

HOBBS OCD
JUL 27 2018
RECEIVED



Lea County, NM (NAD 83 NME)

Fox 30 Fed Com #604H

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: #604H

KB = 25 @ 3347.0usft 3322.0
Northing 401199.00 Easting 798220.00 Latitude 32° 6' 0.931 N Longitude 103° 30' 13.525 W

SECTION DETAILS

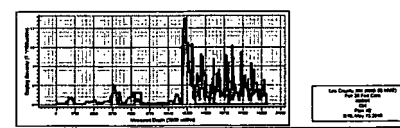
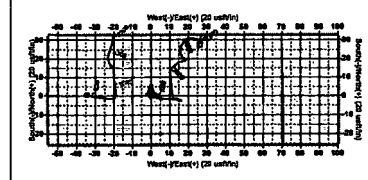
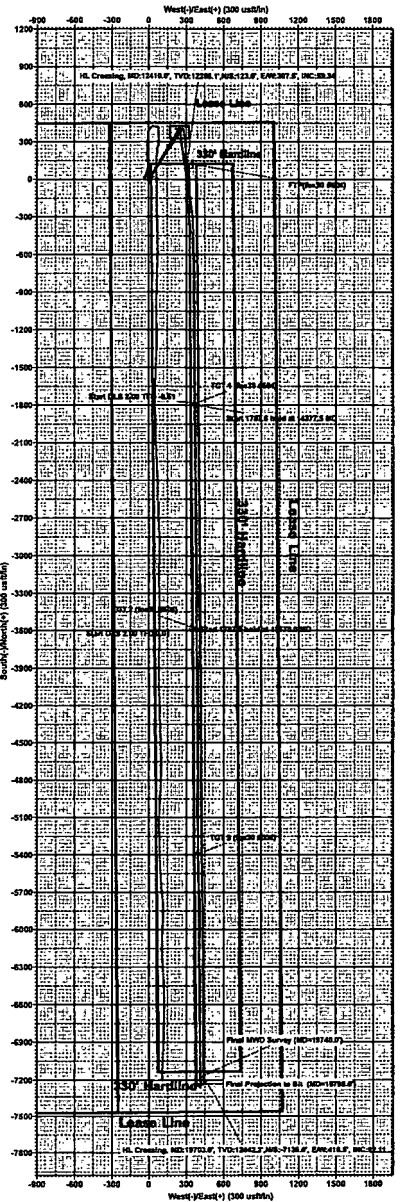
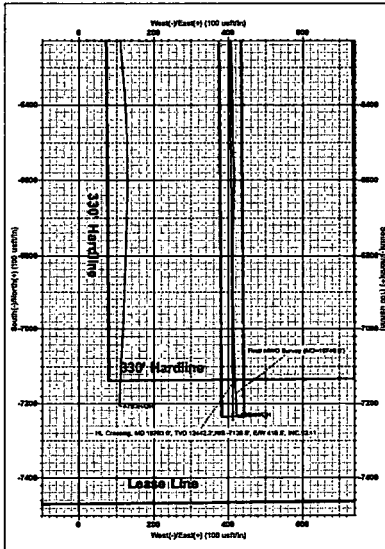
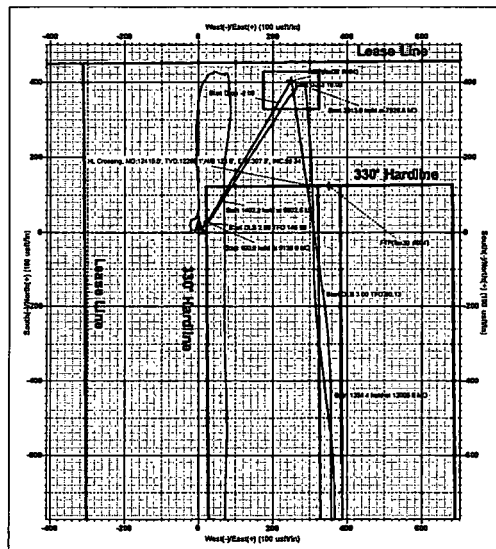
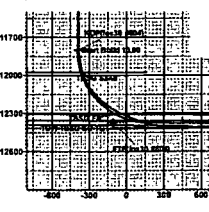
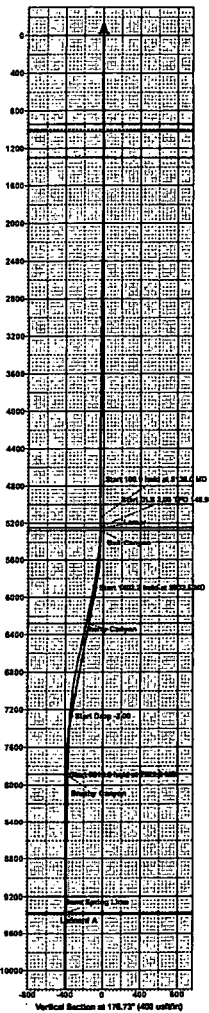
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	5138.0	1.00	246.60	5135.4	26.7	27.5	0.00	0.00	-25.1	
2	5236.0	1.00	246.60	5235.4	26.0	25.9	0.00	0.00	-24.5	
3	5902.5	12.50	31.13	5896.9	85.7	58.0	2.00	146.98	-82.3	
4	7304.7	12.50	31.13	7255.8	345.5	214.9	0.00	0.00	-332.7	
5	7929.8	0.00	0.00	7886.0	403.7	250.0	2.00	180.00	-388.8	
6	11842.8	0.00	0.00	11799.0	403.7	250.0	0.00	0.00	-388.8	KOP(fox30 #604)
7	12736.9	89.41	171.37	12371.9	-158.9	335.1	10.00	171.37	175.8	
8	13008.8	89.40	179.53	12374.8	-427.8	356.6	3.00	90.13	447.4	
9	14363.2	89.40	179.53	12389.0	-1782.0	367.8	0.00	0.00	1800.1	TGT 1 (fox30 #604)
10	14377.5	89.68	179.53	12389.1	-1796.3	367.9	2.00	-0.61	1814.3	
11	16165.3	89.68	179.53	12399.0	-3584.0	382.7	0.00	0.00	3600.0	TGT 2 (fox30 #604)
12	16170.0	89.78	179.53	12399.0	-3588.7	382.8	2.00	0.01	3604.7	
13	17967.4	89.78	179.53	12406.0	-5386.1	397.7	0.00	0.00	5400.0	TGT 3 (fox30 #604)
14	19816.4	89.85	179.53	12412.0	-7235.0	413.0	0.00	0.00	7246.8	PBHL(fox30 #604)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP(fox30 #604)	11799.0	403.7	250.0	401602.70	798470.00
FTPT(fox30 #604)	12372.0	124.0	352.0	401323.00	798372.00
TGT 1 (fox30 #604)	12389.0	-1782.0	367.8	399417.00	798587.80
TGT 2 (fox30 #604)	12399.0	-3584.0	382.7	397615.00	798602.34
TGT 3 (fox30 #604)	12406.0	-5386.1	397.7	395812.90	798617.67
PBHL(fox30 #604)	12412.0	-7235.0	413.0	393964.00	798633.00



