

AMEREDEV

HOBBS OCD

JUL 29 2019

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Ameredev Operating, LLC.

MAG/AC

MAG/AC#1N

Amen Corner 121H

Wellbore #1

Plan: Design #1

Standard Planning Report

11 July, 2019

Database:	EDM5000	Local Co-ordinate Reference:	Well Amen Corner 121H
Company:	Ameredev Operating, LLC.	TVD Reference:	KB @ 2938.0usft
Project:	MAG/AC	MD Reference:	KB @ 2938.0usft
Site:	MAG/AC#1N	North Reference:	Grid
Well:	Amen Corner 121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	MAG/AC		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		MAG/AC#1N			
Site Position:		Northing:	373,452.44 usft	Latitude:	32° 1' 19.796 N
From:	Lat/Long	Easting:	873,738.68 usft	Longitude:	103° 15' 38.879 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.57 °

Well	Amen Corner 121H					
Well Position	+N/-S	0.0 usft	Northing:	373,452.44 usft	Latitude:	32° 1' 19.796 N
	+E/-W	0.0 usft	Easting:	873,738.68 usft	Longitude:	103° 15' 38.879 W
Position Uncertainty	0.0 usft	Wellhead Elevation:		Ground Level:	2,911.0 usft	

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	7/11/2019	6.57	59.90	47,641.84598311

Design	Design #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	179.63

Plan Survey Tool Program			Date	7/11/2019	
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	20,265.3	Design #1 (Wellbore #1)	MWD	
			OWSG MWD - Standard		

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Site: MAG/AC#1N
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Wellbore: Wellbore #1
Design: Design #1

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TVD Reference: KB @ 2938.0usft
MD Reference: KB @ 2938.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,300.0	6.00	331.00	2,299.5	13.7	-7.6	2.00	2.00	0.00	331.00	
6,724.8	6.00	331.00	6,700.0	418.3	-231.8	0.00	0.00	0.00	0.00	
7,024.8	0.00	0.00	6,999.5	432.0	-239.4	2.00	-2.00	0.00	180.00	
11,625.3	0.00	0.00	11,600.0	432.0	-239.4	0.00	0.00	0.00	0.00	
12,256.1	75.69	162.44	12,062.7	89.3	-131.0	12.00	12.00	0.00	162.44	
12,516.5	75.69	162.44	12,127.0	-151.3	-54.8	0.00	0.00	0.00	0.00	
12,700.4	90.00	179.41	12,150.0	-330.4	-26.7	12.00	7.78	9.23	51.01	AC121 EOC
20,265.3	90.00	179.41	12,150.0	-7,895.0	50.8	0.00	0.00	0.00	0.00	AC121 BHL

