



NM OIL CONSERVATION
ARTESIA DISTRICT

OCT 18 2018

RECEIVED

EOG Resources - Midland

Eddy County, NM (NAD 83 NME)

Torpedo 11 State Com

#721H

30-015-45361

OH

Plan: Plan #0.1

Standard Planning Report

15 October, 2018

Database: EDM 5000.14
 Company: EOG Resources - Midland
 Project: Eddy County, NM (NAD 83 NME)
 Site: Torpedo 11 State Com
 Well: #721H
 Wellbore: OH
 Design: Plan #0.1

Local Co-ordinate Reference: Well #721H
 TVD Reference: KB = 25' @ 3207.0usft
 MD Reference: KB = 25' @ 3207.0usft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Project:	Eddy 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	Torpedo 11 State Com				
Site Position:		Northing:	418,848.00 usft	Latitude:	32° 9' 4.984 N
From:	Map	Easting:	592,304.00 usft	Longitude:	104° 10' 7.132 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.09 °

Well	#721H					
Well Position	+N/-S	0.0 usft	Northing:	418,848.00 usft	Latitude:	32° 9' 4.984 N
	+E/-W	33.0 usft	Easting:	592,337.00 usft	Longitude:	104° 10' 6.748 W
Position Uncertainty		0.0 usft	Wellhead Elevation:		Ground Level:	3,182.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/15/2018	7.08	59.88	47,696.63423994

Design	Plan #0.1				
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	177.98	

Plan Survey Tool Program	Date	10/15/2018			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	19,201.9 Plan #0.1 (OH)	MWD		
			OWSG MWD - Standard		

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	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,171.8	3.44	62.49	3,171.7	2.4	4.6	2.00	2.00	0.00	62.49	
8,418.3	3.44	62.49	8,408.8	147.6	283.4	0.00	0.00	0.00	0.00	
8,590.1	0.00	0.00	8,580.5	150.0	288.0	2.00	-2.00	0.00	180.00	KOP(Torpedo 11 SC #
9,340.1	90.00	179.60	9,058.0	-327.5	291.3	12.00	12.00	23.95	179.60	
19,201.9	90.00	179.60	9,058.0	-10,189.0	360.0	0.00	0.00	0.00	0.00	PBHL(Torpedo 11 SC

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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	2.00	62.49	3,100.0	0.8	1.5	-0.8	2.00	2.00	0.00
3,171.8	3.44	62.49	3,171.7	2.4	4.6	-2.2	2.00	2.00	0.00
3,200.0	3.44	62.49	3,199.8	3.2	6.1	-2.9	0.00	0.00	0.00
3,300.0	3.44	62.49	3,299.7	5.9	11.4	-5.5	0.00	0.00	0.00
3,400.0	3.44	62.49	3,399.5	8.7	16.7	-8.1	0.00	0.00	0.00
3,500.0	3.44	62.49	3,499.3	11.5	22.0	-10.7	0.00	0.00	0.00
3,600.0	3.44	62.49	3,599.1	14.2	27.3	-13.3	0.00	0.00	0.00
3,700.0	3.44	62.49	3,698.9	17.0	32.6	-15.8	0.00	0.00	0.00
3,800.0	3.44	62.49	3,798.8	19.8	38.0	-18.4	0.00	0.00	0.00
3,900.0	3.44	62.49	3,898.6	22.5	43.3	-21.0	0.00	0.00	0.00
4,000.0	3.44	62.49	3,998.4	25.3	48.6	-23.6	0.00	0.00	0.00
4,100.0	3.44	62.49	4,098.2	28.1	53.9	-26.2	0.00	0.00	0.00
4,200.0	3.44	62.49	4,198.0	30.8	59.2	-28.7	0.00	0.00	0.00
4,300.0	3.44	62.49	4,297.9	33.6	64.5	-31.3	0.00	0.00	0.00
4,400.0	3.44	62.49	4,397.7	36.4	69.8	-33.9	0.00	0.00	0.00
4,500.0	3.44	62.49	4,497.5	39.1	75.2	-36.5	0.00	0.00	0.00
4,600.0	3.44	62.49	4,597.3	41.9	80.5	-39.0	0.00	0.00	0.00
4,700.0	3.44	62.49	4,697.2	44.7	85.8	-41.6	0.00	0.00	0.00
4,800.0	3.44	62.49	4,797.0	47.5	91.1	-44.2	0.00	0.00	0.00
4,900.0	3.44	62.49	4,896.8	50.2	96.4	-46.8	0.00	0.00	0.00
5,000.0	3.44	62.49	4,996.6	53.0	101.7	-49.4	0.00	0.00	0.00
5,100.0	3.44	62.49	5,096.4	55.8	107.1	-51.9	0.00	0.00	0.00
5,200.0	3.44	62.49	5,196.3	58.5	112.4	-54.5	0.00	0.00	0.00

