



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Condor 32 State

#710H

74843

OH

Plan: Plan #1

Standard Planning Report

30 April, 2018



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #710H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3345.0usft (H&P 424)
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3345.0usft (H&P 424)
Site:	Condor 32 State	North Reference:	Grid
Well:	#710H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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	Condor 32 State					
Site Position:		Northing:	398,890.00 usft	Latitude:	32° 5' 37.669 N	
From:	Map	Easting:	803,604.00 usft	Longitude:	103° 29' 11.148 W	
Position Uncertainty:		0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.45 °

Well	#710H					
Well Position	+N/-S	-696.0 usft	Northing:	398,194.00 usft	Latitude:	32° 5' 30.921 N
	+E/-W	-1,790.0 usft	Easting:	801,814.00 usft	Longitude:	103° 29' 32.018 W
Position Uncertainty	0.0 usft		Wellhead Elevation:		Ground Level:	3,320.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	4/25/2018	6.81	59.94	47,780.87851101

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	173.47

Plan Survey Tool Program	Date	4/30/2018		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	17,463.1 Plan #1 (OH)	MWD	
			OWSG MWD - Standard	



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #710H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3345.0usft (H&P 424)
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3345.0usft (H&P 424)
Site:	Condor 32 State	North Reference:	Grid
Well:	#710H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,929.6	8.59	28.79	1,928.0	28.2	15.5	2.00	2.00	0.00	28.79	
7,581.1	8.59	28.79	7,516.0	768.1	422.1	0.00	0.00	0.00	0.00	
8,010.6	0.00	0.00	7,944.0	796.3	437.6	2.00	-2.00	0.00	180.00	KOP (Condor 32 State)
12,193.8	0.00	0.00	12,127.2	796.3	437.6	0.00	0.00	0.00	0.00	
12,936.3	89.10	179.50	12,604.6	326.3	441.7	12.00	12.00	24.18	179.50	
13,533.6	89.10	179.50	12,614.0	-270.9	446.8	0.00	0.00	0.00	0.00	TGT #1(Condor 32 State)
13,542.1	89.27	179.50	12,614.1	-279.3	446.9	2.00	2.00	0.00	0.00	
14,315.0	89.27	179.50	12,624.0	-1,052.2	453.6	0.00	0.00	0.00	0.00	TGT #2(Condor 32 State)
14,319.3	89.35	179.50	12,624.1	-1,056.5	453.7	2.00	2.00	0.00	0.00	
15,200.0	89.35	179.50	12,634.0	-1,937.1	461.3	0.00	0.00	0.00	0.00	TGT #3(Condor 32 State)
15,205.9	89.47	179.50	12,634.1	-1,943.0	461.4	2.00	2.00	0.00	0.00	
16,283.1	89.47	179.50	12,644.0	-3,020.1	470.7	0.00	0.00	0.00	0.00	TGT #4(Condor 32 State)
16,288.2	89.37	179.50	12,644.1	-3,025.2	470.8	2.00	-2.00	0.00	180.00	
17,463.1	89.37	179.50	12,657.0	-4,200.0	481.0	0.00	0.00	0.00	0.00	PBHL (Condor 32 State)



