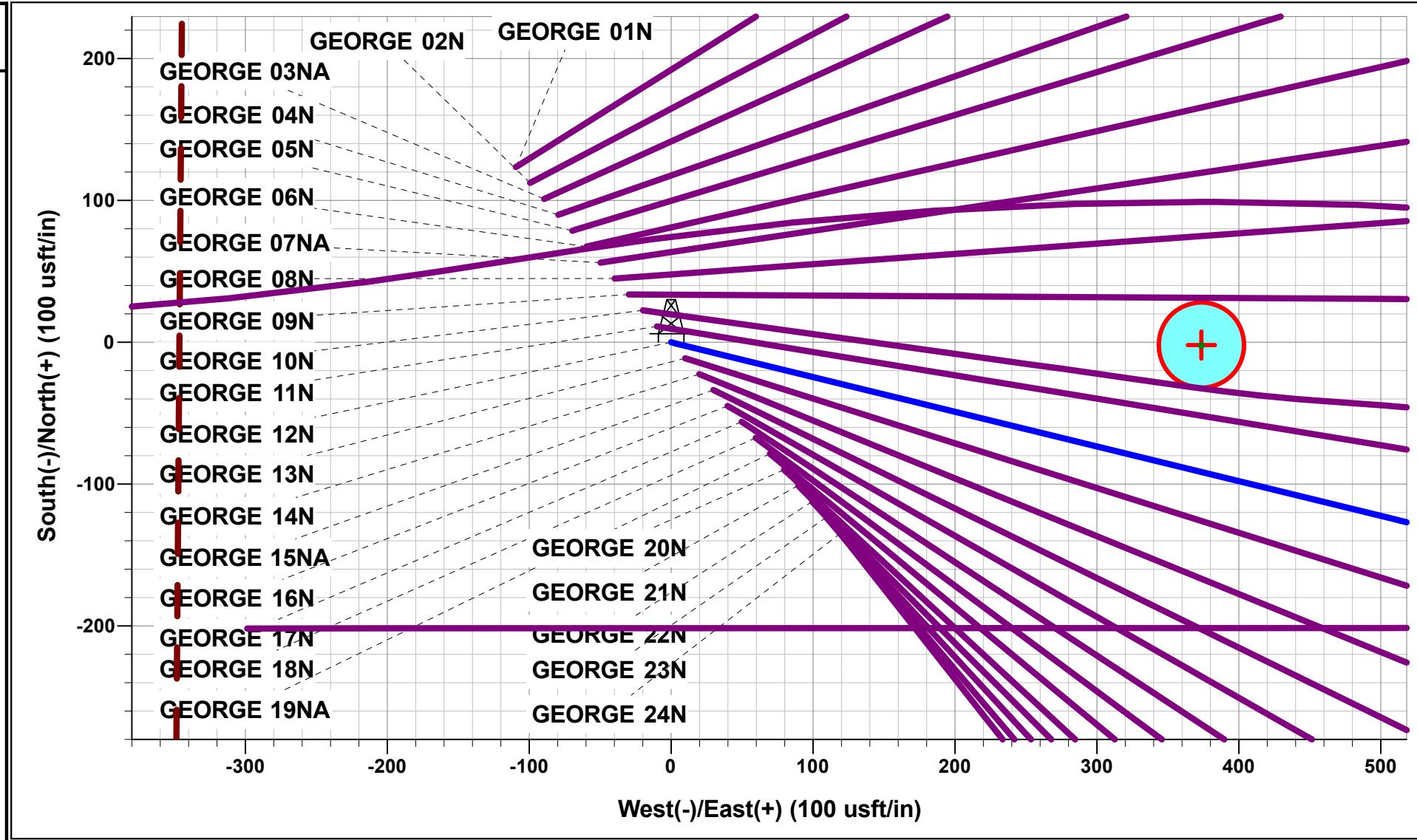




Project: WELD COUNTY, COLORADO (TRUE)
Site: SW NE SEC. 21 T4N R64W 6th P.M. (GEORGE)
Well: GEORGE 12N
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #1

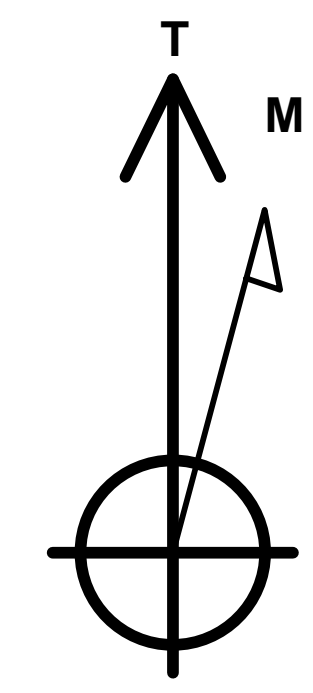
ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Dep	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL: 1895ft FNL & 2285ft FEL of Sec 21
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	START NUDGE (4°/100ft BUR)
2455.98	38.24	103.75	2386.57	-73.06	298.53	-291.80	307.34	EOB TO 38.24° INC
5802.74	38.24	103.75	5015.24	-565.46	2310.63	-2258.49	2378.81	END OF TANGENT
6758.72	0.00	0.00	5901.81	-638.52	2609.16	-2550.29	2686.15	EOD TO VERTICAL
6858.72	0.00	0.00	6001.81	-638.52	2609.16	-2550.29	2686.15	KOP (8°/100ft BUR)
7796.22	75.00	269.98	6693.60	-638.71	2078.33	-2021.11	3216.98	EP: 2529ft FNL & 200ft FEL of Sec 21
7979.72	89.68	269.98	6717.99	-638.78	1896.97	-1840.32	3398.35	HZ LANDING POINT
13669.72	89.68	269.98	6749.77	-640.85	-3792.95	3831.83	9088.26	END OF TANGENT
14156.17	89.68	260.25	6752.47	-682.23	-4277.04	4317.68	9574.70	EOT TO 260.25° AZ
14256.17	89.68	260.25	6753.03	-699.16	-4375.59	4417.27	9674.70	END OF TANGENT
14742.66	89.69	269.98	6755.69	-740.54	-4859.73	4903.16	10161.19	EOT TO 269.98° AZ
15412.66	89.69	269.98	6759.33	-740.77	-5529.72	5571.06	10831.18	END OF TANGENT
15901.15	89.69	279.75	6761.96	-699.40	-6015.85	6052.38	11319.66	EOT TO 279.75° AZ
16001.15	89.69	279.75	6762.50	-682.46	-6114.41	6149.28	11419.66	END OF TANGENT
16489.90	89.69	269.98	6765.13	-641.08	-6600.80	6630.85	11908.40	EOT TO 269.97° AZ
17953.18	89.69	269.98	6773.00	-641.71	-8064.06	8089.55	13371.66	BHL: 2531ft FNL & 200ft FWL of Sec 20



PROPOSED LOCAL COORDINATES:

