

# **PDC ENERGY**

**WELD COUNTY, COLORADO**

**SW SW SEC. 28 T5N R67W 6th P.M.**

**KINZER 28H-202**

**ORIGINAL WELLBORE**

**06 May, 2016**

**Plan: PROPOSAL #2**



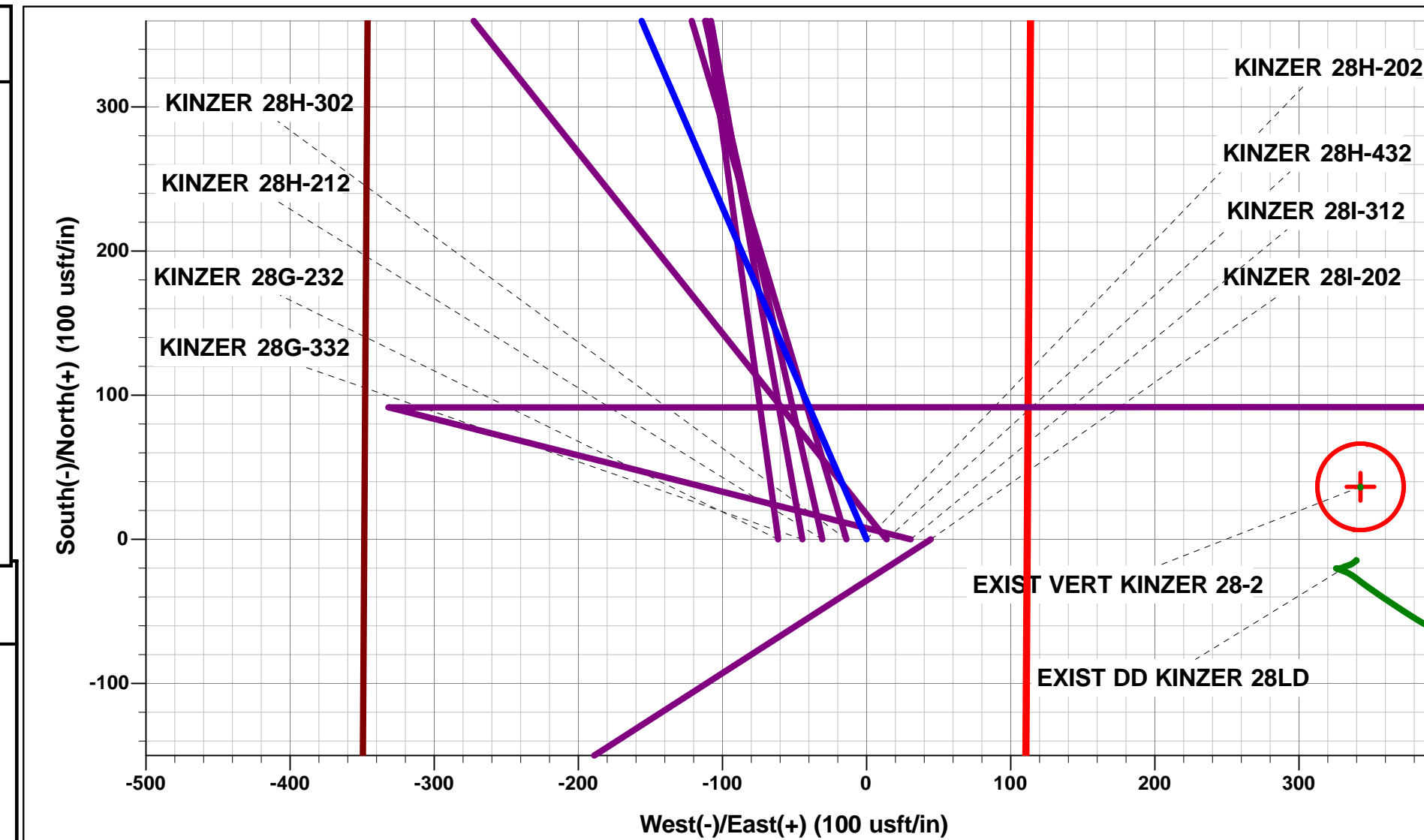


Project: WELD COUNTY, COLORADO  
Site: SW SW SEC. 28 T5N R67W 6th P.M.  
Well: KINZER 28H-202  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #2



ANNOTATIONS										
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Dep	Annotation		
0.0	0.0	0.00	0.00	0.0	0.0	0.0	0.0	SHL: 430ft FSL & 348ft FWL of Sec 28		
700.0	700.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)		
1295.5	1299.9	12.00	336.55	57.4	-24.9	-16.0	62.6	EOB TO 12° INC		
4596.3	4674.4	12.00	336.55	700.9	-304.1	-195.4	764.0	END OF TANGENT		
5191.8	5274.3	0.00	0.00	758.3	-329.0	-211.4	826.6	EOD TO VERTICAL		
6069.8	6152.3	0.00	0.00	758.3	-329.0	-211.4	826.6	KOP (8°/100ft BUR)		
6786.0	7282.3	90.40	90.00	758.3	392.2	501.7	1547.8	HZ LP *NEW*: 1188.2ft FSL & 736.2ft FWL of Sec 28		
6765.6	10200.0	90.40	90.00	758.3	3309.9	3386.2	4465.5	END OF TANGENT		
6764.4	10366.7	90.40	95.00	751.0	3476.4	3549.7	4632.2	EOT TO 95° AZ		
6763.8	10466.7	90.40	95.00	742.3	3576.0	3646.9	4732.2	END OF TANGENT		
6761.4	10800.0	90.40	85.00	742.3	3908.8	3976.0	5065.5	EOT TO 85° AZ		
6760.7	10899.9	90.40	85.00	751.0	4008.4	4075.7	5165.3	END OF TANGENT		
6759.6	11066.6	90.39	90.00	758.3	4174.8	4241.4	5332.0	EOT TO 90° AZ		
6754.0	11882.6	90.39	90.00	758.3	4990.8	5048.1	6148.0	BHL: 1195ft FSL & 75ft FEL of Sec 28		

