PBHL(LH 32 ST #201

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #201H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3616.0usft
Project:	Lea County, NM (NAD 27 NME)	**MD Reference:**	KB = 25 @ 3616.0usft
Site:	Leghorn 32 State	**North Reference:**	Grid
Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.3		

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	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	1.00	66.30	4,600.0	0.4	0.8	-0.3	1.00	1.00	0.00
4,700.0	2.00	66.30	4,700.0	1.4	3.2	-1.1	1.00	1.00	0.00
4,800.0	3.00	66.30	4,799.9	3.2	7.2	-2.5	1.00	1.00	0.00
4,900.0	4.00	66.30	4,899.7	5.6	12.8	-4.5	1.00	1.00	0.00
4,997.4	4.97	66.30	4,996.8	8.7	19.8	-6.9	1.00	1.00	0.00
5,000.0	4.97	66.30	4,999.4	8.8	20.0	-7.0	0.00	0.00	0.00
5,100.0	4.97	66.30	5,099.0	12.2	27.9	-9.7	0.00	0.00	0.00
5,200.0	4.97	66.30	5,198.6	15.7	35.8	-12.5	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #201H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3616.0usft
Project:	Lea County, NM (NAD 27 NME)	**MD Reference:**	KB = 25 @ 3616.0usft
Site:	Leghorn 32 State	**North Reference:**	Grid
Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.3		

