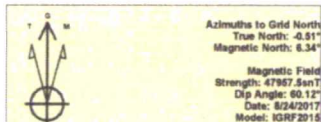




Lea County, NM (NAD 83 NME)

Beowulf 33 State Com #301H

Plan #0.1



To convert a Magnetic Direction to a Grid Direction, Add 0.51°
To convert a Magnetic Direction to a True Direction, Add 6.85° East
To convert a True Direction to a Grid Direction, Subtract 0.51°

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: #301H

KB = 25' @ 3443.00sft
Northing 457797.00 Easting 836096.00 Latitude 32.28496075 Longitude -103.37983394

SECTION DETAILS

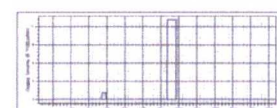
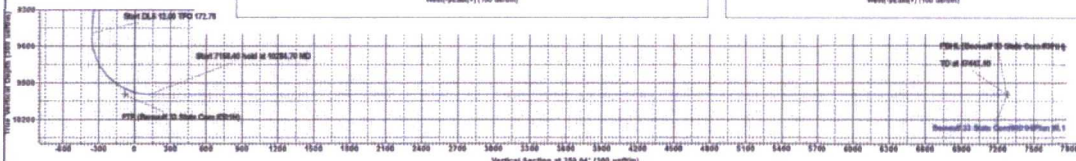
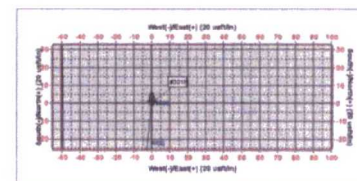
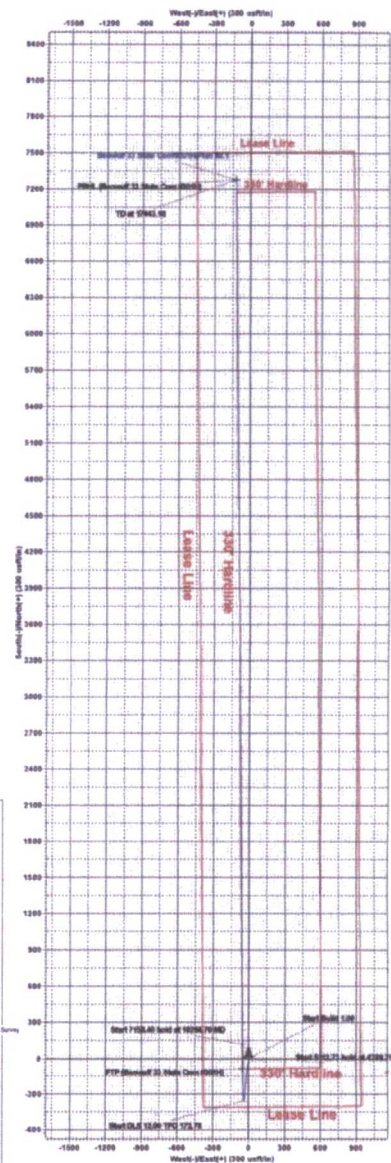
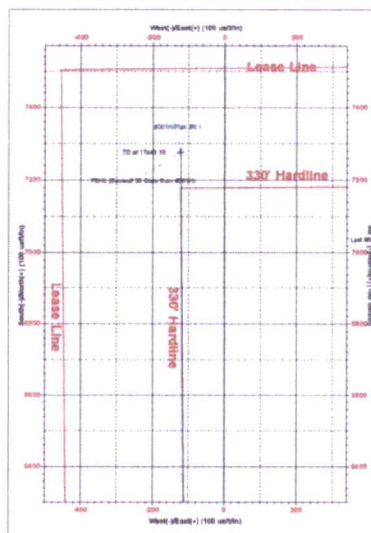
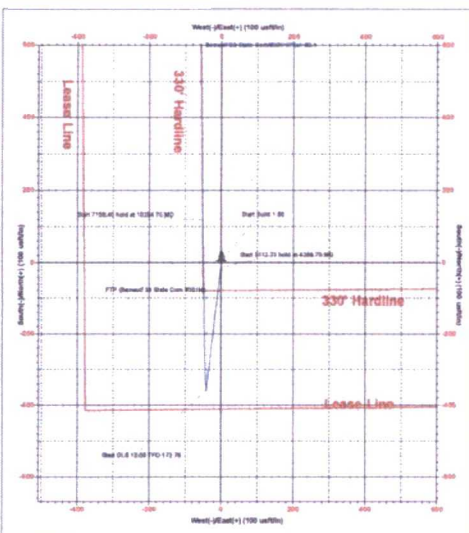
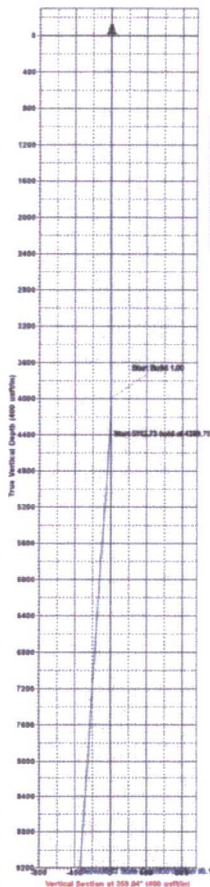
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	4000.00	0.00	0.00	4000.00	0.00	0.00	0.00	0.00	0.00	
3	4389.75	3.90	186.64	4389.45	-13.16	-1.53	1.00	186.64	-13.13	
4	9502.48	3.90	186.64	9490.38	-358.36	-41.69	0.00	0.00	-357.61	
5	10284.70	90.00	359.43	10000.00	117.95	-50.79	12.00	172.78	118.79	
6	17443.10	90.00	359.43	10000.00	7276.00	-122.00	0.00	0.00	7277.02	PBHL (Beowulf 33 State Com #301H)

