



Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level



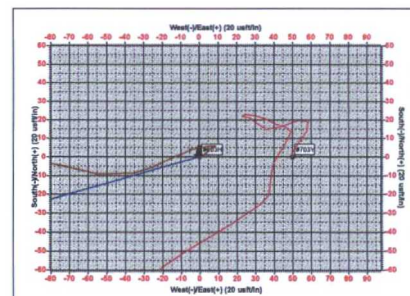
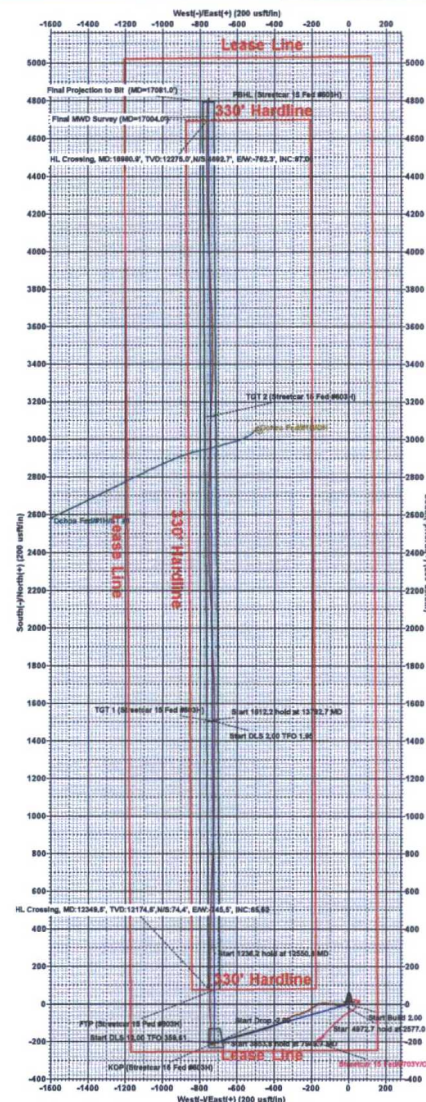
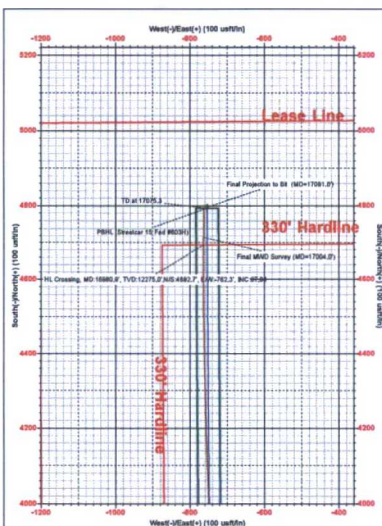
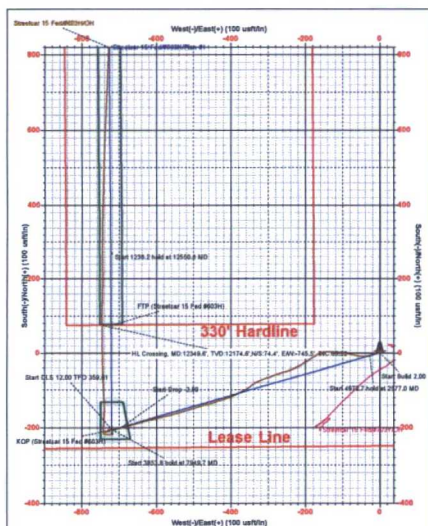
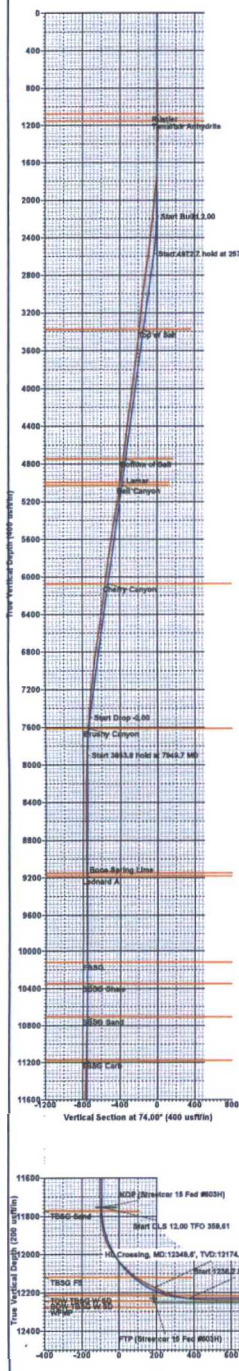
Azimuths to Grid North
 True North: -0.41°
 Magnetic North: 6.52°
 Magnetic Field
 Strength: 47872.0nT
 Dip Angle: 59.97°
 Date: 7/18/2017
 Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.52°
To convert a Magnetic Direction to a True Direction, Add 6.93° E
To convert a True Direction to a Grid Direction, Subtract 0.41°

