



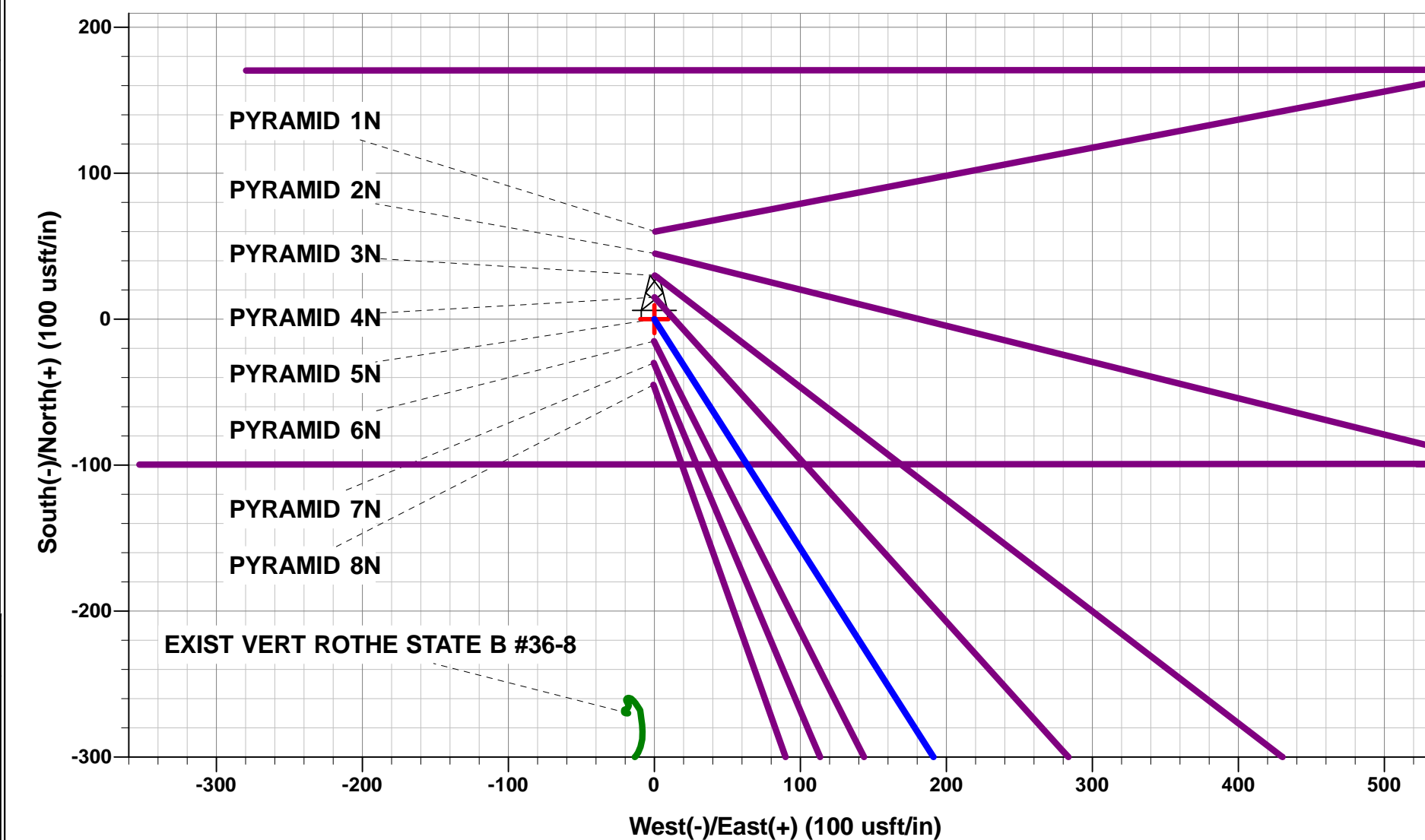
Project: WELD COUNTY, COLORADO (TRUE)
Site: SE NE SEC. 36 T5N R64W 6th P.M. (PYRAMID)
Well: PYRAMID 5N
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #2

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Dep	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL: 1680ft FNL & 600ft FEL of Sec 36
600.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	START NUDGE (2°/100ft BUR)
1303.11	1310.36	14.21	147.48	-73.88	47.10	-39.89	87.62	EOB TO 14.21° INC
4963.69	5086.45	14.21	147.48	-855.34	545.33	-461.86	1014.39	END OF TANGENT
5666.80	5796.81	0.00	0.00	-929.22	592.43	-501.75	1102.01	EOD TO VERTICAL
5866.80	5996.81	0.00	0.00	-929.22	592.43	-501.75	1102.01	KOP (8°/100ft BUR)
6583.00	7122.32	90.04	269.97	-929.60	-124.27	211.77	1818.71	EP: 2610ft FNL & 737ft FEL of Sec 36
6576.00	16821.88	90.04	269.97	-934.71	-9823.83	9868.20	11518.27	BHL: 2610ft FNL & 150ft FWL of Sec 35

