

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources
Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

FORM C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-46755	² Pool Code 59900	³ Pool Name TRIPLE X; BONE SPRING
⁴ Property Code 320561	⁵ Property Name HEMLOCK 32 STATE	⁶ Well Number 204H
⁷ OGRID No. 7377	⁸ Operator Name EOG RESOURCES, INC.	⁹ Elevation 3666'

¹⁰Surface Location

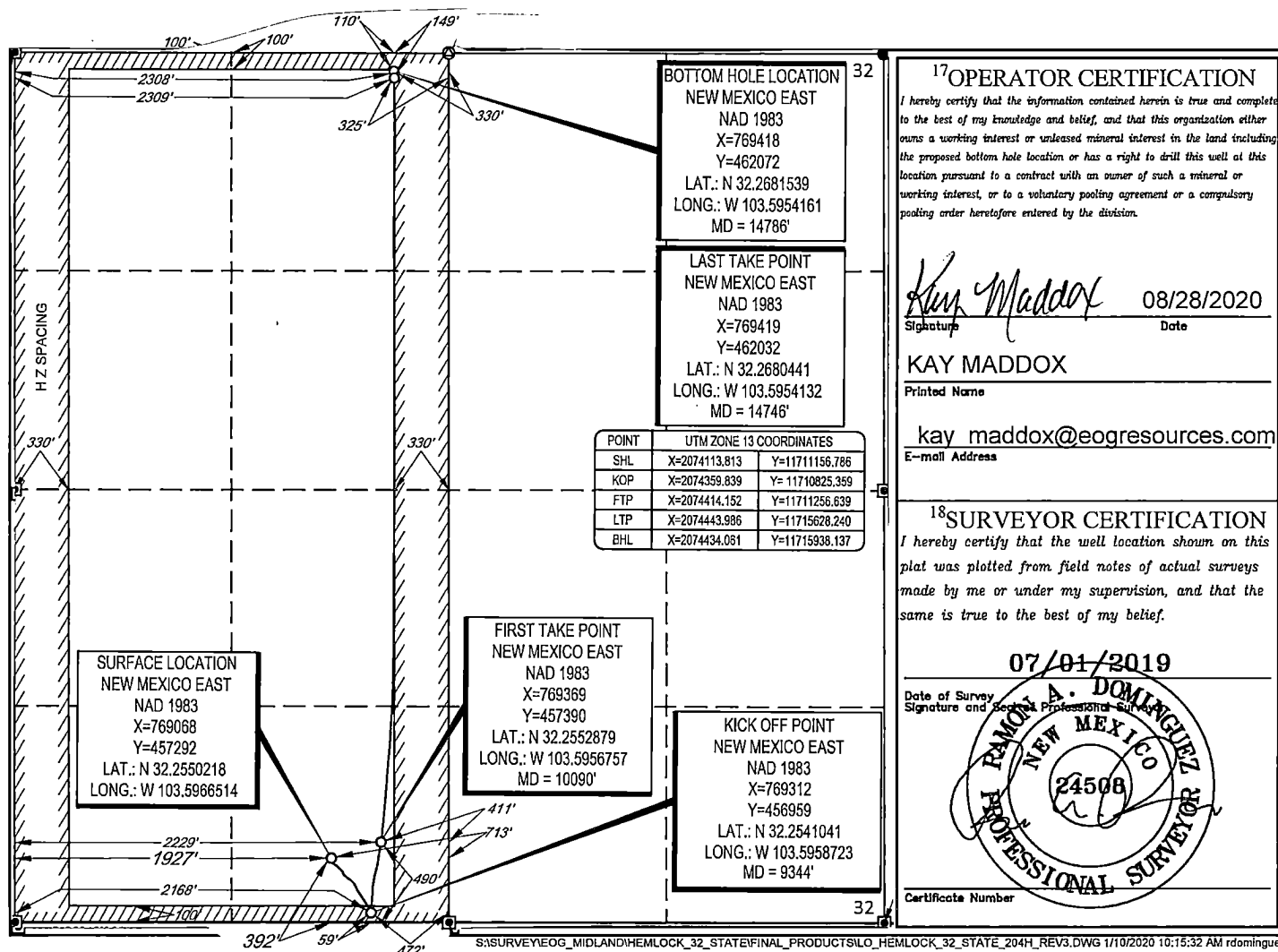
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	32	23-S	33-E	-	392'	SOUTH	1927'	WEST	LEA

¹¹Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	32	23-S	33-E	-	110'	NORTH	2308'	WEST	LEA

¹² Dedicated Acres 320	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



Intent ☐ As Drilled ☒API #
30-025-46755Operator Name:
EOG RESOURCES, INCProperty Name:
HEMLOCK 32 STATEWell Number
204H

Kick Off Point (KOP)

UL N	Section 32	Township 23S	Range 33E	Lot	Feet 59	From N/S SOUTH	Feet 2168	From E/W WEST	County LEA
Latitude 32.2541041					Longitude 103.5958723				NAD 1983

First Take Point (FTP)

UL N	Section 32	Township 23S	Range 33E	Lot	Feet 490	From N/S SOUTH	Feet 2229	From E/W WEST	County LEA
Latitude 32.2552879					Longitude 103.5956757				NAD 1983

Last Take Point (LTP)

UL C	Section 32	Township 23S	Range 33E	Lot	Feet 149	From N/S NORTH	Feet 2309	From E/W WEST	County LEA
Latitude 32.2680441					Longitude 103.5954132				NAD 1983

Is this well the defining well for the Horizontal Spacing Unit?

