

Edge Energy LLC

Weld County, Co (NAD 83)

Sec. 33 Twn 1N Rng 65W

Cherry Knolls 33-10 - Slot 10

Hz

UWI:

WL:

Plan: #1

Standard Planning Report

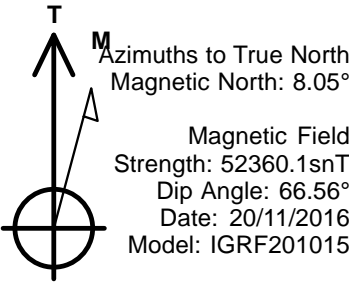
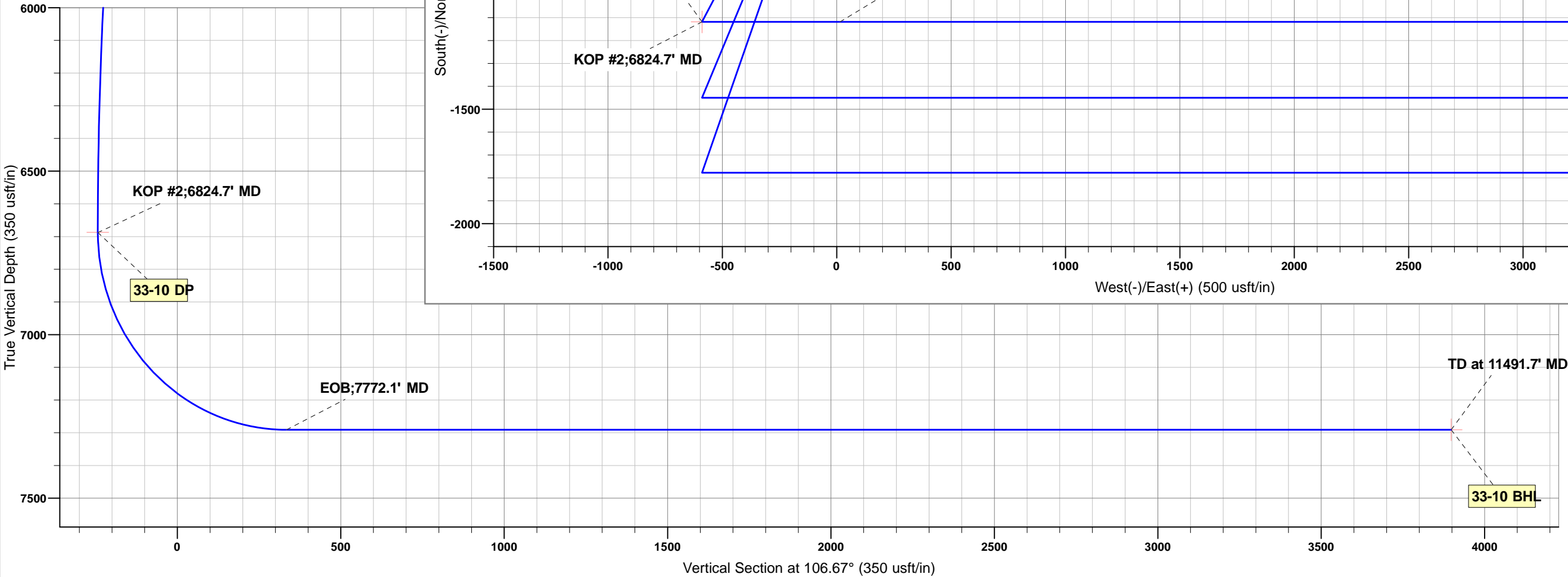
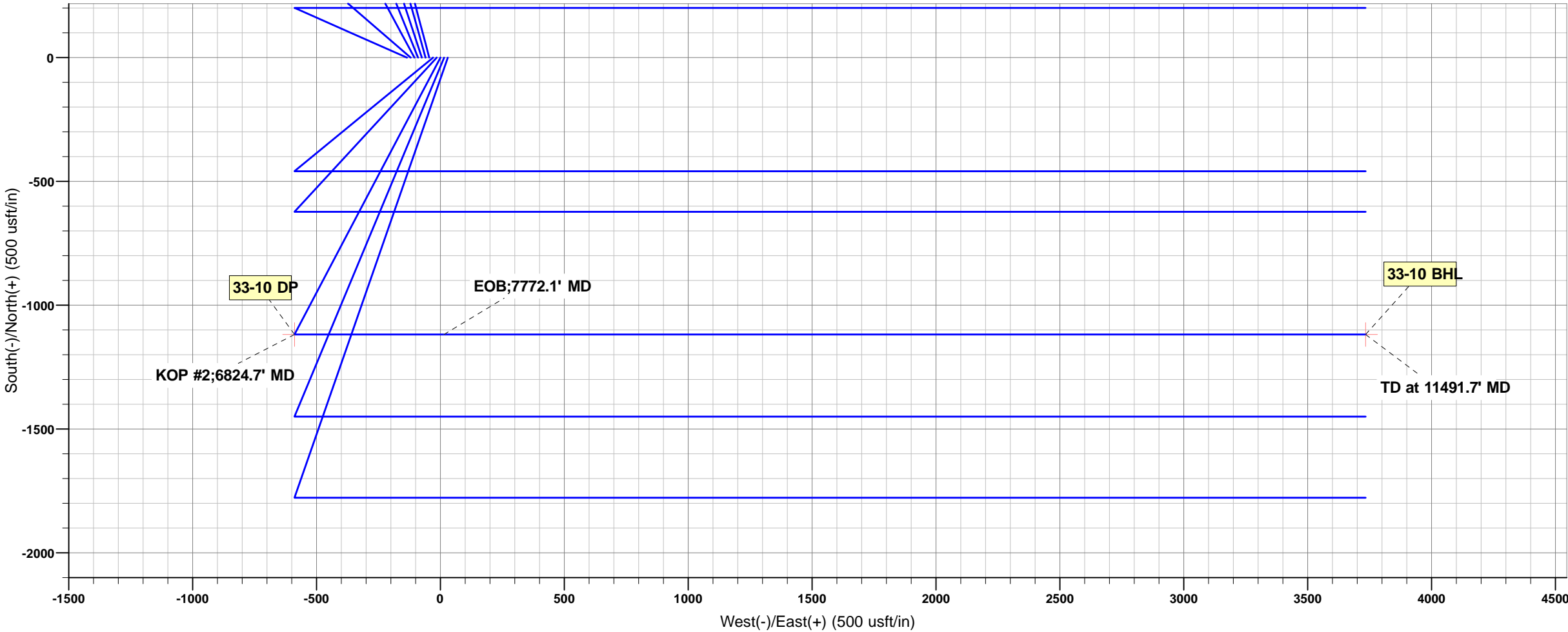
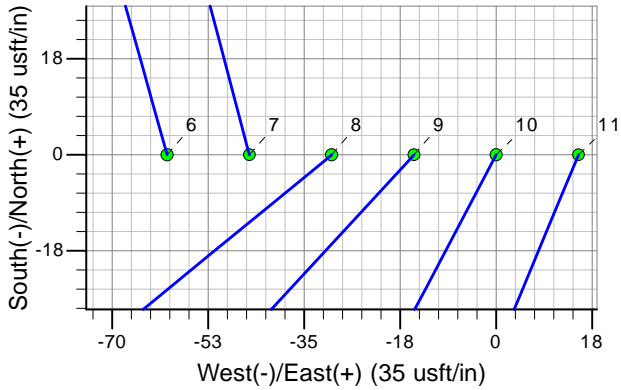
07 December, 2016

Project: Weld County, Co (NAD 83)
Site: Sec. 33 Twn 1N Rng 65W
Well: Cherry Knolls 33-10
Wellbore: Hz
Plan: #1

Reference Details - WELL CENTRE
Geodetic System: US State Plane 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
Northing: 1246560.08
Easting: 3231191.82
Latitude: 40° 0' 26.06395 N
Longitude: 104° 40' 28.80505 W
Grid Convergence: 0.53° West
Ground Elevation: 5106.0
KB Elevation: Est RKB @ 5126.0usft (kb;20')

PLAN 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	500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.0	
3	1142.2	12.84	207.78	1136.8	-63.4	-33.4	2.00	207.78	-13.8	
4	6182.0	12.84	207.78	6050.6	-1054.6	-555.6	0.00	0.00	-229.7	
5	6824.2	0.00	0.00	6687.4	-1118.0	-589.0	2.00	180.00	-243.5	33-10 DP
6	6824.7	0.00	0.00	6687.9	-1118.0	-589.0	0.00	0.00	-243.5	
7	7772.1	90.00	90.00	7291.0	-1118.0	14.1	9.50	90.00	334.2	
8	11491.7	90.00	90.00	7291.0	-1118.0	3733.7	0.00	0.00	3897.5	33-10 BHL



Planning Report

Database:	WellPlan Services	Local Co-ordinate Reference:	Well Cherry Knolls 33-10 - Slot 10
Company:	Edge Energy LLC	TVD Reference:	Est RKB @ 5126.0usft (kb;20')
Project:	Weld County, Co (NAD 83)	MD Reference:	Est RKB @ 5126.0usft (kb;20')
Site:	Sec. 33 TwN 1N Rng 65W	North Reference:	True
Well:	Cherry Knolls 33-10	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	#1		

