

# **PDC ENERGY**

**WELD COUNTY, COLORADO**

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

**KINZER 28H-212**

**ORIGINAL WELLBORE**

**25 March, 2016**

**Plan: PROPOSAL #2**



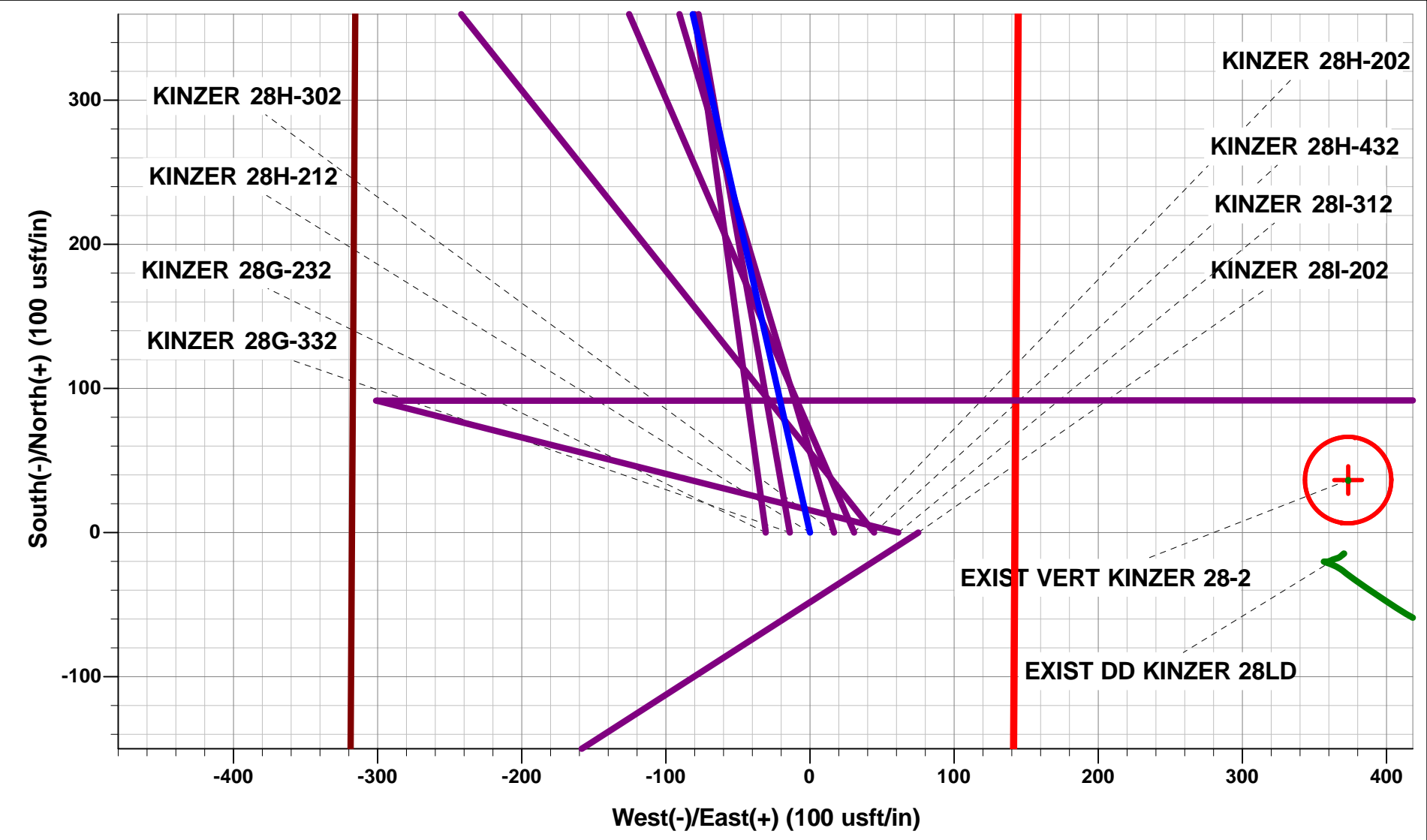


Project: WELD COUNTY, COLORADO  
Site: SW SW SEC. 28 T5N R67W 6th P.M.  
Well: KINZER 28H-212  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #2