Planning Report

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Condor 32 State
Well: #710H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Well #710H
KB = 25 @ 3345.0usft (H&P 424)
KB = 25 @ 3345.0usft (H&P 424)
Grid
Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
832.0	0.00	0.00	832.0	0.0	0.0	0.0	0.00	0.00	0.00
Rustler									
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
927.0	0.00	0.00	927.0	0.0	0.0	0.0	0.00	0.00	0.00
Tamarisk Anhydrite									
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,598.0	1.96	28.79	1,598.0	1.5	0.8	-1.4	2.00	2.00	0.00
Top of Salt									
1,600.0	2.00	28.79	1,600.0	1.5	0.8	-1.4	2.00	2.00	0.00
1,700.0	4.00	28.79	1,699.8	6.1	3.4	-5.7	2.00	2.00	0.00
1,800.0	6.00	28.79	1,799.5	13.8	7.6	-12.8	2.00	2.00	0.00
1,900.0	8.00	28.79	1,898.7	24.4	13.4	-22.7	2.00	2.00	0.00
1,929.6	8.59	28.79	1,928.0	28.2	15.5	-26.2	2.00	2.00	0.00
2,000.0	8.59	28.79	1,997.6	37.4	20.5	-34.8	0.00	0.00	0.00
2,100.0	8.59	28.79	2,096.5	50.5	27.7	-47.0	0.00	0.00	0.00
2,200.0	8.59	28.79	2,195.4	63.6	34.9	-59.2	0.00	0.00	0.00
2,300.0	8.59	28.79	2,294.2	76.7	42.1	-71.4	0.00	0.00	0.00
2,400.0	8.59	28.79	2,393.1	89.8	49.3	-83.6	0.00	0.00	0.00
2,500.0	8.59	28.79	2,492.0	102.9	56.5	-95.8	0.00	0.00	0.00
2,600.0	8.59	28.79	2,590.9	115.9	63.7	-107.9	0.00	0.00	0.00
2,700.0	8.59	28.79	2,689.7	129.0	70.9	-120.1	0.00	0.00	0.00
2,800.0	8.59	28.79	2,788.6	142.1	78.1	-132.3	0.00	0.00	0.00
2,900.0	8.59	28.79	2,887.5	155.2	85.3	-144.5	0.00	0.00	0.00
3,000.0	8.59	28.79	2,986.4	168.3	92.5	-156.7	0.00	0.00	0.00
3,100.0	8.59	28.79	3,085.3	181.4	99.7	-168.9	0.00	0.00	0.00
3,200.0	8.59	28.79	3,184.1	194.5	106.9	-181.1	0.00	0.00	0.00
3,300.0	8.59	28.79	3,283.0	207.6	114.1	-193.3	0.00	0.00	0.00
3,400.0	8.59	28.79	3,381.9	220.7	121.3	-205.5	0.00	0.00	0.00
3,500.0	8.59	28.79	3,480.8	233.8	128.5	-217.6	0.00	0.00	0.00
3,600.0	8.59	28.79	3,579.6	246.9	135.7	-229.8	0.00	0.00	0.00
3,700.0	8.59	28.79	3,678.5	260.0	142.9	-242.0	0.00	0.00	0.00
3,800.0	8.59	28.79	3,777.4	273.1	150.1	-254.2	0.00	0.00	0.00
3,900.0	8.59	28.79	3,876.3	286.1	157.2	-266.4	0.00	0.00	0.00
4,000.0	8.59	28.79	3,975.2	299.2	164.4	-278.6	0.00	0.00	0.00
4,100.0	8.59	28.79	4,074.0	312.3	171.6	-290.8	0.00	0.00	0.00
4,200.0	8.59	28.79	4,172.9	325.4	178.8	-303.0	0.00	0.00	0.00
4,300.0	8.59	28.79	4,271.8	338.5	186.0	-315.1	0.00	0.00	0.00
4,400.0	8.59	28.79	4,370.7	351.6	193.2	-327.3	0.00	0.00	0.00
4,500.0	8.59	28.79	4,469.5	364.7	200.4	-339.5	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #710H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3345.0usft (H&P 424)
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3345.0usft (H&P 424)
Site:	Condor 32 State	North Reference:	Grid
Well:	#710H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,600.0	8.59	28.79	4,568.4	377.8	207.6	-351.7	0.00	0.00	0.00
4,700.0	8.59	28.79	4,667.3	390.9	214.8	-363.9	0.00	0.00	0.00
4,800.0	8.59	28.79	4,766.2	404.0	222.0	-376.1	0.00	0.00	0.00