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - KINZER 28H-202	6069.8	758.3	-329.0	40.366691	-104.907531
BHL - KINZER 28H-202	6754.0	758.3	4990.8	40.366690	-104.888440
HZ LANDING PNT *NEW* - KINZER 28H-202	6786.0	758.3	392.2	40.366691	-104.904943



PROPOSED LOCAL COORDINATES:

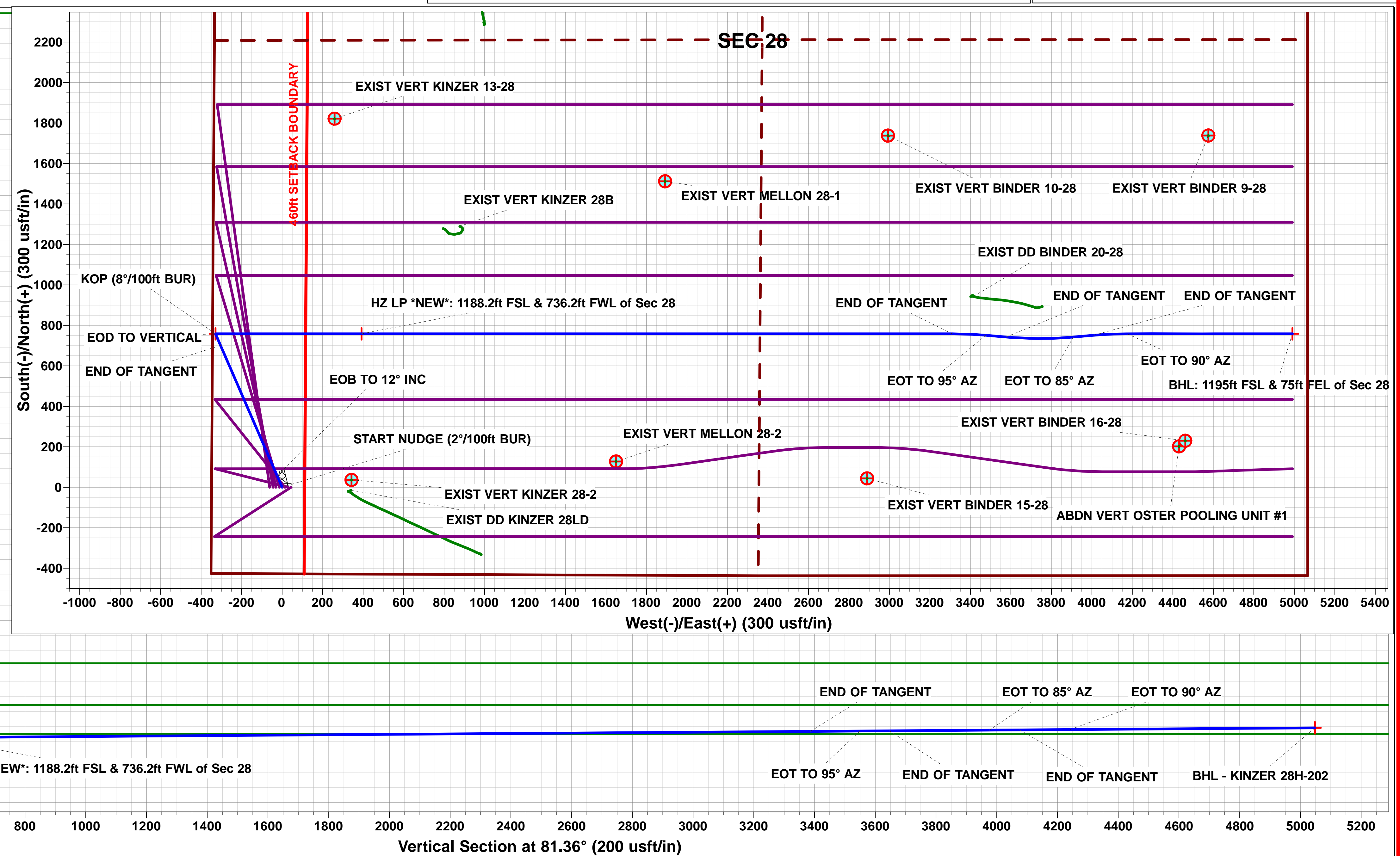
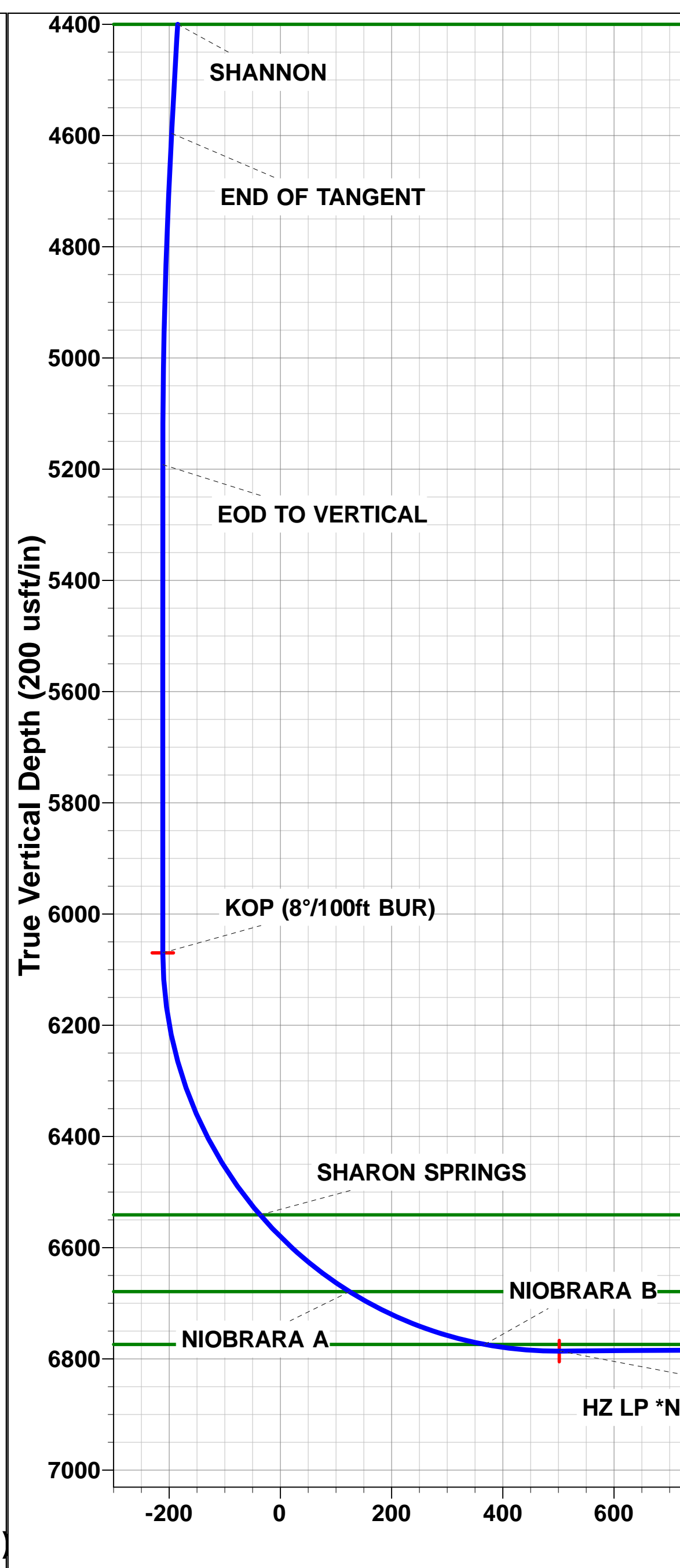
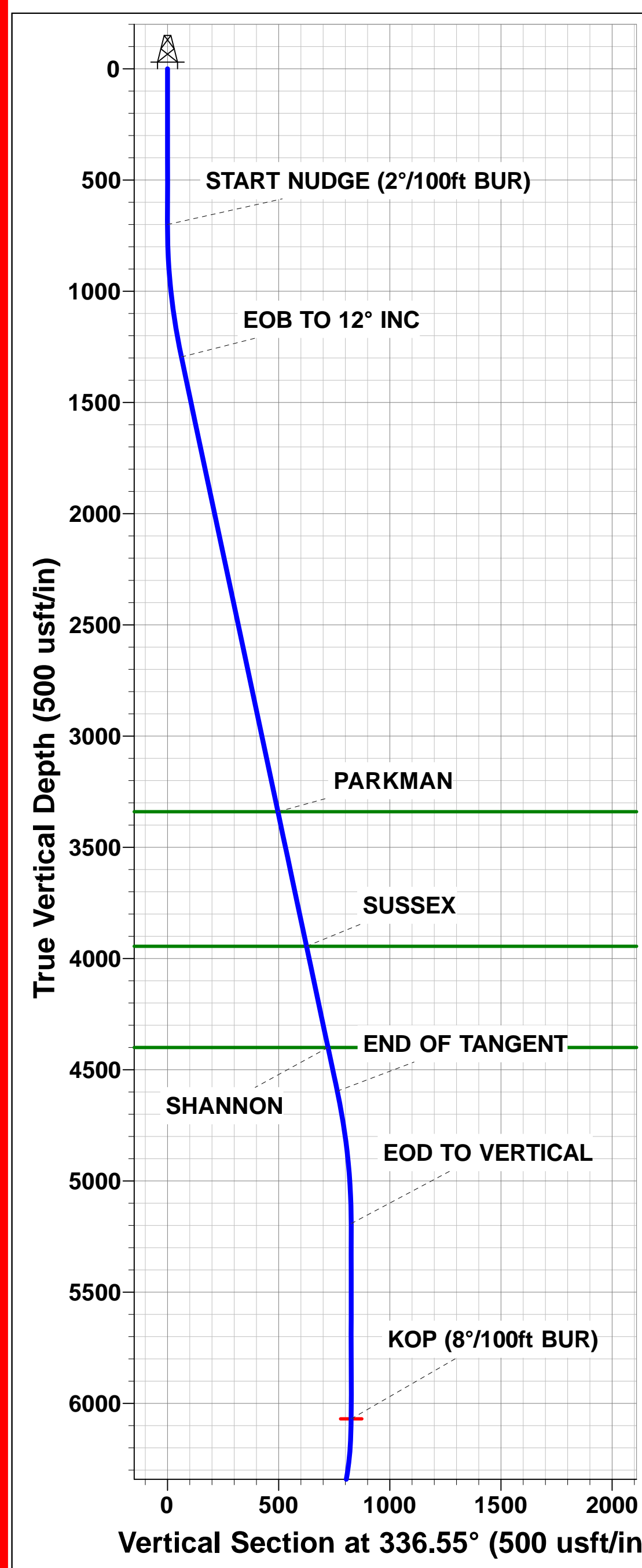
SHL: 430ft FSL & 348ft FWL of Sec 28