Project	Weld County, Co (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	Sec. 33 TwN 1N Rng 65W			
Site Position:		Northing:	1,246,558.82 usft	Latitude: 40° 0' 26.06400 N
From:	Lat/Long	Easting:	3,231,056.83 usft	Longitude: 104° 40' 30.54000 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.53 °

Well	Cherry Knolls 33-10 - Slot 10			
Well Position	+N/-S	0.0 usft	Northing:	1,246,560.08 usft
	+E/-W	135.0 usft	Easting:	3,231,191.82 usft
Position Uncertainty	0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level: 5,106.0 usft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF201015	20/11/2016	8.05	66.56	52,360

Design	#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	106.67

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	
500.0	0.00	0.00	500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,142.2	12.84	207.78	1,136.8	-63.4	-33.4	2.00	2.00	0.00	207.78	
6,182.0	12.84	207.78	6,050.6	-1,054.6	-555.6	0.00	0.00	0.00	0.00	
6,824.2	0.00	0.00	6,687.4	-1,118.0	-589.0	2.00	-2.00	0.00	180.00	33-10 DP
6,824.7	0.00	0.00	6,687.9	-1,118.0	-589.0	0.00	0.00	0.00	0.00	
7,772.1	90.00	90.00	7,291.0	-1,118.0	14.1	9.50	9.50	0.00	90.00	
11,491.7	90.00	90.00	7,291.0	-1,118.0	3,733.7	0.00	0.00	0.00	0.00	33-10 BHL

Planning Report

Database:	WellPlan Services	Local Co-ordinate Reference:	Well Cherry Knolls 33-10 - Slot 10
Company:	Edge Energy LLC	TVD Reference:	Est RKB @ 5126.0usft (kb;20')
Project:	Weld County, Co (NAD 83)	MD Reference:	Est RKB @ 5126.0usft (kb;20')
Site:	Sec. 33 Twn 1N Rng 65W	North Reference:	True
Well:	Cherry Knolls 33-10	Survey Calculation Method:	Minimum Curvature
Wellbore:	H2		
Design:	#1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea (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	-5,126.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP;500' MD										
500.0	0.00	0.00	500.0	-4,626.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	2.00	207.78	600.0	-4,526.0	-1.5	-0.8	-0.3	2.00	2.00	0.00
700.0	4.00	207.78	699.8	-4,426.2	-6.2	-3.3	-1.3	2.00	2.00	0.00
800.0	6.00	207.78	799.5	-4,326.5	-13.9	-7.3	-3.0	2.00	2.00	0.00
900.0	8.00	207.78	898.7	-4,227.3	-24.7	-13.0	-5.4	2.00	2.00	0.00
1,000.0	10.00	207.78	997.5	-4,128.5	-38.5	-20.3	-8.4	2.00	2.00	0.00
1,100.0	12.00	207.78	1,095.6	-4,030.4	-55.4	-29.2	-12.1	2.00	2.00	0.00
1,142.2	12.84	207.78	1,136.8	-3,989.2	-63.4	-33.4	-13.8	2.00	2.00	0.00
1,200.0	12.84	207.78	1,193.2	-3,932.8	-74.8	-39.4	-16.3	0.00	0.00	0.00
1,300.0	12.84	207.78	1,290.7	-3,835.3	-94.5	-49.8	-20.6	0.00	0.00	0.00
1,400.0	12.84	207.78	1,388.2	-3,737.8	-114.1	-60.1	-24.9	0.00	0.00	0.00
1,500.0	12.84	207.78	1,485.7	-3,640.3	-133.8	-70.5	-29.1	0.00	0.00	0.00
1,600.0	12.84	207.78	1,583.2	-3,542.8	-153.5	-80.8	-33.4	0.00	0.00	0.00
1,700.0	12.84	207.78	1,680.7	-3,445.3	-173.1	-91.2	-37.7	0.00	0.00	0.00
1,800.0	12.84	207.78	1,778.2	-3,347.8	-192.8	-101.6	-42.0	0.00	0.00	0.00
1,900.0	12.84	207.78	1,875.7	-3,250.3	-212.5	-111.9	-46.3	0.00	0.00	0.00
2,000.0	12.84	207.78	1,973.2	-3,152.8	-232.1	-122.3	-50.6	0.00	0.00	0.00
2,100.0	12.84	207.78	2,070.7	-3,055.3	-251.8	-132.6	-54.8	0.00	0.00	0.00
2,200.0	12.84	207.78	2,168.2	-2,957.8	-271.5	-143.0	-59.1	0.00	0.00	0.00
2,300.0	12.84	207.78	2,265.7	-2,860.3	-291.1	-153.4	-63.4	0.00	0.00	0.00
2,400.0	12.84	207.78	2,363.2	-2,762.8	-310.8	-163.7	-67.7	0.00	0.00	0.00
2,500.0	12.84	207.78	2,460.7	-2,665.3	-330.5	-174.1	-72.0	0.00	0.00	0.00
2,600.0	12.84	207.78	2,558.2	-2,567.8	-350.1	-184.5	-76.3	0.00	0.00	0.00
2,700.0	12.84	207.78	2,655.7	-2,470.3	-369.8	-194.8	-80.5	0.00	0.00	0.00
2,800.0	12.84	207.78	2,753.2	-2,372.8	-389.5	-205.2	-84.8	0.00	0.00	0.00
2,900.0	12.84	207.78	2,850.7	-2,275.3	-409.1	-215.5	-89.1	0.00	0.00	0.00
3,000.0	12.84	207.78	2,948.2	-2,177.8	-428.8	-225.9	-93.4	0.00	0.00	0.00
3,100.0	12.84	207.78	3,045.6	-2,080.4	-448.5	-236.3	-97.7	0.00	0.00	0.00
3,200.0	12.84	207.78	3,143.1	-1,982.9	-468.1	-246.6	-102.0	0.00	0.00	0.00
3,300.0	12.84	207.78	3,240.6	-1,885.4	-487.8	-257.0	-106.2	0.00	0.00	0.00
3,400.0	12.84	207.78	3,338.1	-1,787.9	-507.5	-267.3	-110.5	0.00	0.00	0.00
3,500.0	12.84	207.78	3,435.6	-1,690.4	-527.1	-277.7	-114.8	0.00	0.00	0.00
3,600.0	12.84	207.78	3,533.1	-1,592.9	-546.8	-288.1	-119.1	0.00	0.00	0.00
3,700.0	12.84	207.78	3,630.6	-1,495.4	-566.5	-298.4	-123.4	0.00	0.00	0.00
3,800.0	12.84	207.78	3,728.1	-1,397.9	-586.1	-308.8	-127.7	0.00	0.00	0.00
3,900.0	12.84	207.78	3,825.6	-1,300.4	-605.8	-319.1	-132.0	0.00	0.00	0.00
4,000.0	12.84	207.78	3,923.1	-1,202.9	-625.5	-329.5	-136.2	0.00	0.00	0.00
4,100.0	12.84	207.78	4,020.6	-1,105.4	-645.1	-339.9	-140.5	0.00	0.00	0.00
4,200.0	12.84	207.78	4,118.1	-1,007.9	-664.8	-350.2	-144.8	0.00	0.00	0.00
4,300.0	12.84	207.78	4,215.6	-910.4	-684.5	-360.6	-149.1	0.00	0.00	0.00
4,400.0	12.84	207.78	4,313.1	-812.9	-704.1	-371.0	-153.4	0.00	0.00	0.00
4,500.0	12.84	207.78	4,410.6	-715.4	-723.8	-381.3	-157.7	0.00	0.00	0.00
4,600.0	12.84	207.78	4,508.1	-617.9	-743.5	-391.7	-161.9	0.00	0.00	0.00
4,700.0	12.84	207.78	4,605.6	-520.4	-763.1	-402.0	-166.2	0.00	0.00	0.00