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N-S	+E-W	Northing	Easting
FTP (Beowulf 33 State Com #301H)	10000.00	-82.00	-50.00	467716.00	838046.00
PBHL (Beowulf 33 State Com #301H)	10000.00	7276.00	-122.00	466073.00	838074.00



Scale: 1 inch = 100 feet



EOG Resources - Midland

Lea County, NM (NAD 83 NME)

Beowulf 33 State Com

#301H

OH

Plan: Plan #0.1

Standard Planning Report

24 August, 2017



EOG Resources, Inc.
Planning Report

Database: EDM 5000.14 Single User Db
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Beowulf 33 State Com
Well: #301H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #301H
TVD Reference: KB = 25' @ 3443.00usft
MD Reference: KB = 25' @ 3443.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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	Beowulf 33 State Com		
Site Position:		Northing:	457,797.00 usft
From:	Map	Easting:	836,096.00 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"
		Latitude:	32.25496075
		Longitude:	-103.37983393
		Grid Convergence:	0.51 °

Well	#301H		
Well Position	+N/-S	0.00 usft	Northing: 457,797.00 usft
	+E/-W	0.00 usft	Easting: 836,096.00 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	Latitude: 32.25496075
			Longitude: -103.37983393
			Ground Level: 3,418.00 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
	IGRF2015	8/24/2017	(°)
			6.85
			Dip Angle
			(°)
			60.12
			Field Strength
			(nT)
			47,957.53803833

Design	Plan #0.1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction
			(°)
			359.04

Plan Survey Tool Program	Date	8/24/2017		
Depth From	Depth To	Survey (Wellbore)	Tool Name	Remarks
(usft)	(usft)			
1	0.00	17,443.10 Plan #0.1 (OH)	MWD	
			MWD - Standard	

Plan Sections										
Measured	Inclination	Azimuth	Vertical	+N/-S	+E/-W	Dogleg	Build	Turn	TFO	Target
Depth	(°)	(°)	Depth	(usft)	(usft)	Rate	Rate	Rate	(°)	
(usft)			(usft)			(°/100usft)	(°/100usft)	(°/100usft)		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,389.75	3.90	186.64	4,389.45	-13.16	-1.53	1.00	1.00	0.00	186.64	
9,502.48	3.90	186.64	9,490.36	-358.36	-41.69	0.00	0.00	0.00	0.00	
10,284.70	90.00	359.43	10,000.00	117.95	-50.79	12.00	11.01	22.09	172.78	
17,443.10	90.00	359.43	10,000.00	7,276.00	-122.00	0.00	0.00	0.00	0.00	PBHL (Beowulf 33 St



EOG Resources, Inc.