Lea County, NM (NAD 83 NME)
Fox 30 Fed Com #604H
Plan #2

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EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Fox 30 Fed Com

#604H

OH

Design: OH

Final PVA

15 May, 2018

Final PVA

Company:	EOG Resources - Midland		Local Co-ordinate Reference:	Well #604H
Project:	Lea County, NM (NAD 83 NME)		TVD Reference:	KB = 25 @ 3347.0usft
Site:	Fox 30 Fed Corn		MD Reference:	KB = 25 @ 3347.0usft
Well:	#604H		North Reference:	Grid
Wellbore:	OH		Survey Calculation Method:	Minimum Curvature
Design:	OH		Database:	EDM 5000.14

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	Fox 30 Fed Corn				
Site Position:		Northing:	401,193.00 usft	Latitude:	32° 6' 0.944 N
From:	Map	Easting:	797,271.00 usft	Longitude:	103° 30' 24.557 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.44 °

Well	#604H					
Well Position	+N/-S	0.0 usft	Northing:	401,199.00 usft	Latitude:	32° 6' 0.931 N
	+E/-W	0.0 usft	Easting:	798,220.00 usft	Longitude:	103° 30' 13.525 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,322.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	12/6/2017	6.86	59.95	47,824.01442987

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	176.73	

Final PVA

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Well:	#604H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey Program		Date	5/15/2018		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
158.0	5,136.0	M3P MWD (OH)	MWD	OWSG MWD - Standard	
5,233.0	19,798.0	Intrepid MWD #1 (OH)	MWD	OWSG MWD - Standard	

MD (usft)	Inc (")	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Bulid (°/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
158.0	0.30	99.90	158.0	-0.1	0.4	0.19	0.19	0.00	0.0	0.0
333.0	0.50	119.50	333.0	-0.5	1.5	0.14	0.11	11.20	0.0	0.0
512.0	1.00	100.50	512.0	-1.2	3.7	0.31	0.28	-10.61	0.0	0.0
702.0	1.10	94.30	701.9	-1.6	7.2	0.08	0.05	-3.26	0.0	0.0
892.0	1.40	85.60	891.9	-1.6	11.3	0.19	0.16	-4.58	0.0	0.0
1,016.0	1.20	112.20	1,015.9	-2.0	14.0	0.51	-0.16	21.45	0.0	0.0
1,103.0	1.10	113.50	1,102.9	-2.6	15.6	0.12	-0.11	1.49	0.0	0.0
1,198.0	0.40	26.90	1,197.8	-2.7	16.6	1.21	-0.74	-91.16	0.0	0.0
1,389.0	1.80	282.40	1,388.8	-1.5	14.0	1.02	0.73	-54.71	0.0	0.0
1,484.0	0.60	276.00	1,483.8	-1.1	12.0	1.27	-1.26	-6.74	0.0	0.0
1,579.0	0.60	349.40	1,578.8	-0.6	11.5	0.75	0.00	77.26	0.0	0.0
1,769.0	0.50	7.50	1,768.8	1.2	11.4	0.10	-0.05	9.53	0.0	0.0
1,959.0	0.50	348.20	1,958.8	2.9	11.3	0.09	0.00	-10.16	0.0	0.0
2,149.0	0.60	355.40	2,148.8	4.7	11.1	0.06	0.05	3.79	0.0	0.0
2,339.0	0.70	355.90	2,338.8	6.8	10.9	0.05	0.05	0.26	0.0	0.0
2,529.0	0.80	353.00	2,528.7	9.3	10.7	0.06	0.05	-1.53	0.0	0.0
2,719.0	1.10	354.30	2,718.7	12.4	10.3	0.16	0.16	0.68	0.0	0.0
2,910.0	0.80	63.30	2,909.7	14.9	11.3	0.58	-0.16	36.13	0.0	0.0
3,100.0	0.70	23.70	3,099.7	16.5	13.0	0.27	-0.05	-20.84	0.0	0.0
3,280.0	1.30	68.30	3,289.6	18.4	15.5	0.49	0.32	23.47	0.0	0.0

