



Project: WELD COUNTY, COLORADO  
Site: SW SE SEC. 26 T5N R65W 6th P.M.  
Well: BUNTING 26P-232  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #1

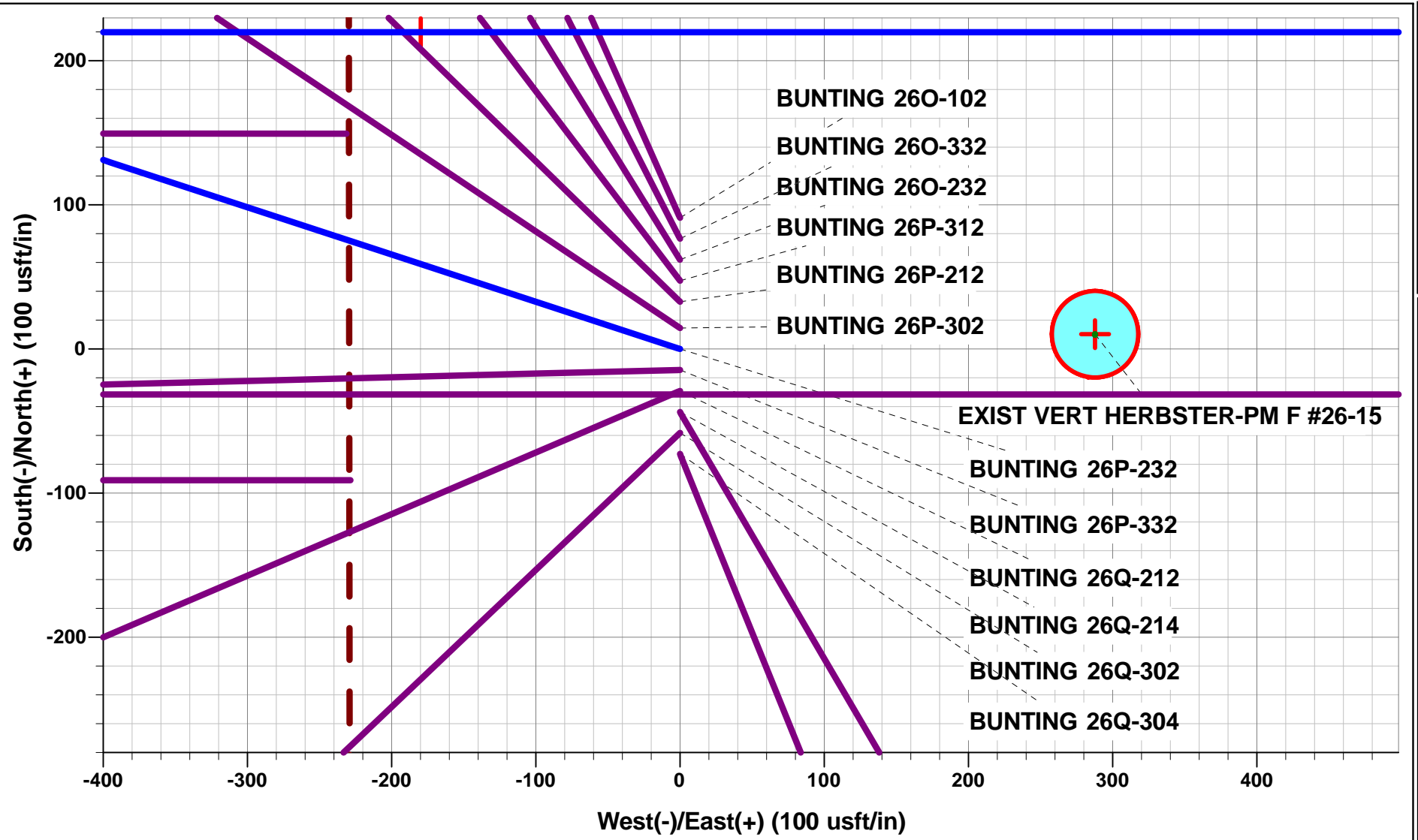


ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Dep	Annotation
0.0	0.0	0.00	0.00	0.0	0.0	0.0	0.0	SHL: 805ft FSL & 2405ft FEL of Sec 26
900.0	900.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2"/100ft BUR)
1495.5	1499.9	12.00	288.14	19.5	-59.5	-58.9	62.6	EOB TO 12° INC
4228.3	4293.7	12.00	288.14	200.3	-611.3	-605.3	643.3	END OF TANGENT
4823.8	4893.6	0.00	0.00	219.8	-670.8	-664.2	705.9	EOD TO VERTICAL
6278.8	6348.6	0.00	0.00	219.8	-670.8	-664.2	705.9	KOP (8"/100ft BUR)
6476.2	6548.6	16.00	90.00	219.8	-643.1	-636.4	733.6	START 12"/100ft BUR
6822.0	7169.6	90.52	90.00	219.8	-179.8	-173.3	1196.9	HZ LP *NEW*: 1026.6ft FSL & 2585ft FEL of Sec 26
6752.0	14940.4	90.51	90.00	219.8	7590.8	7593.9	8967.5	BHL: 1080ft FSL & 100ft FEL of Sec 25

