

# **PDC ENERGY**

**WELD COUNTY, COLORADO**

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

**KINZER 28H-302**

**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-302  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #2

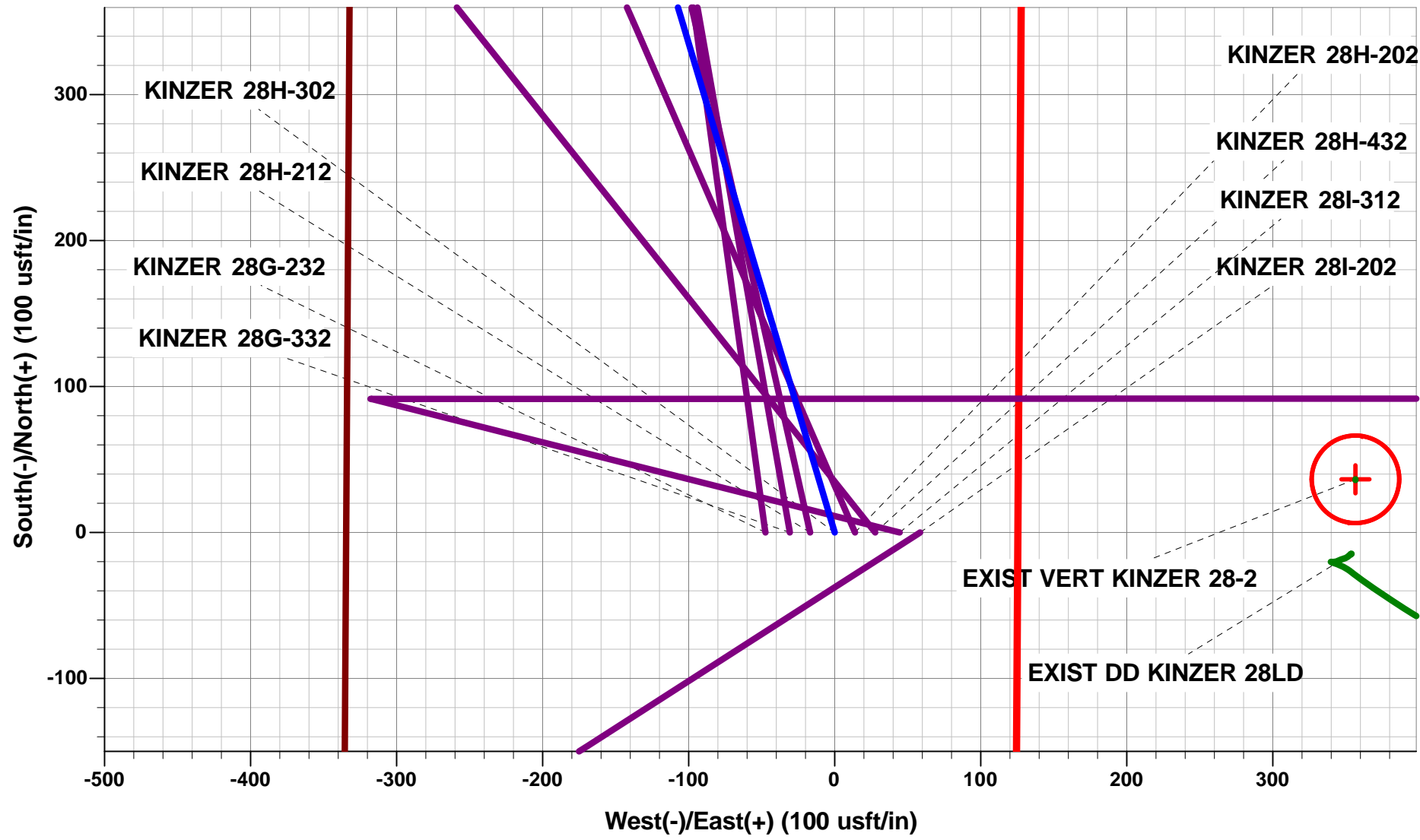


ANNOTATIONS

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 & 333ft FWL of Sec 28
600.0	600.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1223.9	1228.9	12.58	343.39	65.9	-19.6	-5.7	68.8	EOB TO 12.58° INC
5503.9	5614.2	12.58	343.39	981.0	-292.6	-85.5	1023.7	END OF TANGENT
6127.8	6243.1	0.00	343.39	1046.9	-312.2	-91.2	1092.5	EOD TO VERTICAL
6157.8	6273.1	0.00	0.00	1046.9	-312.2	-91.2	1092.5	KOP (8°/100ft BUR)
6874.0	7405.6	90.60	90.00	1046.9	411.5	617.1	1816.1	HZ LP *NEW*: 1478.2ft FSL & 738.7ft FWL of Sec 28
6826.0	11999.0	90.60	90.00	1046.9	5004.6	5113.0	6409.3	BHL *NEW*: 1485ft FSL & 75ft FEL of Sec 28

