

EOG Resources

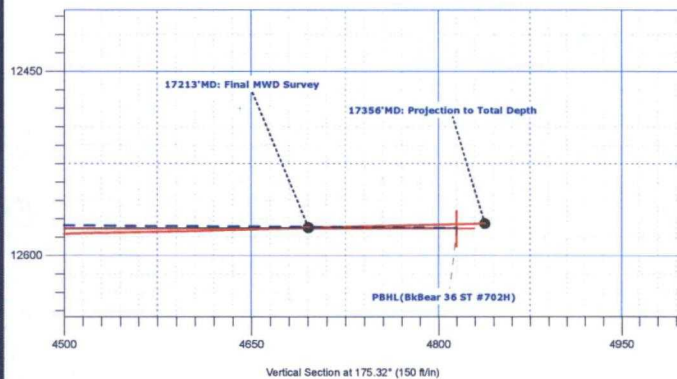
DrilTech, LLC

HOBBS OCD
OCT 11 2016
RECEIVED



SURFACE LOCATION
US State Plane 1927 (Exact solution)
New Mexico East 3001
Elevation: KB = 25 @ 3359.01ft (H&P 415)
Northing 398659.00 Easting 750689.00 Latitude 32° 5' 36.395 N Longitude 103° 31' 25.806 W

Project: Lea County, NM (NAD 27 NME)
Site: Black Bear 36 State
Well: #702H
Wellbore: OH
Plan: Plan #2
Rig: H&P 415