WELL DETAILS: #003H				
3355.0				
KB = 25' @ 3380.0mft (HP 647)				
+N/S	+E/W	Northing	Easting	Slot
0.0	0.0	#003H.0	784.647.00	1071.33.33.003H

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	2177.0	0.00	0.00	2177.0	0.0	0.0	0.00	0.00	0.0	
3	257.0	8.00	254.00	2575.7	-7.7	-28.8	2.00	254.00	-3.4	
4	7549.7	8.00	254.00	7500.0	-198.4	-692.1	0.00	0.00	-884.9	
5	1084.7	0.00	0.00	1084.7	-206.1	-718.9	2.00	180.00	-6.0	
6	11803.5	0.00	0.00	11752.5	-206.1	-718.9	0.00	0.00	-82.1	
7	12550.8	89.67	359.61	12230.0	268.6	-722.1	12.00	359.61	377.4	
8	13787.0	89.67	359.61	12237.0	1504.8	-730.6	0.00	0.00	1600.0	TGT 1 (Streetcar 15 Fed #603H)
9	13762.7	89.78	398.61	12237.0	1510.5	-730.2	2.00	1.95	1605.8	
10	15405.0	89.78	359.61	12243.0	312.0	-743.6	0.00	0.00	3224.0	TGT 2 (Streetcar 15 Fed #603H)
11	17075.3	89.73	359.61	12259.0	4793.0	-753.0	0.00	-179.99	4851.8	PBHL (Streetcar 15 Fed #603H)

Name	TVD	+N-S	+E-W	Northing	Easting	Shape
KCP (Streetcar 15 Fed #603H)	11752.5	-204.1	-716.3	409501.87	781124.14	Polygon
FTP (Streetcar 15 Fed #603H)	12230.0		76.0	-40763.00	781124.14	Point
GT 1 (Streetcar 15 Fed #603H)	12237.0	1504.8	-730.6	411212.80	781124.14	Point
GT 2 (Streetcar 15 Fed #603H)	12243.0	3172.7	-741.6	412830.70	781101.37	Point
PBHL (Streetcar 15 Fed #603H)	12250.0	4122.8	-763.0	414501.00	781090.00	Rectangle (Sides: L0.0 W0.0)



Los County 100 (R02) 64 (R02)
 10/20/10 10/20/10
 10/20/10 10/20/10
 10/20/10 10/20/10
 10/20/10 10/20/10

EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Streetcar 15 Fed

#603H

OH

Design: OH

PVA Report

09 October, 2017

HOBBS OCD
DEC 08 2017
RECEIVED

PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #603H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3380.0usft (HP 647)
Site:	Streetcar 15 Fed	MD Reference:	KB = 25' @ 3380.0usft (HP 647)
Well:	#603H	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	Streetcar 15 Fed		
Site Position:		Northing:	409,714.00 usft
From:	Map	Easting:	782,680.00 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 7' 26.337 N
		Longitude:	103° 33' 13.460 W
		Grid Convergence:	0.41 °

