

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 30-025-46752		² Pool Code 59900	³ Pool Name TRIPLE X; BONE SPRING
⁴ Property Code 320561	⁵ Property Name HEMLOCK 32 STATE		⁶ Well Number 201H
⁷ OGRID No. 7377	⁸ Operator Name EOG RESOURCES, INC.		⁹ Elevation 3661'

¹⁰Surface Location

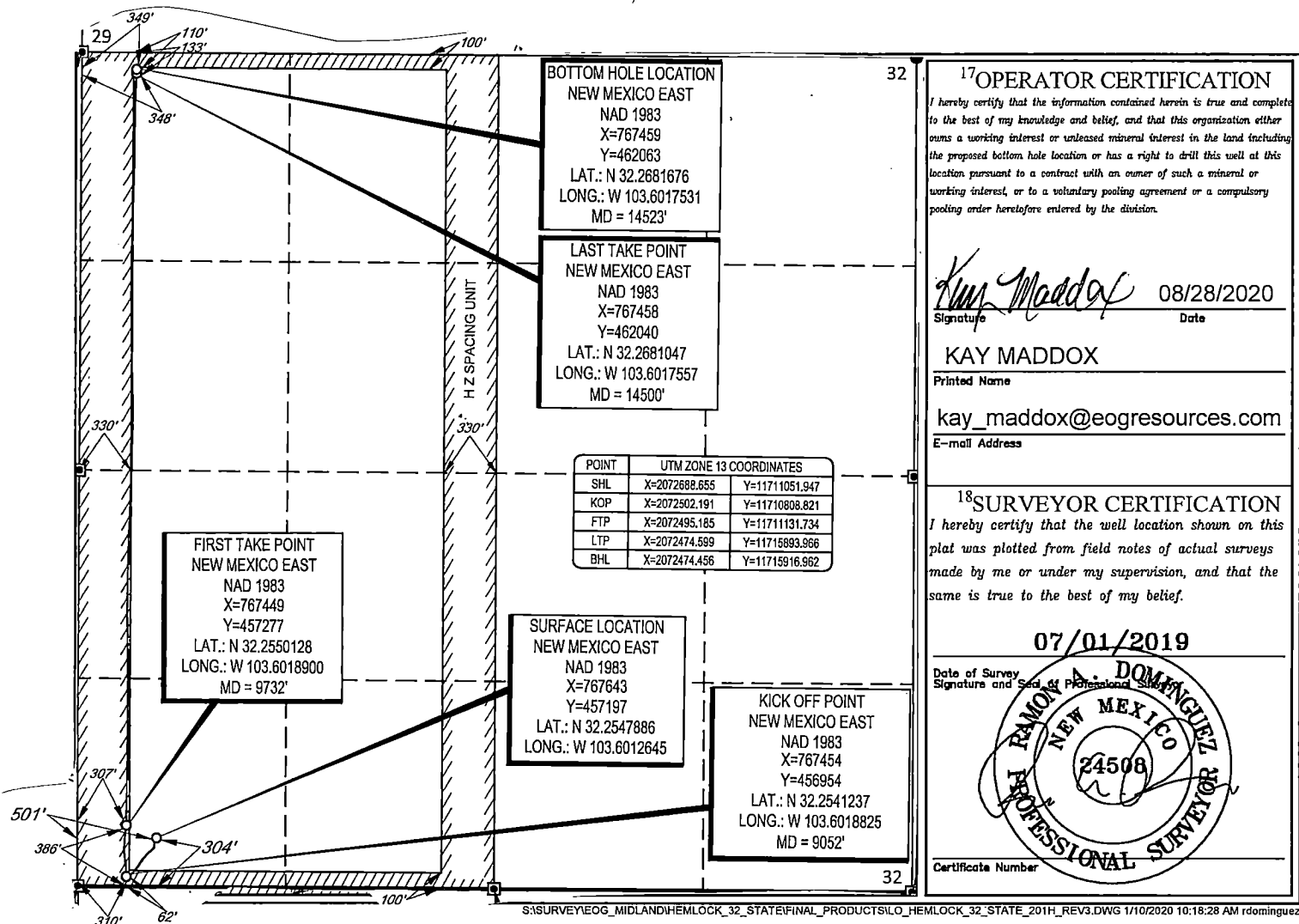
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	32	23-S	33-E	-	304'	SOUTH	501'	WEST	LEA

