

District I
1625 N. French Dr., Hobbs, NM 88240
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District II
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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

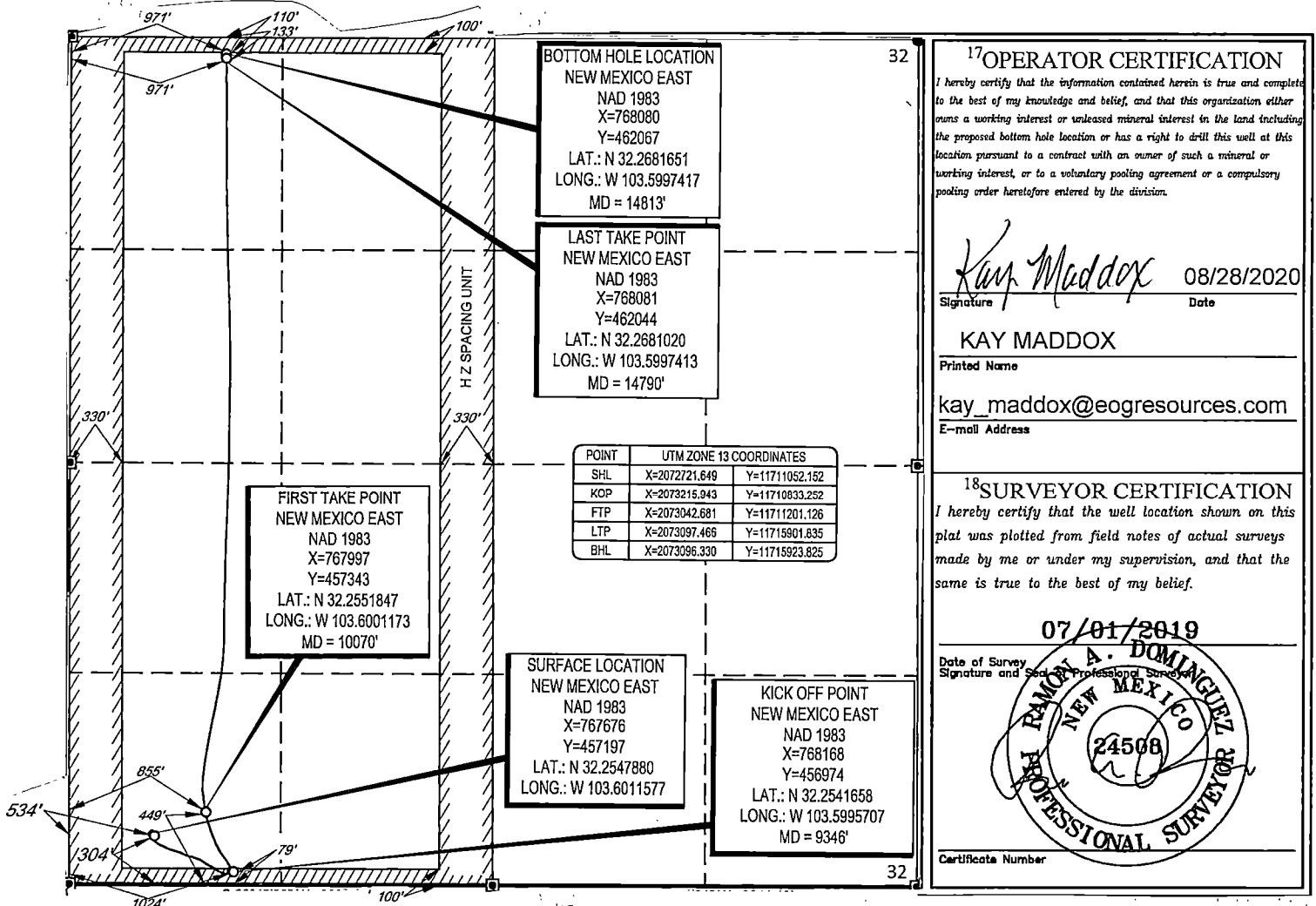
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-46753		² Pool Code 59900		³ Pool Name TRIPLE X; BONE SPRING	
⁴ Property Code 320561		⁵ Property Name HEMLOCK 32 STATE			⁶ Well Number 202H
⁷ OGRID No. 7377		⁸ Operator Name EOG RESOURCES, INC.			⁹ Elevation 3661'
¹⁰ Surface Location					
UL or lot no. M	Section 32	Township 23-S	Range 33-E	Lot Idn -	Feet from the 304'
					North/South line SOUTH
					Feet from the 534'
					East/West line WEST
					County LEA
¹¹ Bottom Hole Location If Different From Surface SL					
UL or lot no. D	Section 32	Township 23-S	Range 33-E	Lot Idn -	Feet from the 110'
					North/South line NORTH
					Feet from the 971'
					East/West line WEST
					County LEA
¹² Dedicated Acres 320		¹³ Joint or Infill		¹⁴ Consolidation Code	
				¹⁵ Order No.	