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5,300.0	3.44	62.49	5,296.1	61.3	117.7	-57.1	0.00	0.00	0.00
5,400.0	3.44	62.49	5,395.9	64.1	123.0	-59.7	0.00	0.00	0.00
5,500.0	3.44	62.49	5,495.7	66.8	128.3	-62.3	0.00	0.00	0.00
5,600.0	3.44	62.49	5,595.5	69.6	133.6	-64.8	0.00	0.00	0.00
5,700.0	3.44	62.49	5,695.4	72.4	138.9	-67.4	0.00	0.00	0.00
5,800.0	3.44	62.49	5,795.2	75.1	144.3	-70.0	0.00	0.00	0.00
5,900.0	3.44	62.49	5,895.0	77.9	149.6	-72.6	0.00	0.00	0.00
6,000.0	3.44	62.49	5,994.8	80.7	154.9	-75.2	0.00	0.00	0.00
6,100.0	3.44	62.49	6,094.6	83.4	160.2	-77.7	0.00	0.00	0.00
6,200.0	3.44	62.49	6,194.5	86.2	165.5	-80.3	0.00	0.00	0.00
6,300.0	3.44	62.49	6,294.3	89.0	170.8	-82.9	0.00	0.00	0.00
6,400.0	3.44	62.49	6,394.1	91.7	176.2	-85.5	0.00	0.00	0.00
6,500.0	3.44	62.49	6,493.9	94.5	181.5	-88.0	0.00	0.00	0.00
6,600.0	3.44	62.49	6,593.7	97.3	186.8	-90.6	0.00	0.00	0.00
6,700.0	3.44	62.49	6,693.6	100.1	192.1	-93.2	0.00	0.00	0.00
6,800.0	3.44	62.49	6,793.4	102.8	197.4	-95.8	0.00	0.00	0.00
6,900.0	3.44	62.49	6,893.2	105.6	202.7	-98.4	0.00	0.00	0.00
7,000.0	3.44	62.49	6,993.0	108.4	208.0	-100.9	0.00	0.00	0.00
7,100.0	3.44	62.49	7,092.8	111.1	213.4	-103.5	0.00	0.00	0.00
7,200.0	3.44	62.49	7,192.7	113.9	218.7	-106.1	0.00	0.00	0.00
7,300.0	3.44	62.49	7,292.5	116.7	224.0	-108.7	0.00	0.00	0.00
7,400.0	3.44	62.49	7,392.3	119.4	229.3	-111.3	0.00	0.00	0.00
7,500.0	3.44	62.49	7,492.1	122.2	234.6	-113.8	0.00	0.00	0.00
7,600.0	3.44	62.49	7,591.9	125.0	239.9	-116.4	0.00	0.00	0.00
7,700.0	3.44	62.49	7,691.8	127.7	245.3	-119.0	0.00	0.00	0.00
7,800.0	3.44	62.49	7,791.6	130.5	250.6	-121.6	0.00	0.00	0.00
7,900.0	3.44	62.49	7,891.4	133.3	255.9	-124.2	0.00	0.00	0.00
8,000.0	3.44	62.49	7,991.2	136.0	261.2	-126.7	0.00	0.00	0.00
8,100.0	3.44	62.49	8,091.0	138.8	266.5	-129.3	0.00	0.00	0.00
8,200.0	3.44	62.49	8,190.9	141.6	271.8	-131.9	0.00	0.00	0.00
8,300.0	3.44	62.49	8,290.7	144.3	277.1	-134.5	0.00	0.00	0.00
8,400.0	3.44	62.49	8,390.5	147.1	282.5	-137.0	0.00	0.00	0.00
8,418.3	3.44	62.49	8,408.8	147.6	283.4	-137.5	0.00	0.00	0.00
8,500.0	1.80	62.49	8,490.4	149.3	286.7	-139.1	2.00	-2.00	0.00
8,590.1	0.00	0.00	8,580.5	150.0	288.0	-139.7	2.00	-2.00	0.00
8,600.0	1.18	179.60	8,590.4	149.9	288.0	-139.6	12.00	12.00	0.00
8,625.0	4.18	179.60	8,615.3	148.7	288.0	-138.5	12.00	12.00	0.00
8,650.0	7.18	179.60	8,640.2	146.3	288.0	-136.0	12.00	12.00	0.00
8,675.0	10.18	179.60	8,664.9	142.5	288.1	-132.2	12.00	12.00	0.00
8,700.0	13.18	179.60	8,689.4	137.4	288.1	-127.2	12.00	12.00	0.00
8,725.0	16.18	179.60	8,713.6	131.1	288.1	-120.8	12.00	12.00	0.00
8,750.0	19.18	179.60	8,737.4	123.5	288.2	-113.2	12.00	12.00	0.00
8,775.0	22.18	179.60	8,760.8	114.7	288.2	-104.4	12.00	12.00	0.00
8,800.0	25.18	179.60	8,783.7	104.6	288.3	-94.4	12.00	12.00	0.00
8,825.0	28.18	179.60	8,806.0	93.4	288.4	-83.2	12.00	12.00	0.00
8,850.0	31.18	179.60	8,827.7	81.0	288.5	-70.8	12.00	12.00	0.00
8,875.0	34.18	179.60	8,848.8	67.5	288.6	-57.3	12.00	12.00	0.00
8,900.0	37.18	179.60	8,869.1	52.9	288.7	-42.7	12.00	12.00	0.00
8,925.0	40.18	179.60	8,888.6	37.3	288.8	-27.1	12.00	12.00	0.00
8,950.0	43.18	179.60	8,907.2	20.7	288.9	-10.5	12.00	12.00	0.00
8,975.0	46.18	179.60	8,925.0	3.1	289.0	7.1	12.00	12.00	0.00
9,000.0	49.18	179.60	8,941.8	-15.4	289.2	25.6	12.00	12.00	0.00
9,025.0	52.18	179.60	8,957.7	-34.7	289.3	44.9	12.00	12.00	0.00
9,050.0	55.18	179.60	8,972.5	-54.9	289.4	65.0	12.00	12.00	0.00