HZ LP \*NEW\*: 1188.2ft FSL & 736.2ft FWL of Sec 28

BHL: 1195ft FSL & 75ft FEL of Sec 28

Azimuths to True North  
Magnetic North: 8.41°

Magnetic Field  
Strength: 52499.7snT  
Dip Angle: 66.83°  
Date: 24/03/2016  
Model: IGRF2015



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well KINZER 28H-202
<b>Company:</b>	PDC ENERGY	<b>TVD Reference:</b>	KB-EST @ 4797.5usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	KB-EST @ 4797.5usft (Original Well Elev)
<b>Site:</b>	SW SW SEC. 28 T5N R67W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	KINZER 28H-202	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

<b>Project</b>	WELD COUNTY, COLORADO		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		Using geodetic scale factor

<b>Site</b>	SW SW SEC. 28 T5N R67W 6th P.M.		
<b>Site Position:</b>		<b>Northing:</b>	1,376,222.00 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,165,467.33 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	1.10000 ft
		<b>Latitude:</b>	40.364610
		<b>Longitude:</b>	-104.906190
		<b>Grid Convergence:</b>	0.38 °

<b>Well</b>	KINZER 28H-202		
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>
	<b>+E/-W</b>	-44.6 usft	<b>Easting:</b>
<b>Position Uncertainty</b>		0.0 usft	<b>Wellhead Elevation:</b>
			<b>Latitude:</b>
			<b>Longitude:</b>
			<b>Ground Level:</b>

<b>Wellbore</b>	ORIGINAL WELLBORE				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	24/03/2016	8.41	66.83	52,500

<b>Design</b>	PROPOSAL #2			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	81.36

<b>Plan Sections</b>											
MD (usft)	Inc (°)	Azi (°)	Vertical Depth	SS (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100usf)	Turn Rate (°/100usf)	TFO (°)	Target
0.0	0.00	0.00	0.0	-4,797.5	0.0	0.0	0.00	0.00	0.00	0.00	
700.0	0.00	0.00	700.0	-4,097.5	0.0	0.0	0.00	0.00	0.00	0.00	
1,299.9	12.00	336.55	1,295.5	-3,502.0	57.4	-24.9	2.00	2.00	0.00	336.55	
4,674.4	12.00	336.55	4,596.3	-201.2	700.9	-304.1	0.00	0.00	0.00	0.00	
5,274.3	0.00	0.00	5,191.8	394.3	758.3	-329.0	2.00	-2.00	0.00	180.00	
6,152.3	0.00	0.00	6,069.8	1,272.3	758.3	-329.0	0.00	0.00	0.00	0.00	KOP - KINZER 28H
7,282.3	90.40	90.00	6,786.0	1,988.5	758.3	392.2	8.00	8.00	0.00	90.00	
10,200.0	90.40	90.00	6,765.6	1,968.1	758.3	3,309.9	0.00	0.00	0.00	0.00	
10,366.7	90.40	95.00	6,764.4	1,966.9	751.0	3,476.3	3.00	0.00	3.00	90.00	
10,466.7	90.40	95.00	6,763.8	1,966.3	742.3	3,575.9	0.00	0.00	0.00	0.00	
10,800.0	90.40	85.00	6,761.4	1,963.9	742.3	3,908.8	3.00	0.00	-3.00	270.05	
10,899.9	90.40	85.00	6,760.7	1,963.2	751.0	4,008.3	0.00	0.00	0.00	0.00	
11,066.6	90.39	90.00	6,759.6	1,962.1	758.3	4,174.8	3.00	-0.01	3.00	90.10	
11,882.6	90.39	90.00	6,754.0	1,956.5	758.3	4,990.8	0.00	0.00	0.00	0.00	BHL - KINZER 28H

