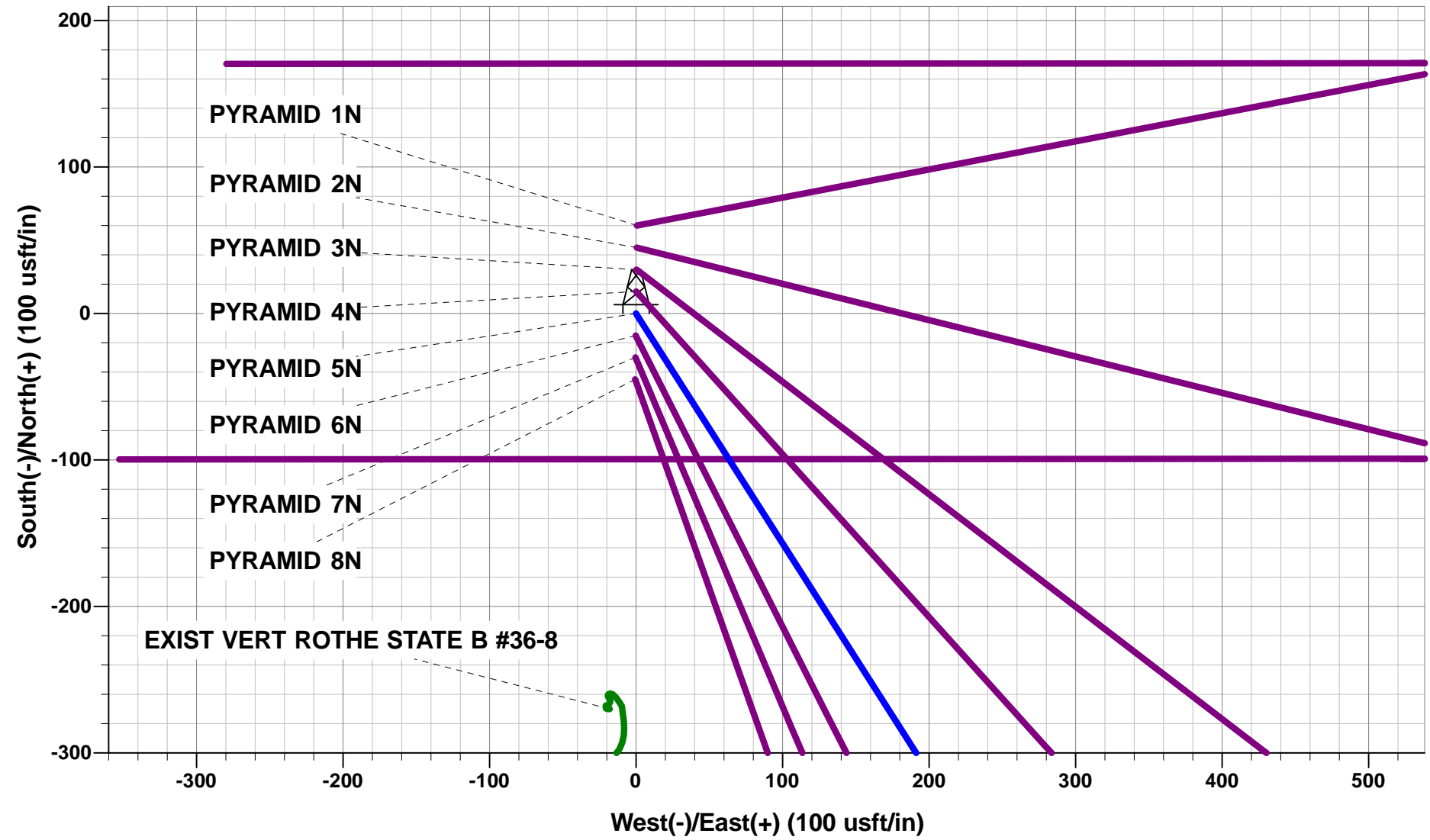




Project: WELD COUNTY, COLORADO (TRUE)  
Site: SE NE SEC. 36 T5N R64W 6th P.M. (PYRAMID)  
Well: PYRAMID 5N  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #1

ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	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	-39.97	87.62	EOB TO 14.21° INC	
4963.69	5086.45	14.21	147.48	-855.34	545.33	-462.72	1014.39	END OF TANGENT	
5666.80	5796.81	0.00	0.00	-929.22	592.43	-502.69	1102.01	EOD TO VERTICAL	
5866.80	5996.81	0.00	0.00	-929.22	592.43	-502.69	1102.01	KOP (8°/100ft BUR)	
6583.00	7122.32	90.04	269.97	-929.60	-124.27	210.89	1818.71	EP: 2610ft FNL & 737ft FEL of Sec 36	
6576.00	16921.85	90.04	269.97	-934.64	-9923.80	9967.72	11618.24	BHL: 2610ft FNL & 50ft 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	-104.488399
EP - PYRAMID 5N	6583.00	-929.60	-124.27	40.355969	-104.490971
BHL - PYRAMID 5N	6576.00	-934.64	-9923.80	40.355950	-104.526132

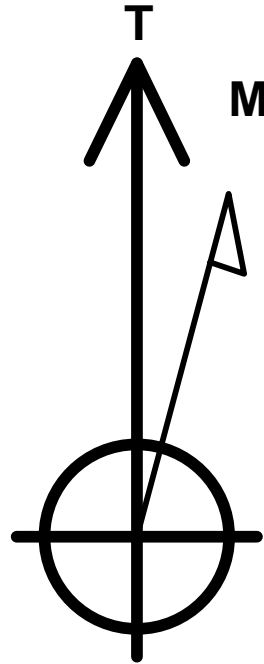


PROPOSED LOCAL COORDINATES:

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

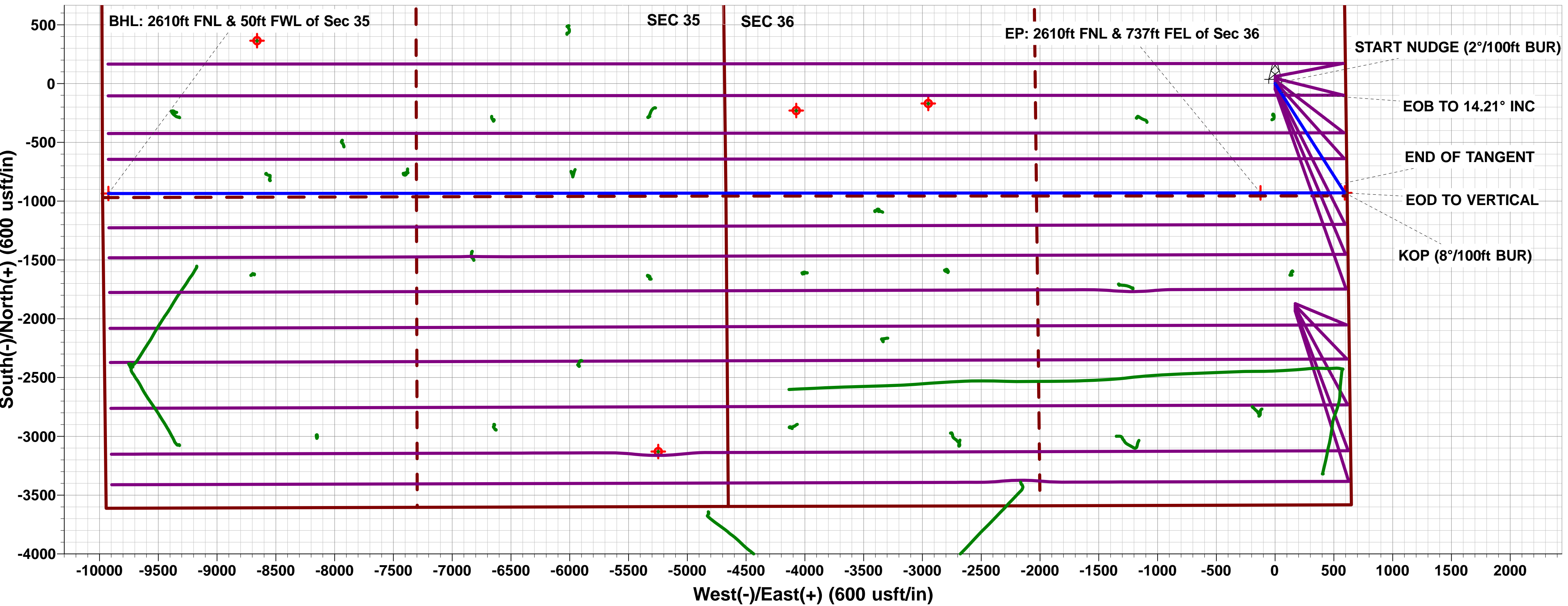
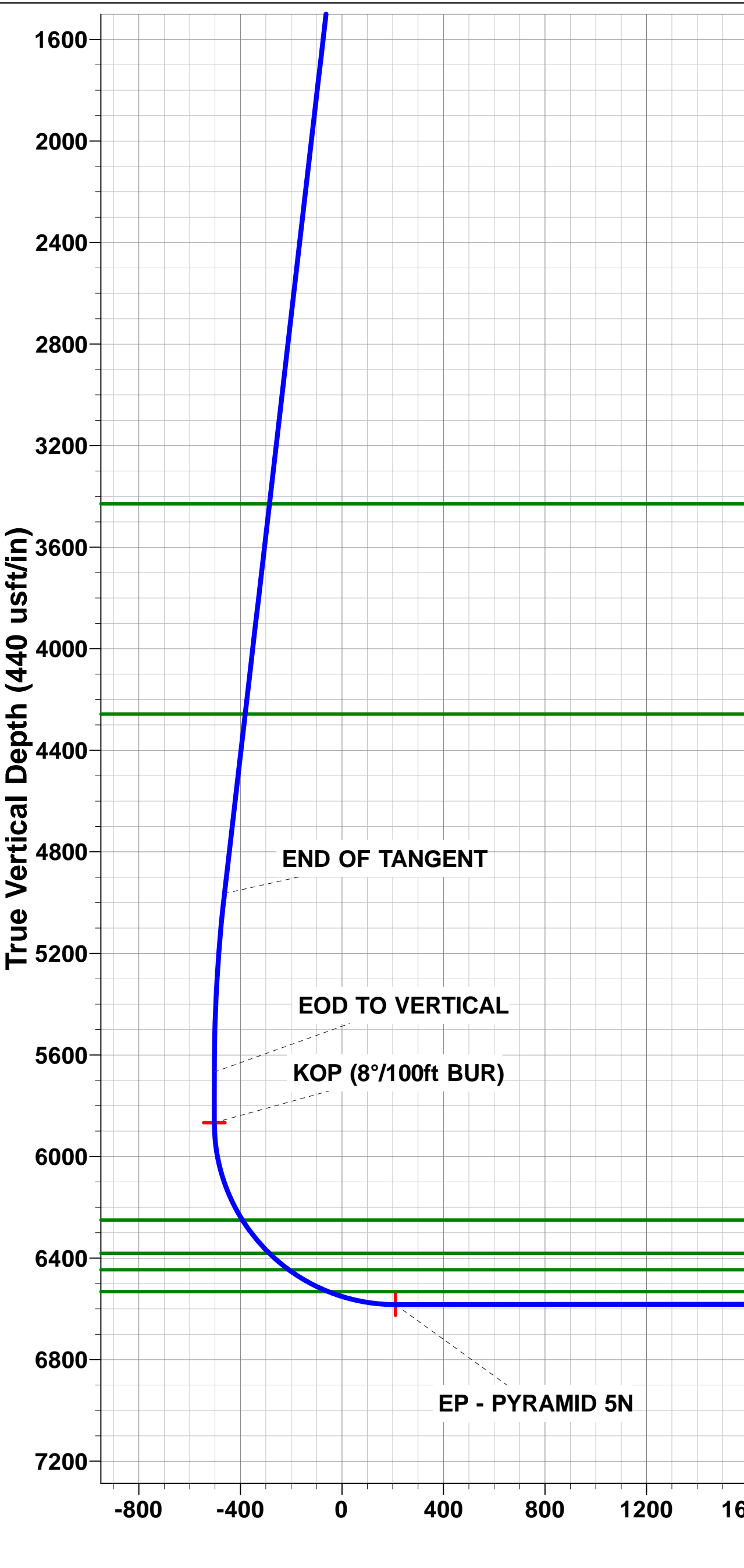
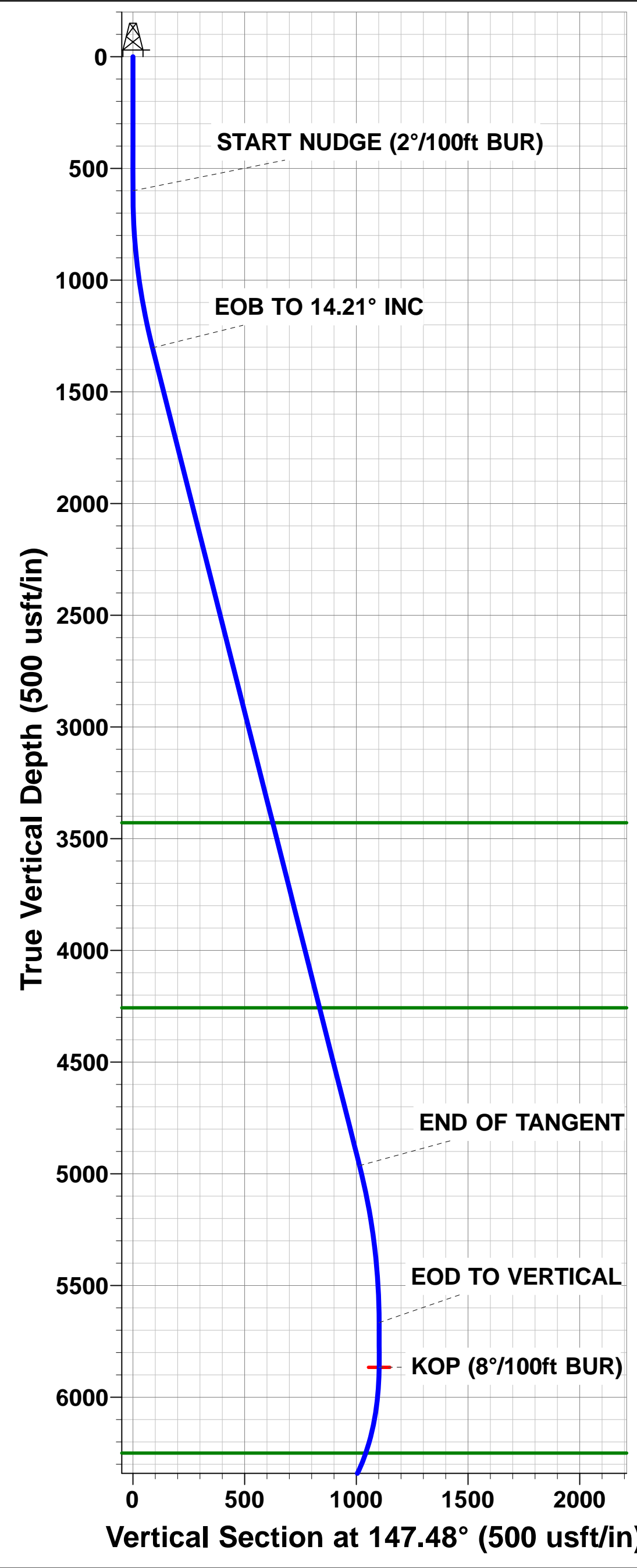
EP: 2610ft FNL & 737ft FEL of Sec 36

BHL: 2610ft FNL & 50ft 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 #1**

## **Anticollision Report**

**20 February, 2018**



<b>Company:</b>	PDC ENERGY	<b>Local Co-ordinate Reference:</b>	Well PYRAMID 5N
<b>Project:</b>	WELD COUNTY, COLORADO (TRUE)	<b>TVD Reference:</b>	KB-EST @ 4611.00usft (Original Well Elev)