Planning Report

Database:	WellPlan Services	Local Co-ordinate Reference:	Well Cherry Knolls 33-10 - Slot 10
Company:	Edge Energy LLC	TVD Reference:	Est RKB @ 5126.0usft (kb;20')
Project:	Weld County, Co (NAD 83)	MD Reference:	Est RKB @ 5126.0usft (kb;20')
Site:	Sec. 33 Twn 1N Rng 65W	North Reference:	True
Well:	Cherry Knolls 33-10	Survey Calculation Method:	Minimum Curvature
Wellbore:	H2		
Design:	#1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,800.0	12.84	207.78	4,703.1	-422.9	-782.8	-412.4	-170.5	0.00	0.00	0.00
4,900.0	12.84	207.78	4,800.6	-325.4	-802.5	-422.8	-174.8	0.00	0.00	0.00
5,000.0	12.84	207.78	4,898.1	-227.9	-822.1	-433.1	-179.1	0.00	0.00	0.00
5,100.0	12.84	207.78	4,995.6	-130.4	-841.8	-443.5	-183.4	0.00	0.00	0.00
5,200.0	12.84	207.78	5,093.1	-32.9	-861.5	-453.8	-187.6	0.00	0.00	0.00
5,300.0	12.84	207.78	5,190.6	64.6	-881.1	-464.2	-191.9	0.00	0.00	0.00
5,400.0	12.84	207.78	5,288.1	162.1	-900.8	-474.6	-196.2	0.00	0.00	0.00
5,500.0	12.84	207.78	5,385.6	259.6	-920.5	-484.9	-200.5	0.00	0.00	0.00
5,600.0	12.84	207.78	5,483.1	357.1	-940.2	-495.3	-204.8	0.00	0.00	0.00
5,700.0	12.84	207.78	5,580.6	454.6	-959.8	-505.6	-209.1	0.00	0.00	0.00
5,800.0	12.84	207.78	5,678.1	552.1	-979.5	-516.0	-213.3	0.00	0.00	0.00
5,900.0	12.84	207.78	5,775.6	649.6	-999.2	-526.4	-217.6	0.00	0.00	0.00
6,000.0	12.84	207.78	5,873.1	747.1	-1,018.8	-536.7	-221.9	0.00	0.00	0.00
6,100.0	12.84	207.78	5,970.6	844.6	-1,038.5	-547.1	-226.2	0.00	0.00	0.00
6,182.0	12.84	207.78	6,050.6	924.6	-1,054.6	-555.6	-229.7	0.00	0.00	0.00
6,200.0	12.48	207.78	6,068.1	942.1	-1,058.1	-557.4	-230.5	2.00	-2.00	0.00
6,300.0	10.48	207.78	6,166.1	1,040.1	-1,075.7	-566.7	-234.3	2.00	-2.00	0.00
6,400.0	8.48	207.78	6,264.7	1,138.7	-1,090.3	-574.4	-237.5	2.00	-2.00	0.00
6,500.0	6.48	207.78	6,363.9	1,237.9	-1,101.8	-580.5	-240.0	2.00	-2.00	0.00
6,600.0	4.48	207.78	6,463.4	1,337.4	-1,110.3	-584.9	-241.8	2.00	-2.00	0.00
6,700.0	2.48	207.78	6,563.2	1,437.2	-1,115.7	-587.7	-243.0	2.00	-2.00	0.00
6,800.0	0.48	207.78	6,663.2	1,537.2	-1,117.9	-589.0	-243.5	2.00	-2.00	0.00
6,824.2	0.00	0.00	6,687.4	1,561.4	-1,118.0	-589.0	-243.5	2.00	-2.00	0.00
KOP #2;6824.7' MD										
6,824.7	0.00	0.00	6,687.9	1,561.9	-1,118.0	-589.0	-243.5	0.00	0.00	0.00
6,900.0	7.15	90.00	6,763.0	1,637.0	-1,118.0	-584.3	-239.0	9.50	9.50	0.00
7,000.0	16.65	90.00	6,860.7	1,734.7	-1,118.0	-563.7	-219.3	9.50	9.50	0.00
7,100.0	26.15	90.00	6,953.7	1,827.7	-1,118.0	-527.3	-184.4	9.50	9.50	0.00
7,200.0	35.65	90.00	7,039.4	1,913.4	-1,118.0	-476.0	-135.2	9.50	9.50	0.00
7,300.0	45.15	90.00	7,115.5	1,989.5	-1,118.0	-411.2	-73.2	9.50	9.50	0.00
7,400.0	54.65	90.00	7,179.8	2,053.8	-1,118.0	-334.8	0.0	9.50	9.50	0.00
7,500.0	64.15	90.00	7,230.7	2,104.7	-1,118.0	-248.8	82.3	9.50	9.50	0.00
7,600.0	73.65	90.00	7,266.6	2,140.6	-1,118.0	-155.7	171.6	9.50	9.50	0.00
7,700.0	83.15	90.00	7,286.7	2,160.7	-1,118.0	-57.8	265.3	9.50	9.50	0.00
EOB;7772.1' MD										
7,772.1	90.00	90.00	7,291.0	2,165.0	-1,118.0	14.1	334.2	9.50	9.50	0.00
7,800.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	42.0	361.0	0.00	0.00	0.00
7,900.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	142.0	456.8	0.00	0.00	0.00
8,000.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	242.0	552.6	0.00	0.00	0.00
8,100.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	342.0	648.4	0.00	0.00	0.00
8,200.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	442.0	744.2	0.00	0.00	0.00
8,300.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	542.0	840.0	0.00	0.00	0.00
8,400.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	642.0	935.8	0.00	0.00	0.00
8,500.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	742.0	1,031.6	0.00	0.00	0.00
8,600.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	842.0	1,127.3	0.00	0.00	0.00
8,700.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	942.0	1,223.1	0.00	0.00	0.00

Planning Report

Database:	WellPlan Services	Local Co-ordinate Reference:	Well Cherry Knolls 33-10 - Slot 10
Company:	Edge Energy LLC	TVD Reference:	Est RKB @ 5126.0usft (kb;20')
Project:	Weld County, Co (NAD 83)	MD Reference:	Est RKB @ 5126.0usft (kb;20')
Site:	Sec. 33 Twn 1N Rng 65W	North Reference:	True
Well:	Cherry Knolls 33-10	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	#1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,800.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	1,042.0	1,318.9	0.00	0.00	0.00
8,900.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	1,142.0	1,414.7	0.00	0.00	0.00
9,000.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	1,242.0	1,510.5	0.00	0.00	0.00
9,100.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	1,342.0	1,606.3	0.00	0.00	0.00
9,200.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	1,442.0	1,702.1	0.00	0.00	0.00
9,300.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	1,542.0	1,797.9	0.00	0.00	0.00
9,400.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	1,642.0	1,893.7	0.00	0.00	0.00
9,500.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	1,742.0	1,989.5	0.00	0.00	0.00
9,600.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	1,842.0	2,085.3	0.00	0.00	0.00
9,700.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	1,942.0	2,181.1	0.00	0.00	0.00
9,800.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	2,042.0	2,276.9	0.00	0.00	0.00
9,900.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	2,142.0	2,372.7	0.00	0.00	0.00
10,000.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	2,242.0	2,468.5	0.00	0.00	0.00
10,100.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	2,342.0	2,564.3	0.00	0.00	0.00
10,200.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	2,442.0	2,660.1	0.00	0.00	0.00
10,300.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	2,542.0	2,755.9	0.00	0.00	0.00
10,400.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	2,642.0	2,851.7	0.00	0.00	0.00
10,500.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	2,742.0	2,947.5	0.00	0.00	0.00
10,600.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	2,842.0	3,043.3	0.00	0.00	0.00
10,700.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	2,942.0	3,139.1	0.00	0.00	0.00
10,800.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	3,042.0	3,234.9	0.00	0.00	0.00
10,900.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	3,142.0	3,330.7	0.00	0.00	0.00
11,000.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	3,242.0	3,426.5	0.00	0.00	0.00
11,100.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	3,342.0	3,522.3	0.00	0.00	0.00
11,200.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	3,442.0	3,618.1	0.00	0.00	0.00
11,300.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	3,542.0	3,713.9	0.00	0.00	0.00
11,400.0	90.00	90.00	7,291.0	2,165.0	-1,118.0	3,642.0	3,809.7	0.00	0.00	0.00
TD at 11491.7' MD										
11,491.7	90.00	90.00	7,291.0	2,165.0	-1,118.0	3,733.7	3,897.5	0.00	0.00	0.00

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
33-10 DP - hit/miss target - Shape	0.00	0.00	6,687.4	-1,118.0	-589.0	1,245,436.60	3,230,613.25	40° 0' 15.01466 N	104° 40' 36.37422 W	
33-10 BHL - plan hits target center - Point	0.00	0.00	7,291.0	-1,118.0	3,733.7	1,245,476.84	3,234,935.74	40° 0' 15.01196 N	104° 39' 40.82400 W	

Planning Report

Database:	WellPlan Services	Local Co-ordinate Reference:	Well Cherry Knolls 33-10 - Slot 10
Company:	Edge Energy LLC	TVD Reference:	Est RKB @ 5126.0usft (kb;20')
Project:	Weld County, Co (NAD 83)	MD Reference:	Est RKB @ 5126.0usft (kb;20')
Site:	Sec. 33 Twn 1N Rng 65W	North Reference:	True
Well:	Cherry Knolls 33-10	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	#1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
500.0	500.0	0.0	0.0	KOP;500' MD
6,824.7	6,687.9	-1,118.0	-589.0	KOP #2;6824.7' MD
7,772.1	7,291.0	-1,118.0	14.1	EOB;7772.1' MD
11,491.7	7,291.0	-1,118.0	3,733.7	TD at 11491.7' MD

Anticollision Report

Company:	Edge Energy LLC	Local Co-ordinate Reference:	Well Cherry Knolls 33-10 - Slot 10
Project:	Weld County, Co (NAD 83)	TVD Reference:	Est RKB @ 5126.0usft (kb;20')
Reference Site:	Sec. 33 Twn 1N Rng 65W	MD Reference:	Est RKB @ 5126.0usft (kb;20')
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Cherry Knolls 33-10	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	WellPlan Services
Reference Design:	#1	Offset TVD Reference:	Offset Datum

Reference	#1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 50.0usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 100.0 usft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program		Date	06/12/2016		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	11,491.7	#1 (Hz)	MWD	MWD - Standard	