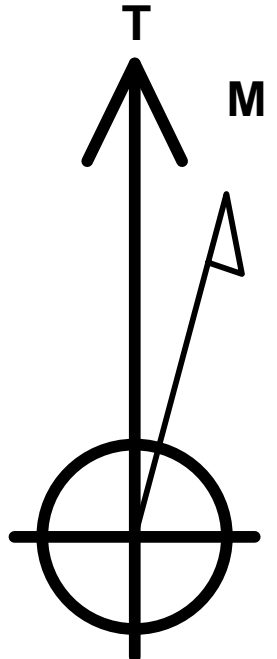
WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - BUNTING 26P-232	6278.8	219.8	-670.8	40.365823	-104.632027
BHL - BUNTING 26P-232	6752.0	219.8	7590.8	40.365820	-104.602380
HZ LP *NEW* - BUNTING 26P-232	6822.0	219.8	-179.8	40.365823	-104.630265



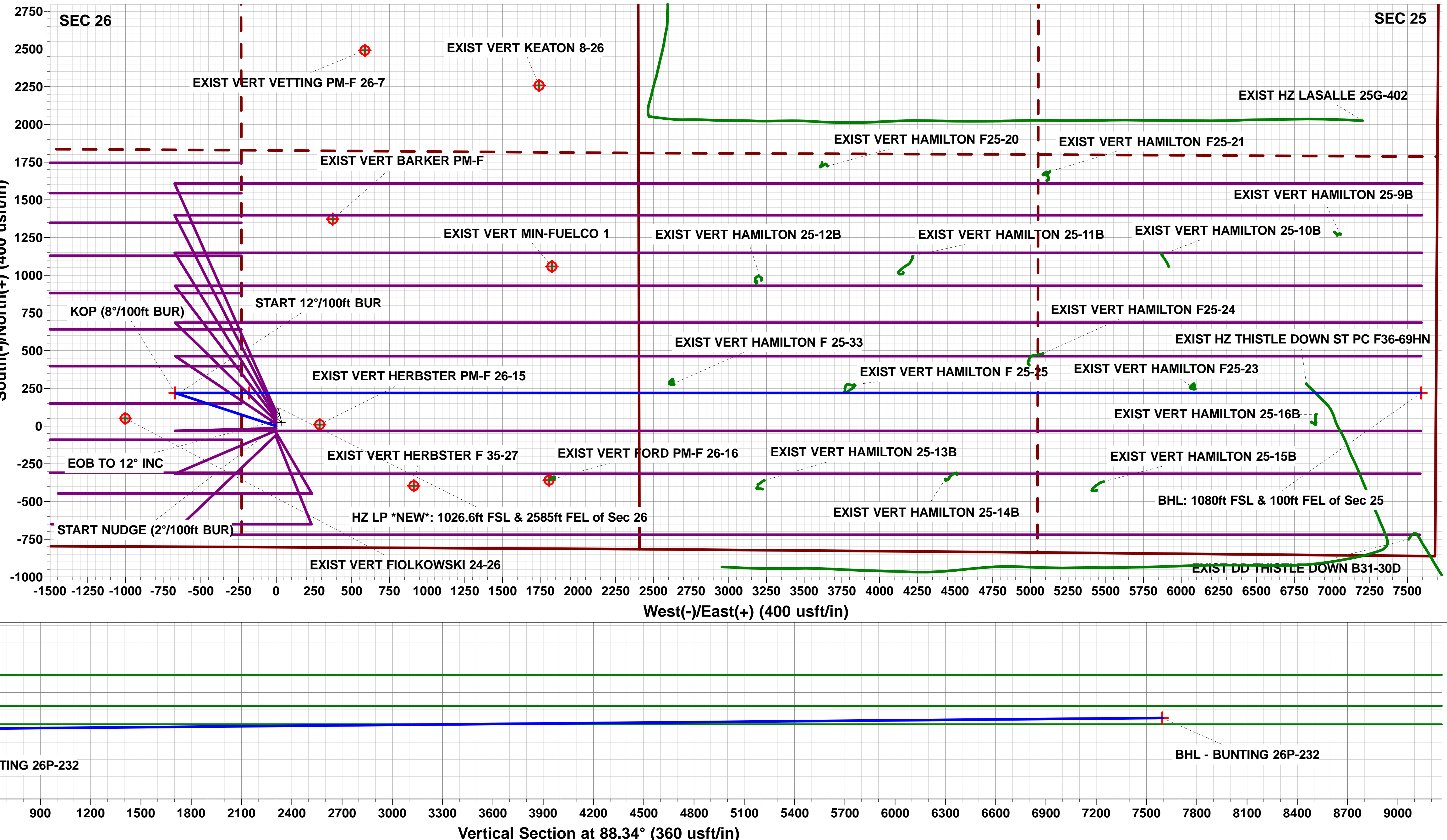
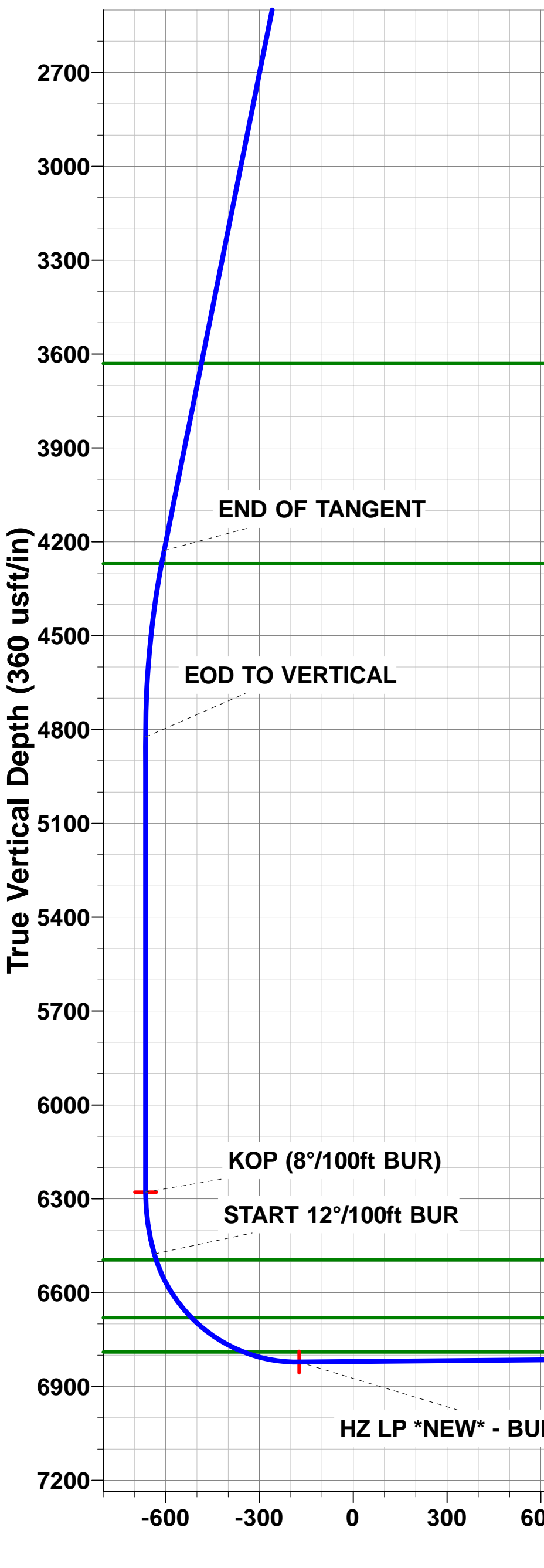