<b>Reference Site:</b>	SE NE SEC. 36 T5N R64W 6th P.M. (PYRAMID)	<b>MD Reference:</b>	KB-EST @ 4611.00usft (Original Well Elev)
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	PYRAMID 5N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 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 100.00usft	<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 9,999.98 usft	<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>	20/02/2018		
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.00	16,921.85	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
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 #	16,921.85	16,860.61	1,147.07	568.46	1.982	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 #	16,921.85	16,934.77	1,439.03	861.56	2.492	ES, SF
PHARAOH 3N - ORIGINAL WELLBORE - PROPOSAL #	5,195.70	4,843.25	1,766.02	1,735.71	58.264	CC
PHARAOH 3N - ORIGINAL WELLBORE - PROPOSAL #	16,921.85	16,829.85	1,828.25	1,250.56	3.165	ES, SF
PHARAOH 4N - ORIGINAL WELLBORE - PROPOSAL #	364.91	369.91	1,923.59	1,922.21	1,398.797	CC
PHARAOH 4N - ORIGINAL WELLBORE - PROPOSAL #	16,921.85	16,987.08	2,217.17	1,640.07	3.842	ES, SF
PHARAOH 5N - ORIGINAL WELLBORE - PROPOSAL #	264.91	269.91	1,938.53	1,937.60	2,094.250	CC
PHARAOH 5N - ORIGINAL WELLBORE - PROPOSAL #	16,921.85	16,981.54	2,477.99	1,900.83	4.293	ES, SF
SE NE SEC. 36 T5N R64W 6th P.M. (PYRAMID)						
ABDN VERT HOSHIKO #1 - Wellbore #1 - Wellbore #1	12,305.46	6,584.58	730.37	569.64	4.544	CC, ES
ABDN VERT HOSHIKO #1 - Wellbore #1 - Wellbore #1	12,400.00	6,584.34	736.47	573.09	4.508	SF
ABDN VERT ROTHE STATE B #36-15 - Wellbore #1 - W	8,157.02	6,550.00	2,104.23	2,057.25	44.798	CC