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 Well: #301H
 Wellbore: OH
 Design: Plan #0.1

Local Co-ordinate Reference: Well #301H
 TVD Reference: KB = 25' @ 3443.00usft
 MD Reference: KB = 25' @ 3443.00usft
 North Reference: Grid
 Survey Calculation Method: 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)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	1.00	186.64	4,100.00	-0.87	-0.10	-0.86	1.00	1.00	0.00
4,200.00	2.00	186.64	4,199.96	-3.47	-0.40	-3.46	1.00	1.00	0.00
4,300.00	3.00	186.64	4,299.86	-7.80	-0.91	-7.78	1.00	1.00	0.00
4,389.75	3.90	186.64	4,389.45	-13.16	-1.53	-13.13	1.00	1.00	0.00
4,400.00	3.90	186.64	4,399.68	-13.85	-1.61	-13.83	0.00	0.00	0.00
4,500.00	3.90	186.64	4,499.44	-20.61	-2.40	-20.56	0.00	0.00	0.00
4,600.00	3.90	186.64	4,599.21	-27.36	-3.18	-27.30	0.00	0.00	0.00
4,700.00	3.90	186.64	4,698.98	-34.11	-3.97	-34.04	0.00	0.00	0.00
4,800.00	3.90	186.64	4,798.75	-40.86	-4.75	-40.78	0.00	0.00	0.00
4,900.00	3.90	186.64	4,898.52	-47.61	-5.54	-47.51	0.00	0.00	0.00
5,000.00	3.90	186.64	4,998.29	-54.36	-6.32	-54.25	0.00	0.00	0.00
5,100.00	3.90	186.64	5,098.06	-61.12	-7.11	-60.99	0.00	0.00	0.00
5,200.00	3.90	186.64	5,197.83	-67.87	-7.90	-67.73	0.00	0.00	0.00



EOG Resources, Inc.

Planning Report

Database: EDM 5000.14 Single User Db
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Beowulf 33 State Corn
 Well: #301H
 Wellbore: OH
 Design: Plan #0.1