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Sec. 33 Twn 1N Rng 65W						
Cherry Knolls 33-1* - Hz - #1						Out of range
Cherry Knolls 33-11 - Hz - #1	500.0	500.0	15.0	13.0	7.584	CC
Cherry Knolls 33-11 - Hz - #1	650.0	650.3	15.3	12.8	5.975	ES
Cherry Knolls 33-11 - Hz - #1	1,400.0	1,401.1	25.9	18.3	3.415	SF
Cherry Knolls 33-12 - Hz - #1	500.0	500.0	30.0	28.0	15.167	CC
Cherry Knolls 33-12 - Hz - #1	600.0	600.3	30.2	27.9	12.729	ES
Cherry Knolls 33-12 - Hz - #1	1,500.0	1,501.2	52.8	44.2	6.150	SF
Cherry Knolls 33-2* - Hz - #1						Out of range
Cherry Knolls 33-3* - Hz - #1						Out of range
Cherry Knolls 33-4 - Hz - #1	848.8	840.7	84.1	80.6	24.263	CC
Cherry Knolls 33-4 - Hz - #1	850.0	841.8	84.1	80.6	24.224	ES
Cherry Knolls 33-4 - Hz - #1	1,050.0	1,032.6	96.6	92.1	21.432	SF
Cherry Knolls 33-5* - Hz - #1	796.1	787.8	70.9	67.7	22.051	CC
Cherry Knolls 33-5* - Hz - #1	800.0	791.6	70.9	67.7	21.936	ES
Cherry Knolls 33-5* - Hz - #1	950.0	936.4	77.6	73.6	19.533	SF
Cherry Knolls 33-6* - Hz - #1	798.7	790.1	55.6	52.4	17.229	CC
Cherry Knolls 33-6* - Hz - #1	800.0	791.3	55.6	52.4	17.200	ES
Cherry Knolls 33-6* - Hz - #1	900.0	888.7	58.6	54.9	15.807	SF
Cherry Knolls 33-7* - Hz - #1	756.3	748.3	41.8	38.7	13.732	CC, ES
Cherry Knolls 33-7* - Hz - #1	850.0	840.0	44.4	40.9	12.785	SF
Cherry Knolls 33-8 - Hz - #1	783.2	780.7	26.5	23.4	8.356	CC
Cherry Knolls 33-8 - Hz - #1	800.0	797.5	26.6	23.3	8.180	ES
Cherry Knolls 33-8 - Hz - #1	850.0	847.1	27.5	24.1	7.902	SF
Cherry Knolls 33-9 - Hz - #1	500.0	499.0	15.0	13.0	7.592	CC
Cherry Knolls 33-9 - Hz - #1	550.0	548.8	15.1	12.9	6.931	ES
Cherry Knolls 33-9 - Hz - #1	850.0	847.7	19.7	16.2	5.745	SF

Offset Design	Sec. 33 Twn 1N Rng 65W - Cherry Knolls 33-11 - Hz - #1											Offset Site Error:	0.0 usft
Survey Program:	0-MWD											Offset Well Error:	0.0 usft
Reference	Offset	Semi Major Axis		Distance									
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	90.00	0.0	15.0	15.0				
50.0	50.0	50.0	50.0	0.0	0.0	90.00	0.0	15.0	15.0	14.9	0.08	190.674	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Edge Energy LLC	Local Co-ordinate Reference:	Well Cherry Knolls 33-10 - Slot 10
Project:	Weld County, Co (NAD 83)	TVD Reference:	Est RKB @ 5126.0usft (kb;20')
Reference Site:	Sec. 33 Twn 1N Rng 65W	MD Reference:	Est RKB @ 5126.0usft (kb;20')
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Cherry Knolls 33-10	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	WellPlan Services
Reference Design:	#1	Offset TVD Reference:	Offset Datum

Offset Design Sec. 33 Twn 1N Rng 65W - Cherry Knolls 33-11 - HZ - #1													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance								Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
100.0	100.0	100.0	100.0	0.1	0.1	90.00	0.0	15.0	15.0	14.8	0.18	83.420		
150.0	150.0	150.0	150.0	0.2	0.2	90.00	0.0	15.0	15.0	14.6	0.40	37.076		
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	15.0	15.0	14.4	0.63	23.834		
250.0	250.0	250.0	250.0	0.4	0.4	90.00	0.0	15.0	15.0	14.1	0.85	17.562		
300.0	300.0	300.0	300.0	0.5	0.5	90.00	0.0	15.0	15.0	13.9	1.08	13.903		
350.0	350.0	350.0	350.0	0.7	0.7	90.00	0.0	15.0	15.0	13.7	1.30	11.506		
400.0	400.0	400.0	400.0	0.8	0.8	90.00	0.0	15.0	15.0	13.5	1.53	9.814		
450.0	450.0	450.0	450.0	0.9	0.9	90.00	0.0	15.0	15.0	13.2	1.75	8.556		
500.0	500.0	500.0	500.0	1.0	1.0	90.00	0.0	15.0	15.0	13.0	1.98	7.584 CC		
550.0	550.0	550.1	550.1	1.1	1.1	-117.71	-0.4	14.8	15.0	12.9	2.18	6.907		
600.0	600.0	600.2	600.2	1.2	1.2	-117.51	-1.6	14.3	15.1	12.8	2.38	6.374		
650.0	649.9	650.3	650.2	1.3	1.3	-117.18	-3.6	13.5	15.3	12.8	2.56	5.975 ES		
700.0	699.8	700.4	700.2	1.4	1.4	-116.74	-6.5	12.3	15.6	12.8	2.75	5.657		
750.0	749.7	750.5	750.2	1.5	1.5	-116.18	-10.1	10.8	15.9	12.9	2.96	5.360		
800.0	799.5	800.6	800.0	1.6	1.6	-115.53	-14.5	8.9	16.3	13.1	3.18	5.125		
850.0	849.1	850.7	849.8	1.7	1.7	-114.81	-19.8	6.8	16.7	13.3	3.42	4.895		
900.0	898.7	900.8	899.5	1.8	1.8	-114.02	-25.8	4.2	17.3	13.6	3.67	4.715		
950.0	948.2	950.9	949.0	2.0	2.0	-113.18	-32.7	1.4	17.9	13.9	3.95	4.529		
1,000.0	997.5	1,001.0	998.4	2.1	2.1	-112.31	-40.3	-1.8	18.6	14.4	4.24	4.383		
1,050.0	1,046.6	1,051.1	1,047.7	2.3	2.3	-111.43	-48.8	-5.3	19.4	14.8	4.58	4.227		
1,100.0	1,095.6	1,101.1	1,096.7	2.5	2.5	-110.53	-58.0	-9.2	20.2	15.3	4.92	4.106		
1,150.0	1,144.4	1,151.2	1,145.6	2.7	2.7	-109.62	-68.0	-13.3	21.1	15.8	5.31	3.978		
1,200.0	1,193.2	1,201.3	1,194.3	2.9	2.9	-107.34	-78.8	-17.9	22.0	16.2	5.73	3.834		
1,250.0	1,241.9	1,251.3	1,242.8	3.1	3.1	-103.07	-90.4	-22.7	22.7	16.5	6.19	3.661		
1,300.0	1,290.7	1,301.3	1,290.9	3.3	3.4	-96.95	-102.8	-27.8	23.5	16.8	6.67	3.519		
1,350.0	1,339.4	1,351.2	1,338.9	3.5	3.6	-90.22	-115.5	-33.1	24.5	17.4	7.14	3.434		
1,400.0	1,388.2	1,401.1	1,386.8	3.8	3.9	-84.12	-128.3	-38.4	25.9	18.3	7.59	3.415 SF		
1,450.0	1,436.9	1,451.0	1,434.8	4.0	4.1	-78.70	-141.0	-43.8	27.6	19.6	8.01	3.441		
1,500.0	1,485.7	1,500.9	1,482.7	4.2	4.4	-73.92	-153.8	-49.1	29.4	21.0	8.40	3.504		
1,550.0	1,534.4	1,550.9	1,530.7	4.4	4.7	-69.73	-166.5	-54.4	31.5	22.7	8.77	3.589		
1,600.0	1,583.2	1,600.8	1,578.7	4.7	4.9	-66.07	-179.2	-59.7	33.7	24.5	9.12	3.691		
1,650.0	1,631.9	1,650.7	1,626.6	4.9	5.2	-62.87	-192.0	-65.0	36.0	26.5	9.46	3.802		
1,700.0	1,680.7	1,700.6	1,674.6	5.1	5.5	-60.06	-204.7	-70.3	38.4	28.6	9.79	3.920		
1,750.0	1,729.4	1,750.5	1,722.6	5.4	5.8	-57.59	-217.5	-75.6	40.9	30.8	10.11	4.041		
1,800.0	1,778.2	1,800.4	1,770.5	5.6	6.0	-55.41	-230.2	-80.9	43.4	33.0	10.43	4.162		
1,850.0	1,826.9	1,850.3	1,818.5	5.8	6.3	-53.47	-243.0	-86.2	46.0	35.3	10.75	4.283		
1,900.0	1,875.7	1,900.2	1,866.4	6.1	6.6	-51.74	-255.7	-91.6	48.7	37.6	11.06	4.402		
1,950.0	1,924.4	1,950.1	1,914.4	6.3	6.9	-50.19	-268.5	-96.9	51.4	40.0	11.38	4.518		
2,000.0	1,973.2	2,000.0	1,962.4	6.5	7.1	-48.80	-281.2	-102.2	54.1	42.4	11.69	4.632		
2,050.0	2,021.9	2,049.9	2,010.3	6.8	7.4	-47.54	-294.0	-107.5	56.9	44.9	12.00	4.742		
2,100.0	2,070.7	2,099.9	2,058.3	7.0	7.7	-46.40	-306.7	-112.8	59.7	47.4	12.31	4.848		
2,150.0	2,119.4	2,149.8	2,106.2	7.2	8.0	-45.36	-319.4	-118.1	62.5	49.9	12.62	4.951		
2,200.0	2,168.2	2,199.7	2,154.2	7.5	8.3	-44.41	-332.2	-123.4	65.3	52.4	12.93	5.050		
2,250.0	2,216.9	2,249.6	2,202.2	7.7	8.5	-43.54	-344.9	-128.7	68.2	54.9	13.25	5.146		
2,300.0	2,265.7	2,299.5	2,250.1	7.9	8.8	-42.74	-357.7	-134.0	71.0	57.5	13.56	5.238		
2,350.0	2,314.4	2,349.4	2,298.1	8.2	9.1	-42.00	-370.4	-139.4	73.9	60.0	13.87	5.326		
2,400.0	2,363.2	2,399.3	2,346.0	8.4	9.4	-41.31	-383.2	-144.7	76.8	62.6	14.19	5.412		
2,450.0	2,411.9	2,449.2	2,394.0	8.7	9.7	-40.68	-395.9	-150.0	79.7	65.2	14.50	5.494		
2,500.0	2,460.7	2,499.1	2,442.0	8.9	10.0	-40.09	-408.7	-155.3	82.6	67.8	14.82	5.573		
2,550.0	2,509.4	2,549.0	2,489.9	9.1	10.2	-39.54	-421.4	-160.6	85.5	70.4	15.13	5.649		
2,600.0	2,558.2	2,598.9	2,537.9	9.4	10.5	-39.03	-434.2	-165.9	88.4	73.0	15.45	5.723		
2,650.0	2,606.9	2,648.8	2,585.8	9.6	10.8	-38.55	-446.9	-171.2	91.3	75.6	15.76	5.793		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Edge Energy LLC	Local Co-ordinate Reference:	Well Cherry Knolls 33-10 - Slot 10
Project:	Weld County, Co (NAD 83)	TVD Reference:	Est RKB @ 5126.0usft (kb;20')
Reference Site:	Sec. 33 Twn 1N Rng 65W	MD Reference:	Est RKB @ 5126.0usft (kb;20')
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Cherry Knolls 33-10	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	WellPlan Services
Reference Design:	#1	Offset TVD Reference:	Offset Datum

