



HOBBS OCD
MAR 09 2018
RECEIVED

Lea County, NM (NAD 83 NME)

Condor 32 State #601H

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: #601H

KB = 25' @ 3344.0usft
Northing 398412.00 Easting 804001.00
Latitude 32° 5' 32.908 N Longitude 103° 29' 6.577 W



Azimuths to Grid North
True North: -0.45°
Magnetic North: 6.42°
Magnetic Field
Strength: 47835.4nT
Dip Angle: 59.95°
Date: 10/17/2017
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 6.42°
To convert a Magnetic Direction to a True Direction, Add 6.87° East
To convert a True Direction to a Grid Direction, Subtract 0.45°

SECTION DETAILS

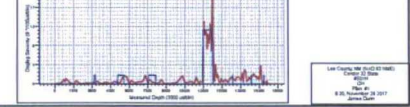
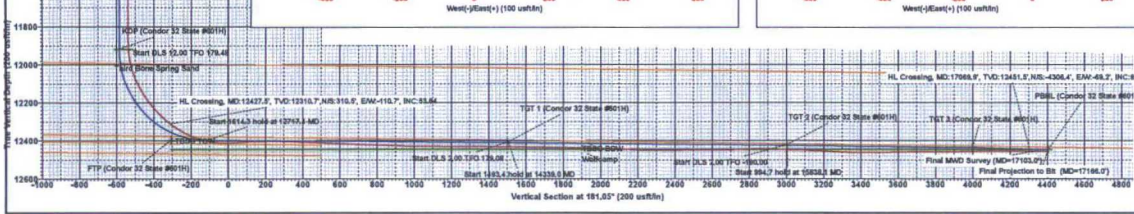
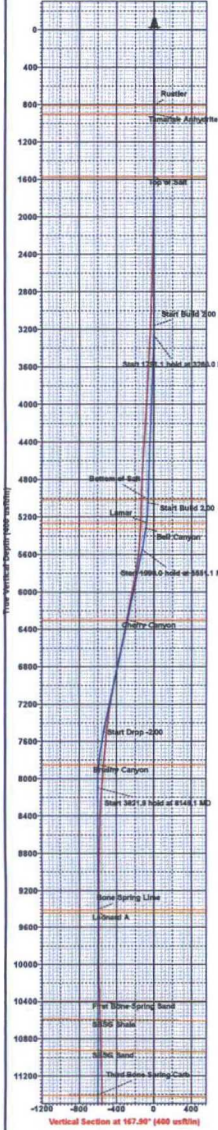
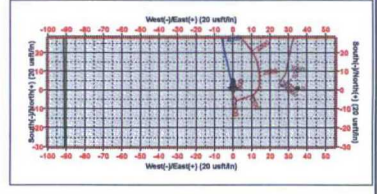
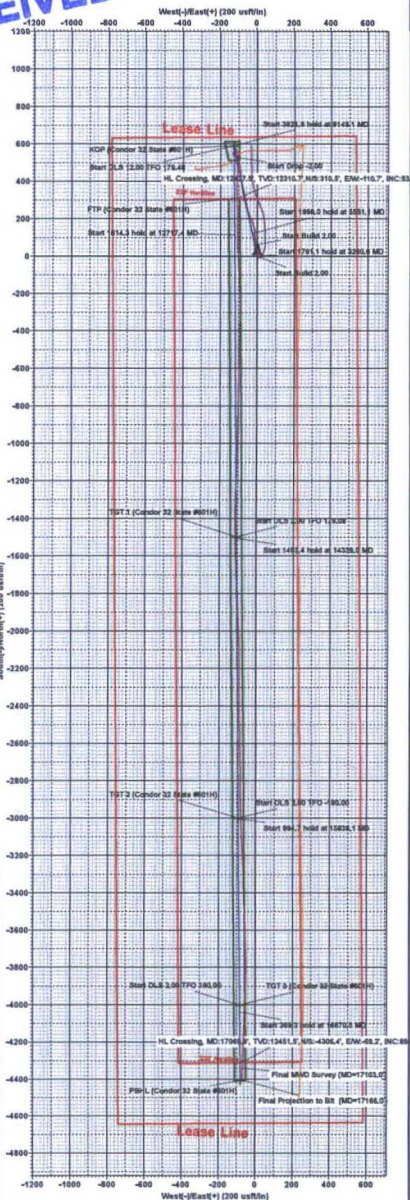
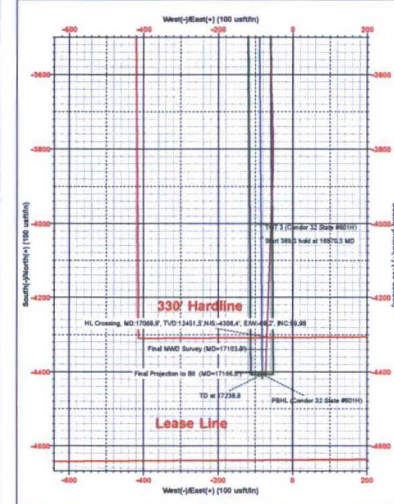
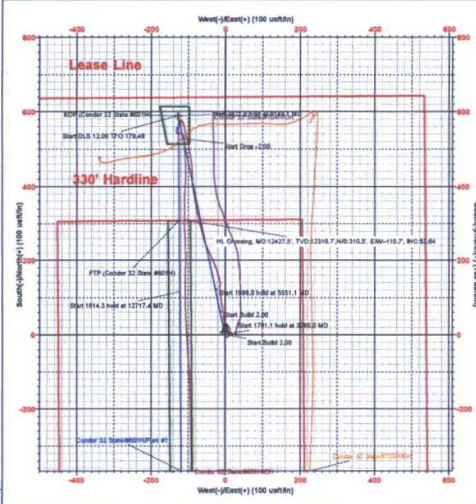
Sec	MD	Inc	Azi	TVD	+N/S	+E/W	Dleg	Tface	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	3160.0	0.00	0.00	3160.0	0.0	0.0	0.00	0.00	0.0	
3	3260.0	2.00	347.90	3260.0	1.7	-0.4	2.00	347.90	-1.7	
4	5051.1	2.00	347.90	5050.0	62.8	-13.5	0.00	0.00	-62.6	
5	5551.1	12.00	347.90	5545.6	122.3	-26.2	2.00	0.00	-121.8	
6	7549.1	12.00	347.90	7500.0	528.5	-113.3	0.00	0.00	-526.3	