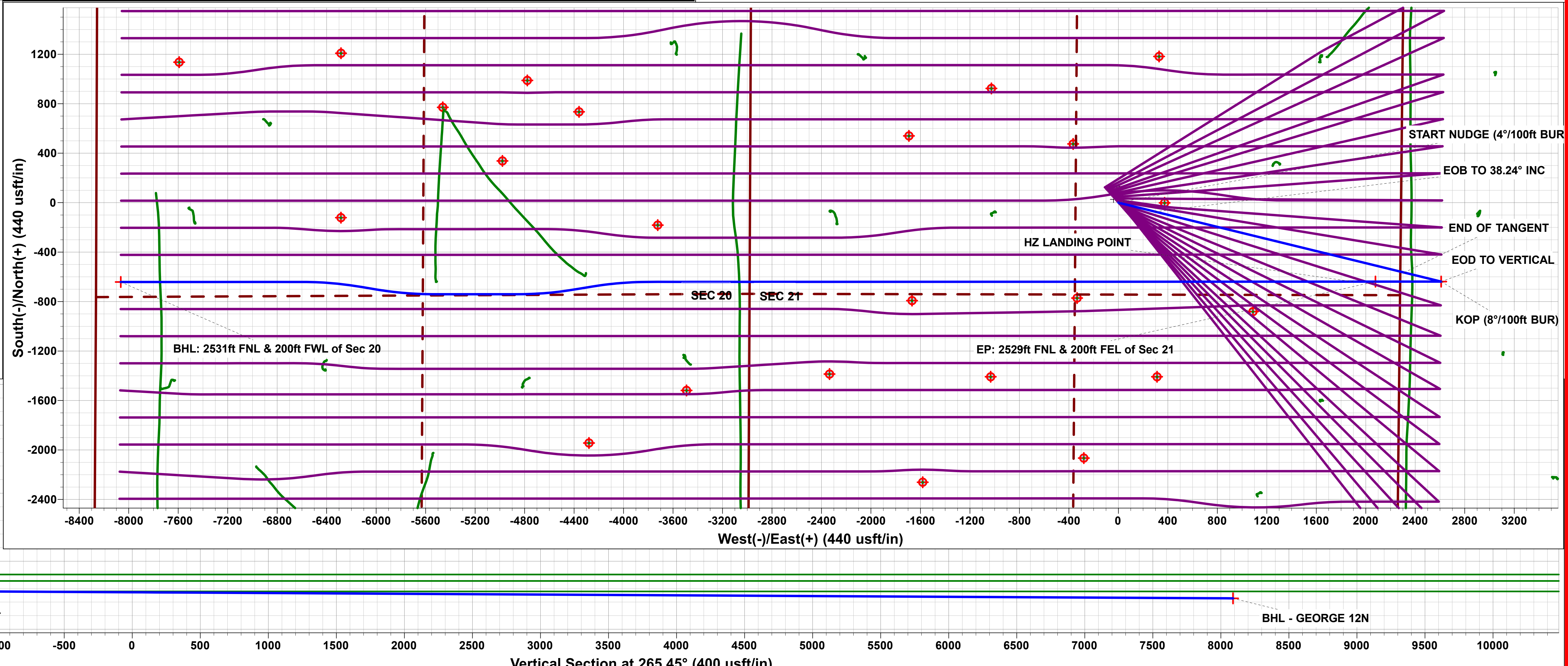
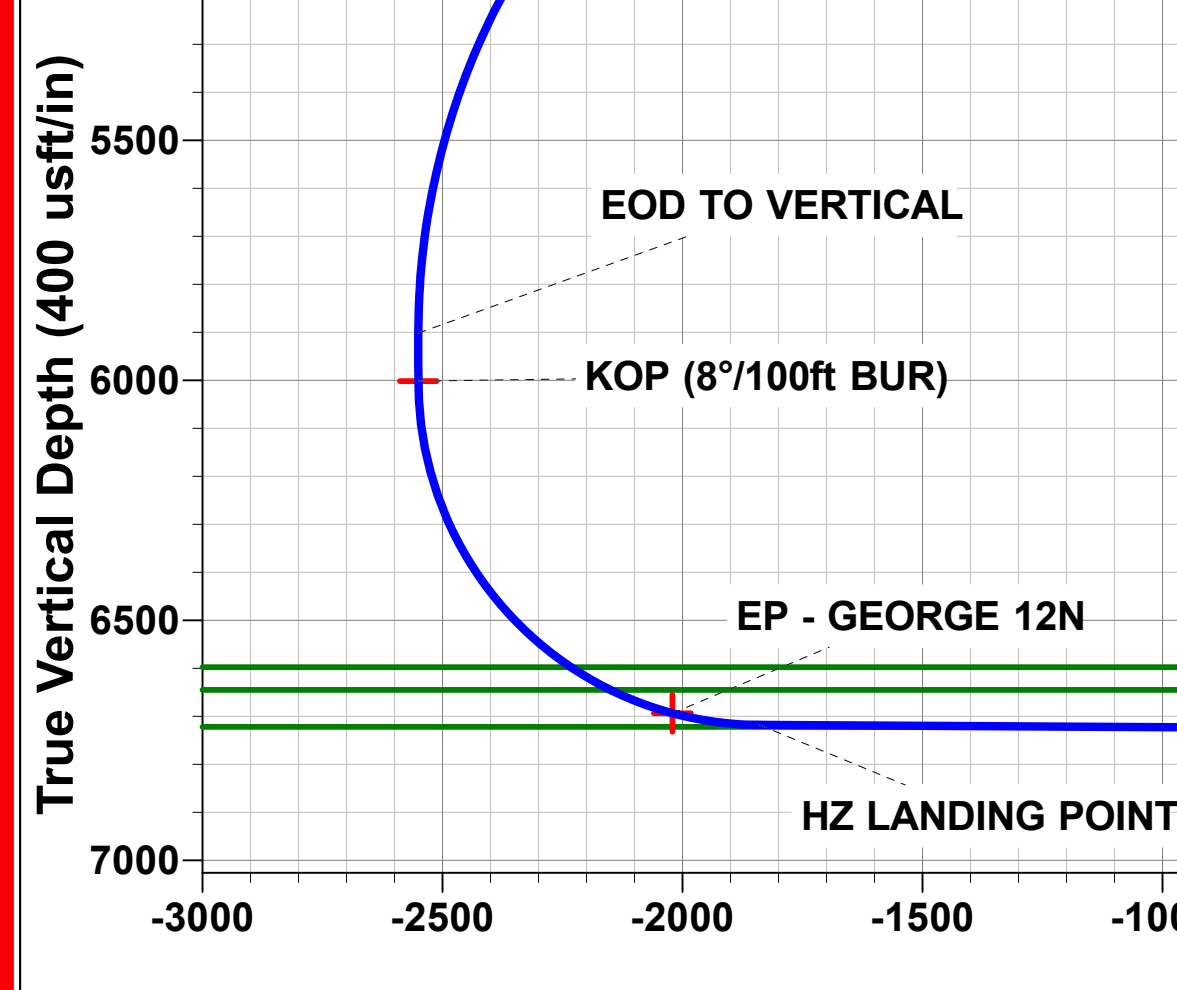
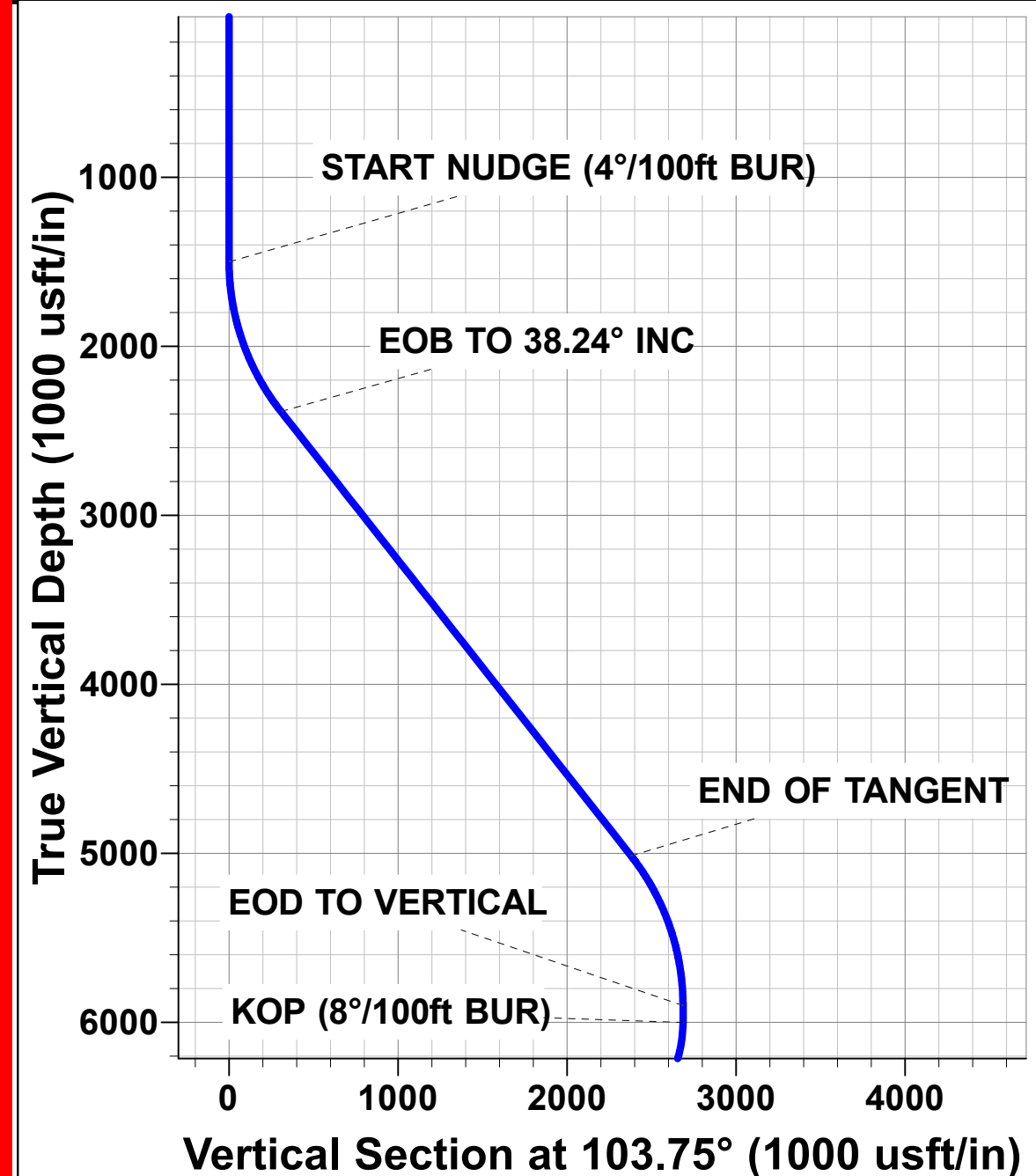
SHL: 1895ft FNL & 2285ft FEL of Sec 21
EP: 2529ft FNL & 200ft FEL of Sec 21
BHL: 2531ft FNL & 200ft FWL of Sec 20



