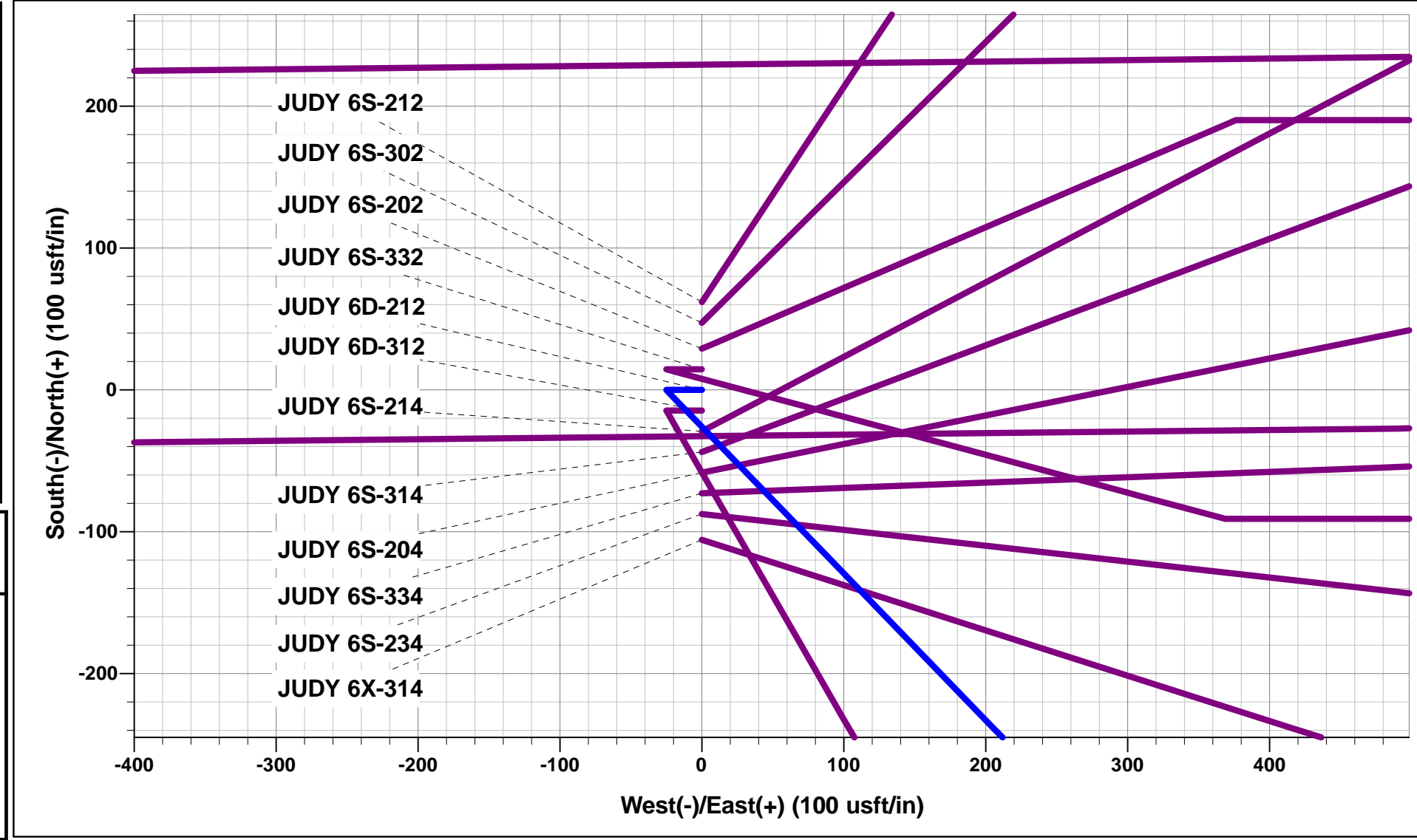




Project: WELD COUNTY, COLORADO
 Site: NE SE SEC. 6 T4N R64W 6th P.M.
 Well: JUDY 6D-212
 Wellbore: ORIGINAL WELLBORE
 Design: PROPOSAL #1

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: 2354ft FSL & 938ft FEL of Sec 6		
300.0	300.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDDGE #1 (2°/100ft BUR)		
549.7	550.0	5.00	270.00	0.0	-10.9	-10.9	10.9	EOB TO 5° INC		
586.3	586.8	5.00	270.00	0.0	-14.1	-14.1	14.1	END OF TANGENT		
836.0	836.8	0.00	0.00	0.0	-25.0	-25.0	25.0	EOD TO VERTICAL		
1700.0	1700.8	0.00	0.00	0.0	-25.0	-25.0	25.0	START NUDDGE #2 (2°/100ft BUR)		
2295.6	2300.8	12.00	135.97	-45.0	18.5	20.1	87.6	EOB TO 12° INC		
4316.2	4366.5	12.00	135.97	-353.8	317.0	329.1	517.1	END OF TANGENT		
4911.8	4966.5	0.00	0.00	-398.8	360.5	374.2	579.7	EOD TO VERTICAL		
6131.8	6186.5	0.00	0.00	-398.8	360.5	374.2	579.7	KOP (8°/100ft BUR)		
6837.1	7186.4	80.00	89.99	-398.7	952.3	965.6	1171.5	80° INC: 1944ft FSL & 25ft FWL of Sec 5		
6848.0	7316.9	90.44	89.99	-398.7	1082.2	1095.4	1301.4	HZ LP: 1944ft FSL & 154.9ft FWL of Sec 5		
6768.0	17622.4	90.45	89.99	-396.7	11387.3	11394.2	11606.5	BHL: 1944ft FSL & 100ft FEL of Sec 4		