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Wellbore: Wellbore #1
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Local Co-ordinate Reference: Well Amen Corner 121H
TVD Reference: KB @ 2938.0usft
MD Reference: KB @ 2938.0usft
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)
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	2.00	331.00	2,100.0	1.5	-0.8	-1.5	2.00	2.00	0.00
2,200.0	4.00	331.00	2,199.8	6.1	-3.4	-6.1	2.00	2.00	0.00
2,300.0	6.00	331.00	2,299.5	13.7	-7.6	-13.8	2.00	2.00	0.00
2,400.0	6.00	331.00	2,398.9	22.9	-12.7	-22.9	0.00	0.00	0.00
2,500.0	6.00	331.00	2,498.4	32.0	-17.7	-32.1	0.00	0.00	0.00
2,600.0	6.00	331.00	2,597.8	41.2	-22.8	-41.3	0.00	0.00	0.00
2,700.0	6.00	331.00	2,697.3	50.3	-27.9	-50.5	0.00	0.00	0.00
2,800.0	6.00	331.00	2,796.7	59.4	-32.9	-59.6	0.00	0.00	0.00
2,900.0	6.00	331.00	2,896.2	68.6	-38.0	-68.8	0.00	0.00	0.00
3,000.0	6.00	331.00	2,995.6	77.7	-43.1	-78.0	0.00	0.00	0.00
3,100.0	6.00	331.00	3,095.1	86.9	-48.1	-87.2	0.00	0.00	0.00
3,200.0	6.00	331.00	3,194.5	96.0	-53.2	-96.3	0.00	0.00	0.00
3,300.0	6.00	331.00	3,294.0	105.1	-58.3	-105.5	0.00	0.00	0.00
3,400.0	6.00	331.00	3,393.4	114.3	-63.4	-114.7	0.00	0.00	0.00
3,500.0	6.00	331.00	3,492.9	123.4	-68.4	-123.9	0.00	0.00	0.00
3,600.0	6.00	331.00	3,592.3	132.6	-73.5	-133.0	0.00	0.00	0.00
3,700.0	6.00	331.00	3,691.8	141.7	-78.6	-142.2	0.00	0.00	0.00
3,800.0	6.00	331.00	3,791.2	150.9	-83.6	-151.4	0.00	0.00	0.00
3,900.0	6.00	331.00	3,890.7	160.0	-88.7	-160.6	0.00	0.00	0.00
4,000.0	6.00	331.00	3,990.1	169.1	-93.8	-169.7	0.00	0.00	0.00
4,100.0	6.00	331.00	4,089.6	178.3	-98.8	-178.9	0.00	0.00	0.00
4,200.0	6.00	331.00	4,189.0	187.4	-103.9	-188.1	0.00	0.00	0.00
4,300.0	6.00	331.00	4,288.5	196.6	-109.0	-197.3	0.00	0.00	0.00
4,400.0	6.00	331.00	4,387.9	205.7	-114.0	-206.4	0.00	0.00	0.00
4,500.0	6.00	331.00	4,487.4	214.9	-119.1	-215.6	0.00	0.00	0.00
4,600.0	6.00	331.00	4,586.9	224.0	-124.2	-224.8	0.00	0.00	0.00
4,700.0	6.00	331.00	4,686.3	233.1	-129.2	-234.0	0.00	0.00	0.00
4,800.0	6.00	331.00	4,785.8	242.3	-134.3	-243.1	0.00	0.00	0.00
4,900.0	6.00	331.00	4,885.2	251.4	-139.4	-252.3	0.00	0.00	0.00
5,000.0	6.00	331.00	4,984.7	260.6	-144.4	-261.5	0.00	0.00	0.00
5,100.0	6.00	331.00	5,084.1	269.7	-149.5	-270.7	0.00	0.00	0.00
5,200.0	6.00	331.00	5,183.6	278.9	-154.6	-279.8	0.00	0.00	0.00
5,300.0	6.00	331.00	5,283.0	288.0	-159.6	-289.0	0.00	0.00	0.00