# Planning Report



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<b>Company:</b>	PDC ENERGY	<b>TVD Reference:</b>	KB-EST @ 4797.5usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	KB-EST @ 4797.5usft (Original Well Elev)
<b>Site:</b>	SW SW SEC. 28 T5N R67W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	KINZER 28H-202	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

## Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
<b>SHL: 430ft FSL &amp; 348ft FWL of Sec 28</b>										
0.0	0.00	0.00	0.0	4,797.50	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,697.50	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,597.50	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,497.50	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,397.50	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,297.50	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,197.50	0.0	0.0	0.0	0.00	0.00	0.00
<b>START NUDGE (2°/100ft BUR)</b>										
700.0	0.00	0.00	700.0	4,097.50	0.0	0.0	0.0	0.00	0.00	0.00
800.0	2.00	336.55	800.0	3,997.52	1.6	-0.7	-0.4	2.00	2.00	0.00
900.0	4.00	336.55	899.8	3,897.66	6.4	-2.8	-1.8	2.00	2.00	0.00
1,000.0	6.00	336.55	999.5	3,798.05	14.4	-6.2	-4.0	2.00	2.00	0.00
1,100.0	8.00	336.55	1,098.7	3,698.80	25.6	-11.1	-7.1	2.00	2.00	0.00
1,200.0	10.00	336.55	1,197.5	3,600.03	39.9	-17.3	-11.1	2.00	2.00	0.00
<b>EOB TO 12° INC</b>										
1,299.9	12.00	336.55	1,295.5	3,501.97	57.4	-24.9	-16.0	2.00	2.00	0.00
1,300.0	12.00	336.55	1,295.6	3,501.88	57.4	-24.9	-16.0	0.00	0.00	0.00
1,400.0	12.00	336.55	1,393.4	3,404.06	76.5	-33.2	-21.3	0.00	0.00	0.00
1,500.0	12.00	336.55	1,491.3	3,306.25	95.6	-41.5	-26.6	0.00	0.00	0.00
1,600.0	12.00	336.55	1,589.1	3,208.43	114.6	-49.7	-32.0	0.00	0.00	0.00
1,700.0	12.00	336.55	1,686.9	3,110.61	133.7	-58.0	-37.3	0.00	0.00	0.00
1,800.0	12.00	336.55	1,784.7	3,012.80	152.8	-66.3	-42.6	0.00	0.00	0.00
1,900.0	12.00	336.55	1,882.5	2,914.98	171.8	-74.6	-47.9	0.00	0.00	0.00
2,000.0	12.00	336.55	1,980.3	2,817.17	190.9	-82.8	-53.2	0.00	0.00	0.00
2,100.0	12.00	336.55	2,078.1	2,719.35	210.0	-91.1	-58.5	0.00	0.00	0.00
2,200.0	12.00	336.55	2,176.0	2,621.54	229.1	-99.4	-63.8	0.00	0.00	0.00
2,300.0	12.00	336.55	2,273.8	2,523.72	248.1	-107.7	-69.2	0.00	0.00	0.00
2,400.0	12.00	336.55	2,371.6	2,425.90	267.2	-115.9	-74.5	0.00	0.00	0.00
2,500.0	12.00	336.55	2,469.4	2,328.09	286.3	-124.2	-79.8	0.00	0.00	0.00
2,600.0	12.00	336.55	2,567.2	2,230.27	305.3	-132.5	-85.1	0.00	0.00	0.00
2,700.0	12.00	336.55	2,665.0	2,132.46	324.4	-140.7	-90.4	0.00	0.00	0.00
2,800.0	12.00	336.55	2,762.9	2,034.64	343.5	-149.0	-95.7	0.00	0.00	0.00
2,900.0	12.00	336.55	2,860.7	1,936.82	362.5	-157.3	-101.0	0.00	0.00	0.00
3,000.0	12.00	336.55	2,958.5	1,839.01	381.6	-165.6	-106.4	0.00	0.00	0.00
3,100.0	12.00	336.55	3,056.3	1,741.19	400.7	-173.8	-111.7	0.00	0.00	0.00
3,200.0	12.00	336.55	3,154.1	1,643.38	419.7	-182.1	-117.0	0.00	0.00	0.00
3,300.0	12.00	336.55	3,251.9	1,545.56	438.8	-190.4	-122.3	0.00	0.00	0.00
<b>PARKMAN</b>										
3,390.0	12.00	336.55	3,340.0	1,457.50	456.0	-197.8	-127.1	0.00	0.00	0.00
3,400.0	12.00	336.55	3,349.8	1,447.75	457.9	-198.7	-127.6	0.00	0.00	0.00
3,500.0	12.00	336.55	3,447.6	1,349.93	476.9	-206.9	-132.9	0.00	0.00	0.00
3,600.0	12.00	336.55	3,545.4	1,252.11	496.0	-215.2	-138.3	0.00	0.00	0.00
3,700.0	12.00	336.55	3,643.2	1,154.30	515.1	-223.5	-143.6	0.00	0.00	0.00
3,800.0	12.00	336.55	3,741.0	1,056.48	534.2	-231.8	-148.9	0.00	0.00	0.00
3,900.0	12.00	336.55	3,838.8	958.67	553.2	-240.0	-154.2	0.00	0.00	0.00
4,000.0	12.00	336.55	3,936.6	860.85	572.3	-248.3	-159.5	0.00	0.00	0.00
<b>SUSSEX</b>										
4,008.5	12.00	336.55	3,945.0	852.50	573.9	-249.0	-160.0	0.00	0.00	0.00
4,100.0	12.00	336.55	4,034.5	763.04	591.4	-256.6	-164.8	0.00	0.00	0.00
4,200.0	12.00	336.55	4,132.3	665.22	610.4	-264.8	-170.1	0.00	0.00	0.00
4,300.0	12.00	336.55	4,230.1	567.40	629.5	-273.1	-175.5	0.00	0.00	0.00
4,400.0	12.00	336.55	4,327.9	469.59	648.6	-281.4	-180.8	0.00	0.00	0.00