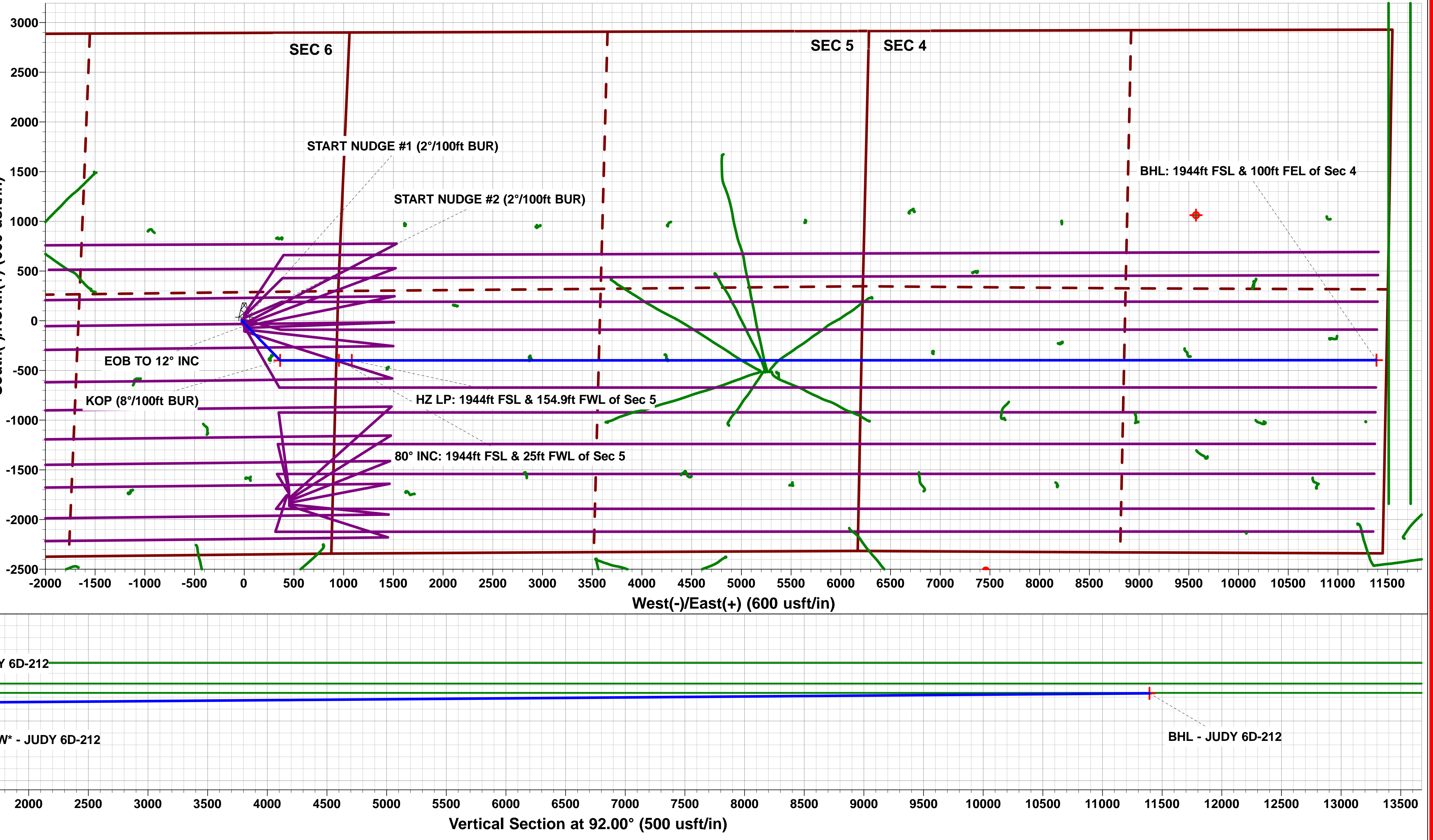
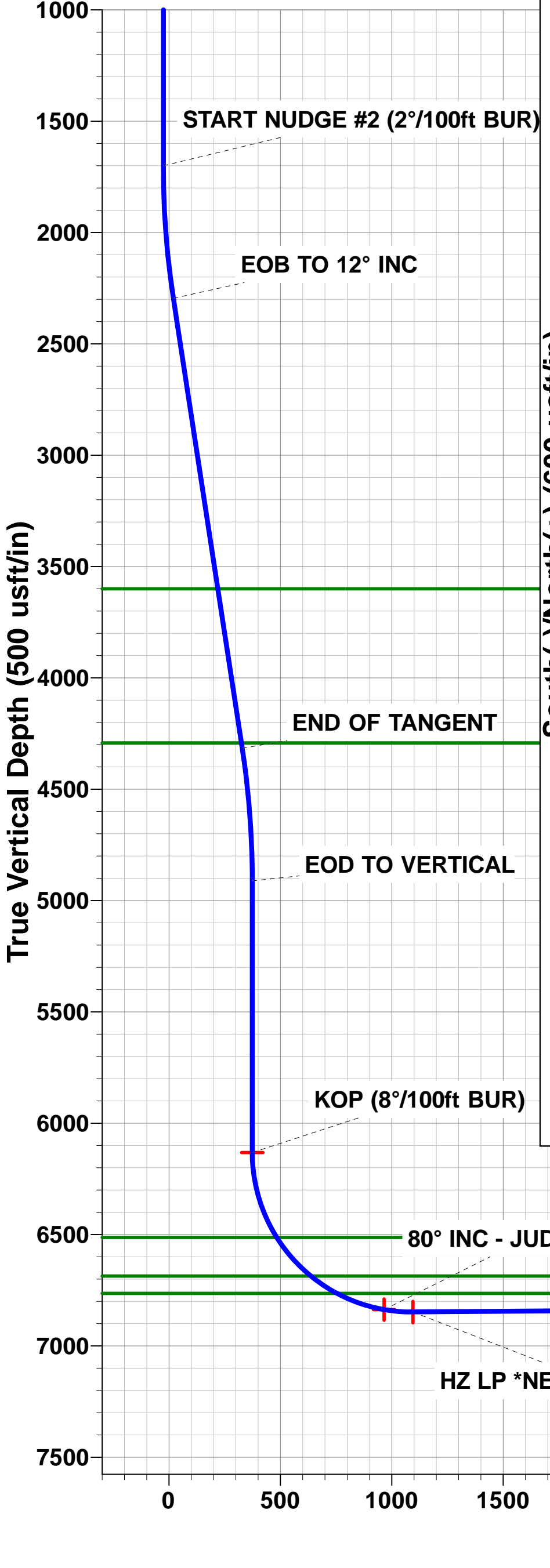
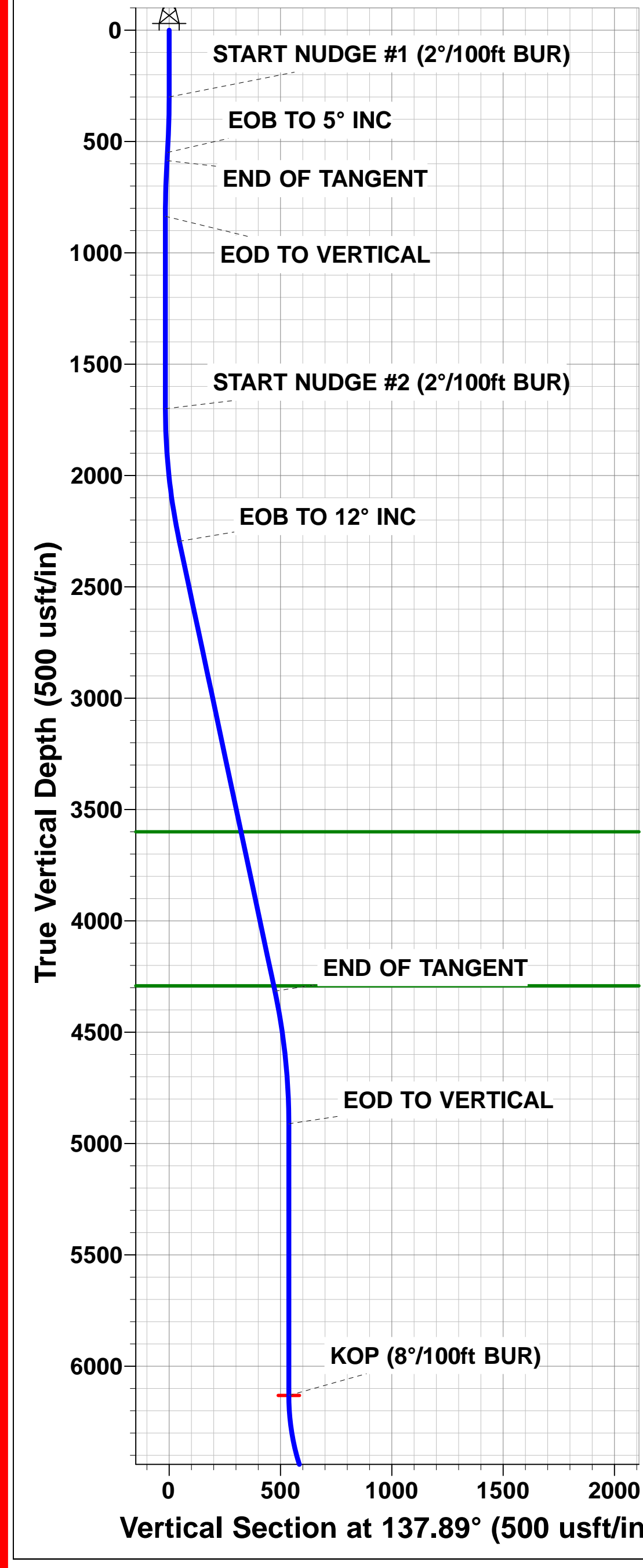
WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - JUDY 6D-212	6131.8	-398.8	360.5	40.339425	-104.585817
80° INC - JUDY 6D-212	6837.1	-398.7	952.3	40.339426	-104.583694
BHL - JUDY 6D-212	6768.0	-396.7	11387.3	40.339424	-104.546262
HZ LP *NEW* - JUDY 6D-212	6848.0	-398.7	1082.2	40.339426	-104.583228