Offset Design		Sec. 33 Twn 1N Rng 65W - Cherry Knolls 33-11 - Hz - #1										Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
2,700.0	2,655.7	2,698.8	2,633.8	9.8	11.1	-38.10	-459.6	-176.5	94.3	78.2	16.08	5.861	
2,750.0	2,704.4	2,748.7	2,681.8	10.1	11.4	-37.67	-472.4	-181.8	97.2	80.8	16.40	5.927	

Anticollision Report

Company:	Edge Energy LLC	Local Co-ordinate Reference:	Well Cherry Knolls 33-10 - Slot 10
Project:	Weld County, Co (NAD 83)	TVD Reference:	Est RKB @ 5126.0usft (kb;20')
Reference Site:	Sec. 33 Twn 1N Rng 65W	MD Reference:	Est RKB @ 5126.0usft (kb;20')
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Cherry Knolls 33-10	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	WellPlan Services
Reference Design:	#1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	90.00	0.0	30.0	30.0					
50.0	50.0	50.0	50.0	0.0	0.0	90.00	0.0	30.0	30.0	29.9	0.08	381.348		
100.0	100.0	100.0	100.0	0.1	0.1	90.00	0.0	30.0	30.0	29.8	0.18	166.840		
150.0	150.0	150.0	150.0	0.2	0.2	90.00	0.0	30.0	30.0	29.6	0.40	74.151		
200.0	200.0	200.0	200.0	0.3	0.3	90.00	0.0	30.0	30.0	29.4	0.63	47.669		
250.0	250.0	250.0	250.0	0.4	0.4	90.00	0.0	30.0	30.0	29.1	0.85	35.124		
300.0	300.0	300.0	300.0	0.5	0.5	90.00	0.0	30.0	30.0	28.9	1.08	27.807		
350.0	350.0	350.0	350.0	0.7	0.7	90.00	0.0	30.0	30.0	28.7	1.30	23.012		
400.0	400.0	400.0	400.0	0.8	0.8	90.00	0.0	30.0	30.0	28.5	1.53	19.628		
450.0	450.0	450.0	450.0	0.9	0.9	90.00	0.0	30.0	30.0	28.2	1.75	17.112		
500.0	500.0	500.0	500.0	1.0	1.0	90.00	0.0	30.0	30.0	28.0	1.98	15.167 CC		
550.0	550.0	550.2	550.2	1.1	1.1	-117.73	-0.4	29.9	30.1	27.9	2.18	13.809		
600.0	600.0	600.3	600.3	1.2	1.2	-117.57	-1.7	29.4	30.2	27.9	2.38	12.729 ES		
650.0	649.9	650.5	650.4	1.3	1.3	-117.31	-3.7	28.7	30.5	28.0	2.56	11.911		
700.0	699.8	700.7	700.5	1.4	1.4	-116.95	-6.6	27.7	31.0	28.2	2.75	11.250		
750.0	749.7	750.9	750.5	1.5	1.5	-116.50	-10.4	26.4	31.5	28.5	2.96	10.625		
800.0	799.5	801.0	800.5	1.6	1.6	-115.98	-14.9	24.8	32.2	29.0	3.18	10.122		
850.0	849.1	851.2	850.3	1.7	1.7	-115.39	-20.3	22.9	32.9	29.5	3.42	9.626		
900.0	898.7	901.3	900.0	1.8	1.8	-114.74	-26.5	20.8	33.8	30.2	3.67	9.227		
950.0	948.2	951.5	949.6	2.0	2.0	-114.04	-33.5	18.3	34.9	30.9	3.95	8.818		
1,000.0	997.5	1,001.6	999.1	2.1	2.1	-113.31	-41.4	15.6	36.0	31.8	4.24	8.490		
1,050.0	1,046.6	1,051.8	1,048.4	2.3	2.3	-112.56	-50.0	12.6	37.3	32.7	4.58	8.144		
1,100.0	1,095.6	1,101.9	1,097.5	2.5	2.5	-111.79	-59.5	9.3	38.7	33.8	4.92	7.867		
1,150.0	1,144.4	1,152.0	1,146.4	2.7	2.7	-111.00	-69.8	5.7	40.3	34.9	5.31	7.579		
1,200.0	1,193.2	1,202.2	1,195.1	2.9	2.9	-109.52	-80.9	1.8	41.7	36.0	5.72	7.297		
1,250.0	1,241.9	1,252.2	1,243.6	3.1	3.1	-107.00	-92.7	-2.3	43.1	36.9	6.17	6.980		
1,300.0	1,290.7	1,302.2	1,291.8	3.3	3.4	-103.52	-105.4	-6.7	44.4	37.8	6.64	6.694		
1,350.0	1,339.4	1,352.1	1,339.6	3.5	3.6	-99.17	-118.8	-11.4	45.9	38.8	7.14	6.430		
1,400.0	1,388.2	1,401.9	1,387.1	3.8	3.9	-94.10	-133.0	-16.3	47.7	40.1	7.63	6.249		
1,450.0	1,436.9	1,451.5	1,434.1	4.0	4.2	-88.46	-147.9	-21.5	50.0	41.9	8.13	6.151		
1,500.0	1,485.7	1,501.2	1,481.1	4.2	4.5	-82.90	-163.2	-26.8	52.8	44.2	8.59	6.150 SF		
1,550.0	1,534.4	1,550.9	1,528.0	4.4	4.8	-77.95	-178.4	-32.1	56.1	47.1	9.02	6.220		
1,600.0	1,583.2	1,600.5	1,575.0	4.7	5.1	-73.56	-193.7	-37.5	59.8	50.3	9.42	6.345		
1,650.0	1,631.9	1,650.2	1,621.9	4.9	5.4	-69.70	-209.0	-42.8	63.7	53.9	9.80	6.504		
1,700.0	1,680.7	1,699.9	1,668.9	5.1	5.7	-66.30	-224.3	-48.1	67.9	57.8	10.16	6.690		
1,750.0	1,729.4	1,749.5	1,715.8	5.4	6.0	-63.31	-239.6	-53.4	72.4	61.9	10.50	6.890		
1,800.0	1,778.2	1,799.2	1,762.8	5.6	6.3	-60.66	-254.9	-58.8	77.0	66.1	10.84	7.101		
1,850.0	1,826.9	1,848.9	1,809.8	5.8	6.6	-58.32	-270.2	-64.1	81.7	70.6	11.17	7.316		
1,900.0	1,875.7	1,898.5	1,856.7	6.1	7.0	-56.24	-285.5	-69.4	86.6	75.1	11.50	7.532		
1,950.0	1,924.4	1,948.2	1,903.7	6.3	7.3	-54.38	-300.8	-74.7	91.6	79.7	11.82	7.747		
2,000.0	1,973.2	1,997.9	1,950.6	6.5	7.6	-52.71	-316.1	-80.1	96.6	84.5	12.14	7.960		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Edge Energy LLC	Local Co-ordinate Reference:	Well Cherry Knolls 33-10 - Slot 10
Project:	Weld County, Co (NAD 83)	TVD Reference:	Est RKB @ 5126.0usft (kb;20')
Reference Site:	Sec. 33 Twn 1N Rng 65W	MD Reference:	Est RKB @ 5126.0usft (kb;20')
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Cherry Knolls 33-10	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	WellPlan Services
Reference Design:	#1	Offset TVD Reference:	Offset Datum