4,900.0	8.59	28.79	4,865.1	417.1	229.2	-388.3	0.00	0.00	0.00
5,000.0	8.59	28.79	4,963.9	430.2	236.4	-400.5	0.00	0.00	0.00
5,045.6	8.59	28.79	5,009.0	436.1	239.7	-406.0	0.00	0.00	0.00
Bottom of Salt									
5,100.0	8.59	28.79	5,062.8	443.3	243.6	-412.7	0.00	0.00	0.00
5,200.0	8.59	28.79	5,161.7	456.3	250.8	-424.8	0.00	0.00	0.00
5,300.0	8.59	28.79	5,260.6	469.4	258.0	-437.0	0.00	0.00	0.00
5,302.5	8.59	28.79	5,263.0	469.8	258.1	-437.3	0.00	0.00	0.00
Lamar									
5,326.7	8.59	28.79	5,287.0	472.9	259.9	-440.3	0.00	0.00	0.00
Bell Canyon									
5,400.0	8.59	28.79	5,359.4	482.5	265.2	-449.2	0.00	0.00	0.00
5,500.0	8.59	28.79	5,458.3	495.6	272.4	-461.4	0.00	0.00	0.00
5,600.0	8.59	28.79	5,557.2	508.7	279.6	-473.6	0.00	0.00	0.00
5,700.0	8.59	28.79	5,656.1	521.8	286.7	-485.8	0.00	0.00	0.00
5,800.0	8.59	28.79	5,755.0	534.9	293.9	-498.0	0.00	0.00	0.00
5,900.0	8.59	28.79	5,853.8	548.0	301.1	-510.2	0.00	0.00	0.00
6,000.0	8.59	28.79	5,952.7	561.1	308.3	-522.4	0.00	0.00	0.00
6,100.0	8.59	28.79	6,051.6	574.2	315.5	-534.5	0.00	0.00	0.00
6,200.0	8.59	28.79	6,150.5	587.3	322.7	-546.7	0.00	0.00	0.00
6,300.0	8.59	28.79	6,249.3	600.4	329.9	-558.9	0.00	0.00	0.00
6,355.3	8.59	28.79	6,304.0	607.6	333.9	-565.7	0.00	0.00	0.00
Cherry Canyon									
6,400.0	8.59	28.79	6,348.2	613.5	337.1	-571.1	0.00	0.00	0.00
6,500.0	8.59	28.79	6,447.1	626.5	344.3	-583.3	0.00	0.00	0.00
6,600.0	8.59	28.79	6,546.0	639.6	351.5	-595.5	0.00	0.00	0.00
6,700.0	8.59	28.79	6,644.9	652.7	358.7	-607.7	0.00	0.00	0.00
6,800.0	8.59	28.79	6,743.7	665.8	365.9	-619.9	0.00	0.00	0.00
6,900.0	8.59	28.79	6,842.6	678.9	373.1	-632.1	0.00	0.00	0.00
7,000.0	8.59	28.79	6,941.5	692.0	380.3	-644.2	0.00	0.00	0.00
7,100.0	8.59	28.79	7,040.4	705.1	387.5	-656.4	0.00	0.00	0.00
7,200.0	8.59	28.79	7,139.3	718.2	394.7	-668.6	0.00	0.00	0.00
7,300.0	8.59	28.79	7,238.1	731.3	401.9	-680.8	0.00	0.00	0.00
7,400.0	8.59	28.79	7,337.0	744.4	409.1	-693.0	0.00	0.00	0.00
7,500.0	8.59	28.79	7,435.9	757.5	416.3	-705.2	0.00	0.00	0.00
7,581.1	8.59	28.79	7,516.0	768.1	422.1	-715.1	0.00	0.00	0.00
7,600.0	8.21	28.79	7,534.8	770.5	423.4	-717.3	2.00	-2.00	0.00
7,700.0	6.21	28.79	7,634.0	781.5	429.5	-727.6	2.00	-2.00	0.00
7,800.0	4.21	28.79	7,733.6	789.5	433.8	-735.0	2.00	-2.00	0.00
7,900.0	2.21	28.79	7,833.4	794.4	436.5	-739.6	2.00	-2.00	0.00
8,000.0	0.21	28.79	7,933.4	796.2	437.6	-741.3	2.00	-2.00	0.00
8,010.6	0.00	0.00	7,944.0	796.3	437.6	-741.3	2.00	-2.00	0.00
Brushy Canyon									
8,100.0	0.00	0.00	8,033.4	796.3	437.6	-741.3	0.00	0.00	0.00
8,200.0	0.00	0.00	8,133.4	796.3	437.6	-741.3	0.00	0.00	0.00
8,300.0	0.00	0.00	8,233.4	796.3	437.6	-741.3	0.00	0.00	0.00
8,400.0	0.00	0.00	8,333.4	796.3	437.6	-741.3	0.00	0.00	0.00
8,500.0	0.00	0.00	8,433.4	796.3	437.6	-741.3	0.00	0.00	0.00
8,600.0	0.00	0.00	8,533.4	796.3	437.6	-741.3	0.00	0.00	0.00
8,700.0	0.00	0.00	8,633.4	796.3	437.6	-741.3	0.00	0.00	0.00
8,800.0	0.00	0.00	8,733.4	796.3	437.6	-741.3	0.00	0.00	0.00