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 & 318ft FEL of Sec 28	
500.0	500.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)	
1279.7	1289.7	15.79	347.28	105.5	-23.8	3.6	108.2	EOB TO 15.79° INC	
5260.1	5426.2	15.79	347.28	1203.7	-271.7	40.8	1234.0	END OF TANGENT	
6039.8	6215.9	0.00	0.00	1309.2	-295.5	44.4	1342.1	EOD TO VERTICAL	
6069.8	6245.9	0.00	0.00	1309.2	-295.5	44.4	1342.1	KOP (8°/100ft BUR)	
6786.0	7375.3	90.35	90.00	1309.2	425.1	741.7	2062.8	HZ LP *NEW*: 1738.2ft FSL & 735.6ft FWL of Sec 28	
6758.0	11971.6	90.35	90.00	1309.2	5021.3	5189.2	6659.0	BHL *NEW*: 1745ft FSL & 75ft FEL of Sec 28	

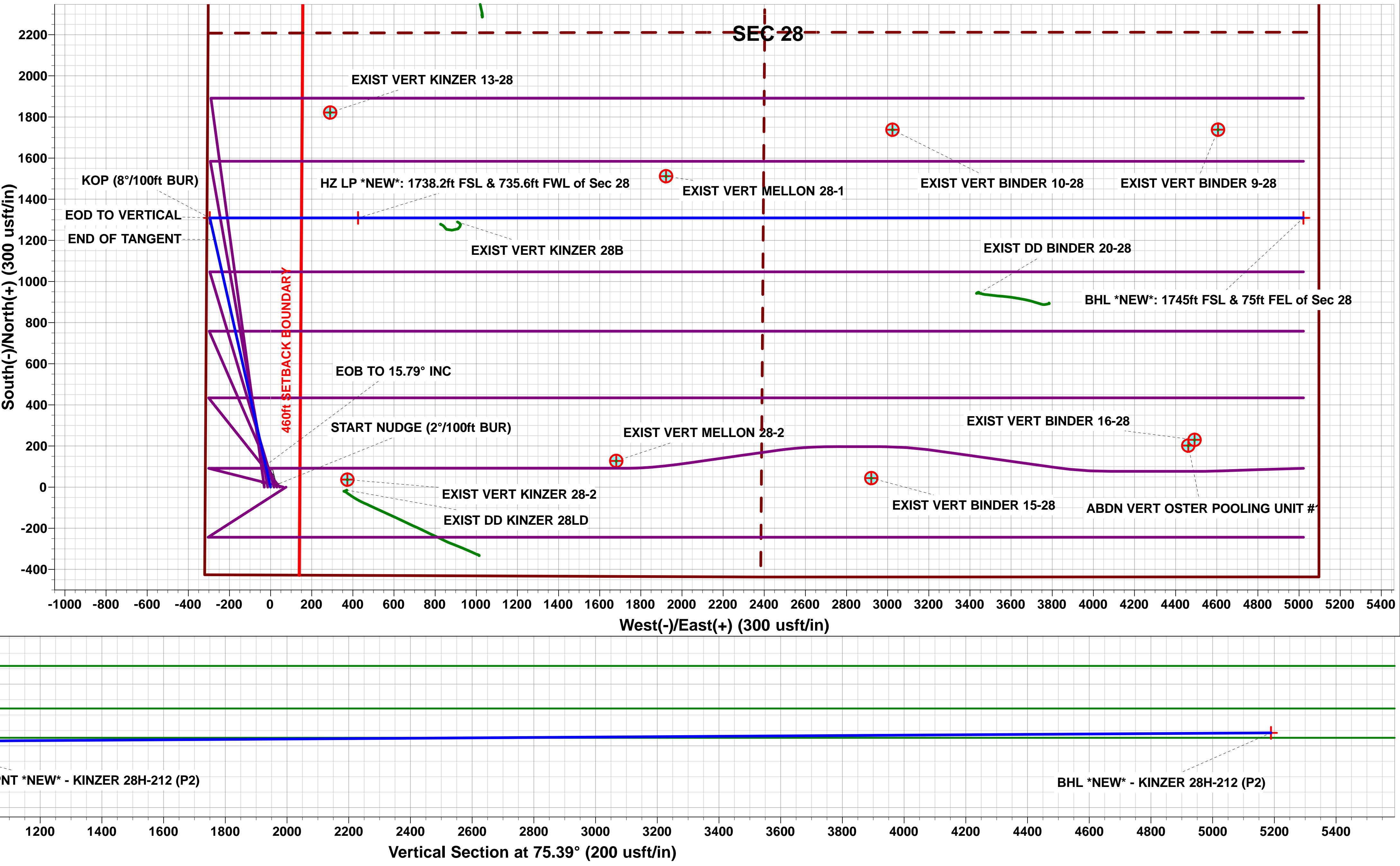
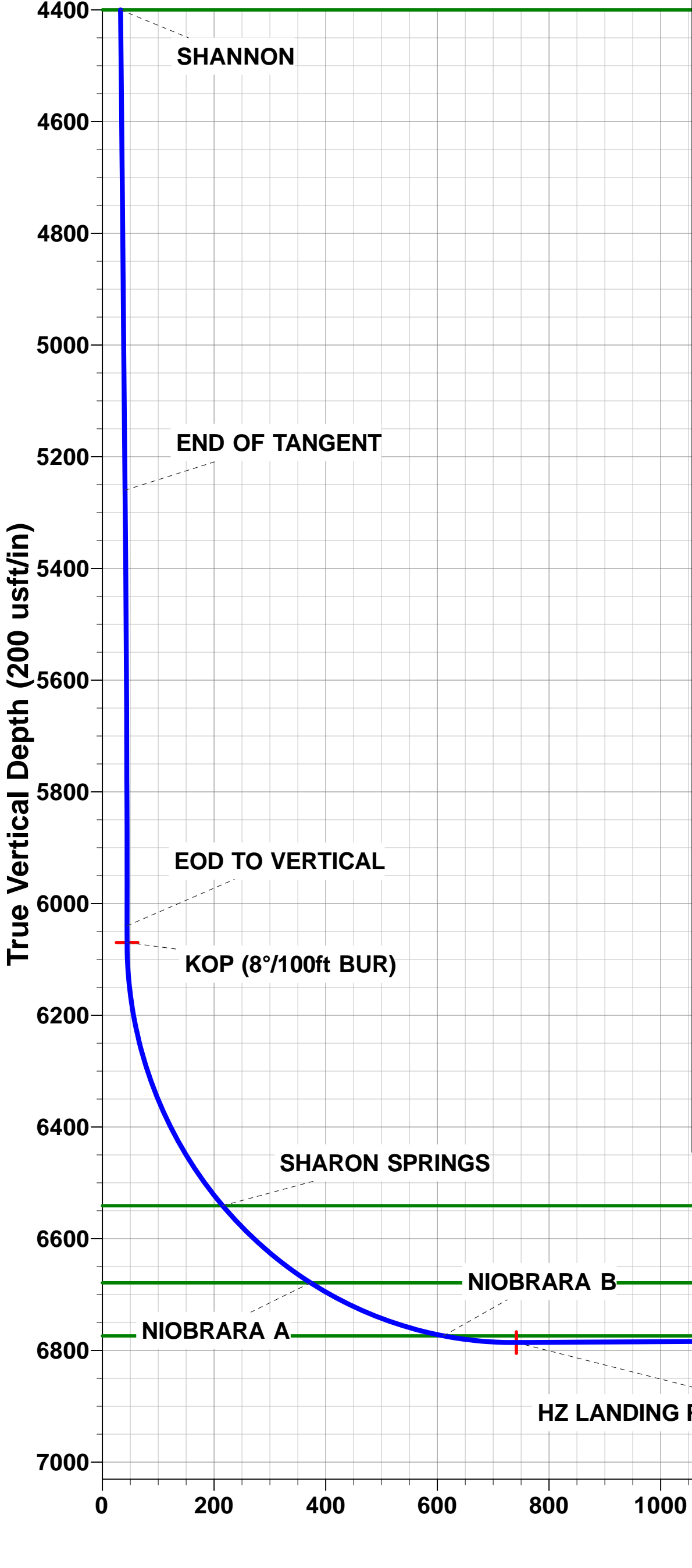
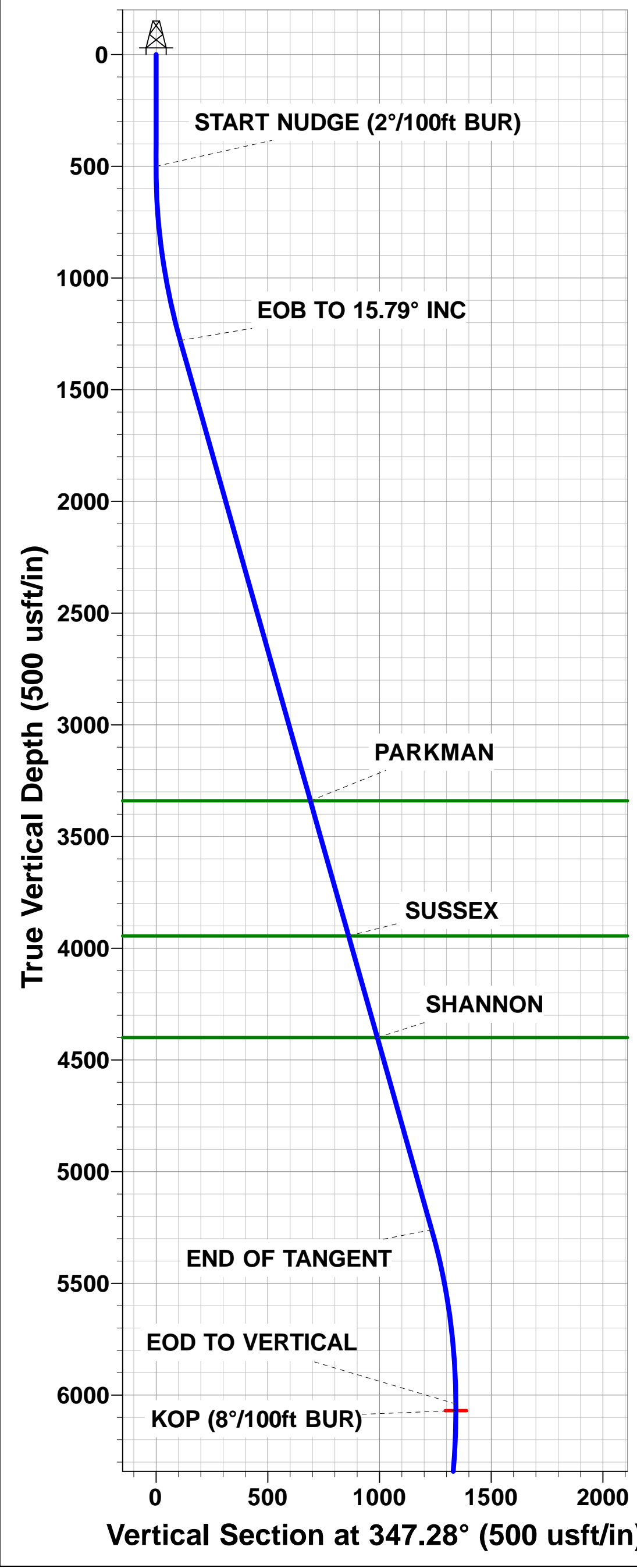
WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - KINZER 28H-212 (P2)	6069.8	1309.2	-295.5	40.368204	-104.907520
BHL *NEW* - KINZER 28H-212 (P2)	6758.0	1309.2	5021.3	40.368202	-104.888440
HZ LP *NEW* - KINZER 28H-212 (P2)	6786.0	1309.2	425.1	40.368204	-104.904934