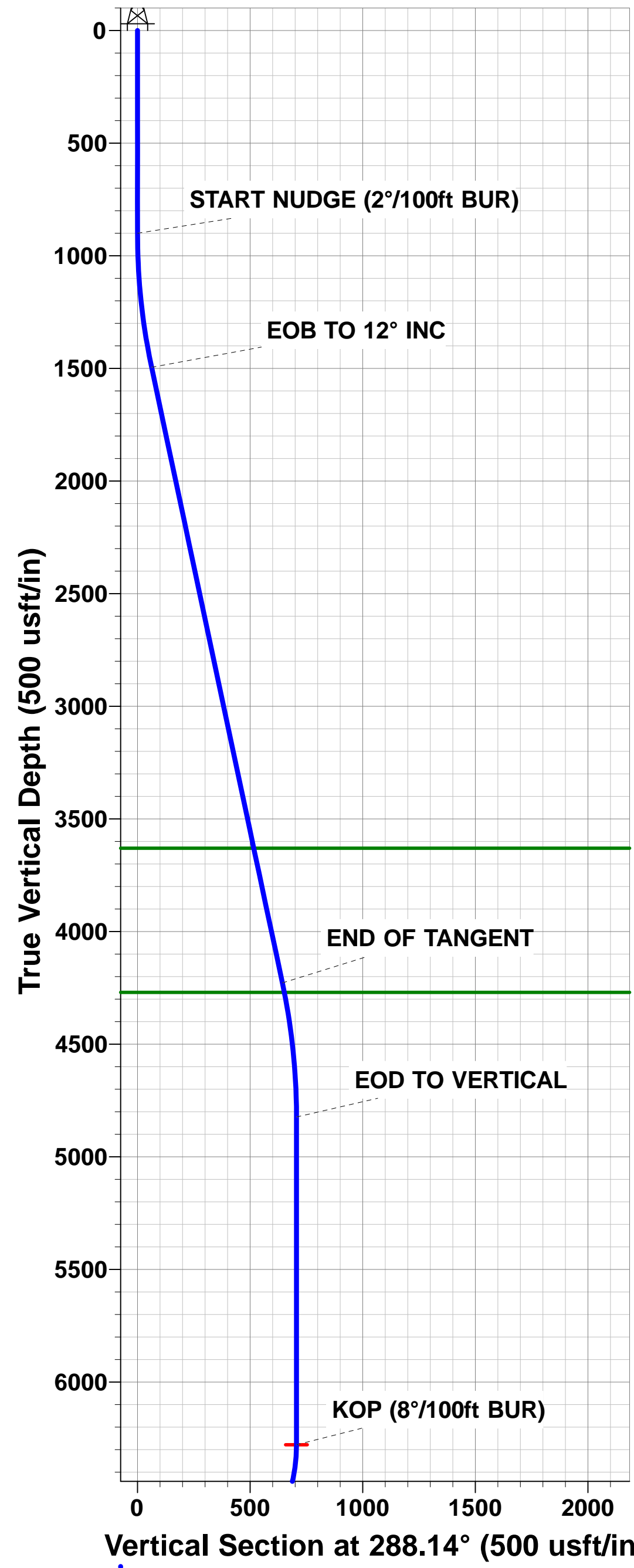
PROPOSED LOCAL COORDINATES:

SHL: 805ft FSL & 2405ft FEL of Sec 26  
HZ LP \*NEW\*: 1026.6ft FSL & 2585ft FEL of Sec 26  
BHL: 1080ft FSL & 100ft FEL of Sec 25



Azimuths to True North  
Magnetic North: 8.22°

Magnetic Field  
Strength: 52483.2snT  
Dip Angle: 66.87°  
Date: 22/08/2016  
Model: IGRF2015



