



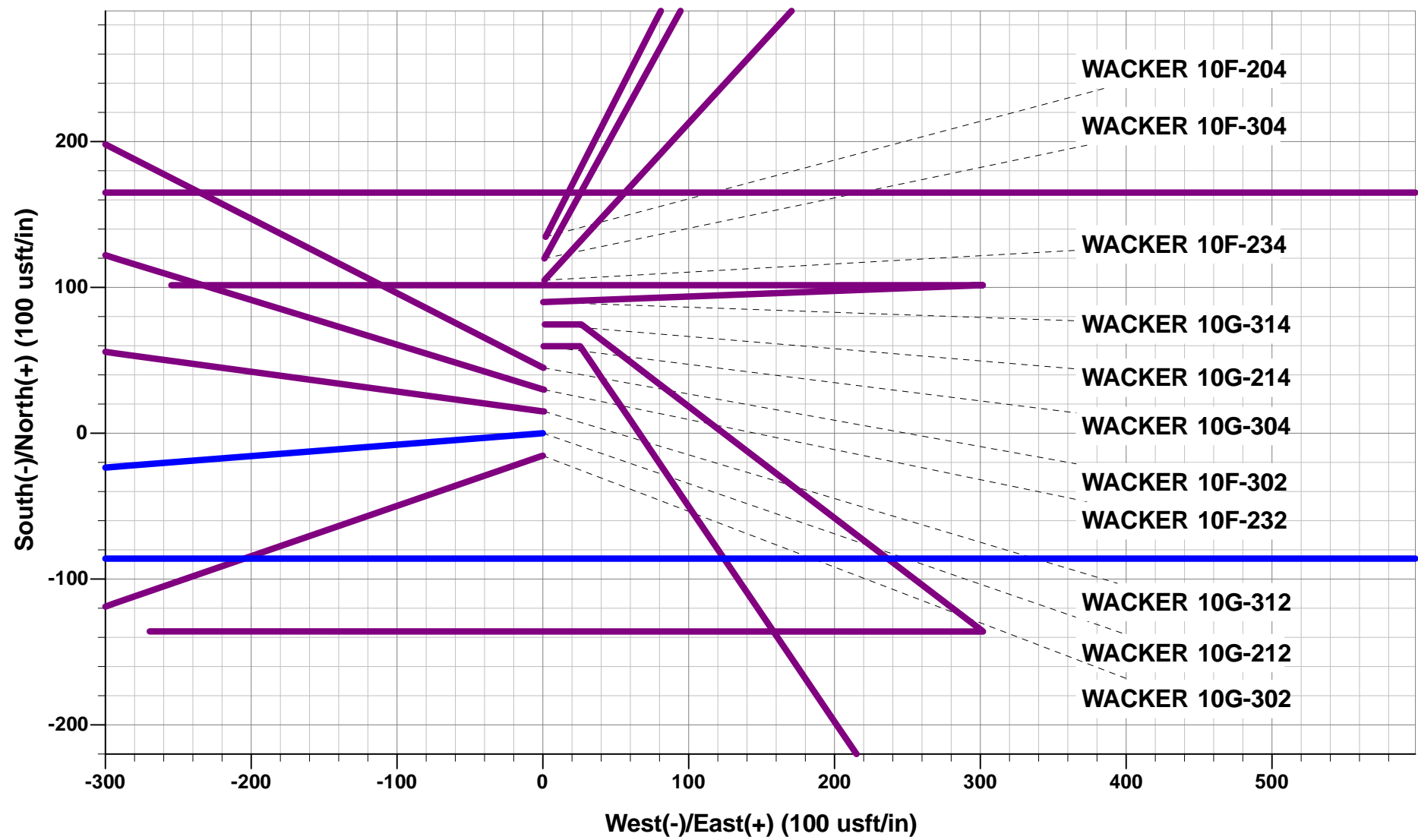
Project: WELD COUNTY, COLORADO
Site: SW NW SEC. 10 T5N R64W 6th P.M.