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
D	32	23-S	33-E	-	110'	NORTH	349'	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 ☒ XXXAPI #
30-025-46752Operator Name:
EOG RESOURCES, INCProperty Name:
HEMLOCK 32 STATEWell Number
201H

Kick Off Point (KOP)

UL M	Section 32	Township 23S	Range 33E	Lot	Feet 62	From N/S SOUTH	Feet 310	From E/W WEST	County LEA
Latitude 32.2541237					Longitude 103.6018825			NAD 1983	

First Take Point (FTP)

UL M	Section 32	Township 23S	Range 33E	Lot	Feet 386	From N/S SOUTH	Feet 501	From E/W WEST	County LEA
Latitude 32.2550128					Longitude 103.6018900			NAD 1983	

Last Take Point (LTP)

UL D	Section 32	Township 23S	Range 33E	Lot	Feet 133	From N/S NORTH	Feet 348	From E/W WEST	County LEA
Latitude 32.2681047					Longitude 103.6017557			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

KZ 06/29/2018



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Hemlock 32 State

#201H

OH

Design: OH

Midland PVA

16 March, 2020



EOG Resources
Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #201H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3686.0usft
Site:	Hemlock 32 State	MD Reference:	KB = 25 @ 3686.0usft
Well:	#201H	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	#201H					
Well Position	+N-S	0.0 usft	Northing:	457,197.00 usft	Latitude:	32° 15' 17.239 N
	+E-W	0.0 usft	Easting:	767,643.00 usft	Longitude:	103° 36' 4.552 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	2/17/2020	6.68	60.05	47,676.87325933

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	357.60	

Survey Program		Date 3/16/2020		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
172.0	14,523.0	Drilltech (OH)	EOG MWD+IFR1	MWD + IFR1



EOG Resources
Midland PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Hemlock 32 State
Well: #201H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #201H
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)
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0
172.0	1.14	221.58	172.0	-1.3	-1.1	0.66	0.66	0.00	-1.7	0.0
230.0	1.76	220.79	230.0	-2.4	-2.1	1.07	1.07	-1.36	-3.2	0.0
317.0	2.20	217.62	316.9	-4.7	-4.0	0.52	0.51	-3.64	-6.2	-0.3
406.0	2.37	207.96	405.8	-7.7	-5.9	0.47	0.19	-10.85	-9.6	-1.6
495.0	2.64	205.76	494.8	-11.2	-7.7	0.32	0.30	-2.47	-13.4	-2.0
585.0	2.64	194.95	584.7	-15.0	-9.1	0.55	0.00	-12.01	-16.9	-4.9
672.0	2.90	186.51	671.6	-19.2	-9.9	0.56	0.30	-9.70	-20.2	-7.6
771.0	2.99	187.30	770.4	-24.2	-10.5	0.10	0.09	0.80	-25.3	-7.3
866.0	2.90	184.40	865.3	-29.1	-11.0	0.18	-0.09	-3.05	-29.8	-8.7
960.0	2.81	189.67	959.2	-33.7	-11.5	0.30	-0.10	5.61	-35.2	-5.7
1,055.0	2.73	189.06	1,054.1	-38.2	-12.3	0.09	-0.08	-0.64	-39.7	-6.1
1,148.0	3.17	181.50	1,147.0	-43.0	-12.7	0.63	0.47	-8.13	-43.3	-11.6
1,243.0	3.52	176.93	1,241.8	-48.5	-12.6	0.46	0.37	-4.81	-47.8	-15.2
1,327.0	3.17	179.04	1,325.7	-53.4	-12.4	0.44	-0.42	2.51	-53.2	-13.3
1,434.0	2.46	186.25	1,432.5	-58.7	-12.6	0.74	-0.66	6.74	-59.7	-6.2
1,529.0	2.73	205.58	1,527.4	-62.7	-13.8	0.96	0.28	20.35	-62.4	14.7
1,623.0	4.92	227.12	1,621.2	-67.5	-17.8	2.75	2.33	22.91	-56.3	37.0
1,718.0	6.24	232.21	1,715.8	-73.4	-24.8	1.48	1.39	5.36	-56.5	40.9
1,812.0	5.89	232.30	1,809.2	-79.5	-32.7	0.37	-0.37	0.10	-58.6	39.2
1,906.0	5.45	230.63	1,902.8	-85.3	-39.9	0.50	-0.47	-1.78	-60.9	35.8
2,001.0	4.92	230.46	1,997.4	-90.8	-46.6	0.56	-0.56	-0.18	-61.5	34.0
2,095.0	5.72	225.54	2,091.0	-96.6	-53.0	0.98	0.85	-5.23	-64.7	27.4
2,190.0	7.91	221.05	2,185.3	-104.8	-60.7	2.37	2.31	-4.73	-69.7	21.6
2,284.0	7.30	221.32	2,278.5	-114.2	-68.9	0.65	-0.65	0.29	-73.9	21.7
2,378.0	6.68	219.56	2,371.8	-122.9	-76.3	0.70	-0.66	-1.87	-77.8	19.2
2,472.0	6.24	218.06	2,465.2	-131.1	-82.9	0.50	-0.47	-1.60	-80.6	17.2