Azimuths to True North
Magnetic North: 7.73°
Magnetic Field
Strength: 51929.1nT
Dip Angle: 66.61°
Date: 2021-05-29
Model: IGRF2020

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
BHL - GEORGE 12N	6773.00	-641.71	-8064.06	1352796.80	3255658.78	40.298200	-104.583409
EP - GEORGE 12N	6693.60	-638.71	-2078.33	1352907.93	3265800.13	40.298212	-104.547049
KOP - GEORGE 12N	6001.81	-638.52	2609.16	1352913.78	3266330.90	40.298212	-104.545146



PDC ENERGY

**WELD COUNTY, COLORADO (TRUE)
SW NE SEC. 21 T4N R64W 6th P.M. (GEORGE)
GEORGE 12N**

**ORIGINAL WELLBORE
PROPOSAL #1**

Anticollision Report

29 May, 2021

Anticollision Report

Company:	PDC ENERGY	Local Co-ordinate Reference:	Well GEORGE 12N
Project:	WELD COUNTY, COLORADO (TRUE)	TVD Reference:	KB 23ft @ 4743.00usft
Reference Site:	SW NE SEC. 21 T4N R64W 6th P.M. (GEORGE)	MD Reference:	KB 23ft @ 4743.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	GEORGE 12N	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
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 100.00usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 9,999.98usft	Error Surface:	Ellipsoid Separation
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	2021-05-29		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	17,953.10	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						
SW NE SEC. 21 T4N R64W 6th P.M. (GEORGE)						
ABDN DD BALBOA C20-24D - Wellbore #1 - Wellbore #	15,421.08	6,975.00	1,285.29	1,037.46	5.186	CC, ES
ABDN DD BALBOA C20-24D - Wellbore #1 - Wellbore #	15,500.00	6,975.00	1,288.79	1,038.82	5.156	SF
ABDN DD DINNEL C27-28D - Wellbore #1 - Wellbore #1	6,749.20	5,920.39	3,546.10	3,494.67	68.951	CC, ES
ABDN DD DINNEL C27-28D - Wellbore #1 - Wellbore #1	6,900.00	6,079.14	3,547.53	3,495.76	68.530	SF
ABDN DD DINNEL C27-29D - Wellbore #1 - Wellbore #1	6,789.38	5,959.82	2,791.41	2,736.44	50.772	CC
ABDN DD DINNEL C27-29D - Wellbore #1 - Wellbore #1	6,858.72	6,028.77	2,791.45	2,736.43	50.738	ES, SF
ABDN DD HANSCOME C28-29D - Wellbore #1 - Wellbo	11,521.10	6,890.15	2,670.84	2,517.13	17.376	CC
ABDN DD HANSCOME C28-29D - Wellbore #1 - Wellbo	11,600.00	6,888.39	2,672.01	2,516.69	17.203	ES
ABDN DD HANSCOME C28-29D - Wellbore #1 - Wellbo	12,000.00	6,879.32	2,713.42	2,551.84	16.792	SF
ABDN DD LEONARD C21-16 - Wellbore #1 - Wellbore #	8,162.27	6,703.72	2,211.08	2,133.86	28.634	CC, ES
ABDN DD LEONARD C21-16 - Wellbore #1 - Wellbore #	8,300.00	6,708.68	2,215.36	2,137.80	28.564	SF
ABDN VERT BALBOA 20-3 - Wellbore #1 - Wellbore #1	14,662.18	6,754.78	679.43	467.52	3.206	CC, ES, SF
ABDN VERT BALBOA C20-2 - Wellbore #1 - Design #1	13,367.96	6,740.09	877.58	566.18	2.818	CC, ES
ABDN VERT BALBOA C20-2 - Wellbore #1 - Design #1	13,400.00	6,740.26	878.17	566.24	2.815	SF
ABDN VERT CHENOWETH #2 - Wellbore #1 - Wellbore	17,524.30	6,821.21	2,080.16	1,790.19	7.174	CC
ABDN VERT CHENOWETH #2 - Wellbore #1 - Wellbore	17,600.00	6,822.08	2,081.54	1,789.80	7.135	ES
ABDN VERT CHENOWETH #2 - Wellbore #1 - Wellbore	17,700.00	6,823.23	2,087.57	1,794.17	7.115	SF
ABDN VERT CPC OSTER 19-1 - Wellbore #1 - Wellbore	17,953.18	6,875.58	2,057.52	1,786.92	7.604	CC, ES, SF
ABDN VERT HANSCOME C21-18 - Wellbore #1 - Desig	1,500.00	1,475.00	598.97	566.43	18.405	CC, ES
ABDN VERT HANSCOME C21-18 - Wellbore #1 - Desig	10,400.00	6,706.51	1,125.33	888.94	4.761	SF
ABDN VERT HANSCOME C21-19 - Wellbore #1 - Desig	11,569.21	6,725.04	1,179.90	915.20	4.458	CC
ABDN VERT HANSCOME C21-19 - Wellbore #1 - Desig	11,600.00	6,725.21	1,180.30	914.71	4.444	ES
ABDN VERT HANSCOME C21-19 - Wellbore #1 - Desig	11,700.00	6,725.77	1,187.13	919.34	4.433	SF
ABDN VERT HANSCOME C28-1 - Wellbore #1 - Design	10,916.14	6,748.39	3,406.97	3,157.72	13.669	CC
ABDN VERT HANSCOME C28-1 - Wellbore #1 - Design	11,000.00	6,748.86	3,408.00	3,156.94	13.574	ES
ABDN VERT HANSCOME C28-1 - Wellbore #1 - Design	11,600.00	6,752.21	3,474.93	3,212.60	13.246	SF
ABDN VERT HIGHLAND 11-20 - Wellbore #1 - Wellbore	16,234.40	6,772.01	625.52	372.32	2.470	CC
ABDN VERT HIGHLAND 11-20 - Wellbore #1 - Wellbore	16,300.00	6,772.59	628.20	372.04	2.452	ES, SF
ABDN VERT JOHNSON C29-29 - Wellbore #1 - Design	16,897.17	6,822.34	2,927.35	2,519.59	7.179	CC
ABDN VERT JOHNSON C29-29 - Wellbore #1 - Design	17,000.00	6,822.90	2,929.15	2,518.84	7.139	ES
ABDN VERT JOHNSON C29-29 - Wellbore #1 - Design	17,200.00	6,823.98	2,942.97	2,528.75	7.105	SF
ABDN VERT LEONARD #1 - Wellbore #1 - Wellbore #1	9,622.80	6,647.67	2,126.19	2,039.51	24.527	CC, ES
ABDN VERT LEONARD #1 - Wellbore #1 - Wellbore #1	10,100.00	6,657.89	2,179.07	2,086.49	23.538	SF
ABDN VERT LEONARD 21-1414 - Wellbore #1 - Design	10,922.02	6,749.43	2,102.76	1,853.41	8.433	CC
ABDN VERT LEONARD 21-1414 - Wellbore #1 - Design	11,000.00	6,749.86	2,104.21	1,853.32	8.387	ES
ABDN VERT LEONARD 21-1414 - Wellbore #1 - Design	11,200.00	6,750.98	2,121.05	1,866.89	8.345	SF