7	8149.1	0.00	0.00	8095.6	589.7	-126.4	2.00	180.00	-587.3	
8	11971.0	0.00	0.00	11917.5	589.7	-126.4	0.00	0.00	-587.3	
9	12717.4	89.57	179.48	12395.0	115.8	-122.1	12.00	179.48	-113.6	
10	14331.7	89.57	179.48	12407.0	-1498.3	-107.4	0.00	0.00	1500.0	TGT 1 (Condor 32 State #601H)
11	14339.0	89.43	179.48	12407.1	-1505.6	-107.3	2.00	179.08	1507.3	
12	15832.3	89.43	179.48	12422.0	-2998.8	-93.8	0.00	0.00	3000.0	TGT 2 (Condor 32 State #601H)
13	15838.1	89.31	179.48	12422.1	-3004.5	-93.7	2.00	-180.00	3005.7	
14	16832.7	89.31	179.48	12434.0	-3999.1	-84.7	0.00	0.00	4000.0	TGT 3 (Condor 32 State #601H)
15	16870.5	88.56	179.48	12434.7	-4036.9	-84.4	2.00	180.00	4037.7	
16	17239.8	88.56	179.48	12444.0	-4406.0	-81.0	0.00	0.00	4406.7	PBHL (Condor 32 State #601H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/S	+E/W	Northing	Easting
KOP (Condor 32 State #601H)	11917.5	589.7	-126.4	39901.73	803874.57
FTP (Condor 32 State #601H)	12395.0	310.0	-124.0	398722.00	803877.00
TGT 1 (Condor 32 State #601H)	12407.0	-1498.3	-107.4	398913.70	803893.61
TGT 2 (Condor 32 State #601H)	12422.0	-2998.8	-93.8	398413.30	803907.23
TGT 3 (Condor 32 State #601H)	12434.0	-3999.1	-84.7	398412.90	803916.31
PBHL (Condor 32 State #601H)	12444.0	-4406.0	-81.0	398406.00	803920.00



