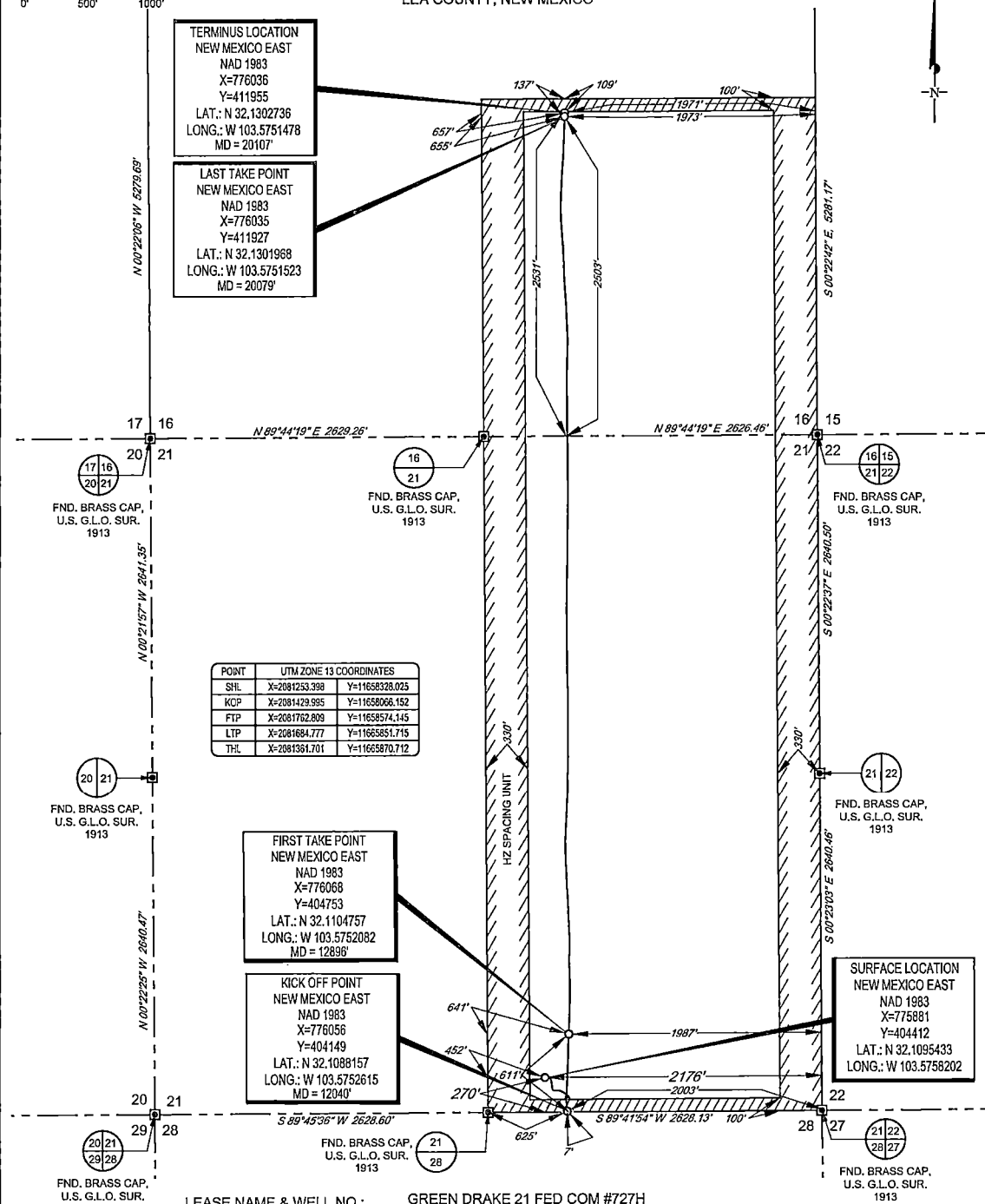


SCALE: 1" = 1000'
0' 500' 1000'

SECTION 21, TOWNSHIP 25-S, RANGE 33-E, N.M.P.M.
LEA COUNTY, NEW MEXICO



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

1400 EVERMAN PARKWAY, Ste. 140 • FT. WORTH, TEXAS 76140
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Ramon A. Dominguez, P.S. No. 24508
OCTOBER 19, 2020

eg resources, inc.