☐ NO

Is this well an infill well?

☐ YES

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #
30-025-46756Operator Name:
EOG RESOURCES, INCProperty Name:
HEMLOCK 32 STATEWell Number
#503H



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Hemlock 32 State

#204H

OH

Design: OH

Midland PVA

31 March, 2020



EOG Resources
Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #204H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3691.0usft
Site:	Hemlock 32 State	MD Reference:	KB = 25 @ 3691.0usft
Well:	#204H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM

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
From:	Map	Eastings:	767,769.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 15' 17.825 N
		Longitude:	103° 36' 3.080 W
		Grid Convergence:	0.39 °

Well	#204H					
Well Position	+N-S	0.0 usft	Northing:	457,292.00 usft	Latitude:	32° 15' 18.083 N
	+E-W	0.0 usft	Easting:	769,068.00 usft	Longitude:	103° 35' 47.951 W
Position Uncertainty	0.0 usft		Wellhead Elevation:	usft	Ground Level:	3,666.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	1/13/2020	6.69	60.05	47,687.28099517

Design	OH			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	
		Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD)	+N-S	+E-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	4.20

Survey Program		Date 3/31/2020		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
191.0	14,786.0	Driltech MWD (OH)	EOG MWD+IFR1	MWD + IFR1



EOG Resources
Midland PVA

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Site:	Hemlock 32 State	MD Reference:	KB = 25 @ 3691.0usft
Well:	#204H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM

Survey												
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)		
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0		0.0
191.0	0.26	312.89	191.0	0.3	-0.3	0.14	0.14	0.00	-0.4	0.0		0.0
220.0	0.44	12.83	220.0	0.4	-0.3	1.32	0.62	206.69	-0.4	0.4		0.4
306.0	0.44	29.97	306.0	1.1	-0.1	0.15	0.00	19.93	-0.9	0.6		0.6
391.0	0.26	31.37	391.0	1.5	0.2	0.21	-0.21	1.65	-1.4	0.6		0.6
480.0	0.35	263.85	480.0	1.6	0.0	0.62	0.10	-143.28	0.2	-1.6		-1.6
566.0	0.26	226.58	566.0	1.5	-0.4	0.25	-0.10	-43.34	0.7	-1.4		-1.4
663.0	0.26	195.47	663.0	1.1	-0.6	0.14	0.00	-32.07	0.9	-0.9		-0.9
758.0	0.35	290.21	758.0	1.0	-1.0	0.48	0.09	99.73	-1.2	-0.6		-0.6
852.0	0.44	213.57	852.0	0.8	-1.4	0.53	0.10	-81.53	-0.1	-1.6		-1.6
947.0	0.44	218.05	947.0	0.2	-1.9	0.04	0.00	4.72	-1.0	-1.6		-1.6
1,041.0	0.53	272.02	1,041.0	0.0	-2.5	0.48	0.10	57.41	-2.5	0.1		0.1
1,135.0	0.88	230.01	1,135.0	-0.5	-3.5	0.64	0.37	-44.69	-3.0	-1.9		-1.9
1,230.0	1.23	236.51	1,230.0	-1.5	-4.9	0.39	0.37	6.84	-4.9	-1.4		-1.4
1,425.0	1.32	247.59	1,424.9	-3.5	-8.7	0.13	0.05	5.68	-9.4	-0.1		-0.1
1,517.0	1.23	270.35	1,516.9	-3.9	-10.7	0.56	-0.10	24.74	-10.7	4.0		4.0
1,612.0	0.88	231.33	1,611.9	-4.4	-12.3	0.82	-0.37	-41.07	-12.3	-4.3		-4.3
1,706.0	0.97	204.43	1,705.9	-5.6	-13.2	0.47	0.10	-28.62	-10.5	-9.7		-9.7
1,800.0	0.97	197.49	1,799.9	-7.0	-13.7	0.12	0.00	-7.38	-10.8	-11.0		-11.0
1,893.0	0.97	194.68	1,892.8	-8.6	-14.2	0.05	0.00	-3.02	-11.9	-11.5		-11.5
1,988.0	1.14	152.40	1,987.8	-10.2	-13.9	0.82	0.18	-44.51	-2.6	-17.1		-17.1
2,083.0	1.76	138.43	2,082.8	-12.1	-12.5	0.75	0.65	-14.71	-0.7	-17.4		-17.4
2,176.0	1.67	134.91	2,175.8	-14.1	-10.6	0.15	-0.10	-3.78	-2.4	-17.5		-17.5
2,272.0	1.49	132.10	2,271.7	-16.0	-8.7	0.20	-0.19	-2.93	-4.2	-17.7		-17.7
2,366.0	1.32	129.28	2,365.7	-17.5	-7.0	0.20	-0.18	-3.00	-5.7	-17.9		-17.9
2,460.0	1.41	132.10	2,459.7	-18.9	-5.3	0.12	0.10	3.00	-8.8	-17.6		-17.6
2,555.0	1.23	138.95	2,554.6	-20.5	-3.7	0.25	-0.19	7.21	-13.0	-16.3		-16.3