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #710H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3345.0usft (H&P 424)
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3345.0usft (H&P 424)
Site:	Condor 32 State	North Reference:	Grid
Well:	#710H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,900.0	0.00	0.00	8,833.4	796.3	437.6	-741.3	0.00	0.00	0.00
9,000.0	0.00	0.00	8,933.4	796.3	437.6	-741.3	0.00	0.00	0.00
9,100.0	0.00	0.00	9,033.4	796.3	437.6	-741.3	0.00	0.00	0.00
9,200.0	0.00	0.00	9,133.4	796.3	437.6	-741.3	0.00	0.00	0.00
9,300.0	0.00	0.00	9,233.4	796.3	437.6	-741.3	0.00	0.00	0.00
9,400.0	0.00	0.00	9,333.4	796.3	437.6	-741.3	0.00	0.00	0.00
9,477.6	0.00	0.00	9,411.0	796.3	437.6	-741.3	0.00	0.00	0.00
Bone Spring Lime									
9,500.0	0.00	0.00	9,433.4	796.3	437.6	-741.3	0.00	0.00	0.00
9,517.6	0.00	0.00	9,451.0	796.3	437.6	-741.3	0.00	0.00	0.00
Leonard A									
9,600.0	0.00	0.00	9,533.4	796.3	437.6	-741.3	0.00	0.00	0.00
9,700.0	0.00	0.00	9,633.4	796.3	437.6	-741.3	0.00	0.00	0.00
9,800.0	0.00	0.00	9,733.4	796.3	437.6	-741.3	0.00	0.00	0.00
9,900.0	0.00	0.00	9,833.4	796.3	437.6	-741.3	0.00	0.00	0.00
10,000.0	0.00	0.00	9,933.4	796.3	437.6	-741.3	0.00	0.00	0.00
10,100.0	0.00	0.00	10,033.4	796.3	437.6	-741.3	0.00	0.00	0.00
10,200.0	0.00	0.00	10,133.4	796.3	437.6	-741.3	0.00	0.00	0.00
10,300.0	0.00	0.00	10,233.4	796.3	437.6	-741.3	0.00	0.00	0.00
10,400.0	0.00	0.00	10,333.4	796.3	437.6	-741.3	0.00	0.00	0.00
10,468.6	0.00	0.00	10,402.0	796.3	437.6	-741.3	0.00	0.00	0.00
First Bone Spring Sand									
10,500.0	0.00	0.00	10,433.4	796.3	437.6	-741.3	0.00	0.00	0.00
10,600.0	0.00	0.00	10,533.4	796.3	437.6	-741.3	0.00	0.00	0.00
10,675.6	0.00	0.00	10,609.0	796.3	437.6	-741.3	0.00	0.00	0.00
SBSG Shale									
10,700.0	0.00	0.00	10,633.4	796.3	437.6	-741.3	0.00	0.00	0.00
10,800.0	0.00	0.00	10,733.4	796.3	437.6	-741.3	0.00	0.00	0.00
10,900.0	0.00	0.00	10,833.4	796.3	437.6	-741.3	0.00	0.00	0.00
11,000.0	0.00	0.00	10,933.4	796.3	437.6	-741.3	0.00	0.00	0.00
11,023.6	0.00	0.00	10,957.0	796.3	437.6	-741.3	0.00	0.00	0.00
SBSG Sand									
11,100.0	0.00	0.00	11,033.4	796.3	437.6	-741.3	0.00	0.00	0.00
11,200.0	0.00	0.00	11,133.4	796.3	437.6	-741.3	0.00	0.00	0.00
11,300.0	0.00	0.00	11,233.4	796.3	437.6	-741.3	0.00	0.00	0.00
11,400.0	0.00	0.00	11,333.4	796.3	437.6	-741.3	0.00	0.00	0.00
11,500.0	0.00	0.00	11,433.4	796.3	437.6	-741.3	0.00	0.00	0.00
11,503.6	0.00	0.00	11,437.0	796.3	437.6	-741.3	0.00	0.00	0.00
Third Bone Spring Carb									
11,600.0	0.00	0.00	11,533.4	796.3	437.6	-741.3	0.00	0.00	0.00
11,700.0	0.00	0.00	11,633.4	796.3	437.6	-741.3	0.00	0.00	0.00
11,800.0	0.00	0.00	11,733.4	796.3	437.6	-741.3	0.00	0.00	0.00
11,900.0	0.00	0.00	11,833.4	796.3	437.6	-741.3	0.00	0.00	0.00
12,000.0	0.00	0.00	11,933.4	796.3	437.6	-741.3	0.00	0.00	0.00
12,093.6	0.00	0.00	12,027.0	796.3	437.6	-741.3	0.00	0.00	0.00
Third Bone Spring Sand									
12,100.0	0.00	0.00	12,033.4	796.3	437.6	-741.3	0.00	0.00	0.00
12,193.8	0.00	0.00	12,127.2	796.3	437.6	-741.3	0.00	0.00	0.00
12,200.0	0.74	179.50	12,133.4	796.2	437.6	-741.3	12.00	12.00	0.00
12,225.0	3.74	179.50	12,158.3	795.2	437.6	-740.3	12.00	12.00	0.00
12,250.0	6.74	179.50	12,183.2	793.0	437.6	-738.0	12.00	12.00	0.00
12,275.0	9.74	179.50	12,208.0	789.4	437.6	-734.4	12.00	12.00	0.00
12,300.0	12.74	179.50	12,232.5	784.5	437.7	-729.6	12.00	12.00	0.00