GREEN DRAKE 21 FED COM #727H AS-COMPLETED	REVISION:
DATE: 10/19/2020	
FILE: AD_GREEN_DRAKE_16_FED_COM_727H	
DRAWN BY: A.V.F.	
SHEET: 1 OF 1	

NOTES:
1. ORIGINAL DOCUMENT SIZE: 8.5" X 14"
2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO COORDINATE SYSTEM OF 1983, EAST ZONE, U.S. SURVEY FEET.
3. THIS WELL LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY EOG RESOURCES, INC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.



EOG Resources
Midland PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Green Drake 21 Fed Com
Well: #727H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #727H
TVD Reference: KB = 22' @ 3391.0usft
MD Reference: KB = 22' @ 3391.0usft
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)
19,090.0	89.96	354.74	12,648.3	6,524.8	140.4	3.75	-1.30	-3.52	-2.8	12.3
19,185.0	90.75	355.36	12,647.8	6,619.4	132.2	1.06	0.83	0.65	-4.0	19.9
19,280.0	92.07	358.79	12,645.4	6,714.2	127.3	3.87	1.39	3.61	-6.9	24.1
19,375.0	91.10	359.66	12,642.8	6,809.2	126.1	1.37	-1.02	0.92	-10.2	24.8
19,470.0	91.10	1.86	12,641.0	6,904.1	127.3	2.32	0.00	2.32	-12.7	22.9
19,566.0	91.36	3.09	12,638.9	7,000.0	131.5	1.31	0.27	1.28	-15.4	18.1
19,661.0	90.75	3.00	12,637.2	7,094.9	136.5	0.65	-0.64	-0.09	-17.8	12.4
19,756.0	91.19	3.79	12,635.6	7,189.7	142.1	0.95	0.46	0.83	-20.1	6.2
19,851.0	90.22	1.95	12,634.4	7,284.6	146.9	2.19	-1.02	-1.94	-21.9	0.8
19,946.0	89.87	0.98	12,634.3	7,379.5	149.3	1.09	-0.37	-1.02	-22.6	-2.2
20,041.0	90.66	2.48	12,633.9	7,474.5	152.2	1.78	0.83	1.58	-23.7	-5.7
Last MWD Survey (MD=20041.0')										
20,107.0	90.66	2.48	12,633.1	7,540.4	155.0	0.00	0.00	0.00	-24.9	-9.0
Projection to Bit (MD=20107.0') - PBHL(GD 21 FC #727H)										

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
12,040.0	12,021.1	-263.5	174.9	KOP, MD:12040.0', TVD:12021.1', N/S:-263.5', E/W:174.9', INC:2.46
12,308.2	12,264.9	-170.0	172.0	FTP Crossing, MD:12308.2', TVD:12264.9', N/S:-170.0', E/W:172.0', INC:38.65
20,041.0	12,633.9	7,474.5	152.2	Last MWD Survey (MD=20041.0')
20,107.0	12,633.1	7,540.4	155.0	Projection to Bit (MD=20107.0')

Checked By: _____ Approved By: _____ Date: _____

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

Kay Maddox 11/13/2020
Signed Date



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Green Drake 21 Fed Com

#727H

OH

Design: OH

Midland PVA

08 July, 2020



EOG Resources
Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #727H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 22' @ 3391.0usft
Site:	Green Drake 21 Fed Com	MD Reference:	KB = 22' @ 3391.0usft
Well:	#727H	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:	Green Drake 21 Fed Com		
Site Position:		Northing:	404,412.00 usft
From:	Map	Easting:	775,848.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 6' 34.354 N
		Longitude:	103° 34' 33.335 W
		Grid Convergence:	0.40 "

Well	#727H					
Well Position	+N-S	0.0 usft	Northing:	404,412.00 usft	Latitude:	32° 6' 34.352 N
	+E-W	0.0 usft	Easting:	775,881.00 usft	Longitude:	103° 34' 32.952 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,369.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	6/27/2020	6.65	59.83	47,526.66932839

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	1.11	

Survey Program	Date	7/8/2020		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
198.0	20,107.0	Drlitech (OH)	EOG MWD+IFR1	MWD + IFR1