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - PYRAMID 5N	5866.80	-929.22	592.43	40.355970°N	104.488399°W
EP - PYRAMID 5N	6583.00	-929.60	-124.27	40.355969°N	104.490971°W
BHL - PYRAMID 5N (P2)	6576.00	-934.71	-9823.83	40.355950°N	104.525773°W
SHL - PYRAMID 5N	0.00	0.00	0.00	40.358521°N	104.490525°W

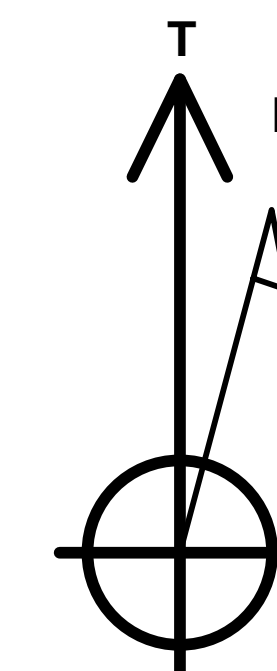


PROPOSED LOCAL COORDINATES:

SHL: 1680ft FNL & 600ft FEL of Sec 36

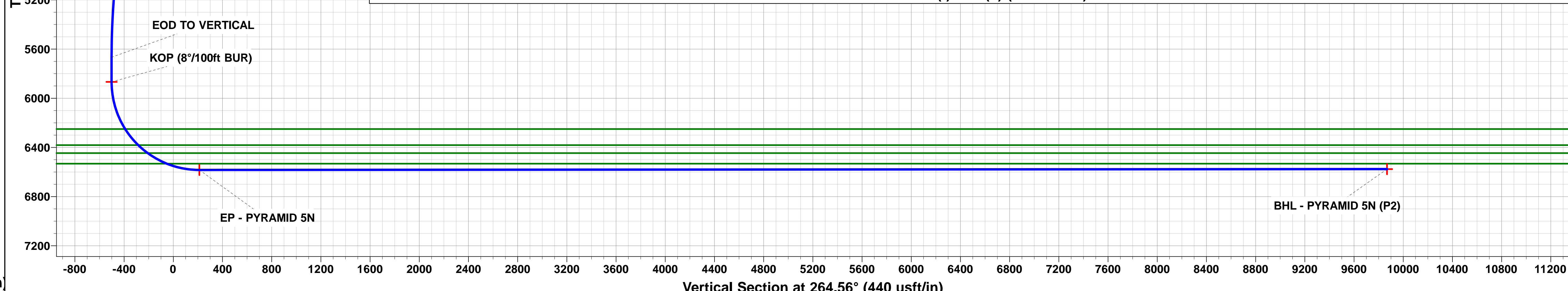
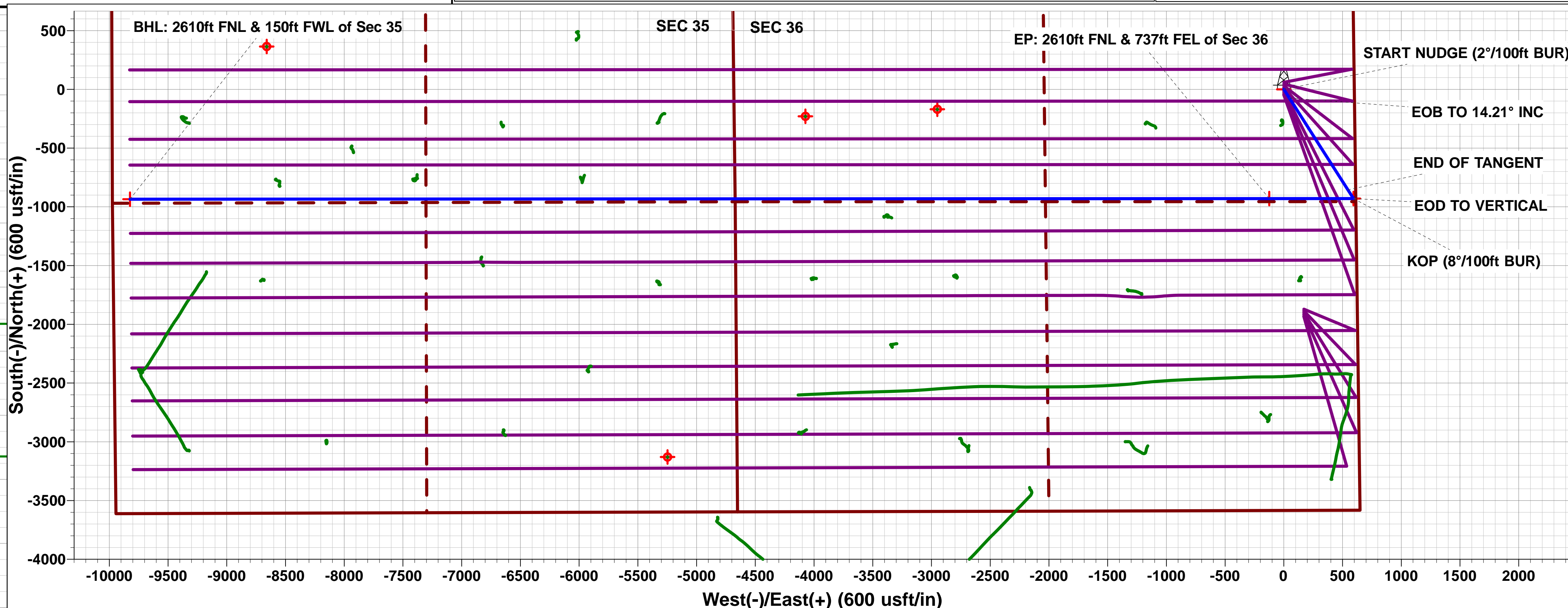
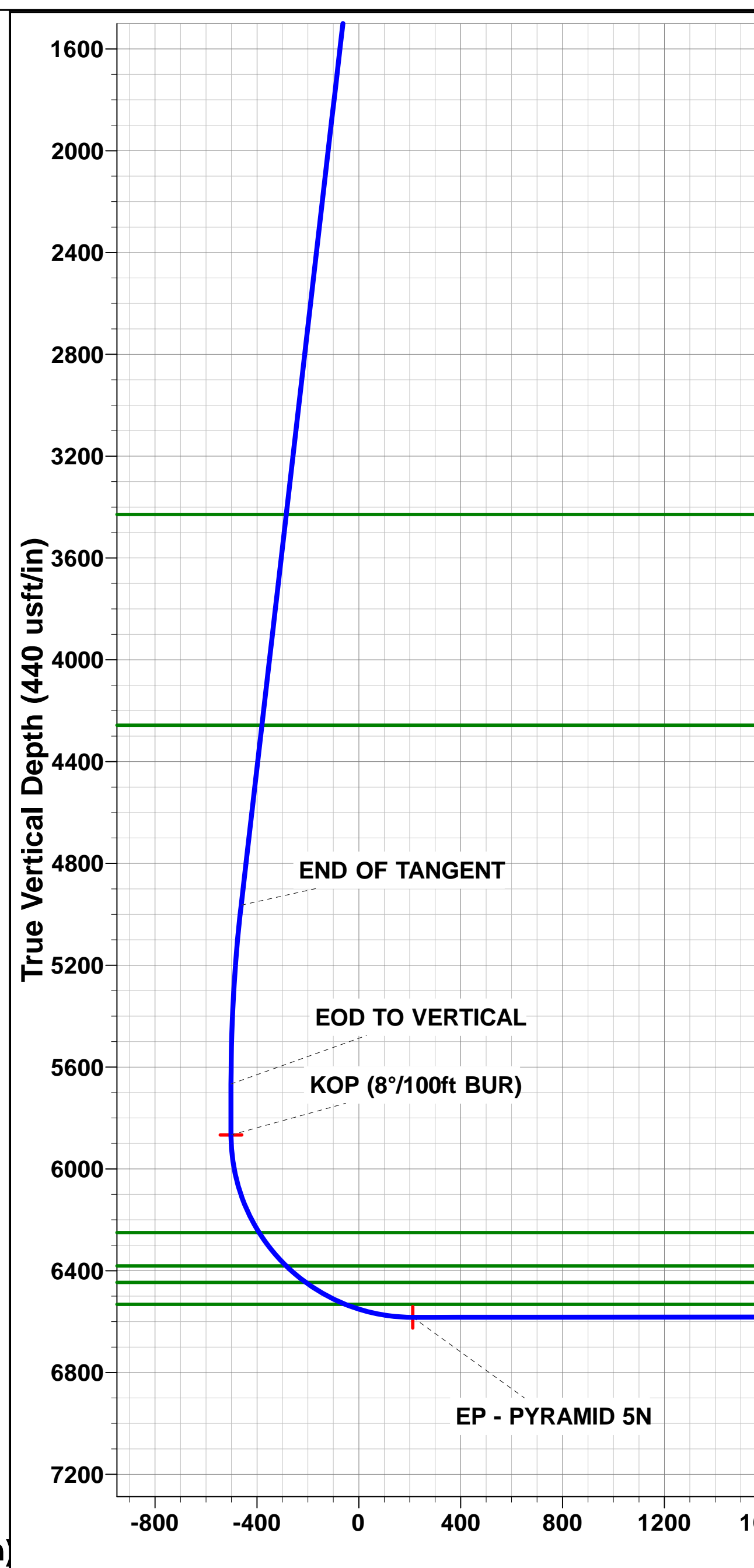
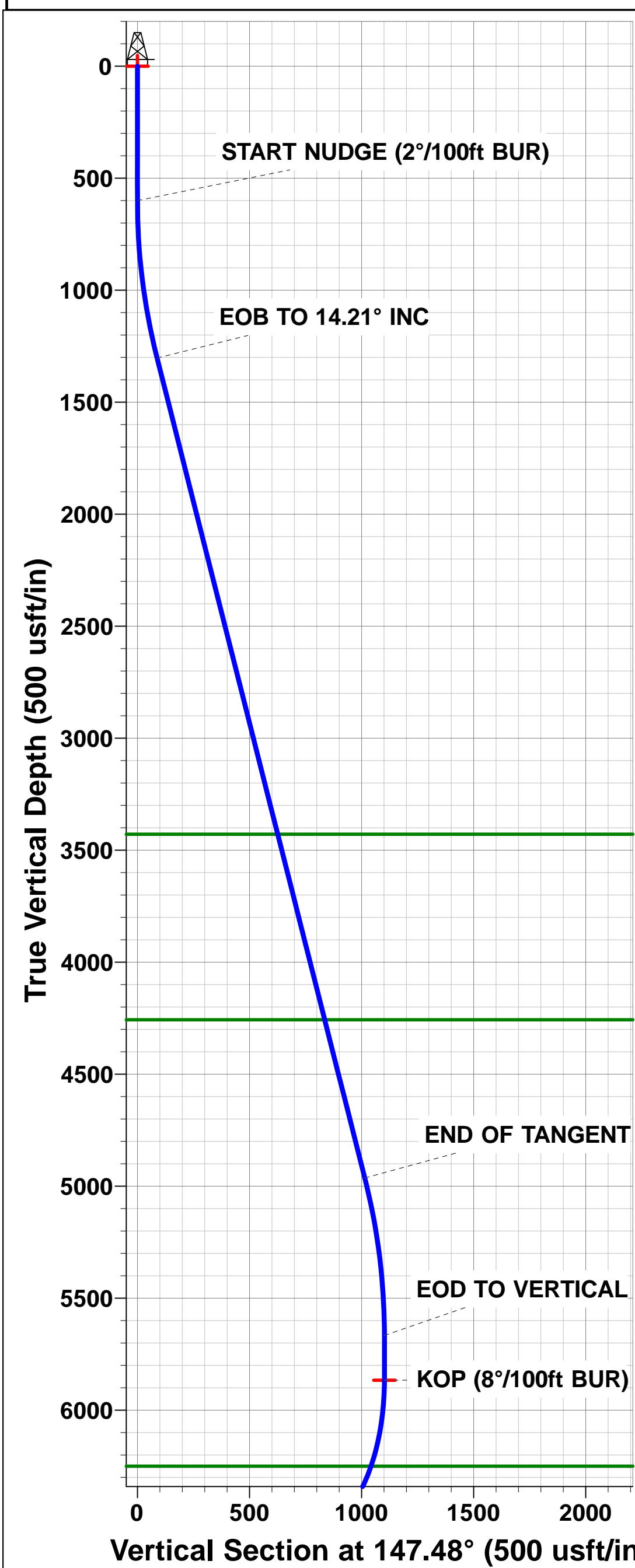
EP: 2610ft FNL & 737ft FEL of Sec 36

