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

HOBBS OCD
RECEIVED
FEB 03 2020

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. 30-025-46752

5. Indicate Type of Lease STATE [X] FEE [ ]

6. State Oil & Gas Lease No. 320561

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: HEMLOCK 32 STATE

1. Type of Well: Oil Well [X] Gas Well [ ] Other

8. Well Number 201H

2. Name of Operator: EOG RESOURCES

9. OGRID Number 7377

3. Address of Operator: P O BOX 2267, MIDLAND TX 79702

10. Pool name or Wildcat: 59900 TRIPLE X; BONE SPRING

4. Well Location
Unit Letter M : 304 feet from the SOUTH line and 501 feet from the WEST line
Section 32 Township 23S Range 33E NMPM County LEA CO, NM

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 3661 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	[X]	COMMENCE DRILLING OPNS.	[X]	P AND A	[ ]
PULL OR ALTER CASING	[ ]	MULTIPLE COMPL	[ ]	CASING/CEMENT JOB	[X]		
DOWNHOLE COMMINGLE	[ ]						
CLOSED-LOOP SYSTEM	[ ]						
OTHER:	[ ]			OTHER: CEMENT CHANGE			[X]

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 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 [signature] TITLE Sr. Regulatory Administrator DATE 01/30/2020

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

For State Use Only

APPROVED BY: [signature] TITLE Petroleum Engineer DATE 02/03/2020

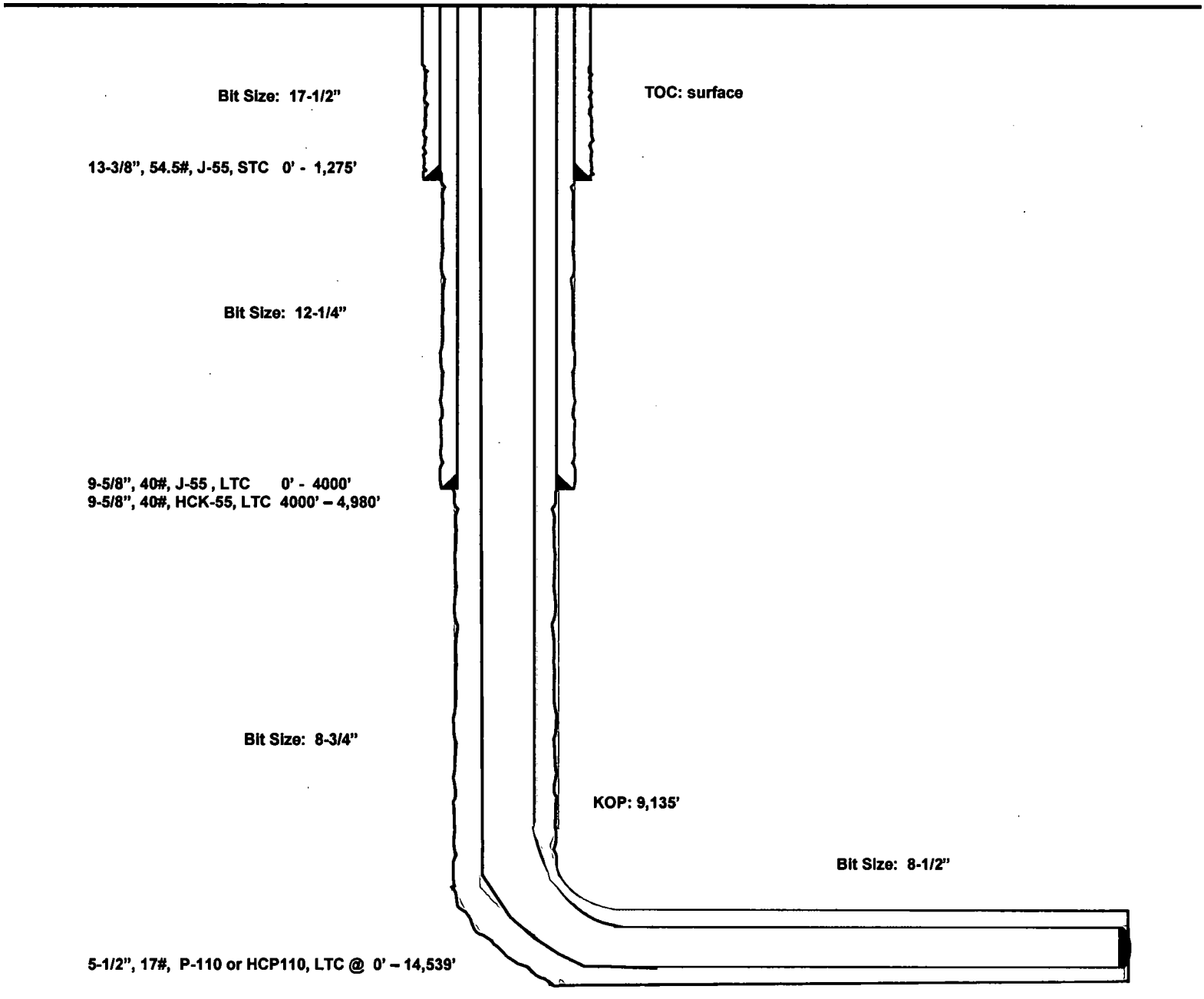
Conditions of Approval (if any):