Local Co-ordinate Reference: Well #301H
 TVD Reference: KB = 25' @ 3443.00usft
 MD Reference: KB = 25' @ 3443.00usft
 North Reference: Grid
 Survey Calculation Method: 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)
5,300.00	3.90	186.64	5,297.59	-74.62	-8.68	-74.46	0.00	0.00	0.00
5,400.00	3.90	186.64	5,397.36	-81.37	-9.47	-81.20	0.00	0.00	0.00
5,500.00	3.90	186.64	5,497.13	-88.12	-10.25	-87.94	0.00	0.00	0.00
5,600.00	3.90	186.64	5,596.90	-94.87	-11.04	-94.68	0.00	0.00	0.00
5,700.00	3.90	186.64	5,696.67	-101.63	-11.82	-101.41	0.00	0.00	0.00
5,800.00	3.90	186.64	5,796.44	-108.38	-12.61	-108.15	0.00	0.00	0.00
5,900.00	3.90	186.64	5,896.21	-115.13	-13.39	-114.89	0.00	0.00	0.00
6,000.00	3.90	186.64	5,995.98	-121.88	-14.18	-121.63	0.00	0.00	0.00
6,100.00	3.90	186.64	6,095.74	-128.63	-14.97	-128.36	0.00	0.00	0.00
6,200.00	3.90	186.64	6,195.51	-135.38	-15.75	-135.10	0.00	0.00	0.00
6,300.00	3.90	186.64	6,295.28	-142.14	-16.54	-141.84	0.00	0.00	0.00
6,400.00	3.90	186.64	6,395.05	-148.89	-17.32	-148.58	0.00	0.00	0.00
6,500.00	3.90	186.64	6,494.82	-155.64	-18.11	-155.31	0.00	0.00	0.00
6,600.00	3.90	186.64	6,594.59	-162.39	-18.89	-162.05	0.00	0.00	0.00
6,700.00	3.90	186.64	6,694.36	-169.14	-19.68	-168.79	0.00	0.00	0.00
6,800.00	3.90	186.64	6,794.13	-175.89	-20.46	-175.53	0.00	0.00	0.00
6,900.00	3.90	186.64	6,893.89	-182.65	-21.25	-182.26	0.00	0.00	0.00
7,000.00	3.90	186.64	6,993.66	-189.40	-22.04	-189.00	0.00	0.00	0.00
7,100.00	3.90	186.64	7,093.43	-196.15	-22.82	-195.74	0.00	0.00	0.00
7,200.00	3.90	186.64	7,193.20	-202.90	-23.61	-202.48	0.00	0.00	0.00
7,300.00	3.90	186.64	7,292.97	-209.65	-24.39	-209.21	0.00	0.00	0.00
7,400.00	3.90	186.64	7,392.74	-216.40	-25.18	-215.95	0.00	0.00	0.00
7,500.00	3.90	186.64	7,492.51	-223.16	-25.96	-222.69	0.00	0.00	0.00
7,600.00	3.90	186.64	7,592.28	-229.91	-26.75	-229.43	0.00	0.00	0.00
7,700.00	3.90	186.64	7,692.04	-236.66	-27.53	-236.16	0.00	0.00	0.00
7,800.00	3.90	186.64	7,791.81	-243.41	-28.32	-242.90	0.00	0.00	0.00