ABDN VERT ROTHE STATE B #36-15 - Wellbore #1 - W	8,200.00	6,550.00	2,104.66	2,056.59	43.776	ES
ABDN VERT ROTHE STATE B #36-15 - Wellbore #1 - W	10,900.00	6,550.00	3,457.13	3,335.43	28.407	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	6,416.51	5,882.00	5,710.31	34.259	SF
ABDN VERT STATE #1-36 - Wellbore #1 - Design #1	11,070.92	6,559.21	702.08	446.61	2.748	CC
ABDN VERT STATE #1-36 - Wellbore #1 - Design #1	11,100.00	6,559.19	702.68	446.41	2.742	ES, SF
EXIST DD ECKHARDT B #35-12 - Wellbore #1 - Wellbor	16,172.18	6,729.47	622.62	352.10	2.302	CC
EXIST DD ECKHARDT B #35-12 - Wellbore #1 - Wellbor	16,200.00	6,729.57	623.24	351.94	2.297	ES, SF
EXIST DD ECKHARDT B #35-13 - Wellbore #1 - Wellbor	16,319.79	6,657.34	2,138.30	1,863.96	7.794	CC
EXIST DD ECKHARDT B #35-13 - Wellbore #1 - Wellbor	16,400.00	6,656.85	2,139.81	1,863.21	7.736	ES
EXIST DD ECKHARDT B #35-13 - Wellbore #1 - Wellbor	16,800.00	6,654.40	2,191.56	1,903.74	7.614	SF
EXIST DD MARLEY C #1-28D - Wellbore #1 - Wellbore #	9,161.42	6,820.06	2,469.11	2,377.72	27.017	CC
EXIST DD MARLEY C #1-28D - Wellbore #1 - Wellbore #	9,200.00	6,820.69	2,469.41	2,376.97	26.714	ES
EXIST DD MARLEY C #1-28D - Wellbore #1 - Wellbore #	11,000.00	6,853.49	3,078.35	2,936.27	21.667	SF
EXIST DD MARLEY C #1-30D - Wellbore #1 - Wellbore #	11,820.50	6,684.62	2,710.79	2,548.34	16.687	CC
EXIST DD MARLEY C #1-30D - Wellbore #1 - Wellbore #	11,900.00	6,684.64	2,711.96	2,547.29	16.469	ES
EXIST DD MARLEY C #1-30D - Wellbore #1 - Wellbore #	13,100.00	6,684.98	2,997.59	2,799.38	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	1,671.36	1,415.30	6.527	ES
EXIST HZ SOONER STATE B #36-63HN - Wellbore #1 -	11,400.00	11,055.00	1,691.17	1,429.14	6.454	SF