Offset Design Sec. 33 Twn 1N Rng 65W - Cherry Knolls 33-4 - Hz - #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	0.0	-90.0	90.1				
50.0	50.0	45.0	45.0	0.0	0.0	-90.00	0.0	-90.0	90.0	89.9	0.07	1,213.381	
100.0	100.0	95.0	95.0	0.1	0.1	-90.00	0.0	-90.0	90.0	89.8	0.18	513.354	
150.0	150.0	145.0	145.0	0.2	0.2	-90.00	0.0	-90.0	90.0	89.6	0.39	228.809	
200.0	200.0	195.0	195.0	0.3	0.3	-90.00	0.0	-90.0	90.0	89.4	0.62	145.606	
250.0	250.0	245.0	245.0	0.4	0.4	-90.00	0.0	-90.0	90.0	89.2	0.84	106.778	
300.0	300.0	295.0	295.0	0.5	0.5	-90.00	0.0	-90.0	90.0	88.9	1.07	84.298	
350.0	350.0	345.0	345.0	0.7	0.6	-90.00	0.0	-90.0	90.0	88.7	1.29	69.638	
400.0	400.0	395.0	395.0	0.8	0.8	-90.00	0.0	-90.0	90.0	88.5	1.52	59.321	
450.0	450.0	445.0	445.0	0.9	0.9	-90.00	0.0	-90.0	90.0	88.3	1.74	51.667	
500.0	500.0	495.0	495.0	1.0	1.0	-90.00	0.0	-90.0	90.0	88.0	1.97	45.762	
550.0	550.0	545.0	545.0	1.1	1.1	62.47	0.0	-90.0	89.8	87.6	2.18	41.215	
600.0	600.0	595.0	595.0	1.2	1.2	63.23	0.0	-90.0	89.2	86.8	2.39	37.312	
650.0	649.9	644.9	644.9	1.3	1.3	64.51	0.0	-90.0	88.2	85.6	2.60	33.970	
700.0	699.8	694.8	694.8	1.4	1.4	66.34	0.0	-90.0	87.0	84.2	2.80	31.016	
750.0	749.7	744.2	744.2	1.5	1.5	68.87	0.2	-90.1	85.6	82.5	3.02	28.325	
800.0	799.5	793.2	793.1	1.6	1.6	72.45	1.1	-90.5	84.5	81.3	3.24	26.101	
848.8	847.9	840.7	840.6	1.7	1.8	76.97	2.8	-91.1	84.1	80.6	3.46	24.263 CC	
850.0	849.1	841.8	841.8	1.7	1.8	77.09	2.8	-91.1	84.1	80.6	3.47	24.224 ES	
900.0	898.7	890.2	890.1	1.8	1.9	82.66	5.3	-92.1	84.7	81.0	3.71	22.844	
950.0	948.2	938.2	937.9	2.0	2.0	88.92	8.4	-93.4	86.7	82.8	3.97	21.863	
1,000.0	997.5	985.6	985.2	2.1	2.1	95.54	12.3	-95.0	90.6	86.4	4.23	21.434	
1,050.0	1,046.6	1,032.6	1,031.9	2.3	2.2	102.15	16.8	-96.8	96.6	92.1	4.51	21.432 SF	

Anticollision Report

Company:	Edge Energy LLC	Local Co-ordinate Reference:	Well Cherry Knolls 33-10 - Slot 10
Project:	Weld County, Co (NAD 83)	TVD Reference:	Est RKB @ 5126.0usft (kb;20')
Reference Site:	Sec. 33 Twn 1N Rng 65W	MD Reference:	Est RKB @ 5126.0usft (kb;20')
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Cherry Knolls 33-10	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	WellPlan Services
Reference Design:	#1	Offset TVD Reference:	Offset Datum

Offset Design Sec. 33 Twn 1N Rng 65W - Cherry Knolls 33-5* - HZ - #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	0.0	-75.0	75.2				
50.0	50.0	44.0	44.0	0.0	0.0	-90.00	0.0	-75.0	75.0	74.9	0.07	1,023.558	
100.0	100.0	94.0	94.0	0.1	0.1	-90.00	0.0	-75.0	75.0	74.8	0.17	430.000	
150.0	150.0	144.0	144.0	0.2	0.2	-90.00	0.0	-75.0	75.0	74.6	0.39	191.770	
200.0	200.0	194.0	194.0	0.3	0.3	-90.00	0.0	-75.0	75.0	74.4	0.62	121.781	
250.0	250.0	244.0	244.0	0.4	0.4	-90.00	0.0	-75.0	75.0	74.2	0.84	89.219	
300.0	300.0	294.0	294.0	0.5	0.5	-90.00	0.0	-75.0	75.0	73.9	1.07	70.397	
350.0	350.0	344.0	344.0	0.7	0.6	-90.00	0.0	-75.0	75.0	73.7	1.29	58.132	
400.0	400.0	394.0	394.0	0.8	0.8	-90.00	0.0	-75.0	75.0	73.5	1.51	49.507	
450.0	450.0	444.0	444.0	0.9	0.9	-90.00	0.0	-75.0	75.0	73.3	1.74	43.111	
500.0	500.0	494.0	494.0	1.0	1.0	-90.00	0.0	-75.0	75.0	73.0	1.96	38.179	
550.0	550.0	544.0	544.0	1.1	1.1	62.52	0.0	-75.0	74.8	72.6	2.18	34.366	
600.0	600.0	594.0	594.0	1.2	1.2	63.43	0.0	-75.0	74.2	71.8	2.39	31.068	
650.0	649.9	643.9	643.9	1.3	1.3	64.97	0.0	-75.0	73.3	70.7	2.60	28.225	
700.0	699.8	693.4	693.4	1.4	1.4	67.41	0.3	-75.1	72.1	69.3	2.80	25.766	
750.0	749.7	742.6	742.6	1.5	1.5	71.15	1.4	-75.5	71.3	68.2	3.02	23.626	
796.1	795.6	787.8	787.8	1.6	1.6	75.75	3.1	-76.0	70.9	67.7	3.22	22.051 CC	
800.0	799.5	791.6	791.6	1.6	1.6	76.19	3.3	-76.1	70.9	67.7	3.23	21.936 ES	
850.0	849.1	840.3	840.2	1.7	1.8	82.36	6.0	-77.0	71.6	68.1	3.47	20.623	
900.0	898.7	888.6	888.3	1.8	1.9	89.38	9.4	-78.1	73.6	69.9	3.71	19.850	
950.0	948.2	936.4	935.9	2.0	2.0	96.80	13.6	-79.5	77.6	73.6	3.97	19.533 SF	
1,000.0	997.5	983.7	982.9	2.1	2.1	104.13	18.4	-81.1	83.7	79.5	4.23	19.792	
1,050.0	1,046.6	1,030.4	1,029.2	2.3	2.2	110.96	23.9	-82.9	92.2	87.7	4.50	20.477	

Anticollision Report

Company:	Edge Energy LLC	Local Co-ordinate Reference:	Well Cherry Knolls 33-10 - Slot 10
Project:	Weld County, Co (NAD 83)	TVD Reference:	Est RKB @ 5126.0usft (kb;20')
Reference Site:	Sec. 33 Twn 1N Rng 65W	MD Reference:	Est RKB @ 5126.0usft (kb;20')
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Cherry Knolls 33-10	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	WellPlan Services
Reference Design:	#1	Offset TVD Reference:	Offset Datum