PROPOSED LOCAL COORDINATES:
 SHL: 2354ft FSL & 938ft FEL of Sec 6
 80° INC: 1944ft FSL & 25ft FWL of Sec 5
 HZ LP *NEW*: 1944ft FSL & 154.9ft FWL of Sec 5
 BHL: 1944ft FSL & 100ft FEL of Sec 4

Azimuths to True North
 Magnetic North: 8.13°

Magnetic Field
 Strength: 52403.3snT
 Dip Angle: 66.84°
 Date: 04/04/2017
 Model: IGRF2015



Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well JUDY 6D-212
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4818.0usft (Original Well Elev)
Reference Site:	NE SE SEC. 6 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4818.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	JUDY 6D-212	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

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

Survey Tool Program	Date	18/04/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	17,622.4	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
Offset Well - Wellbore - Design						
NE SE SEC. 6 T4N R64W 6th P.M.						
ABDN VERT DINNER 6-3 - Wellbore #1 - Wellbore #1	1,746.3	1,817.0	3,549.1	3,544.6	789.498	CC, ES
ABDN VERT DINNER 6-3 - Wellbore #1 - Wellbore #1	12,700.0	6,980.6	9,987.5	9,856.8	76.405	SF
ABDN VERT KUIS C5-7 - Wellbore #1 - Wellbore #1	10,526.3	6,715.5	1,391.6	1,275.8	12.019	CC
ABDN VERT KUIS C5-7 - Wellbore #1 - Wellbore #1	10,600.0	6,715.4	1,393.5	1,275.7	11.827	ES
ABDN VERT KUIS C5-7 - Wellbore #1 - Wellbore #1	11,000.0	6,715.3	1,470.0	1,341.0	11.398	SF
ABDN VERT LEY 2 - Wellbore #1 - Wellbore #1	4,280.2	4,218.5	55.4	41.3	3.947	CC, ES
ABDN VERT LEY 2 - Wellbore #1 - Wellbore #1	4,300.0	4,237.9	55.5	41.4	3.934	SF
ABDN VERT MCCLINTOCK 1 - Wellbore #1 - Wellbore #	15,693.0	6,669.3	117.9	-142.8	0.452	Level 1, CC, ES, SF
ABDN VERT NIKOLORIC C5-5 - Wellbore #1 - Wellbore	7,844.9	6,794.0	1,354.5	1,311.7	31.703	CC
ABDN VERT NIKOLORIC C5-5 - Wellbore #1 - Wellbore	7,900.0	6,793.4	1,355.6	1,311.4	30.714	ES
ABDN VERT NIKOLORIC C5-5 - Wellbore #1 - Wellbore	9,000.0	6,779.5	1,780.1	1,706.5	24.201	SF
EXIST DD ARD PC C6-18D - Wellbore #1 - Wellbore #1	1,919.5	2,114.4	2,227.7	2,218.2	233.612	CC, ES
EXIST DD ARD PC C6-18D - Wellbore #1 - Wellbore #1	14,500.0	7,100.0	9,943.8	9,699.6	40.734	SF
EXIST DD ARD PC C6-20D - Wellbore #1 - Wellbore #1	814.3	806.4	2,319.8	2,317.0	828.734	CC
EXIST DD ARD PC C6-20D - Wellbore #1 - Wellbore #1	836.8	827.7	2,319.9	2,316.9	794.419	ES
EXIST DD ARD PC C6-20D - Wellbore #1 - Wellbore #1	13,300.0	7,261.0	9,926.4	9,728.6	50.175	SF
EXIST DD ARD PC C6-21D - Wellbore #1 - Wellbore #1	3,800.0	4,250.1	2,008.3	1,989.0	104.292	CC, ES
EXIST DD ARD PC C6-21D - Wellbore #1 - Wellbore #1	14,600.0	7,302.0	9,907.5	9,681.0	43.737	SF
EXIST DD BURMAN C4-32D - Wellbore #1 - Wellbore #1	12,552.1	6,936.1	622.8	428.2	3.201	CC, ES
EXIST DD BURMAN C4-32D - Wellbore #1 - Wellbore #1	12,600.0	6,935.9	624.6	428.8	3.189	SF
EXIST DD BURMAN C4-33D - Wellbore #1 - Wellbore #1	12,521.2	6,890.3	613.5	420.7	3.182	CC, ES
EXIST DD BURMAN C4-33D - Wellbore #1 - Wellbore #1	12,600.0	6,889.9	618.5	423.5	3.172	SF
EXIST DD BURMAN C5-17D - Wellbore #1 - Wellbore #1	11,042.3	7,216.9	2,064.4	1,914.5	13.777	CC
EXIST DD BURMAN C5-17D - Wellbore #1 - Wellbore #1	11,100.0	7,217.2	2,065.2	1,913.7	13.636	ES
EXIST DD BURMAN C5-17D - Wellbore #1 - Wellbore #1	11,800.0	7,220.5	2,199.0	2,028.0	12.861	SF
EXIST DD BURMAN C5-21D - Wellbore #1 - Wellbore #1	9,923.8	7,101.3	817.9	687.6	6.278	CC, ES
EXIST DD BURMAN C5-21D - Wellbore #1 - Wellbore #1	10,100.0	7,101.5	836.6	701.5	6.191	SF
EXIST DD BURMAN C5-22D - Wellbore #1 - Wellbore #1	10,983.0	6,929.7	853.4	709.0	5.907	CC
EXIST DD BURMAN C5-22D - Wellbore #1 - Wellbore #1	11,000.0	6,929.8	853.6	708.7	5.889	ES
EXIST DD BURMAN C5-22D - Wellbore #1 - Wellbore #1	11,100.0	6,930.4	861.4	713.7	5.831	SF
EXIST DD BURMAN C5-23D - Wellbore #1 - Wellbore #1	11,105.9	6,809.5	650.1	504.3	4.460	CC, ES
EXIST DD BURMAN C5-23D - Wellbore #1 - Wellbore #1	11,200.0	6,810.4	656.9	508.5	4.426	SF
EXIST DD BURMAN C5-24D - Wellbore #1 - Wellbore #1	9,876.2	7,052.3	621.9	493.4	4.839	CC
EXIST DD BURMAN C5-24D - Wellbore #1 - Wellbore #1	9,900.0	7,052.4	622.3	493.2	4.818	ES
EXIST DD BURMAN C5-24D - Wellbore #1 - Wellbore #1	10,000.0	7,053.0	634.1	502.1	4.806	SF
EXIST DD DIETRICH C7-27 - Wellbore #1 - Wellbore #1	6,234.6	6,245.6	2,047.4	2,029.4	113.917	CC, ES
EXIST DD DIETRICH C7-27 - Wellbore #1 - Wellbore #1	15,500.0	6,631.0	9,925.4	9,671.8	39.135	SF