PROPOSED LOCAL COORDINATES:  
SHL: 430ft FSL & 318ft FWL of Sec 28  
HZ LP \*NEW\*: 1738.2ft FSL & 735.6ft FWL of Sec 28  
BHL: 1745ft 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-212
<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-212	<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-212		
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>
	<b>+E/-W</b>	-75.2 usft	<b>Easting:</b>
<b>Position Uncertainty</b>	0.0 usft	<b>Wellhead Elevation:</b>	usft
		<b>Latitude:</b>	40.364610
		<b>Longitude:</b>	-104.906460
		<b>Ground Level:</b>	4,784.0 usft

<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>
	6,758.0	0.0	0.0	75.39

<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	
500.0	0.00	0.00	500.0	-4,297.5	0.0	0.0	0.00	0.00	0.00	0.00	
1,289.7	15.79	347.28	1,279.7	-3,517.8	105.5	-23.8	2.00	2.00	0.00	347.28	
5,426.2	15.79	347.28	5,260.1	462.6	1,203.7	-271.7	0.00	0.00	0.00	0.00	
6,215.9	0.00	0.00	6,039.8	1,242.3	1,309.2	-295.5	2.00	-2.00	0.00	180.00	
6,245.9	0.00	0.00	6,069.8	1,272.3	1,309.2	-295.5	0.00	0.00	0.00	0.00	KOP - KINZER 28H
7,375.3	90.35	90.00	6,786.0	1,988.5	1,309.2	425.1	8.00	8.00	0.00	90.00	
11,971.6	90.35	90.00	6,758.0	1,960.5	1,309.2	5,021.3	0.00	0.00	0.00	-180.00	BHL *NEW* - KINZI