Final PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #804H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3347.0usft
Site:	Fox 30 Fed Com	MD Reference:	KB = 25 @ 3347.0usft
Well:	#804H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLog (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
3,480.0	0.70	95.70	3,479.6	19.1	18.6	0.40	-0.32	14.42	0.0	0.0	
3,671.0	0.90	305.30	3,670.6	19.8	18.6	0.81	0.10	-78.74	0.0	0.0	
3,861.0	0.70	308.50	3,860.6	21.4	18.4	0.11	-0.11	1.68	0.0	0.0	
4,051.0	0.90	6.50	4,050.6	23.6	15.7	0.42	0.11	30.53	0.0	0.0	
4,241.0	1.10	16.90	4,240.5	26.8	18.4	0.14	0.11	5.47	0.0	0.0	
4,431.0	1.20	43.30	4,430.5	30.0	18.3	0.28	0.05	13.89	0.0	0.0	
4,621.0	1.40	92.20	4,620.5	31.4	22.0	0.57	0.11	25.74	0.0	0.0	
4,811.0	0.60	130.20	4,810.4	30.6	25.0	0.53	-0.42	20.00	0.0	0.0	
5,001.0	1.40	138.00	5,000.4	28.3	27.4	0.42	0.42	3.05	0.0	0.0	
5,136.0	1.00	246.60	5,135.4	26.7	27.5	1.47	-0.30	81.93	0.0	0.0	
5,233.0	1.00	262.70	5,232.4	26.2	25.9	0.29	0.00	16.60	0.0	-0.2	
5,423.0	5.70	41.10	5,422.1	33.1	30.4	3.41	2.47	72.84	-5.3	-0.9	
5,612.0	10.10	32.50	5,609.3	54.2	45.5	2.40	2.33	-4.55	-15.2	-4.6	
5,801.0	10.20	33.40	5,795.3	82.1	63.6	0.10	0.05	0.48	-20.4	-5.8	
5,991.0	14.10	32.50	5,981.0	115.7	85.3	2.05	2.05	-0.47	-20.9	-7.4	
6,180.0	14.40	32.90	6,164.2	154.9	110.5	0.17	0.16	0.21	-26.7	-8.4	
6,370.0	14.70	32.50	6,348.1	195.0	136.2	0.17	0.16	-0.21	-33.4	-9.7	
6,559.0	15.20	34.10	6,530.7	235.8	163.0	0.34	0.26	0.85	-41.8	-10.3	
6,748.0	13.30	34.50	6,713.9	274.2	189.2	1.01	-1.01	0.21	-47.7	-12.2	
6,938.0	11.20	31.00	6,899.5	308.1	211.1	1.17	-1.11	-1.84	-46.0	-16.3	
7,127.0	8.80	32.70	7,085.7	336.0	228.4	1.28	-1.27	0.90	-38.2	-15.5	
7,316.0	4.90	36.60	7,273.3	354.6	241.0	2.08	-2.06	2.06	-20.7	-15.9	
7,506.0	4.20	40.60	7,462.7	368.4	250.4	0.40	-0.37	2.11	-2.9	-19.4	
7,695.0	2.30	33.70	7,651.4	374.8	257.0	1.02	-1.01	-3.65	10.5	-21.4	
7,885.0	1.80	37.70	7,841.2	380.4	260.9	0.27	-0.26	2.11	11.4	-22.9	
8,074.0	1.20	35.50	8,030.2	384.3	263.9	0.32	-0.32	-1.16	7.7	-22.6	
8,263.0	1.40	44.50	8,219.1	387.6	266.7	0.15	0.11	4.76	-0.2	-23.2	