Hemlock 32 State #201H
Lea County, New Mexico

Revised Wellbore
1/30/2020
API: 30-025-46752

304' FSL
501' FWL
Section 32
T-23-S, R-33-E

KB: 3,686'
GL: 3,661'



Lateral: 14,539' MD, 9,605' TVD
BH Location: 100' FNL & 330' FWL
Section 32
T-23-S, R-33-E

EOG RESOURCES, INC.
HEMLOCK 32 STATE #201H

Revised Permit Information:

Well Name: Hemlock 32 State #201H

Location:
SHL: 304' FSL & 501' FWL, Section 32, T-23-S, R-33-E, Lea Co., N.M.
BHL: 100' FNL & 330' FWL, Section 32, T-23-S, R-33-E, Lea Co., N.M.

Cement Program:

Depth	No. Sacks	Wt. ppg	Yld Ft^3/ft	Slurry Description
1,275'	790	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
4,980'	500	9.0	3.5	Lead: Class C + 10% NaCl + 6% Bentonite Gel + 3% MagOx (TOC @ Surface)
	350	14.4	1.20	Tail: Class C + 10% NaCl + 3% MagOx
14,539'	1,800	14.4	1.31	1st Stage (Tail): Class H + 5% Salt (TOC @ 7,400')
	1,400	12.7	3.21	2nd Stage (Bradenhead squeeze): Class C + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (TOC @ Surface)

eog resources

EOG Resources - Midland

Lea County, NM (NAD 83 NME)
Hemlock 32 State
#201H

OH

Plan: Plan #0.1

Standard Planning Report

13 January, 2020

Database:	EDM	**Local Co-ordinate Reference:**	Well #201H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3686.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	KB = 25 @ 3686.0usft
Site:	Hemlock 32 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	Hemlock 32 State				
Site Position:		**Northing:**	457,257.00 usft	**Latitude:**	32° 15' 17.825 N
From:	Map	**Easting:**	767,769.00 usft	**Longitude:**	103° 36' 3.080 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.39 °

Well	#201H					
Well Position	**+N/-S**	-60.0 usft	**Northing:**	457,197.00 usft	**Latitude:**	32° 15' 17.239 N
	+E/-W	-126.0 usft	**Easting:**	767,643.00 usft	**Longitude:**	103° 36' 4.552 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**		**Ground Level:**	3,661.0 usft

Wellbore	OH			
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2015	1/13/2020	6.69	60.05	47,686.70233109

