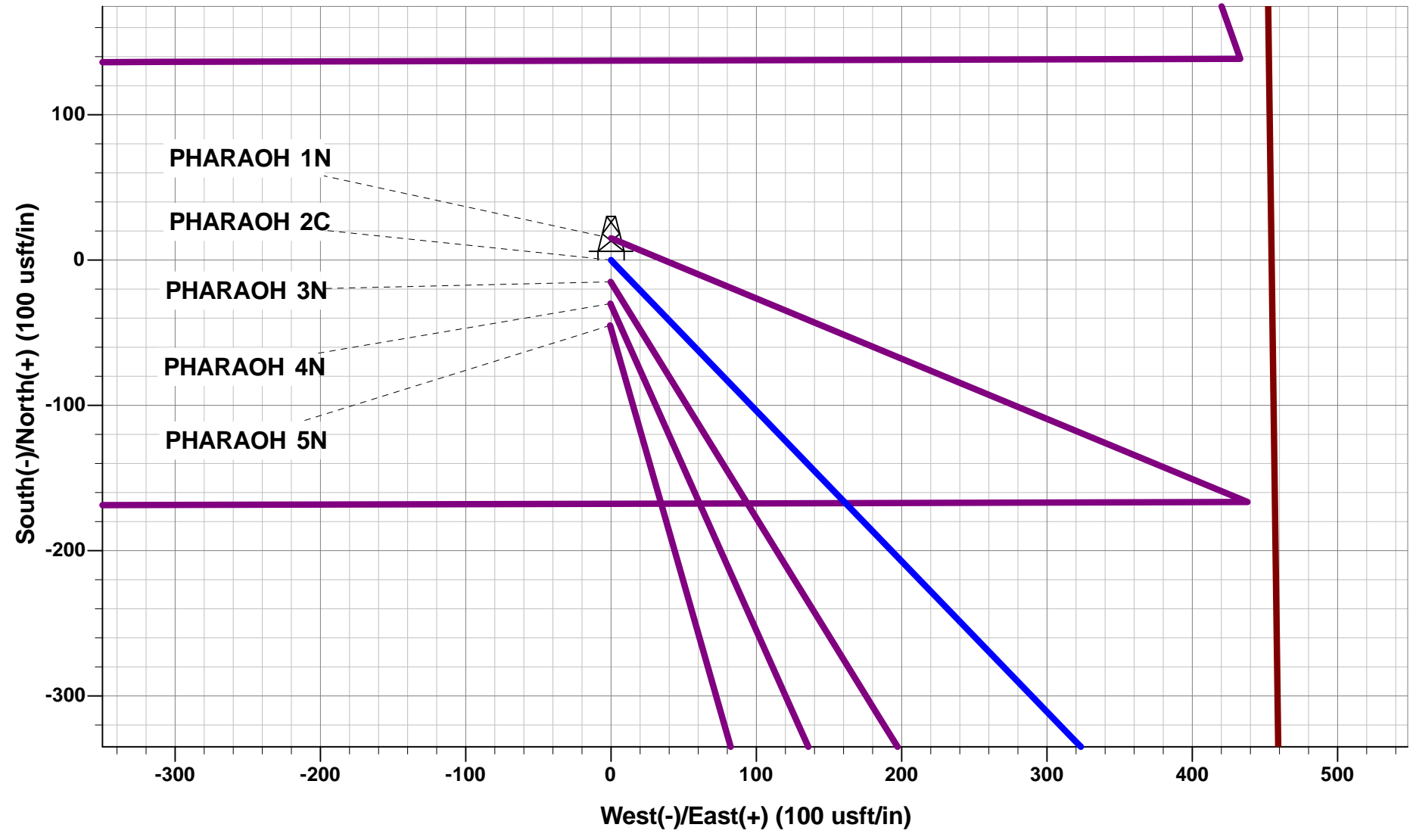




Project: WELD COUNTY, COLORADO (TRUE)
Site: NE SE SEC. 36 T5N R64W 6th P.M. (PHARAOH)
Well: PHARAOH 2C
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #1

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: 1698ft FSL & 455ft 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)	
1195.62	1200.00	12.00	136.01	-45.04	43.48	-41.26	62.60	EOB TO 12° INC	
3591.67	3649.58	12.00	136.01	-411.47	397.19	-376.93	571.90	END OF TANGENT	
4187.30	4249.58	0.00	0.00	-456.51	440.67	-418.19	634.50	EOD TO VERTICAL	
5944.80	6007.08	0.00	0.00	-456.51	440.67	-418.19	634.50	KOP (8°/100ft BUR)	
6661.00	7132.46	90.03	269.84	-458.51	-275.90	297.65	1351.08	EP: 1240ft FSL & 737ft FEL of Sec 36	
6656.00	16934.77	90.03	269.84	-485.49	-10078.18	10089.86	11153.39	BHL: 1240ft FSL & 50ft FWL of Sec 35	