Final PVA

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Well:	#804H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (")	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	ENW (usft)	DLeg ("/100usft)	Buili ("/100usft)	Turn ("/100usft)	High to Plan (usft)	Right to Plan (usft)	
8,453.0	1.40	48.50	8,409.1	390.8	270.0	0.05	0.00	2.11	-6.4	-23.0	
8,642.0	1.40	71.10	8,598.0	393.0	273.9	0.29	0.00	11.96	-19.2	-17.8	
8,831.0	1.00	63.10	8,787.0	394.5	277.6	0.23	-0.21	-4.23	-20.5	-20.7	
9,021.0	0.80	58.80	8,977.0	396.0	280.2	0.11	-0.11	-2.26	-21.8	-22.3	
9,210.0	0.40	75.90	9,165.9	396.8	282.0	0.23	-0.21	9.05	-29.3	-14.5	
9,400.0	0.70	72.60	9,355.9	397.3	283.7	0.16	0.16	-1.74	-30.3	-16.2	
9,589.0	0.40	50.90	9,544.9	398.1	285.3	0.19	-0.16	-11.48	-23.9	-26.6	
9,779.0	0.30	249.60	9,734.9	398.3	285.4	0.36	-0.05	-84.89	31.3	17.4	
9,968.0	0.30	281.70	9,923.9	398.3	284.4	0.09	0.00	16.98	34.8	-1.7	
10,157.0	0.30	131.80	10,112.9	398.0	284.3	0.31	0.00	-79.31	-29.4	18.6	
10,346.0	0.30	159.80	10,301.9	397.2	284.9	0.08	0.00	14.81	-18.1	30.5	
10,536.0	0.80	155.80	10,491.9	395.6	285.6	0.26	0.26	-2.11	-22.0	29.1	
10,725.0	0.30	57.30	10,680.9	394.6	286.5	0.47	-0.26	-52.12	-25.8	-27.4	
10,915.0	1.10	108.00	10,870.9	394.3	288.7	0.49	0.42	26.68	-39.7	3.0	
11,104.0	0.80	127.70	11,059.9	393.0	291.5	0.23	-0.16	10.42	-39.4	16.9	
11,293.0	2.50	288.10	11,248.8	393.4	288.6	1.73	0.90	84.87	39.9	-2.2	
11,482.0	0.70	51.90	11,437.8	395.4	285.6	1.56	-0.95	65.50	-22.9	-28.5	
11,672.0	0.70	56.80	11,627.7	396.8	287.5	0.03	0.00	2.58	-27.6	-26.3	
11,708.0	0.60	84.10	11,663.7	396.9	287.8	0.89	-0.28	75.83	-36.9	-10.6	
11,789.0	0.30	284.20	11,744.7	397.0	288.0	1.10	-0.37	-197.41	38.5	-2.9	
11,843.0	2.60	178.57	11,798.7	395.8	287.9	5.00	4.27	-195.76	-8.8	37.7	
KOP(fox30 #604)											
11,883.0	4.60	175.90	11,838.6	393.3	288.1	5.00	4.99	-6.68	-11.7	37.1	
11,930.0	10.60	177.00	11,885.2	387.1	288.4	12.77	12.77	2.34	-12.0	36.8	
11,978.0	13.80	173.40	11,932.1	377.0	289.3	6.85	6.67	-7.50	-14.9	35.4	
12,025.0	18.20	171.90	11,977.3	364.2	291.0	9.40	9.36	-3.19	-15.6	34.7	
12,073.0	22.20	174.10	12,022.3	347.7	293.0	8.48	8.33	4.58	-13.6	34.7	

Final PVA

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12,120.0	29.10	175.30	12,064.7	327.5	294.8	14.72	14.68	2.55	-12.8	33.7
12,167.0	35.60	176.00	12,104.4	302.4	296.7	13.85	13.83	1.49	-13.9	32.0
12,214.0	41.30	174.80	12,141.1	273.3	299.1	12.23	12.13	-2.55	-16.9	29.8
12,262.0	45.90	175.50	12,175.9	240.3	301.9	9.64	9.58	1.46	-19.3	27.8
12,309.0	49.80	177.20	12,207.4	205.6	304.1	8.72	8.30	3.62	-21.0	25.2
12,357.0	54.00	177.20	12,237.0	167.8	305.9	8.75	8.75	0.00	-22.5	21.3
12,404.0	58.80	178.60	12,263.0	128.7	307.4	10.51	10.21	2.98	-23.4	17.0
12,410.0	59.34	178.56	12,266.1	123.6	307.5	8.95	8.94	-0.66	-23.5	16.3
HL Crossing, MD:12410.0', TVD:12266.1', N/S:123.6', EW:307.5', INC:59.34										
12,451.0	63.00	178.30	12,285.9	87.7	308.5	8.95	8.94	-0.63	-24.2	11.7
12,456.8	63.32	178.30	12,288.5	82.5	308.6	5.53	5.53	0.00	-24.3	11.1
FTP(fox30 #604)										
12,498.0	65.60	178.30	12,308.3	45.4	309.7	5.53	5.53	0.00	-23.8	6.4
12,546.0	68.00	179.20	12,325.2	1.2	310.7	5.29	5.00	1.87	-21.2	0.5
12,593.0	69.80	179.50	12,342.1	-42.6	311.2	3.88	3.83	0.64	-16.4	-5.9
12,641.0	71.30	178.80	12,358.1	-87.8	311.9	3.41	3.12	-1.46	-8.9	-12.3
12,688.0	73.40	177.80	12,372.3	-132.6	313.2	4.91	4.47	-2.13	0.7	-18.0
12,735.0	76.60	176.30	12,384.5	-177.9	315.5	7.47	6.81	-3.19	11.9	-22.7
12,782.0	81.20	174.80	12,393.6	-223.9	319.1	10.28	9.79	-3.19	20.8	-24.9
12,830.0	85.50	173.90	12,399.1	-271.3	323.8	9.15	8.96	-1.87	26.0	-25.0
12,859.0	87.60	173.00	12,400.9	-300.1	327.1	7.88	7.24	-3.10	27.5	-24.1
12,922.0	87.70	172.40	12,403.4	-362.5	335.1	0.96	0.16	-0.95	29.4	-19.8
12,954.0	88.00	172.40	12,404.6	-394.2	339.3	0.94	0.94	0.00	30.3	-16.6
13,017.0	88.60	172.80	12,406.5	-456.7	347.4	1.14	0.95	0.63	31.5	-9.3
13,048.0	88.10	172.80	12,407.4	-487.4	351.3	1.61	-1.61	0.00	32.0	-5.7
13,143.0	91.00	174.60	12,408.1	-581.8	361.7	3.59	3.05	1.89	31.8	3.8
13,238.0	94.20	178.50	12,403.8	-676.5	367.5	5.31	3.37	4.11	26.4	8.8