EOG Resources
Midland PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Hemlock 32 State
Well: #201H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #201H
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)
2,566.0	5.80	215.60	2,558.7	-139.0	-88.9	0.54	-0.47	-2.62	-83.0	14.1
2,660.0	5.28	214.80	2,652.2	-146.4	-94.1	0.56	-0.55	-0.74	-84.1	13.6
2,755.0	4.75	212.97	2,746.9	-153.3	-98.7	0.59	-0.56	-2.03	-84.5	11.6
2,849.0	5.45	213.32	2,840.5	-160.3	-103.3	0.75	0.74	0.37	-84.7	13.0
2,943.0	6.60	217.10	2,934.0	-168.4	-109.0	1.29	1.22	4.02	-85.3	19.1
3,038.0	5.89	216.22	3,028.4	-176.6	-115.2	0.75	-0.75	-0.93	-87.7	18.2
3,132.0	5.63	217.10	3,121.9	-184.2	-120.8	0.29	-0.28	0.94	-88.7	19.9
3,226.0	5.10	215.25	3,215.5	-191.3	-126.0	0.59	-0.56	-1.97	-89.9	17.5
3,320.0	4.48	214.29	3,309.2	-197.8	-130.5	0.67	-0.66	-1.02	-89.8	16.6
3,414.0	4.40	220.26	3,402.9	-203.5	-134.9	0.50	-0.09	6.35	-86.7	26.1
3,509.0	5.36	230.37	3,497.6	-209.1	-140.7	1.35	1.01	10.64	-80.7	39.9
3,603.0	4.48	230.63	3,591.2	-214.3	-146.9	0.94	-0.94	0.28	-80.6	38.7
3,698.0	3.78	229.84	3,686.0	-218.6	-152.1	0.74	-0.74	-0.83	-79.8	36.0
3,792.0	3.25	231.34	3,779.8	-222.3	-156.6	0.57	-0.56	1.60	-76.5	36.5
3,886.0	3.25	230.90	3,873.6	-225.7	-160.7	0.03	0.00	-0.47	-74.1	34.2
3,981.0	3.25	229.58	3,968.5	-229.1	-164.9	0.08	0.00	-1.39	-72.1	31.0
4,075.0	2.29	253.66	4,062.4	-231.4	-168.7	1.58	-1.02	25.62	-50.8	54.1
4,169.0	2.11	269.83	4,156.3	-231.9	-172.2	0.68	-0.19	17.20	-32.0	60.3
4,263.0	1.85	262.45	4,250.3	-232.1	-175.5	0.39	-0.28	-7.85	-36.7	49.9
4,357.0	1.06	222.90	4,344.2	-232.9	-177.6	1.31	-0.84	-42.07	-53.9	13.7
4,452.0	1.49	170.43	4,439.2	-234.8	-178.0	1.25	0.45	-55.23	-40.1	-28.8
4,546.0	1.76	159.70	4,533.2	-237.4	-177.3	0.43	0.29	-11.41	-32.5	-28.9
4,640.0	2.02	151.27	4,627.1	-240.2	-176.0	0.40	0.28	-8.97	-28.0	-26.0
4,735.0	2.81	146.08	4,722.0	-243.6	-173.9	0.86	0.83	-5.46	-27.1	-20.6
4,829.0	3.34	141.16	4,815.9	-247.6	-170.9	0.63	0.56	-5.23	-28.6	-15.1
4,923.0	1.41	159.88	4,909.8	-250.8	-168.7	2.19	-2.05	19.91	-31.5	2.8
5,017.0	0.97	214.99	5,003.8	-252.6	-168.8	1.24	-0.47	58.63	-9.0	28.9