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.

¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or undivided mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Kay Maddox 08/28/2020
Signature Date

KAY MADDOX

Printed Name

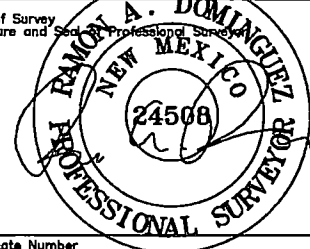
kay_maddox@eogresources.com

E-mail Address

¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true to the best of my belief.

07/01/2019

Date of Survey
Signature and Seal of Professional Surveyor

Certificate Number

Intent ☐ As Drilled ☒ XXXAPI #
30-025-46753

Operator Name: EOG RESOURCES, INC	Property Name: HEMLOCK 32 STATE	Well Number 202H
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Kick Off Point (KOP)

UL M	Section 32	Township 23S	Range 33E	Lot	Feet 79	From N/S SOUTH	Feet 1024	From E/W WEST	County LEA
Latitude 32.2541658					Longitude 103.5995707			NAD 1983	

First Take Point (FTP)

UL M	Section 32	Township 23S	Range 33E	Lot	Feet 449	From N/S SOUTH	Feet 855	From E/W WEST	County LEA
Latitude 32.2551847					Longitude 103.6001173			NAD 1983	

Last Take Point (LTP)

UL D	Section 32	Township 23S	Range 33E	Lot	Feet 133	From N/S NORTH	Feet 971	From E/W WEST	County LEA
Latitude 32.2681020					Longitude 103.5997413			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 #
30-025-46756

Operator Name: EOG RESOURCES, INC	Property Name: HEMLOCK 32 STATE	Well Number #503H
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KZ 06/29/2018



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Hemlock 32 State

#202H

OH

Design: OH

Midland PVA

02 March, 2020



EOG Resources
Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #202H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3686.0usft
Site:	Hemlock 32 State	MD Reference:	KB = 25 @ 3686.0usft
Well:	#202H	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	Easting:	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:	#202H					
Well Position	+N/-S	0.0 usft	Northing:	457,197.00 usft	Latitude:	32° 15' 17.237 N
	+E/-W	0.0 usft	Easting:	767,676.00 usft	Longitude:	103° 36' 4.168 W
Position Uncertainty	0.0 usft		Wellhead Elevation:	usft	Ground Level:	3,661.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	3/1/2020	6.68	60.05	47,673.23028214

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	4.97

Survey Program		Date 3/2/2020		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
172.0	14,813.0	Driltech (OH)	EOG MWD+IFR1	MWD + IFR1