BHL: 2610ft FNL & 150ft FWL of Sec 35



Azimuths to True North
Magnetic North: 7.99°

Magnetic Field
Strength: 52324.0snT
Dip Angle: 66.85°
Date: 19/02/2018
Model: IGRF2015



PDC ENERGY

**WELD COUNTY, COLORADO (TRUE)
SE NE SEC. 36 T5N R64W 6th P.M. (PYRAMID)
PYRAMID 5N**

**ORIGINAL WELLBORE
PROPOSAL #2**

Anticollision Report

01 February, 2019



Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well PYRAMID 5N
Project:	WELD COUNTY, COLORADO (TRUE)	TVD Reference:	KB-EST @ 4611.00usft (Original Well Elev)
Reference Site:	SE NE SEC. 36 T5N R64W 6th P.M. (PYRAMID)	MD Reference:	KB-EST @ 4611.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PYRAMID 5N	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 #2	Offset TVD Reference:	Offset Datum

Reference	PROPOSAL #2		
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 center-center distance of 9,999.98 usft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	01/02/2019		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	16,821.88	PROPOSAL #2 (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
NE SE SEC. 36 T5N R64W 6th P.M. (PHARAOH)						
PHARAOH 1N - ORIGINAL WELLBORE - PROPOSAL #	5,996.81	5,917.21	1,123.44	1,087.83	31.555	CC
PHARAOH 1N - ORIGINAL WELLBORE - PROPOSAL #	16,821.88	16,760.58	1,146.56	573.57	2.001	ES, SF
PHARAOH 2C - ORIGINAL WELLBORE - PROPOSAL #	5,996.81	5,934.08	1,413.47	1,375.67	37.386	CC
PHARAOH 2C - ORIGINAL WELLBORE - PROPOSAL #	16,821.88	16,834.83	1,438.52	866.51	2.515	ES, SF
PHARAOH 3N - ORIGINAL WELLBORE - PROPOSAL #	6,100.24	6,068.81	1,693.44	1,659.76	50.283	CC
PHARAOH 3N - ORIGINAL WELLBORE - PROPOSAL #	16,821.88	16,729.39	1,717.97	1,145.76	3.002	ES, SF
PHARAOH 4N - ORIGINAL WELLBORE - PROPOSAL #	364.91	369.91	1,923.59	1,922.22	1,398.800	CC
PHARAOH 4N - ORIGINAL WELLBORE - PROPOSAL #	16,821.88	16,837.62	2,016.61	1,444.25	3.523	ES, SF
PHARAOH 5N - ORIGINAL WELLBORE - PROPOSAL #	264.91	269.91	1,938.53	1,937.60	2,094.254	CC
PHARAOH 5N - ORIGINAL WELLBORE - PROPOSAL #	16,821.88	16,732.69	2,302.78	1,732.27	4.036	ES, SF
SE NE SEC. 36 T5N R64W 6th P.M. (PYRAMID)						
ABDN VERT HOSHIKO #1 - Wellbore #1 - Wellbore #1	12,305.46	6,584.56	730.34	569.61	4.544	CC, ES
ABDN VERT HOSHIKO #1 - Wellbore #1 - Wellbore #1	12,400.00	6,584.32	736.43	573.06	4.508	SF
ABDN VERT ROTHE STATE B #36-15 - Wellbore #1 - W	8,157.03	6,550.00	2,104.22	2,057.26	44.808	CC
ABDN VERT ROTHE STATE B #36-15 - Wellbore #1 - W	8,200.00	6,550.00	2,104.66	2,056.59	43.785	ES
ABDN VERT ROTHE STATE B #36-15 - Wellbore #1 - W	10,900.00	6,550.00	3,457.12	3,335.42	28.408	SF
ABDN VERT ROTHE STATE B #36-16 - Wellbore #1 - W	7,110.90	6,550.00	1,838.38	1,814.85	78.137	CC
ABDN VERT ROTHE STATE B #36-16 - Wellbore #1 - W	7,122.32	6,550.00	1,838.42	1,814.71	77.549	ES
ABDN VERT ROTHE STATE B #36-16 - Wellbore #1 - W	12,700.00	6,416.49	5,881.99	5,710.30	34.259	SF
ABDN VERT STATE #1-36 - Wellbore #1 - Design #1	11,070.92	6,559.19	702.10	446.64	2.748	CC
ABDN VERT STATE #1-36 - Wellbore #1 - Design #1	11,100.00	6,559.17	702.70	446.43	2.742	ES, SF
EXIST DD ECKHARDT B #35-12 - Wellbore #1 - Wellbor	16,172.20	6,729.41	622.51	351.99	2.301	CC