Final PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #604H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3347.0usft
Site:	Fox 30 Fed Com	MD Reference:	KB = 25 @ 3347.0usft
Well:	#604H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MO (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
13,301.0	93.50	179.00	12,399.6	-739.4	368.8	1.36	-1.11	0.79	21.6	9.6	
13,332.0	92.70	179.50	12,397.9	-770.3	369.2	3.04	-2.58	1.61	19.6	9.8	
13,395.0	91.00	179.30	12,395.9	-833.3	369.9	2.72	-2.70	-0.32	16.9	9.9	
13,427.0	89.50	179.60	12,395.8	-865.3	370.2	4.78	-4.69	0.94	16.4	10.0	
13,458.0	89.10	179.60	12,396.1	-896.3	370.4	1.29	-1.29	0.00	16.4	9.9	
13,490.0	89.30	179.90	12,396.6	-928.3	370.6	1.13	0.62	0.94	16.6	9.8	
13,521.0	89.10	180.00	12,397.0	-959.3	370.6	0.72	-0.65	0.32	16.7	9.6	
13,553.0	89.60	180.70	12,397.4	-991.3	370.4	2.69	1.56	2.19	16.7	9.1	
13,584.0	88.80	180.40	12,397.8	-1,022.3	370.1	2.76	-2.58	-0.97	16.8	8.5	
13,616.0	91.50	180.80	12,397.7	-1,054.3	369.8	8.53	8.44	1.25	16.4	8.0	
13,661.0	93.20	178.50	12,395.9	-1,099.2	370.0	6.35	3.78	-5.11	14.1	7.9	
13,679.0	94.20	178.00	12,394.7	-1,117.2	370.6	6.21	5.56	-2.78	12.7	8.3	
13,710.0	94.80	178.50	12,392.3	-1,148.1	371.5	2.52	1.94	1.61	9.9	9.0	
13,742.0	94.00	179.60	12,389.8	-1,180.0	372.1	4.24	-2.50	3.44	7.1	9.2	
13,774.0	91.40	179.90	12,388.3	-1,211.9	372.2	8.18	-8.12	0.94	5.3	9.1	
13,805.0	89.00	179.70	12,388.2	-1,242.9	372.3	7.77	-7.74	-0.65	4.9	8.9	
13,837.0	87.40	180.60	12,389.2	-1,274.9	372.2	5.74	-5.00	2.81	5.6	8.6	
13,868.0	86.50	180.60	12,390.9	-1,305.9	371.9	2.90	-2.90	0.00	6.9	8.0	
13,900.0	86.20	180.70	12,392.9	-1,337.8	371.5	0.99	-0.94	0.31	8.6	7.4	
13,931.0	85.80	180.10	12,395.1	-1,368.7	371.3	2.32	-1.29	-1.94	10.4	6.9	
13,963.0	85.70	179.90	12,397.4	-1,400.6	371.3	0.70	-0.31	-0.62	12.4	6.7	
13,994.0	86.20	179.90	12,399.6	-1,431.6	371.4	1.61	1.61	0.00	14.3	6.5	
14,026.0	87.10	179.00	12,401.5	-1,463.5	371.7	3.97	2.81	-2.81	15.8	6.5	
14,057.0	87.20	180.10	12,403.0	-1,494.5	371.9	3.56	0.32	3.55	17.1	6.5	
14,089.0	87.40	178.50	12,404.5	-1,526.4	372.3	5.03	0.62	-5.00	18.2	6.6	
14,183.0	87.30	177.10	12,408.9	-1,620.2	375.9	1.49	-0.11	-1.49	21.6	9.5	
14,278.0	87.80	177.90	12,413.0	-1,715.1	380.1	0.99	0.53	0.84	24.7	12.8	