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	357.60

Plan Survey Tool Program **Date** 1/13/2020

	Depth From (usft)	**Depth To (usft)**	**Survey (Wellbore)**	**Tool Name**	**Remarks**
1	0.0	14,538.9	Plan #0.1 (OH)	EOG MWD+IFR1	
				MWD + IFR1	

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	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,546.7	2.93	213.53	1,546.6	-3.1	-2.1	2.00	2.00	0.00	213.53	
7,376.1	2.93	213.53	7,368.4	-251.9	-166.9	0.00	0.00	0.00	0.00	
7,522.8	0.00	0.00	7,515.0	-255.0	-169.0	2.00	-2.00	0.00	180.00	
9,135.3	0.00	0.00	9,127.5	-255.0	-169.0	0.00	0.00	0.00	0.00	KOP(Hemlock 32 Stat
9,885.3	90.00	359.61	9,605.0	222.5	-172.3	12.00	12.00	-0.05	359.61	
14,538.9	90.00	359.61	9,605.0	4,876.0	-204.0	0.00	0.00	0.00	0.00	PBHL(Hemlock 32 St

Database:	EDM	**Local Co-ordinate Reference:**	Well #201H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3686.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	KB = 25 @ 3686.0usft
Site:	Hemlock 32 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)
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	2.00	213.53	1,500.0	-1.5	-1.0	-1.4	2.00	2.00	0.00
1,546.7	2.93	213.53	1,546.6	-3.1	-2.1	-3.0	2.00	2.00	0.00
1,600.0	2.93	213.53	1,599.9	-5.4	-3.6	-5.3	0.00	0.00	0.00
1,700.0	2.93	213.53	1,699.7	-9.7	-6.4	-9.4	0.00	0.00	0.00
1,800.0	2.93	213.53	1,799.6	-13.9	-9.2	-13.5	0.00	0.00	0.00
1,900.0	2.93	213.53	1,899.5	-18.2	-12.1	-17.7	0.00	0.00	0.00
2,000.0	2.93	213.53	1,999.3	-22.5	-14.9	-21.8	0.00	0.00	0.00
2,100.0	2.93	213.53	2,099.2	-26.7	-17.7	-26.0	0.00	0.00	0.00
2,200.0	2.93	213.53	2,199.1	-31.0	-20.5	-30.1	0.00	0.00	0.00
2,300.0	2.93	213.53	2,298.9	-35.3	-23.4	-34.3	0.00	0.00	0.00
2,400.0	2.93	213.53	2,398.8	-39.5	-26.2	-38.4	0.00	0.00	0.00
2,500.0	2.93	213.53	2,498.7	-43.8	-29.0	-42.6	0.00	0.00	0.00
2,600.0	2.93	213.53	2,598.6	-48.1	-31.9	-46.7	0.00	0.00	0.00
2,700.0	2.93	213.53	2,698.4	-52.3	-34.7	-50.8	0.00	0.00	0.00
2,800.0	2.93	213.53	2,798.3	-56.6	-37.5	-55.0	0.00	0.00	0.00
2,900.0	2.93	213.53	2,898.2	-60.9	-40.3	-59.1	0.00	0.00	0.00
3,000.0	2.93	213.53	2,998.0	-65.1	-43.2	-63.3	0.00	0.00	0.00
3,100.0	2.93	213.53	3,097.9	-69.4	-46.0	-67.4	0.00	0.00	0.00
3,200.0	2.93	213.53	3,197.8	-73.7	-48.8	-71.6	0.00	0.00	0.00
3,300.0	2.93	213.53	3,297.6	-77.9	-51.7	-75.7	0.00	0.00	0.00
3,400.0	2.93	213.53	3,397.5	-82.2	-54.5	-79.9	0.00	0.00	0.00
3,500.0	2.93	213.53	3,497.4	-86.5	-57.3	-84.0	0.00	0.00	0.00
3,600.0	2.93	213.53	3,597.2	-90.7	-60.1	-88.2	0.00	0.00	0.00
3,700.0	2.93	213.53	3,697.1	-95.0	-63.0	-92.3	0.00	0.00	0.00
3,800.0	2.93	213.53	3,797.0	-99.3	-65.8	-96.4	0.00	0.00	0.00
3,900.0	2.93	213.53	3,896.9	-103.5	-68.6	-100.6	0.00	0.00	0.00
4,000.0	2.93	213.53	3,996.7	-107.8	-71.5	-104.7	0.00	0.00	0.00
4,100.0	2.93	213.53	4,096.6	-112.1	-74.3	-108.9	0.00	0.00	0.00
4,200.0	2.93	213.53	4,196.5	-116.3	-77.1	-113.0	0.00	0.00	0.00
4,300.0	2.93	213.53	4,296.3	-120.6	-79.9	-117.2	0.00	0.00	0.00
4,400.0	2.93	213.53	4,396.2	-124.9	-82.8	-121.3	0.00	0.00	0.00
4,500.0	2.93	213.53	4,496.1	-129.1	-85.6	-125.5	0.00	0.00	0.00
4,600.0	2.93	213.53	4,595.9	-133.4	-88.4	-129.6	0.00	0.00	0.00
4,700.0	2.93	213.53	4,695.8	-137.7	-91.2	-133.7	0.00	0.00	0.00
4,800.0	2.93	213.53	4,795.7	-141.9	-94.1	-137.9	0.00	0.00	0.00
4,900.0	2.93	213.53	4,895.5	-146.2	-96.9	-142.0	0.00	0.00	0.00
5,000.0	2.93	213.53	4,995.4	-150.5	-99.7	-146.2	0.00	0.00	0.00
5,100.0	2.93	213.53	5,095.3	-154.7	-102.6	-150.3	0.00	0.00	0.00
5,200.0	2.93	213.53	5,195.1	-159.0	-105.4	-154.5	0.00	0.00	0.00