Well	#603H		
Well Position	+N/-S	0.0 usft	Northing: 409,708.00 usft
	+E/-W	0.0 usft	Easting: 781,843.00 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	32° 7' 26.338 N
		Longitude:	103° 33' 23.193 W
		Ground Level:	3,355.0 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2015	7/18/2017	6.93
			Dip Angle (°)
			59.97
			Field Strength (nT)
			47,872.03590783

Design	OH		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)
	0.0	0.0	0.0
		Direction (°)	351.07

Survey Program	Date	10/9/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
191.0	17,081.0	Survey #1 (OH)	MWD	MWD - Standard

PVA Report

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Streetcar 15 Fed
 Well: #603H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #603H
 TVD Reference: KB = 25' @ 3380.0usft (HP 647)
 MD Reference: KB = 25' @ 3380.0usft (HP 647)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 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)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.0	0.0	
191.0	0.30	74.52	191.0	0.1	0.5	0.16	0.16	0.00	-0.5	0.0	
215.0	0.20	69.52	215.0	0.2	0.6	0.43	-0.42	-20.83	-0.6	0.0	
276.0	0.30	99.52	276.0	0.2	0.8	0.26	0.16	49.18	-0.8	0.3	
308.0	0.40	97.52	308.0	0.1	1.0	0.31	0.31	-6.25	-1.0	0.3	
339.0	0.30	70.52	339.0	0.2	1.2	0.61	-0.32	-87.10	-1.2	-0.3	
370.0	0.30	102.52	370.0	0.2	1.4	0.53	0.00	103.23	-1.3	0.5	
401.0	0.30	79.52	401.0	0.2	1.5	0.39	0.00	-74.19	-1.5	-0.1	
464.0	0.60	94.52	464.0	0.2	2.0	0.51	0.48	23.81	-2.0	0.3	
495.0	1.70	355.52	495.0	0.6	2.1	6.09	3.55	-319.35	-0.4	-2.2	
526.0	0.40	74.52	526.0	1.1	2.2	5.39	-4.19	254.84	-2.4	0.5	
622.0	0.50	55.52	622.0	1.4	2.9	0.19	0.10	-19.79	-3.2	-0.5	
653.0	0.60	58.52	653.0	1.6	3.1	0.34	0.32	9.68	-3.5	-0.3	
685.0	0.70	48.52	685.0	1.8	3.4	0.47	0.31	-31.25	-3.8	-0.9	
713.0	0.80	55.52	713.0	2.0	3.7	0.48	0.36	25.00	-4.2	-0.4	
743.0	0.70	53.52	743.0	2.3	4.0	0.34	-0.33	-6.67	-4.6	-0.6	
774.0	0.80	47.52	774.0	2.5	4.3	0.41	0.32	-19.35	-4.9	-1.1	
805.0	0.90	47.52	805.0	2.8	4.7	0.32	0.32	0.00	-5.4	-1.1	
836.0	0.80	42.52	836.0	3.2	5.0	0.40	-0.32	-16.13	-5.7	-1.6	
868.0	0.90	43.52	868.0	3.5	5.3	0.32	0.31	3.12	-6.2	-1.5	
899.0	0.90	49.52	899.0	3.8	5.7	0.30	0.00	19.35	-6.8	-0.8	
930.0	1.00	57.52	930.0	4.1	6.1	0.54	0.32	25.81	-7.4	0.2	
962.0	0.80	59.52	961.9	4.4	6.5	0.63	-0.62	6.25	-7.9	0.5	
993.0	0.80	60.52	992.9	4.6	6.9	0.05	0.00	3.23	-8.3	0.6	
1,024.0	0.70	63.52	1,023.9	4.8	7.3	0.35	-0.32	9.68	-8.6	1.1	
1,056.0	0.50	67.52	1,055.9	4.9	7.6	0.64	-0.62	12.50	-8.9	1.7	
1,082.0	0.60	70.52	1,081.9	5.0	7.8	0.40	0.38	11.54	-9.0	2.1	

PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #603H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3380.0usft (HP 647)
Site:	Streetcar 15 Fed	MD Reference:	KB = 25' @ 3380.0usft (HP 647)
Well:	#603H	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)	
1,120.0	0.30	61.52	1,119.9	5.2	8.1	0.81	-0.79	-23.68	-9.6	0.7	
1,150.0	0.20	91.52	1,149.9	5.2	8.2	0.54	-0.33	100.00	-8.1	5.4	
1,182.0	0.50	78.52	1,181.9	5.2	8.4	0.96	0.94	-40.62	-9.3	3.4	
1,213.0	0.60	81.52	1,212.9	5.3	8.7	0.34	0.32	9.68	-9.4	3.9	
1,369.0	0.60	281.00	1,368.9	5.5	8.7	0.76	0.00	-102.90	7.5	-7.1	
1,554.0	1.50	270.30	1,553.9	5.7	5.3	0.50	0.49	-5.78	5.3	-5.8	
1,742.0	4.00	254.40	1,741.7	4.0	-3.5	1.38	1.33	-8.46	-2.3	-4.8	
1,930.0	5.60	241.30	1,929.0	-2.2	-17.8	1.03	0.85	-6.97	-16.7	-6.7	
2,118.0	5.90	256.50	2,116.1	-8.8	-35.3	0.82	0.16	8.09	-36.4	0.4	
2,305.0	6.40	279.50	2,302.0	-9.4	-54.9	1.33	0.27	12.30	-50.1	17.1	
2,493.0	7.90	285.80	2,488.6	-4.1	-77.7	0.90	0.80	3.35	-58.9	15.8	
2,680.0	9.10	278.20	2,673.5	1.5	-104.7	0.88	0.64	-4.06	-65.3	-4.1	
2,868.0	9.00	272.50	2,859.2	4.3	-134.1	0.48	-0.05	-3.03	-69.3	-20.3	
3,055.0	6.40	244.80	3,044.5	0.5	-158.1	2.38	-1.39	-14.81	-49.8	-52.6	
3,243.0	5.10	234.50	3,231.6	-8.9	-174.4	0.88	-0.69	-5.48	-33.6	-53.8	
3,430.0	7.50	236.30	3,417.4	-20.5	-191.3	1.29	1.28	0.96	-31.0	-44.5	
3,616.0	7.20	241.10	3,601.9	-32.8	-211.6	0.37	-0.16	2.58	-33.1	-35.0	
3,804.0	7.00	244.60	3,788.5	-43.4	-232.3	0.25	-0.11	1.86	-32.5	-27.9	
3,991.0	7.10	255.10	3,974.1	-51.3	-253.8	0.69	0.05	5.61	-33.7	-20.0	
4,178.0	8.60	249.90	4,159.3	-59.1	-278.1	0.89	0.80	-2.78	-31.3	-22.1	
4,365.0	6.70	251.30	4,344.6	-67.4	-301.5	1.02	-1.02	0.75	-30.7	-19.8	
4,552.0	7.70	246.30	4,530.2	-75.9	-323.3	0.63	0.53	-2.67	-26.5	-19.8	
4,740.0	7.60	231.10	4,716.5	-88.8	-344.5	1.07	-0.05	-8.09	-20.9	-19.2	
4,928.0	7.60	241.60	4,902.9	-102.5	-365.2	0.74	0.00	5.59	-23.1	-7.2	
5,115.0	8.10	247.00	5,088.1	-113.5	-388.2	0.48	0.27	2.89	-23.3	-0.7	
5,303.0	9.50	250.10	5,273.9	-124.0	-414.9	0.79	0.74	1.65	-26.0	3.1	
5,490.0	9.60	255.00	5,458.3	-133.3	-444.5	0.44	0.05	2.62	-30.6	6.1	