EOG Resources
Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #204H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3691.0usft
Site:	Hemlock 32 State	MD Reference:	KB = 25 @ 3691.0usft
Well:	#204H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
2,649.0	1.14	141.94	2,648.6	-22.0	-2.5	0.12	-0.10	3.18	-15.8	-15.5
2,744.0	1.14	133.86	2,743.6	-23.4	-1.2	0.17	0.00	-8.51	-15.3	-17.7
2,839.0	1.14	125.15	2,838.6	-24.6	0.2	0.18	0.00	-9.17	-14.3	-20.0
2,933.0	1.49	109.07	2,932.6	-25.5	2.1	0.54	0.37	-17.11	-10.4	-23.4
3,027.0	2.81	111.18	3,026.5	-26.7	5.4	1.41	1.40	2.24	-13.8	-22.4
3,121.0	3.61	121.90	3,120.3	-29.1	10.1	1.06	0.85	11.40	-19.1	-17.5
3,214.0	4.75	127.44	3,213.1	-33.0	15.6	1.30	1.23	5.96	-20.6	-13.3
3,308.0	4.66	124.63	3,306.8	-37.6	21.9	0.26	-0.10	-2.99	-18.5	-11.4
3,403.0	4.48	121.37	3,401.5	-41.7	28.2	0.33	-0.19	-3.43	-16.1	-9.0
3,498.0	5.10	127.44	3,496.1	-46.2	34.7	0.84	0.65	6.39	-15.3	-4.1
3,592.0	6.33	134.56	3,589.7	-52.4	41.8	1.51	1.31	7.57	-15.3	-0.2
3,688.0	5.63	134.03	3,685.1	-59.3	48.9	0.73	-0.73	-0.55	-15.4	1.2
3,782.0	4.57	133.06	3,778.8	-65.1	55.0	1.13	-1.13	-1.03	-14.1	2.6
3,877.0	4.13	138.78	3,873.5	-70.3	60.0	0.65	-0.46	6.02	-11.1	5.2
3,972.0	3.78	147.13	3,968.3	-75.5	63.9	0.71	-0.37	8.79	-6.8	6.5
4,067.0	3.34	148.97	4,063.1	-80.5	67.1	0.48	-0.46	1.94	-2.6	5.8
4,161.0	3.08	149.50	4,156.9	-85.0	69.8	0.28	-0.28	0.56	1.9	4.8
4,255.0	2.73	150.11	4,250.8	-89.1	72.2	0.37	-0.37	0.65	7.0	3.7
4,350.0	2.99	145.28	4,345.7	-93.1	74.7	0.37	0.27	-5.08	11.9	3.7
4,445.0	4.04	139.92	4,440.5	-97.7	78.3	1.16	1.11	-5.64	15.6	5.1
4,540.0	4.31	136.76	4,535.3	-102.9	82.9	0.37	0.28	-3.33	18.2	6.9
4,633.0	4.31	134.03	4,628.0	-107.8	87.8	0.22	0.00	-2.94	20.5	9.1
4,728.0	5.45	132.62	4,722.7	-113.4	93.6	1.21	1.20	-1.48	22.0	11.4
4,823.0	6.33	131.57	4,817.2	-119.9	100.9	0.93	0.93	-1.11	21.7	13.7
4,918.0	6.42	129.28	4,911.6	-126.7	108.9	0.28	0.09	-2.41	20.3	16.7
5,002.0	5.10	124.10	4,995.1	-131.8	115.6	1.69	-1.57	-6.17	18.6	20.9
5,087.0	4.57	117.51	5,079.8	-135.5	121.8	0.90	-0.62	-7.75	16.9	26.3