EOG Resources
Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #727H
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Site:	Green Drake 21 Fed Com	MD Reference:	KB = 22' @ 3391.0usft
Well:	#727H	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
196.0	1.58	233.05	196.0	-1.6	-2.2	0.81	0.81	0.00	0.0	0.0	0.0
321.0	2.20	226.99	320.9	-4.3	-5.3	0.52	0.50	-4.85	0.0	0.0	0.0
507.0	2.64	226.90	506.7	-9.7	-11.0	0.24	0.24	-0.05	0.0	0.0	0.0
697.0	2.99	335.18	696.6	-8.2	-16.3	2.40	0.18	56.99	0.0	0.0	0.0
888.0	3.34	20.36	887.3	1.6	-16.5	1.28	0.18	23.65	0.0	0.0	0.0
1,078.0	3.52	52.79	1,077.0	10.3	-9.9	1.01	0.09	17.07	0.0	0.0	0.0
1,129.0	4.13	60.52	1,127.9	12.2	-7.0	1.56	1.20	15.16	0.0	0.0	0.0
1,264.0	5.28	73.36	1,262.5	16.3	3.1	1.15	0.85	9.51	-1.5	-1.1	-1.1
1,454.0	6.24	114.49	1,451.6	14.5	20.9	2.18	0.51	21.65	-9.9	-2.6	-2.6
1,645.0	5.80	143.84	1,641.6	2.5	36.1	1.61	-0.23	15.37	-16.3	4.0	4.0
1,835.0	5.89	159.23	1,830.6	-14.4	45.2	0.82	0.05	8.10	-18.4	6.4	6.4
2,026.0	5.45	167.66	2,020.7	-32.4	50.6	0.49	-0.23	4.41	-21.5	3.9	3.9
2,216.0	4.75	172.06	2,209.9	-49.0	53.6	0.42	-0.37	2.32	-24.1	-1.4	-1.4
2,407.0	3.96	174.78	2,400.4	-63.4	55.3	0.43	-0.41	1.42	-25.0	-8.3	-8.3
2,597.0	3.52	171.09	2,589.9	-75.7	56.8	0.26	-0.23	-1.94	-22.7	-17.7	-17.7
2,788.0	2.99	161.69	2,780.6	-86.3	59.3	0.39	-0.28	-4.92	-15.1	-27.1	-27.1
2,978.0	2.46	137.52	2,970.4	-94.0	63.6	0.66	-0.28	-12.72	4.5	-31.4	-31.4
3,169.0	3.96	105.88	3,161.1	-98.8	72.7	1.19	0.79	-16.57	22.9	-16.8	-16.8
3,360.0	4.13	96.82	3,351.7	-101.4	85.9	0.35	0.09	-4.74	22.9	-2.4	-2.4
3,550.0	4.04	91.64	3,541.2	-102.4	99.4	0.20	-0.05	-2.73	19.4	11.5	11.5
3,741.0	2.90	91.55	3,731.8	-102.8	110.9	0.60	-0.60	-0.05	17.7	24.0	24.0
3,932.0	2.64	85.40	3,922.6	-102.5	120.1	0.21	-0.14	-3.22	14.4	38.8	38.8
4,027.0	4.75	124.42	4,017.4	-104.6	125.6	3.34	2.22	41.07	37.5	25.1	25.1
4,217.0	5.10	115.81	4,208.7	-112.7	139.7	0.43	0.18	-4.53	31.2	36.6	36.6
4,312.0	7.03	118.62	4,301.2	-117.3	148.6	2.05	2.03	2.96	30.1	38.5	38.5
4,503.0	6.07	130.57	4,490.9	-129.5	166.5	0.87	-0.50	6.26	31.4	37.4	37.4