Database:	EDM	**Local Co-ordinate Reference:**	Well #201H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3686.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	KB = 25 @ 3686.0usft
Site:	Hemlock 32 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)
5,300.0	2.93	213.53	5,295.0	-163.3	-108.2	-158.6	0.00	0.00	0.00
5,400.0	2.93	213.53	5,394.9	-167.6	-111.0	-162.8	0.00	0.00	0.00
5,500.0	2.93	213.53	5,494.8	-171.8	-113.9	-166.9	0.00	0.00	0.00
5,600.0	2.93	213.53	5,594.6	-176.1	-116.7	-171.1	0.00	0.00	0.00
5,700.0	2.93	213.53	5,694.5	-180.4	-119.5	-175.2	0.00	0.00	0.00
5,800.0	2.93	213.53	5,794.4	-184.6	-122.4	-179.3	0.00	0.00	0.00
5,900.0	2.93	213.53	5,894.2	-188.9	-125.2	-183.5	0.00	0.00	0.00
6,000.0	2.93	213.53	5,994.1	-193.2	-128.0	-187.6	0.00	0.00	0.00
6,100.0	2.93	213.53	6,094.0	-197.4	-130.8	-191.8	0.00	0.00	0.00
6,200.0	2.93	213.53	6,193.8	-201.7	-133.7	-195.9	0.00	0.00	0.00
6,300.0	2.93	213.53	6,293.7	-206.0	-136.5	-200.1	0.00	0.00	0.00
6,400.0	2.93	213.53	6,393.6	-210.2	-139.3	-204.2	0.00	0.00	0.00
6,500.0	2.93	213.53	6,493.4	-214.5	-142.2	-208.4	0.00	0.00	0.00
6,600.0	2.93	213.53	6,593.3	-218.8	-145.0	-212.5	0.00	0.00	0.00
6,700.0	2.93	213.53	6,693.2	-223.0	-147.8	-216.6	0.00	0.00	0.00
6,800.0	2.93	213.53	6,793.0	-227.3	-150.6	-220.8	0.00	0.00	0.00
6,900.0	2.93	213.53	6,892.9	-231.6	-153.5	-224.9	0.00	0.00	0.00
7,000.0	2.93	213.53	6,992.8	-235.8	-156.3	-229.1	0.00	0.00	0.00
7,100.0	2.93	213.53	7,092.7	-240.1	-159.1	-233.2	0.00	0.00	0.00
7,200.0	2.93	213.53	7,192.5	-244.4	-161.9	-237.4	0.00	0.00	0.00
7,300.0	2.93	213.53	7,292.4	-248.6	-164.8	-241.5	0.00	0.00	0.00
7,376.1	2.93	213.53	7,368.4	-251.9	-166.9	-244.7	0.00	0.00	0.00
7,400.0	2.46	213.53	7,392.3	-252.8	-167.5	-245.6	2.00	-2.00	0.00
7,500.0	0.46	213.53	7,492.2	-254.9	-169.0	-247.6	2.00	-2.00	0.00
7,522.8	0.00	0.00	7,515.0	-255.0	-169.0	-247.7	2.00	-2.00	0.00
7,600.0	0.00	0.00	7,592.2	-255.0	-169.0	-247.7	0.00	0.00	0.00
7,700.0	0.00	0.00	7,692.2	-255.0	-169.0	-247.7	0.00	0.00	0.00
7,800.0	0.00	0.00	7,792.2	-255.0	-169.0	-247.7	0.00	0.00	0.00
7,900.0	0.00	0.00	7,892.2	-255.0	-169.0	-247.7	0.00	0.00	0.00
8,000.0	0.00	0.00	7,992.2	-255.0	-169.0	-247.7	0.00	0.00	0.00
8,100.0	0.00	0.00	8,092.2	-255.0	-169.0	-247.7	0.00	0.00	0.00
8,200.0	0.00	0.00	8,192.2	-255.0	-169.0	-247.7	0.00	0.00	0.00
8,300.0	0.00	0.00	8,292.2	-255.0	-169.0	-247.7	0.00	0.00	0.00
8,400.0	0.00	0.00	8,392.2	-255.0	-169.0	-247.7	0.00	0.00	0.00
8,500.0	0.00	0.00	8,492.2	-255.0	-169.0	-247.7	0.00	0.00	0.00
8,600.0	0.00	0.00	8,592.2	-255.0	-169.0	-247.7	0.00	0.00	0.00
8,700.0	0.00	0.00	8,692.2	-255.0	-169.0	-247.7	0.00	0.00	0.00
8,800.0	0.00	0.00	8,792.2	-255.0	-169.0	-247.7	0.00	0.00	0.00
8,900.0	0.00	0.00	8,892.2	-255.0	-169.0	-247.7	0.00	0.00	0.00
9,000.0	0.00	0.00	8,992.2	-255.0	-169.0	-247.7	0.00	0.00	0.00
9,100.0	0.00	0.00	9,092.2	-255.0	-169.0	-247.7	0.00	0.00	0.00
9,135.3	0.00	0.00	9,127.5	-255.0	-169.0	-247.7	0.00	0.00	0.00
9,150.0	1.77	359.61	9,142.2	-254.8	-169.0	-247.5	12.00	12.00	0.00
9,175.0	4.77	359.61	9,167.2	-253.3	-169.0	-246.1	12.00	12.00	0.00
9,200.0	7.77	359.61	9,192.0	-250.6	-169.0	-243.3	12.00	12.00	0.00
9,225.0	10.77	359.61	9,216.7	-246.6	-169.1	-239.3	12.00	12.00	0.00
9,250.0	13.77	359.61	9,241.1	-241.3	-169.1	-234.0	12.00	12.00	0.00
9,275.0	16.77	359.61	9,265.2	-234.7	-169.1	-227.4	12.00	12.00	0.00
9,300.0	19.77	359.61	9,289.0	-226.9	-169.2	-219.6	12.00	12.00	0.00
9,325.0	22.77	359.61	9,312.3	-217.8	-169.3	-210.5	12.00	12.00	0.00
9,350.0	25.77	359.61	9,335.1	-207.5	-169.3	-200.3	12.00	12.00	0.00
9,375.0	28.77	359.61	9,357.3	-196.1	-169.4	-188.8	12.00	12.00	0.00
9,400.0	31.77	359.61	9,378.9	-183.5	-169.5	-176.2	12.00	12.00	0.00
9,425.0	34.77	359.61	9,399.8	-169.8	-169.6	-162.5	12.00	12.00	0.00