EOG Resources
Midland PVA

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Site:	Hemlock 32 State	MD Reference:	KB = 25 @ 3691.0usft
Well:	#204H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
5,182.0	4.92	140.71	5,174.5	-140.4	127.7	2.04	0.37	24.42	28.3	19.5	
5,277.0	7.74	141.68	5,268.9	-148.6	134.3	2.97	2.97	1.02	28.0	19.4	
5,369.0	10.29	149.41	5,359.8	-160.5	142.3	3.06	2.77	8.40	25.5	15.3	
5,464.0	10.90	151.78	5,453.2	-175.7	150.8	0.79	0.64	2.49	18.4	13.1	
5,559.0	11.17	149.76	5,546.4	-191.6	159.7	0.50	0.28	-2.13	9.6	12.3	
5,651.0	11.26	149.06	5,636.7	-207.0	168.8	0.18	0.10	-0.76	1.0	11.3	
5,746.0	11.26	147.83	5,729.8	-222.8	178.5	0.25	0.00	-1.29	-8.0	10.4	
5,841.0	11.70	147.48	5,822.9	-238.8	188.7	0.47	0.46	-0.37	-17.2	9.5	
5,935.0	11.87	146.07	5,915.0	-254.8	199.2	0.36	0.18	-1.50	-26.9	8.4	
6,030.0	8.44	145.28	6,008.5	-268.7	208.6	3.61	-3.61	-0.83	-33.9	7.5	
6,125.0	7.74	143.87	6,102.5	-279.6	216.4	0.77	-0.74	-1.48	-37.5	6.4	
6,220.0	7.65	143.17	6,196.7	-289.8	223.9	0.14	-0.09	-0.74	-40.4	5.9	
6,315.0	5.72	143.08	6,291.0	-298.6	230.5	2.03	-2.03	-0.09	-41.6	5.8	
6,408.0	3.87	132.01	6,383.7	-304.4	235.7	2.22	-1.99	-11.90	-40.1	-1.2	
6,503.0	2.29	105.47	6,478.5	-307.1	239.9	2.20	-1.66	-27.94	-32.2	-14.3	
6,598.0	2.55	104.68	6,573.5	-308.1	243.7	0.28	0.27	-0.83	-28.3	-8.6	
6,693.0	1.23	155.83	6,668.4	-309.6	246.2	2.13	-1.39	53.84	-17.1	16.1	
6,787.0	1.23	178.86	6,762.4	-311.5	246.6	0.52	0.00	24.50	-3.4	16.1	
6,882.0	1.23	180.26	6,857.4	-313.6	246.7	0.03	0.00	1.47	2.9	10.2	
6,977.0	0.97	188.44	6,952.3	-315.4	246.5	0.32	-0.27	8.61	9.5	2.8	
7,069.0	1.06	193.88	7,044.3	-317.0	246.2	0.14	0.10	5.91	14.0	-5.2	
7,164.0	0.35	321.59	7,139.3	-317.6	245.8	1.37	-0.75	134.43	-19.4	-7.4	
7,258.0	0.70	341.19	7,233.3	-316.8	245.5	0.41	0.37	20.85	-25.1	0.8	
7,352.0	0.79	352.61	7,327.3	-315.7	245.2	0.18	0.10	12.15	-26.4	6.3	
7,447.0	0.79	354.64	7,422.3	-314.3	245.1	0.03	0.00	2.14	-27.4	7.2	
7,540.0	0.62	335.83	7,515.3	-313.3	244.8	0.31	-0.18	-20.23	-29.4	-2.2	
7,634.0	0.53	348.66	7,609.3	-312.4	244.5	0.17	-0.10	13.65	-30.1	4.5	



EOG Resources
Midland PVA

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Site:	Hemlock 32 State	MD Reference:	KB = 25 @ 3691.0usft
Well:	#204H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build. (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
7,729.0	0.35	345.41	7,704.3	-311.7	244.3	0.19	-0.19	-3.42	-31.0	2.7
7,824.0	0.26	353.93	7,799.3	-311.2	244.2	0.11	-0.09	8.97	-30.8	7.3
7,919.0	0.26	108.37	7,894.3	-311.0	244.4	0.46	0.00	120.46	19.3	25.2
8,013.0	0.35	137.81	7,988.3	-311.3	244.8	0.19	0.10	31.32	28.7	12.6
8,108.0	0.53	170.59	8,083.3	-311.9	245.1	0.32	0.19	34.51	30.3	-4.8
8,202.0	0.62	182.11	8,177.3	-312.9	245.1	0.16	0.10	12.26	27.8	-10.7
8,297.0	1.06	189.14	8,272.3	-314.3	245.0	0.47	0.46	7.40	24.8	-14.0
8,391.0	1.41	193.01	8,368.2	-316.2	244.6	0.38	0.37	4.12	21.8	-16.5
8,486.0	1.49	188.35	8,461.2	-318.6	244.1	0.15	0.08	-4.91	20.6	-13.8
8,580.0	1.49	191.60	8,555.2	-321.0	243.7	0.09	0.00	3.46	17.4	-14.9
8,673.0	1.49	186.50	8,648.2	-323.4	243.3	0.14	0.00	-5.48	16.2	-13.4
8,768.0	1.41	184.48	8,743.1	-325.8	243.1	0.10	-0.08	-2.13	14.3	-12.9
8,862.0	1.32	181.40	8,837.1	-328.0	243.0	0.12	-0.10	-3.28	12.7	-12.1
8,956.0	1.32	182.19	8,931.1	-330.2	242.9	0.02	0.00	0.84	10.4	-12.3
9,052.0	1.32	172.88	9,027.0	-332.4	243.0	0.22	0.00	-9.70	10.0	-10.6
9,146.0	1.32	171.56	9,121.0	-334.5	243.3	0.03	0.00	-1.40	8.1	-10.4
9,217.0	1.32	188.79	9,192.0	-336.2	243.3	0.56	0.00	24.27	3.0	-12.1
9,344.0	4.86	0.68	9,318.9	-332.2	243.1	4.86	2.79	135.35	-8.6	11.8
KOP, MD:9344.0', TVD:9318.9', N/S:-332.2', E/W:243.1', INC:4.86										
9,378.0	6.51	1.12	9,352.7	-328.8	243.2	4.86	4.86	1.30	-11.9	11.9
9,388.9	7.58	2.41	9,363.5	-327.5	243.2	9.97	9.86	11.82	-12.9	12.2
KOP (Hemlock 32 State #204H)										
9,472.0	15.83	6.48	9,444.8	-310.7	244.7	9.97	9.92	4.90	-23.2	13.9
9,532.9	21.01	4.95	9,502.6	-291.6	246.6	8.55	8.51	-2.52	-31.1	14.2
FTP Crossing, MD:9532.9', TVD:9502.6', N/S:-291.6', E/W:246.6', INC:21.01										
9,567.0	23.92	4.37	9,534.1	-278.6	247.7	8.55	8.52	-1.69	-34.9	14.8
9,660.0	34.82	2.35	9,615.0	-233.1	250.2	11.77	11.72	-2.17	-45.6	18.3