Offset Design Sec. 33 Twn 1N Rng 65W - Cherry Knolls 33-6* - HZ - #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	0.0	-60.0	60.4				
50.0	50.0	43.0	43.0	0.0	0.0	-90.00	0.0	-60.0	60.0	59.9	0.07	829.018	
100.0	100.0	93.0	93.0	0.1	0.1	-90.00	0.0	-60.0	60.0	59.8	0.17	345.782	
150.0	150.0	143.0	143.0	0.2	0.2	-90.00	0.0	-60.0	60.0	59.6	0.39	154.303	
200.0	200.0	193.0	193.0	0.3	0.3	-90.00	0.0	-60.0	60.0	59.4	0.61	97.782	
250.0	250.0	243.0	243.0	0.4	0.4	-90.00	0.0	-60.0	60.0	59.2	0.84	71.567	
300.0	300.0	293.0	293.0	0.5	0.5	-90.00	0.0	-60.0	60.0	58.9	1.06	56.436	
350.0	350.0	343.0	343.0	0.7	0.6	-90.00	0.0	-60.0	60.0	58.7	1.29	46.587	
400.0	400.0	393.0	393.0	0.8	0.7	-90.00	0.0	-60.0	60.0	58.5	1.51	39.665	
450.0	450.0	443.0	443.0	0.9	0.9	-90.00	0.0	-60.0	60.0	58.3	1.74	34.534	
500.0	500.0	493.0	493.0	1.0	1.0	-90.00	0.0	-60.0	60.0	58.0	1.96	30.578	
550.0	550.0	543.0	543.0	1.1	1.1	62.59	0.0	-60.0	59.8	57.6	2.17	27.503	
600.0	600.0	593.0	593.0	1.2	1.2	63.73	0.0	-60.0	59.2	56.8	2.39	24.813	
650.0	649.9	642.9	642.9	1.3	1.3	65.67	0.0	-60.0	58.3	55.7	2.59	22.474	
700.0	699.8	692.7	692.7	1.4	1.4	68.50	0.0	-60.0	57.1	54.3	2.80	20.397	
750.0	749.7	742.2	742.1	1.5	1.5	72.82	0.6	-60.2	56.1	53.0	3.02	18.587	
798.7	798.2	790.1	790.1	1.6	1.6	78.67	2.0	-60.6	55.6	52.4	3.23	17.229 CC	
800.0	799.5	791.3	791.3	1.6	1.6	78.84	2.1	-60.6	55.6	52.4	3.23	17.200 ES	
850.0	849.1	840.2	840.1	1.7	1.8	86.35	4.3	-61.2	56.3	52.8	3.47	16.221	
900.0	898.7	888.7	888.5	1.8	1.9	94.84	7.3	-62.0	58.6	54.9	3.71	15.807 SF	
950.0	948.2	936.7	936.4	2.0	2.0	103.56	11.1	-63.1	63.1	59.2	3.97	15.907	
1,000.0	997.5	984.2	983.7	2.1	2.1	111.81	15.5	-64.3	70.1	65.8	4.22	16.595	
1,050.0	1,046.6	1,031.2	1,030.3	2.3	2.2	119.09	20.7	-65.8	79.5	75.0	4.48	17.718	
1,100.0	1,095.6	1,077.4	1,076.2	2.5	2.3	125.23	26.5	-67.4	91.2	86.5	4.74	19.265	

Anticollision Report

Company:	Edge Energy LLC	Local Co-ordinate Reference:	Well Cherry Knolls 33-10 - Slot 10
Project:	Weld County, Co (NAD 83)	TVD Reference:	Est RKB @ 5126.0usft (kb;20')
Reference Site:	Sec. 33 Twn 1N Rng 65W	MD Reference:	Est RKB @ 5126.0usft (kb;20')
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Cherry Knolls 33-10	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	HZ	Database:	WellPlan Services
Reference Design:	#1	Offset TVD Reference:	Offset Datum

Offset Design Sec. 33 Twn 1N Rng 65W - Cherry Knolls 33-7* - HZ - #1												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	0.0	-45.0	45.5				
50.0	50.0	43.0	43.0	0.0	0.0	-90.00	0.0	-45.0	45.0	44.9	0.07	621.764	
100.0	100.0	93.0	93.0	0.1	0.1	-90.00	0.0	-45.0	45.0	44.8	0.17	259.337	
150.0	150.0	143.0	143.0	0.2	0.2	-90.00	0.0	-45.0	45.0	44.6	0.39	115.727	
200.0	200.0	193.0	193.0	0.3	0.3	-90.00	0.0	-45.0	45.0	44.4	0.61	73.336	
250.0	250.0	243.0	243.0	0.4	0.4	-90.00	0.0	-45.0	45.0	44.2	0.84	53.675	
300.0	300.0	293.0	293.0	0.5	0.5	-90.00	0.0	-45.0	45.0	43.9	1.06	42.327	
350.0	350.0	343.0	343.0	0.7	0.6	-90.00	0.0	-45.0	45.0	43.7	1.29	34.940	
400.0	400.0	393.0	393.0	0.8	0.7	-90.00	0.0	-45.0	45.0	43.5	1.51	29.749	
450.0	450.0	443.0	443.0	0.9	0.9	-90.00	0.0	-45.0	45.0	43.3	1.74	25.900	
500.0	500.0	493.0	493.0	1.0	1.0	-90.00	0.0	-45.0	45.0	43.0	1.96	22.933	
550.0	550.0	543.0	543.0	1.1	1.1	62.72	0.0	-45.0	44.8	42.6	2.17	20.604	
600.0	600.0	593.0	593.0	1.2	1.2	64.23	0.0	-45.0	44.2	41.8	2.39	18.529	
650.0	649.9	642.9	642.9	1.3	1.3	66.85	0.0	-45.0	43.3	40.7	2.59	16.703	
700.0	699.8	692.6	692.6	1.4	1.4	71.05	0.3	-45.1	42.3	39.5	2.80	15.127	
750.0	749.7	742.0	742.0	1.5	1.5	77.55	1.4	-45.4	41.8	38.8	3.02	13.860	
756.3	756.0	748.3	748.2	1.5	1.5	78.53	1.6	-45.4	41.8	38.7	3.04	13.732 CC, ES	
800.0	799.5	791.2	791.1	1.6	1.6	86.14	3.4	-45.9	42.3	39.0	3.24	13.067	
850.0	849.1	840.0	839.9	1.7	1.8	96.10	6.1	-46.6	44.4	40.9	3.47	12.785 SF	
900.0	898.7	888.5	888.2	1.8	1.9	106.27	9.6	-47.5	48.8	45.1	3.71	13.133	
950.0	948.2	936.4	936.0	2.0	2.0	115.59	13.8	-48.7	55.6	51.7	3.97	14.020	
1,000.0	997.5	983.8	983.1	2.1	2.1	123.46	18.8	-50.0	64.9	60.7	4.21	15.423	
1,050.0	1,046.6	1,030.7	1,029.5	2.3	2.2	129.79	24.4	-51.5	76.6	72.1	4.46	17.164	
1,100.0	1,095.6	1,076.8	1,075.2	2.5	2.3	134.76	30.7	-53.1	90.3	85.6	4.70	19.207	

Anticollision Report

Company:	Edge Energy LLC	Local Co-ordinate Reference:	Well Cherry Knolls 33-10 - Slot 10
Project:	Weld County, Co (NAD 83)	TVD Reference:	Est RKB @ 5126.0usft (kb;20')
Reference Site:	Sec. 33 Twn 1N Rng 65W	MD Reference:	Est RKB @ 5126.0usft (kb;20')
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Cherry Knolls 33-10	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	WellPlan Services
Reference Design:	#1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
Survey Program: 0-MWD												Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	0.0	-30.0	30.1				
50.0	50.0	48.0	48.0	0.0	0.0	-90.00	0.0	-30.0	30.0	29.9	0.08	390.269	
100.0	100.0	98.0	98.0	0.1	0.1	-90.00	0.0	-30.0	30.0	29.8	0.18	168.525	
150.0	150.0	148.0	148.0	0.2	0.2	-90.00	0.0	-30.0	30.0	29.6	0.40	74.984	
200.0	200.0	198.0	198.0	0.3	0.3	-90.00	0.0	-30.0	30.0	29.4	0.62	48.012	
250.0	250.0	248.0	248.0	0.4	0.4	-90.00	0.0	-30.0	30.0	29.2	0.85	35.310	
300.0	300.0	298.0	298.0	0.5	0.5	-90.00	0.0	-30.0	30.0	28.9	1.07	27.923	
350.0	350.0	348.0	348.0	0.7	0.6	-90.00	0.0	-30.0	30.0	28.7	1.30	23.092	
400.0	400.0	398.0	398.0	0.8	0.8	-90.00	0.0	-30.0	30.0	28.5	1.52	19.686	
450.0	450.0	448.0	448.0	0.9	0.9	-90.00	0.0	-30.0	30.0	28.3	1.75	17.156	
500.0	500.0	498.0	498.0	1.0	1.0	-90.00	0.0	-30.0	30.0	28.0	1.97	15.202	
550.0	550.0	548.0	548.0	1.1	1.1	62.97	0.0	-30.0	29.8	27.6	2.19	13.635	
600.0	600.0	598.0	598.0	1.2	1.2	65.26	0.0	-30.0	29.2	26.8	2.40	12.192	
650.0	649.9	647.9	647.9	1.3	1.3	69.27	0.0	-30.0	28.4	25.8	2.60	10.899	
700.0	699.8	697.8	697.8	1.4	1.4	75.25	0.0	-30.0	27.5	24.6	2.81	9.767	
750.0	749.7	747.7	747.7	1.5	1.5	83.40	0.0	-30.0	26.7	23.7	3.03	8.819	
783.2	782.7	780.7	780.7	1.6	1.6	90.00	0.0	-30.0	26.5	23.4	3.18	8.356 CC	
800.0	799.5	797.5	797.5	1.6	1.7	93.67	0.0	-30.0	26.6	23.3	3.25	8.180 ES	
850.0	849.1	847.1	847.1	1.7	1.8	105.41	0.0	-30.0	27.5	24.1	3.49	7.902 SF	
900.0	898.7	896.7	896.7	1.8	1.9	117.41	0.0	-30.0	30.0	26.2	3.72	8.064	
950.0	948.2	946.2	946.2	2.0	2.0	128.38	0.0	-30.0	34.0	30.1	3.95	8.617	
1,000.0	997.5	995.5	995.5	2.1	2.1	137.62	0.0	-30.0	39.7	35.5	4.17	9.526	
1,050.0	1,046.6	1,045.0	1,045.0	2.3	2.2	144.71	-0.2	-30.3	46.7	42.3	4.38	10.654	
1,100.0	1,095.6	1,094.7	1,094.7	2.5	2.3	149.65	-1.0	-31.2	54.4	49.9	4.59	11.863	
1,150.0	1,144.4	1,144.6	1,144.5	2.7	2.4	153.11	-2.3	-32.8	62.7	57.9	4.79	13.074	
1,200.0	1,193.2	1,194.6	1,194.5	2.9	2.5	155.40	-4.2	-35.1	70.8	65.8	5.01	14.143	
1,250.0	1,241.9	1,244.9	1,244.6	3.1	2.6	156.76	-6.6	-38.1	78.4	73.2	5.23	14.986	
1,300.0	1,290.7	1,295.4	1,294.9	3.3	2.7	157.45	-9.7	-41.8	85.4	79.9	5.46	15.648	
1,350.0	1,339.4	1,346.1	1,345.3	3.5	2.8	157.65	-13.2	-46.1	91.8	86.1	5.70	16.098	
1,400.0	1,388.2	1,397.0	1,395.7	3.8	2.9	157.44	-17.4	-51.2	97.6	91.6	5.95	16.398	