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

Company:	PDC ENERGY	Local Co-ordinate Reference:	Well JUDY 6D-212
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4818.0usft (Original Well Elev)
Reference Site:	NE SE SEC. 6 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4818.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	JUDY 6D-212	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
NE SE SEC. 6 T4N R64W 6th P.M.						
EXIST DD DIETRICH C8-30D - Wellbore #1 - Wellbore #	7,018.1	7,160.9	1,851.9	1,801.4	36.687	CC
EXIST DD DIETRICH C8-30D - Wellbore #1 - Wellbore #	7,050.0	7,171.4	1,852.1	1,801.1	36.279	ES
EXIST DD DIETRICH C8-30D - Wellbore #1 - Wellbore #	9,000.0	7,208.5	2,703.7	2,603.3	26.940	SF
EXIST DD RUFF C8-27D - Wellbore #1 - Wellbore #1	11,079.5	6,798.2	1,980.4	1,834.9	13.616	CC
EXIST DD RUFF C8-27D - Wellbore #1 - Wellbore #1	11,100.0	6,798.2	1,980.5	1,834.5	13.564	ES
EXIST DD RUFF C8-27D - Wellbore #1 - Wellbore #1	11,800.0	6,799.6	2,107.4	1,941.8	12.730	SF
EXIST DD SLEDGE C9-30D - Wellbore #1 - Wellbore #1	12,321.6	6,939.7	1,695.2	1,511.0	9.205	CC
EXIST DD SLEDGE C9-30D - Wellbore #1 - Wellbore #1	12,400.0	6,938.0	1,697.0	1,510.7	9.106	ES
EXIST DD SLEDGE C9-30D - Wellbore #1 - Wellbore #1	12,800.0	6,929.2	1,761.4	1,563.8	8.916	SF
EXIST DD WRIGHT-GOIN C7-28D - Wellbore #1 - Wellb	6,186.5	6,840.0	2,959.6	2,911.0	60.834	ES
EXIST DD WRIGHT-GOIN C7-28D - Wellbore #1 - Wellb	6,288.9	6,897.4	2,953.5	2,911.4	70.202	CC
EXIST DD WRIGHT-GOIN C7-28D - Wellbore #1 - Wellb	14,300.0	7,560.0	9,961.4	9,705.1	38.878	SF
EXIST HZ COALVIEW G2-63-1HN - Wellbore #1 - Wellb	1,915.3	2,110.7	4,600.5	4,592.1	544.958	CC, ES
EXIST HZ COALVIEW G2-63-1HN - Wellbore #1 - Wellb	11,800.0	6,409.0	9,942.0	9,795.6	67.917	SF
EXIST HZ COALVIEW G2-64-1HN - Wellbore #1 - Wellb	937.1	960.5	4,604.9	4,601.6	1,406.827	CC
EXIST HZ COALVIEW G2-64-1HN - Wellbore #1 - Wellb	6,200.0	6,281.0	4,619.1	4,589.8	157.898	ES
EXIST HZ COALVIEW G2-64-1HN - Wellbore #1 - Wellb	11,900.0	6,375.0	9,933.4	9,842.8	109.709	SF
EXIST HZ COALVIEW G2-65-1HN - Wellbore #1 - Wellb	2,218.8	2,838.2	4,456.0	4,445.6	428.024	CC, ES
EXIST HZ COALVIEW G2-65-1HN - Wellbore #1 - Wellb	12,000.0	6,549.0	9,999.8	9,890.8	91.686	SF
EXIST HZ COALVIEW G2-66-1HN - Wellbore #1 - Wellb	1,992.9	2,372.2	4,465.6	4,457.0	516.510	CC
EXIST HZ COALVIEW G2-66-1HN - Wellbore #1 - Wellb	2,000.0	2,377.3	4,465.6	4,457.0	514.955	ES
EXIST HZ COALVIEW G2-66-1HN - Wellbore #1 - Wellb	11,900.0	6,460.0	9,938.1	9,788.6	66.458	SF
EXIST HZ LOWER LATHAM PC G12-69HN - Wellbore #	6,186.5	12,060.0	4,874.9	4,722.3	31.956	ES
EXIST HZ LOWER LATHAM PC G12-69HN - Wellbore #	6,300.6	12,060.0	4,865.3	4,779.7	56.824	CC
EXIST HZ LOWER LATHAM PC G12-69HN - Wellbore #	7,316.9	12,060.0	5,472.0	5,289.4	29.962	SF
EXIST HZ NORTHRUP C8-73HN - Wellbore #1 - Wellbo	11,076.8	6,325.0	2,229.4	2,088.1	15.777	CC
EXIST HZ NORTHRUP C8-73HN - Wellbore #1 - Wellbo	11,100.0	6,325.0	2,229.5	2,087.6	15.708	ES
EXIST HZ NORTHRUP C8-73HN - Wellbore #1 - Wellbo	12,000.0	6,325.0	2,413.0	2,246.6	14.500	SF
EXIST HZ NORTHRUP C8-75HN - Wellbore #1 - Wellbo	9,779.7	6,510.6	2,049.2	1,938.4	18.492	CC
EXIST HZ NORTHRUP C8-75HN - Wellbore #1 - Wellbo	9,800.0	6,510.7	2,049.3	1,937.9	18.401	ES
EXIST HZ NORTHRUP C8-75HN - Wellbore #1 - Wellbo	10,800.0	6,524.0	2,289.2	2,150.3	16.488	SF
EXIST HZ SCHMIDT PC C6-79HN - Wellbore #1 - Wellb	6,250.0	11,668.0	4,669.3	4,572.4	48.223	SF
EXIST HZ SCHMIDT PC C6-79HN - Wellbore #1 - Wellb	6,314.2	11,668.8	4,666.0	4,569.6	48.428	CC, ES
EXIST VERT COBB 6-1 - Wellbore #1 - Wellbore #1	1,741.8	1,767.8	2,342.3	2,337.9	534.003	CC, ES
EXIST VERT COBB 6-1 - Wellbore #1 - Wellbore #1	14,000.0	7,128.1	9,959.3	9,749.3	47.435	SF
EXIST VERT COBB 6-23 - Wellbore #1 - Wellbore #1	1,723.5	1,766.8	3,618.5	3,614.1	815.698	CC, ES
EXIST VERT COBB 6-23 - Wellbore #1 - Wellbore #1	12,600.0	6,967.3	9,939.9	9,766.2	57.222	SF
EXIST VERT CONNELL C4-20 - Wellbore #1 - Wellbore #	13,560.1	6,700.0	878.2	677.6	4.378	CC
EXIST VERT CONNELL C4-20 - Wellbore #1 - Wellbore #	13,600.0	6,699.6	879.1	677.4	4.358	ES
EXIST VERT CONNELL C4-20 - Wellbore #1 - Wellbore #	13,700.0	6,698.6	889.3	684.8	4.348	SF
EXIST VERT CONNELL 14-4 - Wellbore #1 - Wellbore #	13,021.3	6,759.2	1,128.0	941.7	6.054	CC, ES
EXIST VERT CONNELL 14-4 - Wellbore #1 - Wellbore #	13,200.0	6,756.9	1,142.1	950.8	5.970	SF
EXIST VERT CONNELL 2 - Wellbore #1 - Wellbore #1	13,165.1	6,726.3	64.2	-125.1	0.339	Level 1, CC, ES, SF
EXIST VERT CONNELL 3 - Wellbore #1 - Wellbore #1	14,396.1	6,735.6	1,231.0	1,007.0	5.495	CC
EXIST VERT CONNELL 3 - Wellbore #1 - Wellbore #1	14,400.0	6,735.5	1,231.0	1,006.9	5.492	ES
EXIST VERT CONNELL 3 - Wellbore #1 - Wellbore #1	14,600.0	6,729.0	1,247.8	1,018.0	5.431	SF
EXIST VERT CONNELL C 4-5 - Wellbore #1 - Wellbore #	12,925.8	6,707.8	1,477.5	1,294.8	8.087	CC
EXIST VERT CONNELL C 4-5 - Wellbore #1 - Wellbore #	13,000.0	6,706.7	1,479.4	1,294.6	8.006	ES
EXIST VERT CONNELL C 4-5 - Wellbore #1 - Wellbore #	13,300.0	6,700.0	1,524.2	1,331.0	7.890	SF
EXIST VERT CONNELL C4-11 - Wellbore #1 - Wellbore	14,420.3	6,691.7	169.0	-55.5	0.753	Level 1, CC, ES, SF
EXIST VERT CONNELL C4-25 - Wellbore #1 - Wellbore	13,922.4	6,736.8	423.0	212.3	2.008	CC, ES, SF
EXIST VERT DIETRICH 6-10 - Wellbore #1 - Wellbore #	799.8	780.9	1,175.6	1,173.6	591.293	CC
EXIST VERT DIETRICH 6-10 - Wellbore #1 - Wellbore #	800.0	781.1	1,175.6	1,173.6	591.164	ES