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Site:	MAG/AC#1N	North Reference:	Grid
Well:	Amen Corner 121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #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)
5,400.0	6.00	331.00	5,382.5	297.1	-164.7	-298.2	0.00	0.00	0.00
5,500.0	6.00	331.00	5,481.9	306.3	-169.8	-307.4	0.00	0.00	0.00
5,600.0	6.00	331.00	5,581.4	315.4	-174.8	-316.5	0.00	0.00	0.00
5,700.0	6.00	331.00	5,680.8	324.6	-179.9	-325.7	0.00	0.00	0.00
5,800.0	6.00	331.00	5,780.3	333.7	-185.0	-334.9	0.00	0.00	0.00
5,900.0	6.00	331.00	5,879.7	342.8	-190.0	-344.1	0.00	0.00	0.00
6,000.0	6.00	331.00	5,979.2	352.0	-195.1	-353.2	0.00	0.00	0.00
6,100.0	6.00	331.00	6,078.6	361.1	-200.2	-362.4	0.00	0.00	0.00
6,200.0	6.00	331.00	6,178.1	370.3	-205.2	-371.6	0.00	0.00	0.00
6,300.0	6.00	331.00	6,277.5	379.4	-210.3	-380.8	0.00	0.00	0.00
6,400.0	6.00	331.00	6,377.0	388.6	-215.4	-389.9	0.00	0.00	0.00
6,500.0	6.00	331.00	6,476.4	397.7	-220.4	-399.1	0.00	0.00	0.00
6,600.0	6.00	331.00	6,575.9	406.8	-225.5	-408.3	0.00	0.00	0.00
6,700.0	6.00	331.00	6,675.3	416.0	-230.6	-417.5	0.00	0.00	0.00
6,724.8	6.00	331.00	6,700.0	418.3	-231.8	-419.7	0.00	0.00	0.00
6,800.0	4.50	331.00	6,774.9	424.3	-235.2	-425.8	2.00	-2.00	0.00
6,900.0	2.50	331.00	6,874.7	429.6	-238.1	-431.1	2.00	-2.00	0.00
7,000.0	0.50	331.00	6,974.7	431.9	-239.4	-433.4	2.00	-2.00	0.00
7,024.8	0.00	0.00	6,999.5	432.0	-239.4	-433.5	2.00	-2.00	0.00
7,100.0	0.00	0.00	7,074.7	432.0	-239.4	-433.5	0.00	0.00	0.00
7,200.0	0.00	0.00	7,174.7	432.0	-239.4	-433.5	0.00	0.00	0.00
7,300.0	0.00	0.00	7,274.7	432.0	-239.4	-433.5	0.00	0.00	0.00
7,400.0	0.00	0.00	7,374.7	432.0	-239.4	-433.5	0.00	0.00	0.00
7,500.0	0.00	0.00	7,474.7	432.0	-239.4	-433.5	0.00	0.00	0.00
7,600.0	0.00	0.00	7,574.7	432.0	-239.4	-433.5	0.00	0.00	0.00
7,700.0	0.00	0.00	7,674.7	432.0	-239.4	-433.5	0.00	0.00	0.00
7,800.0	0.00	0.00	7,774.7	432.0	-239.4	-433.5	0.00	0.00	0.00
7,900.0	0.00	0.00	7,874.7	432.0	-239.4	-433.5	0.00	0.00	0.00
8,000.0	0.00	0.00	7,974.7	432.0	-239.4	-433.5	0.00	0.00	0.00
8,100.0	0.00	0.00	8,074.7	432.0	-239.4	-433.5	0.00	0.00	0.00
8,200.0	0.00	0.00	8,174.7	432.0	-239.4	-433.5	0.00	0.00	0.00
8,300.0	0.00	0.00	8,274.7	432.0	-239.4	-433.5	0.00	0.00	0.00
8,400.0	0.00	0.00	8,374.7	432.0	-239.4	-433.5	0.00	0.00	0.00
8,500.0	0.00	0.00	8,474.7	432.0	-239.4	-433.5	0.00	0.00	0.00
8,600.0	0.00	0.00	8,574.7	432.0	-239.4	-433.5	0.00	0.00	0.00
8,700.0	0.00	0.00	8,674.7	432.0	-239.4	-433.5	0.00	0.00	0.00
8,800.0	0.00	0.00	8,774.7	432.0	-239.4	-433.5	0.00	0.00	0.00
8,900.0	0.00	0.00	8,874.7	432.0	-239.4	-433.5	0.00	0.00	0.00
9,000.0	0.00	0.00	8,974.7	432.0	-239.4	-433.5	0.00	0.00	0.00
9,100.0	0.00	0.00	9,074.7	432.0	-239.4	-433.5	0.00	0.00	0.00
9,200.0	0.00	0.00	9,174.7	432.0	-239.4	-433.5	0.00	0.00	0.00
9,300.0	0.00	0.00	9,274.7	432.0	-239.4	-433.5	0.00	0.00	0.00
9,400.0	0.00	0.00	9,374.7	432.0	-239.4	-433.5	0.00	0.00	0.00
9,500.0	0.00	0.00	9,474.7	432.0	-239.4	-433.5	0.00	0.00	0.00
9,600.0	0.00	0.00	9,574.7	432.0	-239.4	-433.5	0.00	0.00	0.00
9,700.0	0.00	0.00	9,674.7	432.0	-239.4	-433.5	0.00	0.00	0.00
9,800.0	0.00	0.00	9,774.7	432.0	-239.4	-433.5	0.00	0.00	0.00
9,900.0	0.00	0.00	9,874.7	432.0	-239.4	-433.5	0.00	0.00	0.00
10,000.0	0.00	0.00	9,974.7	432.0	-239.4	-433.5	0.00	0.00	0.00
10,100.0	0.00	0.00	10,074.7	432.0	-239.4	-433.5	0.00	0.00	0.00
10,200.0	0.00	0.00	10,174.7	432.0	-239.4	-433.5	0.00	0.00	0.00
10,300.0	0.00	0.00	10,274.7	432.0	-239.4	-433.5	0.00	0.00	0.00
10,400.0	0.00	0.00	10,374.7	432.0	-239.4	-433.5	0.00	0.00	0.00
10,500.0	0.00	0.00	10,474.7	432.0	-239.4	-433.5	0.00	0.00	0.00