Database:	EDM	**Local Co-ordinate Reference:**	Well #201H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3686.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	KB = 25 @ 3686.0usft
Site:	Hemlock 32 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)
9,450.0	37.77	359.61	9,419.9	-155.0	-169.7	-147.7	12.00	12.00	0.00
9,475.0	40.77	359.61	9,439.3	-139.2	-169.8	-131.9	12.00	12.00	0.00
9,500.0	43.77	359.61	9,457.8	-122.3	-169.9	-115.1	12.00	12.00	0.00
9,525.0	46.77	359.61	9,475.4	-104.6	-170.0	-97.4	12.00	12.00	0.00
9,550.0	49.77	359.61	9,492.0	-85.9	-170.2	-78.7	12.00	12.00	0.00
9,575.0	52.77	359.61	9,507.7	-66.4	-170.3	-59.3	12.00	12.00	0.00
9,600.0	55.77	359.61	9,522.2	-46.1	-170.4	-39.0	12.00	12.00	0.00
9,625.0	58.77	359.61	9,535.8	-25.1	-170.6	-18.0	12.00	12.00	0.00
9,650.0	61.77	359.61	9,548.2	-3.4	-170.7	3.7	12.00	12.00	0.00
9,675.0	64.77	359.61	9,559.4	18.9	-170.9	26.0	12.00	12.00	0.00
9,700.0	67.77	359.61	9,569.5	41.8	-171.0	48.9	12.00	12.00	0.00
9,725.0	70.77	359.61	9,578.3	65.2	-171.2	72.3	12.00	12.00	0.00
9,750.0	73.77	359.61	9,585.9	89.0	-171.3	96.1	12.00	12.00	0.00
9,775.0	76.77	359.61	9,592.3	113.2	-171.5	120.2	12.00	12.00	0.00
9,800.0	79.77	359.61	9,597.4	137.6	-171.7	144.7	12.00	12.00	0.00
9,825.0	82.77	359.61	9,601.2	162.3	-171.8	169.4	12.00	12.00	0.00
9,850.0	85.77	359.61	9,603.7	187.2	-172.0	194.2	12.00	12.00	0.00
9,875.0	88.77	359.61	9,604.9	212.2	-172.2	219.2	12.00	12.00	0.00
9,885.3	90.00	359.61	9,605.0	222.5	-172.3	229.5	12.00	12.00	0.00
9,900.0	90.00	359.61	9,605.0	237.2	-172.4	244.2	0.00	0.00	0.00
10,000.0	90.00	359.61	9,605.0	337.2	-173.0	344.1	0.00	0.00	0.00
10,100.0	90.00	359.61	9,605.0	437.2	-173.7	444.1	0.00	0.00	0.00
10,200.0	90.00	359.61	9,605.0	537.2	-174.4	544.0	0.00	0.00	0.00
10,300.0	90.00	359.61	9,605.0	637.2	-175.1	643.9	0.00	0.00	0.00
10,400.0	90.00	359.61	9,605.0	737.2	-175.8	743.9	0.00	0.00	0.00
10,500.0	90.00	359.61	9,605.0	837.2	-176.4	843.8	0.00	0.00	0.00