EOG Resources
Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #202H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3686.0usft
Site:	Hemlock 32 State	MD Reference:	KB = 25 @ 3686.0usft
Well:	#202H	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
172.0	0.88	0.00	172.0	1.3	0.0	0.51	0.51	0.00	-1.3	0.0	
230.0	1.14	353.32	230.0	2.3	-0.1	0.49	0.45	-11.52	-2.3	-0.2	
317.0	2.02	346.73	317.0	4.7	-0.5	1.03	1.01	-7.57	-4.7	-0.6	
406.0	3.34	344.27	405.9	8.7	-1.6	1.49	1.48	-2.76	-8.8	-0.8	
495.0	3.87	341.55	494.7	14.1	-3.2	0.63	0.60	-3.06	-14.4	-1.4	
585.0	3.08	341.81	584.5	19.2	-5.0	0.88	-0.88	0.29	-19.8	-1.3	
674.0	2.73	345.41	673.4	23.6	-6.2	0.44	-0.39	4.04	-24.4	0.1	
771.0	2.64	336.27	770.3	27.8	-7.7	0.45	-0.09	-9.42	-28.6	-4.1	
866.0	1.76	323.62	865.2	31.0	-9.5	1.05	-0.93	-13.32	-30.6	-10.8	
960.0	1.41	307.44	959.2	32.9	-11.2	0.60	-0.37	-17.21	-28.9	-19.3	
1,055.0	1.41	289.34	1,054.2	34.0	-13.3	0.47	0.00	-19.05	-23.8	-27.7	
1,148.0	2.02	253.83	1,147.1	33.9	-15.9	1.29	0.66	-38.18	-5.8	-37.0	
1,243.0	2.90	232.03	1,242.0	32.0	-19.4	1.34	0.93	-22.95	4.3	-37.1	
1,327.0	3.52	227.46	1,325.9	28.9	-23.0	0.80	0.74	-5.44	2.6	-36.8	
1,433.0	3.52	228.96	1,431.7	24.6	-27.8	0.09	0.00	1.42	-4.9	-37.0	
1,527.0	4.04	211.38	1,525.5	19.8	-31.7	1.34	0.55	-18.70	0.4	-40.1	
1,622.0	5.80	188.01	1,620.1	12.2	-34.2	2.77	1.85	-24.60	10.6	-43.3	
1,716.0	7.21	161.55	1,713.6	1.9	-33.0	3.48	1.50	-28.15	24.9	-42.0	
1,810.0	7.91	143.45	1,806.8	-8.9	-27.2	2.63	0.74	-19.26	33.5	-38.2	
1,904.0	7.91	131.76	1,899.9	-18.4	-18.6	1.71	0.00	-12.44	37.3	-34.2	
1,999.0	7.65	129.29	1,994.0	-26.7	-8.8	0.45	-0.27	-2.60	35.6	-34.6	
2,093.0	7.30	127.10	2,087.2	-34.3	0.8	0.48	-0.37	-2.33	34.4	-34.9	
2,188.0	6.60	125.78	2,181.5	-41.1	10.1	0.76	-0.74	-1.39	33.5	-35.5	
2,282.0	6.24	123.32	2,274.9	-47.1	18.7	0.48	-0.38	-2.62	34.3	-35.0	
2,376.0	5.89	123.49	2,368.4	-52.6	27.0	0.37	-0.37	0.18	34.1	-35.9	
2,470.0	5.36	118.40	2,461.9	-57.3	34.9	0.77	-0.56	-5.41	37.7	-33.1	