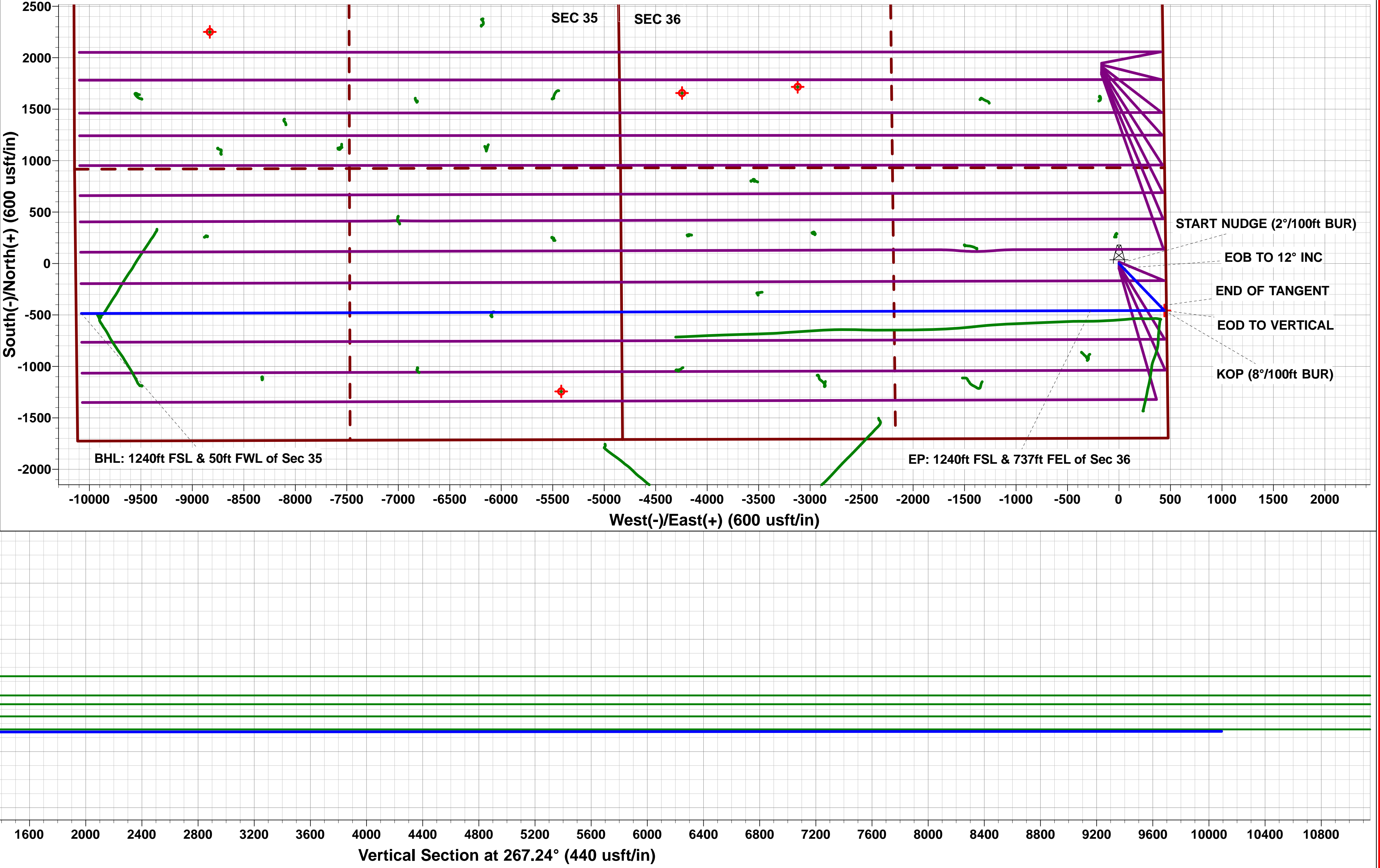
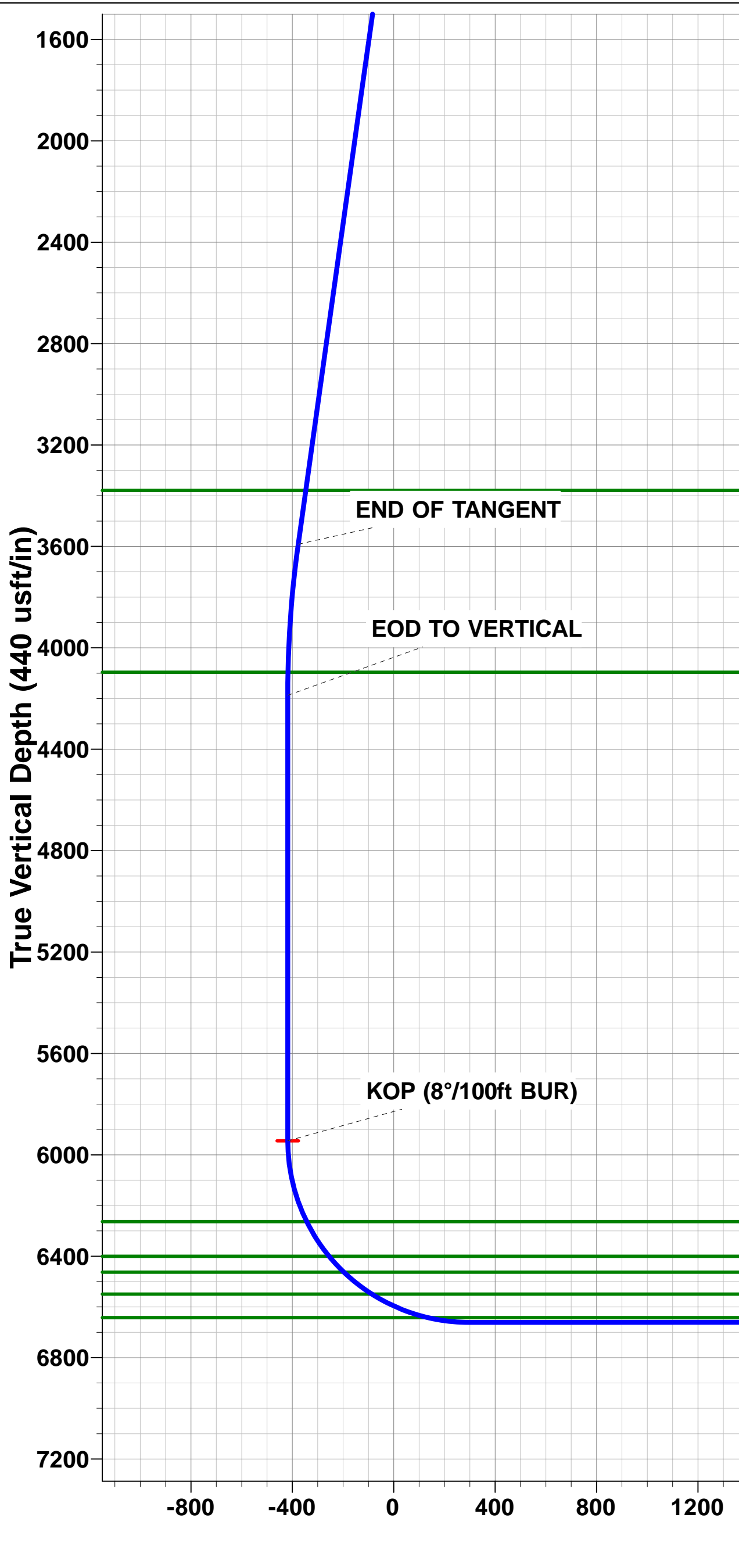
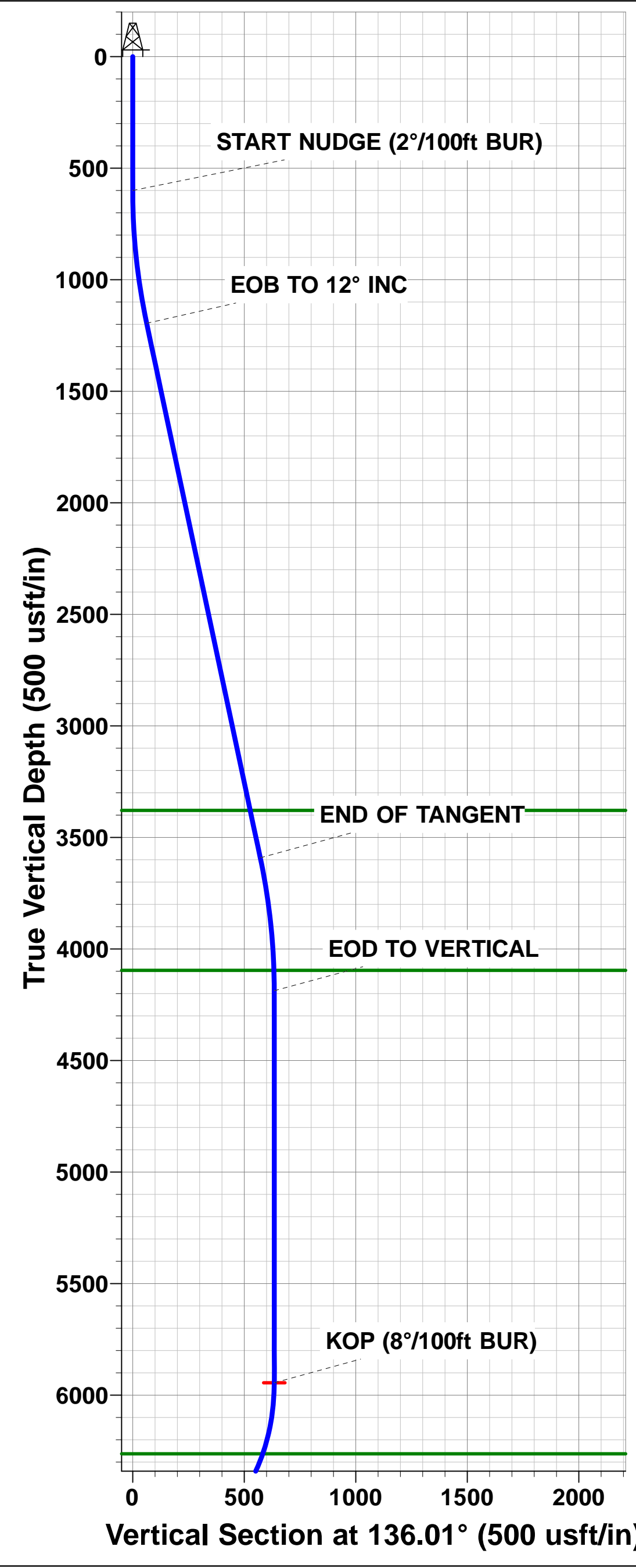
WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - PHARAOH 2C	5944.80	-456.51	440.67	40.352091	-104.488332
EP - PHARAOH 2C	6661.00	-458.51	-275.90	40.352085	-104.490903
BHL - PHARAOH 2C	6656.00	-485.49	-10078.18	40.352006	-104.526072