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well KINZER 28H-212
<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-212	<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; 318ft FEL 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
<b>START NUDGE (2°/100ft BUR)</b>										
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	2.00	347.28	600.0	4,197.52	1.7	-0.4	0.1	2.00	2.00	0.00
700.0	4.00	347.28	699.8	4,097.66	6.8	-1.5	0.2	2.00	2.00	0.00
800.0	6.00	347.28	799.5	3,998.05	15.3	-3.5	0.5	2.00	2.00	0.00
900.0	8.00	347.28	898.7	3,898.80	27.2	-6.1	0.9	2.00	2.00	0.00
1,000.0	10.00	347.28	997.5	3,800.03	42.5	-9.6	1.4	2.00	2.00	0.00
1,100.0	12.00	347.28	1,095.6	3,701.88	61.1	-13.8	2.1	2.00	2.00	0.00
1,200.0	14.00	347.28	1,193.1	3,604.44	83.0	-18.7	2.8	2.00	2.00	0.00
<b>EOB TO 15.79° INC</b>										
1,289.7	15.79	347.28	1,279.7	3,517.76	105.5	-23.8	3.6	2.00	2.00	0.00
1,300.0	15.79	347.28	1,289.6	3,507.85	108.2	-24.4	3.7	0.00	0.00	0.00
1,400.0	15.79	347.28	1,385.9	3,411.63	134.8	-30.4	4.6	0.00	0.00	0.00
1,500.0	15.79	347.28	1,482.1	3,315.40	161.3	-36.4	5.5	0.00	0.00	0.00
1,600.0	15.79	347.28	1,578.3	3,219.18	187.9	-42.4	6.4	0.00	0.00	0.00
1,700.0	15.79	347.28	1,674.5	3,122.95	214.4	-48.4	7.3	0.00	0.00	0.00
1,800.0	15.79	347.28	1,770.8	3,026.73	241.0	-54.4	8.2	0.00	0.00	0.00
1,900.0	15.79	347.28	1,867.0	2,930.50	267.5	-60.4	9.1	0.00	0.00	0.00
2,000.0	15.79	347.28	1,963.2	2,834.28	294.1	-66.4	10.0	0.00	0.00	0.00
2,100.0	15.79	347.28	2,059.4	2,738.05	320.6	-72.4	10.9	0.00	0.00	0.00
2,200.0	15.79	347.28	2,155.7	2,641.83	347.2	-78.4	11.8	0.00	0.00	0.00
2,300.0	15.79	347.28	2,251.9	2,545.60	373.7	-84.4	12.7	0.00	0.00	0.00
2,400.0	15.79	347.28	2,348.1	2,449.38	400.3	-90.3	13.6	0.00	0.00	0.00
2,500.0	15.79	347.28	2,444.3	2,353.15	426.8	-96.3	14.5	0.00	0.00	0.00
2,600.0	15.79	347.28	2,540.6	2,256.93	453.4	-102.3	15.4	0.00	0.00	0.00
2,700.0	15.79	347.28	2,636.8	2,160.70	479.9	-108.3	16.3	0.00	0.00	0.00
2,800.0	15.79	347.28	2,733.0	2,064.48	506.5	-114.3	17.2	0.00	0.00	0.00
2,900.0	15.79	347.28	2,829.2	1,968.25	533.0	-120.3	18.1	0.00	0.00	0.00
3,000.0	15.79	347.28	2,925.5	1,872.03	559.6	-126.3	19.0	0.00	0.00	0.00
3,100.0	15.79	347.28	3,021.7	1,775.80	586.1	-132.3	19.9	0.00	0.00	0.00
3,200.0	15.79	347.28	3,117.9	1,679.58	612.7	-138.3	20.8	0.00	0.00	0.00
3,300.0	15.79	347.28	3,214.1	1,583.35	639.2	-144.3	21.7	0.00	0.00	0.00
3,400.0	15.79	347.28	3,310.4	1,487.13	665.8	-150.3	22.6	0.00	0.00	0.00
<b>PARKMAN</b>										
3,430.8	15.79	347.28	3,340.0	1,457.50	673.9	-152.1	22.8	0.00	0.00	0.00
3,500.0	15.79	347.28	3,406.6	1,390.90	692.3	-156.3	23.5	0.00	0.00	0.00
3,600.0	15.79	347.28	3,502.8	1,294.68	718.9	-162.3	24.4	0.00	0.00	0.00
3,700.0	15.79	347.28	3,599.0	1,198.45	745.4	-168.2	25.3	0.00	0.00	0.00
3,800.0	15.79	347.28	3,695.3	1,102.23	772.0	-174.2	26.2	0.00	0.00	0.00
3,900.0	15.79	347.28	3,791.5	1,006.00	798.5	-180.2	27.1	0.00	0.00	0.00
4,000.0	15.79	347.28	3,887.7	909.78	825.1	-186.2	28.0	0.00	0.00	0.00
<b>SUSSEX</b>										
4,059.5	15.79	347.28	3,945.0	852.50	840.9	-189.8	28.5	0.00	0.00	0.00
4,100.0	15.79	347.28	3,983.9	813.55	851.6	-192.2	28.9	0.00	0.00	0.00
4,200.0	15.79	347.28	4,080.2	717.33	878.2	-198.2	29.8	0.00	0.00	0.00
4,300.0	15.79	347.28	4,176.4	621.10	904.7	-204.2	30.7	0.00	0.00	0.00
4,400.0	15.79	347.28	4,272.6	524.88	931.3	-210.2	31.6	0.00	0.00	0.00
4,500.0	15.79	347.28	4,368.8	428.65	957.8	-216.2	32.5	0.00	0.00	0.00