EOG Resources
Midland PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Hemlock 32 State
Well: #202H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #202H
TVD Reference: KB = 25 @ 3686.0usft
MD Reference: KB = 25 @ 3686.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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)	
2,564.0	5.28	114.09	2,555.5	-61.2	42.7	0.43	-0.09	-4.59	41.2	-29.7	
2,659.0	4.75	115.06	2,650.2	-64.6	50.3	0.56	-0.56	1.02	42.3	-29.7	
2,753.0	4.57	111.80	2,743.9	-67.6	57.3	0.34	-0.19	-3.47	46.1	-26.3	
2,847.0	5.36	112.42	2,837.5	-70.7	64.8	0.84	0.84	0.66	47.4	-25.6	
2,942.0	5.80	112.95	2,932.0	-74.3	73.3	0.47	0.46	0.56	47.9	-25.0	
3,036.0	5.63	112.60	3,025.6	-77.9	81.9	0.18	-0.18	-0.37	48.4	-23.7	
3,130.0	6.33	109.52	3,119.1	-81.4	91.1	0.82	0.74	-3.28	49.5	-19.7	
3,224.0	7.74	107.67	3,212.4	-85.1	102.0	1.52	1.50	-1.97	48.3	-16.4	
3,319.0	7.39	108.11	3,306.5	-88.9	113.9	0.37	-0.37	0.46	45.4	-14.8	
3,413.0	6.86	106.79	3,399.8	-92.4	125.0	0.59	-0.56	-1.40	43.7	-11.9	
3,507.0	7.03	104.77	3,493.1	-95.5	136.0	0.32	0.18	-2.15	42.2	-8.2	
3,601.0	7.12	107.67	3,586.4	-98.7	147.1	0.39	0.10	3.09	39.8	-8.1	
3,696.0	6.95	112.24	3,680.7	-102.7	158.0	0.62	-0.18	4.81	37.3	-9.6	
3,790.0	6.16	112.24	3,774.1	-106.7	167.9	0.84	-0.84	0.00	36.3	-8.5	
3,884.0	6.24	114.97	3,867.5	-110.8	177.2	0.32	0.09	2.90	35.6	-9.3	
3,979.0	7.21	112.68	3,961.9	-115.3	187.4	1.06	1.02	-2.41	34.7	-7.0	
4,073.0	5.98	114.44	4,055.2	-119.6	197.3	1.33	-1.31	1.87	33.4	-7.1	
4,167.0	5.54	107.41	4,148.8	-123.0	206.1	0.88	-0.47	-7.48	34.3	-1.7	
4,261.0	5.36	100.91	4,242.3	-125.2	214.7	0.68	-0.19	-6.91	34.7	4.7	
4,355.0	5.45	99.94	4,335.9	-126.8	223.5	0.14	0.10	-1.03	35.1	8.4	
4,450.0	5.80	107.67	4,430.5	-129.0	232.5	0.88	0.37	8.14	36.4	6.2	
4,544.0	5.19	109.52	4,524.0	-131.9	241.0	0.68	-0.65	1.97	37.3	6.7	
4,638.0	5.10	107.15	4,617.7	-134.5	249.0	0.25	-0.10	-2.52	38.2	10.1	
4,733.0	5.28	109.52	4,712.3	-137.2	257.2	0.29	0.19	2.49	39.8	10.3	
4,827.0	5.54	112.68	4,805.9	-140.4	265.4	0.42	0.28	3.36	41.2	9.4	
4,922.0	5.01	112.33	4,900.4	-143.8	273.5	0.56	-0.56	-0.37	42.3	10.7	
5,010.0	4.31	112.68	4,988.2	-146.5	280.1	0.80	-0.80	0.40	44.4	11.5	



EOG Resources
Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #202H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3686.0usft
Site:	Hemlock 32 State	MD Reference:	KB = 25 @ 3686.0usft
Well:	#202H	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)
5,096.0	3.89	111.10	5,073.9	-148.7	285.7	0.73	-0.72	-1.84	47.0	13.8
5,191.0	5.89	127.10	5,168.6	-152.8	292.4	2.69	2.32	16.84	51.0	-0.2
5,285.0	8.71	121.38	5,261.8	-159.4	302.3	3.09	3.00	-6.09	48.7	3.9
5,380.0	9.58	120.86	5,355.6	-167.2	315.2	0.92	0.92	-0.55	43.4	4.0
5,474.0	9.67	121.74	5,448.3	-175.4	328.7	0.18	0.10	0.94	37.5	2.9
5,569.0	9.94	122.70	5,541.9	-184.0	342.4	0.33	0.28	1.01	31.3	1.8
5,664.0	9.76	122.09	5,635.5	-192.7	356.1	0.22	-0.19	-0.64	24.9	1.4
5,758.0	9.67	120.59	5,728.2	-200.9	369.6	0.29	-0.10	-1.60	18.7	1.6
5,853.0	10.02	119.36	5,821.8	-209.1	383.7	0.43	0.37	-1.29	12.3	1.7
5,948.0	9.85	118.92	5,915.4	-217.0	398.0	0.20	-0.18	-0.46	5.8	1.7
6,041.0	9.06	119.28	6,007.1	-224.5	411.4	0.85	-0.85	0.39	0.2	1.6
6,135.0	8.44	111.10	6,100.0	-230.6	424.3	1.48	-0.66	-8.70	-4.5	1.9
6,229.0	6.68	99.59	6,193.2	-234.0	436.1	2.46	-1.87	-12.24	-7.8	2.8
6,323.0	3.96	90.89	6,286.8	-234.9	444.7	3.01	-2.89	-9.26	-8.1	5.4
6,417.0	3.08	72.96	6,380.6	-234.2	450.4	1.49	-0.94	-19.07	-8.1	8.7
6,511.0	1.93	48.70	6,474.5	-232.4	454.0	1.64	-1.22	-25.81	-12.2	11.0
6,604.0	1.41	20.66	6,567.5	-230.3	455.6	1.03	-0.56	-30.15	-19.1	8.1
6,698.0	1.58	24.88	6,661.4	-228.1	456.5	0.22	0.18	4.49	-21.1	11.4
6,792.0	1.49	21.01	6,755.4	-225.8	457.5	0.15	-0.10	-4.12	-24.3	9.9
6,886.0	1.41	17.67	6,849.4	-223.5	458.3	0.12	-0.09	-3.55	-27.2	8.4
6,980.0	1.41	17.32	6,943.3	-221.3	459.0	0.01	0.00	-0.37	-29.6	8.2
7,074.0	1.41	20.49	7,037.3	-219.1	459.7	0.08	0.00	3.37	-31.4	9.9
7,168.0	1.23	31.38	7,131.3	-217.2	460.7	0.33	-0.19	11.59	-31.1	15.8
7,262.0	1.06	42.99	7,225.3	-215.7	461.8	0.31	-0.18	12.35	-29.1	22.0
7,356.0	1.14	38.24	7,319.3	-214.3	463.0	0.13	0.09	-5.05	-32.7	19.4
7,418.1	1.14	38.24	7,381.3	-213.4	463.7	0.00	0.00	0.00	-33.9	19.4