EOG Resources
Midland PVA

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

Local Co-ordinate Reference: Well #201H
TVD Reference: KB = 25 @ 3686.0usft
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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)
	5,190.0	0.79	225.80	5,176.8	-254.6	-170.5	0.14	-0.10	6.25	8.9	26.7
	5,284.0	3.52	312.72	5,270.7	-253.1	-173.1	3.79	2.90	92.47	25.8	-14.8
	5,379.0	3.52	310.79	5,365.5	-249.2	-177.4	0.12	0.00	-2.03	20.2	-20.8
	5,474.0	3.61	316.50	5,460.4	-245.1	-181.7	0.39	0.09	6.01	11.7	-26.0
	5,569.0	3.69	317.29	5,555.2	-240.7	-185.8	0.10	0.08	0.83	5.2	-26.7
	5,663.0	1.23	273.87	5,649.1	-238.4	-188.9	3.11	-2.62	-46.19	18.9	-17.9
	5,758.0	1.32	271.50	5,744.0	-238.3	-191.0	0.11	0.09	-2.49	17.5	-17.1
	5,852.0	1.41	284.95	5,838.0	-238.0	-193.2	0.35	0.10	14.31	10.9	-20.5
	5,947.0	1.49	281.08	5,933.0	-237.5	-195.5	0.13	0.08	-4.07	9.8	-19.8
	6,041.0	1.67	272.20	6,027.0	-237.2	-198.1	0.32	0.19	-9.45	10.2	-18.2
	6,135.0	1.49	276.78	6,120.9	-237.0	-200.7	0.23	-0.19	4.87	6.1	-18.9
	6,228.0	1.67	282.31	6,213.9	-236.5	-203.2	0.25	0.19	5.95	1.7	-19.3
	6,322.0	1.85	281.26	6,307.8	-236.0	-206.0	0.19	0.19	-1.12	-0.8	-19.3
	6,416.0	1.32	297.43	6,401.8	-235.2	-208.5	0.73	-0.56	17.20	-8.7	-17.8
	6,510.0	0.62	6.95	6,495.8	-234.2	-209.4	1.33	-0.74	73.96	-20.6	2.9
	6,604.0	0.35	353.68	6,589.8	-233.4	-209.4	0.31	-0.29	-14.12	-21.5	-2.0
	6,698.0	0.35	23.83	6,683.8	-232.8	-209.3	0.19	0.00	32.07	-20.2	9.2
	6,791.0	0.53	3.96	6,776.8	-232.1	-209.1	0.25	0.19	-21.37	-22.8	1.7
	6,886.0	0.62	358.87	6,871.8	-231.2	-209.1	0.11	0.09	-5.36	-23.8	-0.4
	6,979.0	0.44	8.71	6,964.8	-230.3	-209.1	0.22	-0.19	10.58	-24.4	3.8
	7,073.0	0.35	24.97	7,058.8	-229.7	-208.9	0.15	-0.10	17.30	-23.0	10.6
	7,168.0	0.26	338.21	7,153.8	-229.2	-208.9	0.27	-0.09	-49.22	-23.9	-9.7
	7,261.0	0.26	63.55	7,246.8	-228.9	-208.7	0.38	0.00	91.76	-11.8	23.2
	7,355.0	0.09	32.88	7,340.8	-228.8	-208.5	0.20	-0.18	-32.63	-22.3	13.8
	7,394.2	0.13	86.33	7,380.0	-228.8	-208.5	0.27	0.11	136.24	-2.2	26.1
Brushy Top(Hemlock 32 State #201H)	7,449.0	0.26	109.17	7,434.8	-228.8	-208.3	0.27	0.24	41.71	7.9	25.0



