



EOG Resources - Midland

Lea County, NM (NAD 27 NME)

Ophelia 27

#501H

OH

Plan: Plan #1

Standard Planning Report

13 August, 2014

AUG 19 2014



EOG Resources, Inc.

Planning Report

Database: EDM 5000.1 Single User Db
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Ophelia 27
Well: #501H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well #501H
TVD Reference: KB = 25 @ 3308.0usft (H&P 415)
MD Reference: KB = 25 @ 3308.0usft (H&P 415)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Project	Lea County, NM (NAD 27 NME)		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Ophelia 27			
Site Position:		Northing:	370,025.00 usft	Latitude: 32° 0' 53.711 N
From:	Map	Easting:	741,483.00 usft	Longitude: 103° 33' 15.217 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.41 °

Well	#501H			
Well Position	+N-S	-5.0 usft	Northing:	370,020.00 usft
	+E-W	-728.0 usft	Easting:	740,755.00 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level: 3,283.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF201014	8/13/2014	(°)	(°)	(nT)
			7.17	59.92	48,177

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N-S	+E-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	359.28

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	
10,542.5	0.00	0.00	10,542.5	0.0	0.0	0.00	0.00	0.00	0.00	
11,292.5	90.00	356.80	11,020.0	476.7	-26.7	12.00	12.00	0.00	356.80	
11,385.1	90.00	359.58	11,020.0	589.2	-29.6	3.00	0.00	3.00	90.01	
15,846.0	90.00	359.58	11,020.0	4,830.0	-81.0	0.00	0.00	0.00	0.00	PBHL(OPH 27 #501H)



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 MD Reference: KB = 25 @ 3308.0usft (H&P 415)
 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)
0.0	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
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
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
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	0.00
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	0.00
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	0.00
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	0.00
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	0.00
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	0.00
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	0.00
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	0.00
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	0.00
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	0.00
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	0.00
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	0.00
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	0.00
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	0.00
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	0.00
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	0.00
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	0.00



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5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	0.00
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	0.00
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	0.00
8,200.0	0.00	0.00	8,200.0	0.0	0.0	0.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,500.0	0.0	0.0	0.0	0.00	0.00	0.00
8,600.0	0.00	0.00	8,600.0	0.0	0.0	0.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,700.0	0.0	0.0	0.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,800.0	0.0	0.0	0.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,900.0	0.0	0.0	0.0	0.00	0.00	0.00
9,000.0	0.00	0.00	9,000.0	0.0	0.0	0.0	0.00	0.00	0.00
9,100.0	0.00	0.00	9,100.0	0.0	0.0	0.0	0.00	0.00	0.00
9,200.0	0.00	0.00	9,200.0	0.0	0.0	0.0	0.00	0.00	0.00
9,300.0	0.00	0.00	9,300.0	0.0	0.0	0.0	0.00	0.00	0.00
9,400.0	0.00	0.00	9,400.0	0.0	0.0	0.0	0.00	0.00	0.00
9,500.0	0.00	0.00	9,500.0	0.0	0.0	0.0	0.00	0.00	0.00
9,600.0	0.00	0.00	9,600.0	0.0	0.0	0.0	0.00	0.00	0.00
9,700.0	0.00	0.00	9,700.0	0.0	0.0	0.0	0.00	0.00	0.00
9,800.0	0.00	0.00	9,800.0	0.0	0.0	0.0	0.00	0.00	0.00
9,900.0	0.00	0.00	9,900.0	0.0	0.0	0.0	0.00	0.00	0.00
10,000.0	0.00	0.00	10,000.0	0.0	0.0	0.0	0.00	0.00	0.00
10,100.0	0.00	0.00	10,100.0	0.0	0.0	0.0	0.00	0.00	0.00
10,200.0	0.00	0.00	10,200.0	0.0	0.0	0.0	0.00	0.00	0.00
10,300.0	0.00	0.00	10,300.0	0.0	0.0	0.0	0.00	0.00	0.00
10,400.0	0.00	0.00	10,400.0	0.0	0.0	0.0	0.00	0.00	0.00
10,500.0	0.00	0.00	10,500.0	0.0	0.0	0.0	0.00	0.00	0.00
10,542.5	0.00	0.00	10,542.5	0.0	0.0	0.0	0.00	0.00	0.00
10,550.0	0.90	356.80	10,550.0	0.1	0.0	0.1	12.00	12.00	0.00