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #710H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3345.0usft (H&P 424)
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3345.0usft (H&P 424)
Site:	Condor 32 State	North Reference:	Grid
Well:	#710H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
12,325.0	15.74	179.50	12,256.7	778.3	437.7	-723.5	12.00	12.00	0.00	
12,350.0	18.74	179.50	12,280.6	770.9	437.8	-716.1	12.00	12.00	0.00	
12,375.0	21.74	179.50	12,304.1	762.3	437.9	-707.5	12.00	12.00	0.00	
12,400.0	24.74	179.50	12,327.0	752.4	437.9	-697.7	12.00	12.00	0.00	
12,425.0	27.74	179.50	12,349.4	741.4	438.0	-686.7	12.00	12.00	0.00	
12,450.0	30.74	179.50	12,371.3	729.2	438.1	-674.6	12.00	12.00	0.00	
12,475.0	33.74	179.50	12,392.4	715.8	438.3	-661.3	12.00	12.00	0.00	
12,500.0	36.74	179.50	12,412.8	701.4	438.4	-647.0	12.00	12.00	0.00	
12,525.0	39.74	179.50	12,432.4	685.9	438.5	-631.6	12.00	12.00	0.00	
12,550.0	42.74	179.50	12,451.2	669.5	438.7	-615.2	12.00	12.00	0.00	
12,572.3	45.42	179.50	12,467.3	653.9	438.8	-599.8	12.00	12.00	0.00	
Wolfcamp										
12,575.0	45.74	179.50	12,469.2	652.0	438.8	-597.9	12.00	12.00	0.00	
12,600.0	48.74	179.50	12,486.1	633.7	439.0	-579.6	12.00	12.00	0.00	
12,611.4	50.11	179.50	12,493.6	625.0	439.1	-571.0	12.00	12.00	0.00	
Wfmp Clastics X										
12,625.0	51.74	179.50	12,502.1	614.5	439.1	-560.5	12.00	12.00	0.00	
12,650.0	54.74	179.50	12,517.1	594.4	439.3	-540.6	12.00	12.00	0.00	
12,675.0	57.74	179.50	12,531.0	573.6	439.5	-519.9	12.00	12.00	0.00	
12,700.0	60.74	179.50	12,543.7	552.2	439.7	-498.6	12.00	12.00	0.00	
12,725.0	63.74	179.50	12,555.4	530.0	439.9	-476.6	12.00	12.00	0.00	
12,750.0	66.74	179.50	12,565.9	507.3	440.1	-454.0	12.00	12.00	0.00	
12,775.0	69.74	179.50	12,575.1	484.1	440.3	-430.9	12.00	12.00	0.00	
12,800.0	72.74	179.50	12,583.2	460.5	440.5	-407.4	12.00	12.00	0.00	
12,803.9	73.20	179.50	12,584.3	456.8	440.5	-403.7	12.00	12.00	0.00	
Wfmp Clastics Y - Wolfcamp Y TOW										
12,825.0	75.74	179.50	12,590.0	436.4	440.7	-383.4	12.00	12.00	0.00	
12,850.0	78.74	179.50	12,595.5	412.0	440.9	-359.2	12.00	12.00	0.00	
12,875.0	81.74	179.50	12,599.7	387.4	441.1	-334.7	12.00	12.00	0.00	
12,900.0	84.74	179.50	12,602.7	362.6	441.3	-310.0	12.00	12.00	0.00	
12,925.0	87.74	179.50	12,604.3	337.6	441.6	-285.2	12.00	12.00	0.00	
12,938.3	89.10	179.50	12,604.6	326.3	441.7	-273.9	12.00	12.00	0.00	
13,000.0	89.10	179.50	12,605.6	262.6	442.2	-210.6	0.00	0.00	0.00	
13,100.0	89.10	179.50	12,607.2	162.7	443.1	-111.2	0.00	0.00	0.00	
13,200.0	89.10	179.50	12,608.8	62.7	443.9	-11.8	0.00	0.00	0.00	
13,300.0	89.10	179.50	12,610.3	-37.3	444.8	87.7	0.00	0.00	0.00	
13,400.0	89.10	179.50	12,611.9	-137.3	445.7	187.1	0.00	0.00	0.00	
13,500.0	89.10	179.50	12,613.5	-237.3	446.5	286.5	0.00	0.00	0.00	
13,533.6	89.10	179.50	12,614.0	-270.9	446.8	320.0	0.00	0.00	0.00	
13,542.1	89.27	179.50	12,614.1	-279.3	446.9	328.4	2.00	2.00	0.00	
13,600.0	89.27	179.50	12,614.9	-337.3	447.4	386.0	0.00	0.00	0.00	
13,700.0	89.27	179.50	12,616.1	-437.2	448.3	485.4	0.00	0.00	0.00	
13,800.0	89.27	179.50	12,617.4	-537.2	449.2	584.9	0.00	0.00	0.00	
13,900.0	89.27	179.50	12,618.7	-637.2	450.0	684.3	0.00	0.00	0.00	
14,000.0	89.27	179.50	12,620.0	-737.2	450.9	783.7	0.00	0.00	0.00	
14,100.0	89.27	179.50	12,621.3	-837.2	451.8	883.2	0.00	0.00	0.00	
14,200.0	89.27	179.50	12,622.5	-937.2	452.6	982.6	0.00	0.00	0.00	
14,300.0	89.27	179.50	12,623.8	-1,037.2	453.5	1,082.0	0.00	0.00	0.00	
14,315.0	89.27	179.50	12,624.0	-1,052.2	453.6	1,097.0	0.00	0.00	0.00	
14,319.3	89.35	179.50	12,624.1	-1,056.5	453.7	1,101.2	2.00	2.00	0.00	
14,400.0	89.35	179.50	12,625.0	-1,137.2	454.4	1,181.5	0.00	0.00	0.00	
14,500.0	89.35	179.50	12,626.1	-1,237.2	455.2	1,280.9	0.00	0.00	0.00	
14,600.0	89.35	179.50	12,627.2	-1,337.1	456.1	1,380.4	0.00	0.00	0.00	