Well: WACKER 10G-212
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #2

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Dep	Annotation
0.0	0.0	0.00	0.00	0.0	0.0	0.0	0.0	SHL: 2152ft FNL & 395ft FWL of Sec 10
400.0	400.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1034.5	1039.8	12.80	265.53	-5.5	-70.9	-70.8	71.1	EOB TO 12.8° INC
5264.7	5377.7	12.80	265.53	-80.5	-1028.7	-1026.9	1031.9	END OF TANGENT
5899.1	6017.4	0.00	265.53	-86.0	-1099.6	-1097.7	1103.0	EOD TO VERTICAL
5929.1	6047.4	0.00	0.00	-86.0	-1099.6	-1097.7	1103.0	KOP (8°/100ft BUR)
6645.0	7181.2	90.73	90.00	-86.0	-374.5	-372.7	1828.1	LANDING PNT: 2236ft FNL & 20ft FWL of Sec 10
6585.0	11843.6	90.74	90.00	-86.0	4287.5	4288.3	6490.1	BHL: 2261ft FNL & 500ft FEL of Sec 10

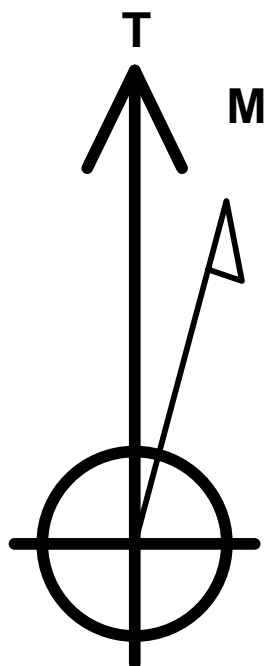
WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - WACKER 10G-212 (P2)	5929.1	-86.0	-1099.6	40.414862	-104.548193
LANDING PNT - WACKER 10G-212 (P2)	6645.0	-86.0	-374.5	40.414862	-104.545589
BHL - WACKER 10G-212 (P2)	6585.0	-86.0	4287.5	40.414861	-104.528847



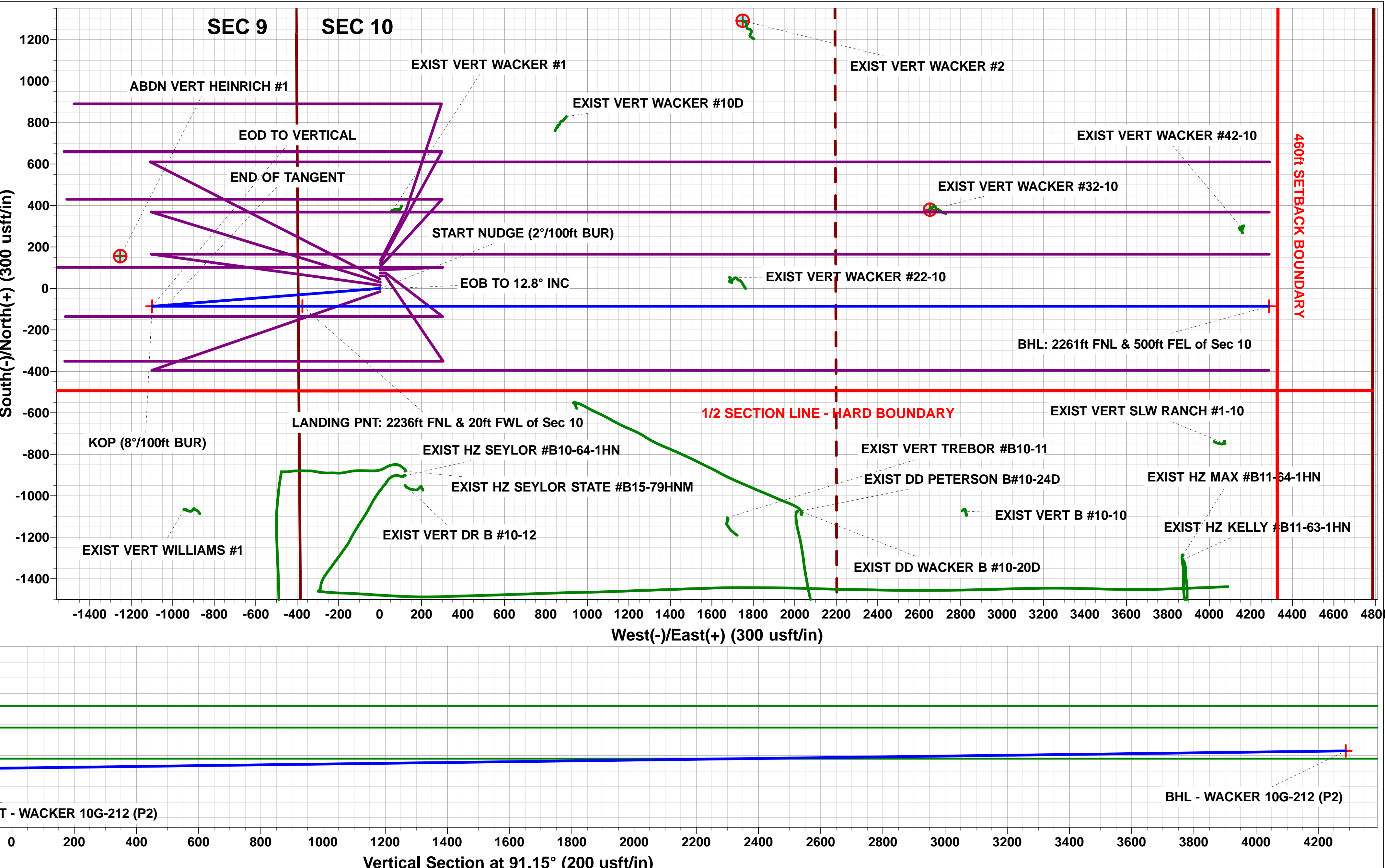
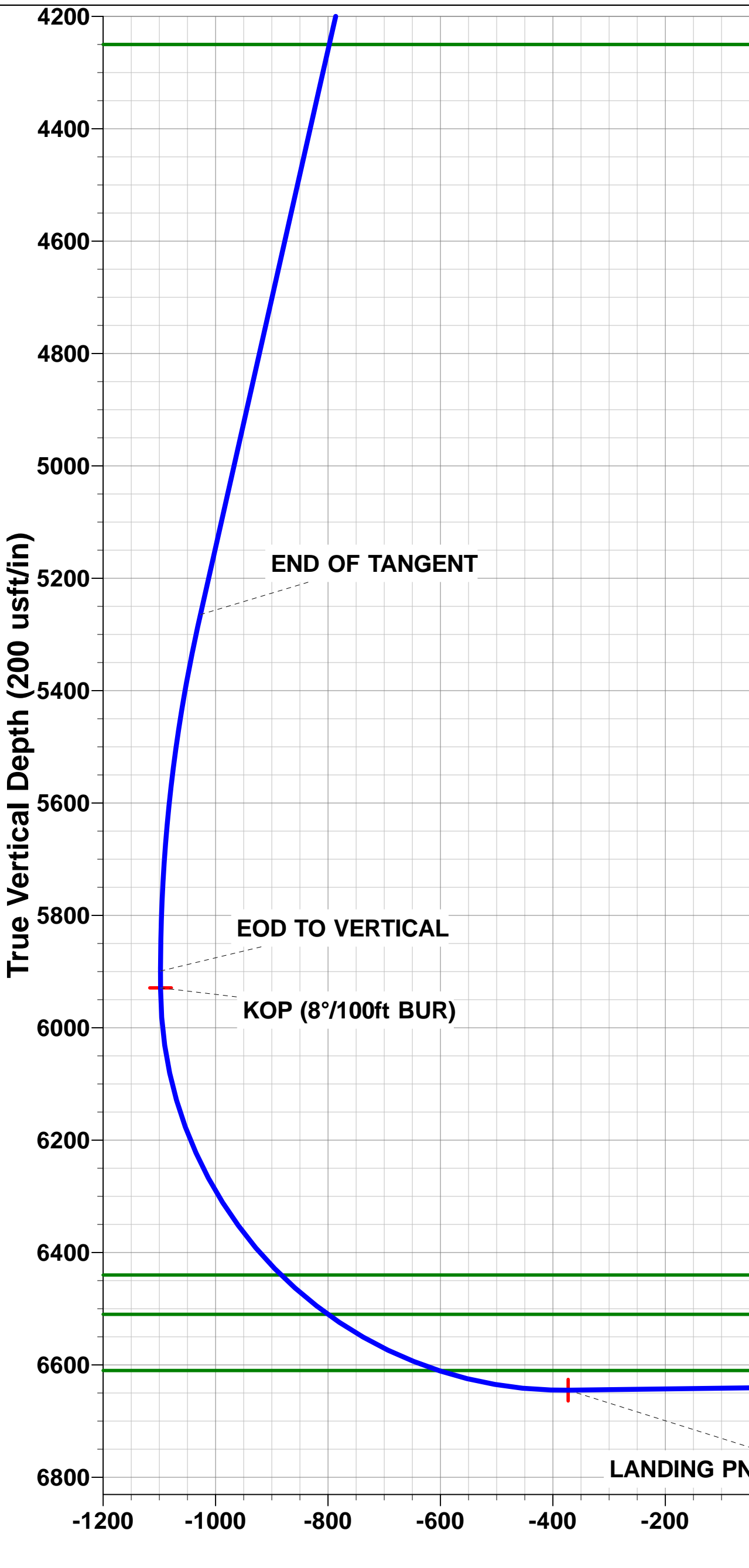
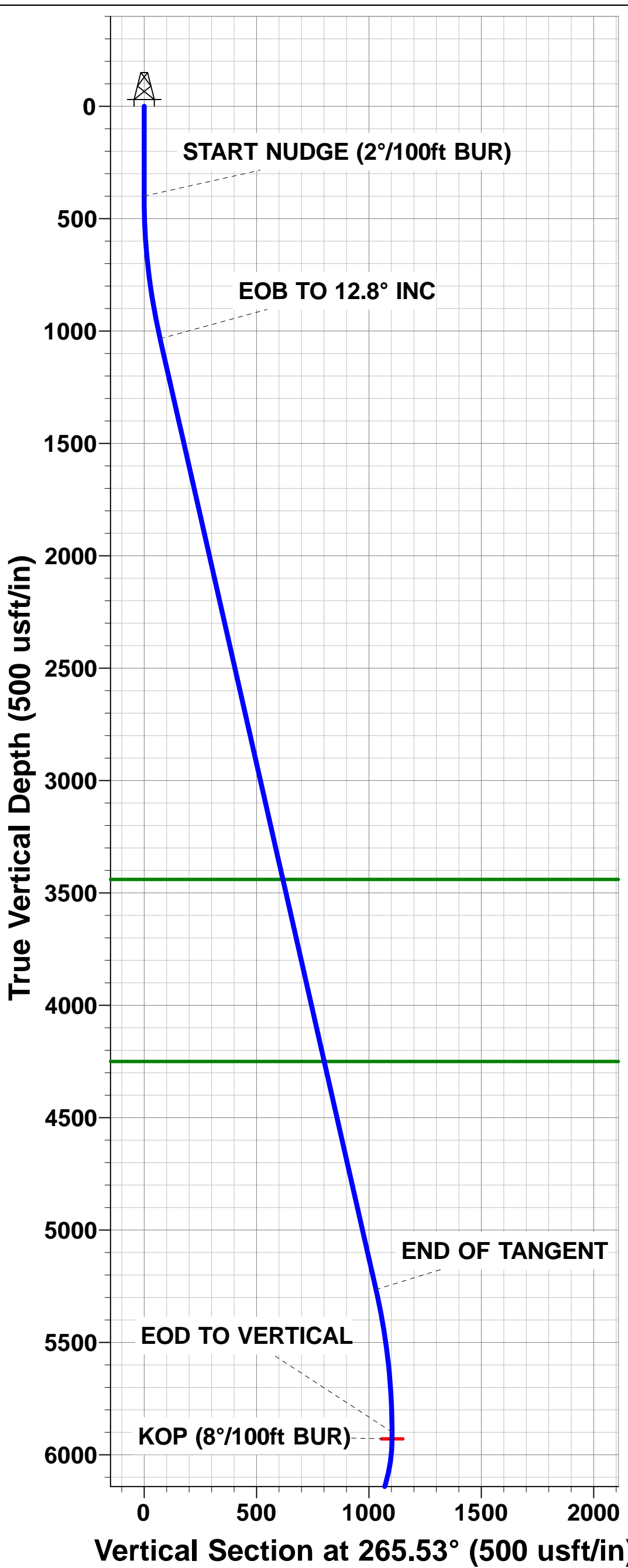
PROPOSED LOCAL COORDINATES:

SHL: 2152ft FNL & 395ft FWL of Sec 10
HZ LP: 2236ft FNL & 20ft FWL of Sec 10
BHL: 2261ft FNL & 500ft FEL of Sec 10



Azimuths to True North
Magnetic North: 8.12°

Magnetic Field
Strength: 52451.4snT
Dip Angle: 66.91°
Date: 24/03/2017
Model: IGRF2015



Anticollision Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well WACKER 10G-212
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4634.0usft
Reference Site:	SW NW SEC. 10 T5N R64W 6th P.M.	MD Reference:	KB-EST @ 4634.0usft
Site Error:	0.0 usft	North Reference:	True
Reference Well:	WACKER 10G-212	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #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 100.0usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.0 us	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	24/03/2017		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	11,843.5	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
Offset Well - Wellbore - Design						
SW NW SEC. 10 T5N R64W 6th P.M.						