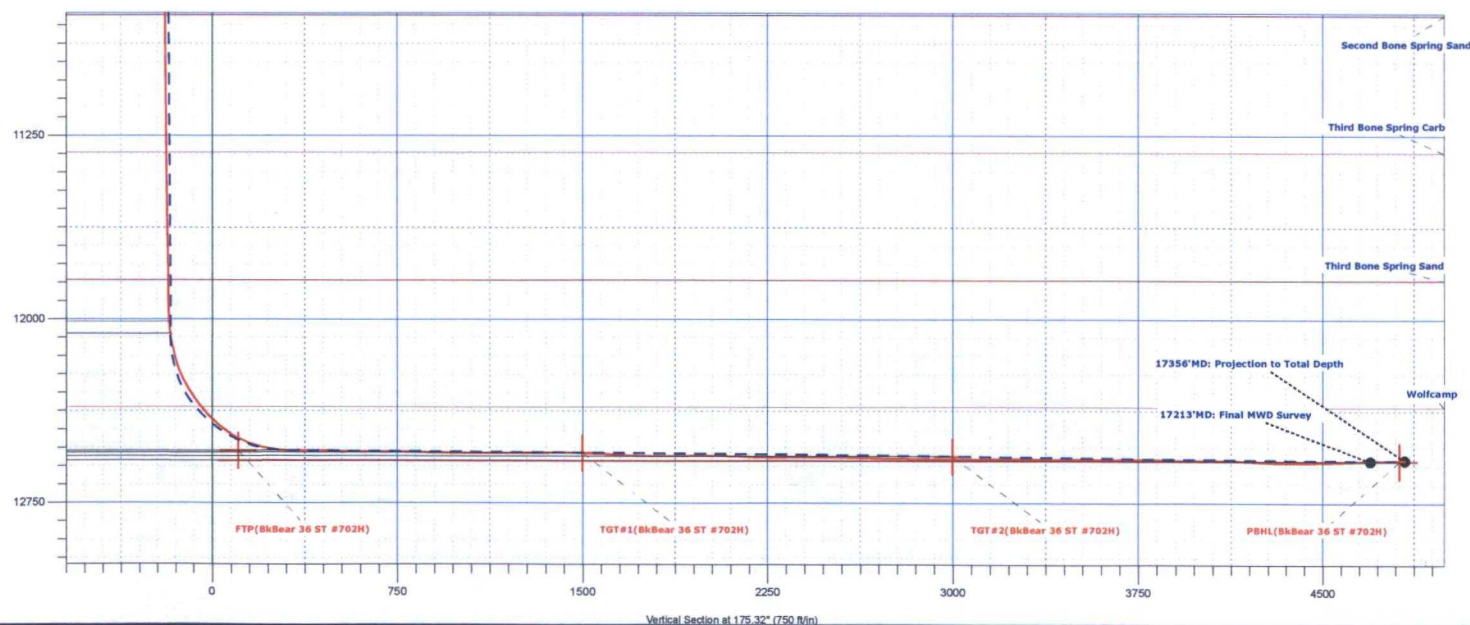


WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
FTP(BkBear 36 ST #702H)	12537.00	-76.00	359.00	398583.00	751048.00
TGT#1(BkBear 36 ST #702H)	12545.00	-1474.80	369.07	397184.20	751058.07
TGT#2(BkBear 36 ST #702H)	12560.00	-2978.91	379.90	395680.10	751068.90
PBHL(BkBear 36 ST #702H)	12578.00	-4799.01	393.00	393860.00	751082.00

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSEct
9478.00	0.50	30.00	9463.00	218.40	357.70	0.00	0.00	-187.67
9577.20	0.49	210.26	9562.20	367.70	367.70	1.00	-179.87	-187.68
12025.30	0.49	210.26	12010.21	200.32	357.15	0.00	0.00	-170.52
12074.60	0.00	0.00	12059.51	200.14	357.05	0.99	180.00	-170.35
12821.40	89.62	179.59	12836.94	-274.12	360.44	12.00	179.59	302.61
14022.00	89.62	179.59	12844.90	-1474.66	369.03	0.00	0.00	1499.86
15526.20	89.25	179.59	12859.74	-2978.75	379.79	0.02	180.00	2999.81
17346.40	89.63	179.59	12877.53	-4798.81	392.82	0.02	0.00	4814.86





EOG Resources

Lea County, NM (NAD 27 NME)

Black Bear 36 State

#702H

OH

Design: Survey Program

Standard Survey Report

01 April, 2016

HOBBS OCD
OCT 11 2016
RECEIVED



Survey Report

Company:	EOG Resources	Local Co-ordinate Reference:	Well #702H
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB = 25 @ 3359.01ft (H&P 415)
Site:	Black Bear 36 State	MD Reference:	KB = 25 @ 3359.01ft (H&P 415)
Well:	#702H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Survey Program	Database:	EDM 5000.1 Single User Db

Project	Lea County, NM (NAD 27 NME)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Black Bear 36 State		