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EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Condor 32 State

#601H

OH

Design: OH

PVA Report

28 November, 2017

HOBBS OCD
MAR 09 2018
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PVA Report

Company: EOG Resources - Midland Project: Lea County, NM (NAD 83 NME) Site: Condor 32 State Well: #601H Wellbore: OH Design: OH		Local Co-ordinate Reference: Well #601H TVD Reference: KB = 25' @ 3344.0usft MD Reference: KB = 25' @ 3344.0usft North Reference: Grid Survey Calculation Method: Minimum Curvature Database: EDM 5000.14													
Project Lea County, NM (NAD 83 NME)															
Map System: US State Plane 1983 Geo Datum: North American Datum 1983 Map Zone: New Mexico Eastern Zone		System Datum: Mean Sea Level													
Site Condor 32 State															
Site Position: From: Map Position Uncertainty: 0.0 usft		Northing: 398,890.00 usft Easting: 803,604.00 usft Slot Radius: 13-3/16 "													
		Latitude: 32° 5' 37.669 N Longitude: 103° 29' 11.148 W Grid Convergence: 0.45 °													
Well #601H															
Well Position +N/-S 0.0 usft Position Uncertainty +E/-W 0.0 usft 0.0 usft		Northing: 398,412.00 usft Easting: 804,001.00 usft Wellhead Elevation: usft													
		Latitude: 32° 5' 32.908 N Longitude: 103° 29' 6.577 W Ground Level: 3,319.0 usft													
Wellbore OH															
<table border="1"> <thead> <tr> <th>Magnetics</th> <th>Model Name</th> <th>Sample Date</th> <th>Declination (°)</th> <th>Dip Angle (°)</th> <th>Field Strength (nT)</th> </tr> </thead> <tbody> <tr> <td></td> <td>IGRF2015</td> <td>10/17/2017</td> <td>6.87</td> <td>59.95</td> <td>47,835.42438346</td> </tr> </tbody> </table>				Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)		IGRF2015	10/17/2017	6.87	59.95	47,835.42438346
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)										
	IGRF2015	10/17/2017	6.87	59.95	47,835.42438346										
Design OH															
Audit Notes: Version: 1.0 Phase: ACTUAL Tie On Depth:															
<table border="1"> <thead> <tr> <th>Vertical Section:</th> <th>Depth From (TVD) (usft)</th> <th>+N/-S (usft)</th> <th>+E/-W (usft)</th> <th>Direction (°)</th> </tr> </thead> <tbody> <tr> <td></td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>181.05</td> </tr> </tbody> </table>				Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)		0.0	0.0	0.0	181.05		
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)											
	0.0	0.0	0.0	181.05											

PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #601H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3344.0usft
Site:	Condor 32 State	MD Reference:	KB = 25' @ 3344.0usft
Well:	#601H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	EDM 5000.14

Survey Program		Date 11/28/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
197.0	862.0	Olebrook MWD (OH)	MWD	MWD - Standard
862.0	17,166.0	Intrepid MWD (OH)	MWD	MWD - Standard