EXIST DD ECKHARDT B #35-12 - Wellbore #1 - Wellbor	16,200.00	6,729.51	623.13	351.83	2.297	ES, SF
EXIST DD ECKHARDT B #35-13 - Wellbore #1 - Wellbor	16,319.85	6,657.28	2,138.19	1,863.84	7.794	CC
EXIST DD ECKHARDT B #35-13 - Wellbore #1 - Wellbor	16,400.00	6,656.79	2,139.69	1,863.10	7.736	ES
EXIST DD ECKHARDT B #35-13 - Wellbore #1 - Wellbor	16,800.00	6,654.34	2,191.44	1,903.62	7.614	SF
EXIST DD MARLEY C #1-28D - Wellbore #1 - Wellbore #	9,161.44	6,820.06	2,469.11	2,377.72	27.019	CC
EXIST DD MARLEY C #1-28D - Wellbore #1 - Wellbore #	9,200.00	6,820.68	2,469.41	2,376.98	26.716	ES
EXIST DD MARLEY C #1-28D - Wellbore #1 - Wellbore #	11,000.00	6,853.47	3,078.33	2,936.26	21.667	SF
EXIST DD MARLEY C #1-30D - Wellbore #1 - Wellbore #	11,820.53	6,684.60	2,710.76	2,548.31	16.687	CC
EXIST DD MARLEY C #1-30D - Wellbore #1 - Wellbore #	11,900.00	6,684.62	2,711.93	2,547.26	16.469	ES
EXIST DD MARLEY C #1-30D - Wellbore #1 - Wellbore #	13,100.00	6,684.95	2,997.54	2,799.33	15.123	SF
EXIST HZ SOONER STATE B #36-63HN - Wellbore #1 -	6,206.71	6,194.00	1,491.26	1,459.41	46.820	CC
EXIST HZ SOONER STATE B #36-63HN - Wellbore #1 -	11,200.00	11,040.62	1,671.34	1,415.28	6.527	ES
EXIST HZ SOONER STATE B #36-63HN - Wellbore #1 -	11,400.00	11,055.00	1,691.15	1,429.12	6.454	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 PYRAMID 5N
Project:	WELD COUNTY, COLORADO (TRUE)	TVD Reference:	KB-EST @ 4611.00usft (Original Well Elev)
Reference Site:	SE NE SEC. 36 T5N R64W 6th P.M. (PYRAMID)	MD Reference:	KB-EST @ 4611.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PYRAMID 5N	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 #2	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 NE SEC. 36 T5N R64W 6th P.M. (PYRAMID)						
EXIST VERT BAKER STATE B #36-11 - Wellbore #1 - W	9,782.04	6,565.62	675.54	584.96	7.457	CC
EXIST VERT BAKER STATE B #36-11 - Wellbore #1 - W	9,800.00	6,565.50	675.78	584.70	7.420	ES
EXIST VERT BAKER STATE B #36-11 - Wellbore #1 - W	9,900.00	6,564.87	685.76	591.92	7.308	SF
EXIST VERT BAKER STATE B #36-12 - Wellbore #1 - W	10,978.54	6,562.12	678.68	554.94	5.485	CC
EXIST VERT BAKER STATE B #36-12 - Wellbore #1 - W	11,000.00	6,562.07	679.02	554.69	5.461	ES
EXIST VERT BAKER STATE B #36-12 - Wellbore #1 - W	11,100.00	6,561.84	689.46	562.35	5.424	SF
EXIST VERT BAKER STATE B #36-13 - Wellbore #1 - W	11,063.53	6,600.00	1,966.35	1,840.18	15.585	CC
EXIST VERT BAKER STATE B #36-13 - Wellbore #1 - W	11,100.00	6,600.00	1,966.69	1,839.50	15.463	ES
EXIST VERT BAKER STATE B #36-13 - Wellbore #1 - W	11,900.00	6,573.49	2,136.69	1,987.18	14.291	SF
EXIST VERT BAKER STATE B #36-14 - Wellbore #1 - W	9,680.05	6,600.00	2,101.31	2,013.44	23.913	CC
EXIST VERT BAKER STATE B #36-14 - Wellbore #1 - W	9,700.00	6,600.00	2,101.41	2,012.98	23.765	ES
EXIST VERT BAKER STATE B #36-14 - Wellbore #1 - W	11,100.00	6,600.00	2,536.09	2,408.89	19.938	SF
EXIST VERT CLYNCKE STATE B #36-20 - Wellbore #1	10,336.75	6,550.00	163.63	57.87	1.547	CC, ES, SF
EXIST VERT CLYNCKE STATE B #36-25 - Wellbore #1	10,293.36	6,550.00	1,233.98	1,129.20	11.776	CC
EXIST VERT CLYNCKE STATE B #36-25 - Wellbore #1	10,300.00	6,550.00	1,234.00	1,129.03	11.756	ES