7,900.00	3.90	186.64	7,891.58	-250.16	-29.10	-249.64	0.00	0.00	0.00
8,000.00	3.90	186.64	7,991.35	-256.91	-29.89	-256.38	0.00	0.00	0.00
8,100.00	3.90	186.64	8,091.12	-263.67	-30.68	-263.11	0.00	0.00	0.00
8,200.00	3.90	186.64	8,190.89	-270.42	-31.46	-269.85	0.00	0.00	0.00
8,300.00	3.90	186.64	8,290.66	-277.17	-32.25	-276.59	0.00	0.00	0.00
8,400.00	3.90	186.64	8,390.42	-283.92	-33.03	-283.33	0.00	0.00	0.00
8,500.00	3.90	186.64	8,490.19	-290.67	-33.82	-290.06	0.00	0.00	0.00
8,600.00	3.90	186.64	8,589.96	-297.42	-34.60	-296.80	0.00	0.00	0.00
8,700.00	3.90	186.64	8,689.73	-304.18	-35.39	-303.54	0.00	0.00	0.00
8,800.00	3.90	186.64	8,789.50	-310.93	-36.17	-310.28	0.00	0.00	0.00
8,900.00	3.90	186.64	8,889.27	-317.68	-36.96	-317.02	0.00	0.00	0.00
9,000.00	3.90	186.64	8,989.04	-324.43	-37.75	-323.75	0.00	0.00	0.00
9,100.00	3.90	186.64	9,088.81	-331.18	-38.53	-330.49	0.00	0.00	0.00
9,200.00	3.90	186.64	9,188.57	-337.93	-39.32	-337.23	0.00	0.00	0.00
9,300.00	3.90	186.64	9,288.34	-344.69	-40.10	-343.97	0.00	0.00	0.00
9,400.00	3.90	186.64	9,388.11	-351.44	-40.89	-350.70	0.00	0.00	0.00
9,502.48	3.90	186.64	9,490.36	-358.36	-41.69	-357.61	0.00	0.00	0.00
9,525.00	1.26	202.23	9,512.85	-359.35	-41.87	-358.59	12.00	-11.70	69.27
9,550.00	1.90	344.50	9,537.85	-359.20	-42.09	-358.45	12.00	2.55	569.06
9,575.00	4.86	353.66	9,562.80	-357.75	-42.32	-356.99	12.00	11.84	36.65
9,600.00	7.85	355.88	9,587.64	-354.99	-42.56	-354.23	12.00	11.96	8.86
9,625.00	10.85	356.87	9,612.31	-350.94	-42.81	-350.17	12.00	11.98	3.99
9,650.00	13.84	357.44	9,636.73	-345.60	-43.07	-344.83	12.00	11.99	2.28
9,675.00	16.84	357.81	9,660.83	-338.99	-43.34	-338.22	12.00	11.99	1.48
9,700.00	19.84	358.07	9,684.56	-331.13	-43.62	-330.36	12.00	12.00	1.04
9,725.00	22.84	358.27	9,707.84	-322.04	-43.91	-321.26	12.00	12.00	0.78
9,750.00	25.84	358.42	9,730.62	-311.74	-44.21	-310.96	12.00	12.00	0.61
9,775.00	28.84	358.54	9,752.82	-300.27	-44.51	-299.48	12.00	12.00	0.49



EOG Resources, Inc.