EOG Resources
Midland PVA

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Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 22' @ 3391.0usft
Site:	Green Drake 21 Fed Com	MD Reference:	KB = 22' @ 3391.0usft
Well:	#727H	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)
4,693.0	9.85	133.91	4,679.1	-147.3	185.8	2.00	1.99	1.76	22.8	38.7
4,884.0	3.61	237.10	4,869.1	-161.9	192.6	5.88	-3.27	54.03	29.3	-30.9
5,074.0	1.49	278.23	5,058.9	-164.8	185.1	1.41	-1.12	21.65	-16.0	-49.3
5,264.0	1.41	331.58	5,248.9	-162.4	181.6	0.69	-0.04	28.08	-58.0	-13.8
5,455.0	1.23	333.07	5,439.8	-158.6	179.5	0.10	-0.09	0.78	-62.7	-12.2
5,645.0	1.23	316.81	5,629.8	-155.2	177.2	0.18	0.00	-8.56	-60.8	-29.9
5,836.0	1.32	325.69	5,820.7	-151.9	174.5	0.11	0.05	4.65	-68.9	-19.8
6,026.0	1.41	322.70	6,010.7	-148.3	171.9	0.06	0.05	-1.57	-72.3	-23.5
6,217.0	1.76	303.54	6,201.6	-144.8	168.0	0.33	0.18	-10.03	-65.7	-46.7
6,407.0	2.20	228.40	6,391.5	-145.6	162.9	1.28	0.23	-39.55	23.9	-78.3
6,598.0	2.29	165.11	6,582.4	-151.7	161.1	1.23	0.05	-33.14	75.2	-17.2
6,788.0	2.11	164.06	6,772.2	-158.7	163.0	0.10	-0.09	-0.55	68.2	-15.8
6,979.0	2.11	168.72	6,963.1	-165.6	164.7	0.09	0.00	2.44	59.7	-21.0
7,170.0	2.20	172.06	7,154.0	-172.6	165.9	0.08	0.05	1.75	51.2	-24.3
7,360.0	2.29	178.91	7,343.8	-180.0	166.5	0.15	0.05	3.61	40.5	-29.8
7,502.7	2.15	171.39	7,486.4	-185.5	166.9	0.23	-0.10	-5.27	38.6	-24.6
Brushy Top(GD 21 FC #727H)										
7,551.0	2.11	168.63	7,534.7	-187.3	167.2	0.23	-0.08	-5.71	37.9	-22.8
7,741.0	1.76	157.99	7,724.8	-193.4	169.0	0.26	-0.18	-5.60	35.1	-16.0
7,932.0	1.85	171.27	7,915.5	-199.2	170.6	0.22	0.05	6.95	24.6	-23.0
8,122.0	1.76	181.29	8,105.4	-205.2	171.0	0.17	-0.05	5.27	14.2	-26.4
8,313.0	2.29	176.80	8,296.3	-211.9	171.1	0.29	0.28	-2.35	9.5	-25.4
8,503.0	2.55	176.01	8,486.1	-219.9	171.6	0.14	0.14	-0.42	1.9	-25.3
8,693.0	2.90	180.85	8,675.9	-228.9	171.9	0.22	0.18	2.55	-9.3	-25.0
8,884.0	2.55	183.66	8,866.7	-238.0	171.5	0.20	-0.18	1.47	-19.6	-24.3
9,074.0	1.32	184.80	9,056.6	-244.4	171.1	0.65	-0.65	0.60	-26.5	-23.8
9,265.0	0.44	117.39	9,247.5	-246.9	171.5	0.64	-0.46	-35.29	10.2	-35.6



EOG Resources
Midland PVA

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Site:	Green Drake 21 Fed Com	MD Reference:	KB = 22' @ 3391.0usft
Well:	#727H	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)
9,360.0	0.53	80.21	9,342.5	-247.0	172.3	0.34	0.09	-39.14	29.0	-22.4
9,550.0	0.88	173.99	9,532.5	-248.3	173.3	0.56	0.18	49.36	-25.7	-26.5
9,645.0	1.06	196.67	9,627.5	-249.9	173.1	0.44	0.19	23.87	-35.5	-14.3
9,836.0	0.70	225.06	9,818.5	-252.4	171.8	0.29	-0.19	14.86	-40.7	5.1
9,931.0	2.29	53.41	9,913.5	-251.7	172.9	3.14	1.67	-180.68	38.2	-11.1
10,026.0	2.11	37.58	10,008.4	-249.2	175.5	0.66	-0.19	-16.66	36.2	-0.7
10,121.0	1.23	43.56	10,103.4	-247.0	177.3	0.94	-0.93	6.29	33.2	-4.3
10,217.0	0.70	322.70	10,199.3	-245.8	177.6	1.37	-0.55	-84.23	8.8	31.1
10,312.0	0.53	294.66	10,294.3	-245.2	176.9	0.36	-0.18	-29.52	-7.8	31.3
10,407.0	0.35	352.67	10,389.3	-244.7	176.4	0.48	-0.19	61.06	21.9	23.6
10,597.0	0.88	140.86	10,579.3	-245.3	177.3	0.63	0.28	77.99	-7.2	-31.2
10,693.0	0.79	113.52	10,675.3	-246.1	178.4	0.42	-0.09	-28.48	6.7	-31.4
10,883.0	1.23	106.14	10,865.3	-247.2	181.5	0.24	0.23	-3.88	7.3	-30.4
11,074.0	3.34	25.10	11,056.2	-242.7	185.8	1.77	1.10	-42.43	25.3	0.5
11,169.0	2.11	34.33	11,151.1	-238.8	188.0	1.37	-1.29	9.72	20.6	-3.2
11,359.0	0.88	224.18	11,341.0	-236.9	189.0	1.57	-0.65	-89.55	-17.7	6.0
11,550.0	0.70	231.82	11,532.0	-238.7	187.0	0.11	-0.09	4.00	-19.4	8.5
11,645.0	3.08	206.07	11,627.0	-241.4	185.4	2.60	2.51	-27.11	-24.3	-1.0
11,757.0	5.28	199.13	11,738.6	-248.9	182.4	2.01	1.96	-6.20	-32.1	-4.3
11,947.0	2.37	214.77	11,928.2	-260.4	177.3	1.61	-1.53	8.23	-44.4	6.9
12,040.0	2.46	222.78	12,021.1	-263.5	174.9	0.37	0.09	8.61	-46.9	13.3
KOP, MD:12040.0, TVD:12021.1, N/S:-263.5, E/W:174.9, INC:2.46										
12,043.0	2.46	223.03	12,024.1	-263.6	174.8	0.37	0.12	8.27	-47.0	13.5
12,138.0	14.25	354.25	12,118.2	-253.3	172.2	16.82	12.41	138.13	30.9	28.4
12,233.0	34.12	1.37	12,204.5	-214.7	171.7	21.10	20.92	7.49	7.0	25.2
12,308.2	38.85	359.59	12,264.9	-170.0	172.0	6.45	6.29	-2.37	-17.5	25.0
FTP Crossing, MD:12308.2, TVD:12264.9, N/S:-170.0, E/W:172.0, INC:38.85										