Final PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #804H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3347.0usft
Site:	Fox 30 Fed Corn	MD Reference:	KB = 25 @ 3347.0usft
Well:	#804H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	EW (usft)	DLeg (°/100usft)	Bulid (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
14,343.4	87.25	178.52	12,415.8	-1,780.4	382.1	1.27	-0.84	0.95	26.8	14.3	
TGT 1 (fox30 #804)											
14,373.0	87.00	178.80	12,417.3	-1,809.9	382.8	1.27	-0.84	0.95	28.1	14.8	
14,467.0	90.00	179.50	12,419.7	-1,903.9	384.2	3.28	3.19	0.74	30.0	15.4	
14,530.0	90.50	178.50	12,419.5	-1,966.9	385.3	1.77	0.79	-1.59	29.4	15.9	
14,562.0	90.20	178.50	12,419.3	-1,998.9	386.1	0.94	-0.94	0.00	29.0	16.5	
14,656.0	89.80	181.40	12,419.3	-2,092.8	386.2	3.11	-0.43	3.09	28.5	15.8	
14,719.0	91.40	183.70	12,418.6	-2,155.8	383.4	4.45	2.54	3.65	27.5	12.5	
14,751.0	92.00	183.80	12,417.6	-2,187.7	381.3	1.90	1.87	0.31	26.4	10.1	
14,782.0	91.10	182.60	12,416.8	-2,218.6	379.6	4.84	-2.90	-3.87	25.4	8.1	
14,814.0	88.90	181.50	12,416.8	-2,250.6	378.4	7.69	-6.87	-3.44	25.2	6.7	
14,846.0	88.90	181.50	12,417.4	-2,282.6	377.6	0.00	0.00	0.00	25.6	5.6	
14,909.0	88.00	179.90	12,419.1	-2,345.6	376.8	2.91	-1.43	-2.54	27.0	4.4	
14,940.0	88.00	179.40	12,420.2	-2,376.5	377.0	1.61	0.00	-1.61	27.9	4.3	
15,003.0	88.50	177.80	12,422.1	-2,439.5	378.6	2.66	0.79	-2.54	29.5	5.3	
15,035.0	88.50	176.50	12,423.0	-2,471.4	380.1	4.06	0.00	-4.06	30.1	6.6	
15,066.0	89.50	177.70	12,423.5	-2,502.4	381.7	5.04	3.23	3.87	30.5	7.9	
15,098.0	90.70	178.90	12,423.5	-2,534.4	382.7	5.30	3.75	3.75	30.3	8.6	
15,129.0	91.20	178.50	12,422.9	-2,565.4	383.4	2.07	1.61	-1.29	29.6	9.1	
15,161.0	91.90	178.50	12,422.1	-2,597.3	384.2	2.19	2.19	0.00	28.5	9.6	
15,224.0	89.30	179.50	12,421.4	-2,660.3	385.3	4.42	-4.13	1.59	27.5	10.2	
15,287.0	87.60	178.80	12,423.1	-2,723.3	386.2	2.92	-2.70	-1.11	28.9	10.6	
15,318.0	88.90	180.10	12,424.1	-2,754.3	386.5	5.93	4.19	4.19	29.7	10.7	
15,350.0	90.00	180.00	12,424.4	-2,786.3	386.5	3.45	3.44	-0.31	29.8	10.4	
15,413.0	90.70	179.80	12,424.0	-2,849.3	386.6	1.16	1.11	-0.32	29.1	10.0	
15,460.0	88.70	180.20	12,424.2	-2,896.3	386.6	4.34	-4.26	0.85	29.0	9.6	
15,508.0	89.70	179.90	12,424.9	-2,944.3	386.6	2.18	2.08	-0.62	29.4	9.1	

Final PVA

Company:	EOG Resources - Midland					Local Co-ordinate Reference:	Well #804H				
Project:	Lea County, NM (NAD 83 NME)					TVD Reference:	KB = 25 @ 3347.0usft				
Site:	Fox 30 Fed Com					MD Reference:	KB = 25 @ 3347.0usft				
Well:	#604H					North Reference:	Grid				
Wellbore:	OH					Survey Calculation Method:	Minimum Curvature				
Design:	OH					Database:	EDM 5000.14				
Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
15,603.0	88.40	180.20	12,428.5	-3,039.2	386.5	1.40	-1.37	0.32	30.5	8.3	
15,697.0	88.70	178.60	12,428.9	-3,133.2	387.5	1.73	0.32	-1.70	32.3	8.5	
15,792.0	88.30	175.90	12,431.3	-3,228.1	392.0	2.87	-0.42	-2.84	34.3	12.2	
15,886.0	88.30	177.30	12,434.1	-3,321.8	397.6	1.49	0.00	1.49	36.6	17.0	
15,918.0	88.40	177.60	12,435.1	-3,353.8	399.0	0.99	0.31	0.94	37.3	18.2	
15,981.0	88.50	176.60	12,436.8	-3,416.7	402.2	1.59	0.16	-1.59	38.7	20.9	
16,013.0	90.70	178.10	12,437.0	-3,448.7	403.7	8.32	6.87	4.69	38.7	22.1	
16,076.0	92.10	178.30	12,435.4	-3,511.6	405.7	2.24	2.22	0.32	36.8	23.5	
16,108.0	92.10	179.40	12,434.3	-3,543.6	406.3	3.44	0.00	3.44	35.5	23.9	
16,149.4	92.17	179.33	12,432.7	-3,585.0	406.8	0.22	0.16	-0.16	33.7	24.0	
TGT 2 (fox30 #804)											
16,171.0	92.20	179.30	12,431.9	-3,606.5	407.0	0.22	0.16	-0.16	32.8	24.1	
16,202.0	90.60	180.80	12,431.2	-3,637.5	407.0	7.07	-5.16	4.84	31.9	23.8	
16,234.0	90.40	180.70	12,430.9	-3,669.5	406.6	0.70	-0.62	-0.31	31.5	23.1	
16,265.0	89.60	180.60	12,430.9	-3,700.5	406.2	2.60	-2.58	-0.32	31.4	22.5	
16,328.0	89.50	180.90	12,431.4	-3,763.5	405.4	0.50	-0.16	0.48	31.7	21.2	
16,360.0	89.80	180.90	12,431.6	-3,795.5	404.9	0.94	0.94	0.00	31.7	20.4	
16,423.0	92.20	181.40	12,430.5	-3,858.5	403.6	3.89	3.81	0.79	30.4	18.6	
16,455.0	92.00	181.50	12,429.3	-3,890.4	402.8	0.70	-0.62	0.31	29.1	17.6	
16,486.0	92.30	182.20	12,428.1	-3,921.4	401.8	2.46	0.97	2.26	27.8	16.3	
16,549.0	88.50	181.30	12,427.7	-3,984.4	399.9	6.20	-6.03	-1.43	27.1	13.8	
16,581.0	85.40	180.50	12,429.4	-4,016.3	399.4	10.00	-9.69	-2.50	28.7	13.1	
16,644.0	85.80	180.50	12,434.2	-4,079.1	398.9	0.63	0.63	0.00	33.3	12.0	
16,675.0	88.20	179.90	12,435.8	-4,110.1	398.7	7.98	7.74	-1.94	34.8	11.6	
16,707.0	89.10	179.10	12,436.6	-4,142.1	399.0	3.76	2.81	-2.50	35.4	11.7	
16,738.0	89.40	178.80	12,437.0	-4,173.1	399.6	1.37	0.97	-0.97	35.7	12.0	
16,801.0	89.80	177.70	12,437.4	-4,236.0	401.5	1.86	0.63	-1.75	35.9	13.4	