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Survey Calculation Method: 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)
9,800.00	31.84	358.64	9,774.40	-287.64	-44.82	-286.85	12.00	12.00	0.40
9,825.00	34.84	358.73	9,795.28	-273.91	-45.14	-273.11	12.00	12.00	0.34
9,850.00	37.84	358.80	9,815.42	-259.10	-45.46	-258.30	12.00	12.00	0.29
9,875.00	40.84	358.86	9,834.75	-243.26	-45.78	-242.46	12.00	12.00	0.26
9,900.00	43.84	358.92	9,853.23	-226.43	-46.11	-225.62	12.00	12.00	0.23
9,925.00	46.84	358.97	9,870.80	-208.65	-46.43	-207.84	12.00	12.00	0.20
9,950.00	49.84	359.02	9,887.42	-189.98	-46.76	-189.17	12.00	12.00	0.18
9,975.00	52.84	359.06	9,903.03	-170.46	-47.09	-169.65	12.00	12.00	0.17
10,000.00	55.84	359.10	9,917.61	-150.16	-47.42	-149.34	12.00	12.00	0.16
10,025.00	58.84	359.13	9,931.10	-129.11	-47.74	-128.30	12.00	12.00	0.14
10,050.00	61.84	359.17	9,943.47	-107.39	-48.06	-106.57	12.00	12.00	0.14
10,075.00	64.84	359.20	9,954.69	-85.06	-48.38	-84.24	12.00	12.00	0.13
10,096.01	67.36	359.23	9,963.20	-65.85	-48.64	-65.03	12.00	12.00	0.12
FTP (Beowulf 33 State Com #301H)									
10,100.00	67.84	359.23	9,964.72	-62.16	-48.69	-61.34	12.00	12.00	0.12
10,125.00	70.84	359.26	9,973.54	-38.78	-49.00	-37.95	12.00	12.00	0.12
10,150.00	73.84	359.29	9,981.13	-14.96	-49.30	-14.13	12.00	12.00	0.11
10,175.00	76.84	359.32	9,987.45	9.22	-49.60	10.05	12.00	12.00	0.11
10,200.00	79.84	359.34	9,992.51	33.70	-49.88	34.53	12.00	12.00	0.11
10,225.00	82.84	359.37	9,996.27	58.41	-50.16	59.24	12.00	12.00	0.10
10,250.00	85.84	359.39	9,998.74	83.28	-50.43	84.12	12.00	12.00	0.10
10,275.00	88.84	359.42	9,999.90	108.25	-50.69	109.09	12.00	12.00	0.10
10,284.70	90.00	359.43	10,000.00	117.95	-50.79	118.79	12.00	12.00	0.10
10,300.00	90.00	359.43	10,000.00	133.25	-50.94	134.09	0.00	0.00	0.00
10,400.00	90.00	359.43	10,000.00	233.25	-51.93	234.08	0.00	0.00	0.00
10,500.00	90.00	359.43	10,000.00	333.24	-52.93	334.08	0.00	0.00	0.00
10,600.00	90.00	359.43	10,000.00	433.24	-53.92	434.08	0.00	0.00	0.00
10,700.00	90.00	359.43	10,000.00	533.23	-54.92	534.08	0.00	0.00	0.00
10,800.00	90.00	359.43	10,000.00	633.23	-55.91	634.07	0.00	0.00	0.00
10,900.00	90.00	359.43	10,000.00	733.22	-56.91	734.07	0.00	0.00	0.00
11,000.00	90.00	359.43	10,000.00	833.22	-57.90	834.07	0.00	0.00	0.00
11,100.00	90.00	359.43	10,000.00	933.21	-58.90	934.07	0.00	0.00	0.00
11,200.00	90.00	359.43	10,000.00	1,033.21	-59.89	1,034.06	0.00	0.00	0.00
11,300.00	90.00	359.43	10,000.00	1,133.20	-60.89	1,134.06	0.00	0.00	0.00
11,400.00	90.00	359.43	10,000.00	1,233.20	-61.88	1,234.06	0.00	0.00	0.00
11,500.00	90.00	359.43	10,000.00	1,333.19	-62.88	1,334.06	0.00	0.00	0.00
11,600.00	90.00	359.43	10,000.00	1,433.19	-63.87	1,434.06	0.00	0.00	0.00
11,700.00	90.00	359.43	10,000.00	1,533.18	-64.87	1,534.05	0.00	0.00	0.00
11,800.00	90.00	359.43	10,000.00	1,633.18	-65.86	1,634.05	0.00	0.00	0.00
11,900.00	90.00	359.43	10,000.00	1,733.17	-66.86	1,734.05	0.00	0.00	0.00
12,000.00	90.00	359.43	10,000.00	1,833.17	-67.85	1,834.05	0.00	0.00	0.00
12,100.00	90.00	359.43	10,000.00	1,933.16	-68.85	1,934.04	0.00	0.00	0.00
12,200.00	90.00	359.43	10,000.00	2,033.16	-69.84	2,034.04	0.00	0.00	0.00
12,300.00	90.00	359.43	10,000.00	2,133.15	-70.84	2,134.04	0.00	0.00	0.00
12,400.00	90.00	359.43	10,000.00	2,233.15	-71.83	2,234.04	0.00	0.00	0.00
12,500.00	90.00	359.43	10,000.00	2,333.14	-72.82	2,334.03	0.00	0.00	0.00
12,600.00	90.00	359.43	10,000.00	2,433.14	-73.82	2,434.03	0.00	0.00	0.00
12,700.00	90.00	359.43	10,000.00	2,533.13	-74.81	2,534.03	0.00	0.00	0.00
12,800.00	90.00	359.43	10,000.00	2,633.13	-75.81	2,634.03	0.00	0.00	0.00
12,900.00	90.00	359.43	10,000.00	2,733.12	-76.80	2,734.02	0.00	0.00	0.00
13,000.00	90.00	359.43	10,000.00	2,833.12	-77.80	2,834.02	0.00	0.00	0.00
13,100.00	90.00	359.43	10,000.00	2,933.11	-78.79	2,934.02	0.00	0.00	0.00
13,200.00	90.00	359.43	10,000.00	3,033.11	-79.79	3,034.02	0.00	0.00	0.00