# **PDC ENERGY**

**WELD COUNTY, COLORADO  
SW SE SEC. 26 T5N R65W 6th P.M.  
BUNTING 26P-232**

**ORIGINAL WELLBORE  
PROPOSAL #1**

## **Anticollision Report**

**23 August, 2016**



# Anticollision Report



<b>Company:</b>	PDC ENERGY	<b>Local Co-ordinate Reference:</b>	Well BUNTING 26P-232
<b>Project:</b>	WELD COUNTY, COLORADO	<b>TVD Reference:</b>	KB-EST @ 4672.0usft (Original Well Elev)
<b>Reference Site:</b>	SW SE SEC. 26 T5N R65W 6th P.M.	<b>MD Reference:</b>	KB-EST @ 4672.0usft (Original Well Elev)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	BUNTING 26P-232	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	PROPOSAL #1		
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
<b>Interpolation Method:</b>	MD + Stations Interval 100.0usft	<b>Error Model:</b>	ISCWSA
<b>Depth Range:</b>	Unlimited	<b>Scan Method:</b>	Closest Approach 3D
<b>Results Limited by:</b>	Maximum center-center distance of 10,000.0 us	<b>Error Surface:</b>	Elliptical Conic
<b>Warning Levels Evaluated at:</b>	2.00 Sigma	<b>Casing Method:</b>	Not applied

<b>Survey Tool Program</b>	<b>Date</b> 23/08/2016			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.0	14,940.4	PROPOSAL #1 (ORIGINAL WELLBORE)	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
NW SW SEC. 27 T5N R65W 6th P.M.						
ABDN VERT SITZMAN F27-13 - Wellbore #1 - Wellbore	4,113.1	2,700.0	6,987.9	6,976.3	602.363	CC, ES
ABDN VERT SITZMAN F27-13 - Wellbore #1 - Wellbore	6,348.6	2,700.0	7,650.3	7,630.9	393.605	SF
BOULTER FARMS 27G-202 - ORIGINAL WELLBORE -	7,081.6	14,509.3	1,525.3	1,290.6	6.499	CC
BOULTER FARMS 27G-202 - ORIGINAL WELLBORE -	7,125.0	14,544.9	1,525.3	1,289.3	6.462	ES
BOULTER FARMS 27G-202 - ORIGINAL WELLBORE -	7,200.0	14,544.9	1,527.5	1,290.7	6.452	SF
BOULTER FARMS 27G-232 - ORIGINAL WELLBORE -	7,118.2	14,563.1	1,128.2	892.6	4.790	CC
BOULTER FARMS 27G-232 - ORIGINAL WELLBORE -	7,125.0	14,563.1	1,128.2	892.6	4.789	ES
BOULTER FARMS 27G-232 - ORIGINAL WELLBORE -	7,169.6	14,563.1	1,129.3	893.3	4.785	SF
BOULTER FARMS 27G-332 - ORIGINAL WELLBORE -	7,123.0	14,613.0	1,326.1	1,090.3	5.624	CC
BOULTER FARMS 27G-332 - ORIGINAL WELLBORE -	7,125.0	14,613.0	1,326.1	1,090.3	5.623	ES
BOULTER FARMS 27G-332 - ORIGINAL WELLBORE -	7,200.0	14,613.0	1,328.6	1,092.0	5.617	SF
BOULTER FARMS 27H-202 - ORIGINAL WELLBORE -	6,996.0	14,411.3	177.3	-54.5	0.765	Level 1, CC
BOULTER FARMS 27H-202 - ORIGINAL WELLBORE -	7,025.0	14,438.7	177.6	-54.9	0.764	Level 1, ES, SF
BOULTER FARMS 27H-212 - ORIGINAL WELLBORE -	7,118.2	14,543.0	661.8	425.4	2.800	CC
BOULTER FARMS 27H-212 - ORIGINAL WELLBORE -	7,125.0	14,543.0	661.9	425.4	2.799	ES, SF
BOULTER FARMS 27H-232 - ORIGINAL WELLBORE -	7,123.1	14,587.2	312.0	77.1	1.328	Level 3, CC
BOULTER FARMS 27H-232 - ORIGINAL WELLBORE -	7,125.0	14,587.2	312.0	77.1	1.328	Level 3, ES, SF
BOULTER FARMS 27H-302 - ORIGINAL WELLBORE -	7,122.5	14,584.2	424.5	189.9	1.810	CC
BOULTER FARMS 27H-302 - ORIGINAL WELLBORE -	7,125.0	14,584.2	424.5	189.9	1.810	ES, SF
BOULTER FARMS 27H-312 - ORIGINAL WELLBORE -	7,123.0	14,589.5	911.4	675.5	3.864	CC
BOULTER FARMS 27H-312 - ORIGINAL WELLBORE -	7,125.0	14,589.5	911.4	675.5	3.864	ES
BOULTER FARMS 27H-312 - ORIGINAL WELLBORE -	7,150.0	14,589.5	911.8	675.7	3.862	SF
BOULTER FARMS 27H-332 - ORIGINAL WELLBORE -	7,120.5	14,619.8	75.5	-145.9	0.341	Level 1, CC, ES, SF
BOULTER FARMS 27I-312 - ORIGINAL WELLBORE - P	7,126.9	14,694.5	534.8	301.3	2.290	CC, ES, SF
EXIST VERT BARKER -PM F #26-10 - Wellbore #1 - De	7,723.9	6,796.0	1,151.8	986.8	6.979	CC, ES
EXIST VERT BARKER -PM F #26-10 - Wellbore #1 - De	7,900.0	6,794.4	1,165.2	996.3	6.896	SF
EXIST VERT BUNTING 1 - Wellbore #1 - Wellbore #1	5,590.3	5,500.0	2,856.3	2,837.1	148.704	CC
EXIST VERT BUNTING 1 - Wellbore #1 - Wellbore #1	5,823.8	5,734.2	2,856.4	2,836.7	145.507	ES
EXIST VERT BUNTING 1 - Wellbore #1 - Wellbore #1	13,800.0	6,664.6	9,974.5	9,800.1	57.206	SF
EXIST VERT BUNTING 27-43 - Wellbore #1 - Wellbore #	6,348.6	6,272.9	4,093.6	4,073.6	204.525	ES
EXIST VERT BUNTING 27-43 - Wellbore #1 - Wellbore #	6,351.3	6,275.5	4,093.6	4,076.8	243.515	CC
EXIST VERT BUNTING 27-43 - Wellbore #1 - Wellbore #	12,600.0	6,749.5	9,995.2	9,835.0	62.388	SF
EXIST VERT FOLKOWSKI 1 - Wellbore #1 - Wellbore #	5,845.0	5,763.6	1,578.6	1,559.6	82.932	CC
EXIST VERT FOLKOWSKI 1 - Wellbore #1 - Wellbore #	5,900.0	5,816.1	1,578.6	1,559.5	82.556	ES
EXIST VERT FOLKOWSKI 1 - Wellbore #1 - Wellbore #	14,940.4	6,625.3	9,823.7	9,627.1	49.958	SF
EXIST VERT FOLKOWSKI 24-26 - Wellbore #1 - Desigr	6,348.6	6,263.8	370.3	228.2	2.606	CC, ES, SF
EXIST VERT FORD PM-F #26-16 - Wellbore #1 - Wellbore	9,193.7	6,793.8	569.8	501.8	8.381	CC