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

Company:	PDC ENERGY	Local Co-ordinate Reference:	Well JUDY 6D-212
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4818.0usft (Original Well Elev)
Reference Site:	NE SE SEC. 6 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4818.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	JUDY 6D-212	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
NE SE SEC. 6 T4N R64W 6th P.M.						
EXIST VERT DIETRICH 6-10 - Wellbore #1 - Wellbore #	12,400.0	6,700.0	7,284.4	7,139.7	50.332	SF
EXIST VERT DIETRICH 6-16 - Wellbore #1 - Wellbore #	6,283.6	6,242.1	1,226.3	1,208.9	70.420	CC
EXIST VERT DIETRICH 6-16 - Wellbore #1 - Wellbore #	6,300.0	6,258.9	1,226.4	1,208.9	70.213	ES
EXIST VERT DIETRICH 6-16 - Wellbore #1 - Wellbore #	16,200.0	6,700.0	9,969.7	9,696.5	36.497	SF
EXIST VERT DIETRICH C6-23 - Wellbore #1 - Wellbore	3,691.6	3,611.0	1,031.8	1,020.5	91.385	CC
EXIST VERT DIETRICH C6-23 - Wellbore #1 - Wellbore	6,190.8	6,138.7	1,035.1	1,017.0	57.242	ES
EXIST VERT DIETRICH C6-23 - Wellbore #1 - Wellbore	15,800.0	6,820.2	9,957.3	9,694.0	37.827	SF
EXIST VERT DINNER 6-1 - Wellbore #1 - Wellbore #1	1,721.8	1,745.5	3,965.7	3,961.3	900.384	CC, ES
EXIST VERT DINNER 6-1 - Wellbore #1 - Wellbore #1	12,500.0	6,983.7	9,906.8	9,735.9	57.959	SF
EXIST VERT DINNER 6-2 - Wellbore #1 - Wellbore #1	1,749.4	1,767.3	2,248.1	2,243.6	500.780	CC, ES
EXIST VERT DINNER 6-2 - Wellbore #1 - Wellbore #1	7,300.0	6,800.0	3,270.5	3,240.6	109.365	SF
EXIST VERT DINNER 6-34 - Wellbore #1 - Wellbore #1	1,764.1	1,779.1	2,763.3	2,758.8	625.179	CC
EXIST VERT DINNER 6-34 - Wellbore #1 - Wellbore #1	1,900.0	1,919.3	2,763.5	2,758.8	586.656	ES
EXIST VERT DINNER 6-34 - Wellbore #1 - Wellbore #1	13,900.0	6,946.0	9,960.2	9,750.1	47.415	SF
EXIST VERT DINNER 6-35 - Wellbore #1 - Wellbore #1	1,771.4	1,827.8	3,412.3	3,407.7	747.648	CC, ES
EXIST VERT DINNER 6-35 - Wellbore #1 - Wellbore #1	12,900.0	6,944.9	9,902.4	9,720.5	54.436	SF
EXIST VERT EHRlich 1 - Wellbore #1 - Wellbore #1	14,457.3	6,677.1	1,392.6	1,166.8	6.167	CC
EXIST VERT EHRlich 1 - Wellbore #1 - Wellbore #1	14,500.0	6,676.6	1,393.2	1,166.2	6.138	ES
EXIST VERT EHRlich 1 - Wellbore #1 - Wellbore #1	14,700.0	6,674.1	1,413.5	1,181.0	6.077	SF
EXIST VERT HINKLE 23-5 - Wellbore #1 - Wellbore #1	9,128.6	6,772.3	7.3	-69.9	0.095	Level 1, CC, ES, SF
EXIST VERT HINKLE 24-5 - Wellbore #1 - Wellbore #1	9,077.1	6,600.0	1,198.0	1,122.7	15.906	CC
EXIST VERT HINKLE 24-5 - Wellbore #1 - Wellbore #1	9,100.0	6,600.0	1,198.2	1,122.3	15.779	ES
EXIST VERT HINKLE 24-5 - Wellbore #1 - Wellbore #1	9,600.0	6,600.0	1,307.1	1,217.6	14.601	SF
EXIST VERT LEVI C5-15 - Wellbore #1 - Wellbore #1	10,732.9	6,788.0	1,168.3	1,046.9	9.617	CC, ES
EXIST VERT LEVI C5-15 - Wellbore #1 - Wellbore #1	11,000.0	6,789.4	1,198.5	1,069.6	9.296	SF
EXIST VERT LEY 1 - Wellbore #1 - Wellbore #1	3,620.6	3,567.9	1,995.1	1,984.0	180.751	CC
EXIST VERT LEY 1 - Wellbore #1 - Wellbore #1	3,700.0	3,640.3	1,995.2	1,983.8	175.036	ES
EXIST VERT LEY 1 - Wellbore #1 - Wellbore #1	15,000.0	6,950.0	9,989.6	9,749.1	41.536	SF
EXIST VERT MCCLINTOCK C4-15 - Wellbore #1 - Wellt	15,811.0	6,691.1	906.9	643.3	3.440	CC, ES
EXIST VERT MCCLINTOCK C4-15 - Wellbore #1 - Wellt	15,900.0	6,689.9	911.3	645.1	3.424	SF
EXIST VERT OPDYKE/HINKLE 1 - Wellbore #1 - Wellbo	10,497.9	6,600.0	153.5	117.0	4.208	CC
EXIST VERT OPDYKE/HINKLE 1 - Wellbore #1 - Wellbo	10,500.0	6,600.0	153.5	117.0	4.207	ES, SF
EXIST VERT REISTAD 5-1 - Wellbore #1 - Wellbore #1	11,749.2	6,764.7	1,229.6	1,079.6	8.199	CC
EXIST VERT REISTAD 5-1 - Wellbore #1 - Wellbore #1	11,800.0	6,764.1	1,230.7	1,079.3	8.130	ES
EXIST VERT REISTAD 5-1 - Wellbore #1 - Wellbore #1	12,000.0	6,761.8	1,254.9	1,097.9	7.995	SF
EXIST VERT REISTAD C5-9 - Wellbore #1 - Wellbore #1	11,609.7	6,745.7	187.7	41.3	1.282	Level 3, CC, ES, SF
EXIST VERT ROUKEMA 5-1 - Wellbore #1 - Wellbore #1	7,948.0	6,780.7	1,344.2	1,298.8	29.581	CC
EXIST VERT ROUKEMA 5-1 - Wellbore #1 - Wellbore #1	8,000.0	6,780.6	1,345.2	1,298.4	28.750	ES
EXIST VERT ROUKEMA 5-1 - Wellbore #1 - Wellbore #1	9,100.0	6,777.6	1,770.3	1,694.0	23.184	SF
EXIST VERT ROUKEMA PM C5-12 - Wellbore #1 - Wellt	7,667.6	6,791.2	91.5	53.2	2.387	CC, ES, SF
EXIST VERT SITZMAN 4-714 - Wellbore #1 - Design #1	15,807.7	6,670.2	1,459.1	1,065.5	3.707	CC, ES
EXIST VERT SITZMAN 4-714 - Wellbore #1 - Design #1	16,000.0	6,668.7	1,471.7	1,072.7	3.689	SF
EXIST VERT SITZMAN C4-22 - Wellbore #1 - Wellbore #	16,386.0	6,663.3	789.7	510.0	2.823	CC
EXIST VERT SITZMAN C4-22 - Wellbore #1 - Wellbore #	16,400.0	6,663.1	789.8	509.7	2.820	ES, SF
EXIST VERT SLEDGE C9-28 - Wellbore #1 - Design #1	15,030.6	6,708.3	2,173.2	1,800.9	5.838	CC
EXIST VERT SLEDGE C9-28 - Wellbore #1 - Design #1	15,100.0	6,707.7	2,174.3	1,800.1	5.810	ES
EXIST VERT SLEDGE C9-28 - Wellbore #1 - Design #1	15,400.0	6,705.4	2,204.4	1,821.8	5.762	SF
EXIST VERT SLEDGE C9-29 - Wellbore #1 - Design #1	13,692.3	6,737.7	2,115.1	1,779.9	6.310	CC
EXIST VERT SLEDGE C9-29 - Wellbore #1 - Design #1	13,800.0	6,736.9	2,117.8	1,779.6	6.263	ES
EXIST VERT SLEDGE C9-29 - Wellbore #1 - Design #1	14,100.0	6,734.5	2,154.0	1,807.5	6.216	SF
EXIST VERT SMITH-REEVES 42-5 - Wellbore #1 - Wellt	11,879.2	6,550.0	1,424.3	1,271.9	9.346	CC
EXIST VERT SMITH-REEVES 42-5 - Wellbore #1 - Wellt	11,900.0	6,550.0	1,424.4	1,271.5	9.311	ES
EXIST VERT SMITH-REEVES 42-5 - Wellbore #1 - Wellt	12,200.0	6,550.0	1,459.9	1,298.7	9.051	SF