Brushy Top(Hemlock 32 State #202H)



EOG Resources
Midland PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Hemlock 32 State
Well: #202H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #202H
TVD Reference: KB = 25 @ 3686.0usft
MD Reference: KB = 25 @ 3686.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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)
7,449.0	1.14	38.50	7,412.2	-212.9	464.1	0.02	0.00	0.84	-34.4	19.6
7,543.0	1.14	47.38	7,506.2	-211.5	465.4	0.19	0.00	9.45	-32.8	24.8
7,638.0	0.88	59.77	7,601.2	-210.5	466.7	0.36	-0.27	13.04	-28.4	31.5
7,732.0	0.88	66.19	7,695.2	-209.8	468.0	0.10	0.00	6.83	-26.2	34.5
7,826.0	0.88	85.88	7,789.2	-209.5	469.4	0.32	0.00	20.95	-14.4	41.6
7,919.0	1.06	93.17	7,882.2	-209.5	470.9	0.23	0.19	7.84	-10.6	43.2
8,013.0	1.14	101.26	7,976.1	-209.7	472.7	0.19	0.09	8.61	-6.2	44.3
8,107.0	1.14	112.60	8,070.1	-210.3	474.5	0.24	0.00	12.06	0.8	44.9
8,201.0	1.49	117.96	8,164.1	-211.2	476.4	0.39	0.37	5.70	2.8	44.7
8,295.0	1.49	117.78	8,258.1	-212.3	478.6	0.00	0.00	-0.19	0.2	44.7
8,389.0	1.32	121.65	8,352.0	-213.5	480.6	0.21	-0.18	4.12	1.0	44.7
8,483.0	1.23	123.58	8,446.0	-214.6	482.4	0.11	-0.10	2.05	0.4	44.6
8,577.0	1.49	121.82	8,540.0	-215.8	484.3	0.28	0.28	-1.87	-3.2	44.6
8,671.0	1.32	129.73	8,634.0	-217.1	486.1	0.27	-0.18	8.41	0.6	44.8
8,765.0	1.14	134.92	8,727.9	-218.5	487.6	0.23	-0.19	5.52	2.7	44.6
8,859.0	1.23	139.84	8,821.9	-219.9	488.9	0.14	0.10	5.23	4.6	44.3
8,953.0	1.14	143.45	8,915.9	-221.5	490.1	0.12	-0.10	3.84	5.4	44.0
9,047.0	1.23	141.16	9,009.9	-223.0	491.3	0.11	0.10	-2.44	1.7	44.2
9,141.0	0.88	149.16	9,103.9	-224.4	492.3	0.40	-0.37	8.51	6.1	43.6
9,235.0	0.35	142.04	9,197.9	-225.2	492.9	0.57	-0.56	-7.57	-0.4	44.0
9,346.0	2.77	339.64	9,308.8	-223.0	492.2	2.80	2.18	-146.31	-15.3	-42.1
KOP, MD:9345.0', TVD:9308.8', N/S:-223.0', E/W:492.2', INC:2.77										
9,363.0	3.25	339.35	9,325.8	-222.2	491.8	2.80	2.80	-1.68	-16.0	-42.2
9,458.0	16.09	327.31	9,419.3	-208.5	483.7	13.61	13.52	-12.67	-15.6	-39.9
9,483.7	18.32	329.95	9,443.8	-202.0	479.8	9.19	8.67	10.28	-20.5	-36.3
FTP Crossing, MD:9483.7', TVD:9443.8', N/S:-202.0', E/W:479.8', INC:18.32										
9,551.0	24.27	334.61	9,506.5	-180.3	468.6	9.19	8.84	6.92	-30.6	-25.0