-------------	---------------------	--	--

Site Position:		Northing:	398,659.00 usft	Latitude:	32° 5' 36.397 N
From:	Map	Easting:	750,659.00 usft	Longitude:	103° 31' 26.155 W
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.43 °

Well	#702H				
Well Position	+N/-S	0.00 ft	Northing:	398,659.00 usft	Latitude: 32° 5' 36.394 N
	+E/-W	0.00 ft	Easting:	750,689.00 usft	Longitude: 103° 31' 25.806 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level: 3,334.01 ft

Wellbore	OH				
-----------------	----	--	--	--	--

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	3/13/2016	7.06	59.97	47,996

Design	Survey Program				
---------------	----------------	--	--	--	--

Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	175.32

Survey Program		Date	4/1/2016		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
195.00	17,356.00	Survey #1 (OH)	MWD	MWD - Standard	

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
195.00	0.50	48.10	195.00	0.57	0.63	-0.51	0.26	0.26	0.00
195'MD - Start DrilTech MWD									
350.00	0.50	50.00	349.99	1.45	1.65	-1.31	0.01	0.00	1.23
501.00	0.90	61.60	500.98	2.44	3.20	-2.17	0.28	0.26	7.68
591.00	0.90	78.20	590.97	2.92	4.52	-2.54	0.29	0.00	18.44
682.00	0.90	71.00	681.96	3.30	5.89	-2.81	0.12	0.00	-7.91
870.00	1.60	79.90	869.91	4.24	9.87	-3.42	0.39	0.37	4.73
1,042.00	1.40	91.40	1,041.85	4.61	14.34	-3.43	0.21	-0.12	6.69
1,226.00	0.40	171.00	1,225.83	3.92	16.68	-2.55	0.75	-0.54	43.26
1,316.00	0.40	185.90	1,315.83	3.30	16.70	-1.93	0.12	0.00	16.56