EOG Resources
Midland PVA

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Design: OH

Local Co-ordinate Reference: Well #201H
TVD Reference: KB = 25 @ 3686.0usft
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North Reference: Grid
Survey Calculation Method: Minimum Curvature
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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)
7,543.0	0.26	98.88	7,528.8	-228.9	-207.9	0.05	0.00	-10.95	2.9	26.0
7,637.0	0.70	82.19	7,622.8	-228.9	-207.1	0.49	0.47	-17.76	-5.5	25.6
7,731.0	0.70	106.53	7,716.8	-228.9	-206.0	0.31	0.00	25.89	4.5	25.8
7,825.0	0.70	98.09	7,810.8	-229.2	-204.8	0.11	0.00	-8.98	-0.5	26.1
7,919.0	0.62	114.79	7,904.7	-229.5	-203.8	0.22	-0.09	17.77	6.0	25.3
8,013.0	0.97	115.41	7,998.7	-230.0	-202.6	0.37	0.37	0.66	5.0	25.3
8,201.0	1.14	119.45	8,186.7	-231.6	-199.6	0.10	0.09	2.15	3.3	25.0
8,295.0	1.23	124.46	8,280.7	-232.7	-197.9	0.15	0.10	5.33	3.5	24.7
8,388.0	1.23	127.27	8,373.7	-233.8	-196.3	0.06	0.00	3.02	2.7	24.5
8,482.0	1.06	142.57	8,467.6	-235.1	-195.0	0.37	-0.18	16.28	7.2	23.2
8,576.0	1.32	150.92	8,561.6	-236.8	-193.9	0.33	0.28	8.88	8.6	22.0
8,671.0	1.14	151.97	8,656.6	-238.6	-192.9	0.19	-0.19	1.11	7.0	21.9
8,764.0	1.06	151.97	8,749.6	-240.1	-192.1	0.09	-0.09	0.00	5.2	21.9
8,858.0	1.23	152.15	8,843.6	-241.8	-191.2	0.18	0.18	0.19	3.4	21.9
8,953.0	1.23	154.70	8,938.5	-243.6	-190.3	0.06	0.00	2.68	2.3	21.8
9,052.0	1.71	17.68	9,037.5	-243.2	-189.4	2.77	0.49	-138.41	-17.2	-15.1
KOP, MD:9052.0', TVD:9037.5', N/S:-243.2', E/W:-189.4', INC:1.71										
9,080.0	2.46	12.14	9,065.5	-242.2	-189.2	2.77	2.68	-19.77	-16.1	-16.8
9,174.0	9.85	4.84	9,158.9	-232.2	-188.0	7.89	7.86	-7.77	-11.5	-19.3
9,269.0	18.20	357.46	9,251.0	-209.2	-188.0	8.97	8.79	-7.77	-3.9	-18.8
9,282.2	19.22	356.31	9,263.5	-205.0	-188.3	8.19	7.70	-8.70	-2.6	-18.3
FTP Crossing, MD:9282.2', TVD:9263.5', N/S:-205.0', E/W:-188.3', INC:19.22										
9,320.0	22.16	353.59	9,298.9	-191.7	-189.4	8.19	7.79	-7.20	0.9	-16.0
9,362.0	25.06	351.48	9,337.3	-175.0	-191.7	7.19	6.90	-5.02	5.0	-12.1
9,415.0	29.90	349.29	9,384.3	-150.9	-195.8	9.33	9.13	-4.13	10.4	-5.4
9,456.0	34.12	351.75	9,419.1	-129.5	-199.3	10.77	10.29	6.00	14.3	-0.5
9,503.0	38.43	356.93	9,457.0	-101.9	-202.0	11.25	9.17	11.02	19.4	3.1