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

# Anticollision Report



<b>Company:</b>	PDC ENERGY	<b>Local Co-ordinate Reference:</b>	Well BUNTING 26P-232
<b>Project:</b>	WELD COUNTY, COLORADO	<b>TVD Reference:</b>	KB-EST @ 4672.0usft (Original Well Elev)
<b>Reference Site:</b>	SW SE SEC. 26 T5N R65W 6th P.M.	<b>MD Reference:</b>	KB-EST @ 4672.0usft (Original Well Elev)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	BUNTING 26P-232	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

## Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
NW SW SEC. 27 T5N R65W 6th P.M.						
EXIST VERT FORD PM-F #26-16 - Wellbore #1 - Wellbc	9,200.0	6,793.8	569.8	501.7	8.361	ES
EXIST VERT FORD PM-F #26-16 - Wellbore #1 - Wellbc	9,300.0	6,794.1	579.6	508.8	8.180	SF
EXIST VERT HERBSTER F #35-27 - Wellbore #1 - Desi	8,261.2	6,803.2	615.1	437.3	3.459	CC, ES
EXIST VERT HERBSTER F #35-27 - Wellbore #1 - Desi	8,300.0	6,802.8	616.3	437.5	3.448	SF
EXIST VERT HERBSTER PM F #26-15 - Wellbore #1 - [	7,637.2	6,800.8	209.6	46.3	1.284	Level 3, CC, ES, SF
EXIST VERT KEATON #8-26 - Wellbore #1 - Design #1	9,092.6	6,785.6	2,038.6	1,839.3	10.229	CC
EXIST VERT KEATON #8-26 - Wellbore #1 - Design #1	9,100.0	6,785.6	2,038.6	1,839.1	10.219	ES
EXIST VERT KEATON #8-26 - Wellbore #1 - Design #1	9,700.0	6,780.1	2,127.2	1,911.5	9.863	SF
EXIST VERT MINERAL-FUELCO #1 - Wellbore #1 - Des	9,177.1	6,788.9	838.2	636.6	4.158	CC
EXIST VERT MINERAL-FUELCO #1 - Wellbore #1 - Des	9,200.0	6,788.7	838.5	636.3	4.147	ES
EXIST VERT MINERAL-FUELCO #1 - Wellbore #1 - Des	9,300.0	6,787.7	847.2	642.3	4.135	SF
EXIST VERT SITZMAN F27-14 - Wellbore #1 - Wellbore	6,146.5	6,062.3	5,616.8	5,596.6	277.326	CC, ES
EXIST VERT SITZMAN F27-14 - Wellbore #1 - Wellbore	11,000.0	6,812.4	9,935.6	9,820.7	86.435	SF
EXIST VERT VETTING PM F-#26-7 - Wellbore #1 - Desi	7,937.0	6,795.1	2,271.4	2,101.5	13.374	CC
EXIST VERT VETTING PM F-#26-7 - Wellbore #1 - Desi	8,000.0	6,794.5	2,272.2	2,100.9	13.264	ES
EXIST VERT VETTING PM F-#26-7 - Wellbore #1 - Desi	8,700.0	6,788.2	2,396.1	2,207.2	12.683	SF



# Anticollision Report



<b>Company:</b>	PDC ENERGY	<b>Local Co-ordinate Reference:</b>	Well BUNTING 26P-232
<b>Project:</b>	WELD COUNTY, COLORADO	<b>TVD Reference:</b>	KB-EST @ 4672.0usft (Original Well Elev)
<b>Reference Site:</b>	SW SE SEC. 26 T5N R65W 6th P.M.	<b>MD Reference:</b>	KB-EST @ 4672.0usft (Original Well Elev)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	BUNTING 26P-232	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

## Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
SW SE SEC. 26 T5N R65W 6th P.M.						
BUNTING 26O-102 - ORIGINAL WELLBORE - PROPOS	300.0	300.0	91.1	90.0	84.957	CC, ES
BUNTING 26O-102 - ORIGINAL WELLBORE - PROPOS	14,940.4	15,028.6	1,391.2	940.1	3.084	SF
BUNTING 26O-232 - ORIGINAL WELLBORE - PROPOS	500.0	500.0	61.9	60.0	31.419	CC, ES
BUNTING 26O-232 - ORIGINAL WELLBORE - PROPOS	14,940.4	15,025.3	929.0	477.6	2.058	SF
BUNTING 26O-332 - ORIGINAL WELLBORE - PROPOS	400.0	400.0	76.5	75.0	50.277	CC, ES
BUNTING 26O-332 - ORIGINAL WELLBORE - PROPOS	14,940.4	15,164.0	1,182.0	731.9	2.626	SF
BUNTING 26P-212 - ORIGINAL WELLBORE - PROPOS	700.0	700.0	32.8	29.9	11.423	CC
BUNTING 26P-212 - ORIGINAL WELLBORE - PROPOS	14,940.4	14,963.9	466.4	15.1	1.033	Level 2, ES, SF
BUNTING 26P-302 - ORIGINAL WELLBORE - PROPOS	800.0	800.0	14.6	11.3	4.390	CC
BUNTING 26P-302 - ORIGINAL WELLBORE - PROPOS	14,940.4	15,020.6	255.3	-177.2	0.590	Level 1, ES, SF
BUNTING 26P-312 - ORIGINAL WELLBORE - PROPOS	600.0	600.0	47.4	44.9	19.564	CC, ES
BUNTING 26P-312 - ORIGINAL WELLBORE - PROPOS	14,940.4	15,075.8	715.5	267.4	1.597	SF
BUNTING 26P-332 - ORIGINAL WELLBORE - PROPOS	700.0	700.0	14.6	11.7	5.077	CC
BUNTING 26P-332 - ORIGINAL WELLBORE - PROPOS	14,940.4	14,993.5	259.7	-179.2	0.592	Level 1, ES, SF
BUNTING 26Q-212 - ORIGINAL WELLBORE - PROPOS	600.0	600.0	29.1	26.7	12.040	CC, ES
BUNTING 26Q-212 - ORIGINAL WELLBORE - PROPOS	14,940.4	14,927.5	535.7	84.5	1.187	Level 2, SF
BUNTING 26Q-214 - ORIGINAL WELLBORE - PROPOS	500.0	500.0	43.7	41.7	22.178	CC, ES
BUNTING 26Q-214 - ORIGINAL WELLBORE - PROPOS	7,700.0	6,739.4	711.6	669.1	16.737	SF
BUNTING 26Q-302 - ORIGINAL WELLBORE - PROPOS	400.0	400.0	58.3	56.8	38.306	CC, ES
BUNTING 26Q-302 - ORIGINAL WELLBORE - PROPOS	14,940.4	15,054.6	942.2	491.7	2.092	SF
BUNTING 26Q-304 - ORIGINAL WELLBORE - PROPOS	300.0	300.0	72.9	71.8	67.960	CC, ES
BUNTING 26Q-304 - ORIGINAL WELLBORE - PROPOS	8,000.0	6,700.0	1,002.7	953.2	20.288	SF
EXIST DD CONAGRA B30-32D - Wellbore #1 - Wellbore	14,940.4	6,912.6	1,541.4	1,298.0	6.333	CC, ES, SF
EXIST DD CONAGRA B30-33D - Wellbore #1 - Wellbore	14,940.4	6,869.6	305.2	77.0	1.337	Level 3, CC, ES, SF
EXIST DD THISTLE DOWN B31-30D - Wellbore #1 - We	14,870.3	6,894.6	953.2	727.0	4.214	CC
EXIST DD THISTLE DOWN B31-30D - Wellbore #1 - We	14,900.0	6,893.4	953.6	726.6	4.201	ES
EXIST DD THISTLE DOWN B31-30D - Wellbore #1 - We	14,940.4	6,891.7	955.7	727.6	4.189	SF
EXIST HZ LASALLE 25G-402 - Wellbore #1 - Wellbore #	11,145.0	8,028.2	1,802.1	1,646.3	11.566	CC
EXIST HZ LASALLE 25G-402 - Wellbore #1 - Wellbore #	14,600.0	11,435.0	1,814.8	1,470.7	5.275	ES
EXIST HZ LASALLE 25G-402 - Wellbore #1 - Wellbore #	14,800.0	11,435.0	1,831.2	1,481.6	5.238	SF
EXIST HZ THISTLE DOWN STATE PC F36-69HN - Well	14,532.4	6,818.3	1,103.5	875.4	4.837	CC, ES
EXIST HZ THISTLE DOWN STATE PC F36-69HN - Well	14,600.0	6,784.7	1,104.9	875.8	4.824	SF
EXIST VERT HAMILTON 25-10B - Wellbore #1 - Wellboi	13,268.3	6,500.0	889.1	716.3	5.147	CC
EXIST VERT HAMILTON 25-10B - Wellbore #1 - Wellboi	13,300.0	6,500.0	889.6	716.1	5.125	ES
EXIST VERT HAMILTON 25-10B - Wellbore #1 - Wellboi	13,400.0	6,500.0	898.8	722.5	5.100	SF
EXIST VERT HAMILTON 25-11B - Wellbore #1 - Wellboi	11,506.4	6,775.8	800.0	667.8	6.053	CC, ES
EXIST VERT HAMILTON 25-11B - Wellbore #1 - Wellboi	11,600.0	6,774.0	805.5	670.7	5.976	SF
EXIST VERT HAMILTON 25-12B - Wellbore #1 - Wellboi	10,533.1	6,800.0	727.6	623.0	6.951	CC, ES
EXIST VERT HAMILTON 25-12B - Wellbore #1 - Wellboi	10,700.0	6,794.9	746.5	637.2	6.829	SF
EXIST VERT HAMILTON 25-13B - Wellbore #1 - Wellboi	10,563.5	6,815.0	634.8	529.1	6.004	CC, ES
EXIST VERT HAMILTON 25-13B - Wellbore #1 - Wellboi	10,700.0	6,820.6	649.3	539.8	5.928	SF
EXIST VERT HAMILTON 25-14B - Wellbore #1 - Wellboi	11,862.7	6,797.6	537.3	395.8	3.798	CC, ES
EXIST VERT HAMILTON 25-14B - Wellbore #1 - Wellboi	11,900.0	6,797.3	538.6	396.1	3.779	SF
EXIST VERT HAMILTON 25-15B - Wellbore #1 - Wellboi	12,788.3	6,809.2	644.1	476.5	3.843	CC
EXIST VERT HAMILTON 25-15B - Wellbore #1 - Wellboi	12,800.0	6,809.2	644.2	476.3	3.836	ES
EXIST VERT HAMILTON 25-15B - Wellbore #1 - Wellboi	12,900.0	6,808.7	653.7	483.0	3.829	SF
EXIST VERT HAMILTON 25-16B - Wellbore #1 - Wellboi	14,211.9	6,816.4	192.8	-14.6	0.930	Level 1, CC, ES, SF
EXIST VERT HAMILTON 25-9B - Wellbore #1 - Wellbore	14,382.0	6,808.6	1,047.0	835.1	4.941	CC
EXIST VERT HAMILTON 25-9B - Wellbore #1 - Wellbore	14,400.0	6,808.6	1,047.2	834.8	4.930	ES
EXIST VERT HAMILTON 25-9B - Wellbore #1 - Wellbore	14,500.0	6,809.1	1,053.7	838.5	4.896	SF
EXIST VERT HAMILTON F 25-23 - Wellbore #1 - Wellbo	13,421.8	6,812.8	35.8	-149.3	0.193	Level 1, CC, ES, SF
EXIST VERT HAMILTON F 25-25 - Wellbore #1 - Wellbo	11,165.7	6,806.1	28.1	-94.0	0.230	Level 1, CC, ES, SF
EXIST VERT HAMILTON F 25-33 - Wellbore #1 - Wellbo	9,966.1	6,798.6	64.6	-24.5	0.725	Level 1, CC, ES, SF