10,600.0	90.00	359.61	9,605.0	937.2	-177.1	943.8	0.00	0.00	0.00
10,700.0	90.00	359.61	9,605.0	1,037.2	-177.8	1,043.7	0.00	0.00	0.00
10,800.0	90.00	359.61	9,605.0	1,137.2	-178.5	1,143.6	0.00	0.00	0.00
10,900.0	90.00	359.61	9,605.0	1,237.2	-179.2	1,243.6	0.00	0.00	0.00
11,000.0	90.00	359.61	9,605.0	1,337.2	-179.9	1,343.5	0.00	0.00	0.00
11,100.0	90.00	359.61	9,605.0	1,437.2	-180.5	1,443.4	0.00	0.00	0.00
11,200.0	90.00	359.61	9,605.0	1,537.2	-181.2	1,543.4	0.00	0.00	0.00
11,300.0	90.00	359.61	9,605.0	1,637.1	-181.9	1,643.3	0.00	0.00	0.00
11,400.0	90.00	359.61	9,605.0	1,737.1	-182.6	1,743.3	0.00	0.00	0.00
11,500.0	90.00	359.61	9,605.0	1,837.1	-183.3	1,843.2	0.00	0.00	0.00
11,600.0	90.00	359.61	9,605.0	1,937.1	-184.0	1,943.1	0.00	0.00	0.00
11,700.0	90.00	359.61	9,605.0	2,037.1	-184.6	2,043.1	0.00	0.00	0.00
11,800.0	90.00	359.61	9,605.0	2,137.1	-185.3	2,143.0	0.00	0.00	0.00
11,900.0	90.00	359.61	9,605.0	2,237.1	-186.0	2,243.0	0.00	0.00	0.00
12,000.0	90.00	359.61	9,605.0	2,337.1	-186.7	2,342.9	0.00	0.00	0.00
12,100.0	90.00	359.61	9,605.0	2,437.1	-187.4	2,442.8	0.00	0.00	0.00
12,200.0	90.00	359.61	9,605.0	2,537.1	-188.0	2,542.8	0.00	0.00	0.00
12,300.0	90.00	359.61	9,605.0	2,637.1	-188.7	2,642.7	0.00	0.00	0.00
12,400.0	90.00	359.61	9,605.0	2,737.1	-189.4	2,742.6	0.00	0.00	0.00
12,500.0	90.00	359.61	9,605.0	2,837.1	-190.1	2,842.6	0.00	0.00	0.00
12,600.0	90.00	359.61	9,605.0	2,937.1	-190.8	2,942.5	0.00	0.00	0.00
12,700.0	90.00	359.61	9,605.0	3,037.1	-191.5	3,042.5	0.00	0.00	0.00
12,800.0	90.00	359.61	9,605.0	3,137.1	-192.1	3,142.4	0.00	0.00	0.00
12,900.0	90.00	359.61	9,605.0	3,237.1	-192.8	3,242.3	0.00	0.00	0.00
13,000.0	90.00	359.61	9,605.0	3,337.1	-193.5	3,342.3	0.00	0.00	0.00
13,100.0	90.00	359.61	9,605.0	3,437.1	-194.2	3,442.2	0.00	0.00	0.00
13,200.0	90.00	359.61	9,605.0	3,537.1	-194.9	3,542.2	0.00	0.00	0.00
13,300.0	90.00	359.61	9,605.0	3,637.1	-195.5	3,642.1	0.00	0.00	0.00