Final PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #604H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3347.0usft
Site:	Fox 30 Fed Com	MD Reference:	KB = 25 @ 3347.0usft
Well:	#604H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Build (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
16,833.0	90.80	178.10	12,437.3	-4,268.0	402.7	3.37	3.12	1.25	35.6	14.3	
16,928.0	92.30	179.40	12,434.7	-4,362.9	404.8	2.09	1.58	1.37	32.7	15.6	
17,022.0	92.10	181.10	12,431.1	-4,456.9	404.3	1.82	-0.21	1.81	28.7	14.4	
17,117.0	91.10	181.80	12,428.4	-4,551.8	401.9	1.28	-1.05	0.74	25.7	11.2	
17,212.0	91.20	181.30	12,426.5	-4,646.7	399.4	0.54	0.11	-0.53	23.4	7.8	
17,306.0	92.70	183.10	12,423.3	-4,740.6	395.8	2.49	1.60	1.91	19.8	3.4	
17,369.0	92.40	182.30	12,420.5	-4,803.5	392.8	1.36	-0.48	-1.27	16.8	0.0	
17,401.0	89.60	181.80	12,420.0	-4,835.4	391.7	8.89	-8.75	-1.56	16.1	-1.4	
17,432.0	87.60	181.80	12,420.7	-4,866.4	390.7	6.45	-6.45	0.00	16.8	-2.7	
17,464.0	86.50	181.70	12,422.4	-4,898.4	389.7	3.45	-3.44	-0.31	18.3	-3.9	
17,496.0	86.50	181.30	12,424.3	-4,930.3	388.9	1.25	0.00	-1.25	20.1	-5.0	
17,527.0	86.80	180.80	12,426.1	-4,961.2	388.3	1.88	0.97	-1.61	21.8	-5.9	
17,559.0	86.90	179.90	12,427.9	-4,993.2	388.1	2.83	0.31	-2.81	23.4	-6.3	
17,590.0	86.90	179.50	12,429.6	-5,024.1	388.3	1.29	0.00	-1.29	25.0	-6.4	
17,622.0	87.50	179.20	12,431.1	-5,056.1	388.6	2.10	1.87	-0.94	26.4	-6.3	
17,653.0	88.60	178.30	12,432.2	-5,087.1	389.3	4.58	3.55	-2.90	27.4	-5.9	
17,685.0	88.70	177.00	12,433.0	-5,119.0	390.6	4.07	0.31	-4.06	28.0	-4.8	
17,748.0	88.70	179.40	12,434.4	-5,182.0	392.6	3.81	0.00	3.81	29.2	-3.4	
17,779.0	89.00	180.90	12,435.0	-5,213.0	392.5	4.93	0.97	4.84	29.7	-3.7	
17,842.0	90.60	179.90	12,435.2	-5,276.0	392.1	2.99	2.54	-1.59	29.7	-4.7	
17,874.0	91.10	179.20	12,434.8	-5,308.0	392.3	2.69	1.56	-2.19	29.1	-4.7	
17,937.0	89.10	179.20	12,434.6	-5,371.0	393.2	3.17	-3.17	0.00	28.7	-4.3	
17,951.8	89.10	178.87	12,434.9	-5,385.7	393.5	2.26	0.00	-2.26	28.9	-4.2	
TGT 3 (fox30 #604)											
17,968.0	89.10	178.50	12,435.1	-5,401.9	393.8	2.26	0.00	-2.26	29.1	-4.0	
18,000.0	90.00	178.90	12,435.4	-5,433.9	394.6	3.08	2.81	1.25	29.2	-3.5	
18,031.0	90.30	177.60	12,435.3	-5,464.9	395.5	4.30	0.97	-4.19	29.0	-2.8	