EOG Resources
Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #204H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3691.0usft
Site:	Hemlock 32 State	MD Reference:	KB = 25 @ 3691.0usft
Well:	#204H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM

Survey	MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Bulld (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
	9,755.0	43.79	5.08	9,688.5	-173.2	254.2	9.61	9.44	2.87	-54.9	26.5
	9,848.0	50.65	11.84	9,751.6	-105.8	264.5	9.10	7.38	7.27	-58.4	33.1
FTP (Hemlock 32 State #204H)											
	9,941.0	56.54	12.28	9,806.8	-32.6	280.1	6.34	6.33	0.47	-58.1	30.6
	10,036.0	64.10	8.33	9,853.8	48.5	294.8	8.74	7.96	-4.16	-52.4	28.9
	10,131.0	72.19	5.78	9,889.2	135.9	305.5	8.87	8.52	-2.68	-41.8	33.7
	10,188.0	77.91	4.99	9,903.9	190.7	310.7	10.12	10.04	-1.39	-34.1	38.5
	10,281.0	79.49	4.99	9,922.1	281.6	318.6	1.70	1.70	0.00	-16.5	46.3
	10,375.0	81.07	5.08	9,938.0	373.9	326.8	1.68	1.68	0.10	0.6	48.6
	10,470.0	82.92	4.11	9,951.2	467.6	334.3	2.19	1.95	-1.02	15.1	45.1
	10,551.0	86.44	3.67	9,958.7	548.1	339.8	4.38	4.35	-0.54	23.4	39.3
	10,601.0	93.30	4.20	9,958.8	597.9	343.2	13.76	13.72	1.06	23.8	35.7
	10,632.0	94.00	4.64	9,956.8	628.8	345.6	2.67	2.26	1.42	22.2	33.1
	10,695.0	93.21	3.93	9,952.9	691.5	350.3	1.68	-1.25	-1.13	18.9	28.0
	10,790.0	96.11	3.84	9,945.2	785.9	356.7	3.05	3.05	-0.09	12.2	20.9
	10,846.0	95.67	2.97	9,939.4	841.6	360.0	1.73	-0.79	-1.55	7.1	17.2
	10,941.0	94.79	1.91	9,930.7	936.1	364.0	1.45	-0.93	-1.12	-0.5	12.5
	11,034.0	94.35	1.03	9,923.3	1,028.7	366.4	1.06	-0.47	-0.95	-6.9	9.5
	11,053.3	93.84	1.03	9,922.0	1,048.0	366.8	2.65	-2.65	0.00	-8.0	9.0
TGT 1 (Hemlock 32 State #204H)											
	11,127.0	91.89	1.03	9,918.3	1,121.6	368.1	2.65	-2.65	0.00	-10.6	7.2
	11,222.0	91.80	0.59	9,915.2	1,216.5	369.4	0.47	-0.09	-0.46	-12.0	5.3
	11,317.0	90.48	0.51	9,913.3	1,311.5	370.3	1.39	-1.39	-0.08	-12.3	3.7
	11,411.0	90.92	359.80	9,912.2	1,405.5	370.6	0.89	0.47	-0.76	-11.9	2.9
	11,505.0	91.71	359.89	9,910.0	1,499.5	370.3	0.85	0.84	0.10	-12.5	2.5
	11,601.0	93.21	358.66	9,905.9	1,595.4	369.1	2.02	1.56	-1.28	-15.0	3.1
	11,656.2	92.01	359.24	9,903.4	1,650.5	368.1	2.41	-2.17	1.04	-16.6	3.7
TGT 2 (Hemlock 32 State #204H)											