EOG Resources
Midland PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Hemlock 32 State
Well: #201H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #201H
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)	Buile (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)
9,550.0	42.56	359.13	9,492.7	-71.4	-203.0	9.30	8.79	4.68	24.9	5.5
FTP(Hemlock 32 State #201H)										
9,605.0	49.15	3.26	9,531.0	-32.0	-202.1	13.13	11.98	7.51	31.1	5.6
9,644.0	57.77	4.49	9,554.2	-0.7	-200.0	22.25	22.10	3.15	33.1	4.8
9,688.0	67.27	3.96	9,574.5	38.2	-197.1	21.62	21.59	-1.20	31.4	4.3
9,707.0	71.40	4.49	9,581.2	55.9	-195.8	21.89	21.74	2.79	29.5	3.9
9,732.0	76.06	4.40	9,588.2	79.8	-194.0	18.64	18.64	-0.36	25.8	3.5
9,826.0	86.70	0.71	9,602.3	172.5	-189.9	11.96	11.32	-3.93	8.9	4.9
9,919.0	89.34	0.71	9,605.5	265.4	-188.7	2.84	2.84	0.00	-3.8	8.8
10,014.0	90.22	1.06	9,605.9	360.4	-187.2	1.00	0.93	0.37	-5.4	12.3
10,108.0	90.92	0.36	9,604.9	454.4	-186.1	1.05	0.74	-0.74	-5.3	12.2
10,201.0	91.63	359.04	9,602.9	547.4	-186.6	1.61	0.76	-1.42	-6.5	12.1
10,295.0	92.07	359.48	9,599.8	641.3	-187.8	0.66	0.47	0.47	-8.5	12.7
10,390.0	91.63	359.74	9,596.8	736.3	-188.4	0.54	-0.46	0.27	-10.6	12.6
10,427.6	91.73	359.67	9,595.7	773.9	-188.6	0.33	0.27	-0.18	-11.3	12.6
TGT#1(Hemlock 32 State #201H)										
10,485.0	91.89	359.57	9,593.8	831.2	-189.0	0.33	0.27	-0.18	-12.3	12.6
10,579.0	91.98	359.04	9,590.7	925.2	-190.1	0.57	0.10	-0.56	-14.1	13.1
10,674.0	91.80	358.87	9,587.5	1,020.1	-191.9	0.26	-0.19	-0.18	-15.8	14.2
10,768.0	92.15	358.51	9,584.3	1,114.0	-194.0	0.53	0.37	-0.38	-17.6	15.7
10,862.0	89.43	359.48	9,583.0	1,208.0	-195.7	3.07	-2.89	1.03	-17.5	16.7
10,957.0	87.23	358.60	9,585.8	1,302.9	-197.2	2.49	-2.32	-0.93	-13.3	17.6
11,051.0	86.09	358.25	9,591.2	1,396.7	-199.8	1.27	-1.21	-0.37	-6.4	19.5
11,160.0	88.37	359.55	9,596.5	1,505.6	-201.9	2.41	2.09	1.19	0.5	20.9
11,240.0	91.19	0.60	9,596.8	1,585.6	-201.8	3.76	3.52	1.31	2.0	20.2
11,334.0	92.15	1.04	9,594.1	1,679.5	-200.5	1.12	1.02	0.47	0.7	18.2
11,428.0	92.24	0.87	9,590.5	1,773.4	-198.9	0.20	0.10	-0.18	-1.5	16.0