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

<b>Company:</b>	PDC ENERGY	<b>Local Co-ordinate Reference:</b>	Well PYRAMID 5N
<b>Project:</b>	WELD COUNTY, COLORADO (TRUE)	<b>TVD Reference:</b>	KB-EST @ 4611.00usft (Original Well Elev)
<b>Reference Site:</b>	SE NE SEC. 36 T5N R64W 6th P.M. (PYRAMID)	<b>MD Reference:</b>	KB-EST @ 4611.00usft (Original Well Elev)
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	PYRAMID 5N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 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
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	675.55	584.96	7.457	CC
EXIST VERT BAKER STATE B #36-11 - Wellbore #1 - W	9,800.00	6,565.51	675.79	584.70	7.419	ES
EXIST VERT BAKER STATE B #36-11 - Wellbore #1 - W	9,900.00	6,564.88	685.77	591.93	7.308	SF
EXIST VERT BAKER STATE B #36-12 - Wellbore #1 - W	10,978.53	6,562.13	678.70	554.96	5.485	CC
EXIST VERT BAKER STATE B #36-12 - Wellbore #1 - W	11,000.00	6,562.08	679.04	554.70	5.461	ES
EXIST VERT BAKER STATE B #36-12 - Wellbore #1 - W	11,100.00	6,561.85	689.49	562.36	5.424	SF
EXIST VERT BAKER STATE B #36-13 - Wellbore #1 - W	11,063.51	6,600.00	1,966.37	1,840.20	15.585	CC
EXIST VERT BAKER STATE B #36-13 - Wellbore #1 - W	11,100.00	6,600.00	1,966.71	1,839.52	15.463	ES
EXIST VERT BAKER STATE B #36-13 - Wellbore #1 - W	11,900.00	6,573.51	2,136.72	1,987.20	14.291	SF
EXIST VERT BAKER STATE B #36-14 - Wellbore #1 - W	9,680.03	6,600.00	2,101.32	2,013.44	23.911	CC
EXIST VERT BAKER STATE B #36-14 - Wellbore #1 - W	9,700.00	6,600.00	2,101.41	2,012.99	23.764	ES