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #710H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3345.0usft (H&P 424)
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3345.0usft (H&P 424)
Site:	Condor 32 State	North Reference:	Grid
Well:	#710H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,700.0	89.35	179.50	12,628.4	-1,437.1	457.0	1,479.8	0.00	0.00	0.00
14,800.0	89.35	179.50	12,629.5	-1,537.1	457.9	1,579.2	0.00	0.00	0.00
14,900.0	89.35	179.50	12,630.6	-1,637.1	458.7	1,678.7	0.00	0.00	0.00
15,000.0	89.35	179.50	12,631.7	-1,737.1	459.6	1,778.1	0.00	0.00	0.00
15,100.0	89.35	179.50	12,632.9	-1,837.1	460.5	1,877.6	0.00	0.00	0.00
15,200.0	89.35	179.50	12,634.0	-1,937.1	461.3	1,977.0	0.00	0.00	0.00
15,205.9	89.47	179.50	12,634.1	-1,943.0	461.4	1,982.9	2.00	2.00	0.00
15,300.0	89.47	179.50	12,634.9	-2,037.1	462.2	2,076.4	0.00	0.00	0.00
15,400.0	89.47	179.50	12,635.9	-2,137.1	463.1	2,175.9	0.00	0.00	0.00
15,500.0	89.47	179.50	12,636.8	-2,237.1	463.9	2,275.3	0.00	0.00	0.00
15,600.0	89.47	179.50	12,637.7	-2,337.1	464.8	2,374.8	0.00	0.00	0.00
15,700.0	89.47	179.50	12,638.6	-2,437.0	465.7	2,474.2	0.00	0.00	0.00
15,800.0	89.47	179.50	12,639.5	-2,537.0	466.5	2,573.6	0.00	0.00	0.00
15,900.0	89.47	179.50	12,640.5	-2,637.0	467.4	2,673.1	0.00	0.00	0.00
16,000.0	89.47	179.50	12,641.4	-2,737.0	468.3	2,772.5	0.00	0.00	0.00
16,100.0	89.47	179.50	12,642.3	-2,837.0	469.2	2,872.0	0.00	0.00	0.00
16,200.0	89.47	179.50	12,643.2	-2,937.0	470.0	2,971.4	0.00	0.00	0.00
16,283.1	89.47	179.50	12,644.0	-3,020.1	470.7	3,054.0	0.00	0.00	0.00
16,288.2	89.37	179.50	12,644.1	-3,025.2	470.8	3,059.2	2.00	-2.00	0.00
16,300.0	89.37	179.50	12,644.2	-3,037.0	470.9	3,070.9	0.00	0.00	0.00
16,400.0	89.37	179.50	12,645.3	-3,137.0	471.8	3,170.3	0.00	0.00	0.00
16,500.0	89.37	179.50	12,646.4	-3,237.0	472.6	3,269.7	0.00	0.00	0.00
16,600.0	89.37	179.50	12,647.5	-3,337.0	473.5	3,369.2	0.00	0.00	0.00
16,700.0	89.37	179.50	12,648.6	-3,437.0	474.4	3,468.6	0.00	0.00	0.00
16,800.0	89.37	179.50	12,649.7	-3,536.9	475.2	3,568.0	0.00	0.00	0.00
16,900.0	89.37	179.50	12,650.8	-3,636.9	476.1	3,667.5	0.00	0.00	0.00
17,000.0	89.37	179.50	12,651.9	-3,736.9	477.0	3,766.9	0.00	0.00	0.00
17,100.0	89.37	179.50	12,653.0	-3,836.9	477.8	3,866.4	0.00	0.00	0.00
17,200.0	89.37	179.50	12,654.1	-3,936.9	478.7	3,965.8	0.00	0.00	0.00
17,300.0	89.37	179.50	12,655.2	-4,036.9	479.6	4,065.2	0.00	0.00	0.00
17,400.0	89.37	179.50	12,656.3	-4,136.9	480.5	4,164.7	0.00	0.00	0.00
17,463.1	89.37	179.50	12,657.0	-4,200.0	481.0	4,227.5	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #710H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3345.0usft (H&P 424)
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3345.0usft (H&P 424)
Site:	Condor 32 State	North Reference:	Grid
Well:	#710H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP (Condor 32 State # - plan hits target center - Polygon	0.00	0.00	7,944.0	796.3	437.6	398,990.25	802,251.56	32° 5' 38.766 N	103° 29' 26.860 W
Point 1			7,944.0	30.0	-30.0	399,020.25	802,221.56		
Point 2			7,944.0	30.0	50.0	399,020.25	802,301.56		
Point 3			7,944.0	-50.0	50.0	398,940.25	802,301.56		
Point 4			7,944.0	-50.0	-30.0	398,940.25	802,221.56		
FTP (Condor 32 State # - plan misses target center by 43.1usft at 12758.0usft MD (12568.9 TVD, 500.0 N, 440.1 E) - Point	0.00	0.00	12,609.0	516.0	440.0	398,710.00	802,254.00	32° 5' 35.992 N	103° 29' 26.857 W
TGT #1(Condor 32 State - plan hits target center - Point	0.00	0.00	12,614.0	-270.9	446.8	397,923.10	802,260.84	32° 5' 28.205 N	103° 29' 26.849 W
TGT #2(Condor 32 State - plan hits target center - Point	0.00	0.00	12,624.0	-1,052.2	453.6	397,141.80	802,267.63	32° 5' 20.474 N	103° 29' 26.841 W
TGT #3(Condor 32 State - plan hits target center - Point	0.00	0.00	12,634.0	-1,937.1	461.3	396,256.90	802,275.33	32° 5' 11.717 N	103° 29' 26.832 W
TGT #4(Condor 32 State - plan hits target center - Point	0.00	0.00	12,644.0	-3,020.1	470.7	395,173.90	802,284.74	32° 5' 1.000 N	103° 29' 26.820 W
PBHL (Condor 32 State - plan hits target center - Rectangle (sides W50.0 H0.0 D4,716.0)	90.00	179.50	12,657.0	-4,200.0	481.0	393,994.00	802,295.00	32° 4' 49.324 N	103° 29' 26.808 W