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

Anticollision Report

Company:	PDC ENERGY	Local Co-ordinate Reference:	Well GEORGE 12N
Project:	WELD COUNTY, COLORADO (TRUE)	TVD Reference:	KB 23ft @ 4743.00usft
Reference Site:	SW NE SEC. 21 T4N R64W 6th P.M. (GEORGE)	MD Reference:	KB 23ft @ 4743.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	GEORGE 12N	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
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
SW NE SEC. 21 T4N R64W 6th P.M. (GEORGE)						
ABDN VERT LEONARD 21-614 - Wellbore #1 - Wellbore	10,905.76	6,723.67	545.35	430.16	4.734	CC, ES, SF
ABDN VERT PREBISH #1 - Wellbore #1 - Design #1	16,297.26	6,775.09	1,859.95	1,469.98	4.770	CC
ABDN VERT PREBISH #1 - Wellbore #1 - Design #1	16,300.00	6,775.11	1,859.95	1,469.94	4.769	ES
ABDN VERT PREBISH #1 - Wellbore #1 - Design #1	16,400.00	6,775.65	1,864.62	1,473.21	4.764	SF
ABDN VERT PREBISH #2 - Wellbore #1 - Wellbore #1	17,402.49	6,815.25	598.70	311.90	2.088	CC, ES, SF
ABDN VERT TODD #1 - Wellbore #1 - Wellbore #1	13,493.80	6,668.30	1,929.26	1,747.60	10.620	CC
ABDN VERT TODD #1 - Wellbore #1 - Wellbore #1	13,500.00	6,668.32	1,929.27	1,747.43	10.610	ES
ABDN VERT TODD #1 - Wellbore #1 - Wellbore #1	13,700.00	6,668.95	1,940.40	1,754.02	10.411	SF
ABDN VERT TODD #2 - Wellbore #1 - Design #1	14,861.54	6,750.34	1,077.92	726.95	3.071	CC
ABDN VERT TODD #2 - Wellbore #1 - Design #1	14,900.00	6,750.54	1,078.61	726.74	3.065	ES, SF
ABDN VERT UPRC #29-4H - Wellbore #1 - Design #1	17,642.40	6,834.38	3,409.51	2,981.01	7.957	CC
ABDN VERT UPRC #29-4H - Wellbore #1 - Design #1	17,700.00	6,834.69	3,409.99	2,979.99	7.930	ES
ABDN VERT UPRC #29-4H - Wellbore #1 - Design #1	17,953.18	6,836.00	3,423.65	2,988.12	7.861	SF
ABDN VERT VICTOR C19-9 - Wellbore #1 - Wellbore #1	17,953.18	6,839.88	1,090.98	933.31	6.919	CC, ES, SF
ABDN VERT VICTOR C29-4 - Wellbore #1 - Design #1	17,499.77	4,554.00	4,099.76	3,784.78	13.016	CC
ABDN VERT VICTOR C29-4 - Wellbore #1 - Design #1	17,600.00	4,554.00	4,100.99	3,783.81	12.930	ES
ABDN VERT VICTOR C29-4 - Wellbore #1 - Design #1	17,953.18	4,554.00	4,124.73	3,800.83	12.735	SF
EXIST DD CHENOWETH C20-25D - Wellbore #1 - Wellb	16,858.77	7,066.93	1,496.18	1,201.25	5.073	CC, ES
EXIST DD CHENOWETH C20-25D - Wellbore #1 - Wellb	16,900.00	7,067.19	1,496.75	1,201.37	5.067	SF
EXIST DD HANSCOME C28-28D - Wellbore #1 - Wellbo	10,157.35	6,757.90	2,797.42	2,687.20	25.381	CC
EXIST DD HANSCOME C28-28D - Wellbore #1 - Wellbo	10,200.00	6,757.77	2,797.74	2,686.71	25.198	ES
EXIST DD HANSCOME C28-28D - Wellbore #1 - Wellbo	10,900.00	6,756.00	2,894.32	2,772.44	23.747	SF
EXIST DD HANSCOME C28-30D - Wellbore #1 - Wellbo	12,801.84	6,902.71	2,650.25	2,470.71	14.762	CC
EXIST DD HANSCOME C28-30D - Wellbore #1 - Wellbo	12,900.00	6,905.50	2,652.06	2,470.49	14.606	ES
EXIST DD HANSCOME C28-30D - Wellbore #1 - Wellbo	13,200.00	6,913.83	2,679.98	2,493.64	14.383	SF
EXIST DD HANSCOME C29-27D - Wellbore #1 - Wellbo	14,450.66	6,888.16	2,534.87	2,312.10	11.379	CC
EXIST DD HANSCOME C29-27D - Wellbore #1 - Wellbo	14,500.00	6,888.09	2,535.78	2,312.08	11.336	ES
EXIST DD HANSCOME C29-27D - Wellbore #1 - Wellbo	14,600.00	6,887.96	2,543.15	2,317.83	11.287	SF
EXIST DD LONG C20-21D - Wellbore #1 - Wellbore #1	15,396.18	6,987.05	100.29	-143.30	0.412	Level 3, CC, ES, SF
EXIST DD LONG C20-22D - Wellbore #1 - Wellbore #1	14,168.97	7,069.44	100.62	-62.20	0.618	Level 3, CC
EXIST DD LONG C20-22D - Wellbore #1 - Wellbore #1	14,200.00	7,068.92	105.29	-109.51	0.490	Level 3, ES, SF
EXIST DD NOVACEK C28-27D - Wellbore #1 - Wellbore	8,956.35	6,812.29	2,828.69	2,738.51	31.368	CC
EXIST DD NOVACEK C28-27D - Wellbore #1 - Wellbore	9,000.00	6,812.53	2,829.03	2,738.25	31.165	ES
EXIST DD NOVACEK C28-27D - Wellbore #1 - Wellbore	9,900.00	6,817.39	2,981.93	2,879.64	29.151	SF
EXIST HZ HANSCOME C21-79HN - Wellbore #1 - Wellb	12,940.22	8,857.12	33.34	-36.96	0.474	Level 3, CC, ES, SF
EXIST HZ KLINGENBERG C20-780 - SIDETRACK - SID	17,600.00	9,453.06	423.51	317.38	3.991	SF
EXIST HZ KLINGENBERG C20-780 - SIDETRACK - SID	17,638.40	9,455.25	421.77	316.60	4.010	CC, ES
EXIST HZ KLINGENBERG C20-780 - VERTICAL PILOT	17,651.78	6,826.94	2,488.33	2,182.68	8.141	CC
EXIST HZ KLINGENBERG C20-780 - VERTICAL PILOT	17,700.00	6,826.97	2,488.80	2,181.93	8.110	ES
EXIST HZ KLINGENBERG C20-780 - VERTICAL PILOT	17,900.00	6,827.06	2,500.68	2,190.10	8.052	SF
EXIST HZ THOMPSON C28-79HN - Wellbore #1 - Wellb	12,822.83	10,884.00	3,269.37	3,092.70	18.505	CC
EXIST HZ THOMPSON C28-79HN - Wellbore #1 - Wellb	12,900.00	10,884.00	3,270.28	3,092.12	18.356	ES
EXIST HZ THOMPSON C28-79HN - Wellbore #1 - Wellb	14,400.00	10,884.00	3,556.73	3,340.70	16.464	SF
EXIST VERT API #20-614 - Wellbore #1 - Design #1	16,200.00	6,785.57	534.90	147.32	1.380	Level 3, ES, SF
EXIST VERT API #20-614 - Wellbore #1 - Design #1	16,222.72	6,785.69	534.33	147.37	1.381	Level 3, CC
EXIST VERT API 20-414 - Wellbore #1 - Design #1	17,480.64	6,814.50	1,777.35	1,353.71	4.195	CC
EXIST VERT API 20-414 - Wellbore #1 - Design #1	17,500.00	6,814.61	1,777.45	1,353.27	4.190	ES
EXIST VERT API 20-414 - Wellbore #1 - Design #1	17,600.00	6,815.15	1,781.35	1,355.01	4.178	SF
EXIST VERT BALBOA 20-1 - Wellbore #1 - Design #1	13,504.12	6,763.85	2,027.62	1,712.16	6.427	CC, ES
EXIST VERT BALBOA 20-1 - Wellbore #1 - Design #1	13,700.00	6,764.94	2,036.90	1,717.55	6.378	SF
EXIST VERT BALBOA C20-23 - Wellbore #1 - Design #1	14,336.89	6,760.47	1,244.15	909.63	3.719	CC, ES, SF
EXIST VERT BALBOA C20-4 - Wellbore #1 - Design #1	14,974.82	6,780.95	2,000.39	1,645.90	5.643	CC