EOG Resources
Midland PVA

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Local Co-ordinate Reference: Well #201H
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)
11,523.0	93.39	0.34	9,585.8	1,868.3	-197.9	1.33	1.21	-0.56	-4.7	14.4
11,617.0	92.33	2.27	9,581.1	1,962.2	-195.8	2.34	-1.13	2.05	-8.0	11.6
11,711.0	91.98	2.01	9,577.6	2,056.0	-192.3	0.46	-0.37	-0.28	-10.1	7.4
11,759.0	91.27	1.66	9,576.2	2,104.0	-190.7	1.66	-1.48	-0.74	-10.8	5.6
TGT#2(Hemlock 32 State #201H)										
11,806.0	90.57	1.31	9,575.5	2,151.0	-189.5	1.66	-1.48	-0.74	-11.1	4.1
11,900.0	89.87	1.31	9,575.1	2,244.9	-187.4	0.74	-0.74	0.00	-10.7	1.3
11,993.0	89.87	1.57	9,575.3	2,337.9	-185.0	0.28	0.00	0.28	-9.7	-1.7
12,088.0	89.78	1.04	9,575.6	2,432.9	-182.9	0.57	-0.09	-0.56	-8.7	-4.5
12,182.0	90.04	1.04	9,575.8	2,526.9	-181.1	0.28	0.28	0.00	-7.8	-6.9
12,276.0	88.46	359.81	9,577.0	2,620.8	-180.4	2.13	-1.68	-1.31	-5.8	-8.2
12,370.0	88.37	359.37	9,579.6	2,714.8	-181.1	0.48	-0.10	-0.47	-2.4	-8.2
12,465.0	91.63	358.32	9,579.6	2,809.8	-183.0	3.61	3.43	-1.11	-1.7	-6.9
12,559.0	91.80	357.44	9,576.8	2,903.7	-186.5	0.95	0.18	-0.94	-3.7	-4.1
12,653.0	92.68	358.23	9,573.1	2,997.5	-190.1	1.26	0.94	0.84	-6.7	-1.2
12,748.0	92.77	358.41	9,568.6	3,092.4	-192.8	0.21	0.09	0.19	-10.4	1.0
12,843.0	94.00	359.20	9,563.0	3,187.2	-194.8	1.54	1.29	0.83	-15.3	2.3
12,937.0	91.36	358.49	9,558.6	3,281.1	-196.7	2.91	-2.81	-0.76	-18.9	3.5
13,020.1	91.67	358.49	9,556.4	3,364.1	-198.9	0.37	0.37	0.00	-20.4	5.2
TGT#3(Hemlock 32 State #201H)										
13,032.0	91.71	358.49	9,556.0	3,376.0	-199.2	0.37	0.37	0.00	-20.7	5.4
13,126.0	94.18	358.93	9,551.2	3,469.8	-201.3	2.67	2.63	0.47	-24.2	6.9
13,179.0	91.63	359.81	9,548.5	3,522.8	-201.9	5.09	-4.81	1.66	-26.2	7.1
13,220.0	91.28	359.64	9,547.5	3,563.7	-202.1	0.95	-0.85	-0.41	-26.7	7.0
13,314.0	90.48	1.22	9,546.0	3,657.7	-201.4	1.88	-0.85	1.68	-26.9	5.6
13,408.0	91.28	1.04	9,544.6	3,751.7	-199.5	0.87	0.85	-0.19	-27.1	3.2
13,503.0	90.22	0.87	9,543.4	3,846.7	-198.0	1.13	-1.12	-0.18	-27.1	0.9



EOG Resources
Midland PVA

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Local Co-ordinate Reference: Well #201H
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)
13,597.0	89.78	0.87	9,543.4	3,940.7	-196.5	0.47	-0.47	0.00	-25.9	-1.1
13,691.0	89.25	0.25	9,544.1	4,034.7	-195.6	0.87	-0.56	-0.66	-23.8	-2.7
13,785.0	89.16	0.69	9,545.5	4,128.6	-194.8	0.48	-0.10	0.47	-21.3	-4.1
13,879.0	88.72	0.16	9,547.2	4,222.6	-194.2	0.73	-0.47	-0.56	-18.3	-5.5
13,973.0	91.71	0.43	9,546.8	4,316.6	-193.7	3.19	3.18	0.29	-17.4	-6.6
14,067.0	91.45	359.99	9,544.2	4,410.6	-193.3	0.54	-0.28	-0.47	-18.8	-7.6
14,161.0	92.59	0.78	9,540.9	4,504.5	-192.7	1.48	1.21	0.84	-20.8	-8.8
14,255.0	92.68	0.87	9,536.6	4,598.4	-191.3	0.14	0.10	0.10	-23.9	-10.8
14,349.0	94.88	1.66	9,530.4	4,692.2	-189.3	2.49	2.34	0.84	-28.9	-13.6
Last MWD Survey (MD=14349.0')										
14,519.4	94.88	1.66	9,515.9	4,861.9	-184.4	0.00	0.00	0.00	-41.1	-19.7
PBHL(Hemlock 32 State #201H)										
14,523.0	94.88	1.66	9,515.6	4,865.5	-184.2	0.00	0.00	0.00	-41.4	-19.8
Projection to Bit (MD=14523.0')										