EXIST VERT BAKER STATE B #36-14 - Wellbore #1 - W	11,100.00	6,600.00	2,536.11	2,408.91	19.937	SF
EXIST VERT CLYNCKE STATE B #36-20 - Wellbore #1	10,336.75	6,550.00	163.65	57.88	1.547	CC, ES, SF
EXIST VERT CLYNCKE STATE B #36-25 - Wellbore #1	10,293.35	6,550.00	1,234.00	1,129.21	11.776	CC
EXIST VERT CLYNCKE STATE B #36-25 - Wellbore #1	10,300.00	6,550.00	1,234.02	1,129.04	11.756	ES
EXIST VERT CLYNCKE STATE B #36-25 - Wellbore #1	10,700.00	6,550.00	1,299.27	1,183.21	11.195	SF
EXIST VERT CPC-HOSHIKO #35-1 - Wellbore #1 - Well	15,695.16	6,600.00	682.01	426.14	2.665	CC
EXIST VERT CPC-HOSHIKO #35-1 - Wellbore #1 - Well	15,700.00	6,600.00	682.03	426.02	2.664	ES, SF
EXIST VERT ECKHARDT B #35-33 - Wellbore #1 - Well	16,720.51	6,603.42	1,473.91	1,189.48	5.182	CC
EXIST VERT ECKHARDT B #35-33 - Wellbore #1 - Well	16,800.00	6,605.67	1,476.05	1,189.40	5.149	ES
EXIST VERT ECKHARDT B #35-33 - Wellbore #1 - Well	16,921.85	6,609.24	1,487.58	1,197.53	5.129	SF
EXIST VERT HOSHIKO #2 - Wellbore #1 - Wellbore #1	13,640.55	6,603.83	1,967.62	1,769.27	9.920	CC
EXIST VERT HOSHIKO #2 - Wellbore #1 - Wellbore #1	13,700.00	6,604.19	1,968.52	1,768.50	9.842	ES
EXIST VERT HOSHIKO #2 - Wellbore #1 - Wellbore #1	14,200.00	6,607.28	2,045.61	1,831.59	9.558	SF
EXIST VERT HOSHIKO #35-10H4 - Wellbore #1 - Wellb	13,814.31	6,600.57	569.24	366.02	2.801	CC, ES
EXIST VERT HOSHIKO #35-10H4 - Wellbore #1 - Wellb	13,900.00	6,600.23	575.66	370.03	2.800	SF
EXIST VERT HOSHIKO #35-16H4 - Wellbore #1 - Desig	12,246.33	6,603.37	2,196.99	1,909.31	7.637	CC
EXIST VERT HOSHIKO #35-16H4 - Wellbore #1 - Desig	12,300.00	6,603.33	2,197.64	1,908.47	7.600	ES