Database:	EDM	**Local Co-ordinate Reference:**	Well #201H
Company:	EOG Resources - Midland	**TVD Reference:**	KB = 25 @ 3686.0usft
Project:	Lea County, NM (NAD 83 NME)	**MD Reference:**	KB = 25 @ 3686.0usft
Site:	Hemlock 32 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)
13,400.0	90.00	359.61	9,605.0	3,737.1	-196.2	3,742.0	0.00	0.00	0.00
13,500.0	90.00	359.61	9,605.0	3,837.1	-196.9	3,842.0	0.00	0.00	0.00
13,600.0	90.00	359.61	9,605.0	3,937.1	-197.6	3,941.9	0.00	0.00	0.00
13,700.0	90.00	359.61	9,605.0	4,037.1	-198.3	4,041.9	0.00	0.00	0.00
13,800.0	90.00	359.61	9,605.0	4,137.1	-199.0	4,141.8	0.00	0.00	0.00
13,900.0	90.00	359.61	9,605.0	4,237.1	-199.6	4,241.7	0.00	0.00	0.00
14,000.0	90.00	359.61	9,605.0	4,337.1	-200.3	4,341.7	0.00	0.00	0.00
14,100.0	90.00	359.61	9,605.0	4,437.1	-201.0	4,441.6	0.00	0.00	0.00
14,200.0	90.00	359.61	9,605.0	4,537.1	-201.7	4,541.5	0.00	0.00	0.00
14,300.0	90.00	359.61	9,605.0	4,637.1	-202.4	4,641.5	0.00	0.00	0.00
14,400.0	90.00	359.61	9,605.0	4,737.1	-203.1	4,741.4	0.00	0.00	0.00
14,500.0	90.00	359.61	9,605.0	4,837.1	-203.7	4,841.4	0.00	0.00	0.00
14,538.9	90.00	359.61	9,605.0	4,876.0	-204.0	4,880.3	0.00	0.00	0.00