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
9,052.0	9,037.5	-243.2	-189.4	KOP, MD:9052.0', TVD:9037.5', N/S:-243.2', E/W:-189.4', INC:1.71
9,282.2	9,263.5	-205.0	-188.3	FTP Crossing, MD:9282.2', TVD:9263.5', N/S:-205.0', E/W:-188.3', INC:19.22
14,349.0	9,530.4	4,692.2	-189.3	Last MWD Survey (MD=14349.0')
14,523.0	9,515.6	4,865.5	-184.2	Projection to Bit (MD=14523.0')

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 #201H

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: #201H

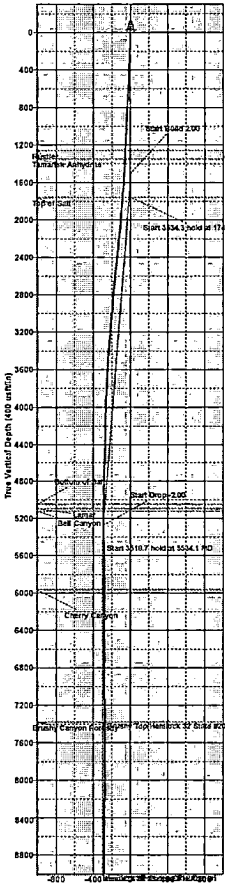
KB = 25 @ 3886.0usft 3861.0
Northing 457197.00 Easting 767643.80 Latitude 32° 15' 17.239 N Longitude 103° 36' 4.552 W



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

Magnetic Field
Strength: 47676.9nT
Dip Angle: 60.05°
Date: 2/17/2020
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.29°
To convert a Magnetic Direction to a True Direction, Add 6.68° 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	1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0
3	1749.9	5.00	219.34	1749.6	-8.4	-6.9	2.00	219.34	-8.1
4	5284.2	5.00	219.34	5270.4	-246.6	-202.1	0.00	0.00	-237.9
5	5534.1	0.00	0.00	5520.0	-255.0	-209.0	2.00	180.00	-246.0
6	9052.8	0.00	0.00	9038.7	-255.0	-209.0	0.00	0.00	-246.0
7	9958.7	90.59	3.20	9611.6	323.0	-176.7	10.00	3.20	330.1
8	10078.5	90.59	359.61	9610.4	442.7	-173.8	3.00	-90.03	449.6
9	10410.1	90.59	359.61	9607.0	774.3	-176.0	0.00	0.00	781.0
10	10423.9	90.86	359.61	9606.8	788.1	-176.1	2.00	0.49	794.8
11	11740.1	90.86	359.61	9587.0	2104.1	-185.1	0.00	0.00	2110.0
12	11760.2	90.46	359.61	9586.8	2124.3	-185.3	2.00	-180.00	2130.1
13	13000.9	90.46	359.61	9576.6	3364.8	-193.7	0.00	0.00	3370.0
14	13015.7	90.76	359.61	9576.6	3379.7	-193.8	2.00	0.00	3384.8
15	14502.2	90.76	359.61	9557.0	4866.0	-204.0	0.00	0.00	4870.3

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP COORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
Brushy Top(Hemlock 32 State #201H)	7380.0	-255.0	-289.0	458242.00	767434.00
PBHL(Hemlock 32 State #201H)	9587.0	-486.0	-204.0	462063.00	767433.00
TGT#1(Hemlock 32 State #201H)	9576.8	-193.7	-183.7	460561.80	767449.26
TGT#2(Hemlock 32 State #201H)	9587.0	-185.1	-45301.10	767457.88	
TGT#3(Hemlock 32 State #201H)	9607.0	-174.3	-176.0	457971.30	767466.97
FTP(Hemlock 32 State #201H)	9617.0	-205.0	-169.0	456992.00	767474.00