EOG Resources
Midland PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Hemlock 32 State
Well: #202H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #202H
TVD Reference: KB = 25 @ 3686.0usft
MD Reference: KB = 25 @ 3686.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
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)
9,645.0	30.43	321.78	9,590.0	-144.1	445.5	9.04	6.55	-13.65	-35.8	-9.3
9,739.0	38.78	324.76	9,667.3	-101.3	413.7	9.06	8.88	3.17	-44.1	24.7
9,833.0	47.04	336.80	9,736.2	-45.4	383.1	12.35	8.79	12.81	-38.6	65.2
FTP(Hemlock 32 State #202H)										
9,927.0	57.07	339.18	9,794.0	23.2	355.5	10.85	10.67	2.53	-33.6	95.8
10,021.0	63.84	344.98	9,840.3	101.0	330.5	8.98	7.20	6.17	-22.5	123.4
10,115.0	74.13	350.52	9,874.0	186.6	312.0	12.25	10.95	5.89	-9.1	142.7
10,208.0	85.47	355.32	9,890.5	277.3	300.8	13.21	12.19	5.16	-1.5	153.6
10,260.0	91.71	0.25	9,891.7	329.2	298.8	15.29	12.00	9.48	-0.9	155.2
10,303.0	93.83	6.31	9,889.7	372.0	301.3	14.91	4.93	14.09	-3.7	152.4
10,392.0	93.03	7.62	9,884.3	460.2	312.0	1.72	-0.90	1.47	-8.0	141.0
10,486.0	91.28	9.29	9,880.8	553.1	325.9	2.57	-1.86	1.78	-10.1	126.6
10,581.0	90.13	10.35	9,879.6	646.7	342.1	1.65	-1.21	1.12	-10.0	109.8
10,675.0	89.52	10.52	9,879.9	739.2	359.1	0.67	-0.65	0.18	-8.5	92.1
10,733.0	89.57	10.63	9,880.4	796.2	369.7	0.21	0.09	0.19	-7.4	81.1
TGT#1(Hemlock 32 State #202H)										
10,769.0	89.60	10.70	9,880.6	831.6	376.4	0.21	0.09	0.19	-6.6	74.2
10,864.0	87.49	9.82	9,883.0	925.0	393.3	2.41	-2.22	-0.93	-2.4	56.7
10,958.0	86.09	7.89	9,888.3	1,017.7	407.7	2.53	-1.49	-2.05	4.4	41.5
11,052.0	86.17	5.69	9,894.7	1,110.9	418.8	2.34	0.09	-2.34	11.9	29.8
11,147.0	88.02	0.24	9,899.5	1,205.6	423.7	6.05	1.95	-5.74	18.0	24.3
11,241.0	93.74	358.84	9,898.0	1,299.5	423.0	6.26	6.09	-1.49	18.0	24.4
11,335.0	94.09	0.94	9,891.6	1,393.3	422.8	2.26	0.37	2.23	13.0	24.0
11,430.0	94.62	1.12	9,884.4	1,488.0	424.5	0.59	0.56	0.19	7.2	21.6
11,524.0	95.41	0.68	9,876.2	1,581.6	426.0	0.96	0.84	-0.47	0.4	19.5
11,618.0	93.74	0.94	9,868.7	1,675.3	427.3	1.80	-1.78	0.28	-5.6	17.5
11,713.0	91.01	1.74	9,864.7	1,770.2	429.5	2.99	-2.87	0.84	-8.1	14.6