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Site:	MAG/AC#1N	North Reference:	Grid
Well:	Amen Corner 121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #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)
10,600.0	0.00	0.00	10,574.7	432.0	-239.4	-433.5	0.00	0.00	0.00
10,700.0	0.00	0.00	10,674.7	432.0	-239.4	-433.5	0.00	0.00	0.00
10,800.0	0.00	0.00	10,774.7	432.0	-239.4	-433.5	0.00	0.00	0.00
10,900.0	0.00	0.00	10,874.7	432.0	-239.4	-433.5	0.00	0.00	0.00
11,000.0	0.00	0.00	10,974.7	432.0	-239.4	-433.5	0.00	0.00	0.00
11,100.0	0.00	0.00	11,074.7	432.0	-239.4	-433.5	0.00	0.00	0.00
11,200.0	0.00	0.00	11,174.7	432.0	-239.4	-433.5	0.00	0.00	0.00
11,300.0	0.00	0.00	11,274.7	432.0	-239.4	-433.5	0.00	0.00	0.00
11,400.0	0.00	0.00	11,374.7	432.0	-239.4	-433.5	0.00	0.00	0.00
11,500.0	0.00	0.00	11,474.7	432.0	-239.4	-433.5	0.00	0.00	0.00
11,600.0	0.00	0.00	11,574.7	432.0	-239.4	-433.5	0.00	0.00	0.00
11,625.3	0.00	0.00	11,600.0	432.0	-239.4	-433.5	0.00	0.00	0.00
AC121 KOP									
11,700.0	8.96	162.44	11,674.4	426.4	-237.7	-427.9	12.00	12.00	0.00
11,800.0	20.96	162.44	11,770.8	401.9	-229.9	-403.3	12.00	12.00	0.00
11,900.0	32.96	162.44	11,859.8	358.7	-216.3	-360.1	12.00	12.00	0.00
12,000.0	44.96	162.44	11,937.4	298.9	-197.3	-300.1	12.00	12.00	0.00
12,100.0	56.96	162.44	12,000.3	225.0	-173.9	-226.1	12.00	12.00	0.00
12,200.0	68.96	162.44	12,045.6	140.2	-147.1	-141.1	12.00	12.00	0.00
12,256.1	75.69	162.44	12,062.7	89.3	-131.0	-90.1	12.00	12.00	0.00
12,300.0	75.69	162.44	12,073.5	48.7	-118.1	-49.5	0.00	0.00	0.00
12,400.0	75.69	162.44	12,098.2	-43.7	-88.9	43.1	0.00	0.00	0.00
12,500.0	75.69	162.44	12,122.9	-136.1	-59.7	135.7	0.00	0.00	0.00
12,516.5	75.69	162.44	12,127.0	-151.3	-54.8	150.9	0.00	0.00	0.00
12,600.0	82.11	170.28	12,143.1	-230.8	-35.6	230.6	12.00	7.68	9.40
12,700.0	89.97	179.38	12,150.0	-330.0	-26.7	329.8	12.00	7.86	9.10
12,700.4	90.00	179.41	12,150.0	-330.4	-26.7	330.2	12.00	7.89	9.04
AC121 EOC - AC121 FTP									
12,800.0	90.00	179.41	12,150.0	-430.0	-25.6	429.8	0.00	0.00	0.00
12,900.0	90.00	179.41	12,150.0	-530.0	-24.6	529.8	0.00	0.00	0.00
13,000.0	90.00	179.41	12,150.0	-630.0	-23.6	629.8	0.00	0.00	0.00
13,100.0	90.00	179.41	12,150.0	-730.0	-22.6	729.8	0.00	0.00	0.00
13,200.0	90.00	179.41	12,150.0	-830.0	-21.5	829.8	0.00	0.00	0.00
13,300.0	90.00	179.41	12,150.0	-930.0	-20.5	929.8	0.00	0.00	0.00
13,400.0	90.00	179.41	12,150.0	-1,030.0	-19.5	1,029.8	0.00	0.00	0.00
13,500.0	90.00	179.41	12,150.0	-1,130.0	-18.5	1,129.8	0.00	0.00	0.00
13,600.0	90.00	179.41	12,150.0	-1,230.0	-17.4	1,229.8	0.00	0.00	0.00
13,700.0	90.00	179.41	12,150.0	-1,330.0	-16.4	1,329.8	0.00	0.00	0.00
13,800.0	90.00	179.41	12,150.0	-1,429.9	-15.4	1,429.8	0.00	0.00	0.00
13,900.0	90.00	179.41	12,150.0	-1,529.9	-14.4	1,529.8	0.00	0.00	0.00
14,000.0	90.00	179.41	12,150.0	-1,629.9	-13.4	1,629.8	0.00	0.00	0.00
14,100.0	90.00	179.41	12,150.0	-1,729.9	-12.3	1,729.8	0.00	0.00	0.00
14,200.0	90.00	179.41	12,150.0	-1,829.9	-11.3	1,829.8	0.00	0.00	0.00
14,300.0	90.00	179.41	12,150.0	-1,929.9	-10.3	1,929.8	0.00	0.00	0.00
14,400.0	90.00	179.41	12,150.0	-2,029.9	-9.3	2,029.8	0.00	0.00	0.00
14,500.0	90.00	179.41	12,150.0	-2,129.9	-8.2	2,129.8	0.00	0.00	0.00
14,600.0	90.00	179.41	12,150.0	-2,229.9	-7.2	2,229.8	0.00	0.00	0.00
14,700.0	90.00	179.41	12,150.0	-2,329.9	-6.2	2,329.8	0.00	0.00	0.00
14,800.0	90.00	179.41	12,150.0	-2,429.9	-5.2	2,429.8	0.00	0.00	0.00
14,900.0	90.00	179.41	12,150.0	-2,529.9	-4.1	2,529.8	0.00	0.00	0.00
15,000.0	90.00	179.41	12,150.0	-2,629.9	-3.1	2,629.8	0.00	0.00	0.00
15,100.0	90.00	179.41	12,150.0	-2,729.9	-2.1	2,729.8	0.00	0.00	0.00
15,200.0	90.00	179.41	12,150.0	-2,829.9	-1.1	2,829.8	0.00	0.00	0.00
15,300.0	90.00	179.41	12,150.0	-2,929.9	0.0	2,929.8	0.00	0.00	0.00