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

Anticollision Report

Company:	PDC ENERGY	Local Co-ordinate Reference:	Well GEORGE 12N
Project:	WELD COUNTY, COLORADO (TRUE)	TVD Reference:	KB 23ft @ 4743.00usft
Reference Site:	SW NE SEC. 21 T4N R64W 6th P.M. (GEORGE)	MD Reference:	KB 23ft @ 4743.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	GEORGE 12N	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
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
SW NE SEC. 21 T4N R64W 6th P.M. (GEORGE)						
EXIST VERT BALBOA C20-4 - Wellbore #1 - Design #1	15,000.00	6,781.09	2,000.55	1,645.39	5.633	ES
EXIST VERT BALBOA C20-4 - Wellbore #1 - Design #1	15,200.00	6,782.17	2,013.03	1,654.01	5.607	SF
EXIST VERT BALBOA C20-9X - Wellbore #1 - Wellbore	13,385.67	6,720.77	602.55	424.08	3.376	CC
EXIST VERT BALBOA C20-9X - Wellbore #1 - Wellbore	13,400.00	6,721.05	602.72	424.05	3.373	ES, SF
EXIST VERT BORYS C22-20 - Wellbore #1 - Design #1	6,858.72	5,939.81	1,164.56	1,019.79	8.044	CC, ES
EXIST VERT BORYS C22-20 - Wellbore #1 - Design #1	6,950.00	6,030.84	1,170.36	1,023.71	7.981	SF
EXIST VERT CANTRELL #1 - Wellbore #1 - Design #1	6,858.72	5,921.81	1,831.33	1,689.24	12.889	CC, ES
EXIST VERT CANTRELL #1 - Wellbore #1 - Design #1	7,050.00	6,110.82	1,854.09	1,708.36	12.723	SF
EXIST VERT CANTRELL 22-12 - Wellbore #1 - Wellbore	6,749.66	5,815.12	771.86	731.77	19.254	CC, ES
EXIST VERT CANTRELL 22-12 - Wellbore #1 - Wellbore	6,858.72	5,926.62	772.16	731.99	19.223	SF
EXIST VERT CONRAD #1 - Wellbore #1 - Design #1	6,858.72	5,914.81	2,518.18	2,343.68	14.430	CC
EXIST VERT CONRAD #1 - Wellbore #1 - Design #1	6,900.00	5,956.06	2,518.97	2,343.64	14.367	ES
EXIST VERT CONRAD #1 - Wellbore #1 - Design #1	7,100.00	6,151.55	2,545.11	2,366.33	14.237	SF
EXIST VERT CPC-JOHNSON 29-1 - Wellbore #1 - Desig	13,403.20	6,773.28	3,256.84	2,943.86	10.406	CC
EXIST VERT CPC-JOHNSON 29-1 - Wellbore #1 - Desig	13,500.00	6,773.82	3,258.28	2,942.93	10.332	ES
EXIST VERT CPC-JOHNSON 29-1 - Wellbore #1 - Desig	14,256.17	6,778.03	3,309.54	2,981.67	10.094	SF
EXIST VERT DARLENE DINNEL #1 - Wellbore #1 - Des	6,858.72	5,933.81	2,645.61	2,485.34	16.507	CC
EXIST VERT DARLENE DINNEL #1 - Wellbore #1 - Des	6,900.00	5,975.06	2,646.34	2,485.24	16.427	ES
EXIST VERT DARLENE DINNEL #1 - Wellbore #1 - Des	7,100.00	6,170.55	2,670.44	2,506.06	16.246	SF
EXIST VERT HAMLIN C21-22 - Wellbore #1 - Design #1	8,788.71	6,684.51	241.94	37.71	1.185	Level 3, CC, ES, SF
EXIST VERT HANSCOME 28-4 - Wellbore #1 - Wellbore	12,253.65	6,770.22	3,532.19	3,383.46	23.748	CC
EXIST VERT HANSCOME 28-4 - Wellbore #1 - Wellbore	12,300.00	6,770.70	3,532.49	3,382.65	23.574	ES
EXIST VERT HANSCOME 28-4 - Wellbore #1 - Wellbore	13,200.00	6,779.24	3,656.75	3,490.47	21.991	SF
EXIST VERT HANSCOME C21-20 - Wellbore #1 - Desig	11,544.68	6,739.90	152.01	-111.91	0.576	Level 3, CC, ES, SF
EXIST VERT HANSCOME C21-21 - Wellbore #1 - Desig	10,200.00	6,726.39	132.20	-100.32	0.569	Level 3, ES, SF
EXIST VERT HANSCOME C21-21 - Wellbore #1 - Desig	10,210.47	6,726.45	131.79	-99.89	0.569	Level 3, CC
EXIST VERT HANSCOME C21-24 - Wellbore #1 - Desig	10,156.56	6,727.15	1,425.82	1,194.52	6.164	CC, ES
EXIST VERT HANSCOME C21-24 - Wellbore #1 - Desig	10,300.00	6,727.95	1,433.01	1,199.85	6.146	SF
EXIST VERT HERBST #1 - Wellbore #1 - Wellbore #1	6,862.19	5,939.95	2,094.57	2,034.90	35.104	CC, ES, SF
EXIST VERT HERBST 22-614 - Wellbore #1 - Design #1	6,858.72	5,932.81	1,511.58	1,343.09	8.972	CC, ES
EXIST VERT HERBST 22-614 - Wellbore #1 - Design #1	7,000.00	6,073.17	1,522.74	1,351.65	8.900	SF
EXIST VERT HERBST C22-25 - Wellbore #1 - Wellbore	6,733.85	5,784.77	1,824.38	1,776.21	37.875	CC, ES
EXIST VERT HERBST C22-25 - Wellbore #1 - Wellbore	6,858.72	5,918.05	1,825.45	1,777.24	37.862	SF
EXIST VERT HERBST C27-30 - Wellbore #1 - Design #1	7,363.57	6,418.87	2,927.62	2,738.96	15.518	CC
EXIST VERT HERBST C27-30 - Wellbore #1 - Design #1	7,450.00	6,481.17	2,928.23	2,738.67	15.447	ES
EXIST VERT HERBST C27-30 - Wellbore #1 - Design #1	7,700.00	6,615.54	2,939.97	2,748.48	15.353	SF
EXIST VERT HERBST, CONRAD #1 - Wellbore #1 - Des	6,858.72	5,939.81	3,789.52	3,620.87	22.469	CC
EXIST VERT HERBST, CONRAD #1 - Wellbore #1 - Des	6,900.00	5,981.06	3,790.04	3,620.55	22.362	ES
EXIST VERT HERBST, CONRAD #1 - Wellbore #1 - Des	7,250.00	6,311.91	3,835.67	3,660.88	21.945	SF
EXIST VERT HIGHLAND 12-20 - Wellbore #1 - Wellbore	17,518.57	6,779.84	796.27	506.59	2.749	CC, ES, SF
EXIST VERT JOHNSON C29-28 - Wellbore #1 - Design	15,569.28	6,796.17	2,503.45	2,133.00	6.758	CC
EXIST VERT JOHNSON C29-28 - Wellbore #1 - Design	15,600.00	6,796.34	2,503.81	2,132.36	6.741	ES
EXIST VERT JOHNSON C29-28 - Wellbore #1 - Design	15,800.00	6,797.42	2,523.29	2,146.37	6.695	SF
EXIST VERT JOHNSON R C29-2 - Wellbore #1 - Design	14,855.56	6,803.30	3,268.24	2,916.40	9.289	CC
EXIST VERT JOHNSON R C29-2 - Wellbore #1 - Design	14,900.00	6,803.54	3,268.54	2,915.52	9.259	ES
EXIST VERT JOHNSON R C29-2 - Wellbore #1 - Design	15,300.00	6,805.71	3,298.32	2,936.63	9.119	SF
EXIST VERT JOHNSTON #22-4 - Wellbore #1 - Wellbor	6,888.21	5,969.03	1,733.96	1,670.14	27.169	CC, ES
EXIST VERT JOHNSTON #22-4 - Wellbore #1 - Wellbor	6,900.00	5,980.57	1,733.98	1,670.16	27.168	SF
EXIST VERT JULIE C21-25 - Wellbore #1 - Design #1	11,459.11	6,764.42	1,620.56	1,357.80	6.167	CC
EXIST VERT JULIE C21-25 - Wellbore #1 - Design #1	11,500.00	6,764.65	1,621.08	1,357.50	6.150	ES
EXIST VERT JULIE C21-25 - Wellbore #1 - Design #1	11,600.00	6,765.21	1,626.67	1,361.45	6.133	SF
EXIST VERT KLEIN #1 - Wellbore #1 - Design #1	12,204.16	6,766.59	2,090.18	1,808.61	7.423	CC, ES