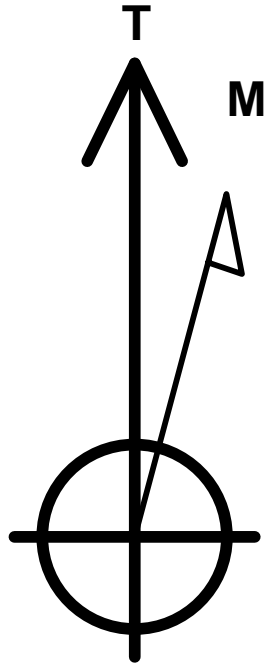
WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - KINZER 28H-302 (P2)	6157.8	1046.9	-312.2	40.367484	-104.907520
BHL *NEW* - KINZER 28H-302 (P2)	6826.0	1046.9	5004.7	40.367482	-104.888440
HZ LP *NEW* - KINZER 28H-302 (P2)	6874.0	1046.9	411.5	40.367484	-104.904923



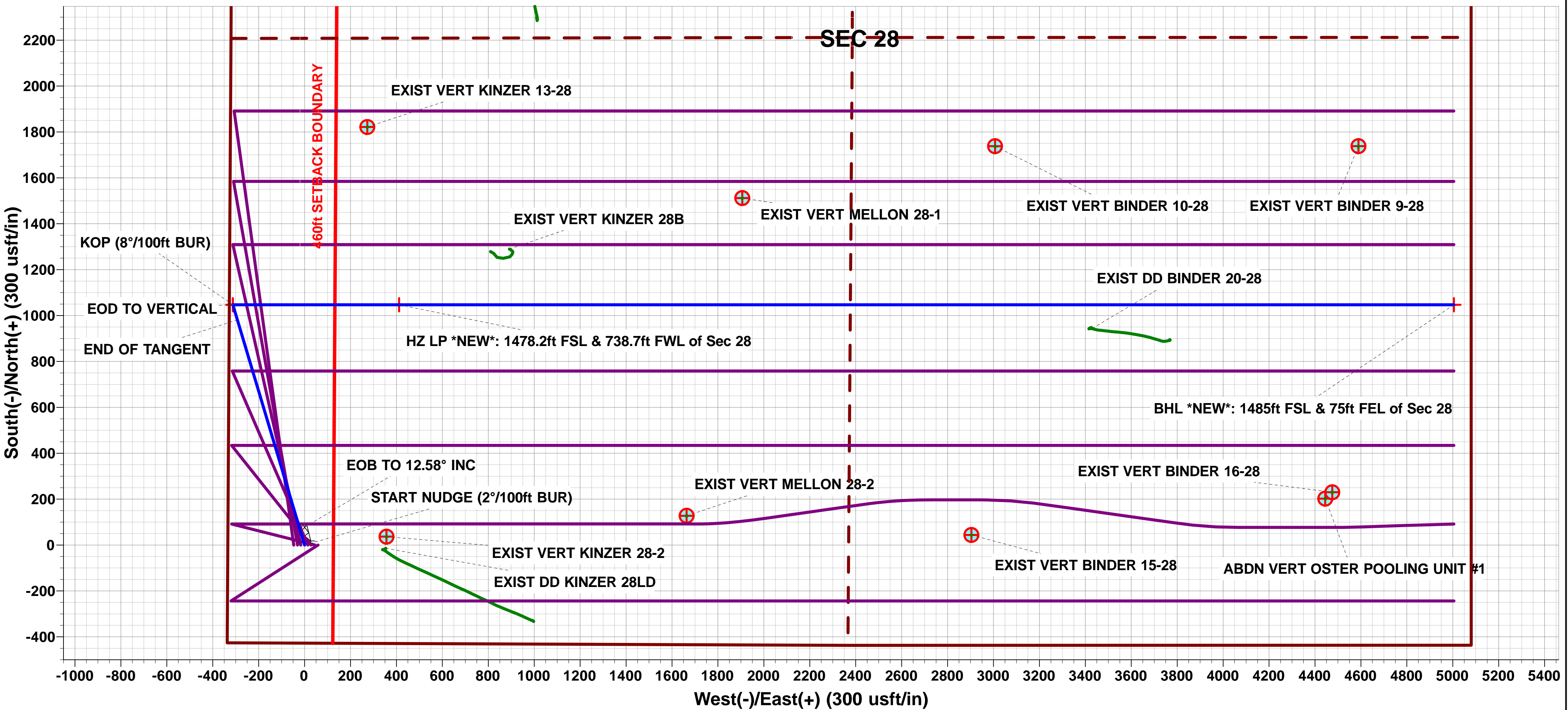
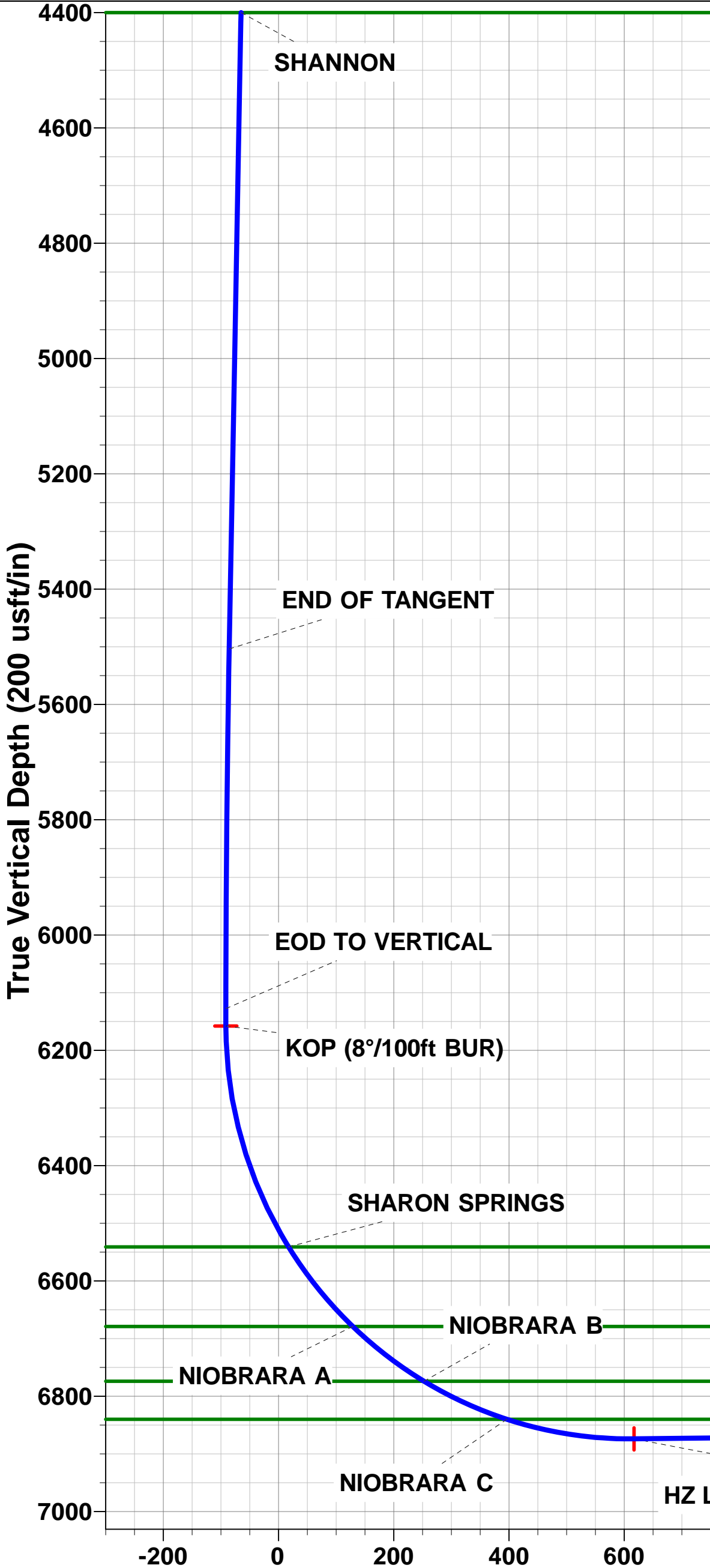
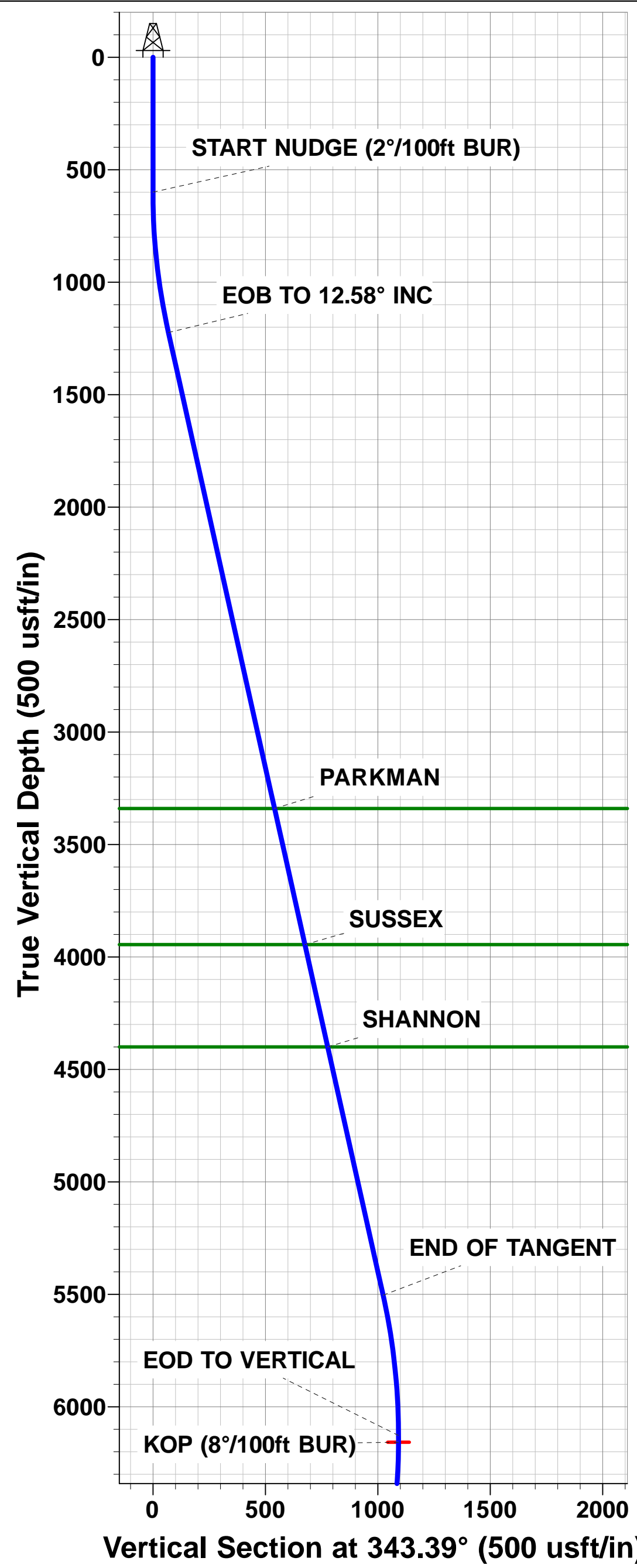
PROPOSED LOCAL COORDINATES:

SHL: 430ft FSL & 333ft FWL of Sec 28  
HZ LP \*NEW\*: 1478.2ft FSL & 738.7ft FWL of Sec 28  
BHL: 1485ft 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



BHL \*NEW\* - KINZER 28H-302 (P2)

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well KINZER 28H-302
<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-302	<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-302		
<b>Well Position</b>	<b>+N-S</b>	0.0 usft	<b>Northing:</b>
	<b>+E-W</b>	-58.5 usft	<b>Easting:</b>
<b>Position Uncertainty</b>	0.0 usft	<b>Wellhead Elevation:</b>	usft
		<b>Latitude:</b>	40.364610
		<b>Longitude:</b>	-104.906400
		<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>
	6,826.0	0.0	0.0	78.18

<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	
600.0	0.00	0.00	600.0	-4,197.5	0.0	0.0	0.00	0.00	0.00	0.00	
1,228.9	12.58	343.39	1,223.8	-3,573.7	65.9	-19.6	2.00	2.00	0.00	343.39	
5,614.2	12.58	343.39	5,504.0	706.5	981.0	-292.6	0.00	0.00	0.00	0.00	
6,243.1	0.00	0.00	6,127.8	1,330.3	1,046.9	-312.2	2.00	-2.00	0.00	180.00	
6,273.1	0.00	0.00	6,157.8	1,360.3	1,046.9	-312.2	0.00	0.00	0.00	0.00	KOP - KINZER 28H
7,405.6	90.60	90.00	6,874.0	2,076.5	1,046.9	411.5	8.00	8.00	0.00	90.00	
11,999.0	90.60	90.00	6,826.0	2,028.5	1,046.9	5,004.7	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-302
<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-302	<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; 333ft 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
<b>START NUDGE (2°/100ft BUR)</b>										
600.0	0.00	0.00	600.0	4,197.50	0.0	0.0	0.0	0.00	0.00	0.00
700.0	2.00	343.39	700.0	4,097.52	1.7	-0.5	-0.1	2.00	2.00	0.00
800.0	4.00	343.39	799.8	3,997.66	6.7	-2.0	-0.6	2.00	2.00	0.00
900.0	6.00	343.39	899.5	3,898.05	15.0	-4.5	-1.3	2.00	2.00	0.00
1,000.0	8.00	343.39	998.7	3,798.80	26.7	-8.0	-2.3	2.00	2.00	0.00
1,100.0	10.00	343.39	1,097.5	3,700.03	41.7	-12.4	-3.6	2.00	2.00	0.00
1,200.0	12.00	343.39	1,195.6	3,601.88	60.0	-17.9	-5.2	2.00	2.00	0.00
<b>EOB TO 12.58° INC</b>										
1,228.9	12.58	343.39	1,223.9	3,573.64	65.9	-19.6	-5.7	2.00	2.00	0.00
1,300.0	12.58	343.39	1,293.3	3,504.25	80.7	-24.1	-7.0	0.00	0.00	0.00
1,400.0	12.58	343.39	1,390.9	3,406.65	101.6	-30.3	-8.9	0.00	0.00	0.00
1,500.0	12.58	343.39	1,488.5	3,309.05	122.5	-36.5	-10.7	0.00	0.00	0.00
1,600.0	12.58	343.39	1,586.1	3,211.44	143.3	-42.7	-12.5	0.00	0.00	0.00
1,700.0	12.58	343.39	1,683.7	3,113.84	164.2	-49.0	-14.3	0.00	0.00	0.00
1,800.0	12.58	343.39	1,781.3	3,016.24	185.1	-55.2	-16.1	0.00	0.00	0.00
1,900.0	12.58	343.39	1,878.9	2,918.64	205.9	-61.4	-17.9	0.00	0.00	0.00
2,000.0	12.58	343.39	1,976.5	2,821.04	226.8	-67.6	-19.8	0.00	0.00	0.00
2,100.0	12.58	343.39	2,074.1	2,723.44	247.7	-73.9	-21.6	0.00	0.00	0.00
2,200.0	12.58	343.39	2,171.7	2,625.84	268.5	-80.1	-23.4	0.00	0.00	0.00
2,300.0	12.58	343.39	2,269.3	2,528.24	289.4	-86.3	-25.2	0.00	0.00	0.00
2,400.0	12.58	343.39	2,366.9	2,430.64	310.3	-92.5	-27.0	0.00	0.00	0.00
2,500.0	12.58	343.39	2,464.5	2,333.04	331.1	-98.8	-28.9	0.00	0.00	0.00
2,600.0	12.58	343.39	2,562.1	2,235.44	352.0	-105.0	-30.7	0.00	0.00	0.00