EXIST VERT CLYNCKE STATE B #36-25 - Wellbore #1	10,700.00	6,550.00	1,299.26	1,183.20	11.195	SF
EXIST VERT CPC-HOSHIKO #35-1 - Wellbore #1 - Well	15,695.17	6,600.00	681.91	426.04	2.665	CC
EXIST VERT CPC-HOSHIKO #35-1 - Wellbore #1 - Well	15,700.00	6,600.00	681.93	425.93	2.664	ES, SF
EXIST VERT ECKHARDT B #35-33 - Wellbore #1 - Well	16,720.55	6,603.34	1,473.78	1,189.36	5.182	CC
EXIST VERT ECKHARDT B #35-33 - Wellbore #1 - Well	16,800.00	6,605.58	1,475.92	1,189.27	5.149	ES
EXIST VERT ECKHARDT B #35-33 - Wellbore #1 - Well	16,821.88	6,606.21	1,477.26	1,190.00	5.143	SF
EXIST VERT HOSHIKO #2 - Wellbore #1 - Wellbore #1	13,640.59	6,603.80	1,967.56	1,769.21	9.920	CC
EXIST VERT HOSHIKO #2 - Wellbore #1 - Wellbore #1	13,700.00	6,604.15	1,968.46	1,768.45	9.842	ES
EXIST VERT HOSHIKO #2 - Wellbore #1 - Wellbore #1	14,200.00	6,607.24	2,045.54	1,831.52	9.558	SF
EXIST VERT HOSHIKO #35-10H4 - Wellbore #1 - Wellb	13,814.32	6,600.53	569.18	365.96	2.801	CC, ES
EXIST VERT HOSHIKO #35-10H4 - Wellbore #1 - Wellb	13,900.00	6,600.19	575.60	369.98	2.799	SF
EXIST VERT HOSHIKO #35-16H4 - Wellbore #1 - Desig	12,246.36	6,603.35	2,196.95	1,909.28	7.637	CC
EXIST VERT HOSHIKO #35-16H4 - Wellbore #1 - Desig	12,300.00	6,603.31	2,197.61	1,908.44	7.600	ES
EXIST VERT HOSHIKO #35-16H4 - Wellbore #1 - Desig	12,700.00	6,603.02	2,243.30	1,942.95	7.469	SF
EXIST VERT HOSHIKO B #35-14 - Wellbore #1 - Wellbo	15,149.86	6,628.71	2,055.29	1,814.88	8.549	CC
EXIST VERT HOSHIKO B #35-14 - Wellbore #1 - Wellbo	15,200.00	6,628.12	2,055.90	1,814.09	8.502	ES
EXIST VERT HOSHIKO B #35-14 - Wellbore #1 - Wellbo	15,600.00	6,623.25	2,104.00	1,850.96	8.315	SF
EXIST VERT HOSHIKO B #35-23 - Wellbore #1 - Wellbo	12,918.72	6,607.40	1,467.12	1,289.04	8.238	CC
EXIST VERT HOSHIKO B #35-23 - Wellbore #1 - Wellbo	13,000.00	6,607.81	1,469.37	1,289.01	8.147	ES
EXIST VERT HOSHIKO B #35-23 - Wellbore #1 - Wellbo	13,300.00	6,609.35	1,515.85	1,327.10	8.031	SF
EXIST VERT LOLOFF #35-6 - Wellbore #1 - Wellbore #1	14,919.10	6,583.10	403.72	169.63	1.725	CC, ES, SF
EXIST VERT LOLOFF #35-8 - Wellbore #1 - Wellbore #1	12,268.28	6,565.76	725.27	565.53	4.540	CC
EXIST VERT LOLOFF #35-8 - Wellbore #1 - Wellbore #1	12,300.00	6,565.70	725.96	565.34	4.520	ES
EXIST VERT LOLOFF #35-8 - Wellbore #1 - Wellbore #1	12,400.00	6,565.51	737.14	573.72	4.511	SF
EXIST VERT LOLOFF #4 - Wellbore #1 - Wellbore #1	13,661.45	6,564.76	653.09	454.14	3.283	CC, ES
EXIST VERT LOLOFF #4 - Wellbore #1 - Wellbore #1	13,700.00	6,564.71	654.23	454.20	3.271	SF
EXIST VERT LOLOFF B #35-17 - Wellbore #1 - Wellbore	13,020.64	6,580.07	1,352.14	1,171.08	7.468	CC, ES
EXIST VERT LOLOFF B #35-17 - Wellbore #1 - Wellbore	13,300.00	6,578.60	1,380.69	1,191.82	7.310	SF
EXIST VERT LOLOFF B #35-19 - Wellbore #1 - Design #	15,657.43	6,609.86	1,298.80	915.55	3.389	CC
EXIST VERT LOLOFF B #35-19 - Wellbore #1 - Design #	15,700.00	6,609.83	1,299.49	915.05	3.380	ES
EXIST VERT LOLOFF B #35-19 - Wellbore #1 - Design #	15,800.00	6,609.75	1,306.60	919.35	3.374	SF
EXIST VERT LOLOFF B #35-20 - Wellbore #1 - Wellbore	15,545.56	6,600.39	110.83	-141.07	0.440	Level 1, CC, ES, SF