PROPOSED LOCAL COORDINATES:
SHL: 1698ft FSL & 455ft FEL of Sec 36
EP: 1240ft FSL & 737ft FEL of Sec 36
BHL: 1240ft FSL & 50ft FWL of Sec 35

Azimuths to True North
Magnetic North: 7.99°

Magnetic Field
Strength: 52321.3snT
Dip Angle: 66.84°
Date: 19/02/2018
Model: IGRF2015



PDC ENERGY

WELD COUNTY, COLORADO (TRUE)

NE SE SEC. 36 T5N R64W 6th P.M. (PHARAOH)

PHARAOH 2C

ORIGINAL WELLBORE

PROPOSAL #1

Anticollision Report

08 May, 2018



Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well PHARAOH 2C
Project:	WELD COUNTY, COLORADO (TRUE)	TVD Reference:	KB-EST @ 4616.00usft (Original Well Elev)
Reference Site:	NE SE SEC. 36 T5N R64W 6th P.M. (PHARAOH)	MD Reference:	KB-EST @ 4616.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PHARAOH 2C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 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 100.00usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.00 usft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	08/05/2018		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	16,934.77	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 #	600.00	600.00	15.02	12.60	6.204 CC	
PHARAOH 1N - ORIGINAL WELLBORE - PROPOSAL #	16,934.77	16,857.93	299.54	-263.10	0.532 Level 1, ES, SF	
PHARAOH 3N - ORIGINAL WELLBORE - PROPOSAL #	500.00	500.00	14.97	13.00	7.596 CC	
PHARAOH 3N - ORIGINAL WELLBORE - PROPOSAL #	16,934.77	16,829.37	313.07	-210.29	0.598 Level 1, ES, SF	
PHARAOH 4N - ORIGINAL WELLBORE - PROPOSAL #	400.00	400.00	29.99	28.47	19.708 CC	
PHARAOH 4N - ORIGINAL WELLBORE - PROPOSAL #	16,934.77	16,937.66	583.80	7.77	1.013 Level 2, ES, SF	
PHARAOH 5N - ORIGINAL WELLBORE - PROPOSAL #	300.00	300.00	45.00	43.93	41.971 CC, ES	
PHARAOH 5N - ORIGINAL WELLBORE - PROPOSAL #	16,934.77	16,832.70	876.33	305.31	1.535 SF	
SE NE SEC. 36 T5N R64W 6th P.M. (PYRAMID)						
ABDN VERT HOSHIKO #1 - Wellbore #1 - Wellbore #1	12,332.16	6,651.59	696.69	534.37	4.292 CC, ES	
ABDN VERT HOSHIKO #1 - Wellbore #1 - Wellbore #1	12,400.00	6,651.53	699.99	535.77	4.263 SF	
ABDN VERT ROTHE STATE B #36-15 - Wellbore #1 - W	8,186.94	6,550.00	692.50	644.45	14.414 CC	
ABDN VERT ROTHE STATE B #36-15 - Wellbore #1 - W	8,200.00	6,550.00	692.62	644.24	14.315 ES	
ABDN VERT ROTHE STATE B #36-15 - Wellbore #1 - W	8,500.00	6,550.00	759.98	703.67	13.498 SF	
ABDN VERT ROTHE STATE B #36-16 - Wellbore #1 - W	7,140.45	6,550.00	432.27	408.74	18.368 CC, ES	
ABDN VERT ROTHE STATE B #36-16 - Wellbore #1 - W	7,300.00	6,550.00	460.78	434.15	17.302 SF	
ABDN VERT STATE #1-36 - Wellbore #1 - Design #1	11,094.48	6,632.94	2,126.02	1,867.63	8.228 CC	
ABDN VERT STATE #1-36 - Wellbore #1 - Design #1	11,200.00	6,632.89	2,128.64	1,867.30	8.145 ES	
ABDN VERT STATE #1-36 - Wellbore #1 - Design #1	11,600.00	6,632.68	2,185.29	1,912.80	8.020 SF	
EXIST DD ECKHARDT B #35-12 - Wellbore #1 - Wellbor	16,198.93	6,782.56	813.71	541.51	2.989 CC	