PVA Report

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Streetcar 15 Fed
 Well: #603H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #603H
 TVD Reference: KB = 25' @ 3380.0usft (HP 647)
 MD Reference: KB = 25' @ 3380.0usft (HP 647)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 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)
5,678.0	8.20	253.70	5,644.1	-141.1	-472.5	0.75	-0.74	-0.69	-33.7	5.2
5,865.0	7.80	253.60	5,829.2	-148.4	-497.5	0.21	-0.21	-0.05	-33.7	5.3
6,052.0	7.00	253.50	6,014.7	-155.2	-520.6	0.43	-0.43	-0.05	-31.8	5.5
6,239.0	7.70	252.70	6,200.1	-162.2	-543.5	0.38	0.37	-0.43	-29.7	5.4
6,426.0	8.10	256.30	6,385.4	-169.1	-568.2	0.34	0.21	1.93	-29.0	7.0
6,614.0	9.20	258.40	6,571.2	-175.2	-595.8	0.61	0.59	1.12	-30.9	6.6
6,802.0	7.90	255.20	6,757.1	-181.5	-623.1	0.74	-0.69	-1.70	-33.0	3.4
6,990.0	7.10	254.40	6,943.5	-188.0	-646.7	0.43	-0.43	-0.43	-31.4	2.6
7,177.0	6.50	251.90	7,129.2	-194.4	-667.9	0.36	-0.32	-1.34	-27.6	1.7
7,364.0	4.70	259.50	7,315.3	-199.0	-685.5	1.04	-0.96	4.06	-19.3	4.2
7,552.0	5.00	255.50	7,502.6	-202.5	-701.0	0.24	0.16	-2.13	-9.2	1.7
7,740.0	3.80	251.40	7,690.1	-206.5	-714.9	0.66	-0.64	-2.18	-3.9	1.3
7,927.0	2.20	269.60	7,876.8	-208.5	-724.3	0.99	-0.86	9.73	-5.6	2.4
8,115.0	1.90	237.20	8,064.7	-210.2	-730.6	0.63	-0.16	-17.23	-12.1	-2.9
8,302.0	1.30	238.60	8,251.6	-213.0	-735.0	0.32	-0.32	0.75	-17.4	-2.5
8,489.0	0.60	5.80	8,438.6	-213.2	-736.7	0.93	-0.37	68.02	8.8	17.0
8,670.0	1.30	61.30	8,619.6	-211.2	-734.8	0.60	0.39	30.66	16.4	3.2
8,858.0	0.90	101.50	8,807.6	-210.5	-731.5	0.45	-0.21	21.38	11.5	-6.8
9,046.0	0.90	101.20	8,995.5	-211.1	-728.6	0.00	0.00	-0.16	8.6	-6.8
9,235.0	0.90	38.10	9,184.5	-210.2	-726.2	0.50	0.00	-33.39	7.7	3.3
9,422.0	0.60	314.90	9,371.5	-208.4	-726.0	0.55	-0.16	-44.49	-3.5	6.6
9,609.0	0.70	326.40	9,558.5	-206.7	-727.3	0.09	0.05	6.15	-4.2	7.4
9,797.0	0.70	22.40	9,746.5	-204.7	-727.5	0.35	0.00	29.79	2.0	8.5
9,984.0	1.70	99.80	9,933.4	-204.1	-724.3	0.90	0.53	41.39	5.8	1.1
10,171.0	2.10	142.50	10,120.3	-207.3	-719.5	0.77	0.21	22.83	-0.5	-1.2
10,359.0	1.10	172.00	10,308.3	-211.8	-717.2	0.67	-0.53	15.69	-5.9	0.9
10,546.0	0.80	199.80	10,495.3	-214.8	-717.4	0.29	-0.16	14.87	-7.7	4.3