2,700.0	12.58	343.39	2,659.7	2,137.84	372.9	-111.2	-32.5	0.00	0.00	0.00
2,800.0	12.58	343.39	2,757.3	2,040.24	393.7	-117.4	-34.3	0.00	0.00	0.00
2,900.0	12.58	343.39	2,854.9	1,942.64	414.6	-123.6	-36.1	0.00	0.00	0.00
3,000.0	12.58	343.39	2,952.5	1,845.04	435.5	-129.9	-37.9	0.00	0.00	0.00
3,100.0	12.58	343.39	3,050.1	1,747.44	456.3	-136.1	-39.8	0.00	0.00	0.00
3,200.0	12.58	343.39	3,147.7	1,649.84	477.2	-142.3	-41.6	0.00	0.00	0.00
3,300.0	12.58	343.39	3,245.3	1,552.24	498.1	-148.5	-43.4	0.00	0.00	0.00
<b>PARKMAN</b>										
3,397.1	12.58	343.39	3,340.0	1,457.50	518.3	-154.6	-45.2	0.00	0.00	0.00
3,400.0	12.58	343.39	3,342.9	1,454.64	519.0	-154.8	-45.2	0.00	0.00	0.00
3,500.0	12.58	343.39	3,440.5	1,357.04	539.8	-161.0	-47.0	0.00	0.00	0.00
3,600.0	12.58	343.39	3,538.1	1,259.44	560.7	-167.2	-48.9	0.00	0.00	0.00
3,700.0	12.58	343.39	3,635.7	1,161.84	581.6	-173.4	-50.7	0.00	0.00	0.00
3,800.0	12.58	343.39	3,733.3	1,064.24	602.4	-179.7	-52.5	0.00	0.00	0.00
3,900.0	12.58	343.39	3,830.9	966.64	623.3	-185.9	-54.3	0.00	0.00	0.00
4,000.0	12.58	343.39	3,928.5	869.04	644.2	-192.1	-56.1	0.00	0.00	0.00
<b>SUSSEX</b>										
4,016.9	12.58	343.39	3,945.0	852.50	647.7	-193.2	-56.4	0.00	0.00	0.00
4,100.0	12.58	343.39	4,026.1	771.44	665.0	-198.3	-58.0	0.00	0.00	0.00
4,200.0	12.58	343.39	4,123.7	673.84	685.9	-204.5	-59.8	0.00	0.00	0.00
4,300.0	12.58	343.39	4,221.3	576.24	706.8	-210.8	-61.6	0.00	0.00	0.00
4,400.0	12.58	343.39	4,318.9	478.64	727.6	-217.0	-63.4	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-302	<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>										
4,483.1	12.58	343.39	4,400.0	397.50	745.0	-222.2	-64.9	0.00	0.00	0.00
4,500.0	12.58	343.39	4,416.5	381.04	748.5	-223.2	-65.2	0.00	0.00	0.00
4,600.0	12.58	343.39	4,514.1	283.44	769.4	-229.4	-67.0	0.00	0.00	0.00
4,700.0	12.58	343.39	4,611.7	185.84	790.2	-235.7	-68.9	0.00	0.00	0.00
4,800.0	12.58	343.39	4,709.3	88.24	811.1	-241.9	-70.7	0.00	0.00	0.00
4,900.0	12.58	343.39	4,806.9	-9.36	832.0	-248.1	-72.5	0.00	0.00	0.00
5,000.0	12.58	343.39	4,904.5	-106.96	852.8	-254.3	-74.3	0.00	0.00	0.00
5,100.0	12.58	343.39	5,002.1	-204.56	873.7	-260.6	-76.1	0.00	0.00	0.00
5,200.0	12.58	343.39	5,099.7	-302.16	894.6	-266.8	-78.0	0.00	0.00	0.00
5,300.0	12.58	343.39	5,197.3	-399.76	915.4	-273.0	-79.8	0.00	0.00	0.00
5,400.0	12.58	343.39	5,294.9	-497.36	936.3	-279.2	-81.6	0.00	0.00	0.00
5,500.0	12.58	343.39	5,392.5	-594.96	957.2	-285.4	-83.4	0.00	0.00	0.00
5,600.0	12.58	343.39	5,490.1	-692.56	978.0	-291.7	-85.2	0.00	0.00	0.00
<b>END OF TANGENT</b>										
5,614.2	12.58	343.39	5,503.9	-706.42	981.0	-292.6	-85.5	0.00	0.00	0.00
5,700.0	10.86	343.39	5,587.9	-790.43	997.7	-297.5	-86.9	2.00	-2.00	0.00
5,800.0	8.86	343.39	5,686.4	-888.95	1,014.1	-302.4	-88.4	2.00	-2.00	0.00
5,900.0	6.86	343.39	5,785.5	-988.00	1,027.2	-306.3	-89.5	2.00	-2.00	0.00
6,000.0	4.86	343.39	5,885.0	-1,087.47	1,037.0	-309.3	-90.4	2.00	-2.00	0.00
6,100.0	2.86	343.39	5,984.7	-1,187.24	1,043.5	-311.2	-90.9	2.00	-2.00	0.00
6,200.0	0.86	343.39	6,084.7	-1,287.18	1,046.6	-312.1	-91.2	2.00	-2.00	0.00
<b>EOD TO VERTICAL</b>										
6,243.1	0.00	343.39	6,127.8	-1,330.28	1,046.9	-312.2	-91.2	2.00	-2.00	0.00