# Planning Report



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<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	KB-EST @ 4797.5usft (Original Well Elev)
<b>Site:</b>	SW SW SEC. 28 T5N R67W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	KINZER 28H-202	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

## Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
<b>SHANNON</b>										
4,473.7	12.00	336.55	4,400.0	397.50	662.6	-287.5	-184.7	0.00	0.00	0.00
4,500.0	12.00	336.55	4,425.7	371.77	667.6	-289.7	-186.1	0.00	0.00	0.00
4,600.0	12.00	336.55	4,523.5	273.96	686.7	-297.9	-191.4	0.00	0.00	0.00
<b>END OF TANGENT</b>										
4,674.4	12.00	336.55	4,596.3	201.18	700.9	-304.1	-195.4	0.00	0.00	0.00
4,700.0	11.49	336.55	4,621.4	176.12	705.7	-306.2	-196.7	2.00	-2.00	0.00
4,800.0	9.49	336.55	4,719.7	77.79	722.4	-313.4	-201.3	2.00	-2.00	0.00
4,900.0	7.49	336.55	4,818.6	-21.11	735.9	-319.3	-205.1	2.00	-2.00	0.00
5,000.0	5.49	336.55	4,918.0	-120.46	746.3	-323.8	-208.0	2.00	-2.00	0.00
5,100.0	3.49	336.55	5,017.7	-220.15	753.4	-326.9	-210.0	2.00	-2.00	0.00
5,200.0	1.49	336.55	5,117.6	-320.05	757.4	-328.6	-211.1	2.00	-2.00	0.00
<b>EOD TO VERTICAL</b>										
5,274.3	0.00	0.00	5,191.8	-394.34	758.3	-329.0	-211.4	2.00	-2.00	0.00
5,300.0	0.00	0.00	5,217.5	-420.04	758.3	-329.0	-211.4	0.00	0.00	0.00
5,400.0	0.00	0.00	5,317.5	-520.04	758.3	-329.0	-211.4	0.00	0.00	0.00
5,500.0	0.00	0.00	5,417.5	-620.04	758.3	-329.0	-211.4	0.00	0.00	0.00
5,600.0	0.00	0.00	5,517.5	-720.04	758.3	-329.0	-211.4	0.00	0.00	0.00
5,700.0	0.00	0.00	5,617.5	-820.04	758.3	-329.0	-211.4	0.00	0.00	0.00
5,800.0	0.00	0.00	5,717.5	-920.04	758.3	-329.0	-211.4	0.00	0.00	0.00
5,900.0	0.00	0.00	5,817.5	-1,020.04	758.3	-329.0	-211.4	0.00	0.00	0.00
6,000.0	0.00	0.00	5,917.5	-1,120.04	758.3	-329.0	-211.4	0.00	0.00	0.00
6,100.0	0.00	0.00	6,017.5	-1,220.04	758.3	-329.0	-211.4	0.00	0.00	0.00
<b>KOP (8°/100ft BUR)</b>										
6,152.3	0.00	0.00	6,069.8	-1,272.34	758.3	-329.0	-211.4	0.00	0.00	0.00
6,200.0	3.82	90.00	6,117.5	-1,320.01	758.3	-327.4	-209.8	8.01	8.01	0.00
6,300.0	11.82	90.00	6,216.5	-1,419.00	758.3	-313.8	-196.3	8.00	8.00	0.00
6,400.0	19.82	90.00	6,312.6	-1,515.13	758.3	-286.6	-169.4	8.00	8.00	0.00
6,500.0	27.82	90.00	6,404.0	-1,606.54	758.3	-246.2	-129.5	8.00	8.00	0.00
6,600.0	35.82	90.00	6,488.9	-1,691.44	758.3	-193.5	-77.4	8.00	8.00	0.00
<b>SHARON SPRINGS</b>										
6,666.5	41.14	90.00	6,541.0	-1,743.50	758.3	-152.2	-36.5	8.00	8.00	0.00
6,700.0	43.82	90.00	6,565.7	-1,768.19	758.3	-129.6	-14.2	8.00	8.00	0.00
6,800.0	51.82	90.00	6,632.8	-1,835.28	758.3	-55.5	59.0	8.00	8.00	0.00
<b>NIOBRARA A</b>										
6,880.7	58.28	90.00	6,679.0	-1,881.50	758.3	10.6	124.4	8.00	8.00	0.00
6,900.0	59.82	90.00	6,688.9	-1,891.41	758.3	27.1	140.7	8.00	8.00	0.00
7,000.0	67.82	90.00	6,733.0	-1,935.50	758.3	116.8	229.4	8.00	8.00	0.00
7,100.0	75.82	90.00	6,764.2	-1,966.67	758.3	211.7	323.2	8.00	8.00	0.00
<b>NIOBRARA B</b>										
7,146.0	79.50	90.00	6,774.0	-1,976.50	758.3	256.7	367.6	8.00	8.00	0.00
7,200.0	83.82	90.00	6,781.8	-1,984.33	758.3	310.1	420.5	8.00	8.00	0.00
<b>HZ LP *NEW*: 1188.2ft FSL &amp; 736.2ft FWL of Sec 28</b>										
7,282.3	90.40	90.00	6,786.0	-1,988.48	758.3	392.2	501.7	8.00	8.00	0.00
7,300.0	90.40	90.00	6,785.9	-1,988.36	758.3	409.9	519.2	0.00	0.00	0.00
7,400.0	90.40	90.00	6,785.2	-1,987.66	758.3	509.9	618.1	0.00	0.00	0.00
7,500.0	90.40	90.00	6,784.5	-1,986.96	758.3	609.9	716.9	0.00	0.00	0.00
7,600.0	90.40	90.00	6,783.8	-1,986.26	758.3	709.9	815.8	0.00	0.00	0.00
7,700.0	90.40	90.00	6,783.1	-1,985.56	758.3	809.9	914.6	0.00	0.00	0.00
7,800.0	90.40	90.00	6,782.4	-1,984.87	758.3	909.9	1,013.5	0.00	0.00	0.00
7,900.0	90.40	90.00	6,781.7	-1,984.17	758.3	1,009.9	1,112.4	0.00	0.00	0.00
8,000.0	90.40	90.00	6,781.0	-1,983.47	758.3	1,109.9	1,211.2	0.00	0.00	0.00
8,100.0	90.40	90.00	6,780.3	-1,982.77	758.3	1,209.9	1,310.1	0.00	0.00	0.00