EXIST VERT LOLOFF B #35-21 - Wellbore #1 - Wellbore	14,377.17	6,592.29	207.36	-11.16	0.949	Level 1, CC, ES, SF
EXIST VERT LOLOFF B #35-22 - Wellbore #1 - Wellbore	12,952.77	6,569.83	200.25	21.37	1.119	Level 2, CC, ES, SF
EXIST VERT ROTHE STATE B #36-10 - Wellbore #1 - W	8,208.85	6,550.00	807.68	759.51	16.770	CC, ES
EXIST VERT ROTHE STATE B #36-10 - Wellbore #1 - W	8,600.00	6,550.00	897.41	838.95	15.352	SF
EXIST VERT ROTHE STATE B #36-7 - Wellbore #1 - We	8,087.99	6,500.00	606.35	561.63	13.561	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 PYRAMID 5N
Project:	WELD COUNTY, COLORADO (TRUE)	TVD Reference:	KB-EST @ 4611.00usft (Original Well Elev)
Reference Site:	SE NE SEC. 36 T5N R64W 6th P.M. (PYRAMID)	MD Reference:	KB-EST @ 4611.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PYRAMID 5N	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 #2	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						
SE NE SEC. 36 T5N R64W 6th P.M. (PYRAMID)						
EXIST VERT ROTHE STATE B #36-7 - Wellbore #1 - We	8,100.00	6,500.00	606.46	561.45	13.472	ES
EXIST VERT ROTHE STATE B #36-7 - Wellbore #1 - We	8,300.00	6,500.00	642.34	592.17	12.802	SF
EXIST VERT ROTHE STATE B #36-8 - Wellbore #1 - We	1,837.26	1,790.54	158.06	151.58	24.383	CC, ES
EXIST VERT ROTHE STATE B #36-8 - Wellbore #1 - We	2,100.00	2,044.83	171.16	163.54	22.455	SF
EXIST VERT ROTHE STATE B #36-9 - Wellbore #1 - We	6,839.13	6,505.96	669.04	648.98	33.362	CC, ES
EXIST VERT ROTHE STATE B #36-9 - Wellbore #1 - We	7,400.00	6,550.00	867.96	839.24	30.219	SF
EXIST VERT STATE #22-36 - Wellbore #1 - Design #1	9,948.01	6,574.00	761.82	538.35	3.409	CC, ES
EXIST VERT STATE #22-36 - Wellbore #1 - Design #1	10,000.00	6,573.96	763.60	538.68	3.395	SF
EXIST VERT STROH #1 - Wellbore #1 - Wellbore #1	16,341.19	6,400.00	716.82	452.13	2.708	CC, ES
EXIST VERT STROH #1 - Wellbore #1 - Wellbore #1	16,400.00	6,400.00	719.22	452.94	2.701	SF
PYRAMID 1N - ORIGINAL WELLBORE - PROPOSAL #2	600.00	600.00	60.01	57.59	24.790	CC, ES
PYRAMID 1N - ORIGINAL WELLBORE - PROPOSAL #2	16,821.88	16,744.81	1,100.23	528.68	1.925	SF
PYRAMID 2N - ORIGINAL WELLBORE - PROPOSAL #2	600.00	600.00	44.99	42.57	18.587	CC, ES
PYRAMID 2N - ORIGINAL WELLBORE - PROPOSAL #2	16,821.88	16,671.47	833.29	263.64	1.463	Level 3, SF
PYRAMID 3N - ORIGINAL WELLBORE - PROPOSAL #2	600.00	600.00	29.98	27.56	12.387	CC
PYRAMID 3N - ORIGINAL WELLBORE - PROPOSAL #2	16,821.88	16,763.37	510.05	-61.44	0.892	Level 1, ES, SF
PYRAMID 4N - ORIGINAL WELLBORE - PROPOSAL #2	600.00	600.00	15.01	12.59	6.201	CC
PYRAMID 4N - ORIGINAL WELLBORE - PROPOSAL #2	16,821.88	16,704.30	299.53	-254.44	0.541	Level 1, ES, SF
PYRAMID 6N - ORIGINAL WELLBORE - PROPOSAL #2	500.00	500.00	15.01	13.04	7.615	CC
PYRAMID 6N - ORIGINAL WELLBORE - PROPOSAL #2	16,821.88	16,812.00	300.47	-255.88	0.540	Level 1, ES, SF
PYRAMID 7N - ORIGINAL WELLBORE - PROPOSAL #2	400.00	400.00	29.98	28.46	19.705	CC
PYRAMID 7N - ORIGINAL WELLBORE - PROPOSAL #2	16,821.88	16,943.86	546.50	-24.99	0.956	Level 1, ES, SF
PYRAMID 8N - ORIGINAL WELLBORE - PROPOSAL #2	300.00	300.00	45.00	43.92	41.968	CC, ES
PYRAMID 8N - ORIGINAL WELLBORE - PROPOSAL #2	16,821.88	16,978.48	844.12	273.81	1.480	Level 3, SF