EOG Resources
Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #204H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3691.0usft
Site:	Hemlock 32 State	MD Reference:	KB = 25 @ 3691.0usft
Well:	#204H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM

Survey											
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	DLeg (°/100usft)	Bulld (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
11,694.0	91.19	359.63	9,902.3	1,688.3	367.7	2.41	-2.17	1.04	-17.1	3.8	
11,788.0	91.19	0.24	9,900.4	1,782.3	367.6	0.65	0.00	0.65	-17.6	3.3	
11,882.0	92.33	359.71	9,897.5	1,876.2	367.6	1.34	1.21	-0.56	-19.1	2.7	
11,875.0	90.31	359.80	9,895.3	1,969.2	367.2	2.17	-2.17	0.10	-19.8	2.5	
12,070.0	90.92	359.89	9,894.3	2,064.2	366.9	0.65	0.64	0.09	-19.4	2.1	
12,165.0	89.52	0.24	9,894.0	2,159.2	367.0	1.52	-1.47	0.37	-18.3	1.4	
12,259.0	90.13	359.98	9,894.3	2,253.2	367.2	0.71	0.65	-0.28	-16.5	0.6	
12,311.0	90.56	0.12	9,893.9	2,305.2	367.3	0.86	0.83	0.27	-16.1	0.2	
TGT 3 (Hemlock 32 State #204H)											
12,354.0	90.92	0.24	9,893.4	2,348.2	367.4	0.88	0.83	0.27	-16.1	-0.2	
12,447.0	91.71	359.80	9,891.2	2,441.1	367.4	0.97	0.85	-0.47	-17.1	-0.9	
12,542.0	92.42	359.98	9,887.8	2,536.1	367.3	0.77	0.75	0.19	-19.3	-1.3	
12,636.0	93.39	359.54	9,883.1	2,630.0	366.9	1.13	1.03	-0.47	-22.9	-1.5	
12,731.0	91.54	359.71	9,879.0	2,724.9	366.2	1.96	-1.95	0.18	-25.8	-1.5	
12,826.0	91.54	359.27	9,876.4	2,819.8	365.4	0.46	0.00	-0.46	-27.2	-1.3	
12,921.0	90.31	359.45	9,874.9	2,914.8	364.3	1.31	-1.29	0.19	-27.6	-0.9	
13,015.0	90.66	359.80	9,874.1	3,008.8	363.7	0.53	0.37	0.37	-27.2	-0.9	
13,110.0	91.80	358.75	9,872.1	3,103.8	362.5	1.63	1.20	-1.11	-28.1	-0.3	
13,118.5	91.67	358.81	9,871.8	3,112.3	362.3	1.73	-1.57	0.74	-28.2	-0.2	
TGT 4 (Hemlock 32 State #204H)											
13,205.0	90.31	359.45	9,870.3	3,198.7	361.0	1.73	-1.57	0.74	-28.8	0.5	
13,300.0	90.75	359.71	9,869.4	3,293.7	360.3	0.54	0.46	0.27	-28.6	0.6	
13,394.0	91.80	359.45	9,867.3	3,387.7	359.6	1.15	1.12	-0.28	-29.7	0.7	
13,488.0	90.04	359.36	9,865.8	3,481.7	358.7	1.87	-1.87	-0.10	-30.2	1.0	
13,582.0	90.40	359.54	9,865.5	3,575.7	357.8	0.43	0.38	0.19	-29.5	1.3	
13,676.0	91.45	359.01	9,863.9	3,669.6	356.6	1.25	1.12	-0.56	-30.0	1.9	
13,771.0	92.51	359.10	9,860.7	3,764.6	355.0	1.12	1.12	0.09	-32.3	2.8	



EOG Resources
Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #204H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3691.0usft
Site:	Hemlock 32 State	MD Reference:	KB = 25 @ 3691.0usft
Well:	#204H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM

MD (usft)	Inc. (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
13,866.0	92.07	0.33	9,856.9	3,859.5	354.5	1.37	-0.46	1.29	-35.1	2.7
13,961.0	90.40	0.07	9,854.8	3,954.5	354.9	1.78	-1.76	-0.27	-36.1	1.7
14,055.0	91.01	0.07	9,853.7	4,048.5	355.0	0.65	0.65	0.00	-36.2	1.0
14,149.0	92.15	0.24	9,851.1	4,142.4	355.2	1.23	1.21	0.18	-37.8	0.1
14,183.3	91.10	0.49	9,850.1	4,176.7	355.5	3.14	-3.05	0.74	-38.4	-0.4
TGT 5 (Hemlock 32 State #204H)										
14,244.0	89.25	0.94	9,849.9	4,237.4	356.2	3.14	-3.05	0.74	-37.9	-1.5
14,339.0	89.34	0.86	9,851.1	4,332.4	357.7	0.13	0.09	-0.08	-35.7	-3.6
14,434.0	89.98	359.19	9,851.7	4,427.4	357.7	1.88	0.65	-1.76	-34.1	-4.3
14,526.0	91.19	358.92	9,850.7	4,519.4	356.2	1.37	1.34	-0.29	-34.1	-3.4
14,621.0	92.33	358.31	9,847.8	4,614.3	353.9	1.36	1.20	-0.64	-36.0	-1.7
Last MWD Survey (MD=14621.0')										
14,785.2	92.33	358.31	9,841.1	4,778.3	349.1	0.00	0.00	0.00	-40.9	2.0
PBHL (Hemlock 32 State #204H)										
14,786.0	92.33	358.31	9,841.1	4,779.1	349.1	0.00	0.00	0.00	-40.9	2.0
Projection to Bit (MD=14786.0')										