EXIST VERT HOSHIKO #35-16H4 - Wellbore #1 - Desig	12,700.00	6,603.04	2,243.34	1,942.99	7.469	SF
EXIST VERT HOSHIKO B #35-14 - Wellbore #1 - Wellbo	15,149.81	6,628.77	2,055.37	1,814.97	8.550	CC
EXIST VERT HOSHIKO B #35-14 - Wellbore #1 - Wellbo	15,200.00	6,628.18	2,055.99	1,814.17	8.502	ES
EXIST VERT HOSHIKO B #35-14 - Wellbore #1 - Wellbo	15,600.00	6,623.32	2,104.09	1,851.06	8.315	SF
EXIST VERT HOSHIKO B #35-23 - Wellbore #1 - Wellbo	12,918.69	6,607.43	1,467.16	1,289.08	8.239	CC
EXIST VERT HOSHIKO B #35-23 - Wellbore #1 - Wellbo	13,000.00	6,607.84	1,469.41	1,289.06	8.147	ES
EXIST VERT HOSHIKO B #35-23 - Wellbore #1 - Wellbo	13,300.00	6,609.39	1,515.90	1,327.15	8.031	SF
EXIST VERT LOLOFF #35-6 - Wellbore #1 - Wellbore #1	14,919.10	6,583.15	403.64	169.55	1.724	CC, ES, SF
EXIST VERT LOLOFF #35-8 - Wellbore #1 - Wellbore #1	12,268.29	6,565.78	725.24	565.49	4.540	CC
EXIST VERT LOLOFF #35-8 - Wellbore #1 - Wellbore #1	12,300.00	6,565.72	725.93	565.30	4.519	ES
EXIST VERT LOLOFF #35-8 - Wellbore #1 - Wellbore #1	12,400.00	6,565.53	737.10	573.68	4.510	SF
EXIST VERT LOLOFF #4 - Wellbore #1 - Wellbore #1	13,661.46	6,564.80	653.03	454.08	3.282	CC, ES
EXIST VERT LOLOFF #4 - Wellbore #1 - Wellbore #1	13,700.00	6,564.75	654.17	454.14	3.270	SF
EXIST VERT LOLOFF B #35-17 - Wellbore #1 - Wellbore	13,020.66	6,580.09	1,352.09	1,171.03	7.468	CC, ES
EXIST VERT LOLOFF B #35-17 - Wellbore #1 - Wellbore	13,300.00	6,578.63	1,380.64	1,191.77	7.310	SF
EXIST VERT LOLOFF B #35-19 - Wellbore #1 - Design #	15,657.46	6,609.92	1,298.70	915.45	3.389	CC
EXIST VERT LOLOFF B #35-19 - Wellbore #1 - Design #	15,700.00	6,609.89	1,299.39	914.95	3.380	ES