# 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-212	<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>										
4,532.4	15.79	347.28	4,400.0	397.50	966.4	-218.1	32.7	0.00	0.00	0.00
4,600.0	15.79	347.28	4,465.1	332.43	984.4	-222.2	33.4	0.00	0.00	0.00
4,700.0	15.79	347.28	4,561.3	236.20	1,010.9	-228.2	34.3	0.00	0.00	0.00
4,800.0	15.79	347.28	4,657.5	139.98	1,037.5	-234.2	35.2	0.00	0.00	0.00
4,900.0	15.79	347.28	4,753.7	43.75	1,064.0	-240.2	36.1	0.00	0.00	0.00
5,000.0	15.79	347.28	4,850.0	-52.47	1,090.6	-246.1	37.0	0.00	0.00	0.00
5,100.0	15.79	347.28	4,946.2	-148.70	1,117.1	-252.1	37.9	0.00	0.00	0.00
5,200.0	15.79	347.28	5,042.4	-244.92	1,143.6	-258.1	38.8	0.00	0.00	0.00
5,300.0	15.79	347.28	5,138.6	-341.15	1,170.2	-264.1	39.7	0.00	0.00	0.00
5,400.0	15.79	347.28	5,234.9	-437.37	1,196.7	-270.1	40.6	0.00	0.00	0.00
<b>END OF TANGENT</b>										
5,426.2	15.79	347.28	5,260.1	-462.58	1,203.7	-271.7	40.8	0.00	0.00	0.00
5,500.0	14.32	347.28	5,331.3	-533.85	1,222.4	-275.9	41.4	2.00	-2.00	0.00
5,600.0	12.32	347.28	5,428.7	-631.15	1,244.9	-281.0	42.2	2.00	-2.00	0.00
5,700.0	10.32	347.28	5,526.7	-729.20	1,264.0	-285.3	42.8	2.00	-2.00	0.00
5,800.0	8.32	347.28	5,625.4	-827.88	1,279.8	-288.9	43.4	2.00	-2.00	0.00
5,900.0	6.32	347.28	5,724.6	-927.06	1,292.2	-291.7	43.8	2.00	-2.00	0.00
6,000.0	4.32	347.28	5,824.1	-1,026.62	1,301.3	-293.7	44.1	2.00	-2.00	0.00
6,100.0	2.32	347.28	5,924.0	-1,126.45	1,306.9	-295.0	44.3	2.00	-2.00	0.00
6,200.0	0.32	347.28	6,023.9	-1,226.42	1,309.2	-295.5	44.4	2.00	-2.00	0.00
<b>EOD TO VERTICAL</b>										
6,215.9	0.00	0.00	6,039.8	-1,242.32	1,309.2	-295.5	44.4	2.00	-2.00	0.00
<b>KOP (8°/100ft BUR)</b>										
6,245.9	0.00	0.00	6,069.8	-1,272.32	1,309.2	-295.5	44.4	0.00	0.00	0.00
6,300.0	4.33	90.00	6,123.9	-1,326.37	1,309.2	-293.5	46.3	8.00	8.00	0.00
6,400.0	12.33	90.00	6,222.7	-1,425.23	1,309.2	-279.0	60.3	8.00	8.00	0.00
6,500.0	20.33	90.00	6,318.6	-1,521.12	1,309.2	-250.9	87.5	8.00	8.00	0.00
6,600.0	28.33	90.00	6,409.7	-1,612.17	1,309.2	-209.7	127.4	8.00	8.00	0.00
6,700.0	36.33	90.00	6,494.1	-1,696.60	1,309.2	-156.3	179.1	8.00	8.00	0.00
<b>SHARON SPRINGS</b>										
6,760.1	41.14	90.00	6,541.0	-1,743.50	1,309.2	-118.7	215.5	8.00	8.00	0.00
6,800.0	44.33	90.00	6,570.3	-1,772.77	1,309.2	-91.6	241.6	8.00	8.00	0.00
6,900.0	52.33	90.00	6,636.7	-1,839.20	1,309.2	-17.0	313.9	8.00	8.00	0.00
<b>NIOBRARA A</b>										
6,974.3	58.28	90.00	6,679.0	-1,881.50	1,309.2	44.1	373.0	8.00	8.00	0.00
7,000.0	60.33	90.00	6,692.1	-1,894.59	1,309.2	66.2	394.3	8.00	8.00	0.00
7,100.0	68.33	90.00	6,735.4	-1,937.88	1,309.2	156.2	481.5	8.00	8.00	0.00