<b>KOP (8°/100ft BUR)</b>										
6,273.1	0.00	0.00	6,157.8	-1,360.28	1,046.9	-312.2	-91.2	0.00	0.00	0.00
6,300.0	2.15	90.00	6,184.7	-1,387.18	1,046.9	-311.7	-90.7	7.99	7.99	0.00
6,400.0	10.15	90.00	6,284.0	-1,486.52	1,046.9	-301.0	-80.3	8.00	8.00	0.00
6,500.0	18.15	90.00	6,380.9	-1,583.41	1,046.9	-276.6	-56.3	8.00	8.00	0.00
6,600.0	26.15	90.00	6,473.5	-1,675.95	1,046.9	-238.9	-19.5	8.00	8.00	0.00
<b>SHARON SPRINGS</b>										
6,677.5	32.35	90.00	6,541.0	-1,743.50	1,046.9	-201.1	17.6	8.00	8.00	0.00
6,700.0	34.15	90.00	6,559.9	-1,762.35	1,046.9	-188.7	29.7	8.00	8.00	0.00
6,800.0	42.15	90.00	6,638.4	-1,840.93	1,046.9	-127.0	90.1	8.00	8.00	0.00
<b>NIOBRARA A</b>										
6,856.8	46.70	90.00	6,679.0	-1,881.50	1,046.9	-87.2	129.0	8.00	8.00	0.00
6,900.0	50.15	90.00	6,707.6	-1,910.15	1,046.9	-54.9	160.6	8.00	8.00	0.00
7,000.0	58.15	90.00	6,766.2	-1,968.67	1,046.9	26.1	239.9	8.00	8.00	0.00
<b>NIOBRARA B</b>										
7,015.1	59.36	90.00	6,774.0	-1,976.50	1,046.9	39.0	252.5	8.00	8.00	0.00
7,100.0	66.15	90.00	6,812.8	-2,015.34	1,046.9	114.4	326.3	8.00	8.00	0.00
<b>NIOBRARA C</b>										
7,176.6	72.28	90.00	6,840.0	-2,042.50	1,046.9	186.0	396.4	8.00	8.00	0.00
7,200.0	74.15	90.00	6,846.8	-2,049.27	1,046.9	208.4	418.3	8.00	8.00	0.00
7,300.0	82.15	90.00	6,867.3	-2,069.79	1,046.9	306.2	514.1	8.00	8.00	0.00
7,400.0	90.15	90.00	6,874.0	-2,076.49	1,046.9	405.9	611.6	8.00	8.00	0.00
<b>HZ LP *NEW*: 1478.2ft FSL &amp; 738.7ft FWL of Sec 28</b>										
7,405.6	90.60	90.00	6,874.0	-2,076.46	1,046.9	411.5	617.1	8.00	8.00	0.00
7,500.0	90.60	90.00	6,873.0	-2,075.47	1,046.9	505.9	709.5	0.00	0.00	0.00
7,600.0	90.60	90.00	6,871.9	-2,074.42	1,046.9	605.9	807.4	0.00	0.00	0.00
7,700.0	90.60	90.00	6,870.9	-2,073.38	1,046.9	705.9	905.3	0.00	0.00	0.00
7,800.0	90.60	90.00	6,869.8	-2,072.33	1,046.9	805.9	1,003.1	0.00	0.00	0.00
7,900.0	90.60	90.00	6,868.8	-2,071.28	1,046.9	905.9	1,101.0	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-302
<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-302	<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)
8,000.0	90.60	90.00	6,867.7	-2,070.24	1,046.9	1,005.8	1,198.9	0.00	0.00	0.00
8,100.0	90.60	90.00	6,866.7	-2,069.19	1,046.9	1,105.8	1,296.8	0.00	0.00	0.00
8,200.0	90.60	90.00	6,865.6	-2,068.14	1,046.9	1,205.8	1,394.6	0.00	0.00	0.00
8,300.0	90.60	90.00	6,864.6	-2,067.10	1,046.9	1,305.8	1,492.5	0.00	0.00	0.00
8,400.0	90.60	90.00	6,863.6	-2,066.05	1,046.9	1,405.8	1,590.4	0.00	0.00	0.00
8,500.0	90.60	90.00	6,862.5	-2,065.01	1,046.9	1,505.8	1,688.3	0.00	0.00	0.00
8,600.0	90.60	90.00	6,861.5	-2,063.96	1,046.9	1,605.8	1,786.1	0.00	0.00	0.00
8,700.0	90.60	90.00	6,860.4	-2,062.91	1,046.9	1,705.8	1,884.0	0.00	0.00	0.00
8,800.0	90.60	90.00	6,859.4	-2,061.87	1,046.9	1,805.8	1,981.9	0.00	0.00	0.00
8,900.0	90.60	90.00	6,858.3	-2,060.82	1,046.9	1,905.8	2,079.8	0.00	0.00	0.00
9,000.0	90.60	90.00	6,857.3	-2,059.78	1,046.9	2,005.8	2,177.7	0.00	0.00	0.00
9,100.0	90.60	90.00	6,856.2	-2,058.73	1,046.9	2,105.8	2,275.5	0.00	0.00	0.00
9,200.0	90.60	90.00	6,855.2	-2,057.69	1,046.9	2,205.8	2,373.4	0.00	0.00	0.00