Survey Report

Company:	EOG Resources	Local Co-ordinate Reference:	Well #702H
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB = 25 @ 3359.01ft (H&P 415)
Site:	Black Bear 36 State	MD Reference:	KB = 25 @ 3359.01ft (H&P 415)
Well:	#702H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Survey Program	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,406.00	0.90	81.50	1,405.83	3.09	17.37	-1.66	1.19	0.56	-116.00
1,585.00	4.80	55.30	1,584.57	7.57	24.92	-5.51	2.24	2.18	-14.64
1,675.00	5.10	57.40	1,674.24	11.86	31.38	-9.26	0.39	0.33	2.33
1,764.00	5.10	55.30	1,762.89	16.25	37.97	-13.10	0.21	0.00	-2.36
1,854.00	5.10	58.00	1,852.53	20.64	44.65	-16.93	0.27	0.00	3.00
1,944.00	5.30	58.80	1,942.16	24.92	51.60	-20.62	0.24	0.22	0.89
2,034.00	5.10	56.40	2,031.79	29.28	58.49	-24.42	0.33	-0.22	-2.67
2,213.00	5.10	53.00	2,210.08	38.48	71.47	-32.52	0.17	0.00	-1.90
2,393.00	5.30	53.40	2,389.34	48.25	84.53	-41.19	0.11	0.11	0.22
2,483.00	5.30	53.70	2,478.96	53.19	91.22	-45.57	0.03	0.00	0.33
2,572.00	5.60	53.60	2,567.55	58.20	98.02	-50.00	0.34	0.34	-0.11
2,662.00	5.80	52.70	2,657.11	63.56	105.18	-54.76	0.24	0.22	-1.00
2,752.00	5.80	58.70	2,746.65	68.68	112.68	-59.25	0.67	0.00	6.67
2,931.00	5.50	66.70	2,924.78	76.77	128.29	-66.05	0.47	-0.17	4.47
3,021.00	5.80	66.60	3,014.34	80.28	136.42	-68.88	0.33	0.33	-0.11
3,110.00	4.90	57.40	3,102.96	84.11	143.75	-72.11	1.39	-1.01	-10.34
3,200.00	4.40	51.30	3,192.66	88.34	149.68	-75.84	0.78	-0.56	-6.78
3,290.00	4.80	57.40	3,282.37	92.53	155.55	-79.53	0.70	0.44	6.78
3,380.00	4.00	55.70	3,372.11	96.33	161.32	-82.85	0.90	-0.89	-1.89
3,470.00	4.20	54.40	3,461.88	100.02	166.59	-86.09	0.25	0.22	-1.44
3,559.00	4.20	55.50	3,550.64	103.76	171.92	-89.39	0.09	0.00	1.24
3,649.00	4.20	56.00	3,640.39	107.47	177.37	-92.64	0.04	0.00	0.56
3,739.00	3.90	58.80	3,730.17	110.90	182.72	-95.62	0.40	-0.33	3.11
3,828.00	3.90	60.10	3,818.96	113.97	187.94	-98.26	0.10	0.00	1.46
3,918.00	3.50	55.00	3,908.78	117.08	192.84	-100.95	0.58	-0.44	-5.67
4,007.00	4.00	55.10	3,997.59	120.41	197.61	-103.89	0.56	0.56	0.11
4,097.00	4.00	57.40	4,087.37	123.90	202.83	-106.94	0.18	0.00	2.56
4,187.00	3.70	53.90	4,177.16	127.30	207.82	-109.92	0.42	-0.33	-3.89
4,277.00	3.70	51.30	4,266.98	130.83	212.43	-113.06	0.19	0.00	-2.89
4,366.00	3.70	47.60	4,355.79	134.56	216.80	-116.42	0.27	0.00	-4.16
4,456.00	4.20	52.90	4,445.58	138.50	221.57	-119.96	0.69	0.56	5.89
4,546.00	4.20	60.60	4,535.34	142.11	227.07	-123.11	0.63	0.00	8.56
4,636.00	4.00	58.50	4,625.11	145.37	232.62	-125.90	0.28	-0.22	-2.33
4,725.00	4.00	63.40	4,713.89	148.38	238.04	-128.46	0.38	0.00	5.51
4,815.00	4.20	72.50	4,803.66	150.78	243.99	-130.37	0.76	0.22	10.11
4,994.00	4.20	81.50	4,982.18	153.72	256.72	-132.26	0.37	0.00	5.03
5,084.00	4.00	82.70	5,071.95	154.60	263.10	-132.62	0.24	-0.22	1.33
5,174.00	3.50	79.40	5,161.76	155.51	268.91	-133.05	0.60	-0.56	-3.67
5,264.00	3.30	79.60	5,251.60	156.48	274.16	-133.59	0.22	-0.22	0.22
5,353.00	3.30	81.00	5,340.45	157.34	279.21	-134.04	0.09	0.00	1.57
5,443.00	3.20	78.50	5,430.31	158.25	284.23	-134.53	0.19	-0.11	-2.78
5,533.00	3.00	76.80	5,520.18	159.29	288.98	-135.18	0.24	-0.22	-1.89
5,622.00	2.80	75.70	5,609.06	160.36	293.36	-135.89	0.23	-0.22	-1.24