Planning Report

Database:	EDM 5000.14	Local Co-ordinate Reference:	Well #710H
Company:	EOG Resources - Midland	TVD Reference:	KB = 25 @ 3345.0usft (H&P 424)
Project:	Lea County, NM (NAD 83 NME)	MD Reference:	KB = 25 @ 3345.0usft (H&P 424)
Site:	Condor 32 State	North Reference:	Grid
Well:	#710H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
832.0	832.0	Rustler				
927.0	927.0	Tamarisk Anhydrite				
1,598.0	1,598.0	Top of Salt				
5,045.6	5,009.0	Bottom of Salt				
5,302.5	5,263.0	Lamar				
5,326.7	5,287.0	Bell Canyon				
6,355.3	6,304.0	Cherry Canyon				
8,010.6	7,944.0	Brushy Canyon				
9,477.6	9,411.0	Bone Spring Lime				
9,517.6	9,451.0	Leonard A				
10,468.6	10,402.0	First Bone Spring Sand				
10,675.6	10,609.0	SBSG Shale				
11,023.6	10,957.0	SBSG Sand				
11,503.6	11,437.0	Third Bone Spring Carb				
12,093.6	12,027.0	Third Bone Spring Sand				
12,572.3	12,467.3	Wolfcamp		-0.59		
12,611.4	12,493.6	Wfmp Clastics X		-0.59		
12,803.9	12,584.3	Wfmp Clastics Y		-0.59		
12,803.9	12,584.3	Wolfcamp Y TOW		-0.59		

HOBBS ON
MAY 02 2018
RECEIVED



Lea County, NM (NAD 83 NME)

Condor 32 State #710H

H&P 424

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: #710H

KB = 25 @ 3345.0usft (H&P 424) 3320.0
Northing 398194.00 Easting 801614.00 Latitude 32° 5' 30.921 N Longitude 103° 29' 32.018 W