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9,075.0	58.18	179.60	8,986.2	-75.7	289.6	85.9	12.00	12.00	0.00
9,100.0	61.18	179.60	8,998.8	-97.3	289.7	107.5	12.00	12.00	0.00
9,125.0	64.18	179.60	9,010.3	-119.5	289.9	129.7	12.00	12.00	0.00
9,150.0	67.18	179.60	9,020.6	-142.3	290.0	152.5	12.00	12.00	0.00
9,175.0	70.18	179.60	9,029.7	-165.6	290.2	175.7	12.00	12.00	0.00
9,200.0	73.18	179.60	9,037.5	-189.3	290.4	199.5	12.00	12.00	0.00
9,225.0	76.18	179.60	9,044.1	-213.4	290.5	223.6	12.00	12.00	0.00
9,250.0	79.18	179.60	9,049.5	-237.9	290.7	248.0	12.00	12.00	0.00
9,275.0	82.18	179.60	9,053.5	-262.5	290.9	272.6	12.00	12.00	0.00
9,300.0	85.18	179.60	9,056.3	-287.4	291.0	297.5	12.00	12.00	0.00
9,325.0	88.18	179.60	9,057.7	-312.3	291.2	322.4	12.00	12.00	0.00
9,340.1	90.00	179.60	9,058.0	-327.5	291.3	337.5	12.00	12.00	0.00
9,400.0	90.00	179.60	9,058.0	-387.3	291.7	397.4	0.00	0.00	0.00
9,500.0	90.00	179.60	9,058.0	-487.3	292.4	497.3	0.00	0.00	0.00
9,600.0	90.00	179.60	9,058.0	-587.3	293.1	597.3	0.00	0.00	0.00
9,700.0	90.00	179.60	9,058.0	-687.3	293.8	697.3	0.00	0.00	0.00
9,800.0	90.00	179.60	9,058.0	-787.3	294.5	797.2	0.00	0.00	0.00
9,900.0	90.00	179.60	9,058.0	-887.3	295.2	897.2	0.00	0.00	0.00
10,000.0	90.00	179.60	9,058.0	-987.3	295.9	997.1	0.00	0.00	0.00
10,100.0	90.00	179.60	9,058.0	-1,087.3	296.6	1,097.1	0.00	0.00	0.00
10,200.0	90.00	179.60	9,058.0	-1,187.3	297.3	1,197.1	0.00	0.00	0.00
10,300.0	90.00	179.60	9,058.0	-1,287.3	298.0	1,297.0	0.00	0.00	0.00
10,400.0	90.00	179.60	9,058.0	-1,387.3	298.7	1,397.0	0.00	0.00	0.00
10,500.0	90.00	179.60	9,058.0	-1,487.3	299.4	1,496.9	0.00	0.00	0.00
10,600.0	90.00	179.60	9,058.0	-1,587.3	300.1	1,596.9	0.00	0.00	0.00
10,700.0	90.00	179.60	9,058.0	-1,687.3	300.8	1,696.9	0.00	0.00	0.00
10,800.0	90.00	179.60	9,058.0	-1,787.3	301.5	1,796.8	0.00	0.00	0.00