EXIST DD ECKHARDT B #35-12 - Wellbore #1 - Wellbor	16,200.00	6,782.56	813.71	541.48	2.989 ES	
EXIST DD ECKHARDT B #35-12 - Wellbore #1 - Wellbor	16,300.00	6,782.69	819.96	544.92	2.981 SF	
EXIST DD ECKHARDT B #35-13 - Wellbore #1 - Wellbor	16,349.30	6,747.55	703.79	427.71	2.549 CC, ES	
EXIST DD ECKHARDT B #35-13 - Wellbore #1 - Wellbor	16,400.00	6,747.35	705.62	428.11	2.543 SF	
EXIST DD MARLEY C #1-28D - Wellbore #1 - Wellbore #	9,192.51	6,848.37	1,047.74	954.83	11.276 CC	
EXIST DD MARLEY C #1-28D - Wellbore #1 - Wellbore #	9,200.00	6,848.48	1,047.77	954.65	11.251 ES	
EXIST DD MARLEY C #1-28D - Wellbore #1 - Wellbore #	9,500.00	6,852.88	1,091.92	990.56	10.773 SF	
EXIST DD MARLEY C #1-30D - Wellbore #1 - Wellbore #	11,851.89	6,742.76	1,284.66	1,120.42	7.822 CC	
EXIST DD MARLEY C #1-30D - Wellbore #1 - Wellbore #	11,900.00	6,742.91	1,285.56	1,119.97	7.764 ES	
EXIST DD MARLEY C #1-30D - Wellbore #1 - Wellbore #	12,100.00	6,743.50	1,308.40	1,137.22	7.643 SF	
EXIST HZ SOONER STATE B #36-63HN - Wellbore #1 -	5,880.64	5,938.26	92.01	58.81	2.771 CC	
EXIST HZ SOONER STATE B #36-63HN - Wellbore #1 -	11,100.00	10,979.75	265.66	34.06	1.147 Level 2, ES, SF	
EXIST VERT BAKER STATE B #36-11 - Wellbore #1 - W	9,808.49	6,600.00	746.53	654.66	8.126 CC, ES	
EXIST VERT BAKER STATE B #36-11 - Wellbore #1 - W	10,000.00	6,600.00	770.70	673.54	7.932 SF	
EXIST VERT BAKER STATE B #36-12 - Wellbore #1 - W	11,005.15	6,600.00	745.89	620.81	5.964 CC, 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 PHARAOH 2C
Project:	WELD COUNTY, COLORADO (TRUE)	TVD Reference:	KB-EST @ 4616.00usft (Original Well Elev)
Reference Site:	NE SE SEC. 36 T5N R64W 6th P.M. (PHARAOH)	MD Reference:	KB-EST @ 4616.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PHARAOH 2C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 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 Offset Well - Wellbore - Design	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 #36-12 - Wellbore #1 - W	11,100.00	6,600.00	751.89	624.18	5.887	SF
EXIST VERT BAKER STATE B #36-13 - Wellbore #1 - W	11,093.12	6,600.00	544.54	417.02	4.270	CC
EXIST VERT BAKER STATE B #36-13 - Wellbore #1 - W	11,100.00	6,600.00	544.59	416.87	4.264	ES
EXIST VERT BAKER STATE B #36-13 - Wellbore #1 - W	11,200.00	6,600.00	554.93	424.44	4.253	SF
EXIST VERT BAKER STATE B #36-14 - Wellbore #1 - W	9,709.94	6,600.00	682.29	592.98	7.640	CC, ES
EXIST VERT BAKER STATE B #36-14 - Wellbore #1 - W	9,900.00	6,600.00	708.27	613.72	7.491	SF
EXIST VERT CLYNCKE STATE B #36-20 - Wellbore #1	10,362.29	6,550.00	1,262.77	1,155.61	11.784	CC
EXIST VERT CLYNCKE STATE B #36-20 - Wellbore #1	10,400.00	6,550.00	1,263.34	1,155.13	11.675	ES
EXIST VERT CLYNCKE STATE B #36-20 - Wellbore #1	10,800.00	6,550.00	1,336.48	1,217.17	11.202	SF
EXIST VERT CLYNCKE STATE B #36-25 - Wellbore #1	10,321.30	6,550.00	210.78	113.26	2.161	CC, ES, SF