Survey Report

Company:	EOG Resources	Local Co-ordinate Reference:	Well #702H
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB = 25 @ 3359.01ft (H&P 415)
Site:	Black Bear 36 State	MD Reference:	KB = 25 @ 3359.01ft (H&P 415)
Well:	#702H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Survey Program	Database:	EDM 5000.1 Single User Db

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,712.00	2.60	75.90	5,698.96	161.40	297.47	-136.59	0.22	-0.22	0.22
5,802.00	2.60	70.10	5,788.87	162.59	301.37	-137.46	0.29	0.00	-6.44
5,892.00	2.80	70.30	5,878.77	164.02	305.35	-138.56	0.22	0.22	0.22
5,981.00	2.50	70.10	5,967.67	165.42	309.23	-139.64	0.34	-0.34	-0.22
6,071.00	2.50	64.10	6,057.59	166.94	312.84	-140.86	0.29	0.00	-6.67
6,161.00	2.50	64.30	6,147.50	168.65	316.37	-142.28	0.01	0.00	0.22
6,251.00	2.50	64.50	6,237.42	170.35	319.91	-143.68	0.01	0.00	0.22
6,341.00	2.30	59.00	6,327.34	172.12	323.23	-145.18	0.34	-0.22	-6.11
6,430.00	2.30	60.10	6,416.27	173.93	326.31	-146.73	0.05	0.00	1.24
6,520.00	2.30	56.70	6,506.19	175.83	329.39	-148.36	0.15	0.00	-3.78
6,610.00	2.30	52.20	6,596.12	177.92	332.32	-150.22	0.20	0.00	-5.00
6,700.00	2.10	47.20	6,686.05	180.15	334.96	-152.22	0.31	-0.22	-5.56
6,789.00	2.30	50.20	6,774.99	182.40	337.53	-154.25	0.26	0.22	3.37
6,879.00	2.10	52.20	6,864.92	184.57	340.22	-156.19	0.24	-0.22	2.22
6,969.00	2.10	49.00	6,954.86	186.66	342.77	-158.07	0.13	0.00	-3.56
7,058.00	1.90	47.90	7,043.81	188.72	345.09	-159.93	0.23	-0.22	-1.24
7,148.00	2.10	49.70	7,133.75	190.79	347.46	-161.80	0.23	0.22	2.00
7,238.00	1.90	47.20	7,223.70	192.87	349.81	-163.68	0.24	-0.22	-2.78
7,327.00	1.80	45.00	7,312.65	194.86	351.88	-165.50	0.14	-0.11	-2.47
7,417.00	2.30	41.60	7,402.59	197.21	354.08	-167.66	0.57	0.56	-3.78
7,507.00	2.30	37.90	7,492.52	199.98	356.39	-170.24	0.16	0.00	-4.11
7,596.00	2.30	34.80	7,581.45	202.86	358.50	-172.93	0.14	0.00	-3.48
7,686.00	3.00	41.40	7,671.35	206.11	361.09	-175.96	0.85	0.78	7.33
7,775.00	3.00	42.00	7,760.23	209.59	364.19	-179.17	0.04	0.00	0.67
7,865.00	2.30	27.70	7,850.14	212.94	366.60	-182.31	1.06	-0.78	-15.89
8,044.00	0.40	249.40	8,029.09	215.90	367.69	-185.18	1.46	-1.06	-77.26
8,133.00	0.40	200.50	8,118.09	215.50	367.29	-184.81	0.37	0.00	-54.94
8,223.00	0.50	212.30	8,208.09	214.87	366.97	-184.21	0.15	0.11	13.11
8,313.00	0.70	191.60	8,298.08	214.00	366.65	-183.37	0.32	0.22	-23.00
8,402.00	0.40	184.50	8,387.08	213.16	366.52	-182.54	0.35	-0.34	-7.98
8,492.00	0.40	163.30	8,477.08	212.54	366.58	-181.93	0.16	0.00	-23.56
8,582.00	0.20	191.00	8,567.08	212.09	366.64	-181.47	0.27	-0.22	30.78
8,671.00	0.20	102.30	8,656.07	211.90	366.76	-181.27	0.31	0.00	-99.66
8,761.00	0.00	31.90	8,746.07	211.87	366.92	-181.23	0.22	-0.22	0.00
8,851.00	0.50	355.70	8,836.07	212.26	366.89	-181.62	0.56	0.56	0.00
8,941.00	0.70	6.60	8,926.07	213.20	366.92	-182.55	0.25	0.22	12.11
9,030.00	0.50	348.00	9,015.06	214.12	366.90	-183.47	0.31	-0.22	-20.90
9,120.00	0.70	9.80	9,105.06	215.04	366.92	-184.39	0.33	0.22	24.22
9,210.00	0.70	6.50	9,195.05	216.13	367.07	-185.46	0.04	0.00	-3.67
9,299.00	0.50	21.20	9,284.05	217.03	367.27	-186.34	0.28	-0.22	16.52
9,389.00	0.40	8.60	9,374.04	217.71	367.46	-187.00	0.16	-0.11	-14.00
9,478.00	0.50	30.00	9,463.04	218.35	367.70	-187.63	0.22	0.11	24.04
9,568.00	0.50	29.80	9,553.04	219.04	368.09	-188.27	0.00	0.00	-0.22



Survey Report

Company:	EOG Resources	Local Co-ordinate Reference:	Well #702H
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB = 25 @ 3359.01ft (H&P 415)
Site:	Black Bear 36 State	MD Reference:	KB = 25 @ 3359.01ft (H&P 415)
Well:	#702H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Survey Program	Database:	EDM 5000.1 Single User Db