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well KINZER 28H-202
<b>Company:</b>	PDC ENERGY	<b>TVD Reference:</b>	KB-EST @ 4797.5usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	KB-EST @ 4797.5usft (Original Well Elev)
<b>Site:</b>	SW SW SEC. 28 T5N R67W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	KINZER 28H-202	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

Planned Survey										
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,200.0	90.40	90.00	6,779.6	-1,982.07	758.3	1,309.9	1,409.0	0.00	0.00	0.00
8,300.0	90.40	90.00	6,778.9	-1,981.37	758.3	1,409.9	1,507.8	0.00	0.00	0.00
8,400.0	90.40	90.00	6,778.2	-1,980.68	758.3	1,509.9	1,606.7	0.00	0.00	0.00
8,500.0	90.40	90.00	6,777.5	-1,979.98	758.3	1,609.9	1,705.6	0.00	0.00	0.00
8,600.0	90.40	90.00	6,776.8	-1,979.28	758.3	1,709.9	1,804.4	0.00	0.00	0.00
8,700.0	90.40	90.00	6,776.1	-1,978.58	758.3	1,809.9	1,903.3	0.00	0.00	0.00
8,800.0	90.40	90.00	6,775.4	-1,977.88	758.3	1,909.9	2,002.1	0.00	0.00	0.00
8,900.0	90.40	90.00	6,774.7	-1,977.19	758.3	2,009.9	2,101.0	0.00	0.00	0.00
9,000.0	90.40	90.00	6,774.0	-1,976.49	758.3	2,109.9	2,199.9	0.00	0.00	0.00
9,100.0	90.40	90.00	6,773.3	-1,975.79	758.3	2,209.9	2,298.7	0.00	0.00	0.00
9,200.0	90.40	90.00	6,772.6	-1,975.09	758.3	2,309.9	2,397.6	0.00	0.00	0.00
9,300.0	90.40	90.00	6,771.9	-1,974.39	758.3	2,409.9	2,496.5	0.00	0.00	0.00
9,400.0	90.40	90.00	6,771.2	-1,973.70	758.3	2,509.9	2,595.3	0.00	0.00	0.00
9,500.0	90.40	90.00	6,770.5	-1,973.00	758.3	2,609.9	2,694.2	0.00	0.00	0.00
9,600.0	90.40	90.00	6,769.8	-1,972.30	758.3	2,709.9	2,793.0	0.00	0.00	0.00
9,700.0	90.40	90.00	6,769.1	-1,971.60	758.3	2,809.9	2,891.9	0.00	0.00	0.00
9,800.0	90.40	90.00	6,768.4	-1,970.90	758.3	2,909.9	2,990.8	0.00	0.00	0.00
9,900.0	90.40	90.00	6,767.7	-1,970.20	758.3	3,009.9	3,089.6	0.00	0.00	0.00
10,000.0	90.40	90.00	6,767.0	-1,969.51	758.3	3,109.9	3,188.5	0.00	0.00	0.00
10,100.0	90.40	90.00	6,766.3	-1,968.81	758.3	3,209.9	3,287.4	0.00	0.00	0.00
<b>END OF TANGENT</b>										
10,200.0	90.40	90.00	6,765.6	-1,968.11	758.3	3,309.9	3,386.2	0.00	0.00	0.00
10,300.0	90.40	93.00	6,764.9	-1,967.41	755.7	3,409.8	3,484.6	3.00	0.00	3.00
<b>EOT TO 95° AZ</b>										
10,366.7	90.40	95.00	6,764.4	-1,966.95	751.0	3,476.4	3,549.7	3.00	0.00	3.00
10,400.0	90.40	95.00	6,764.2	-1,966.72	748.1	3,509.5	3,582.1	0.00	0.00	0.00
<b>END OF TANGENT</b>										
10,466.7	90.40	95.00	6,763.8	-1,966.25	742.3	3,576.0	3,646.9	0.00	0.00	0.00
10,500.0	90.40	94.00	6,763.5	-1,966.02	739.7	3,609.2	3,679.3	3.00	0.00	-3.00
10,600.0	90.40	91.00	6,762.8	-1,965.32	735.3	3,709.1	3,777.4	3.00	0.00	-3.00
10,700.0	90.40	88.00	6,762.1	-1,964.62	736.2	3,809.0	3,876.4	3.00	0.00	-3.00