Anticollision Report

Company:	Edge Energy LLC	Local Co-ordinate Reference:	Well Cherry Knolls 33-10 - Slot 10
Project:	Weld County, Co (NAD 83)	TVD Reference:	Est RKB @ 5126.0usft (kb;20')
Reference Site:	Sec. 33 Twn 1N Rng 65W	MD Reference:	Est RKB @ 5126.0usft (kb;20')
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Cherry Knolls 33-10	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	WellPlan Services
Reference Design:	#1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	0.0 usft
Survey Program: 0-MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-90.00	0.0	-15.0	15.0					
50.0	50.0	49.0	49.0	0.0	0.0	-90.00	0.0	-15.0	15.0	14.9	0.08	192.879		
100.0	100.0	99.0	99.0	0.1	0.1	-90.00	0.0	-15.0	15.0	14.8	0.18	83.839		
150.0	150.0	149.0	149.0	0.2	0.2	-90.00	0.0	-15.0	15.0	14.6	0.40	37.283		
200.0	200.0	199.0	199.0	0.3	0.3	-90.00	0.0	-15.0	15.0	14.4	0.63	23.920		
250.0	250.0	249.0	249.0	0.4	0.4	-90.00	0.0	-15.0	15.0	14.1	0.85	17.608		
300.0	300.0	299.0	299.0	0.5	0.5	-90.00	0.0	-15.0	15.0	13.9	1.08	13.932		
350.0	350.0	349.0	349.0	0.7	0.6	-90.00	0.0	-15.0	15.0	13.7	1.30	11.526		
400.0	400.0	399.0	399.0	0.8	0.8	-90.00	0.0	-15.0	15.0	13.5	1.53	9.829		
450.0	450.0	449.0	449.0	0.9	0.9	-90.00	0.0	-15.0	15.0	13.2	1.75	8.567		
500.0	500.0	499.0	499.0	1.0	1.0	-90.00	0.0	-15.0	15.0	13.0	1.98	7.592 CC		
550.0	550.0	548.8	548.8	1.1	1.1	62.52	-0.3	-15.3	15.1	12.9	2.18	6.931 ES		
600.0	600.0	598.6	598.6	1.2	1.2	63.30	-1.2	-16.2	15.3	13.0	2.38	6.460		
650.0	649.9	648.5	648.4	1.3	1.3	64.50	-2.8	-17.6	15.8	13.2	2.57	6.159		
700.0	699.8	698.3	698.1	1.4	1.4	66.06	-5.0	-19.6	16.5	13.7	2.75	5.973		
750.0	749.7	748.1	747.8	1.5	1.5	67.87	-7.9	-22.3	17.3	14.3	2.97	5.835		
800.0	799.5	797.9	797.4	1.6	1.6	69.84	-11.4	-25.5	18.4	15.2	3.18	5.779		
850.0	849.1	847.7	846.8	1.7	1.7	71.88	-15.5	-29.3	19.7	16.2	3.42	5.745 SF		
900.0	898.7	897.5	896.2	1.8	1.9	73.91	-20.2	-33.7	21.2	17.5	3.67	5.769		
950.0	948.2	947.2	945.4	2.0	2.0	75.87	-25.6	-38.6	22.9	19.0	3.96	5.792		
1,000.0	997.5	997.0	994.5	2.1	2.1	77.73	-31.6	-44.1	24.9	20.7	4.25	5.858		
1,050.0	1,046.6	1,046.9	1,043.7	2.3	2.3	80.20	-38.0	-50.0	27.0	22.4	4.59	5.875		
1,100.0	1,095.6	1,096.9	1,092.9	2.5	2.5	84.02	-44.4	-55.9	29.0	24.0	4.94	5.862		
1,150.0	1,144.4	1,146.8	1,142.0	2.7	2.7	88.92	-50.7	-61.8	31.0	25.7	5.32	5.830		
1,200.0	1,193.2	1,196.6	1,191.1	2.9	2.8	93.75	-57.1	-67.6	33.3	27.6	5.71	5.835		
1,250.0	1,241.9	1,246.5	1,240.2	3.1	3.0	97.92	-63.5	-73.5	35.8	29.7	6.11	5.870		
1,300.0	1,290.7	1,296.4	1,289.3	3.3	3.2	101.54	-69.8	-79.4	38.5	32.0	6.49	5.932		
1,350.0	1,339.4	1,346.2	1,338.5	3.5	3.4	104.68	-76.2	-85.3	41.3	34.4	6.88	6.006		
1,400.0	1,388.2	1,396.1	1,387.6	3.8	3.6	107.41	-82.6	-91.1	44.2	37.0	7.26	6.092		
1,450.0	1,436.9	1,446.0	1,436.7	4.0	3.8	109.80	-88.9	-97.0	47.2	39.6	7.64	6.182		
1,500.0	1,485.7	1,495.9	1,485.8	4.2	4.0	111.90	-95.3	-102.9	50.3	42.3	8.02	6.275		
1,550.0	1,534.4	1,545.7	1,534.9	4.4	4.1	113.76	-101.7	-108.7	53.4	45.0	8.39	6.369		
1,600.0	1,583.2	1,595.6	1,584.0	4.7	4.3	115.41	-108.0	-114.6	56.6	47.8	8.76	6.461		
1,650.0	1,631.9	1,645.5	1,633.1	4.9	4.5	116.88	-114.4	-120.5	59.8	50.7	9.13	6.551		
1,700.0	1,680.7	1,695.4	1,682.3	5.1	4.7	118.21	-120.8	-126.3	63.1	53.6	9.50	6.640		
1,750.0	1,729.4	1,745.2	1,731.4	5.4	4.9	119.40	-127.2	-132.2	66.4	56.5	9.87	6.725		
1,800.0	1,778.2	1,795.1	1,780.5	5.6	5.1	120.48	-133.5	-138.1	69.7	59.5	10.24	6.808		
1,850.0	1,826.9	1,845.0	1,829.6	5.8	5.3	121.46	-139.9	-143.9	73.0	62.4	10.60	6.887		
1,900.0	1,875.7	1,894.9	1,878.7	6.1	5.5	122.36	-146.3	-149.8	76.4	65.4	10.97	6.963		
1,950.0	1,924.4	1,944.7	1,927.8	6.3	5.7	123.18	-152.6	-155.7	79.8	68.4	11.34	7.036		
2,000.0	1,973.2	1,994.6	1,977.0	6.5	5.9	123.93	-159.0	-161.6	83.1	71.4	11.70	7.107		
2,050.0	2,021.9	2,044.5	2,026.1	6.8	6.1	124.62	-165.4	-167.4	86.6	74.5	12.07	7.174		
2,100.0	2,070.7	2,094.4	2,075.2	7.0	6.3	125.27	-171.7	-173.3	90.0	77.5	12.43	7.238		
2,150.0	2,119.4	2,144.2	2,124.3	7.2	6.5	125.86	-178.1	-179.2	93.4	80.6	12.79	7.300		
2,200.0	2,168.2	2,194.1	2,173.4	7.5	6.7	126.41	-184.5	-185.0	96.8	83.7	13.16	7.359		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	Edge Energy LLC	Local Co-ordinate Reference:	Well Cherry Knolls 33-10 - Slot 10
Project:	Weld County, Co (NAD 83)	TVD Reference:	Est RKB @ 5126.0usft (kb;20')
Reference Site:	Sec. 33 TwN 1N Rng 65W	MD Reference:	Est RKB @ 5126.0usft (kb;20')
Site Error:	0.0 usft	North Reference:	True
Reference Well:	Cherry Knolls 33-10	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	Hz	Database:	WellPlan Services
Reference Design:	#1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to Est RKB @ 5126.0usft (kb;20')

Offset Depths are relative to Offset Datum

Central Meridian is 105° 30' 0.00000 W

Coordinates are relative to: Cherry Knolls 33-10 - Slot 10

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.53°