Design Targets

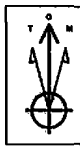
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP(Hemlock 32 State ; - plan hits target center - Point	0.00	0.00	9,127.5	-255.0	-169.0	456,942.00	767,474.00	32° 15' 14.728 N	103° 36' 6.540 W
PBHL(Hemlock 32 State - plan hits target center - Point	0.00	0.00	9,605.0	4,876.0	-204.0	462,073.00	767,439.00	32° 16' 5.502 N	103° 36' 6.541 W
FTP(Hemlock 32 State # - plan misses target center by 163.4usft at 9536.3usft MD (9483.0 TVD, -96.2 N, -170.1 E) - Point	0.00	0.00	9,605.0	-205.0	-169.0	456,992.00	767,474.00	32° 15' 15.222 N	103° 36' 6.536 W

eog resources

Lea County, NM (NAD 83 NME)

Hemlock 32 State #201H

Plan #0.1



Azimuths to Grid North
True North: -0.39°
Magnetic North: 6.30°

Magnetic Field
Strength: 47686.7nT
Dip Angle: 60.05°
Date: 1/13/2020
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.30°
To convert a Magnetic Direction to a True Direction, Add 6.69° East
To convert a True Direction to a Grid Direction, Subtract 0.39°

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

3661.0
KB = 25 @ 3686.0usft

Northing	Easting	Latitude	Longitude
457197.00	767643.00	32° 15' 17.239 N	103° 36' 4.552 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	1400.0	0.00	0.00	1400.0	0.0	0.0	0.00	0.00	0.0	
3	1546.7	2.93	213.53	1546.6	-3.1	-2.1	2.00	213.53	-3.0	
4	7376.1	2.93	213.53	7368.4	-251.9	-166.9	0.00	0.00	-244.7	
5	7522.8	0.00	0.00	7515.0	-255.0	-169.0	2.00	180.00	-247.7	
6	9135.3	0.00	0.00	9127.5	-255.0	-169.0	0.00	0.00	-247.7	KOP(Hemlock 32 State #201H)
7	9885.3	90.00	359.61	9605.0	222.5	-172.3	12.00	359.61	229.5	
8	14538.9	90.00	359.61	9605.0	4876.0	-204.0	0.00	0.00	4880.3	PBHL(Hemlock 32 State #201H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP(Hemlock 32 State #201H)	9127.5	-255.0	-169.0	456942.00	767474.00
PBHL(Hemlock 32 State #201H)	9605.0	4876.0	-204.0	462073.00	767439.00
FTP(Hemlock 32 State #201H)	9605.0	-205.0	-169.0	456992.00	767474.00