EOG Resources
Midland PVA

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Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
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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)	
12,328.0	40.10	359.18	12,280.2	-157.4	171.9	6.45	6.31	-2.06	-23.4	25.0	
12,423.0	53.64	0.14	12,345.0	-88.2	171.5	14.27	14.25	1.01	-50.9	26.0	
12,469.4	58.35	1.56	12,370.9	-49.8	172.1	10.46	10.15	3.05	-64.3	26.3	
FTP(GD 21 FC #727H)											
12,519.0	63.40	2.92	12,395.1	-6.5	173.8	10.46	10.18	2.75	-77.6	25.4	
12,614.0	63.22	2.92	12,437.7	78.3	178.1	0.19	-0.19	0.00	-91.2	19.3	
12,709.0	66.30	0.99	12,478.3	164.1	181.0	3.73	3.24	-2.03	-83.9	14.1	
12,804.0	68.24	1.78	12,515.0	251.7	183.2	2.18	2.04	0.83	-58.4	11.5	
12,900.0	74.57	3.28	12,545.6	342.6	187.2	6.76	6.59	1.56	-30.5	6.3	
12,995.0	84.94	1.43	12,562.4	435.8	191.0	11.08	10.92	-1.95	-16.4	1.7	
13,070.7	86.76	1.08	12,567.9	511.3	192.7	2.45	2.41	-0.46	-13.1	-0.5	
TGT#1(GD 21 FC #727H)											
13,090.0	87.23	0.99	12,568.9	530.6	193.0	2.45	2.41	-0.46	-12.6	-0.9	
13,186.0	91.54	2.49	12,569.9	626.5	195.9	4.75	4.49	1.56	-12.9	-4.5	
13,281.0	86.09	357.83	12,571.9	721.4	196.2	7.55	-5.74	-4.91	-12.0	-5.4	
13,376.0	84.33	357.92	12,579.8	816.0	192.7	1.86	-1.85	0.09	-5.2	-2.5	
13,471.0	85.65	0.02	12,588.1	910.7	191.0	2.60	1.39	2.21	1.9	-1.4	
13,566.0	92.33	0.99	12,589.8	1,005.6	191.8	7.11	7.03	1.02	2.5	-2.9	
13,662.0	93.03	359.06	12,585.3	1,101.5	191.9	2.14	0.73	-2.01	-3.1	-3.5	
13,757.0	91.19	358.09	12,581.8	1,196.4	189.5	2.19	-1.94	-1.02	-7.8	-1.6	
13,852.0	91.54	356.33	12,579.6	1,291.2	184.9	1.89	0.37	-1.85	-11.2	2.2	
13,873.0	91.35	356.45	12,579.0	1,312.2	183.6	1.08	-0.93	0.56	-12.0	3.4	
TGT#2(GD 21 FC #727H)											
13,947.0	90.66	356.86	12,577.7	1,386.0	179.2	1.08	-0.93	0.56	-14.4	7.2	
14,043.0	89.52	355.63	12,577.6	1,481.8	173.0	1.75	-1.19	-1.28	-16.2	12.8	
14,138.0	88.99	357.30	12,578.8	1,576.5	167.1	1.84	-0.56	1.76	-16.5	18.1	
14,233.0	90.40	358.09	12,579.3	1,671.6	163.3	1.70	1.48	0.83	-17.5	21.3	