10,900.0	90.00	179.60	9,058.0	-1,887.3	302.2	1,896.8	0.00	0.00	0.00
11,000.0	90.00	179.60	9,058.0	-1,987.3	302.9	1,996.7	0.00	0.00	0.00
11,100.0	90.00	179.60	9,058.0	-2,087.3	303.6	2,096.7	0.00	0.00	0.00
11,200.0	90.00	179.60	9,058.0	-2,187.3	304.3	2,196.7	0.00	0.00	0.00
11,300.0	90.00	179.60	9,058.0	-2,287.3	305.0	2,296.6	0.00	0.00	0.00
11,400.0	90.00	179.60	9,058.0	-2,387.3	305.7	2,396.6	0.00	0.00	0.00
11,500.0	90.00	179.60	9,058.0	-2,487.3	306.4	2,496.5	0.00	0.00	0.00
11,600.0	90.00	179.60	9,058.0	-2,587.3	307.1	2,596.5	0.00	0.00	0.00
11,700.0	90.00	179.60	9,058.0	-2,687.3	307.8	2,696.5	0.00	0.00	0.00
11,800.0	90.00	179.60	9,058.0	-2,787.3	308.5	2,796.4	0.00	0.00	0.00
11,900.0	90.00	179.60	9,058.0	-2,887.3	309.2	2,896.4	0.00	0.00	0.00
12,000.0	90.00	179.60	9,058.0	-2,987.3	309.8	2,996.3	0.00	0.00	0.00
12,100.0	90.00	179.60	9,058.0	-3,087.3	310.5	3,096.3	0.00	0.00	0.00
12,200.0	90.00	179.60	9,058.0	-3,187.2	311.2	3,196.3	0.00	0.00	0.00
12,300.0	90.00	179.60	9,058.0	-3,287.2	311.9	3,296.2	0.00	0.00	0.00
12,400.0	90.00	179.60	9,058.0	-3,387.2	312.6	3,396.2	0.00	0.00	0.00
12,500.0	90.00	179.60	9,058.0	-3,487.2	313.3	3,496.1	0.00	0.00	0.00
12,600.0	90.00	179.60	9,058.0	-3,587.2	314.0	3,596.1	0.00	0.00	0.00
12,700.0	90.00	179.60	9,058.0	-3,687.2	314.7	3,696.0	0.00	0.00	0.00
12,800.0	90.00	179.60	9,058.0	-3,787.2	315.4	3,796.0	0.00	0.00	0.00
12,900.0	90.00	179.60	9,058.0	-3,887.2	316.1	3,896.0	0.00	0.00	0.00
13,000.0	90.00	179.60	9,058.0	-3,987.2	316.8	3,995.9	0.00	0.00	0.00
13,100.0	90.00	179.60	9,058.0	-4,087.2	317.5	4,095.9	0.00	0.00	0.00
13,200.0	90.00	179.60	9,058.0	-4,187.2	318.2	4,195.8	0.00	0.00	0.00
13,300.0	90.00	179.60	9,058.0	-4,287.2	318.9	4,295.8	0.00	0.00	0.00
13,400.0	90.00	179.60	9,058.0	-4,387.2	319.6	4,395.8	0.00	0.00	0.00
13,500.0	90.00	179.60	9,058.0	-4,487.2	320.3	4,495.7	0.00	0.00	0.00