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

Company:	PDC ENERGY	Local Co-ordinate Reference:	Well JUDY 6D-212
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4818.0usft (Original Well Elev)
Reference Site:	NE SE SEC. 6 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4818.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	JUDY 6D-212	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
NE SE SEC. 6 T4N R64W 6th P.M.						
EXIST VERT WILMOTH 6-1 - Wellbore #1 - Wellbore #1	997.3	951.5	1,303.0	1,300.4	505.604	CC
EXIST VERT WILMOTH 6-1 - Wellbore #1 - Wellbore #1	1,500.0	1,449.9	1,303.9	1,300.1	341.660	ES
EXIST VERT WILMOTH 6-1 - Wellbore #1 - Wellbore #1	15,200.0	6,900.0	9,951.3	9,705.2	40.430	SF
EXIST VERT WILMOTH 6-14 - Wellbore #1 - Wellbore #	302.7	264.0	888.6	888.0	1,440.408	CC, ES
EXIST VERT WILMOTH 6-14 - Wellbore #1 - Wellbore #	12,300.0	6,725.4	5,814.0	5,649.2	35.283	SF
EXIST VERT WILMOTH C4-23 - Wellbore #1 - Wellbore	16,409.8	6,674.9	608.0	327.7	2.169	CC, ES, SF
EXIST VERT WILMOTH C4-24 - Wellbore #1 - Wellbore	15,202.7	6,690.7	535.2	288.5	2.170	CC, ES, SF
EXIST VERT WILMOTH C5-20 - Wellbore #1 - Wellbore	8,380.9	6,777.2	547.6	490.9	9.648	CC
EXIST VERT WILMOTH C5-20 - Wellbore #1 - Wellbore	8,400.0	6,776.9	548.0	490.7	9.568	ES
EXIST VERT WILMOTH C5-20 - Wellbore #1 - Wellbore	8,500.0	6,775.7	560.4	500.5	9.347	SF
EXIST VERT WILMOTH C5-6 - Wellbore #1 - Wellbore #	9,213.3	6,755.5	1,358.2	1,278.7	17.097	CC, ES
EXIST VERT WILMOTH C5-6 - Wellbore #1 - Wellbore #	9,900.0	6,751.7	1,521.9	1,423.5	15.471	SF
EXIST VERT WILMOTH C9-27 - Wellbore #1 - Wellbore	16,312.1	6,655.0	1,737.6	1,460.2	6.263	CC
EXIST VERT WILMOTH C9-27 - Wellbore #1 - Wellbore	16,400.0	6,654.4	1,739.9	1,460.0	6.216	ES
EXIST VERT WILMOTH C9-27 - Wellbore #1 - Wellbore	16,600.0	6,652.9	1,761.3	1,475.8	6.169	SF
JUDY 6D-312 - ORIGINAL WELLBORE - PROPOSAL #	1,600.0	1,600.0	14.6	7.9	2.184	CC
JUDY 6D-312 - ORIGINAL WELLBORE - PROPOSAL #	17,622.4	17,716.0	288.4	-307.5	0.484	Level 1, ES, SF
JUDY 6S-202 - ORIGINAL WELLBORE - PROPOSAL #1	300.0	300.0	29.1	28.1	27.184	CC
JUDY 6S-202 - ORIGINAL WELLBORE - PROPOSAL #1	17,622.4	17,590.3	588.8	-36.5	0.942	Level 1, ES, SF
JUDY 6S-204 - ORIGINAL WELLBORE - PROPOSAL #1	300.0	300.0	58.3	57.2	54.367	CC
JUDY 6S-204 - ORIGINAL WELLBORE - PROPOSAL #1	500.0	499.8	58.7	56.8	30.050	ES
JUDY 6S-204 - ORIGINAL WELLBORE - PROPOSAL #1	7,600.0	7,028.2	665.0	600.2	10.258	SF
JUDY 6S-212 - ORIGINAL WELLBORE - PROPOSAL #1	300.0	300.0	61.9	60.9	57.773	CC, ES
JUDY 6S-212 - ORIGINAL WELLBORE - PROPOSAL #1	17,622.4	17,601.2	1,088.2	463.6	1.742	SF
JUDY 6S-214 - ORIGINAL WELLBORE - PROPOSAL #1	300.0	300.0	29.1	28.1	27.184	CC
JUDY 6S-214 - ORIGINAL WELLBORE - PROPOSAL #1	500.0	500.1	29.6	27.6	15.187	ES
JUDY 6S-214 - ORIGINAL WELLBORE - PROPOSAL #1	586.8	586.1	32.7	30.4	13.965	SF
JUDY 6S-234 - ORIGINAL WELLBORE - PROPOSAL #1	300.0	300.0	87.4	86.4	81.551	CC
JUDY 6S-234 - ORIGINAL WELLBORE - PROPOSAL #1	7,250.2	7,273.5	138.3	80.6	2.398	ES
JUDY 6S-234 - ORIGINAL WELLBORE - PROPOSAL #1	7,300.0	7,228.3	139.8	81.4	2.397	SF
JUDY 6S-302 - ORIGINAL WELLBORE - PROPOSAL #1	300.0	300.0	47.4	46.3	44.174	CC
JUDY 6S-302 - ORIGINAL WELLBORE - PROPOSAL #1	400.0	400.0	47.4	45.9	31.372	ES
JUDY 6S-302 - ORIGINAL WELLBORE - PROPOSAL #1	17,622.4	17,663.9	860.0	237.7	1.382	Level 3, SF
JUDY 6S-314 - ORIGINAL WELLBORE - PROPOSAL #1	300.0	300.0	43.7	42.6	40.776	CC
JUDY 6S-314 - ORIGINAL WELLBORE - PROPOSAL #1	400.0	400.0	43.8	42.2	28.962	ES
JUDY 6S-314 - ORIGINAL WELLBORE - PROPOSAL #1	7,900.0	6,938.1	982.4	909.1	13.406	SF
JUDY 6S-332 - ORIGINAL WELLBORE - PROPOSAL #1	300.0	300.0	14.6	13.5	13.592	CC
JUDY 6S-332 - ORIGINAL WELLBORE - PROPOSAL #1	17,622.4	17,669.0	318.1	-288.7	0.524	Level 1, ES, SF
JUDY 6S-334 - ORIGINAL WELLBORE - PROPOSAL #1	300.0	300.0	72.9	71.8	67.959	CC
JUDY 6S-334 - ORIGINAL WELLBORE - PROPOSAL #1	500.0	499.8	73.2	71.2	37.468	ES
JUDY 6S-334 - ORIGINAL WELLBORE - PROPOSAL #1	7,500.0	7,119.9	382.4	319.1	6.035	SF
JUDY 6X-314 - ORIGINAL WELLBORE - PROPOSAL #1	300.0	300.0	105.6	104.6	98.541	CC, ES
JUDY 6X-314 - ORIGINAL WELLBORE - PROPOSAL #1	7,400.0	7,168.2	187.5	126.6	3.078	SF

Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well JUDY 6D-212
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4818.0usft (Original Well Elev)
Reference Site:	NE SE SEC. 6 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4818.0usft (Original Well Elev)
Site Error:	0.0 usft	North Reference:	True
Reference Well:	JUDY 6D-212	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #1	Offset TVD Reference:	Offset Datum