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
9,344.0	9,318.9	-332.2	243.1	KOP, MD:9344.0', TVD:9318.9', N/S:-332.2', E/W:243.1', INC:4.86
9,532.9	9,502.6	-291.6	246.6	FTP Crossing, MD:9532.9', TVD:9502.6', N/S:-291.6', E/W:246.6', INC:21.01
14,621.0	9,847.8	4,614.3	353.9	Last MWD Survey (MD=14621.0')
14,786.0	9,841.1	4,779.1	349.1	Projection to Bit (MD=14786.0')

Checked By: _____ Approved By: _____ Date: _____

I certify this survey to be true and correct to the best of my belief and knowledge.

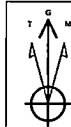
Kay Maddox 08/28/2020
Signed Date



Lea County, NM (NAD 83 NME)

Hemlock 32 State #204H

Plan #1



Azimuths to Grid North
True North: -0.39°
Magnetic North: 6.29°

Magnetic Field
Strength: 47687.3nT
Dip Angle: 60.05°
Date: 1/13/2020
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.29°
To convert a Magnetic Direction to a True Direction, Add 6.69° East
To convert a True Direction to a Grid Direction, Subtract 6.39°

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: #204H

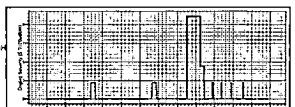
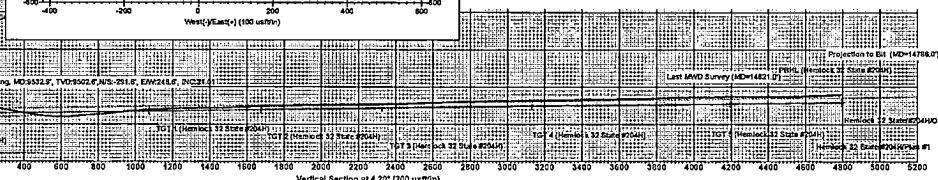
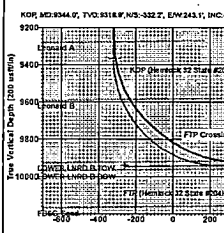
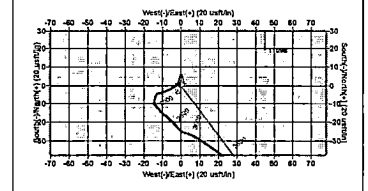
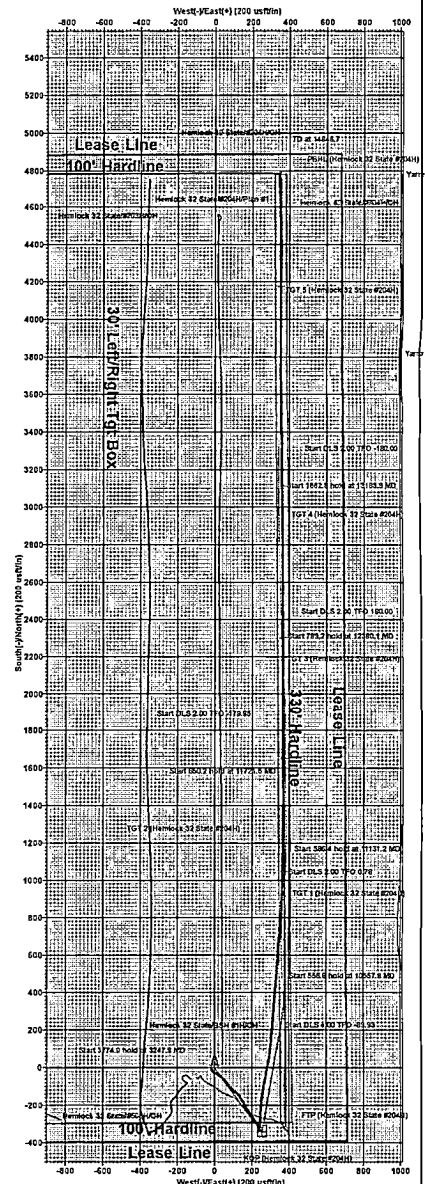
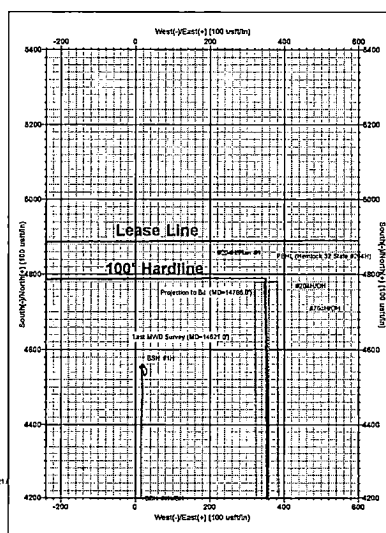
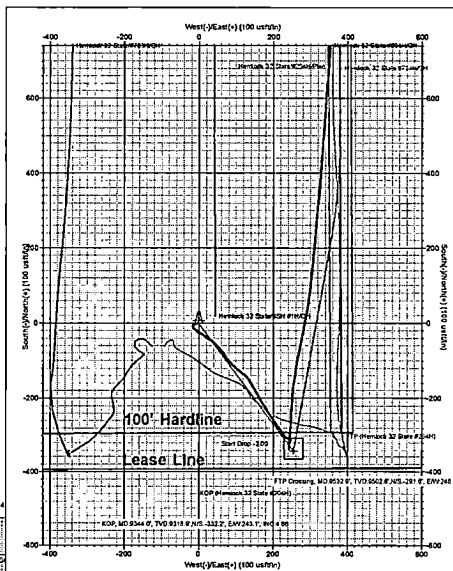
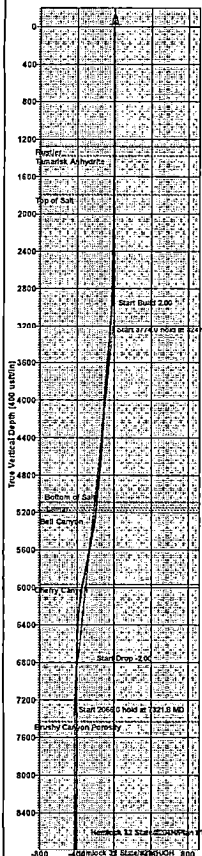
KB = 25 @ 3691.0usft
Northing 457292.00 Easting 769055.00
Latitude 32° 15' 18.063 N Longitude 103° 35' 47.551 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/S	+E/W	Dleg	TFace	VSecl	Target	Annotation
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	2948.0	0.00	0.00	2948.0	0.0	0.0	0.00	0.00	0.0		