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	4.97	66.30	5,298.2	19.2	43.8	-15.3	0.00	0.00	0.00
5,400.0	4.97	66.30	5,397.9	22.7	51.7	-18.0	0.00	0.00	0.00
5,500.0	4.97	66.30	5,497.5	26.2	59.7	-20.8	0.00	0.00	0.00
5,600.0	4.97	66.30	5,597.1	29.7	67.6	-23.6	0.00	0.00	0.00
5,700.0	4.97	66.30	5,696.7	33.2	75.5	-26.3	0.00	0.00	0.00
5,800.0	4.97	66.30	5,796.4	36.6	83.5	-29.1	0.00	0.00	0.00
5,900.0	4.97	66.30	5,896.0	40.1	91.4	-31.9	0.00	0.00	0.00
6,000.0	4.97	66.30	5,995.6	43.6	99.4	-34.6	0.00	0.00	0.00
6,100.0	4.97	66.30	6,095.2	47.1	107.3	-37.4	0.00	0.00	0.00
6,200.0	4.97	66.30	6,194.8	50.6	115.2	-40.2	0.00	0.00	0.00
6,300.0	4.97	66.30	6,294.5	54.1	123.2	-42.9	0.00	0.00	0.00
6,400.0	4.97	66.30	6,394.1	57.6	131.1	-45.7	0.00	0.00	0.00
6,500.0	4.97	66.30	6,493.7	61.0	139.0	-48.5	0.00	0.00	0.00
6,600.0	4.97	66.30	6,593.3	64.5	147.0	-51.2	0.00	0.00	0.00
6,700.0	4.97	66.30	6,693.0	68.0	154.9	-54.0	0.00	0.00	0.00
6,800.0	4.97	66.30	6,792.6	71.5	162.9	-56.8	0.00	0.00	0.00
6,900.0	4.97	66.30	6,892.2	75.0	170.8	-59.6	0.00	0.00	0.00
7,000.0	4.97	66.30	6,991.8	78.5	178.7	-62.3	0.00	0.00	0.00
7,100.0	4.97	66.30	7,091.5	82.0	186.7	-65.1	0.00	0.00	0.00
7,200.0	4.97	66.30	7,191.1	85.4	194.6	-67.9	0.00	0.00	0.00
7,300.0	4.97	66.30	7,290.7	88.9	202.6	-70.6	0.00	0.00	0.00
7,400.0	4.97	66.30	7,390.3	92.4	210.5	-73.4	0.00	0.00	0.00
7,500.0	4.97	66.30	7,490.0	95.9	218.4	-76.2	0.00	0.00	0.00
7,600.0	4.97	66.30	7,589.6	99.4	226.4	-78.9	0.00	0.00	0.00
7,700.0	4.97	66.30	7,689.2	102.9	234.3	-81.7	0.00	0.00	0.00
7,800.0	4.97	66.30	7,788.8	106.4	242.3	-84.5	0.00	0.00	0.00
7,900.0	4.97	66.30	7,888.4	109.8	250.2	-87.2	0.00	0.00	0.00
8,000.0	4.97	66.30	7,988.1	113.3	258.1	-90.0	0.00	0.00	0.00
8,100.0	4.97	66.30	8,087.7	116.8	266.1	-92.8	0.00	0.00	0.00
8,200.0	4.97	66.30	8,187.3	120.3	274.0	-95.5	0.00	0.00	0.00
8,300.0	4.97	66.30	8,286.9	123.8	281.9	-98.3	0.00	0.00	0.00
8,400.0	4.97	66.30	8,386.6	127.3	289.9	-101.1	0.00	0.00	0.00
8,500.0	4.97	66.30	8,486.2	130.8	297.8	-103.8	0.00	0.00	0.00
8,600.0	4.97	66.30	8,585.8	134.2	305.8	-106.6	0.00	0.00	0.00
8,700.0	4.97	66.30	8,685.4	137.7	313.7	-109.4	0.00	0.00	0.00
8,800.0	4.97	66.30	8,785.1	141.2	321.6	-112.1	0.00	0.00	0.00
8,900.0	4.97	66.30	8,884.7	144.7	329.6	-114.9	0.00	0.00	0.00
9,000.0	4.97	66.30	8,984.3	148.2	337.5	-117.7	0.00	0.00	0.00
9,014.6	4.97	66.30	8,998.9	148.7	338.7	-118.1	0.00	0.00	0.00
9,025.0	4.63	80.64	9,009.2	148.9	339.5	-118.3	12.00	-3.31	138.23
9,050.0	5.12	116.07	9,034.1	148.6	341.5	-117.8	12.00	1.96	141.72
9,075.0	7.00	138.67	9,059.0	147.0	343.5	-116.0	12.00	7.50	90.39
9,100.0	9.47	150.70	9,083.7	144.0	345.5	-112.8	12.00	9.89	48.13
9,125.0	12.18	157.62	9,108.3	139.8	347.5	-108.5	12.00	10.84	27.65
9,150.0	15.00	162.00	9,132.6	134.3	349.5	-102.8	12.00	11.28	17.55
9,175.0	17.87	165.02	9,156.6	127.5	351.5	-95.8	12.00	11.51	12.06
9,200.0	20.78	167.22	9,180.1	119.5	353.5	-87.7	12.00	11.64	8.79
9,225.0	23.72	168.89	9,203.3	110.2	355.5	-78.3	12.00	11.73	6.71
9,250.0	26.66	170.22	9,225.9	99.8	357.4	-67.7	12.00	11.79	5.30
9,275.0	29.62	171.30	9,247.9	88.1	359.3	-55.9	12.00	11.83	4.32
9,300.0	32.58	172.20	9,269.4	75.3	361.1	-43.0	12.00	11.86	3.60
9,325.0	35.55	172.96	9,290.1	61.4	362.9	-29.0	12.00	11.88	3.06
9,350.0	38.53	173.62	9,310.0	46.5	364.7	-14.0	12.00	11.89	2.64
9,375.0	41.50	174.20	9,329.2	30.5	366.4	2.1	12.00	11.91	2.32

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #201H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3616.0usft
Project:	Lea County, NM (NAD 27 NME)	**MD Reference:**	KB = 25 @ 3616.0usft
Site:	Leghorn 32 State	**North Reference:**	Grid
Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.3		