EOG Resources
Midland PVA

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Local Co-ordinate Reference: Well #202H
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MD Reference: KB = 25 @ 3686.0usft
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Survey Calculation Method: Minimum Curvature
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)
11,807.0	91.01	1.56	9,863.1	1,864.1	432.2	0.19	0.00	-0.19	-8.3	11.3
11,901.0	91.80	1.30	9,860.8	1,958.1	434.6	0.88	0.84	-0.28	-9.1	8.3
11,995.0	89.43	1.47	9,859.8	2,052.0	436.8	2.53	-2.52	0.18	-8.7	5.4
12,089.0	89.60	1.65	9,860.6	2,146.0	439.4	0.26	0.18	0.19	-8.4	2.2
12,183.0	89.78	1.47	9,861.1	2,240.0	442.0	0.27	0.19	-0.19	-4.5	-1.0
12,278.0	90.31	0.51	9,861.0	2,335.0	443.6	1.15	0.56	-1.01	-3.1	-3.3
12,372.0	90.75	0.15	9,860.1	2,428.9	444.1	0.60	0.47	-0.38	-2.5	-4.5
12,466.0	91.80	0.24	9,858.0	2,522.9	444.5	1.12	1.12	0.10	-3.2	-5.4
12,561.0	92.51	359.45	9,854.5	2,617.9	444.2	1.12	0.75	-0.83	-5.3	-5.8
12,655.0	93.47	0.15	9,849.6	2,711.7	443.9	1.26	1.02	0.74	-8.7	-6.1
12,749.0	94.26	0.94	9,843.2	2,805.5	444.8	1.19	0.84	0.84	-13.6	-7.7
12,844.0	93.39	0.77	9,836.9	2,900.3	446.2	0.93	-0.92	-0.18	-18.5	-9.7
12,939.0	91.28	358.66	9,833.0	2,995.2	445.7	3.14	-2.22	-2.22	-20.9	-9.9
13,033.0	92.51	358.57	9,829.9	3,089.1	443.4	1.31	1.31	-0.10	-22.6	-8.3
13,127.0	90.48	359.10	9,827.5	3,183.0	441.5	2.23	-2.16	0.56	-23.6	-7.0
13,222.0	89.69	358.57	9,827.3	3,278.0	439.6	1.00	-0.83	-0.56	-22.3	-5.7
13,316.0	90.92	358.40	9,826.8	3,372.0	437.1	1.32	1.31	-0.18	-21.3	-3.9
13,324.9	90.98	358.31	9,826.7	3,380.9	436.9	1.22	0.66	-1.03	-21.3	-3.7
TGT#2(Hemlock 32 State #202H)										
13,410.0	91.54	357.43	9,824.8	3,465.9	433.7	1.22	0.66	-1.03	-22.5	-1.1
13,504.0	91.80	356.90	9,822.1	3,559.8	429.1	0.63	0.28	-0.56	-24.6	2.9
13,598.0	90.75	358.75	9,820.0	3,653.7	425.5	2.26	-1.12	1.97	-26.1	5.8
13,692.0	90.04	359.10	9,819.3	3,747.6	423.7	0.84	-0.76	0.37	-26.1	6.9
13,787.0	90.66	358.48	9,818.7	3,842.6	421.7	0.92	0.65	-0.65	-26.1	8.3
13,880.0	89.25	358.40	9,818.8	3,936.6	419.2	1.52	-1.52	-0.09	-25.4	10.2
13,975.0	89.34	358.48	9,820.0	4,030.5	416.6	0.13	0.09	0.08	-23.6	12.1
14,069.0	89.08	358.57	9,821.3	4,124.5	414.2	0.29	-0.28	0.10	-21.7	13.9