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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)
10,575.0	3.90	356.80	10,575.0	1.1	-0.1	1.1	12.00	12.00	0.00
10,600.0	6.90	356.80	10,589.9	3.5	-0.2	3.5	12.00	12.00	0.00
10,825.0	9.90	356.80	10,624.6	7.1	-0.4	7.1	12.00	12.00	0.00
10,650.0	12.90	356.80	10,649.1	12.0	-0.7	12.0	12.00	12.00	0.00
10,675.0	15.90	356.80	10,673.3	18.2	-1.0	18.3	12.00	12.00	0.00
10,700.0	18.90	356.80	10,697.2	25.7	-1.4	25.7	12.00	12.00	0.00
10,725.0	21.90	356.80	10,720.6	34.4	-1.9	34.4	12.00	12.00	0.00
10,750.0	24.90	356.80	10,743.5	44.3	-2.5	44.3	12.00	12.00	0.00
10,775.0	27.90	356.80	10,765.9	55.4	-3.1	55.4	12.00	12.00	0.00
10,800.0	30.90	356.80	10,787.7	67.7	-3.8	67.7	12.00	12.00	0.00
10,825.0	33.90	356.80	10,808.8	81.0	-4.5	81.1	12.00	12.00	0.00
10,850.0	36.90	356.80	10,829.2	95.5	-5.3	95.6	12.00	12.00	0.00
10,875.0	39.90	356.80	10,848.8	111.0	-6.2	111.1	12.00	12.00	0.00
10,900.0	42.90	356.80	10,867.5	127.5	-7.1	127.6	12.00	12.00	0.00
10,925.0	45.90	356.80	10,885.4	145.0	-8.1	145.1	12.00	12.00	0.00
10,950.0	48.90	356.80	10,902.3	163.3	-9.1	163.4	12.00	12.00	0.00
10,975.0	51.90	356.80	10,918.2	182.6	-10.2	182.7	12.00	12.00	0.00
11,000.0	54.90	356.80	10,933.1	202.6	-11.3	202.7	12.00	12.00	0.00
11,025.0	57.90	356.80	10,947.0	223.4	-12.5	223.5	12.00	12.00	0.00
11,050.0	60.90	356.80	10,959.7	244.8	-13.7	245.0	12.00	12.00	0.00
11,075.0	63.90	356.80	10,971.3	267.0	-14.9	267.2	12.00	12.00	0.00
11,100.0	66.90	356.80	10,981.7	289.7	-16.2	289.9	12.00	12.00	0.00
11,125.0	69.90	356.80	10,990.9	312.9	-17.5	313.1	12.00	12.00	0.00
11,150.0	72.90	356.80	10,998.9	336.5	-18.8	336.8	12.00	12.00	0.00
11,175.0	75.90	356.80	11,005.6	360.6	-20.2	360.8	12.00	12.00	0.00
11,200.0	78.90	356.80	11,011.0	384.9	-21.5	385.2	12.00	12.00	0.00
11,225.0	81.90	356.80	11,015.2	409.5	-22.9	409.8	12.00	12.00	0.00
11,250.0	84.90	356.80	11,018.1	434.3	-24.3	434.6	12.00	12.00	0.00
11,275.0	87.90	356.80	11,019.6	459.3	-25.7	459.5	12.00	12.00	0.00
11,292.5	90.00	356.80	11,020.0	476.7	-26.7	477.0	12.00	12.00	0.00
11,300.0	90.00	357.03	11,020.0	484.2	-27.1	484.5	3.00	0.00	3.00
11,385.1	90.00	359.58	11,020.0	569.2	-29.6	569.6	3.00	0.00	3.00
11,400.0	90.00	359.58	11,020.0	584.2	-29.7	584.5	0.00	0.00	0.00
11,500.0	90.00	359.58	11,020.0	684.2	-30.4	684.5	0.00	0.00	0.00
11,600.0	90.00	359.58	11,020.0	784.2	-31.2	784.5	0.00	0.00	0.00
11,700.0	90.00	359.58	11,020.0	884.2	-31.9	884.5	0.00	0.00	0.00
11,800.0	90.00	359.58	11,020.0	984.2	-32.6	984.5	0.00	0.00	0.00
11,900.0	90.00	359.58	11,020.0	1,084.2	-33.4	1,084.5	0.00	0.00	0.00
12,000.0	90.00	359.58	11,020.0	1,184.1	-34.1	1,184.5	0.00	0.00	0.00
12,100.0	90.00	359.58	11,020.0	1,284.1	-34.9	1,284.5	0.00	0.00	0.00
12,200.0	90.00	359.58	11,020.0	1,384.1	-35.6	1,384.5	0.00	0.00	0.00
12,300.0	90.00	359.58	11,020.0	1,484.1	-36.3	1,484.5	0.00	0.00	0.00
12,400.0	90.00	359.58	11,020.0	1,584.1	-37.1	1,584.5	0.00	0.00	0.00
12,500.0	90.00	359.58	11,020.0	1,684.1	-37.8	1,684.5	0.00	0.00	0.00
12,600.0	90.00	359.58	11,020.0	1,784.1	-38.5	1,784.5	0.00	0.00	0.00
12,700.0	90.00	359.58	11,020.0	1,884.1	-39.3	1,884.5	0.00	0.00	0.00
12,800.0	90.00	359.58	11,020.0	1,984.1	-40.0	1,984.5	0.00	0.00	0.00
12,900.0	90.00	359.58	11,020.0	2,084.1	-40.8	2,084.5	0.00	0.00	0.00
13,000.0	90.00	359.58	11,020.0	2,184.1	-41.5	2,184.5	0.00	0.00	0.00
13,100.0	90.00	359.58	11,020.0	2,284.1	-42.2	2,284.5	0.00	0.00	0.00
13,200.0	90.00	359.58	11,020.0	2,384.1	-43.0	2,384.5	0.00	0.00	0.00
13,300.0	90.00	359.58	11,020.0	2,484.1	-43.7	2,484.5	0.00	0.00	0.00
13,400.0	90.00	359.58	11,020.0	2,584.1	-44.4	2,584.5	0.00	0.00	0.00
13,500.0	90.00	359.58	11,020.0	2,684.1	-45.2	2,684.5	0.00	0.00	0.00