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)
9,400.0	44.48	174.72	9,347.4	13.5	368.0	19.1	12.00	11.92	2.06
9,425.0	47.46	175.18	9,364.8	-4.4	369.6	37.1	12.00	11.93	1.85
9,450.0	50.45	175.60	9,381.2	-23.2	371.1	56.0	12.00	11.93	1.68
9,475.0	53.43	175.99	9,396.6	-42.8	372.6	75.6	12.00	11.94	1.55
9,500.0	56.42	176.35	9,411.0	-63.2	373.9	96.1	12.00	11.94	1.43
9,525.0	59.40	176.68	9,424.3	-84.3	375.2	117.3	12.00	11.95	1.33
9,550.0	62.39	176.99	9,436.4	-106.1	376.4	139.1	12.00	11.95	1.25
9,575.0	65.38	177.29	9,447.4	-128.6	377.5	161.5	12.00	11.95	1.19
9,590.8	67.27	177.47	9,453.8	-143.0	378.2	176.0	12.00	11.95	1.14
FTP(LH 32 ST #201H)									
9,600.0	68.37	177.57	9,457.3	-151.5	378.6	184.5	12.00	11.96	1.12
9,625.0	71.36	177.85	9,465.9	-175.0	379.5	207.9	12.00	11.96	1.09
9,650.0	74.35	178.11	9,473.2	-198.8	380.3	231.8	12.00	11.96	1.05
9,675.0	77.34	178.36	9,479.3	-223.1	381.1	256.0	12.00	11.96	1.02
9,700.0	80.33	178.61	9,484.2	-247.6	381.7	280.4	12.00	11.96	1.00
9,725.0	83.32	178.86	9,487.7	-272.3	382.3	305.1	12.00	11.96	0.98
9,750.0	86.31	179.10	9,490.0	-297.2	382.7	330.0	12.00	11.96	0.97
9,775.0	89.30	179.34	9,491.0	-322.2	383.1	354.9	12.00	11.96	0.96
9,780.9	90.00	179.39	9,491.0	-328.1	383.1	360.7	12.00	11.96	0.96
9,800.0	90.00	179.39	9,491.0	-347.2	383.3	379.8	0.00	0.00	0.00
9,900.0	90.00	179.39	9,491.0	-447.2	384.4	479.5	0.00	0.00	0.00
10,000.0	90.00	179.39	9,491.0	-547.2	385.5	579.2	0.00	0.00	0.00
10,100.0	90.00	179.39	9,491.0	-647.2	386.5	678.9	0.00	0.00	0.00
10,200.0	90.00	179.39	9,491.0	-747.2	387.6	778.6	0.00	0.00	0.00
10,300.0	90.00	179.39	9,491.0	-847.2	388.6	878.3	0.00	0.00	0.00
10,400.0	90.00	179.39	9,491.0	-947.2	389.7	978.0	0.00	0.00	0.00
10,500.0	90.00	179.39	9,491.0	-1,047.1	390.8	1,077.7	0.00	0.00	0.00
10,600.0	90.00	179.39	9,491.0	-1,147.1	391.8	1,177.4	0.00	0.00	0.00
10,700.0	90.00	179.39	9,491.0	-1,247.1	392.9	1,277.1	0.00	0.00	0.00
10,800.0	90.00	179.39	9,491.0	-1,347.1	393.9	1,376.7	0.00	0.00	0.00
10,900.0	90.00	179.39	9,491.0	-1,447.1	395.0	1,476.4	0.00	0.00	0.00
11,000.0	90.00	179.39	9,491.0	-1,547.1	396.1	1,576.1	0.00	0.00	0.00
11,100.0	90.00	179.39	9,491.0	-1,647.1	397.1	1,675.8	0.00	0.00	0.00
11,200.0	90.00	179.39	9,491.0	-1,747.1	398.2	1,775.5	0.00	0.00	0.00
11,300.0	90.00	179.39	9,491.0	-1,847.1	399.2	1,875.2	0.00	0.00	0.00
11,400.0	90.00	179.39	9,491.0	-1,947.1	400.3	1,974.9	0.00	0.00	0.00
11,500.0	90.00	179.39	9,491.0	-2,047.1	401.4	2,074.6	0.00	0.00	0.00
11,600.0	90.00	179.39	9,491.0	-2,147.1	402.4	2,174.3	0.00	0.00	0.00
11,700.0	90.00	179.39	9,491.0	-2,247.1	403.5	2,274.0	0.00	0.00	0.00
11,800.0	90.00	179.39	9,491.0	-2,347.1	404.5	2,373.7	0.00	0.00	0.00
11,900.0	90.00	179.39	9,491.0	-2,447.1	405.6	2,473.4	0.00	0.00	0.00
12,000.0	90.00	179.39	9,491.0	-2,547.1	406.7	2,573.1	0.00	0.00	0.00
12,100.0	90.00	179.39	9,491.0	-2,647.1	407.7	2,672.8	0.00	0.00	0.00
12,200.0	90.00	179.39	9,491.0	-2,747.1	408.8	2,772.5	0.00	0.00	0.00
12,300.0	90.00	179.39	9,491.0	-2,847.0	409.8	2,872.2	0.00	0.00	0.00
12,400.0	90.00	179.39	9,491.0	-2,947.0	410.9	2,971.9	0.00	0.00	0.00
12,500.0	90.00	179.39	9,491.0	-3,047.0	412.0	3,071.6	0.00	0.00	0.00
12,600.0	90.00	179.39	9,491.0	-3,147.0	413.0	3,171.3	0.00	0.00	0.00
12,700.0	90.00	179.39	9,491.0	-3,247.0	414.1	3,270.9	0.00	0.00	0.00
12,800.0	90.00	179.39	9,491.0	-3,347.0	415.1	3,370.6	0.00	0.00	0.00
12,900.0	90.00	179.39	9,491.0	-3,447.0	416.2	3,470.3	0.00	0.00	0.00
13,000.0	90.00	179.39	9,491.0	-3,547.0	417.3	3,570.0	0.00	0.00	0.00
13,100.0	90.00	179.39	9,491.0	-3,647.0	418.3	3,669.7	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well #201H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3616.0usft
Project:	Lea County, NM (NAD 27 NME)	**MD Reference:**	KB = 25 @ 3616.0usft
Site:	Leghorn 32 State	**North Reference:**	Grid
Well:	#201H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #0.3		