EOG Resources
Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #727H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 22' @ 3391.0usft
Site:	Green Drake 21 Fed Com	MD Reference:	KB = 22' @ 3391.0usft
Well:	#727H	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)
14,328.0	88.20	357.74	12,580.5	1,766.5	159.8	2.34	-2.32	-0.37	-17.9	24.1
14,424.0	89.78	2.13	12,582.2	1,862.4	159.7	4.86	1.65	4.57	-17.7	23.6
14,519.0	87.93	2.75	12,584.1	1,957.3	163.8	2.05	-1.95	0.65	-17.4	19.0
14,614.0	88.20	2.93	12,587.3	2,052.2	168.5	0.34	0.28	0.19	-15.7	13.6
14,709.0	86.53	2.66	12,591.7	2,146.9	173.1	1.78	-1.76	-0.28	-12.9	8.4
14,804.0	88.90	1.70	12,595.4	2,241.8	176.7	2.69	2.49	-1.01	-10.7	4.1
14,900.0	86.70	359.94	12,599.1	2,337.7	178.1	2.93	-2.29	-1.83	-8.5	2.1
14,995.0	90.84	0.82	12,601.2	2,432.7	178.7	4.46	4.36	0.93	-8.0	0.9
15,090.0	91.54	1.17	12,599.2	2,527.6	180.4	0.82	0.74	0.37	-11.6	-1.4
15,185.0	91.10	0.11	12,597.0	2,622.6	181.4	1.21	-0.46	-1.12	-15.3	-3.1
15,281.0	90.92	359.50	12,595.3	2,718.6	181.1	0.66	-0.19	-0.64	-18.6	-3.4
15,376.0	90.75	359.41	12,593.9	2,813.6	180.2	0.20	-0.18	-0.09	-21.5	-3.1
15,471.0	91.01	359.93	12,592.5	2,908.5	179.6	0.61	0.27	0.55	-24.5	-3.2
15,566.0	89.60	358.70	12,592.0	3,003.5	178.5	1.97	-1.48	-1.29	-26.5	-2.7
15,662.0	90.57	359.75	12,591.8	3,099.5	177.2	1.49	1.01	1.09	-28.2	-2.0
15,757.0	91.36	359.14	12,590.2	3,194.5	176.3	1.05	0.83	-0.64	-31.4	-1.7
15,852.0	87.76	358.52	12,591.0	3,289.5	174.3	3.85	-3.79	-0.65	-32.2	-0.4
15,947.0	88.46	359.40	12,594.1	3,384.4	172.6	1.18	0.74	0.93	-30.6	0.7
16,043.0	86.44	0.45	12,598.4	3,480.3	172.5	2.37	-2.10	1.09	-27.9	0.2
16,138.0	86.70	359.14	12,604.0	3,575.1	172.2	1.40	0.27	-1.38	-23.8	-0.1
16,233.0	86.97	0.19	12,609.3	3,670.0	171.6	1.14	0.28	1.11	-20.1	-0.2
16,329.0	86.79	0.37	12,614.5	3,765.8	172.1	0.26	-0.19	0.19	-16.4	-1.2
16,424.0	88.99	0.98	12,618.0	3,860.7	173.2	2.40	2.32	0.64	-14.5	-3.0
16,519.0	89.69	1.69	12,619.1	3,955.7	175.4	1.05	0.74	0.75	-14.9	-5.8
16,614.0	88.99	0.45	12,620.2	4,050.7	177.2	1.50	-0.74	-1.31	-15.4	-8.2
16,710.0	88.11	359.49	12,622.6	4,146.7	177.1	1.36	-0.92	-1.00	-14.5	-8.8
16,805.0	89.78	0.28	12,624.4	4,241.6	176.9	1.94	1.76	0.83	-14.3	-9.2