EOG Resources, Inc.

Planning Report

Database: EDM 5000.14 Single User Db
 Company: EOG Resources - Midland
 Project: Lea County, NM (NAD 83 NME)
 Site: Beowulf 33 State Com
 Well: #301H
 Wellbore: OH
 Design: Plan #0.1

Local Co-ordinate Reference: Well #301H
 TVD Reference: KB = 25' @ 3443.00usft
 MD Reference: KB = 25' @ 3443.00usft
 North Reference: Grid
 Survey Calculation Method: 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)
13,300.00	90.00	359.43	10,000.00	3,133.10	-80.78	3,134.02	0.00	0.00	0.00
13,400.00	90.00	359.43	10,000.00	3,233.10	-81.78	3,234.01	0.00	0.00	0.00
13,500.00	90.00	359.43	10,000.00	3,333.09	-82.77	3,334.01	0.00	0.00	0.00
13,600.00	90.00	359.43	10,000.00	3,433.09	-83.77	3,434.01	0.00	0.00	0.00
13,700.00	90.00	359.43	10,000.00	3,533.08	-84.76	3,534.01	0.00	0.00	0.00
13,800.00	90.00	359.43	10,000.00	3,633.08	-85.76	3,634.00	0.00	0.00	0.00
13,900.00	90.00	359.43	10,000.00	3,733.07	-86.75	3,734.00	0.00	0.00	0.00
14,000.00	90.00	359.43	10,000.00	3,833.07	-87.75	3,834.00	0.00	0.00	0.00
14,100.00	90.00	359.43	10,000.00	3,933.06	-88.74	3,934.00	0.00	0.00	0.00
14,200.00	90.00	359.43	10,000.00	4,033.06	-89.74	4,033.99	0.00	0.00	0.00
14,300.00	90.00	359.43	10,000.00	4,133.05	-90.73	4,133.99	0.00	0.00	0.00
14,400.00	90.00	359.43	10,000.00	4,233.05	-91.73	4,233.99	0.00	0.00	0.00
14,500.00	90.00	359.43	10,000.00	4,333.04	-92.72	4,333.99	0.00	0.00	0.00
14,600.00	90.00	359.43	10,000.00	4,433.04	-93.72	4,433.99	0.00	0.00	0.00
14,700.00	90.00	359.43	10,000.00	4,533.03	-94.71	4,533.98	0.00	0.00	0.00
14,800.00	90.00	359.43	10,000.00	4,633.03	-95.71	4,633.98	0.00	0.00	0.00
14,900.00	90.00	359.43	10,000.00	4,733.02	-96.70	4,733.98	0.00	0.00	0.00
15,000.00	90.00	359.43	10,000.00	4,833.02	-97.70	4,833.98	0.00	0.00	0.00
15,100.00	90.00	359.43	10,000.00	4,933.01	-98.69	4,933.97	0.00	0.00	0.00
15,200.00	90.00	359.43	10,000.00	5,033.01	-99.69	5,033.97	0.00	0.00	0.00
15,300.00	90.00	359.43	10,000.00	5,133.00	-100.68	5,133.97	0.00	0.00	0.00
15,400.00	90.00	359.43	10,000.00	5,233.00	-101.67	5,233.97	0.00	0.00	0.00
15,500.00	90.00	359.43	10,000.00	5,332.99	-102.67	5,333.96	0.00	0.00	0.00
15,600.00	90.00	359.43	10,000.00	5,432.99	-103.66	5,433.96	0.00	0.00	0.00
15,700.00	90.00	359.43	10,000.00	5,532.98	-104.66	5,533.96	0.00	0.00	0.00
15,800.00	90.00	359.43	10,000.00	5,632.98	-105.65	5,633.96	0.00	0.00	0.00
15,900.00	90.00	359.43	10,000.00	5,732.97	-106.65	5,733.96	0.00	0.00	0.00
16,000.00	90.00	359.43	10,000.00	5,832.97	-107.64	5,833.95	0.00	0.00	0.00
16,100.00	90.00	359.43	10,000.00	5,932.96	-108.64	5,933.95	0.00	0.00	0.00
16,200.00	90.00	359.43	10,000.00	6,032.96	-109.63	6,033.95	0.00	0.00	0.00
16,300.00	90.00	359.43	10,000.00	6,132.95	-110.63	6,133.95	0.00	0.00	0.00
16,400.00	90.00	359.43	10,000.00	6,232.95	-111.62	6,233.94	0.00	0.00	0.00
16,500.00	90.00	359.43	10,000.00	6,332.94	-112.62	6,333.94	0.00	0.00	0.00
16,600.00	90.00	359.43	10,000.00	6,432.94	-113.61	6,433.94	0.00	0.00	0.00
16,700.00	90.00	359.43	10,000.00	6,532.93	-114.61	6,533.94	0.00	0.00	0.00
16,800.00	90.00	359.43	10,000.00	6,632.93	-115.60	6,633.93	0.00	0.00	0.00
16,900.00	90.00	359.43	10,000.00	6,732.92	-116.60	6,733.93	0.00	0.00	0.00
17,000.00	90.00	359.43	10,000.00	6,832.92	-117.59	6,833.93	0.00	0.00	0.00
17,100.00	90.00	359.43	10,000.00	6,932.91	-118.59	6,933.93	0.00	0.00	0.00
17,200.00	90.00	359.43	10,000.00	7,032.91	-119.58	7,033.93	0.00	0.00	0.00
17,300.00	90.00	359.43	10,000.00	7,132.90	-120.58	7,133.92	0.00	0.00	0.00
17,400.00	90.00	359.43	10,000.00	7,232.90	-121.57	7,233.92	0.00	0.00	0.00
17,443.10	90.00	359.43	10,000.00	7,276.00	-122.00	7,277.02	0.00	0.00	0.00

PBHL (Beowulf 33 State Com #301H)