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Eddy County, NM (NAD 83 NME)
Site: Torpedo 11 State Com
Well: #721H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #721H
TVD Reference: KB = 25' @ 3207.0usft
MD Reference: KB = 25' @ 3207.0usft
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	179.60	9,058.0	-4,587.2	321.0	4,595.7	0.00	0.00	0.00
13,700.0	90.00	179.60	9,058.0	-4,687.2	321.7	4,695.6	0.00	0.00	0.00
13,800.0	90.00	179.60	9,058.0	-4,787.2	322.4	4,795.6	0.00	0.00	0.00
13,900.0	90.00	179.60	9,058.0	-4,887.2	323.1	4,895.6	0.00	0.00	0.00
14,000.0	90.00	179.60	9,058.0	-4,987.2	323.8	4,995.5	0.00	0.00	0.00
14,100.0	90.00	179.60	9,058.0	-5,087.2	324.5	5,095.5	0.00	0.00	0.00
14,200.0	90.00	179.60	9,058.0	-5,187.2	325.2	5,195.4	0.00	0.00	0.00
14,300.0	90.00	179.60	9,058.0	-5,287.2	325.9	5,295.4	0.00	0.00	0.00
14,400.0	90.00	179.60	9,058.0	-5,387.2	326.6	5,395.4	0.00	0.00	0.00
14,500.0	90.00	179.60	9,058.0	-5,487.2	327.3	5,495.3	0.00	0.00	0.00
14,600.0	90.00	179.60	9,058.0	-5,587.2	328.0	5,595.3	0.00	0.00	0.00
14,700.0	90.00	179.60	9,058.0	-5,687.2	328.6	5,695.2	0.00	0.00	0.00
14,800.0	90.00	179.60	9,058.0	-5,787.2	329.3	5,795.2	0.00	0.00	0.00
14,900.0	90.00	179.60	9,058.0	-5,887.2	330.0	5,895.2	0.00	0.00	0.00
15,000.0	90.00	179.60	9,058.0	-5,987.2	330.7	5,995.1	0.00	0.00	0.00
15,100.0	90.00	179.60	9,058.0	-6,087.2	331.4	6,095.1	0.00	0.00	0.00
15,200.0	90.00	179.60	9,058.0	-6,187.2	332.1	6,195.0	0.00	0.00	0.00
15,300.0	90.00	179.60	9,058.0	-6,287.2	332.8	6,295.0	0.00	0.00	0.00
15,400.0	90.00	179.60	9,058.0	-6,387.2	333.5	6,395.0	0.00	0.00	0.00
15,500.0	90.00	179.60	9,058.0	-6,487.2	334.2	6,494.9	0.00	0.00	0.00
15,600.0	90.00	179.60	9,058.0	-6,587.2	334.9	6,594.9	0.00	0.00	0.00
15,700.0	90.00	179.60	9,058.0	-6,687.2	335.6	6,694.8	0.00	0.00	0.00
15,800.0	90.00	179.60	9,058.0	-6,787.2	336.3	6,794.8	0.00	0.00	0.00
15,900.0	90.00	179.60	9,058.0	-6,887.2	337.0	6,894.8	0.00	0.00	0.00
16,000.0	90.00	179.60	9,058.0	-6,987.2	337.7	6,994.7	0.00	0.00	0.00