Offset Design NE SE SEC. 36 T5N R64W 6th P.M. (PHARAOH) - PHARAOH 1N - ORIGINAL WELLBORE - PROPO												Offset Site Error:	0.00 usft
Survey Program: O-MWD												Offset Well Error:	0.00 usft
Reference Measured Depth (usft)	Vertical Depth (usft)	Offset Measured Depth (usft)	Vertical Depth (usft)	Semi Major Axis Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	5.00	5.00	0.00	0.00	174.79	-1,871.04	170.74	1,878.82				
100.00	100.00	105.00	105.00	0.09	0.10	174.79	-1,871.04	170.74	1,878.82	1,878.63	0.18	N/A	
200.00	200.00	205.00	205.00	0.31	0.32	174.79	-1,871.04	170.74	1,878.82	1,878.18	0.63	2,964.181	
300.00	300.00	305.00	305.00	0.54	0.55	174.79	-1,871.04	170.74	1,878.82	1,877.73	1.08	1,734.231	
400.00	400.00	405.00	405.00	0.76	0.77	174.79	-1,871.04	170.74	1,878.82	1,877.28	1.53	1,225.659	
500.00	500.00	505.00	505.00	0.99	1.00	174.79	-1,871.04	170.74	1,878.82	1,876.84	1.98	947.732	
600.00	600.00	605.00	605.00	1.21	1.22	174.79	-1,871.04	170.74	1,878.82	1,876.39	2.43	772.550	
700.00	699.98	704.98	704.98	1.41	1.45	27.34	-1,871.04	170.74	1,877.27	1,874.41	2.86	656.867	
800.00	799.84	804.84	804.84	1.60	1.67	27.46	-1,871.04	170.74	1,872.62	1,869.35	3.27	572.711	
900.00	899.45	904.45	904.45	1.81	1.89	27.66	-1,871.04	170.74	1,864.89	1,861.19	3.69	505.029	
1,000.00	998.70	1,003.70	1,003.70	2.06	2.12	27.93	-1,871.04	170.74	1,854.09	1,849.96	4.13	449.336	
1,100.00	1,097.47	1,102.47	1,102.47	2.35	2.34	28.29	-1,871.04	170.74	1,840.25	1,835.68	4.57	402.480	
1,200.00	1,195.62	1,200.62	1,200.62	2.69	2.56	28.74	-1,871.04	170.74	1,823.42	1,818.38	5.03	362.256	
1,300.00	1,293.06	1,298.06	1,298.06	3.09	2.78	29.28	-1,871.04	170.74	1,803.63	1,798.11	5.51	327.116	
1,310.36	1,303.11	1,308.11	1,308.11	3.13	2.80	29.34	-1,871.04	170.74	1,801.41	1,795.84	5.56	323.719	
1,400.00	1,390.00	1,395.00	1,395.00	3.53	3.00	29.68	-1,871.04	170.74	1,782.12	1,776.10	6.03	295.745	
1,500.00	1,486.94	1,491.94	1,491.94	4.00	3.22	30.07	-1,871.04	170.74	1,760.68	1,754.13	6.55	268.642	
1,600.00	1,583.88	1,588.88	1,588.88	4.49	3.43	30.48	-1,871.04	170.74	1,739.32	1,732.23	7.09	245.179	
1,700.00	1,680.83	1,668.50	1,668.49	4.98	3.60	30.79	-1,871.36	171.50	1,718.48	1,710.89	7.59	226.384	

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