EOG Resources, Inc.
Planning Report

Database: EDM 5000.14 Single User Db
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 83 NME)
Site: Beowulf 33 State Com
Well: #301H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #301H
TVD Reference: KB = 25' @ 3443.00usft
MD Reference: KB = 25' @ 3443.00usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
PBHL (Beowulf 33 State	0.00	0.00	10,000.00	7,276.00	-122.00	465,073.00	835,974.00	32.27496187	-103.38001949
- plan hits target center									
- Point									
FTP (Beowulf 33 State C	0.00	0.00	10,000.00	-82.00	-50.00	457,715.00	836,046.00	32.25473659	-103.37999801
- plan misses target center by 40.21usft at 10096.01usft MD (9963.20 TVD, -65.85 N, -48.64 E)									
- Point									

EOG RESOURCES, INC.
BEOWULF 33 STATE COM #301H

Hydrogen Sulfide Plan Summary

- A. All personnel shall receive proper H₂S training in accordance with Onshore Order III.C.3.a.
- B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.
- C. Required Emergency Equipment:
 - Well control equipment
 - a. Flare line 150' from wellhead to be ignited by flare gun.
 - b. Choke manifold with a remotely operated choke.
 - c. Mud/gas separator
 - Protective equipment for essential personnel.

Breathing apparatus:

- a. Rescue Packs (SCBA) — 1 unit shall be placed at each breathing area, 2 shall be stored in the safety trailer.
- b. Work/Escape packs — 4 packs shall be stored on the rig floor th sufficient air hose not to restrict work activity.
- c. Emergency Escape Packs — 4 packs shall be stored in the doghouse for emergency evacuation.

Auxiliary Rescue Equipment:

- a. Stretcher
- b. Two OSHA full body harness
- c. 100 ft 5/8 inch OSHA approved rope
- d. 1-20# class ABC fire extinguisher

■ H₂S detection and monitoring equipment:

The stationary detector with three sensors will be placed in the upper dog house if equipped, set to visually alarm @ 10 ppm and audible @ 14 ppm. Calibrate a minimum of every 30 days or as needed. The sensors will be placed in the following places: Rig floor / Bell nipple / End of flow line or where well bore fluid is being discharged.

(Gas sample tubes will be stored in the safety trailer)

■ Visual warning systems.

- a. One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site.
- b. A colored condition flag will be on display, reflecting the current condition at the site at the time.
- c. Two wind socks will be placed in strategic locations, visible from all angles.

EOG RESOURCES, INC.
BEOWULF 33 STATE COM #301H

- **Mud program:**
The mud program has been designed to minimize the volume of H₂S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H₂S bearing zones.
- **Metallurgy:**
All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.
- **Communication:**
Communication will be via cell phones and land lines where available.

**EOG RESOURCES, INC.
BEOWULF 33 STATE COM #301H**

Emergency Assistance Telephone List

PUBLIC SAFETY: **911 or**

Lea County Sheriff's Department	(575) 396-3611
Rod Coffman	
Fire Department:	
Carlsbad	(575) 885-3125
Artesia	(575) 746-5050
Hospitals:	
Carlsbad	(575) 887-4121
Artesia	(575) 748-3333
Hobbs	(575) 392-1979
Dept. of Public Safety/Carlsbad	(575) 748-9718
Highway Department	(575) 885-3281
New Mexico Oil Conservation	(575) 476-3440
U.S. Dept. of Labor	(575) 887-1174

EOG Resources, Inc.

EOG / Midland	Office (432) 686-3600
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Company Drilling Consultants:

David Dominque	Cell (985) 518-5839
Mike Vann	Cell (817) 980-5507

Drilling Engineer

Kirby Castille	Office (432) 686-3657
	Cell (432) 559-4987

Drilling Manager

Heath Work	Office (432) 686-6716
	Cell (903) 780-1179

Drilling Superintendent

Jason Fitzgerald	Office (432) 848-9029
	Cell (318) 347-3916

H&P Drilling

H&P Drilling	Office (432) 563-5757
H&P 651 Drilling Rig	Rig (903) 509-7131

Tool Pusher:

Johnathan Craig	Cell (817) 760-6374
Brad Garrett	

Safety

Brian Chandler (HSE Manager)	Office (432) 686-3695
	Cell (817) 239-0251