EOG Resources
Midland PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #727H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 22' @ 3391.0usft
Site:	Green Drake 21 Fed Com	MD Reference:	KB = 22' @ 3391.0usft
Well:	#727H	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)
16,900.0	89.52	1.51	12,625.0	4,336.6	178.4	1.32	-0.27	1.29	-15.3	-11.3
16,995.0	87.32	0.10	12,627.6	4,431.6	179.7	2.75	-2.32	-1.46	-14.2	-13.3
17,091.0	87.05	0.54	12,632.3	4,527.5	180.3	0.54	-0.28	0.46	-11.0	-14.5
17,186.0	88.37	359.31	12,636.1	4,622.4	180.2	1.90	1.39	-1.29	-8.8	-15.0
17,281.0	90.13	359.93	12,637.3	4,717.4	179.5	1.96	1.85	0.65	-9.1	-15.0
17,376.0	90.22	359.93	12,637.0	4,812.4	179.4	0.09	0.09	0.00	-10.9	-15.5
17,471.0	89.16	359.40	12,637.6	4,907.4	178.9	1.25	-1.12	-0.56	-12.0	-15.5
17,561.9	89.33	358.62	12,638.8	4,998.2	177.5	0.66	0.19	-0.64	-12.2	-14.7
TGT#3(GD 21 FC #727H)										
17,567.0	89.34	358.79	12,638.8	5,003.3	177.3	0.66	0.19	-0.64	-12.3	-14.7
17,662.0	89.52	358.87	12,639.8	5,098.3	175.4	0.21	0.19	0.08	-11.6	-13.3
17,757.0	90.48	0.19	12,639.8	5,193.3	174.6	1.72	1.01	1.39	-11.6	-13.2
17,852.0	91.89	0.28	12,637.8	5,288.3	175.0	1.49	1.48	0.09	-13.5	-14.2
17,948.0	89.96	357.47	12,636.2	5,384.2	173.1	3.55	-2.01	-2.93	-15.1	-12.9
18,043.0	89.25	2.04	12,636.9	5,479.2	172.7	4.87	-0.75	4.81	-14.4	-13.2
18,138.0	88.29	1.07	12,638.9	5,574.1	175.3	1.44	-1.01	-1.02	-12.3	-16.4
18,233.0	87.85	1.16	12,642.1	5,669.1	177.1	0.47	-0.46	0.09	-9.1	-18.8
18,328.0	90.48	1.60	12,643.5	5,764.0	179.4	2.81	2.77	0.46	-7.7	-21.7
18,424.0	89.08	354.83	12,643.9	5,859.9	176.4	7.20	-1.46	-7.05	-7.3	-19.4
18,519.0	89.60	357.47	12,645.0	5,954.7	170.1	2.83	0.55	2.78	-6.2	-13.6
18,614.0	90.13	357.91	12,645.2	6,049.6	166.2	0.73	0.56	0.46	-5.9	-10.4
18,709.0	87.85	355.09	12,646.9	6,144.4	160.4	3.82	-2.40	-2.97	-4.2	-5.3
18,805.0	88.84	357.03	12,649.8	6,240.1	153.9	2.18	0.82	2.02	-1.2	0.7
18,900.0	90.40	357.91	12,650.6	6,335.0	149.7	2.07	1.85	0.93	-0.4	4.3
18,995.0	91.19	358.08	12,649.3	6,430.0	146.3	0.85	0.83	0.18	-1.7	7.0
19,085.8	90.27	355.59	12,648.4	6,500.6	142.4	3.75	-1.29	-3.52	-2.6	10.4
TGT#4(GD 21 FC #727H)										



EOG Resources
Midland PVA

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Green Drake 21 Fed Com
Well: #727H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #727H
TVD Reference: KB = 22' @ 3391.0usft
MD Reference: KB = 22' @ 3391.0usft
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)
19,090.0	89.96	354.74	12,648.3	6,524.8	140.4	3.75	-1.30	-3.52	-2.8	12.3
19,185.0	90.75	355.36	12,647.8	6,619.4	132.2	1.06	0.83	0.65	-4.0	19.9
19,280.0	92.07	358.79	12,645.4	6,714.2	127.3	3.87	1.39	3.61	-6.9	24.1
19,375.0	91.10	359.66	12,642.8	6,809.2	126.1	1.37	-1.02	0.92	-10.2	24.8
19,470.0	91.10	1.86	12,641.0	6,904.1	127.3	2.32	0.00	2.32	-12.7	22.9
19,566.0	91.36	3.09	12,638.9	7,000.0	131.5	1.31	0.27	1.28	-15.4	18.1
19,661.0	90.75	3.00	12,637.2	7,094.9	136.5	0.65	-0.64	-0.09	-17.8	12.4
19,756.0	91.19	3.79	12,635.6	7,189.7	142.1	0.95	0.46	0.83	-20.1	6.2
19,851.0	90.22	1.95	12,634.4	7,284.6	146.9	2.19	-1.02	-1.94	-21.9	0.8
19,946.0	89.87	0.98	12,634.3	7,379.5	149.3	1.09	-0.37	-1.02	-22.6	-2.2
20,041.0	90.66	2.48	12,633.9	7,474.5	152.2	1.78	0.83	1.58	-23.7	-5.7
Last MWD Survey (MD=20041.0')										
20,107.0	90.66	2.48	12,633.1	7,540.4	155.0	0.00	0.00	0.00	-24.9	-9.0
Projection to Bit (MD=20107.0') - PBHL(GD 21 FC #727H)										