PVA Report

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Streetcar 15 Fed
 Well: #603H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #603H
 TVD Reference: KB = 25' @ 3380.0usft (HP 647)
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 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
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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)	
10,734.0	0.60	152.50	10,683.2	-216.9	-717.4	0.31	-0.11	-25.16	-10.3	-3.7	
10,921.0	0.60	229.40	10,870.2	-218.4	-717.7	0.40	0.00	41.12	-7.1	10.1	
11,108.0	2.30	267.20	11,057.2	-219.3	-722.1	1.00	0.91	20.21	-3.9	13.0	
11,295.0	1.00	278.40	11,244.1	-219.2	-727.5	0.71	-0.70	5.99	-6.6	14.2	
11,483.0	2.00	274.70	11,432.0	-218.7	-732.4	0.53	0.53	-1.97	-12.5	13.6	
11,628.0	1.70	274.50	11,576.9	-218.3	-737.1	0.21	-0.21	-0.14	-17.2	13.6	
11,755.0	1.40	290.50	11,703.9	-217.6	-740.4	0.41	-0.24	12.60	-16.1	18.3	
11,848.0	4.70	357.10	11,796.8	-213.4	-741.7	4.66	3.55	71.61	8.2	23.2	
11,894.0	8.60	359.60	11,842.5	-208.1	-741.8	8.50	8.48	5.43	10.2	22.9	
11,941.0	14.50	4.50	11,888.5	-198.7	-741.3	12.71	12.55	10.43	13.5	21.4	
11,988.0	22.70	4.50	11,933.0	-183.8	-740.2	17.45	17.45	0.00	13.6	20.1	
12,035.0	32.40	0.50	11,974.6	-162.1	-739.3	21.00	20.64	-8.51	9.7	20.1	
12,082.0	38.50	357.90	12,012.9	-134.9	-739.8	13.37	12.98	-5.53	4.4	20.5	
12,129.0	42.40	357.40	12,048.6	-104.4	-741.0	8.33	8.30	-1.06	0.2	21.5	
12,176.0	46.30	357.40	12,082.2	-71.6	-742.5	8.30	8.30	0.00	-2.4	22.7	
12,223.0	53.80	357.90	12,112.4	-35.6	-744.0	15.98	15.96	1.06	-5.0	23.9	
12,269.0	59.60	358.20	12,137.6	2.8	-745.3	12.62	12.61	0.65	-8.3	24.9	
12,316.0	63.30	0.30	12,160.1	44.1	-745.8	8.80	7.87	4.47	-10.7	25.3	
12,349.6	65.52	0.95	12,174.6	74.4	-745.5	6.82	6.59	1.93	-11.5	24.8	
HL Crossing, MD:12349.6', TVD:12174.6', N/S:74.4', E/W:-745.5', INC:65.52											
12,363.0	66.40	1.20	12,180.1	86.6	-745.2	6.82	6.60	1.88	-11.5	24.5	
12,410.0	67.30	1.00	12,198.6	129.8	-744.4	1.95	1.91	-0.43	-9.3	23.3	
12,457.0	73.50	0.40	12,214.3	174.1	-743.9	13.25	13.19	-1.28	-5.4	22.4	
12,504.0	79.40	359.60	12,225.3	219.7	-743.9	12.66	12.55	-1.70	-1.8	22.1	
12,551.0	83.10	359.40	12,232.5	266.2	-744.3	7.88	7.87	-0.43	2.5	22.2	
12,598.0	84.90	0.00	12,237.4	312.9	-744.5	4.03	3.83	1.28	7.2	22.1	
12,648.0	89.50	1.90	12,239.8	362.8	-743.7	9.95	9.20	3.80	9.3	20.9	