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	0.0
197.0	0.44	201.87	197.0	-0.7	-0.3	0.22	0.22	0.00	-0.8	0.0	0.0
377.0	0.35	181.84	377.0	-1.9	-0.6	0.09	-0.05	-11.13	-1.9	-0.5	-0.5
503.0	0.44	109.94	503.0	-2.4	-0.1	0.37	0.07	-57.06	-0.7	-2.3	-2.3
597.0	0.35	220.95	597.0	-2.8	0.0	0.69	-0.10	118.10	-2.1	1.9	1.9
691.0	0.97	137.80	691.0	-3.6	0.4	1.05	0.66	-88.46	-2.9	-2.1	-2.1
785.0	0.62	116.97	785.0	-4.4	1.4	0.48	-0.37	-22.16	-3.2	-3.3	-3.3
862.0	0.70	208.82	862.0	-5.0	1.5	1.23	0.10	119.29	-3.7	3.7	3.7
976.0	0.50	83.20	976.0	-5.6	1.7	0.94	-0.18	-110.19	-1.0	-5.7	-5.7
1,163.0	1.10	66.30	1,163.0	-4.7	4.1	0.34	0.32	-9.04	-1.9	-6.0	-6.0
1,349.0	1.30	72.30	1,348.9	-3.4	7.8	0.13	0.11	3.23	-6.4	-5.6	-5.6
1,535.0	1.30	63.80	1,534.9	-1.8	11.7	0.10	0.00	-4.57	-9.7	-6.8	-6.8
1,722.0	1.80	9.80	1,721.8	2.0	14.1	0.79	0.27	-28.88	-4.4	-13.5	-13.5
1,908.0	1.50	354.80	1,907.7	7.3	14.4	0.28	-0.16	-8.06	-6.0	-15.0	-15.0
2,096.0	1.50	348.70	2,095.7	12.2	13.7	0.08	0.00	-3.24	-9.3	-15.8	-15.8
2,282.0	1.20	342.40	2,281.6	16.4	12.6	0.18	-0.16	-3.39	-11.9	-17.0	-17.0
2,469.0	1.50	329.10	2,468.6	20.4	10.7	0.23	0.16	-7.11	-12.0	-19.7	-19.7
2,656.0	2.00	320.90	2,655.5	25.0	7.4	0.30	0.27	-4.39	-14.7	-21.5	-21.5
2,843.0	2.10	312.20	2,842.4	29.9	2.8	0.17	0.05	-4.65	-18.0	-24.0	-24.0
3,030.0	2.30	330.40	3,029.2	35.4	-1.6	0.39	0.11	9.73	-31.6	-16.1	-16.1
3,217.0	2.50	340.80	3,216.1	42.5	-4.8	0.26	0.11	5.56	-41.2	-9.4	-9.4

PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #601H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3344.0usft
Site:	Condor 32 State	MD Reference:	KB = 25' @ 3344.0usft
Well:	#601H	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)	
3,405.0	2.90	6.50	3,403.9	51.1	-5.6	0.67	0.21	13.67	-43.7	9.2	
3,592.0	2.80	357.70	3,590.6	60.4	-5.2	0.24	-0.05	-4.71	-47.4	0.5	
3,778.0	2.80	350.60	3,776.4	69.4	-6.1	0.19	0.00	-3.82	-49.7	-6.2	
3,965.0	3.00	339.40	3,963.2	78.5	-8.6	0.32	0.11	-5.99	-50.5	-15.7	
4,153.0	3.30	354.40	4,150.9	88.5	-10.9	0.46	0.16	7.98	-56.5	-1.5	
4,339.0	3.40	349.40	4,336.6	99.3	-12.4	0.17	0.05	-2.69	-60.5	-7.1	
4,526.0	3.70	349.10	4,523.2	110.6	-14.6	0.16	0.16	-0.16	-65.5	-7.6	
4,714.0	3.20	1.50	4,710.9	121.8	-15.6	0.48	-0.27	6.60	-70.4	6.4	
4,900.0	2.30	10.40	4,896.6	130.7	-14.8	0.53	-0.48	4.78	-71.4	15.5	
5,087.0	1.80	2.50	5,083.5	137.3	-14.0	0.31	-0.27	-4.22	-73.0	3.4	
5,240.0	1.50	348.10	5,236.5	141.7	-14.3	0.33	-0.20	-9.41	-64.4	-15.6	
5,427.0	4.00	347.00	5,423.2	150.4	-16.2	1.34	1.34	-0.59	-47.7	-16.5	
5,614.0	7.70	343.00	5,609.2	168.8	-21.4	1.99	1.98	-2.14	-28.9	-17.0	
5,801.0	10.40	336.00	5,793.9	196.2	-31.9	1.56	1.44	-3.74	-17.8	-13.8	
5,987.0	10.40	335.60	5,976.8	226.8	-45.7	0.04	0.00	-0.22	-13.3	-5.8	
6,174.0	11.20	343.30	6,160.5	259.6	-57.9	0.88	0.43	4.12	-10.0	1.4	
6,361.0	10.80	345.70	6,344.1	293.9	-67.4	0.33	-0.21	1.28	-6.7	4.0	
6,548.0	11.40	347.80	6,527.6	329.0	-75.6	0.39	0.32	1.12	-3.6	5.0	
6,736.0	12.20	350.30	6,711.6	366.7	-82.9	0.50	0.43	1.33	-2.8	4.3	
6,922.0	11.80	353.90	6,893.6	405.0	-88.2	0.46	-0.22	1.94	-2.7	1.7	
7,107.0	10.80	358.70	7,075.0	441.1	-90.7	0.74	-0.54	2.59	-0.9	-3.7	
7,294.0	7.30	352.40	7,259.6	470.4	-92.6	1.94	-1.87	-3.37	9.1	-8.8	
7,480.0	7.00	349.20	7,444.2	493.3	-96.3	0.27	-0.16	-1.72	25.3	-9.8	
7,667.0	5.20	344.50	7,630.1	512.7	-100.7	1.00	-0.96	-2.51	42.6	-6.5	
7,854.0	4.70	349.70	7,816.4	528.4	-104.3	0.36	-0.27	2.78	50.5	-10.3	
8,041.0	4.00	349.00	8,002.9	542.3	-107.0	0.38	-0.37	-0.37	48.7	-10.0	
8,228.0	3.80	345.20	8,189.4	554.7	-109.8	0.17	-0.11	-2.03	38.1	-7.2	

PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #601H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3344.0usft
Site:	Condor 32 State	MD Reference:	KB = 25' @ 3344.0usft
Well:	#601H	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)	
8,414.0	3.10	349.30	8,375.1	565.6	-112.3	0.40	-0.38	2.20	26.3	-9.4	
8,600.0	1.50	325.10	8,561.0	572.5	-114.6	0.99	-0.86	-13.01	20.9	0.2	
8,788.0	1.40	313.00	8,748.9	576.1	-117.7	0.17	-0.05	-6.44	15.7	4.0	
8,976.0	1.30	293.20	8,936.8	578.5	-121.3	0.25	-0.05	-10.53	9.1	8.3	
9,164.0	1.00	291.90	9,124.8	580.0	-124.8	0.16	-0.16	-0.69	5.1	8.5	
9,357.0	0.90	286.50	9,317.8	581.0	-127.8	0.07	-0.05	-2.80	1.1	8.7	
9,546.0	0.30	308.80	9,506.8	581.8	-129.7	0.33	-0.32	11.80	2.5	8.2	
9,733.0	0.40	28.80	9,693.8	582.6	-129.7	0.24	0.05	42.78	7.8	-0.5	
9,920.0	1.10	101.50	9,880.8	582.9	-127.6	0.56	0.37	38.88	-0.2	-7.0	
10,108.0	3.30	131.00	10,068.6	578.9	-121.8	1.28	1.17	15.69	-10.6	-5.1	
10,295.0	1.60	216.70	10,255.5	573.3	-119.3	1.90	-0.91	45.83	-8.9	15.5	
10,481.0	1.90	209.20	10,441.4	568.5	-122.3	0.20	0.16	-4.03	-16.5	13.9	
10,668.0	2.50	220.00	10,628.2	562.7	-126.5	0.39	0.32	5.78	-20.7	17.3	
10,855.0	1.50	218.10	10,815.1	557.7	-130.6	0.54	-0.53	-1.02	-27.8	16.5	
11,043.0	1.90	180.90	11,003.1	552.6	-132.2	0.61	0.21	-19.79	-37.2	-5.2	
11,228.0	2.20	181.30	11,187.9	546.0	-132.3	0.16	0.16	0.22	-43.9	-4.9	
11,416.0	0.90	60.60	11,375.9	543.1	-131.1	1.47	-0.69	-64.20	27.0	-38.3	
11,603.0	1.20	89.90	11,562.9	543.8	-127.9	0.32	0.16	15.67	1.5	-45.9	
11,790.0	2.30	98.70	11,749.8	543.3	-122.2	0.60	0.59	4.71	-11.2	-45.3	
11,919.0	2.70	111.20	11,878.7	541.8	-116.8	0.52	0.31	9.69	-26.3	-41.2	
11,966.0	5.50	152.40	11,925.5	539.4	-114.7	8.29	5.96	87.66	-50.0	-13.0	
12,013.0	11.80	166.00	11,972.0	532.7	-112.5	14.00	13.40	28.94	-55.3	0.6	
12,060.0	16.50	176.90	12,017.5	521.4	-111.0	11.45	10.00	23.19	-57.0	12.3	
12,106.0	21.50	178.10	12,061.0	506.4	-110.4	10.90	10.87	2.61	-58.4	14.0	
12,152.0	26.90	176.10	12,103.0	487.6	-109.4	11.87	11.74	-4.35	-59.7	13.0	
12,199.0	32.30	176.60	12,143.8	464.4	-107.9	11.50	11.49	1.06	-59.6	14.9	
12,246.0	36.60	181.10	12,182.6	437.9	-107.4	10.63	9.15	9.57	-57.3	18.9	

PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #601H
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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)	
12,293.0	40.00	183.60	12,219.5	408.8	-108.6	7.95	7.23	5.32	-53.4	18.9	
12,340.0	45.20	182.40	12,254.0	377.0	-110.3	11.20	11.06	-2.55	-48.8	15.8	
12,388.0	50.20	180.10	12,286.3	341.6	-111.0	11.00	10.42	-4.79	-43.1	13.5	
12,427.5	53.64	178.74	12,310.7	310.5	-110.7	9.13	8.72	-3.43	-37.2	13.1	
HL Crossing, MD:12427.5', TVD:12310.7', N/S:310.5', E/W:-110.7', INC:53.64											
12,435.0	54.30	178.50	12,315.1	304.4	-110.6	9.13	8.74	-3.25	-36.0	13.1	
12,482.0	58.90	177.20	12,341.0	265.2	-109.1	10.06	9.79	-2.77	-27.4	14.2	
12,529.0	65.10	178.70	12,363.0	223.8	-107.6	13.49	13.19	3.19	-18.2	15.5	
12,575.0	70.80	181.00	12,380.3	181.1	-107.5	13.23	12.39	5.00	-9.4	15.3	
12,622.0	74.30	181.00	12,394.4	136.3	-108.3	7.45	7.45	0.00	0.1	14.0	
12,669.0	79.40	179.10	12,405.1	90.6	-108.3	11.54	10.85	-4.04	9.8	13.6	
12,716.0	88.60	176.70	12,410.0	43.9	-106.6	20.22	19.57	-5.11	14.5	14.8	
12,763.0	93.20	176.20	12,409.2	-3.0	-103.7	9.84	9.79	-1.06	13.4	17.3	
12,814.0	93.60	176.50	12,406.2	-53.8	-100.5	0.98	0.78	0.59	10.0	20.1	
12,864.0	93.30	176.40	12,403.2	-103.6	-97.4	0.63	-0.60	-0.20	6.7	22.7	
12,957.0	90.10	178.90	12,400.5	-196.5	-93.6	4.37	-3.44	2.69	3.2	25.7	
13,051.0	88.90	179.60	12,401.3	-290.4	-92.3	1.48	-1.28	0.74	3.3	26.1	
13,145.0	87.60	181.20	12,404.1	-384.4	-93.0	2.19	-1.38	1.70	5.5	24.5	
13,238.0	87.10	181.30	12,408.4	-477.3	-95.0	0.55	-0.54	0.11	9.1	21.7	
13,332.0	87.50	181.20	12,412.9	-571.1	-97.1	0.44	0.43	-0.11	12.8	18.8	
13,426.0	88.60	181.50	12,416.1	-665.1	-99.3	1.21	1.17	0.32	15.3	15.7	
13,519.0	88.40	181.00	12,418.5	-758.0	-101.3	0.58	-0.22	-0.54	17.0	12.8	
13,613.0	88.00	180.70	12,421.5	-852.0	-102.7	0.53	-0.43	-0.32	19.3	10.6	
13,707.0	88.70	181.30	12,424.2	-945.9	-104.3	0.98	0.74	0.64	21.3	8.1	
13,800.0	89.50	181.70	12,425.6	-1,038.9	-106.8	0.96	0.86	0.43	22.1	4.8	
13,892.0	89.00	181.70	12,426.8	-1,130.8	-109.5	0.54	-0.54	0.00	22.6	1.2	
13,986.0	89.40	181.50	12,428.1	-1,224.8	-112.1	0.48	0.43	-0.21	23.2	-2.3	

PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #601H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3344.0usft
Site:	Condor 32 State	MD Reference:	KB = 25' @ 3344.0usft
Well:	#601H	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)	
14,079.0	90.30	180.90	12,428.4	-1,317.7	-114.1	1.16	0.97	-0.65	22.7	-5.1	
14,173.0	89.30	180.20	12,428.7	-1,411.7	-115.0	1.30	-1.06	-0.74	22.4	-6.8	
14,266.0	89.90	178.90	12,429.4	-1,504.7	-114.3	1.54	0.65	-1.40	22.3	-6.9	
14,360.0	89.10	178.10	12,430.2	-1,598.7	-111.8	1.20	-0.85	-0.85	22.2	-5.3	
14,453.0	89.00	177.10	12,431.7	-1,691.6	-107.9	1.08	-0.11	-1.08	22.8	-2.3	
14,546.0	89.70	177.20	12,432.8	-1,784.5	-103.3	0.76	0.75	0.11	22.9	1.5	
14,640.0	88.70	178.10	12,434.1	-1,878.4	-99.4	1.43	-1.06	0.96	23.3	4.5	
14,734.0	87.30	177.80	12,437.4	-1,972.3	-96.1	1.52	-1.49	-0.32	25.6	7.0	
14,827.0	88.00	179.10	12,441.2	-2,065.1	-93.6	1.59	0.75	1.40	28.5	8.7	
14,920.0	88.30	180.30	12,444.2	-2,158.1	-93.1	1.33	0.32	1.29	30.6	8.3	
15,014.0	88.80	179.70	12,446.6	-2,252.1	-93.1	0.83	0.53	-0.64	32.0	7.5	
15,106.0	91.00	179.90	12,446.7	-2,344.1	-92.7	2.40	2.39	0.22	31.3	7.0	
15,199.0	91.20	179.50	12,444.9	-2,437.0	-92.3	0.48	0.22	-0.43	28.6	6.6	
15,292.0	89.10	177.40	12,444.7	-2,530.0	-89.7	3.19	-2.26	-2.26	27.4	8.3	
15,386.0	90.90	179.40	12,444.7	-2,623.9	-87.1	2.86	1.91	2.13	26.4	10.1	
15,480.0	91.40	179.60	12,442.8	-2,717.9	-86.3	0.57	0.53	0.21	23.6	10.0	
15,573.0	90.70	179.20	12,441.1	-2,810.9	-85.3	0.87	-0.75	-0.43	21.0	10.2	
15,668.0	89.30	178.80	12,441.1	-2,905.9	-83.7	1.53	-1.47	-0.42	20.0	11.0	
15,761.0	88.60	178.10	12,442.8	-2,998.8	-81.2	1.06	-0.75	-0.75	20.8	12.6	
15,855.0	87.70	177.20	12,445.9	-3,092.7	-77.3	1.35	-0.96	-0.96	22.7	15.6	
15,948.0	86.00	176.50	12,451.0	-3,185.4	-72.2	1.98	-1.83	-0.75	26.7	19.9	
16,042.0	87.60	178.00	12,456.2	-3,279.2	-67.7	2.33	1.70	1.60	30.8	23.6	
16,134.0	89.10	177.90	12,458.9	-3,371.1	-64.4	1.63	1.63	-0.11	32.4	26.0	
16,228.0	90.80	178.40	12,458.9	-3,465.0	-61.4	1.89	1.81	0.53	31.3	28.2	
16,321.0	91.70	178.90	12,456.9	-3,558.0	-59.2	1.11	0.97	0.54	28.2	29.5	
16,414.0	90.60	177.70	12,455.0	-3,650.9	-56.4	1.75	-1.18	-1.29	25.2	31.4	
16,507.0	89.80	177.90	12,454.9	-3,743.8	-52.9	1.10	-1.08	0.22	23.9	34.2	