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,658.00	0.40	7.50	9,643.04	219.69	368.33	-188.90	0.22	-0.11	-24.78
9,748.00	0.50	2.10	9,733.03	220.39	368.39	-189.60	0.12	0.11	-6.00
9,838.00	0.70	359.40	9,823.03	221.33	368.39	-190.54	0.22	0.22	-3.00
9,927.00	0.50	334.30	9,912.02	222.23	368.22	-191.44	0.37	-0.22	-28.20
10,017.00	0.50	344.50	10,002.02	222.96	367.94	-192.20	0.10	0.00	11.33
10,106.00	0.70	335.70	10,091.01	223.83	367.62	-193.09	0.25	0.22	-9.89
10,196.00	0.90	322.20	10,181.01	224.89	366.96	-194.20	0.30	0.22	-15.00
10,286.00	0.70	293.30	10,271.00	225.66	366.02	-195.05	0.49	-0.22	-32.11
10,376.00	0.70	274.50	10,360.99	225.93	364.97	-195.39	0.25	0.00	-20.89
10,465.00	0.70	259.10	10,449.98	225.87	363.89	-195.42	0.21	0.00	-17.30
10,555.00	1.10	246.00	10,539.97	225.41	362.56	-195.08	0.50	0.44	-14.56
10,645.00	0.90	246.40	10,629.96	224.78	361.12	-194.56	0.22	-0.22	0.44
10,735.00	0.90	247.60	10,719.95	224.22	359.82	-194.12	0.02	0.00	1.33
10,824.00	1.20	245.50	10,808.93	223.57	358.33	-193.59	0.34	0.34	-2.36
10,914.00	1.20	243.80	10,898.91	222.76	356.63	-192.92	0.04	0.00	-1.89
11,004.00	1.40	253.60	10,988.89	222.04	354.73	-192.35	0.33	0.22	10.89
11,094.00	1.80	246.40	11,078.86	221.16	352.38	-191.67	0.50	0.44	-8.00
11,184.00	2.10	249.60	11,168.80	220.02	349.54	-190.77	0.35	0.33	3.56
11,273.00	2.10	250.60	11,257.74	218.91	346.47	-189.91	0.04	0.00	1.12
11,343.00	2.10	245.20	11,327.70	217.95	344.09	-189.14	0.28	0.00	-7.71
11,473.00	1.80	240.20	11,457.62	215.93	340.16	-187.46	0.27	-0.23	-3.85
11,563.00	1.80	231.10	11,547.58	214.34	337.83	-186.06	0.32	0.00	-10.11
11,652.00	1.60	221.60	11,636.54	212.54	335.92	-184.42	0.39	-0.22	-10.67
11,742.00	1.40	218.10	11,726.51	210.73	334.41	-182.74	0.24	-0.22	-3.89
11,832.00	1.40	231.80	11,816.48	209.19	332.87	-181.33	0.37	0.00	15.22
11,921.00	1.60	232.70	11,905.45	207.76	331.02	-180.06	0.23	0.22	1.01
12,011.00	1.60	221.60	11,995.42	206.06	329.19	-178.51	0.34	0.00	-12.33
12,055.00	6.90	183.30	12,039.28	202.96	328.63	-175.47	13.02	12.05	-87.05
12,100.00	13.90	175.60	12,083.52	194.86	328.89	-167.38	15.83	15.56	-17.11
12,145.00	15.80	175.70	12,127.01	183.36	329.76	-155.84	4.22	4.22	0.22
12,190.00	17.20	177.50	12,170.16	170.60	330.51	-143.07	3.31	3.11	4.00
12,234.00	21.80	177.10	12,211.63	155.94	331.21	-128.39	10.46	10.45	-0.91
12,279.00	28.00	174.30	12,252.42	137.06	332.68	-109.46	14.02	13.78	-6.22
12,324.00	30.30	174.10	12,291.72	115.26	334.90	-87.55	5.12	5.11	-0.44
12,369.00	33.10	176.30	12,330.01	91.70	336.86	-63.91	6.73	6.22	4.89
12,414.00	39.80	179.40	12,366.18	65.00	337.81	-37.22	15.44	14.89	6.89
12,458.00	45.20	181.20	12,398.61	35.29	337.63	-7.63	12.58	12.27	4.09
12,503.00	47.90	181.50	12,429.56	2.63	336.85	24.86	6.02	6.00	0.67
12,548.00	54.20	179.80	12,457.83	-32.34	336.48	59.69	14.30	14.00	-3.78
12,593.00	61.10	177.50	12,481.90	-70.32	337.40	97.61	15.93	15.33	-5.11
12,638.00	68.40	177.70	12,501.08	-110.96	339.11	138.25	16.23	16.22	0.44
12,683.00	73.50	177.10	12,515.77	-153.43	341.04	180.75	11.40	11.33	-1.33
12,728.00	78.80	177.10	12,526.54	-197.05	343.25	224.40	11.78	11.78	0.00
12,772.00	84.10	177.70	12,533.07	-240.50	345.22	267.87	12.12	12.05	1.36