16,100.0	90.00	179.60	9,058.0	-7,087.2	338.4	7,094.7	0.00	0.00	0.00
16,200.0	90.00	179.60	9,058.0	-7,187.2	339.1	7,194.6	0.00	0.00	0.00
16,300.0	90.00	179.60	9,058.0	-7,287.1	339.8	7,294.6	0.00	0.00	0.00
16,400.0	90.00	179.60	9,058.0	-7,387.1	340.5	7,394.6	0.00	0.00	0.00
16,500.0	90.00	179.60	9,058.0	-7,487.1	341.2	7,494.5	0.00	0.00	0.00
16,600.0	90.00	179.60	9,058.0	-7,587.1	341.9	7,594.5	0.00	0.00	0.00
16,700.0	90.00	179.60	9,058.0	-7,687.1	342.6	7,694.4	0.00	0.00	0.00
16,800.0	90.00	179.60	9,058.0	-7,787.1	343.3	7,794.4	0.00	0.00	0.00
16,900.0	90.00	179.60	9,058.0	-7,887.1	344.0	7,894.4	0.00	0.00	0.00
17,000.0	90.00	179.60	9,058.0	-7,987.1	344.7	7,994.3	0.00	0.00	0.00
17,100.0	90.00	179.60	9,058.0	-8,087.1	345.4	8,094.3	0.00	0.00	0.00
17,200.0	90.00	179.60	9,058.0	-8,187.1	346.1	8,194.2	0.00	0.00	0.00
17,300.0	90.00	179.60	9,058.0	-8,287.1	346.8	8,294.2	0.00	0.00	0.00
17,400.0	90.00	179.60	9,058.0	-8,387.1	347.5	8,394.2	0.00	0.00	0.00
17,500.0	90.00	179.60	9,058.0	-8,487.1	348.1	8,494.1	0.00	0.00	0.00
17,600.0	90.00	179.60	9,058.0	-8,587.1	348.8	8,594.1	0.00	0.00	0.00
17,700.0	90.00	179.60	9,058.0	-8,687.1	349.5	8,694.0	0.00	0.00	0.00
17,800.0	90.00	179.60	9,058.0	-8,787.1	350.2	8,794.0	0.00	0.00	0.00
17,900.0	90.00	179.60	9,058.0	-8,887.1	350.9	8,894.0	0.00	0.00	0.00
18,000.0	90.00	179.60	9,058.0	-8,987.1	351.6	8,993.9	0.00	0.00	0.00
18,100.0	90.00	179.60	9,058.0	-9,087.1	352.3	9,093.9	0.00	0.00	0.00
18,200.0	90.00	179.60	9,058.0	-9,187.1	353.0	9,193.8	0.00	0.00	0.00
18,300.0	90.00	179.60	9,058.0	-9,287.1	353.7	9,293.8	0.00	0.00	0.00
18,400.0	90.00	179.60	9,058.0	-9,387.1	354.4	9,393.8	0.00	0.00	0.00
18,500.0	90.00	179.60	9,058.0	-9,487.1	355.1	9,493.7	0.00	0.00	0.00
18,600.0	90.00	179.60	9,058.0	-9,587.1	355.8	9,593.7	0.00	0.00	0.00
18,700.0	90.00	179.60	9,058.0	-9,687.1	356.5	9,693.6	0.00	0.00	0.00
18,800.0	90.00	179.60	9,058.0	-9,787.1	357.2	9,793.6	0.00	0.00	0.00
18,900.0	90.00	179.60	9,058.0	-9,887.1	357.9	9,893.6	0.00	0.00	0.00