EOG Resources, Inc.

Planning Report

Database: EDM 5000.1 Single User Db
Company: EOG Resources - Midland
Project: Lea County, NM (NAD 27 NME)
Site: Ophelia 27
Well: #501H
Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: Well #501H
TVD Reference: KB = 25 @ 3308.0usft (H&P 415)
MD Reference: KB = 25 @ 3308.0usft (H&P 415)
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)
13,600.0	90.00	359.58	11,020.0	2,784.1	-45.9	2,784.5	0.00	0.00	0.00
13,700.0	90.00	359.58	11,020.0	2,884.1	-46.6	2,884.5	0.00	0.00	0.00
13,800.0	90.00	359.58	11,020.0	2,984.1	-47.4	2,984.5	0.00	0.00	0.00
13,900.0	90.00	359.58	11,020.0	3,084.1	-48.1	3,084.5	0.00	0.00	0.00
14,000.0	90.00	359.58	11,020.0	3,184.1	-48.9	3,184.5	0.00	0.00	0.00
14,100.0	90.00	359.58	11,020.0	3,284.1	-49.6	3,284.5	0.00	0.00	0.00
14,200.0	90.00	359.58	11,020.0	3,384.1	-50.3	3,384.5	0.00	0.00	0.00
14,300.0	90.00	359.58	11,020.0	3,484.1	-51.1	3,484.5	0.00	0.00	0.00
14,400.0	90.00	359.58	11,020.0	3,584.1	-51.8	3,584.5	0.00	0.00	0.00
14,500.0	90.00	359.58	11,020.0	3,684.1	-52.5	3,684.5	0.00	0.00	0.00
14,600.0	90.00	359.58	11,020.0	3,784.1	-53.3	3,784.4	0.00	0.00	0.00
14,700.0	90.00	359.58	11,020.0	3,884.1	-54.0	3,884.4	0.00	0.00	0.00
14,800.0	90.00	359.58	11,020.0	3,984.1	-54.8	3,984.4	0.00	0.00	0.00
14,900.0	90.00	359.58	11,020.0	4,084.1	-55.5	4,084.4	0.00	0.00	0.00
15,000.0	90.00	359.58	11,020.0	4,184.1	-56.2	4,184.4	0.00	0.00	0.00
15,100.0	90.00	359.58	11,020.0	4,284.1	-57.0	4,284.4	0.00	0.00	0.00
15,200.0	90.00	359.58	11,020.0	4,384.1	-57.7	4,384.4	0.00	0.00	0.00
15,300.0	90.00	359.58	11,020.0	4,484.1	-58.4	4,484.4	0.00	0.00	0.00
15,400.0	90.00	359.58	11,020.0	4,584.1	-59.2	4,584.4	0.00	0.00	0.00
15,500.0	90.00	359.58	11,020.0	4,684.1	-59.9	4,684.4	0.00	0.00	0.00
15,600.0	90.00	359.58	11,020.0	4,784.1	-60.7	4,784.4	0.00	0.00	0.00
15,646.0	90.00	359.58	11,020.0	4,830.0	-61.0	4,830.4	0.00	0.00	0.00

PBHL(OPH 27 #501H)

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL(OPH 27 #501H)	0.00	0.00	11,020.0	4,830.0	-61.0	374,650.00	740,694.00	32° 1' 41.515 N	103° 33' 23.978 W
- plan hits target center									
- Point									

EOG RESOURCES, INC.
OPHELIA 27 #501H

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/Escapes packs — 4 packs shall be stored on the rig floor with 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.
OPHELIA 27 #501H

- **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.