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	179.39	9,491.0	-3,747.0	419.4	3,769.4	0.00	0.00	0.00
13,300.0	90.00	179.39	9,491.0	-3,847.0	420.4	3,869.1	0.00	0.00	0.00
13,400.0	90.00	179.39	9,491.0	-3,947.0	421.5	3,968.8	0.00	0.00	0.00
13,500.0	90.00	179.39	9,491.0	-4,047.0	422.6	4,068.5	0.00	0.00	0.00
13,600.0	90.00	179.39	9,491.0	-4,147.0	423.6	4,168.2	0.00	0.00	0.00
13,700.0	90.00	179.39	9,491.0	-4,247.0	424.7	4,267.9	0.00	0.00	0.00
13,800.0	90.00	179.39	9,491.0	-4,347.0	425.7	4,367.6	0.00	0.00	0.00
13,900.0	90.00	179.39	9,491.0	-4,447.0	426.8	4,467.3	0.00	0.00	0.00
14,000.0	90.00	179.39	9,491.0	-4,547.0	427.9	4,567.0	0.00	0.00	0.00
14,100.0	90.00	179.39	9,491.0	-4,646.9	428.9	4,666.7	0.00	0.00	0.00
14,200.0	90.00	179.39	9,491.0	-4,746.9	430.0	4,766.4	0.00	0.00	0.00
14,296.1	90.00	179.39	9,491.0	-4,843.0	431.0	4,862.1	0.00	0.00	0.00
PBHL(LH 32 ST #201H)									

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
FTP(LH 32 ST #201H)	0.00	0.01	9,491.0	-127.0	381.0	493,491.00	731,261.00	32° 21' 16.195 N	103° 35' 3.951 W
- plan misses target center by 40.6usft at 9590.8usft MD (9453.8 TVD, -143.0 N, 378.2 E)									
- Point									
PBHL(LH 32 ST #201H)	0.00	0.01	9,491.0	-4,843.0	431.0	488,775.00	731,311.00	32° 20' 29.526 N	103° 35' 3.753 W
- plan hits target center									
- Point									