Database: EDM 5000.14
Company: EOG Resources - Midland
Project: Eddy County, NM (NAD 83 NME)
Site: Torpedo 11 State Corn
Well: #721H
Wellbore: OH
Design: Plan #0.1

Local Co-ordinate Reference: Well #721H
TVD Reference: KB = 25' @ 3207.0usft
MD Reference: KB = 25' @ 3207.0usft
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)
19,000.0	90.00	179.60	9,058.0	-9,987.1	358.6	9,993.5	0.00	0.00	0.00
19,100.0	90.00	179.60	9,058.0	-10,087.1	359.3	10,093.5	0.00	0.00	0.00
19,201.9	90.00	179.60	9,058.0	-10,189.0	360.0	10,195.4	0.00	0.00	0.00

Design Targets

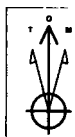
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP(Torpedo 11 SC #72 - plan hits target center - Point	0.00	0.00	8,580.5	150.0	288.0	418,998.00	592,625.00	32° 9' 6.464 N	104° 10' 3.396 W
FTP(Torpedo 11 SC #72 - plan misses target center by 39.3usft at 9152.1usft MD (9021.4 TVD, -144.3 N, 290.0 E) - Point	0.00	0.00	9,058.0	-130.0	288.0	418,718.00	592,625.00	32° 9' 3.693 N	104° 10' 3.401 W
PBHL(Torpedo 11 SC #7 - plan hits target center - Point	0.00	0.00	9,058.0	-10,189.0	360.0	408,659.00	592,697.00	32° 7' 24.146 N	104° 10' 2.743 W



Eddy County, NM (NAD 83 NME)

Torpedo 11 State Com #721H

Plan #0.1



Azimuths to Grid North
True North: -0.09°
Magnetic North: 6.99°
Magnetic Field
Strength: 47696.6anT
Dip Angle: 66.83°
Date: 10/18/2018
Model: IGRF2015

To convert a Magnetic Direction to a Grid Direction, Add 0.09°
To convert a Magnetic Direction to a True Direction, Add 7.08° East
To convert a True Direction to a Grid Direction, Subtract 0.09°

PROJECT DETAILS: Eddy 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: #721H

KB = 25' @ 3207.0usft 3182.0
Northing 418948.00 Easting 592337.00 Latitude 32° 9' 4.984 N Longitude 104° 10' 6.748 W