Database:	EDM5000	Local Co-ordinate Reference:	Well Amen Corner 121H
Company:	Ameredev Operating, LLC.	TVD Reference:	KB @ 2938.0usft
Project:	MAG/AC	MD Reference:	KB @ 2938.0usft
Site:	MAG/AC#1N	North Reference:	Grid
Well:	Amen Corner 121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #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)
15,400.0	90.00	179.41	12,150.0	-3,029.9	1.0	3,029.8	0.00	0.00	0.00
15,500.0	90.00	179.41	12,150.0	-3,129.9	2.0	3,129.8	0.00	0.00	0.00
15,600.0	90.00	179.41	12,150.0	-3,229.9	3.0	3,229.8	0.00	0.00	0.00
15,700.0	90.00	179.41	12,150.0	-3,329.8	4.1	3,329.8	0.00	0.00	0.00
15,800.0	90.00	179.41	12,150.0	-3,429.8	5.1	3,429.8	0.00	0.00	0.00
15,900.0	90.00	179.41	12,150.0	-3,529.8	6.1	3,529.8	0.00	0.00	0.00
16,000.0	90.00	179.41	12,150.0	-3,629.8	7.1	3,629.8	0.00	0.00	0.00
16,100.0	90.00	179.41	12,150.0	-3,729.8	8.2	3,729.8	0.00	0.00	0.00
16,200.0	90.00	179.41	12,150.0	-3,829.8	9.2	3,829.8	0.00	0.00	0.00
16,300.0	90.00	179.41	12,150.0	-3,929.8	10.2	3,929.8	0.00	0.00	0.00
16,400.0	90.00	179.41	12,150.0	-4,029.8	11.2	4,029.8	0.00	0.00	0.00
16,500.0	90.00	179.41	12,150.0	-4,129.8	12.3	4,129.8	0.00	0.00	0.00
16,600.0	90.00	179.41	12,150.0	-4,229.8	13.3	4,229.8	0.00	0.00	0.00
16,700.0	90.00	179.41	12,150.0	-4,329.8	14.3	4,329.8	0.00	0.00	0.00
16,800.0	90.00	179.41	12,150.0	-4,429.8	15.3	4,429.8	0.00	0.00	0.00
16,900.0	90.00	179.41	12,150.0	-4,529.8	16.3	4,529.8	0.00	0.00	0.00
17,000.0	90.00	179.41	12,150.0	-4,629.8	17.4	4,629.8	0.00	0.00	0.00
17,100.0	90.00	179.41	12,150.0	-4,729.8	18.4	4,729.8	0.00	0.00	0.00
17,200.0	90.00	179.41	12,150.0	-4,829.8	19.4	4,829.8	0.00	0.00	0.00
17,300.0	90.00	179.41	12,150.0	-4,929.8	20.4	4,929.8	0.00	0.00	0.00
17,400.0	90.00	179.41	12,150.0	-5,029.8	21.5	5,029.8	0.00	0.00	0.00
17,500.0	90.00	179.41	12,150.0	-5,129.8	22.5	5,129.8	0.00	0.00	0.00
17,600.0	90.00	179.41	12,150.0	-5,229.7	23.5	5,229.8	0.00	0.00	0.00