<b>EOT TO 85° AZ</b>										
10,800.0	90.40	85.00	6,761.4	-1,963.92	742.3	3,908.8	3,976.0	3.00	0.00	-3.00
<b>END OF TANGENT</b>										
10,899.9	90.40	85.00	6,760.7	-1,963.22	751.0	4,008.4	4,075.7	0.00	0.00	0.00
10,900.0	90.40	85.00	6,760.7	-1,963.22	751.0	4,008.5	4,075.8	0.00	0.00	0.00
11,000.0	90.40	88.00	6,760.0	-1,962.53	757.1	4,108.3	4,175.4	3.00	-0.01	3.00
<b>EOT TO 90° AZ</b>										
11,066.6	90.39	90.00	6,759.6	-1,962.07	758.3	4,174.8	4,241.4	3.00	-0.01	3.00
11,100.0	90.39	90.00	6,759.3	-1,961.84	758.3	4,208.2	4,274.4	0.00	0.00	0.00
11,200.0	90.39	90.00	6,758.7	-1,961.16	758.3	4,308.2	4,373.3	0.00	0.00	0.00
11,300.0	90.39	90.00	6,758.0	-1,960.48	758.3	4,408.2	4,472.1	0.00	0.00	0.00
11,400.0	90.39	90.00	6,757.3	-1,959.79	758.3	4,508.2	4,571.0	0.00	0.00	0.00
11,500.0	90.39	90.00	6,756.6	-1,959.11	758.3	4,608.2	4,669.8	0.00	0.00	0.00
11,600.0	90.39	90.00	6,755.9	-1,958.43	758.3	4,708.2	4,768.7	0.00	0.00	0.00
11,700.0	90.39	90.00	6,755.2	-1,957.75	758.3	4,808.2	4,867.6	0.00	0.00	0.00
11,800.0	90.39	90.00	6,754.6	-1,957.06	758.3	4,908.2	4,966.4	0.00	0.00	0.00
<b>BHL: 1195ft FSL &amp; 75ft FEL of Sec 28</b>										
11,882.6	90.39	90.00	6,754.0	-1,956.50	758.3	4,990.8	5,048.1	0.00	0.00	0.00

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well KINZER 28H-202
<b>Company:</b>	PDC ENERGY	<b>TVD Reference:</b>	KB-EST @ 4797.5usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO	<b>MD Reference:</b>	KB-EST @ 4797.5usft (Original Well Elev)
<b>Site:</b>	SW SW SEC. 28 T5N R67W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	KINZER 28H-202	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

Formations					
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,390.0	3,340.0	PARKMAN			
4,008.5	3,945.0	SUSSEX			
4,473.7	4,400.0	SHANNON			
6,666.5	6,541.0	SHARON SPRINGS			
6,880.7	6,679.0	NIOBRARA A			
7,146.0	6,774.0	NIOBRARA B			

Plan Annotations				
MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
0.0	0.0	0.0	0.0	SHL: 430ft FSL & 348ft FWL of Sec 28
700.0	700.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1,299.9	1,295.5	57.4	-24.9	EOB TO 12° INC
4,674.4	4,596.3	700.9	-304.1	END OF TANGENT
5,274.3	5,191.8	758.3	-329.0	EOD TO VERTICAL
6,152.3	6,069.8	758.3	-329.0	KOP (8°/100ft BUR)
7,282.3	6,786.0	758.3	392.2	HZ LP *NEW*: 1188.2ft FSL & 736.2ft FWL of Sec 28
10,200.0	6,765.6	758.3	3,309.9	END OF TANGENT
10,366.7	6,764.4	751.0	3,476.4	EOT TO 95° AZ
10,466.7	6,763.8	742.3	3,576.0	END OF TANGENT
10,800.0	6,761.4	742.3	3,908.8	EOT TO 85° AZ
10,899.9	6,760.7	751.0	4,008.4	END OF TANGENT
11,066.6	6,759.6	758.3	4,174.8	EOT TO 90° AZ
11,882.6	6,754.0	758.3	4,990.8	BHL: 1195ft FSL & 75ft FEL of Sec 28