SECTION DETAILS

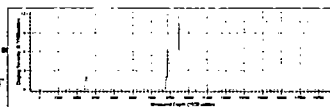
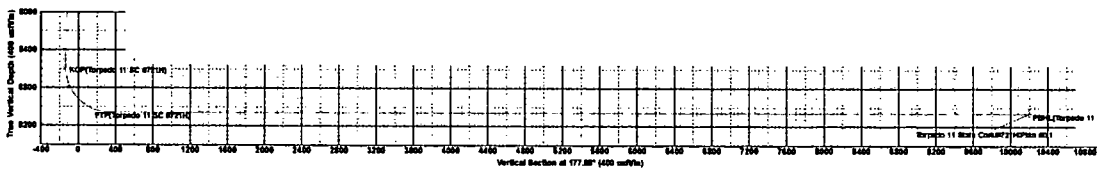
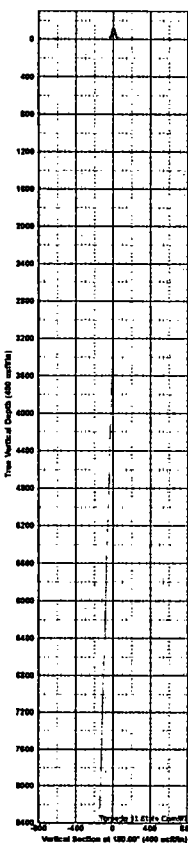
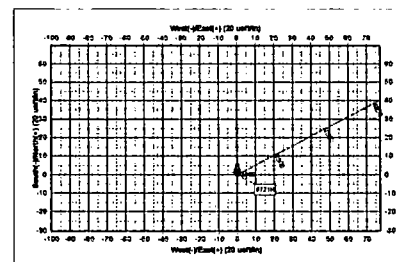
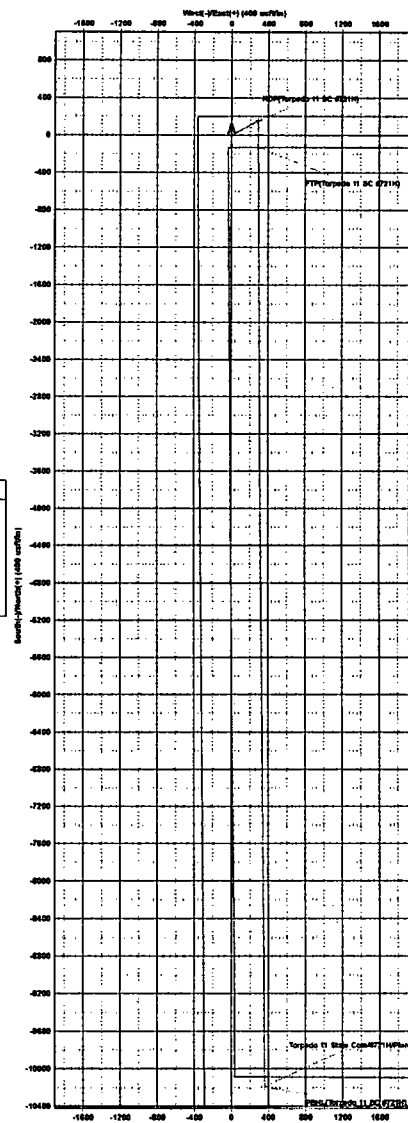
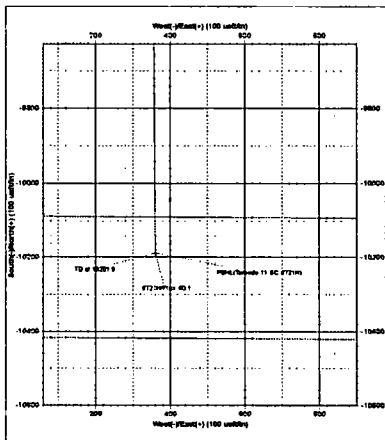
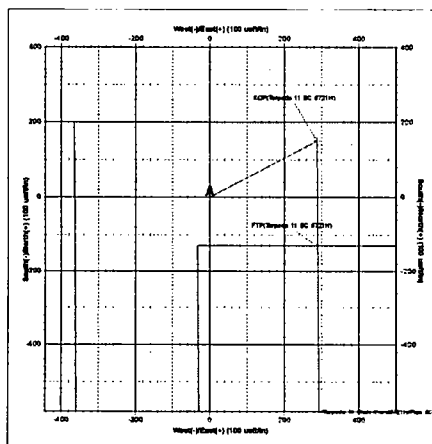
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Diag	TFace	VSeal	Target
1	0.0	0.00	0.00	0.0	0.0	0.00	0.00	0.00	0.0	
2	3000.0	0.00	0.00	3000.0	0.0	0.00	0.00	0.00	0.0	
3	3171.8	3.44	62.49	3171.7	2.4	4.6	2.00	62.49	-2.2	
4	6418.3	3.44	62.49	6408.8	147.6	263.4	0.00	0.00	-137.5	
5	8590.1	0.00	0.00	8590.1	150.0	2.00	180.00		-139.7	KOP(Torpedo 11 SC #721H)
6	9340.1	90.00	179.60	9058.0	-327.5	291.3	12.00	179.60	337.5	PBHL(Torpedo 11 SC #721H)
7	19201.9	90.00	179.60	9058.0	-10189.0	360.0	0.00	0.00	10195.4	

CASING DETAILS

No casing data is available

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
KOP(Torpedo 11 SC #721H)	8590.0	150.0	298.0	418998.00	592625.00
FTP(Torpedo 11 SC #721H)	9058.0	-133.0	298.0	418718.00	592626.00
PBHL(Torpedo 11 SC #721H)	9058.0	-10189.0	380.0	408658.00	592697.00



Print Date: 10/18/2018
10:14:14 AM
User: J. Smith