EXIST VERT LOLOFF B #35-19 - Wellbore #1 - Design #	15,800.00	6,609.81	1,306.50	919.25	3.374	SF
EXIST VERT LOLOFF B #35-20 - Wellbore #1 - Wellbore	15,545.56	6,600.45	110.74	-141.17	0.440	Level 1, CC, ES, SF
EXIST VERT LOLOFF B #35-21 - Wellbore #1 - Wellbore	14,377.17	6,592.34	207.29	-11.23	0.949	Level 1, CC, ES, SF
EXIST VERT LOLOFF B #35-22 - Wellbore #1 - Wellbore	12,952.77	6,569.86	200.21	21.32	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	16.767	CC, ES
EXIST VERT ROTHE STATE B #36-10 - Wellbore #1 - W	8,600.00	6,550.00	897.41	838.95	15.350	SF
EXIST VERT ROTHE STATE B #36-7 - Wellbore #1 - We	8,087.99	6,500.00	606.34	561.62	13.558	CC

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

<b>Company:</b>	PDC ENERGY	<b>Local Co-ordinate Reference:</b>	Well PYRAMID 5N
<b>Project:</b>	WELD COUNTY, COLORADO (TRUE)	<b>TVD Reference:</b>	KB-EST @ 4611.00usft (Original Well Elev)
<b>Reference Site:</b>	SE NE SEC. 36 T5N R64W 6th P.M. (PYRAMID)	<b>MD Reference:</b>	KB-EST @ 4611.00usft (Original Well Elev)
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	PYRAMID 5N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 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
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	561.44	13.469	ES
EXIST VERT ROTHE STATE B #36-7 - Wellbore #1 - We	8,300.00	6,500.00	642.34	592.16	12.799	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	9,948.02	6,574.00	761.81	538.33	3.409	CC, ES
EXIST VERT STATE #22-36 - Wellbore #1 - Design #1	10,000.00	6,573.97	763.58	538.67	3.395	SF
EXIST VERT STROH #1 - Wellbore #1 - Wellbore #1	16,341.21	6,400.00	716.72	452.04	2.708	CC, ES