Final PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #604H
Project:	Les County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3347.0usft
Site:	Fox 30 Fed Com	MD Reference:	KB = 25 @ 3347.0usft
Well:	#604H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey											
MD (usft)	Inc (°)	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (°/100usft)	Bulid (°/100usft)	Turn (°/100usft)	High to Plan (usft)	Right to Plan (usft)	
18,063.0	90.50	177.10	12,435.1	-5,498.9	397.0	1.68	0.62	-1.56	28.7	-1.6	
18,126.0	90.70	177.40	12,434.4	-5,559.8	400.0	0.57	0.32	0.48	27.8	0.9	
18,157.0	90.60	176.60	12,434.1	-5,590.8	401.6	2.60	-0.32	-2.58	27.3	2.3	
18,251.0	89.20	177.00	12,434.2	-5,684.6	406.9	1.55	-1.49	0.43	27.1	6.7	
18,314.0	88.90	177.00	12,435.3	-5,747.5	410.2	0.48	-0.48	0.00	27.9	9.5	
18,346.0	89.20	179.20	12,435.8	-5,779.5	411.2	6.94	0.94	6.87	28.3	10.3	
18,441.0	89.30	180.50	12,437.0	-5,874.5	411.5	1.37	0.11	1.37	29.2	9.8	
18,488.0	89.50	179.60	12,437.5	-5,921.5	411.4	1.96	0.43	-1.91	29.6	9.3	
18,536.0	90.90	179.40	12,437.4	-5,969.5	411.9	2.95	2.92	-0.42	29.2	9.4	
18,599.0	89.50	182.80	12,437.2	-6,032.5	410.7	5.84	-2.22	5.40	28.8	7.6	
18,630.0	89.40	182.30	12,437.5	-6,063.4	409.3	1.64	-0.32	-1.61	29.0	6.0	
18,677.0	89.10	181.20	12,438.1	-6,110.4	407.8	2.43	-0.64	-2.34	29.4	4.2	
18,725.0	89.20	180.20	12,438.8	-6,158.4	407.3	2.09	0.21	-2.08	30.0	3.2	
18,788.0	90.10	179.00	12,439.2	-6,221.4	407.7	2.38	1.43	-1.90	30.2	3.1	
18,820.0	90.10	177.80	12,439.1	-6,253.4	408.6	3.75	0.00	-3.75	30.0	3.7	
18,883.0	90.20	179.20	12,438.9	-6,316.3	410.2	2.23	0.16	2.22	29.6	4.9	
18,915.0	90.50	178.70	12,438.7	-6,348.3	410.8	1.82	0.94	-1.56	29.3	5.2	
19,009.0	89.50	179.00	12,438.7	-6,442.3	412.7	1.11	-1.06	0.32	29.0	6.3	
19,073.0	87.90	178.90	12,440.2	-6,506.3	413.9	2.50	-2.50	-0.16	30.3	6.9	
19,104.0	87.80	178.70	12,441.4	-6,537.3	414.5	0.72	-0.32	-0.65	31.3	7.3	
19,199.0	89.10	180.40	12,443.9	-6,632.2	415.3	2.25	1.37	1.79	33.6	7.3	
19,294.0	89.00	181.40	12,445.5	-6,727.2	413.8	1.06	-0.11	1.05	34.9	5.0	
19,357.0	90.00	180.80	12,446.1	-6,780.2	412.6	1.85	1.59	-0.95	35.3	3.3	
19,389.0	89.70	180.50	12,446.1	-6,822.2	412.2	1.33	-0.94	-0.94	35.3	2.6	
19,438.0	89.10	179.20	12,446.6	-6,869.2	412.3	3.05	-1.28	-2.77	35.6	2.4	
19,483.0	89.40	178.50	12,447.2	-6,916.2	413.3	1.62	0.64	-1.49	36.1	2.9	
19,530.0	90.90	179.70	12,447.1	-6,963.2	414.0	4.09	3.19	2.55	35.9	3.3	

Final PVA

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #604H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25 @ 3347.0usft
Site:	Fox 30 Fed Corn	MD Reference:	KB = 25 @ 3347.0usft
Well:	#604H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

MD (usft)	Inc (")	Azi (grid_north_azim)	TVD (usft)	N/S (usft)	E/W (usft)	DLeg (*/100usft)	Build (*/100usft)	Turn (*/100usft)	High to Plan (usft)	Right to Plan (usft)
19,578.0	91.30	179.20	12,446.2	-7,011.1	414.5	1.33	0.83	-1.04	34.8	3.3
19,673.0	92.20	177.60	12,443.3	-7,106.1	417.1	1.93	0.95	-1.68	31.6	5.2
19,703.0	92.11	177.15	12,442.2	-7,136.0	418.5	1.52	-0.30	-1.49	30.4	6.3
HL Crossing, MD:19703.0', TVD:12442.2', N/S:-7136.0', E/W:418.5', INC:92.11										
19,740.0	92.00	176.60	12,440.8	-7,172.9	420.5	1.52	-0.30	-1.49	29.0	8.0
Final MWD Survey (MD=19740.0')										
19,798.0	92.00	176.60	12,438.8	-7,230.8	424.0	0.00	0.00	0.00	26.8	11.0
Final Projection to Bit (MD=19798.0') - PBHL(fox30 #604)										

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N-S (usft)	+E-W (usft)	
12,410.0	12,266.1	123.6	307.5	HL Crossing, MD:12410.0', TVD:12266.1', N/S:123.6', E/W:307.5', INC:59.34
19,703.0	12,442.2	-7,136.0	418.5	HL Crossing, MD:19703.0', TVD:12442.2', N/S:-7136.0', E/W:418.5', INC:92.11
19,740.0	12,440.8	-7,172.9	420.5	Final MWD Survey (MD=19740.0')
19,798.0	12,438.8	-7,230.8	424.0	Final Projection to Bit (MD=19798.0')

Checked By: _____ Approved By: _____ Date: _____