EXIST VERT CPC-HOSHIKO #35-1 - Wellbore #1 - Well	15,721.69	6,650.00	752.94	495.48	2.925	CC, ES
EXIST VERT CPC-HOSHIKO #35-1 - Wellbore #1 - Well	15,800.00	6,650.00	757.00	497.35	2.915	SF
EXIST VERT ECKHARDT B #35-33 - Wellbore #1 - Well	16,750.27	6,650.00	37.97	-239.21	0.137	Level 1, CC, ES, SF
EXIST VERT HOSHIKO #2 - Wellbore #1 - Wellbore #1	13,670.95	6,688.86	538.64	338.58	2.692	CC
EXIST VERT HOSHIKO #2 - Wellbore #1 - Wellbore #1	13,700.00	6,689.22	539.42	338.55	2.685	ES, SF
EXIST VERT HOSHIKO #35-10H4 - Wellbore #1 - Wellb	13,840.62	6,663.00	861.40	656.57	4.205	CC, ES
EXIST VERT HOSHIKO #35-10H4 - Wellbore #1 - Wellb	13,900.00	6,662.91	863.44	656.95	4.181	SF
EXIST VERT HOSHIKO #35-16H4 - Wellbore #1 - Desig	12,276.41	6,677.34	770.40	479.56	2.649	CC
EXIST VERT HOSHIKO #35-16H4 - Wellbore #1 - Desig	12,300.00	6,677.33	770.76	479.26	2.644	ES, SF
EXIST VERT HOSHIKO B #35-14 - Wellbore #1 - Wellbo	15,179.42	6,650.00	622.78	380.86	2.574	CC
EXIST VERT HOSHIKO B #35-14 - Wellbore #1 - Wellbo	15,200.00	6,650.00	623.12	380.62	2.570	ES, SF
EXIST VERT HOSHIKO B #35-23 - Wellbore #1 - Wellbo	12,947.39	6,650.00	51.16	-93.20	0.354	Level 1, CC, ES, SF
EXIST VERT LOLOFF #35-6 - Wellbore #1 - Wellbore #1	14,943.36	6,600.00	1,837.52	1,601.95	7.800	CC
EXIST VERT LOLOFF #35-6 - Wellbore #1 - Wellbore #1	15,000.00	6,600.00	1,838.39	1,601.23	7.752	ES
EXIST VERT LOLOFF #35-6 - Wellbore #1 - Wellbore #1	15,300.00	6,600.00	1,871.81	1,626.24	7.622	SF
EXIST VERT LOLOFF #35-8 - Wellbore #1 - Wellbore #1	12,291.81	6,600.00	2,152.03	1,990.83	13.351	CC
EXIST VERT LOLOFF #35-8 - Wellbore #1 - Wellbore #1	12,400.00	6,600.00	2,154.74	1,990.52	13.121	ES
EXIST VERT LOLOFF #35-8 - Wellbore #1 - Wellbore #1	13,100.00	6,600.00	2,298.78	2,114.96	12.506	SF
EXIST VERT LOLOFF #4 - Wellbore #1 - Wellbore #1	13,685.18	6,628.94	2,083.52	1,882.99	10.390	CC
EXIST VERT LOLOFF #4 - Wellbore #1 - Wellbore #1	13,700.00	6,628.92	2,083.57	1,882.63	10.369	ES
EXIST VERT LOLOFF #4 - Wellbore #1 - Wellbore #1	14,300.00	6,628.29	2,172.33	1,954.57	9.976	SF
EXIST VERT LOLOFF B #35-17 - Wellbore #1 - Wellbore	13,042.73	6,600.00	2,780.80	2,598.29	15.237	CC
EXIST VERT LOLOFF B #35-17 - Wellbore #1 - Wellbore	13,100.00	6,600.00	2,781.39	2,597.28	15.107	ES
EXIST VERT LOLOFF B #35-17 - Wellbore #1 - Wellbore	14,200.00	6,600.00	3,011.99	2,797.06	14.014	SF
EXIST VERT LOLOFF B #35-19 - Wellbore #1 - Design #	15,679.75	6,684.62	2,732.91	2,346.63	7.075	CC
EXIST VERT LOLOFF B #35-19 - Wellbore #1 - Design #	15,800.00	6,684.56	2,735.55	2,345.90	7.021	ES
EXIST VERT LOLOFF B #35-19 - Wellbore #1 - Design #	16,200.00	6,684.36	2,781.98	2,381.11	6.940	SF
EXIST VERT LOLOFF B #35-20 - Wellbore #1 - Wellbore	15,570.25	6,650.00	1,544.94	1,291.48	6.095	CC
EXIST VERT LOLOFF B #35-20 - Wellbore #1 - Wellbore	15,600.00	6,650.00	1,545.23	1,290.93	6.076	ES
EXIST VERT LOLOFF B #35-20 - Wellbore #1 - Wellbore	15,800.00	6,650.00	1,561.93	1,302.02	6.010	SF