SECTION DETAILS

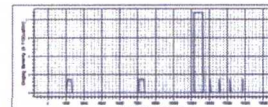
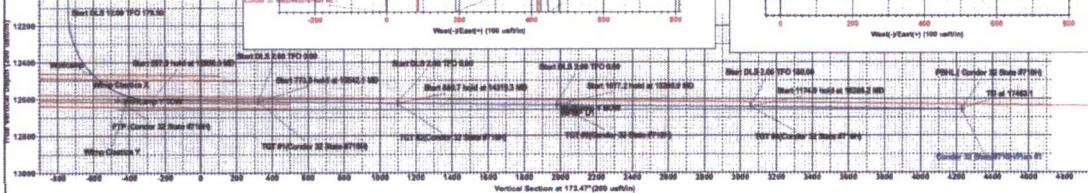
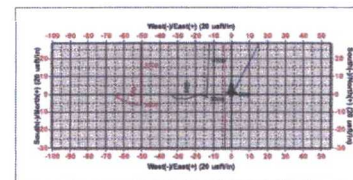
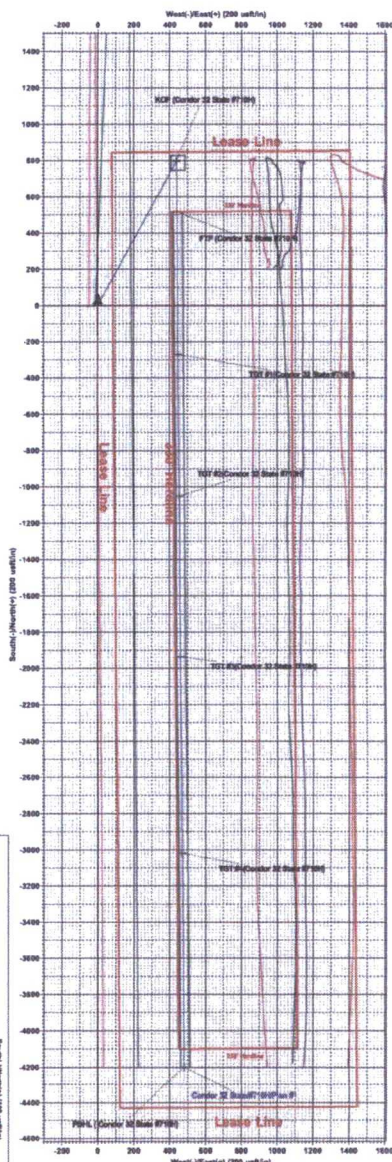
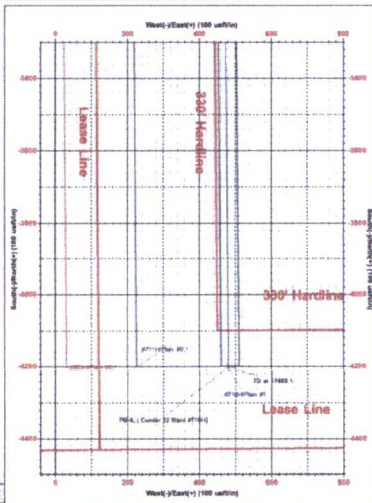
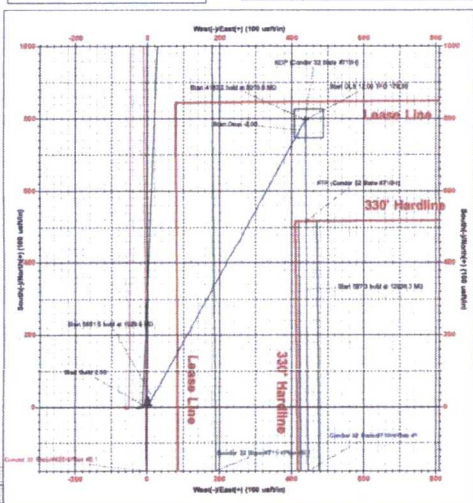
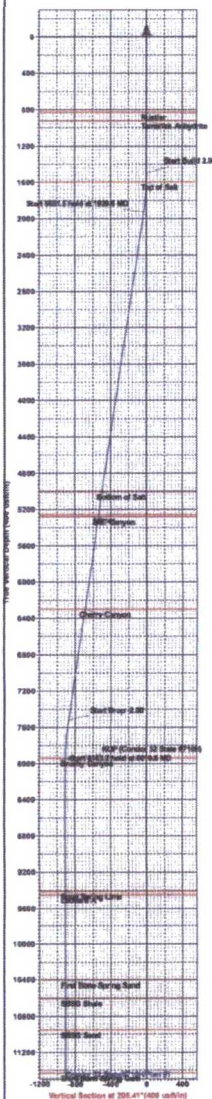
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1500.0	0.00	0.00	1500.0	0.0	0.0	0.00	0.00	0.0	
3	1929.6	8.59	28.79	1928.0	28.2	15.5	2.00	28.79	-26.2	
4	7581.1	8.59	28.79	7516.0	768.1	422.1	0.00	0.00	-715.1	
5	8010.6	0.00	0.00	7944.0	796.3	437.6	2.00	180.00	-741.3	KOP (Condor 32 State #710H)
6	12193.8	0.00	0.00	12127.2	796.3	437.6	0.00	0.00	-741.3	
7	12936.3	89.10	179.50	12604.6	326.3	441.7	12.00	179.50	-273.9	
8	13533.6	89.10	179.50	12614.0	-270.9	448.8	0.00	0.00	320.0	TGT #1(Condor 32 State #710H)
9	13542.1	89.27	179.50	12614.1	-279.3	446.9	2.00	0.00	328.4	TGT #2(Condor 32 State #710H)
10	14315.0	89.27	179.50	12624.0	-1052.2	453.6	0.00	0.00	1097.0	
11	14319.3	89.35	179.50	12624.1	-1056.5	453.7	2.00	0.00	1101.2	TGT #3(Condor 32 State #710H)
12	15200.0	89.35	179.50	12634.0	-1937.1	461.3	0.00	0.00	1977.0	
13	15205.9	89.47	179.50	12634.1	-1943.0	461.4	2.00	0.00	1982.9	TGT #4(Condor 32 State #710H)
14	16283.1	89.47	179.50	12644.0	-3020.1	470.7	0.00	0.00	3054.0	
15	16288.2	89.37	179.50	12644.1	-3025.2	470.8	2.00	180.00	3059.2	
16	17463.1	89.37	179.50	12657.0	-4200.0	481.0	0.00	0.00	4227.5	PBHL (Condor 32 State #710H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP COORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP (Condor 32 State #710H)	7944.0	796.3	437.6	398990.25	802351.56
FTP (Condor 32 State #710H)	12609.0	516.0	446.8	398710.00	802254.00
TGT #1(Condor 32 State #710H)	12614.0	-270.9	446.8	397923.10	802250.54
TGT #2(Condor 32 State #710H)	12614.1	-279.3	446.8	397923.10	802250.54
TGT #3(Condor 32 State #710H)	12624.0	-1052.2	453.6	397441.80	802267.83
TGT #4(Condor 32 State #710H)	12634.0	-1937.1	461.3	396256.90	802275.33
PBHL (Condor 32 State #710H)	12644.0	-3020.1	470.7	395173.90	802284.74
PBHL (Condor 32 State #710H)	12657.0	-4200.0	481.0	393994.00	802295.00



NO OTHER DATA AVAILABLE
DATE: 11/15/2017
BY: [Signature]
CHECKED: [Signature]