EOG Resources
Midland PVA

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Local Co-ordinate Reference: Well #202H
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North Reference: Grid
Survey Calculation Method: Minimum Curvature
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)	
14,163.0	88.11	359.45	9,823.6	4,218.4	412.6	1.39	-1.03	0.94	-18.7	14.9	
14,257.0	87.93	359.10	9,826.8	4,312.4	411.4	0.42	-0.19	-0.37	-14.9	15.4	
14,351.0	87.49	359.45	9,830.6	4,406.3	410.2	0.60	-0.47	0.37	-10.5	16.0	
14,445.0	88.72	359.36	9,833.7	4,500.2	409.2	1.31	1.31	-0.10	-6.7	16.3	
14,540.0	90.92	359.45	9,834.0	4,595.2	408.2	2.32	2.32	0.09	-5.8	16.7	
14,634.0	91.63	359.19	9,831.9	4,689.2	407.1	0.80	0.76	-0.28	-7.3	17.1	
14,729.0	92.24	358.92	9,828.7	4,784.1	405.5	0.70	0.64	-0.28	-9.9	18.1	
14,748.0	92.51	359.36	9,827.9	4,803.1	405.2	2.72	1.42	2.32	-10.5	18.2	
Last MWD Survey (MD=14748.0')											
14,813.0	92.51	359.36	9,825.1	4,868.0	404.5	0.00	0.00	0.00	-12.9	18.5	
Projection to Bit (MD=14813.0') - PBHL(Hemlock 32 State #202H)											

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
9,346.0	9,308.8	-223.0	492.2	KOP, MD:9346.0', TVD:9308.8', N/S:-223.0', E/W:492.2', INC:2.77
9,483.7	9,443.8	-202.0	479.8	FTP Crossing, MD:9483.7', TVD:9443.8', N/S:-202.0', E/W:479.8', INC:18.32
14,748.0	9,827.9	4,803.1	405.2	Last MWD Survey (MD=14748.0')
14,813.0	9,825.1	4,868.0	404.5	Projection to Bit (MD=14813.0')

Checked By: _____ Approved By: _____ Date: _____

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

Kay Maddox 8/28/2020
Signed Date



Lea County, NM (NAD 83 NME)

Hemlock 32 State #202H

Plan #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 @ 3685.0ust 3661.0
Northing 457197.00 Easting 767576.00 Latitude 32° 15' 17.237 N Longitude 103° 35' 4.169 W



Azimuths to Grid North
True North: -0.39°
Magnetic North: 6.28°

Magnetic Field
Strength: 47673.2nT
Dip Angle: 60.05°
Date: 3/12/2020
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.28°
To convert a Magnetic Direction to a True Direction, Add 6.68° East
To convert a True Direction to a Grid Direction, Subtract 0.39°

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSect
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	1700.2	6.00	118.82	1699.7	-7.6	13.8	2.00	118.82	-8.4
4	6396.6	6.00	118.82	6370.3	-244.4	444.2	0.00	0.00	-205.1
5	6696.9	0.00	0.00	6670.0	-252.0	458.0	2.00	180.00	-211.4
6	9346.6	0.00	0.00	9319.7	-252.0	458.0	0.00	0.00	-211.4
7	10252.4	90.58	359.61	9892.6	326.8	454.0	10.00	359.61	364.9
8	10706.6	90.58	359.61	9888.0	780.9	450.9	0.00	0.00	817.0
9	10721.5	90.88	359.61	9887.8	795.8	450.8	2.00	0.00	831.8
10	13307.2	90.88	359.61	9848.0	3381.2	433.2	0.00	0.00	3406.0
11	13332.3	90.38	359.61	9847.7	3406.3	433.0	2.00	-180.00	3431.0
12	14795.1	90.38	359.61	9838.0	4869.0	423.0	0.00	0.00	4887.3

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
Brushy Top(Hemlock 32 State #202H)	7392.0	-232.9	489.0	458946.00	768134.00
PBHL(Hemlock 32 State #202H)	9838.0	4859.0	423.0	452066.00	768099.00
TGT#2(Hemlock 32 State #202H)	9848.0	3381.2	433.2	460579.20	768109.17
TGT#1(Hemlock 32 State #202H)	9889.0	780.9	450.9	457977.00	768125.94
FTP(Hemlock 32 State #202H)	9899.0	-202.0	458.0	456995.00	768134.00