3	3247.9	6.00	143.23	3247.3	-12.6	9.4	2.00	143.23	-11.8		
4	7021.9	6.00	143.23	7000.7	-328.4	245.4	0.00	-399.6			
5	7321.8	0.00	359.62	7300.0	-341.0	254.8	2.00	180.00	-321.4		
6	9387.8	0.00	359.62	9366.0	-341.0	254.9	0.00	0.00	-321.4		
7	10294.0	93.62	10.17	9938.9	229.1	357.1	10.00	10.17	254.6		
8	10557.8	93.62	359.62	9936.1	491.5	379.5	4.00	-99.53	618.0		
9	11114.6	93.62	359.62	9930.0	1048.3	376.8	0.00	0.00	1073.0		
10	11131.2	93.95	359.62	9929.9	1064.9	376.7	2.00	0.78	1099.5		
11	11717.5	93.95	359.62	9920.0	1651.2	371.8	0.00	0.00	1674.0		
12	11721.5	90.88	359.62	9919.9	1655.2	371.8	2.00	-179.95	1677.9		
13	12371.8	90.88	359.62	9910.0	2305.3	367.5	0.00	0.00	2326.0		
14	12380.1	90.71	359.62	9909.9	2313.6	367.4	2.00	180.00	2334.3		
15	13178.4	90.71	359.62	9900.0	3112.8	352.1	0.00	0.00	3131.0		
16	13183.9	93.62	359.62	9899.9	3117.3	352.1	2.00	-189.00	3135.5		
17	14846.7	93.62	359.62	9882.0	4789.0	351.1	0.00	0.00	4792.9		

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/S	+E/W	Northing	Easting
KOP (Hemlock 32 State #204H)	9365.0	-341.0	254.8	456951.00	769322.20
TGT 1 (Hemlock 32 State #204H)	9930.0	1048.3	376.8	458349.30	769442.80
TGT 2 (Hemlock 32 State #204H)	9920.0	1651.2	371.8	458943.20	769439.81
TGT 3 (Hemlock 32 State #204H)	9910.0	2305.3	367.5	459597.30	769435.40
TGT 4 (Hemlock 32 State #204H)	9900.0	3112.8	352.1	460404.80	769430.14
PBHL (Hemlock 32 State #204H)	9882.0	4789.0	351.1	462072.00	769419.10
FTP (Hemlock 32 State #204H)	9939.0	-291.0	385.0	457001.00	769453.00
TGT 5 (Hemlock 32 State #204H)	9950.0	-4177.2	355.1	461459.20	769423.09



Lea County, NM (NAD 83 NME)
Hemlock 32 State #204H
Plan #1
6/16/2020