17,700.0	90.00	179.41	12,150.0	-5,329.7	24.5	5,329.8	0.00	0.00	0.00
17,800.0	90.00	179.41	12,150.0	-5,429.7	25.6	5,429.8	0.00	0.00	0.00
17,900.0	90.00	179.41	12,150.0	-5,529.7	26.6	5,529.8	0.00	0.00	0.00
18,000.0	90.00	179.41	12,150.0	-5,629.7	27.6	5,629.8	0.00	0.00	0.00
18,100.0	90.00	179.41	12,150.0	-5,729.7	28.6	5,729.8	0.00	0.00	0.00
18,200.0	90.00	179.41	12,150.0	-5,829.7	29.7	5,829.8	0.00	0.00	0.00
18,300.0	90.00	179.41	12,150.0	-5,929.7	30.7	5,929.8	0.00	0.00	0.00
18,400.0	90.00	179.41	12,150.0	-6,029.7	31.7	6,029.8	0.00	0.00	0.00
18,500.0	90.00	179.41	12,150.0	-6,129.7	32.7	6,129.8	0.00	0.00	0.00
18,600.0	90.00	179.41	12,150.0	-6,229.7	33.8	6,229.8	0.00	0.00	0.00
18,700.0	90.00	179.41	12,150.0	-6,329.7	34.8	6,329.8	0.00	0.00	0.00
18,800.0	90.00	179.41	12,150.0	-6,429.7	35.8	6,429.8	0.00	0.00	0.00
18,900.0	90.00	179.41	12,150.0	-6,529.7	36.8	6,529.8	0.00	0.00	0.00
19,000.0	90.00	179.41	12,150.0	-6,629.7	37.9	6,629.8	0.00	0.00	0.00
19,100.0	90.00	179.41	12,150.0	-6,729.7	38.9	6,729.8	0.00	0.00	0.00
19,200.0	90.00	179.41	12,150.0	-6,829.7	39.9	6,829.8	0.00	0.00	0.00
19,300.0	90.00	179.41	12,150.0	-6,929.7	40.9	6,929.8	0.00	0.00	0.00
19,400.0	90.00	179.41	12,150.0	-7,029.7	42.0	7,029.8	0.00	0.00	0.00
19,500.0	90.00	179.41	12,150.0	-7,129.6	43.0	7,129.8	0.00	0.00	0.00
19,600.0	90.00	179.41	12,150.0	-7,229.6	44.0	7,229.8	0.00	0.00	0.00
19,700.0	90.00	179.41	12,150.0	-7,329.6	45.0	7,329.8	0.00	0.00	0.00
19,800.0	90.00	179.41	12,150.0	-7,429.6	46.1	7,429.8	0.00	0.00	0.00
19,900.0	90.00	179.41	12,150.0	-7,529.6	47.1	7,529.8	0.00	0.00	0.00
20,000.0	90.00	179.41	12,150.0	-7,629.6	48.1	7,629.8	0.00	0.00	0.00
20,100.0	90.00	179.41	12,150.0	-7,729.6	49.1	7,729.8	0.00	0.00	0.00
20,200.0	90.00	179.41	12,150.0	-7,829.6	50.1	7,829.8	0.00	0.00	0.00
AC121 LTP									
20,265.3	90.00	179.41	12,150.0	-7,895.0	50.8	7,895.1	0.00	0.00	0.00
AC121 BHL									