Survey Report

Company:	EOG Resources	Local Co-ordinate Reference:	Well #702H
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB = 25 @ 3359.01ft (H&P 415)
Site:	Black Bear 36 State	MD Reference:	KB = 25 @ 3359.01ft (H&P 415)
Well:	#702H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Survey Program	Database:	EDM 5000.1 Single User Db

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
12,818.00	89.00	178.00	12,535.84	-286.37	346.94	313.73	10.67	10.65	0.65
12,907.00	90.10	179.10	12,536.54	-375.34	349.19	402.58	1.75	1.24	1.24
12,997.00	88.30	179.60	12,537.80	-465.32	350.21	492.34	2.08	-2.00	0.56
13,086.00	88.90	179.60	12,539.97	-554.29	350.83	581.07	0.67	0.67	0.00
13,176.00	90.30	180.80	12,540.60	-644.29	350.52	670.74	2.05	1.56	1.33
13,265.00	89.40	181.90	12,540.83	-733.26	348.42	759.24	1.60	-1.01	1.24
13,355.00	89.20	179.80	12,541.93	-823.24	347.09	848.81	2.34	-0.22	-2.33
13,445.00	87.60	178.50	12,544.45	-913.19	348.42	938.57	2.29	-1.78	-1.44
13,535.00	90.80	179.80	12,545.70	-1,003.16	349.76	1,028.35	3.84	3.56	1.44
13,624.00	89.20	179.40	12,545.70	-1,092.15	350.38	1,117.10	1.85	-1.80	-0.45
13,714.00	89.70	179.80	12,546.57	-1,182.14	351.01	1,206.84	0.71	0.56	0.44
13,821.00	91.70	181.20	12,545.26	-1,289.12	350.07	1,313.39	2.28	1.87	1.31
13,893.00	90.30	180.80	12,544.00	-1,361.10	348.82	1,385.02	2.02	-1.94	-0.56
13,983.00	88.70	180.70	12,544.79	-1,451.08	347.64	1,474.61	1.78	-1.78	-0.11
14,073.00	88.00	178.20	12,547.38	-1,541.04	348.50	1,564.33	2.88	-0.78	-2.78
14,163.00	85.50	176.10	12,552.48	-1,630.77	352.97	1,654.13	3.63	-2.78	-2.33
14,252.00	88.20	175.90	12,557.37	-1,719.41	359.17	1,742.98	3.04	3.03	-0.22
14,342.00	91.00	179.20	12,558.00	-1,809.30	363.01	1,832.89	4.81	3.11	3.67
14,432.00	90.60	179.60	12,556.74	-1,899.29	363.95	1,922.65	0.63	-0.44	0.44
14,521.00	89.60	180.30	12,556.59	-1,988.29	364.03	2,011.36	1.37	-1.12	0.79
14,611.00	89.00	180.80	12,557.69	-2,078.28	363.17	2,100.98	0.87	-0.67	0.56
14,701.00	87.10	179.40	12,560.75	-2,168.22	363.01	2,190.61	2.62	-2.11	-1.56
14,791.00	89.00	178.20	12,563.81	-2,258.14	364.89	2,280.38	2.50	2.11	-1.33
14,880.00	91.50	178.20	12,563.43	-2,347.09	367.69	2,369.26	2.81	2.81	0.00
14,970.00	89.60	179.40	12,562.56	-2,437.06	369.57	2,459.09	2.50	-2.11	1.33
15,059.00	90.10	179.20	12,562.79	-2,526.05	370.66	2,547.87	0.61	0.56	-0.22
15,149.00	88.20	178.50	12,564.13	-2,616.02	372.47	2,637.69	2.25	-2.11	-0.78
15,239.00	88.50	178.90	12,566.72	-2,705.96	374.51	2,727.49	0.56	0.33	0.44
15,328.00	89.40	178.90	12,568.35	-2,794.92	376.22	2,816.30	1.01	1.01	0.00
15,418.00	88.20	178.20	12,570.24	-2,884.87	378.49	2,906.14	1.54	-1.33	-0.78
15,507.00	89.60	178.00	12,571.95	-2,973.81	381.44	2,995.01	1.59	1.57	-0.22
15,597.00	91.50	180.50	12,571.08	-3,063.78	382.62	3,084.79	3.49	2.11	2.78
15,687.00	89.60	178.70	12,570.22	-3,153.77	383.25	3,174.52	2.91	-2.11	-2.00
15,777.00	89.90	179.20	12,570.61	-3,243.75	384.90	3,264.34	0.65	0.33	0.56
15,866.00	89.00	177.80	12,571.46	-3,332.71	387.23	3,353.20	1.87	-1.01	-1.57
15,956.00	90.40	180.00	12,571.94	-3,422.69	388.96	3,443.01	2.90	1.56	2.44
16,046.00	90.60	179.10	12,571.15	-3,512.68	389.66	3,532.76	1.02	0.22	-1.00
16,135.00	88.50	178.40	12,571.85	-3,601.65	391.60	3,621.60	2.49	-2.36	-0.79
16,225.00	92.00	179.80	12,571.46	-3,691.62	393.02	3,711.38	4.19	3.89	1.56
16,315.00	88.70	179.10	12,570.91	-3,781.61	393.88	3,801.13	3.75	-3.67	-0.78
16,405.00	88.70	181.00	12,572.95	-3,871.58	393.80	3,890.80	2.11	0.00	2.11
16,495.00	89.70	181.00	12,574.21	-3,961.55	392.23	3,980.35	1.11	1.11	0.00
16,584.00	90.60	181.00	12,573.97	-4,050.54	390.68	4,068.91	1.01	1.01	0.00