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

# Anticollision Report



<b>Company:</b>	PDC ENERGY	<b>Local Co-ordinate Reference:</b>	Well BUNTING 26P-232
<b>Project:</b>	WELD COUNTY, COLORADO	<b>TVD Reference:</b>	KB-EST @ 4672.0usft (Original Well Elev)
<b>Reference Site:</b>	SW SE SEC. 26 T5N R65W 6th P.M.	<b>MD Reference:</b>	KB-EST @ 4672.0usft (Original Well Elev)
<b>Site Error:</b>	0.0 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	BUNTING 26P-232	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	ORIGINAL WELLBORE	<b>Database:</b>	EDM 5000.1 Single User Db
<b>Reference Design:</b>	PROPOSAL #1	<b>Offset TVD Reference:</b>	Offset Datum

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						
SW SE SEC. 26 T5N R65W 6th P.M.						
EXIST VERT HAMILTON F25-20 - Wellbore #1 - Wellbor	10,968.9	6,721.9	1,525.6	1,408.8	13.063	CC
EXIST VERT HAMILTON F25-20 - Wellbore #1 - Wellbor	11,000.0	6,721.7	1,526.0	1,408.3	12.970	ES
EXIST VERT HAMILTON F25-20 - Wellbore #1 - Wellbor	11,500.0	6,719.0	1,615.4	1,483.9	12.282	SF
EXIST VERT HAMILTON F25-21 - Wellbore #1 - Wellbor	12,459.7	6,796.9	1,408.5	1,250.0	8.888	CC
EXIST VERT HAMILTON F25-21 - Wellbore #1 - Wellbor	12,500.0	6,795.9	1,409.0	1,249.4	8.829	ES
EXIST VERT HAMILTON F25-21 - Wellbore #1 - Wellbor	12,800.0	6,788.6	1,449.0	1,281.0	8.626	SF
EXIST VERT HAMILTON F25-24 - Wellbore #1 - Wellbor	12,342.2	6,802.0	185.0	29.8	1.192	Level 2, CC, ES, SF