7,200.0	76.33	90.00	6,765.7	-1,968.21	1,309.2	251.4	573.6	8.00	8.00	0.00
<b>NIOBRARA B</b>										
7,239.6	79.50	90.00	6,774.0	-1,976.50	1,309.2	290.2	611.1	8.00	8.00	0.00
7,300.0	84.33	90.00	6,782.5	-1,984.99	1,309.2	349.9	668.9	8.00	8.00	0.00
<b>HZ LP *NEW*: 1738.2ft FSL &amp; 735.6ft FWL of Sec 28</b>										
7,375.3	90.35	90.00	6,786.0	-1,988.48	1,309.2	425.1	741.7	8.00	8.00	0.00
7,400.0	90.35	90.00	6,785.8	-1,988.33	1,309.2	449.8	765.6	0.00	0.00	0.00
7,500.0	90.35	90.00	6,785.2	-1,987.72	1,309.2	549.8	862.3	0.00	0.00	0.00
7,600.0	90.35	90.00	6,784.6	-1,987.11	1,309.2	649.8	959.1	0.00	0.00	0.00
7,700.0	90.35	90.00	6,784.0	-1,986.50	1,309.2	749.8	1,055.9	0.00	0.00	0.00
7,800.0	90.35	90.00	6,783.4	-1,985.89	1,309.2	849.8	1,152.6	0.00	0.00	0.00
7,900.0	90.35	90.00	6,782.8	-1,985.28	1,309.2	949.8	1,249.4	0.00	0.00	0.00
8,000.0	90.35	90.00	6,782.2	-1,984.67	1,309.2	1,049.8	1,346.1	0.00	0.00	0.00
8,100.0	90.35	90.00	6,781.6	-1,984.06	1,309.2	1,149.8	1,442.9	0.00	0.00	0.00
8,200.0	90.35	90.00	6,780.9	-1,983.45	1,309.2	1,249.8	1,539.7	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-212
<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-212	<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)
8,300.0	90.35	90.00	6,780.3	-1,982.84	1,309.2	1,349.8	1,636.4	0.00	0.00	0.00
8,400.0	90.35	90.00	6,779.7	-1,982.23	1,309.2	1,449.8	1,733.2	0.00	0.00	0.00
8,500.0	90.35	90.00	6,779.1	-1,981.62	1,309.2	1,549.8	1,830.0	0.00	0.00	0.00
8,600.0	90.35	90.00	6,778.5	-1,981.01	1,309.2	1,649.8	1,926.7	0.00	0.00	0.00
8,700.0	90.35	90.00	6,777.9	-1,980.40	1,309.2	1,749.8	2,023.5	0.00	0.00	0.00
8,800.0	90.35	90.00	6,777.3	-1,979.79	1,309.2	1,849.8	2,120.3	0.00	0.00	0.00
8,900.0	90.35	90.00	6,776.7	-1,979.18	1,309.2	1,949.8	2,217.0	0.00	0.00	0.00
9,000.0	90.35	90.00	6,776.1	-1,978.57	1,309.2	2,049.8	2,313.8	0.00	0.00	0.00
9,100.0	90.35	90.00	6,775.5	-1,977.96	1,309.2	2,149.8	2,410.5	0.00	0.00	0.00
9,200.0	90.35	90.00	6,774.9	-1,977.35	1,309.2	2,249.8	2,507.3	0.00	0.00	0.00
9,300.0	90.35	90.00	6,774.2	-1,976.74	1,309.2	2,349.8	2,604.1	0.00	0.00	0.00
9,400.0	90.35	90.00	6,773.6	-1,976.13	1,309.2	2,449.8	2,700.8	0.00	0.00	0.00
9,500.0	90.35	90.00	6,773.0	-1,975.52	1,309.2	2,549.8	2,797.6	0.00	0.00	0.00
9,600.0	90.35	90.00	6,772.4	-1,974.92	1,309.2	2,649.8	2,894.4	0.00	0.00	0.00
9,700.0	90.35	90.00	6,771.8	-1,974.31	1,309.2	2,749.8	2,991.1	0.00	0.00	0.00
9,800.0	90.35	90.00	6,771.2	-1,973.70	1,309.2	2,849.8	3,087.9	0.00	0.00	0.00
9,900.0	90.35	90.00	6,770.6	-1,973.09	1,309.2	2,949.8	3,184.6	0.00	0.00	0.00
10,000.0	90.35	90.00	6,770.0	-1,972.48	1,309.2	3,049.8	3,281.4	0.00	0.00	0.00