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

Anticollision Report

Company:	PDC ENERGY	Local Co-ordinate Reference:	Well GEORGE 12N
Project:	WELD COUNTY, COLORADO (TRUE)	TVD Reference:	KB 23ft @ 4743.00usft
Reference Site:	SW NE SEC. 21 T4N R64W 6th P.M. (GEORGE)	MD Reference:	KB 23ft @ 4743.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	GEORGE 12N	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
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
SW NE SEC. 21 T4N R64W 6th P.M. (GEORGE)						
EXIST VERT KLEIN #1 - Wellbore #1 - Design #1	12,400.00	6,767.68	2,099.34	1,813.88	7.354	SF
EXIST VERT KLEIN 21-12 - Wellbore #1 - Design #1	12,211.91	6,742.63	745.90	464.58	2.651	CC, ES, SF
EXIST VERT LEHFELDT C27-04 - Wellbore #1 - Design	6,858.72	5,945.81	3,612.80	3,433.38	20.136	CC
EXIST VERT LEHFELDT C27-04 - Wellbore #1 - Design	7,100.00	6,182.55	3,614.25	3,430.50	19.670	ES
EXIST VERT LEHFELDT C27-04 - Wellbore #1 - Design	7,650.00	6,585.65	3,646.16	3,456.36	19.210	SF
EXIST VERT LEONARD #2 - Wellbore #1 - Wellbore #1	12,147.91	6,715.14	467.96	321.78	3.201	CC, ES, SF
EXIST VERT LEONARD #3 - Wellbore #1 - Design #1	10,909.21	6,754.35	768.32	519.15	3.084	CC, ES, SF
EXIST VERT LEONARD #4 - Wellbore #1 - Design #1	2,546.62	2,429.76	86.92	28.88	1.498	Level 3, CC, ES, SF
EXIST VERT LEONARD 21-10 - Wellbore #1 - Design #1	9,564.65	6,706.84	768.83	550.32	3.519	CC, ES, SF
EXIST VERT LEONARD 21-1614 - Wellbore #1 - Wellbor	8,758.73	6,678.02	1,724.60	1,652.91	24.058	CC, ES
EXIST VERT LEONARD 21-1614 - Wellbore #1 - Wellbor	9,000.00	6,678.35	1,741.39	1,668.21	23.797	SF
EXIST VERT LONG C20-17 - Wellbore #1 - Design #1	14,050.04	6,729.89	1,413.01	1,086.21	4.324	CC
EXIST VERT LONG C20-17 - Wellbore #1 - Design #1	14,100.00	6,730.17	1,414.33	1,085.21	4.297	ES
EXIST VERT LONG C20-17 - Wellbore #1 - Design #1	14,200.00	6,730.72	1,424.51	1,091.62	4.279	SF
EXIST VERT LONG C20-18 - Wellbore #1 - Design #1	15,343.84	6,762.95	1,511.71	1,147.48	4.150	CC
EXIST VERT LONG C20-18 - Wellbore #1 - Design #1	15,400.00	6,763.26	1,512.76	1,147.16	4.138	ES
EXIST VERT LONG C20-18 - Wellbore #1 - Design #1	15,412.66	6,763.33	1,513.28	1,147.43	4.136	SF
EXIST VERT LYMAN #1 - Wellbore #1 - Wellbore #1	6,900.00	6,000.00	626.12	564.67	10.190	SF
EXIST VERT LYMAN #1 - Wellbore #1 - Wellbore #1	6,934.52	6,033.63	625.67	564.31	10.196	CC, ES
EXIST VERT NIX #1 - Wellbore #1 - Design #1	8,321.35	6,669.90	3,537.95	3,339.52	17.830	CC, ES
EXIST VERT NIX #1 - Wellbore #1 - Design #1	9,000.00	6,673.69	3,602.45	3,398.07	17.626	SF
EXIST VERT NOVACEK #1 - Wellbore #1 - Design #1	9,590.69	6,710.99	3,410.03	3,190.87	15.560	CC
EXIST VERT NOVACEK #1 - Wellbore #1 - Design #1	9,600.00	6,711.04	3,410.04	3,190.72	15.548	ES
EXIST VERT NOVACEK #1 - Wellbore #1 - Design #1	10,400.00	6,715.51	3,504.75	3,272.67	15.102	SF
EXIST VERT OSTER PM C19-8 - Wellbore #1 - Design #1	17,953.18	6,838.00	869.95	584.66	3.049	CC, ES, SF
EXIST VERT PREBISH C20-19 - Wellbore #1 - Wellbore	16,744.95	6,790.93	1,274.18	1,005.80	4.748	CC
EXIST VERT PREBISH C20-19 - Wellbore #1 - Wellbore	16,800.00	6,790.19	1,275.37	1,005.67	4.729	ES, SF
EXIST VERT THOUTT #2 - Wellbore #1 - Wellbore #1	8,200.00	6,835.10	968.70	903.20	14.789	SF
EXIST VERT THOUTT #2 - Wellbore #1 - Wellbore #1	8,243.56	6,835.30	967.72	902.34	14.803	CC, ES
EXIST VERT TODD #20-2 - Wellbore #1 - Design #1	14,535.43	6,745.56	1,725.84	1,384.43	5.055	CC
EXIST VERT TODD #20-2 - Wellbore #1 - Design #1	14,700.00	6,746.46	1,728.96	1,382.49	4.990	ES
EXIST VERT TODD #20-2 - Wellbore #1 - Design #1	14,800.00	6,747.00	1,734.45	1,385.96	4.977	SF
EXIST VERT TODD 20-8 - Wellbore #1 - Design #1	13,600.48	6,738.38	459.17	141.63	1.446	Level 3, CC, ES, SF
EXIST VERT TRAVELERS 21-814 - Wellbore #1 - Wellbo	3,840.63	3,414.11	622.31	593.39	21.521	CC, ES
EXIST VERT TRAVELERS 21-814 - Wellbore #1 - Wellbo	8,800.00	6,654.66	956.50	883.25	13.056	SF
EXIST VERT VICTOR C19-16 - Wellbore #1 - Design #1	17,953.18	6,851.00	2,252.02	1,838.81	5.450	CC, ES, SF
GEORGE 01N - ORIGINAL WELLBORE - PROPOSAL #	623.12	621.64	162.74	160.14	62.496	CC, ES
GEORGE 01N - ORIGINAL WELLBORE - PROPOSAL #	17,953.18	18,121.45	2,411.72	1,818.60	4.066	SF
GEORGE 02N - ORIGINAL WELLBORE - PROPOSAL #	770.13	769.43	145.68	142.38	44.149	CC
GEORGE 02N - ORIGINAL WELLBORE - PROPOSAL #	800.00	798.65	145.80	142.34	42.066	ES
GEORGE 02N - ORIGINAL WELLBORE - PROPOSAL #	17,953.18	18,000.00	2,190.70	1,596.49	3.687	SF
GEORGE 03NA - ORIGINAL WELLBORE - PROPOSAL	890.98	890.70	128.98	125.14	33.537	CC
GEORGE 03NA - ORIGINAL WELLBORE - PROPOSAL	900.00	899.52	128.99	125.10	33.116	ES
GEORGE 03NA - ORIGINAL WELLBORE - PROPOSAL	17,953.18	17,952.53	1,972.26	1,377.82	3.318	SF
GEORGE 04N - ORIGINAL WELLBORE - PROPOSAL #	1,016.02	1,017.33	111.03	106.60	25.072	CC, ES
GEORGE 04N - ORIGINAL WELLBORE - PROPOSAL #	17,953.18	17,988.98	1,677.06	1,082.81	2.822	SF
GEORGE 05N - ORIGINAL WELLBORE - PROPOSAL #	1,108.74	1,109.88	95.43	90.61	19.815	CC, ES
GEORGE 05N - ORIGINAL WELLBORE - PROPOSAL #	17,953.18	17,909.84	1,533.67	937.58	2.573	SF
GEORGE 06N - ORIGINAL WELLBORE - PROPOSAL #	1,205.11	1,207.19	78.93	73.70	15.088	CC, ES
GEORGE 06N - ORIGINAL WELLBORE - PROPOSAL #	17,953.18	17,950.05	1,316.70	721.89	2.214	SF
GEORGE 07NA - ORIGINAL WELLBORE - PROPOSAL	1,293.58	1,295.40	62.91	57.31	11.231	CC
GEORGE 07NA - ORIGINAL WELLBORE - PROPOSAL	1,300.00	1,301.68	62.92	57.29	11.166	ES