<b>Offset Design</b> NW SW SEC. 27 T5N R65W 6th P.M. - ABDN VERT SITZMAN F27-13 - Wellbore #1 - Wellbore #1											
Survey Program: 100-GYD_CT											
Reference											
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Warning
				Reference (usft)	Offset (usft)		+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	-92.52	-326.8	-7,415.4	7,422.6		
100.0	100.0	78.6	78.6	0.1	0.0	-92.52	-326.9	-7,415.4	7,422.7	7,422.5	0.12 N/A
200.0	200.0	196.4	196.4	0.3	0.2	-92.53	-327.5	-7,415.6	7,422.8	7,422.3	0.51 N/A
300.0	300.0	300.0	300.0	0.5	0.2	-92.53	-327.6	-7,415.5	7,422.7	7,422.0	0.75 9,882.367
337.5	337.5	331.5	331.5	0.6	0.2	-92.53	-327.6	-7,415.5	7,422.7	7,421.9	0.84 8,885.235
400.0	400.0	382.4	382.4	0.8	0.2	-92.53	-327.7	-7,415.5	7,422.8	7,421.8	0.98 7,605.988
500.0	500.0	500.0	500.0	1.0	0.2	-92.53	-327.9	-7,415.5	7,422.7	7,421.5	1.23 6,056.292
581.6	581.6	573.7	573.7	1.2	0.2	-92.53	-327.9	-7,415.4	7,422.6	7,421.2	1.42 5,230.503
600.0	600.0	587.6	587.6	1.2	0.3	-92.53	-328.0	-7,415.4	7,422.7	7,421.2	1.46 5,075.316
700.0	700.0	700.0	700.0	1.4	0.3	-92.53	-328.2	-7,415.4	7,422.6	7,420.9	1.74 4,277.728
768.2	768.2	759.8	759.8	1.6	0.3	-92.53	-328.3	-7,415.3	7,422.5	7,420.6	1.90 3,913.752
800.0	800.0	783.3	783.3	1.7	0.3	-92.53	-328.3	-7,415.3	7,422.6	7,420.6	1.97 3,765.364
900.0	900.0	912.7	912.7	1.9	0.3	-92.53	-328.1	-7,415.3	7,422.5	7,420.3	2.21 3,356.761
1,000.0	1,000.0	1,000.0	1,000.0	2.1	0.4	-20.69	-327.8	-7,415.2	7,420.8	7,418.3	2.47 3,001.428
1,100.0	1,099.8	1,094.6	1,094.6	2.3	0.4	-20.74	-327.7	-7,415.2	7,415.9	7,413.2	2.70 2,745.615
1,200.0	1,199.5	1,188.3	1,188.3	2.5	0.4	-20.82	-327.6	-7,415.2	7,407.8	7,404.8	2.94 2,515.631
1,300.0	1,298.7	1,298.3	1,298.3	2.8	0.4	-20.93	-327.2	-7,415.3	7,396.4	7,393.1	3.24 2,280.033
1,400.0	1,397.5	1,418.7	1,418.7	3.1	0.5	-21.09	-326.6	-7,415.0	7,381.5	7,377.9	3.56 2,076.256
1,499.9	1,495.5	1,503.7	1,503.7	3.4	0.5	-21.27	-326.5	-7,414.7	7,363.4	7,359.6	3.86 1,907.338
1,500.0	1,495.6	1,503.9	1,503.9	3.4	0.5	-21.27	-326.5	-7,414.7	7,363.4	7,359.5	3.86 1,907.146
1,600.0	1,593.4	1,603.2	1,603.2	3.8	0.6	-21.33	-326.3	-7,414.5	7,343.8	7,339.6	4.14 1,774.055
1,700.0	1,691.3	1,708.8	1,708.8	4.1	0.6	-21.39	-326.3	-7,414.2	7,324.1	7,319.7	4.42 1,658.617
1,800.0	1,789.1	1,789.6	1,789.6	4.5	0.6	-21.44	-326.7	-7,414.0	7,304.5	7,299.8	4.70 1,553.793
1,900.0	1,886.9	1,903.6	1,903.6	4.9	0.6	-21.52	-327.7	-7,413.8	7,284.9	7,279.9	5.00 1,456.114
2,000.0	1,984.7	1,994.3	1,994.3	5.3	0.7	-21.58	-328.8	-7,413.5	7,265.2	7,259.9	5.30 1,370.128
2,100.0	2,082.5	2,088.9	2,088.9	5.8	0.7	-21.65	-330.2	-7,413.2	7,245.7	7,240.1	5.60 1,292.816
2,200.0	2,180.3	2,163.5	2,163.5	6.2	0.7	-21.71	-331.3	-7,413.2	7,226.3	7,220.4	5.90 1,224.718
2,300.0	2,278.1	2,270.6	2,270.6	6.6	0.8	-21.79	-333.0	-7,413.3	7,207.1	7,200.9	6.21 1,160.692
2,400.0	2,376.0	2,377.9	2,377.8	7.1	0.8	-21.87	-334.6	-7,413.1	7,187.7	7,181.1	6.52 1,101.915
2,500.0	2,473.8	2,472.7	2,472.7	7.5	0.8	-21.94	-335.9	-7,412.9	7,168.2	7,161.4	6.83 1,048.854
2,600.0	2,571.6	2,578.3	2,578.2	7.9	0.9	-22.02	-337.4	-7,412.7	7,148.8	7,141.6	7.15 999.861
2,700.0	2,669.4	2,674.7	2,674.6	8.4	0.9	-22.09	-338.7	-7,412.5	7,129.3	7,121.8	7.46 955.130
2,800.0	2,767.2	2,700.0	2,699.9	8.8	0.9	-22.11	-339.1	-7,412.4	7,110.2	7,102.4	7.76 916.323
2,900.0	2,865.0	2,700.0	2,699.9	9.3	0.9	-22.11	-339.1	-7,412.4	7,092.4	7,084.4	8.05 881.215
3,000.0	2,962.9	2,700.0	2,699.9	9.7	0.9	-22.11	-339.1	-7,412.4	7,076.0	7,067.6	8.34 848.618
3,100.0	3,060.7	2,700.0	2,699.9	10.2	0.9	-22.11	-339.1	-7,412.4	7,060.9	7,052.3	8.63 818.299

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