10,100.0	90.35	90.00	6,769.4	-1,971.87	1,309.2	3,149.8	3,378.2	0.00	0.00	0.00
10,200.0	90.35	90.00	6,768.8	-1,971.26	1,309.2	3,249.8	3,474.9	0.00	0.00	0.00
10,300.0	90.35	90.00	6,768.2	-1,970.66	1,309.2	3,349.8	3,571.7	0.00	0.00	0.00
10,400.0	90.35	90.00	6,767.5	-1,970.05	1,309.2	3,449.8	3,668.5	0.00	0.00	0.00
10,500.0	90.35	90.00	6,766.9	-1,969.44	1,309.2	3,549.8	3,765.2	0.00	0.00	0.00
10,600.0	90.35	90.00	6,766.3	-1,968.83	1,309.2	3,649.8	3,862.0	0.00	0.00	0.00
10,700.0	90.35	90.00	6,765.7	-1,968.22	1,309.2	3,749.8	3,958.8	0.00	0.00	0.00
10,800.0	90.35	90.00	6,765.1	-1,967.62	1,309.2	3,849.8	4,055.5	0.00	0.00	0.00
10,900.0	90.35	90.00	6,764.5	-1,967.01	1,309.2	3,949.8	4,152.3	0.00	0.00	0.00
11,000.0	90.35	90.00	6,763.9	-1,966.40	1,309.2	4,049.7	4,249.0	0.00	0.00	0.00
11,100.0	90.35	90.00	6,763.3	-1,965.79	1,309.2	4,149.7	4,345.8	0.00	0.00	0.00
11,200.0	90.35	90.00	6,762.7	-1,965.18	1,309.2	4,249.7	4,442.6	0.00	0.00	0.00
11,300.0	90.35	90.00	6,762.1	-1,964.58	1,309.2	4,349.7	4,539.3	0.00	0.00	0.00
11,400.0	90.35	90.00	6,761.5	-1,963.97	1,309.2	4,449.7	4,636.1	0.00	0.00	0.00
11,500.0	90.35	90.00	6,760.9	-1,963.36	1,309.2	4,549.7	4,732.9	0.00	0.00	0.00
11,600.0	90.35	90.00	6,760.3	-1,962.76	1,309.2	4,649.7	4,829.6	0.00	0.00	0.00
11,700.0	90.35	90.00	6,759.6	-1,962.15	1,309.2	4,749.7	4,926.4	0.00	0.00	0.00
11,800.0	90.35	90.00	6,759.0	-1,961.54	1,309.2	4,849.7	5,023.2	0.00	0.00	0.00
11,900.0	90.35	90.00	6,758.4	-1,960.93	1,309.2	4,949.7	5,119.9	0.00	0.00	0.00
<b>BHL *NEW*: 1745ft FSL &amp; 75ft FEL of Sec 28</b>										
<b>11,971.6</b>	<b>90.35</b>	<b>90.00</b>	<b>6,758.0</b>	<b>-1,960.50</b>	<b>1,309.2</b>	<b>5,021.3</b>	<b>5,189.2</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Formations						
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,430.8	3,340.0	PARKMAN				
4,059.5	3,945.0	SUSSEX				
4,532.4	4,400.0	SHANNON				
6,760.1	6,541.0	SHARON SPRINGS				
6,974.3	6,679.0	NIOBRARA A				
7,239.6	6,774.0	NIOBRARA B				

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well KINZER 28H-212
<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-212	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

## 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 & 318ft FEL of Sec 28
500.0	500.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1,289.7	1,279.7	105.5	-23.8	EOB TO 15.79° INC
5,426.2	5,260.1	1,203.7	-271.7	END OF TANGENT
6,215.9	6,039.8	1,309.2	-295.5	EOD TO VERTICAL
6,245.9	6,069.8	1,309.2	-295.5	KOP (8°/100ft BUR)
7,375.3	6,786.0	1,309.2	425.1	HZ LP *NEW*: 1738.2ft FSL & 735.6ft FWL of Sec 28
11,971.6	6,758.0	1,309.2	5,021.3	BHL *NEW*: 1745ft FSL & 75ft FEL of Sec 28