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	+E/-W (usft)	Comment
12,040.0	12,021.1	-263.5	174.9	KOP, MD:12040.0', TVD:12021.1', N/S:-263.5', E/W:174.9', INC:2.46
12,308.2	12,264.9	-170.0	172.0	FTP Crossing, MD:12308.2', TVD:12264.9', N/S:-170.0', E/W:172.0', INC:38.65
20,041.0	12,633.9	7,474.5	152.2	Last MWD Survey (MD=20041.0')
20,107.0	12,633.1	7,540.4	155.0	Projection to Bit (MD=20107.0')

Checked By: _____ Approved By: _____ Date: _____

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

Kay Maddox 11/13/2020
Signed Date



Lea County, NM (NAD 83 NME)
Green Drake 21 Fed Com #727H
Plan #2

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: #727H

KB = 22' @ 3391.0sft 3369.0
Northing 404412.00 Easting 775881.00 Latitude 32° 5' 34.352 N Longitude 103° 34' 32.952 W

Azimuths to Grid North
True North: -0.40°
Magnetic North: 6.25°

Magnetic Field
Strength: 47526.7nT
Dip Angle: 59.83°
Date: 02/27/2022
Model: IGRF2020

To convert a Magnetic Direction to a Grid Direction, Add 6.25°
To convert a True Direction to a Grid Direction, Subtract 0.40°

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	1129.0	4.13	60.52	1127.9	12.2	-7.0	0.00	0.00	12.0	
2	1329.0	4.13	60.52	1327.4	19.2	5.5	0.00	0.00	19.3	
3	1625.1	4.80	143.30	1622.8	14.6	22.2	2.00	126.45	15.0	
4	5002.5	4.80	143.30	4988.4	-212.0	181.0	0.00	0.00	-208.2	
5	5242.4	0.00	0.00	5228.0	-220.0	187.0	2.00	180.00	-216.1	
6	12110.4	0.00	0.00	12086.0	-220.0	187.0	0.00	0.00	-216.1	
7	12846.5	88.34	359.62	12573.3	243.6	184.0	12.00	359.62	247.3	
8	13113.4	88.34	359.62	12581.0	510.4	192.0	0.00	0.00	514.0	TGT#1(GD 21 FC #727H)
9	13162.2	88.32	359.62	12582.0	559.2	191.9	2.00	0.00	562.8	
10	13915.7	89.32	359.62	12591.0	1312.6	186.9	0.00	0.00	1316.0	TGT#2(GD 21 FC #727H)
11	13928.1	89.07	359.62	12591.2	1325.0	186.8	2.00	-180.00	1328.4	
12	17601.5	89.07	359.62	12651.0	4997.8	162.7	0.00	0.00	5000.0	TGT#3(GD 21 FC #727H)
13	17648.9	90.01	359.62	12651.4	5045.2	162.4	2.00	0.00	5047.4	
14	19105.0	90.01	359.62	12651.0	6501.3	152.8	0.00	0.00	6503.0	TGT#4(GD 21 FC #727H)
15	19125.2	89.61	359.62	12651.1	6521.5	152.7	2.00	-180.00	6523.2	
16	20148.8	89.61	359.62	12658.0	7543.0	148.0	0.00	0.00	7544.4	PBHL(GD 21 FC #727H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
Brushy Top(GD 21 FC #727H)	7485.0	-220.0	197.0	404192.00	776078.00
FTP(GD 21 FC #727H)	12968.0	-170.0	187.0	404242.00	776078.00
TGT#1(GD 21 FC #727H)	12581.0	510.4	192.2	404222.40	776073.20
TGT#2(GD 21 FC #727H)	12591.0	1312.6	186.9	405724.80	776067.93
TGT#3(GD 21 FC #727H)	12651.0	4997.8	162.7	405409.80	776043.72
TGT#4(GD 21 FC #727H)	12651.0	6501.3	152.8	410913.30	776033.84
PBHL(GD 21 FC #727H)	12658.0	7543.0	148.0	411955.00	776027.00