9,300.0	90.60	90.00	6,854.1	-2,056.64	1,046.9	2,305.8	2,471.3	0.00	0.00	0.00
9,400.0	90.60	90.00	6,853.1	-2,055.60	1,046.9	2,405.8	2,569.2	0.00	0.00	0.00
9,500.0	90.60	90.00	6,852.1	-2,054.56	1,046.9	2,505.8	2,667.0	0.00	0.00	0.00
9,600.0	90.60	90.00	6,851.0	-2,053.51	1,046.9	2,605.8	2,764.9	0.00	0.00	0.00
9,700.0	90.60	90.00	6,850.0	-2,052.47	1,046.9	2,705.8	2,862.8	0.00	0.00	0.00
9,800.0	90.60	90.00	6,848.9	-2,051.42	1,046.9	2,805.7	2,960.7	0.00	0.00	0.00
9,900.0	90.60	90.00	6,847.9	-2,050.38	1,046.9	2,905.7	3,058.5	0.00	0.00	0.00
10,000.0	90.60	90.00	6,846.8	-2,049.34	1,046.9	3,005.7	3,156.4	0.00	0.00	0.00
10,100.0	90.60	90.00	6,845.8	-2,048.29	1,046.9	3,105.7	3,254.3	0.00	0.00	0.00
10,200.0	90.60	90.00	6,844.7	-2,047.25	1,046.9	3,205.7	3,352.2	0.00	0.00	0.00
10,300.0	90.60	90.00	6,843.7	-2,046.21	1,046.9	3,305.7	3,450.0	0.00	0.00	0.00
10,400.0	90.60	90.00	6,842.7	-2,045.16	1,046.9	3,405.7	3,547.9	0.00	0.00	0.00
10,500.0	90.60	90.00	6,841.6	-2,044.12	1,046.9	3,505.7	3,645.8	0.00	0.00	0.00
10,600.0	90.60	90.00	6,840.6	-2,043.08	1,046.9	3,605.7	3,743.7	0.00	0.00	0.00
10,700.0	90.60	90.00	6,839.5	-2,042.03	1,046.9	3,705.7	3,841.5	0.00	0.00	0.00
10,800.0	90.60	90.00	6,838.5	-2,040.99	1,046.9	3,805.7	3,939.4	0.00	0.00	0.00
10,900.0	90.60	90.00	6,837.4	-2,039.95	1,046.9	3,905.7	4,037.3	0.00	0.00	0.00
11,000.0	90.60	90.00	6,836.4	-2,038.91	1,046.9	4,005.7	4,135.2	0.00	0.00	0.00
11,100.0	90.60	90.00	6,835.4	-2,037.86	1,046.9	4,105.7	4,233.1	0.00	0.00	0.00
11,200.0	90.60	90.00	6,834.3	-2,036.82	1,046.9	4,205.7	4,330.9	0.00	0.00	0.00
11,300.0	90.60	90.00	6,833.3	-2,035.78	1,046.9	4,305.7	4,428.8	0.00	0.00	0.00
11,400.0	90.60	90.00	6,832.2	-2,034.74	1,046.9	4,405.7	4,526.7	0.00	0.00	0.00
11,500.0	90.60	90.00	6,831.2	-2,033.70	1,046.9	4,505.7	4,624.6	0.00	0.00	0.00
11,600.0	90.60	90.00	6,830.2	-2,032.65	1,046.9	4,605.7	4,722.4	0.00	0.00	0.00
11,700.0	90.60	90.00	6,829.1	-2,031.61	1,046.9	4,705.6	4,820.3	0.00	0.00	0.00
11,800.0	90.60	90.00	6,828.1	-2,030.57	1,046.9	4,805.6	4,918.2	0.00	0.00	0.00
11,900.0	90.60	90.00	6,827.0	-2,029.53	1,046.9	4,905.6	5,016.1	0.00	0.00	0.00
<b>BHL *NEW*: 1485ft FSL &amp; 75ft FEL of Sec 28</b>										
11,999.0	90.60	90.00	6,826.0	-2,028.50	1,046.9	5,004.6	5,113.0	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-302
<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-302	<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 (°)	
3,397.1	3,340.0	PARKMAN				
4,016.9	3,945.0	SUSSEX				
4,483.1	4,400.0	SHANNON				
6,677.5	6,541.0	SHARON SPRINGS				
6,856.8	6,679.0	NIOBRARA A				
7,015.1	6,774.0	NIOBRARA B				
7,176.6	6,840.0	NIOBRARA C				

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 & 333ft FWL of Sec 28
600.0	600.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1,228.9	1,223.9	65.9	-19.6	EOB TO 12.58° INC
5,614.2	5,503.9	981.0	-292.6	END OF TANGENT
6,243.1	6,127.8	1,046.9	-312.2	EOD TO VERTICAL
6,273.1	6,157.8	1,046.9	-312.2	KOP (8°/100ft BUR)
7,405.6	6,874.0	1,046.9	411.5	HZ LP *NEW*: 1478.2ft FSL & 738.7ft FWL of Sec 28
11,999.0	6,826.0	1,046.9	5,004.6	BHL *NEW*: 1485ft FSL & 75ft FEL of Sec 28