Survey Report

Company:	EOG Resources	Local Co-ordinate Reference:	Well #702H
Project:	Lea County, NM (NAD 27 NME)	TVD Reference:	KB = 25 @ 3359.01ft (H&P 415)
Site:	Black Bear 36 State	MD Reference:	KB = 25 @ 3359.01ft (H&P 415)
Well:	#702H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	Survey Program	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
16,674.00	87.10	179.80	12,575.78	-4,140.50	390.05	4,158.52	4.11	-3.89	-1.33
16,764.00	87.60	179.80	12,579.94	-4,230.41	390.36	4,248.15	0.56	0.56	0.00
16,854.00	88.30	179.40	12,583.16	-4,320.35	390.99	4,337.84	0.90	0.78	-0.44
16,944.00	91.70	180.70	12,583.16	-4,410.33	390.91	4,427.52	4.04	3.78	1.44
17,034.00	90.30	180.10	12,581.59	-4,500.31	390.29	4,517.15	1.69	-1.56	-0.67
17,123.00	92.00	180.30	12,579.80	-4,589.29	389.98	4,605.81	1.92	1.91	0.22
17,213.00	91.30	180.10	12,577.21	-4,679.25	389.66	4,695.44	0.81	-0.78	-0.22
17213'MD: Final MWD Survey									
17,356.00	91.30	180.10	12,573.97	-4,822.22	389.41	4,837.91	0.00	0.00	0.00
17356'MD: Projection to Total Depth									

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
195.00	195.00	0.57	0.63	195'MD - Start DrilTech MWD
17,213.00	12,577.21	-4,679.25	389.66	17213'MD: Final MWD Survey
17,356.00	12,573.97	-4,822.22	389.41	17356'MD: Projection to Total Depth

Checked By: _____ Approved By: _____ Date: _____