EXIST VERT LOLOFF B #35-21 - Wellbore #1 - Wellbore	14,401.89	6,600.00	1,640.58	1,420.41	7.451	CC, ES
EXIST VERT LOLOFF B #35-21 - Wellbore #1 - Wellbore	14,700.00	6,600.00	1,667.44	1,438.92	7.297	SF
EXIST VERT LOLOFF B #35-22 - Wellbore #1 - Wellbore	12,977.04	6,600.00	1,629.84	1,449.41	9.033	CC
EXIST VERT LOLOFF B #35-22 - Wellbore #1 - Wellbore	13,000.00	6,600.00	1,630.01	1,448.93	9.002	ES
EXIST VERT LOLOFF B #35-22 - Wellbore #1 - Wellbore	13,400.00	6,600.00	1,683.83	1,491.55	8.757	SF
EXIST VERT ROTHE STATE B #36-10 - Wellbore #1 - W	8,235.83	6,550.00	617.04	568.22	12.638	CC, ES
EXIST VERT ROTHE STATE B #36-10 - Wellbore #1 - W	8,400.00	6,550.00	638.51	585.37	12.015	SF
EXIST VERT ROTHE STATE B #36-7 - Wellbore #1 - We	8,111.77	6,500.00	2,024.87	1,979.07	44.213	CC
EXIST VERT ROTHE STATE B #36-7 - Wellbore #1 - We	8,200.00	6,500.00	2,026.79	1,978.68	42.128	ES
EXIST VERT ROTHE STATE B #36-7 - Wellbore #1 - We	10,700.00	6,500.00	3,286.18	3,169.67	28.205	SF
EXIST VERT ROTHE STATE B #36-8 - Wellbore #1 - We	100.00	70.49	1,627.04	1,626.94	10,000.000	CC
EXIST VERT ROTHE STATE B #36-8 - Wellbore #1 - We	400.00	365.39	1,627.34	1,626.24	1,477.195	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 PHARAOH 2C
Project:	WELD COUNTY, COLORADO (TRUE)	TVD Reference:	KB-EST @ 4616.00usft (Original Well Elev)
Reference Site:	NE SE SEC. 36 T5N R64W 6th P.M. (PHARAOH)	MD Reference:	KB-EST @ 4616.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	PHARAOH 2C	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 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 NE SEC. 36 T5N R64W 6th P.M. (PYRAMID)						
EXIST VERT ROTHE STATE B #36-8 - Wellbore #1 - We	15,400.00	6,500.00	8,597.23	8,349.41	34.692	SF
EXIST VERT ROTHE STATE B #36-9 - Wellbore #1 - We	414.70	389.70	260.02	258.94	239.920	CC
EXIST VERT ROTHE STATE B #36-9 - Wellbore #1 - We	500.00	473.75	260.23	258.91	196.435	ES
EXIST VERT ROTHE STATE B #36-9 - Wellbore #1 - We	7,900.00	6,550.00	1,270.85	1,230.59	31.565	SF
EXIST VERT STATE #22-36 - Wellbore #1 - Design #1	9,971.43	6,647.52	2,183.23	1,956.91	9.647	CC
EXIST VERT STATE #22-36 - Wellbore #1 - Design #1	10,000.00	6,647.51	2,183.41	1,956.31	9.614	ES
EXIST VERT STATE #22-36 - Wellbore #1 - Design #1	10,600.00	6,647.20	2,271.91	2,028.15	9.320	SF
EXIST VERT STROH #1 - Wellbore #1 - Wellbore #1	16,364.85	6,400.00	2,142.31	1,868.76	7.831	CC
EXIST VERT STROH #1 - Wellbore #1 - Wellbore #1	16,400.00	6,400.00	2,142.60	1,868.07	7.804	ES
EXIST VERT STROH #1 - Wellbore #1 - Wellbore #1	16,800.00	6,400.00	2,186.06	1,900.38	7.652	SF
PYRAMID 1N - ORIGINAL WELLBORE - PROPOSAL #1	600.00	595.00	1,953.47	1,951.06	810.740	CC, ES
PYRAMID 1N - ORIGINAL WELLBORE - PROPOSAL #1	16,934.77	16,829.25	2,537.97	1,960.14	4.392	SF
PYRAMID 2N - ORIGINAL WELLBORE - PROPOSAL #1	600.00	595.00	1,938.53	1,936.12	804.537	CC