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

Anticollision Report

Company:	PDC ENERGY	Local Co-ordinate Reference:	Well GEORGE 12N
Project:	WELD COUNTY, COLORADO (TRUE)	TVD Reference:	KB 23ft @ 4743.00usft
Reference Site:	SW NE SEC. 21 T4N R64W 6th P.M. (GEORGE)	MD Reference:	KB 23ft @ 4743.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	GEORGE 12N	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
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
SW NE SEC. 21 T4N R64W 6th P.M. (GEORGE)						
GEORGE 07NA - ORIGINAL WELLBORE - PROPOSAL	17,953.18	17,841.50	1,096.61	499.84	1.838	SF
GEORGE 08N - ORIGINAL WELLBORE - PROPOSAL #	1,372.11	1,373.48	47.74	41.81	8.054	CC, ES
GEORGE 08N - ORIGINAL WELLBORE - PROPOSAL #	17,953.18	17,878.45	876.38	278.38	1.466	Level 3, SF
GEORGE 09N - ORIGINAL WELLBORE - PROPOSAL #	1,500.00	1,500.00	45.01	38.54	6.960	CC, ES
GEORGE 09N - ORIGINAL WELLBORE - PROPOSAL #	17,953.18	18,050.99	660.49	73.89	1.126	Level 3, SF
GEORGE 10N - ORIGINAL WELLBORE - PROPOSAL #	1,500.00	1,500.00	30.00	23.54	4.640	CC
GEORGE 10N - ORIGINAL WELLBORE - PROPOSAL #	17,953.18	17,973.12	438.19	-157.83	0.735	Level 3, ES, SF
GEORGE 11N - ORIGINAL WELLBORE - PROPOSAL #	0.00	0.00	15.00			
GEORGE 11N - ORIGINAL WELLBORE - PROPOSAL #	17,953.18	18,000.53	230.01	-141.08	0.620	Level 3, ES, SF
GEORGE 13N - ORIGINAL WELLBORE - PROPOSAL #	1,400.00	1,400.00	15.00	8.99	2.493	CC
GEORGE 13N - ORIGINAL WELLBORE - PROPOSAL #	17,953.18	17,997.96	230.00	-136.99	0.627	Level 3, ES, SF
GEORGE 14N - ORIGINAL WELLBORE - PROPOSAL #	1,300.00	1,300.00	30.03	24.46	5.394	CC
GEORGE 14N - ORIGINAL WELLBORE - PROPOSAL #	17,953.18	17,956.45	438.65	-115.51	0.792	Level 3, ES, SF
GEORGE 15NA - ORIGINAL WELLBORE - PROPOSAL	1,200.00	1,199.00	44.99	39.87	8.794	CC, ES
GEORGE 15NA - ORIGINAL WELLBORE - PROPOSAL	17,953.18	17,948.56	659.18	68.59	1.116	Level 3, SF
GEORGE 16N - ORIGINAL WELLBORE - PROPOSAL #	1,100.00	1,099.00	59.99	55.32	12.856	CC, ES
GEORGE 16N - ORIGINAL WELLBORE - PROPOSAL #	17,953.18	18,062.11	879.18	286.61	1.484	Level 3, SF
GEORGE 17N - ORIGINAL WELLBORE - PROPOSAL #	1,000.00	999.00	74.95	70.73	17.774	CC, ES
GEORGE 17N - ORIGINAL WELLBORE - PROPOSAL #	17,953.18	18,034.35	1,095.46	498.31	1.834	SF
GEORGE 18N - ORIGINAL WELLBORE - PROPOSAL #	900.00	899.00	89.96	86.19	23.880	CC, ES
GEORGE 18N - ORIGINAL WELLBORE - PROPOSAL #	17,953.18	18,135.35	1,316.41	721.97	2.215	SF
GEORGE 19NA - ORIGINAL WELLBORE - PROPOSAL	800.00	798.00	104.96	101.64	31.659	CC, ES
GEORGE 19NA - ORIGINAL WELLBORE - PROPOSAL	17,953.18	18,103.37	1,534.33	938.29	2.574	SF
GEORGE 20N - ORIGINAL WELLBORE - PROPOSAL #	700.00	698.00	119.99	117.12	41.870	CC, ES
GEORGE 20N - ORIGINAL WELLBORE - PROPOSAL #	17,953.18	18,246.20	1,753.94	1,159.72	2.952	SF
GEORGE 21N - ORIGINAL WELLBORE - PROPOSAL #	600.00	598.00	134.94	132.53	55.849	CC, ES
GEORGE 21N - ORIGINAL WELLBORE - PROPOSAL #	17,953.18	18,238.91	1,971.83	1,377.51	3.318	SF
GEORGE 22N - ORIGINAL WELLBORE - PROPOSAL #	500.00	497.00	149.98	148.02	76.348	CC, ES
GEORGE 22N - ORIGINAL WELLBORE - PROPOSAL #	17,953.18	18,295.58	2,190.92	1,596.62	3.687	SF
GEORGE 23N - ORIGINAL WELLBORE - PROPOSAL #	400.00	397.00	164.94	163.42	108.876	CC, ES
GEORGE 23N - ORIGINAL WELLBORE - PROPOSAL #	17,953.18	18,422.26	2,410.88	1,817.72	4.064	SF
GEORGE 24N - ORIGINAL WELLBORE - PROPOSAL #	300.00	296.00	179.92	178.86	169.236	CC, ES
GEORGE 24N - ORIGINAL WELLBORE - PROPOSAL #	17,953.18	18,455.22	2,629.11	2,036.68	4.438	SF