PVA Report

Company:	EOG Resources - Midland	Local Co-ordinate Reference:	Well #601H
Project:	Lea County, NM (NAD 83 NME)	TVD Reference:	KB = 25' @ 3344.0usft
Site:	Condor 32 State	MD Reference:	KB = 25' @ 3344.0usft
Well:	#601H	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)	
16,600.0	90.30	181.60	12,455.0	-3,836.8	-52.4	4.05	0.75	3.98	22.9	33.7	
16,693.0	90.70	182.30	12,454.2	-3,929.8	-55.6	0.87	0.43	0.75	21.0	29.7	
16,786.0	90.60	182.40	12,453.1	-4,022.7	-59.4	0.15	-0.11	0.11	18.7	25.0	
16,880.0	90.60	182.00	12,452.1	-4,116.6	-63.0	0.43	0.00	-0.43	15.4	20.6	
16,973.0	90.10	181.90	12,451.5	-4,209.5	-66.2	0.55	-0.54	-0.11	12.5	16.6	
17,067.0	90.00	181.70	12,451.5	-4,303.5	-69.1	0.24	-0.11	-0.21	10.0	12.8	
17,069.9	89.98	181.68	12,451.5	-4,306.4	-69.2	0.79	-0.56	-0.56	9.2	11.4	
HL Crossing, MD:17069.9', TVD:12451.5',N/S:-4306.4', E/W:-69.2', INC:89.98											
17,103.0	89.80	181.50	12,451.5	-4,339.5	-70.2	0.79	-0.56	-0.56	9.2	11.4	
Final MWD Survey (MD=17103.0')											
17,166.0	89.80	181.50	12,451.7	-4,402.5	-71.8	0.00	0.00	0.00	7.8	9.2	
Final Projection to Bit (MD=17166.0')											

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
12,427.5	12,310.7	310.5	-110.7	HL Crossing, MD:12427.5', TVD:12310.7',N/S:310.5', E/W:-110.7', INC:53.64	
17,069.9	12,451.5	-4,306.4	-69.2	HL Crossing, MD:17069.9', TVD:12451.5',N/S:-4306.4', E/W:-69.2', INC:89.98	
17,103.0	12,451.5	-4,339.5	-70.2	Final MWD Survey (MD=17103.0')	
17,166.0	12,451.7	-4,402.5	-71.8	Final Projection to Bit (MD=17166.0')	

Checked By: _____ Approved By: _____ Date: _____