Database:	EDM5000	Local Co-ordinate Reference:	Well Amen Corner 121H
Company:	Ameredev Operating, LLC.	TVD Reference:	KB @ 2938.0usft
Project:	MAG/AC	MD Reference:	KB @ 2938.0usft
Site:	MAG/AC#1N	North Reference:	Grid
Well:	Amen Corner 121H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #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
AC121 EOC - plan hits target center - Point	0.00	0.00	12,150.0	-330.4	-26.7	373,122.07	873,712.02	32° 1' 16.530 N	103° 15' 39.227 W
AC121 LTP - plan misses target center by 15.3usft at 20200.0usft MD (12150.0 TVD, -7829.6 N, 50.1 E) - Point	0.00	0.00	12,150.0	-7,844.9	50.3	365,607.51	873,788.97	32° 0' 2.168 N	103° 15' 39.199 W
AC121 FTP - plan hits target center - Point	0.00	0.00	12,150.0	-330.4	-26.7	373,122.07	873,712.02	32° 1' 16.530 N	103° 15' 39.227 W
AC121 BHL - plan hits target center - Point	0.00	0.00	12,150.0	-7,895.0	50.8	365,557.49	873,789.50	32° 0' 1.673 N	103° 15' 39.199 W

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
11,625.3	11,600.0	432.0	-239.4	AC121 KOP

Database: EDM5000
Company: Ameredev Operating, LLC.
Project: MAG/AC
Site: MAG/AC#1N
Well: Amen Corner 121H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well Amen Corner 121H
TVD Reference: KB @ 2938.0usft
MD Reference: KB @ 2938.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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
AC121 EOC - plan hits target center - Point	0.00	0.00	12,150.0	-330.4	-26.7	373,122.07	873,712.02	32° 1' 16.530 N	103° 15' 39.227 W
AC121 LTP - plan misses target center by 15.3usft at 20200.0usft MD (12150.0 TVD, -7829.6 N, 50.1 E) - Point	0.00	0.00	12,150.0	-7,844.9	50.3	365,607.51	873,788.97	32° 0' 2.168 N	103° 15' 39.199 W
AC121 FTP - plan hits target center - Point	0.00	0.00	12,150.0	-330.4	-26.7	373,122.07	873,712.02	32° 1' 16.530 N	103° 15' 39.227 W
AC121 BHL - plan hits target center - Point	0.00	0.00	12,150.0	-7,895.0	50.8	365,557.49	873,789.50	32° 0' 1.673 N	103° 15' 39.199 W

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
11,625.3	11,600.0	432.0	-239.4	AC121 KOP