Anticollision Report

Company:	PDC ENERGY	Local Co-ordinate Reference:	Well GEORGE 12N
Project:	WELD COUNTY, COLORADO (TRUE)	TVD Reference:	KB 23ft @ 4743.00usft
Reference Site:	SW NE SEC. 21 T4N R64W 6th P.M. (GEORGE)	MD Reference:	KB 23ft @ 4743.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	GEORGE 12N	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	Database 1
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
Offset Well - Wellbore - Design						
SW NW SEC. 17 T4N R64W 6th P.M. (DRAKE)						
ABDN VERT CHENOWETH 21-4 - Wellbore #1 - Wellbo	11,922.72	6,676.96	1,815.23	1,674.95	12.940	CC
ABDN VERT CHENOWETH 21-4 - Wellbore #1 - Wellbo	12,000.00	6,678.85	1,816.87	1,674.52	12.764	ES
ABDN VERT CHENOWETH 21-4 - Wellbore #1 - Wellbo	12,200.00	6,683.58	1,836.27	1,689.86	12.542	SF
ABDN VERT CHENOWETH #1 - Wellbore #1 - Design #1	1,500.00	1,486.00	1,380.72	1,347.92	42.089	CC
ABDN VERT CHENOWETH #1 - Wellbore #1 - Design #1	10,902.68	6,720.32	1,563.23	1,314.90	6.295	ES
ABDN VERT CHENOWETH #1 - Wellbore #1 - Design #1	11,100.00	6,721.42	1,575.64	1,322.65	6.228	SF
DRAKE 23N - ORIGINAL WELLBORE - PROPOSAL #1	7,750.00	18,757.30	2,868.84	2,504.91	7.883	SF
DRAKE 23N - ORIGINAL WELLBORE - PROPOSAL #1	7,796.22	18,726.66	2,868.33	2,504.87	7.892	ES
DRAKE 23N - ORIGINAL WELLBORE - PROPOSAL #1	17,953.18	8,583.78	2,863.28	2,519.98	8.341	CC
DRAKE 24N - ORIGINAL WELLBORE - PROPOSAL #1	7,750.00	18,931.07	2,723.68	2,357.17	7.431	SF
DRAKE 24N - ORIGINAL WELLBORE - PROPOSAL #1	17,953.18	8,754.64	2,643.50	2,297.52	7.641	CC, ES
EXIST DD CRICKET C22-30D - Wellbore #1 - Wellbore #	3,352.36	2,577.00	2,018.75	1,994.17	82.117	CC
EXIST DD CRICKET C22-30D - Wellbore #1 - Wellbore #	3,400.00	2,613.23	2,018.94	1,993.55	79.516	ES
EXIST DD CRICKET C22-30D - Wellbore #1 - Wellbore #	8,100.00	6,780.14	2,485.16	2,405.16	31.063	SF
EXIST HZ STOCKLEY C22-79HN - Wellbore #1 - Wellbo	7,557.75	8,993.83	146.74	106.27	3.626	CC
EXIST HZ STOCKLEY C22-79HN - Wellbore #1 - Wellbo	7,600.00	8,994.21	153.89	104.64	3.125	ES
EXIST HZ STOCKLEY C22-79HN - Wellbore #1 - Wellbo	7,650.00	8,994.63	178.24	117.78	2.948	SF
EXIST VERT CHENOWETH #21-2 - Wellbore #1 - Desig	1,833.44	1,798.44	1,226.35	1,186.58	30.831	CC
EXIST VERT CHENOWETH #21-2 - Wellbore #1 - Desig	2,100.00	2,050.61	1,229.31	1,183.35	26.748	ES
EXIST VERT CHENOWETH #21-2 - Wellbore #1 - Desig	9,800.00	6,696.16	1,838.86	1,615.43	8.230	SF
EXIST VERT RYANN STATE C21-27 - Wellbore #1 - We	3,114.47	2,913.44	2,248.31	2,229.80	121.503	CC
EXIST VERT RYANN STATE C21-27 - Wellbore #1 - We	3,200.00	2,976.01	2,249.00	2,229.29	114.071	ES
EXIST VERT RYANN STATE C21-27 - Wellbore #1 - We	9,800.00	6,665.74	2,814.30	2,726.22	31.951	SF
EXIST VERT THOUTT #1 - Wellbore #1 - Wellbore #1	4,146.40	3,693.93	1,532.34	1,498.90	45.820	CC
EXIST VERT THOUTT #1 - Wellbore #1 - Wellbore #1	4,200.00	3,733.94	1,532.72	1,498.52	44.820	ES
EXIST VERT THOUTT #1 - Wellbore #1 - Wellbore #1	8,700.00	6,661.06	1,831.38	1,759.59	25.509	SF

Offset Design:		SW NE SEC. 21 T4N R64W 6th P.M. (GEORGE) - ABDN DD BALBOA C20-24D - Wellbore #1 - Wellbore #1										Offset Site Error:		0.00 usft		
Survey Program:		378-MWD							Rule Assigned:				Offset Well Error:		0.00 usft	
Reference		Offset		Semi Major Axis		Offset Wellbore Centre			Distance		Minimum Separation		Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	+N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)						
0.00	0.00	35.82	35.82	0.00	0.04	-118.79	-3,229.01	-5,875.18	6,704.05							
100.00	100.00	135.31	135.31	0.09	0.15	-118.79	-3,229.05	-5,875.17	6,704.06	6,703.82	0.24		N/A			
200.00	200.00	1,522.07	1,501.73	0.31	4.39	-117.67	-3,052.72	-5,822.56	6,695.02	6,690.70	4.33	1,546.739				
300.00	300.00	1,589.00	1,566.12	0.54	4.72	-117.55	-3,035.05	-5,818.01	6,676.38	6,671.63	4.74	1,407.433				
400.00	400.00	1,674.00	1,648.03	0.76	5.10	-117.40	-3,013.06	-5,812.32	6,658.13	6,652.88	5.24	1,269.736				
500.00	500.00	1,790.14	1,760.02	0.99	5.66	-117.21	-2,983.50	-5,803.80	6,639.55	6,633.65	5.90	1,125.571				
600.00	600.00	1,845.00	1,812.91	1.21	5.93	-117.11	-2,969.41	-5,800.14	6,621.49	6,615.16	6.33	1,046.472				
700.00	700.00	1,913.83	1,879.32	1.44	6.25	-116.99	-2,951.82	-5,795.89	6,604.00	6,597.19	6.81	969.072				
800.00	800.00	2,078.41	2,038.34	1.66	7.04	-116.71	-2,911.01	-5,784.39	6,586.25	6,578.57	7.68	857.532				
900.00	900.00	2,233.53	2,187.93	1.88	7.83	-116.45	-2,871.90	-5,771.95	6,567.39	6,558.85	8.54	769.354				
1,000.00	1,000.00	2,329.48	2,280.16	2.11	8.33	-116.28	-2,846.55	-5,764.47	6,548.27	6,539.11	9.16	714.583				
1,100.00	1,100.00	2,413.01	2,360.51	2.33	8.76	-116.13	-2,824.61	-5,758.06	6,529.40	6,519.67	9.74	670.474				
1,200.00	1,200.00	2,509.98	2,453.70	2.56	9.26	-115.95	-2,798.74	-5,750.96	6,510.71	6,500.33	10.38	627.433				
1,300.00	1,300.00	2,673.69	2,610.71	2.78	10.13	-115.64	-2,754.33	-5,737.71	6,490.96	6,479.64	11.31	573.685				
1,400.00	1,400.00	2,795.51	2,727.17	3.01	10.81	-115.40	-2,719.88	-5,728.25	6,471.30	6,459.21	12.10	534.997				
1,500.00	1,500.00	2,873.22	2,801.42	3.23	11.24	-115.24	-2,697.77	-5,722.15	6,451.52	6,438.84	12.68	508.785				

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