PVA Report

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Streetcar 15 Fed
 Well: #603H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #603H
 TVD Reference: KB = 25' @ 3380.0usft (HP 647)
 MD Reference: KB = 25' @ 3380.0usft (HP 647)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 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)	
12,714.0	90.50	1.40	12,239.8	428.8	-741.8	1.69	1.52	-0.76	9.0	18.6	
12,808.0	90.20	1.60	12,239.3	522.8	-739.3	0.38	-0.32	0.21	7.9	15.5	
12,902.0	90.20	2.10	12,238.9	616.7	-736.3	0.53	0.00	0.53	7.0	11.8	
12,996.0	89.90	2.80	12,238.8	710.6	-732.3	0.81	-0.32	0.74	6.4	7.1	
13,090.0	89.90	1.80	12,239.0	804.6	-728.5	1.06	0.00	-1.06	6.0	2.7	
13,184.0	90.20	1.70	12,238.9	898.5	-725.6	0.34	0.32	-0.11	5.4	-0.8	
13,279.0	90.90	1.40	12,238.0	993.5	-723.1	0.80	0.74	-0.32	3.9	-4.0	
13,372.0	90.80	0.00	12,236.6	1,086.5	-721.9	1.51	-0.11	-1.51	2.0	-5.8	
13,466.0	90.60	0.00	12,235.5	1,180.4	-721.9	0.21	-0.21	0.00	0.3	-6.4	
13,560.0	90.00	0.30	12,235.0	1,274.4	-721.7	0.71	-0.64	0.32	-0.7	-7.3	
13,654.0	91.00	1.10	12,234.2	1,368.4	-720.5	1.36	1.06	0.85	-2.0	-9.1	
13,748.0	89.20	359.80	12,234.0	1,462.4	-719.8	2.36	-1.91	-1.38	-2.7	-10.5	
13,843.0	88.80	359.10	12,235.7	1,557.4	-720.7	0.85	-0.42	-0.74	-1.5	-10.3	
13,937.0	87.80	358.40	12,238.5	1,651.3	-722.8	1.30	-1.06	-0.74	0.9	-8.8	
14,031.0	88.70	357.70	12,241.3	1,745.2	-726.0	1.21	0.96	-0.74	3.4	-6.3	
14,124.0	89.50	357.70	12,242.8	1,838.2	-729.7	0.86	0.86	0.00	4.5	-3.2	
14,219.0	90.40	357.70	12,242.9	1,933.1	-733.5	0.95	0.95	0.00	4.3	0.0	
14,312.0	91.30	358.20	12,241.5	2,026.0	-736.8	1.11	0.97	0.54	2.6	2.7	
14,406.0	91.00	358.00	12,239.6	2,119.9	-740.0	0.38	-0.32	-0.21	0.3	5.1	
14,500.0	90.90	356.90	12,238.0	2,213.8	-744.1	1.17	-0.11	-1.17	-1.6	8.7	
14,594.0	90.90	357.40	12,236.6	2,307.7	-748.8	0.53	0.00	0.53	-3.4	12.7	
14,688.0	90.50	359.40	12,235.4	2,401.6	-751.4	2.17	-0.43	2.13	-4.9	14.7	
14,781.0	90.20	0.10	12,234.9	2,494.6	-751.8	0.82	-0.32	0.75	-5.8	14.5	
14,874.0	89.20	0.20	12,235.3	2,587.6	-751.6	1.08	-1.08	0.11	-5.7	13.6	
14,968.0	90.20	0.90	12,235.8	2,681.6	-750.7	1.30	1.06	0.74	-5.5	12.1	
15,062.0	88.90	1.00	12,236.6	2,775.6	-749.1	1.39	-1.38	0.11	-5.1	9.9	
15,156.0	88.80	1.10	12,238.5	2,869.6	-747.4	0.15	-0.11	0.11	-3.6	7.5	