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
SE SE SEC. 6 T4N R64W 6th P.M.						
HAROLD 6X-202 - ORIGINAL WELLBORE - PROPOSAL	9,389.0	9,421.0	523.9	364.3	3.281	CC
HAROLD 6X-202 - ORIGINAL WELLBORE - PROPOSAL	17,622.4	17,644.4	524.3	-95.0	0.847	Level 1, ES, SF
HAROLD 6X-204 - ORIGINAL WELLBORE - PROPOSAL	7,267.7	7,194.1	469.5	419.1	9.310	CC
HAROLD 6X-204 - ORIGINAL WELLBORE - PROPOSAL	7,316.9	7,150.0	470.0	418.7	9.167	ES
HAROLD 6X-204 - ORIGINAL WELLBORE - PROPOSAL	7,500.0	7,009.1	483.8	429.5	8.914	SF
HAROLD 6X-232 - ORIGINAL WELLBORE - PROPOSAL	17,600.5	17,590.3	1,142.8	524.8	1.849	CC
HAROLD 6X-232 - ORIGINAL WELLBORE - PROPOSAL	17,622.4	17,590.6	1,143.0	524.4	1.848	ES, SF
HAROLD 6X-234 - ORIGINAL WELLBORE - PROPOSAL	7,236.6	7,124.4	1,017.9	968.7	20.695	CC
HAROLD 6X-234 - ORIGINAL WELLBORE - PROPOSAL	7,316.9	7,056.4	1,018.5	967.8	20.088	ES
HAROLD 6X-234 - ORIGINAL WELLBORE - PROPOSAL	8,000.0	6,683.7	1,135.8	1,070.1	17.295	SF
HAROLD 6X-302 - ORIGINAL WELLBORE - PROPOSAL	6,186.5	6,172.9	842.3	811.5	27.287	CC
HAROLD 6X-302 - ORIGINAL WELLBORE - PROPOSAL	17,622.4	17,685.9	846.7	230.2	1.373	Level 3, ES, SF
HAROLD 6X-304 - ORIGINAL WELLBORE - PROPOSAL	7,363.9	7,086.2	760.5	708.4	14.587	CC
HAROLD 6X-304 - ORIGINAL WELLBORE - PROPOSAL	7,400.0	7,056.6	760.7	707.8	14.376	ES
HAROLD 6X-304 - ORIGINAL WELLBORE - PROPOSAL	7,800.0	6,818.8	816.9	755.4	13.296	SF
HAROLD 6X-334 - ORIGINAL WELLBORE - PROPOSAL	7,363.1	7,036.6	1,245.4	1,193.7	24.077	CC
HAROLD 6X-334 - ORIGINAL WELLBORE - PROPOSAL	7,400.0	7,007.2	1,245.6	1,193.0	23.700	ES
HAROLD 6X-334 - ORIGINAL WELLBORE - PROPOSAL	8,300.0	6,628.1	1,447.5	1,373.4	19.526	SF
HAROLD 6Y-202 - ORIGINAL WELLBORE - PROPOSAL	9,415.9	9,436.6	1,723.9	1,562.5	10.683	CC
HAROLD 6Y-202 - ORIGINAL WELLBORE - PROPOSAL	17,622.4	17,610.5	1,724.5	1,105.3	2.785	ES, SF
HAROLD 6Y-214 - ORIGINAL WELLBORE - PROPOSAL	7,263.8	7,075.0	1,555.6	1,506.1	31.407	CC
HAROLD 6Y-214 - ORIGINAL WELLBORE - PROPOSAL	7,400.0	6,966.4	1,557.1	1,504.7	29.717	ES
HAROLD 6Y-214 - ORIGINAL WELLBORE - PROPOSAL	8,700.0	6,519.3	1,925.6	1,841.3	22.841	SF
HAROLD 6Y-304 - ORIGINAL WELLBORE - PROPOSAL	7,385.9	7,013.1	1,784.2	1,731.9	34.157	CC
HAROLD 6Y-304 - ORIGINAL WELLBORE - PROPOSAL	7,500.0	6,932.0	1,785.7	1,730.7	32.469	ES
HAROLD 6Y-304 - ORIGINAL WELLBORE - PROPOSAL	9,100.0	6,531.2	2,328.9	2,232.9	24.256	SF
HAROLD 6Y-312 - ORIGINAL WELLBORE - PROPOSAL	6,186.5	6,139.4	1,494.5	1,466.2	52.765	CC
HAROLD 6Y-312 - ORIGINAL WELLBORE - PROPOSAL	17,622.4	17,687.9	1,499.5	882.1	2.429	ES, SF
SW SW SEC. 34 T5N R64W 6th P.M.						
BAILEY 34I-223 - ORIGINAL WELLBORE - PROPOSAL	17,622.4	10,941.6	343.7	229.0	2.997	CC, ES, SF
BAILEY 34I-303 - ORIGINAL WELLBORE - PROPOSAL	17,622.4	11,033.4	145.3	30.2	1.263	Level 3, CC, ES, SF
EXIST DD LOEFFLER C 10-30 - Wellbore #1 - Wellbore	17,622.4	6,701.3	1,815.1	1,485.3	5.504	CC, ES, SF
EXIST HZ OREDIGGER C10-69HN - Wellbore #1 - Wellbore	17,622.4	6,768.6	2,048.2	1,718.3	6.208	CC, ES, SF
EXIST VERT ATKINSON-GALE 3-13 - Wellbore #1 - Wellbore	17,622.4	6,584.4	1,460.8	1,146.3	4.644	CC, ES, SF
EXIST VERT DONES 1 - Wellbore #1 - Wellbore #1	17,622.4	6,615.5	735.1	421.2	2.341	CC, ES, SF
EXIST VERT MILLAGE 12-3 - Wellbore #1 - Wellbore #1	17,622.4	6,656.2	1,283.3	968.9	4.081	CC, ES, SF
EXIST VERT SITZMAN 2 - Wellbore #1 - Wellbore #1	17,126.1	6,525.0	1,432.9	1,133.4	4.784	CC
EXIST VERT SITZMAN 2 - Wellbore #1 - Wellbore #1	17,200.0	6,525.0	1,434.9	1,133.2	4.757	ES
EXIST VERT SITZMAN 2 - Wellbore #1 - Wellbore #1	17,300.0	6,525.0	1,443.5	1,139.1	4.742	SF
EXIST VERT WILMOTH 1 - Wellbore #1 - Wellbore #1	16,980.2	6,674.8	1,185.0	888.5	3.996	CC
EXIST VERT WILMOTH 1 - Wellbore #1 - Wellbore #1	17,000.0	6,674.7	1,185.2	888.1	3.989	ES
EXIST VERT WILMOTH 1 - Wellbore #1 - Wellbore #1	17,100.0	6,674.4	1,191.1	891.2	3.972	SF
EXIST VERT WILMOTH 4-9I4 - Wellbore #1 - Wellbore #1	17,168.8	6,648.3	217.9	-83.9	0.722	Level 1, CC, ES, SF
EXIST VERT WILMOTH C 3-33 - Wellbore #1 - Wellbore	17,516.1	6,638.0	619.8	308.7	1.993	CC, ES, SF

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