EXIST VERT STROH #1 - Wellbore #1 - Wellbore #1	16,400.00	6,400.00	719.13	452.86	2.701	SF
PYRAMID 1N - ORIGINAL WELLBORE - PROPOSAL #1	600.00	600.00	60.01	57.59	24.792	CC, ES
PYRAMID 1N - ORIGINAL WELLBORE - PROPOSAL #1	16,921.85	16,844.78	1,100.09	522.92	1.906	SF
PYRAMID 2N - ORIGINAL WELLBORE - PROPOSAL #1	600.00	600.00	44.99	42.57	18.587	CC, ES
PYRAMID 2N - ORIGINAL WELLBORE - PROPOSAL #1	16,921.85	16,771.46	833.07	257.82	1.448	Level 3, SF
PYRAMID 3N - ORIGINAL WELLBORE - PROPOSAL #1	600.00	600.00	29.98	27.56	12.387	CC
PYRAMID 3N - ORIGINAL WELLBORE - PROPOSAL #1	16,921.85	16,863.32	510.05	-67.05	0.884	Level 1, ES, SF
PYRAMID 4N - ORIGINAL WELLBORE - PROPOSAL #1	600.00	600.00	15.01	12.59	6.201	CC
PYRAMID 4N - ORIGINAL WELLBORE - PROPOSAL #1	16,921.85	16,804.26	299.57	-259.86	0.535	Level 1, ES, SF
PYRAMID 6N - ORIGINAL WELLBORE - PROPOSAL #1	500.00	500.00	15.01	13.04	7.615	CC
PYRAMID 6N - ORIGINAL WELLBORE - PROPOSAL #1	16,921.85	16,912.11	300.96	-260.90	0.536	Level 1, ES, SF
PYRAMID 7N - ORIGINAL WELLBORE - PROPOSAL #1	400.00	400.00	29.98	28.46	19.705	CC
PYRAMID 7N - ORIGINAL WELLBORE - PROPOSAL #1	16,921.85	17,043.75	547.01	-30.09	0.948	Level 1, ES, SF
PYRAMID 8N - ORIGINAL WELLBORE - PROPOSAL #1	300.00	300.00	45.00	43.92	41.968	CC, ES
PYRAMID 8N - ORIGINAL WELLBORE - PROPOSAL #1	16,921.85	17,078.51	844.55	268.65	1.466	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: 0-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)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +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	1,685.83	1,685.83	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