PVA Report

Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Streetcar 15 Fed
 Well: #603H
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference: Well #603H
 TVD Reference: KB = 25' @ 3380.0usft (HP 647)
 MD Reference: KB = 25' @ 3380.0usft (HP 647)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 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)
15,250.0	87.30	0.70	12,241.7	2,963.5	-745.9	1.65	-1.60	-0.43	-0.7	5.4
15,344.0	89.70	1.60	12,244.1	3,057.5	-744.1	2.73	2.55	0.96	1.4	2.9
15,437.0	89.80	3.60	12,244.5	3,150.4	-739.8	2.15	0.11	2.15	1.4	-2.0
15,531.0	89.80	3.40	12,244.8	3,244.2	-734.1	0.21	0.00	-0.21	1.4	-8.4
15,625.0	87.80	0.60	12,246.8	3,338.1	-730.8	3.66	-2.13	-2.98	3.0	-12.3
15,719.0	86.80	0.30	12,251.2	3,432.0	-730.1	1.11	-1.06	-0.32	7.1	-13.7
15,812.0	89.90	359.10	12,253.9	3,524.9	-730.6	3.57	3.33	-1.29	9.4	-13.8
15,906.0	88.70	358.90	12,255.1	3,618.9	-732.2	1.29	-1.28	-0.21	10.2	-12.8
15,999.0	87.30	356.90	12,258.3	3,711.8	-735.6	2.62	-1.51	-2.15	13.0	-10.0
16,093.0	89.50	357.20	12,260.9	3,805.6	-740.4	2.36	2.34	0.32	15.3	-5.8
16,187.0	93.50	357.40	12,258.5	3,899.5	-744.9	4.26	4.26	0.21	12.4	-2.0
16,280.0	90.20	358.10	12,255.5	3,992.3	-748.5	3.63	-3.55	0.75	9.0	1.0
16,374.0	88.30	357.90	12,256.7	4,086.2	-751.8	2.03	-2.02	-0.21	9.9	3.6
16,467.0	88.90	358.20	12,259.0	4,179.2	-755.0	0.72	0.65	0.32	11.7	6.1
16,561.0	87.90	358.90	12,261.6	4,273.1	-757.3	1.30	-1.06	0.74	14.0	7.9
16,654.0	88.00	358.50	12,264.9	4,366.0	-759.4	0.44	0.11	-0.43	16.9	9.4
16,748.0	89.30	358.80	12,267.1	4,460.0	-761.7	1.42	1.38	0.32	18.7	10.9
16,841.0	88.20	359.30	12,269.2	4,552.9	-763.2	1.30	-1.18	0.54	20.3	11.8
16,935.0	87.40	1.00	12,272.8	4,646.9	-763.0	2.00	-0.85	1.81	23.5	11.0
16,980.9	87.00	0.53	12,275.0	4,692.7	-762.3	1.34	-0.87	-1.01	25.5	10.0
HL Crossing, MD:16980.9', TVD:12275.0', N/S:4692.7', E/W:-762.3', INC:87.00										
17,004.0	86.80	0.30	12,276.3	4,715.8	-762.2	1.34	-0.87	-1.01	26.6	9.7
Final MWD Survey (MD=17004.0')										
17,081.0	86.80	0.30	12,280.6	4,792.6	-761.8	0.00	0.00	0.00	30.6	8.8
Final Projection to Bit (MD=17081.0')										

PVA Report

Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Streetcar 15 Fed
Well: #603H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #603H
TVD Reference: KB = 25' @ 3380.0usft (HP 647)
MD Reference: KB = 25' @ 3380.0usft (HP 647)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 5000.14

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
12,349.6	12,174.6	74.4	-745.5	HL Crossing, MD:12349.6', TVD:12174.6', N/S:74.4', E/W:-745.5', INC:65.52
16,980.9	12,275.0	4,692.7	-762.3	HL Crossing, MD:16980.9', TVD:12275.0', N/S:4692.7', E/W:-762.3', INC:87.00
17,004.0	12,276.3	4,715.8	-762.2	Final MWD Survey (MD=17004.0')
17,081.0	12,280.6	4,792.6	-761.8	Final Projection to Bit (MD=17081.0')

Checked By: _____ Approved By: _____ Date: _____