PYRAMID 2N - ORIGINAL WELLBORE - PROPOSAL #1	16,934.77	16,755.94	2,271.73	1,694.72	3.937	ES, SF
PYRAMID 3N - ORIGINAL WELLBORE - PROPOSAL #1	5,920.23	5,926.08	1,923.55	1,892.45	61.854	CC
PYRAMID 3N - ORIGINAL WELLBORE - PROPOSAL #1	16,934.77	16,847.81	1,948.32	1,370.75	3.373	ES, SF
PYRAMID 4N - ORIGINAL WELLBORE - PROPOSAL #1	5,846.99	5,867.79	1,703.53	1,670.00	50.816	CC
PYRAMID 4N - ORIGINAL WELLBORE - PROPOSAL #1	16,934.77	16,788.73	1,733.52	1,157.83	3.011	ES, SF
PYRAMID 5N - ORIGINAL WELLBORE - PROPOSAL #1	5,913.63	5,976.36	1,413.47	1,375.75	37.467	CC
PYRAMID 5N - ORIGINAL WELLBORE - PROPOSAL #1	16,934.77	16,906.34	1,438.95	861.88	2.494	ES, SF
PYRAMID 6N - ORIGINAL WELLBORE - PROPOSAL #1	5,848.97	5,971.15	1,145.12	1,103.54	27.541	CC
PYRAMID 6N - ORIGINAL WELLBORE - PROPOSAL #1	16,934.77	16,902.00	1,154.58	581.20	2.014	ES, SF
PYRAMID 7N - ORIGINAL WELLBORE - PROPOSAL #1	5,920.60	6,104.10	890.08	844.34	19.457	CC
PYRAMID 7N - ORIGINAL WELLBORE - PROPOSAL #1	16,934.77	17,035.94	893.19	317.12	1.550	ES, SF
PYRAMID 8N - ORIGINAL WELLBORE - PROPOSAL #1	8,236.10	8,374.08	594.55	502.83	6.482	CC
PYRAMID 8N - ORIGINAL WELLBORE - PROPOSAL #1	16,934.77	17,073.25	611.26	47.84	1.085	Level 2, ES, 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	Offset	Semi Major Axis		Distance		Minimum Separation		Warning					
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Minimum Separation (usft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	0.74	15.02	0.20	15.02				
100.00	100.00	100.00	100.00	0.09	0.09	0.74	15.02	0.20	15.02	14.85	0.17	86.780	
200.00	200.00	200.00	200.00	0.31	0.31	0.74	15.02	0.20	15.02	14.40	0.62	24.123	
300.00	300.00	300.00	300.00	0.54	0.54	0.74	15.02	0.20	15.02	13.95	1.07	14.008	
400.00	400.00	400.00	400.00	0.76	0.76	0.74	15.02	0.20	15.02	13.50	1.52	9.870	
500.00	500.00	500.00	500.00	0.99	0.99	0.74	15.02	0.20	15.02	13.05	1.97	7.619	
600.00	600.00	600.00	600.00	1.21	1.21	0.74	15.02	0.20	15.02	12.60	2.42	6.204	CC
700.00	699.98	699.98	699.98	1.41	1.44	-139.57	15.02	0.20	16.31	13.46	2.85	5.724	
800.00	799.84	799.84	799.84	1.61	1.66	-149.02	15.02	0.20	20.57	17.31	3.26	6.303	
900.00	899.45	899.45	899.45	1.82	1.88	-158.04	15.02	0.20	28.40	24.72	3.69	7.704	
1,000.00	998.70	998.70	998.70	2.07	2.11	-164.52	15.02	0.20	39.97	35.86	4.11	9.719	
1,100.00	1,097.47	1,097.47	1,097.47	2.36	2.33	-168.80	15.02	0.20	55.21	50.67	4.54	12.160	
1,200.00	1,195.62	1,195.62	1,195.62	2.70	2.55	-171.61	15.02	0.20	74.03	69.06	4.97	14.897	
1,300.00	1,293.44	1,293.44	1,293.44	3.09	2.77	-173.45	15.02	0.20	94.66	89.24	5.42	17.478	
1,400.00	1,391.25	1,391.25	1,391.25	3.49	2.99	-174.62	15.02	0.20	115.34	109.47	5.87	19.656	
1,500.00	1,489.07	1,489.07	1,489.07	3.91	3.21	-175.45	15.02	0.20	136.06	129.73	6.33	21.509	
1,600.00	1,586.88	1,586.88	1,586.88	4.34	3.43	-176.05	15.02	0.20	156.79	150.01	6.79	23.102	

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