ABDN VERT BLOSKAS #13-9 - Wellbore #1 - Design #1	6,047.4	5,886.1	3,964.8	3,822.9	27.938	CC, ES, SF
ABDN VERT HEINRICH #1 - Wellbore #1 - Design #1	6,047.4	5,898.1	286.3	152.6	2.141	CC
ABDN VERT HEINRICH #1 - Wellbore #1 - Design #1	6,050.0	5,900.7	286.3	146.7	2.051	ES
ABDN VERT HEINRICH #1 - Wellbore #1 - Design #1	6,100.0	5,950.6	287.4	146.9	2.045	SF
ABDN VERT OGRADY #3 - Wellbore #1 - Design #1	6,047.4	5,924.1	2,015.3	1,880.0	14.902	CC
ABDN VERT OGRADY #3 - Wellbore #1 - Design #1	6,050.0	5,926.7	2,015.3	1,876.4	14.506	ES
ABDN VERT OGRADY #3 - Wellbore #1 - Design #1	6,150.0	6,026.3	2,020.0	1,879.6	14.391	SF
ABDN VERT PLUMB #2 - Wellbore #1 - Design #1	6,047.4	5,894.1	8,063.2	7,921.6	56.928	CC, ES
ABDN VERT PLUMB #2 - Wellbore #1 - Design #1	8,400.0	6,594.4	9,980.8	9,799.9	55.171	SF
EXIST DD JURGENS PC #B8-22D - Wellbore #1 - Wellb	6,025.6	6,033.9	5,778.8	5,738.2	142.280	CC
EXIST DD JURGENS PC #B8-22D - Wellbore #1 - Wellb	6,047.4	6,060.0	5,778.8	5,738.1	142.055	ES
EXIST DD JURGENS PC #B8-22D - Wellbore #1 - Wellb	10,600.0	6,762.0	9,911.7	9,788.9	80.705	SF
EXIST DD JURGENS PC #B8-24D - Wellbore #1 - Wellb	3,154.4	1,535.4	7,064.0	7,053.0	640.030	CC
EXIST DD JURGENS PC #B8-24D - Wellbore #1 - Wellb	3,200.0	1,563.0	7,064.1	7,052.9	628.696	ES
EXIST DD JURGENS PC #B8-24D - Wellbore #1 - Wellb	9,200.0	6,637.5	9,941.0	9,847.1	105.872	SF
EXIST DD JURGENS STATE #B16-30D - Wellbore #1 -	6,062.1	6,338.6	5,485.7	5,433.5	105.080	CC, ES
EXIST DD JURGENS STATE #B16-30D - Wellbore #1 -	11,300.0	7,045.0	9,906.4	9,748.0	62.541	SF
EXIST DD PETERSON B #10-24D - Wellbore #1 - Wellb	9,681.7	6,669.0	1,746.8	1,649.0	17.863	CC
EXIST DD PETERSON B #10-24D - Wellbore #1 - Wellb	9,700.0	6,669.0	1,746.9	1,648.6	17.774	ES
EXIST DD PETERSON B #10-24D - Wellbore #1 - Wellb	10,500.0	6,669.0	1,928.9	1,808.9	16.069	SF
EXIST DD PJ #8I - Wellbore #1 - Wellbore #1	6,047.4	6,110.0	8,591.6	8,549.7	205.322	ES
EXIST DD PJ #8I - Wellbore #1 - Wellbore #1	6,059.9	6,136.1	8,591.4	8,560.5	277.625	CC
EXIST DD PJ #8I - Wellbore #1 - Wellbore #1	7,800.0	6,710.0	9,928.4	9,875.5	187.443	SF
EXIST DD WACKER B #10-20D - Wellbore #1 - Wellbore	8,498.6	6,765.9	477.5	400.2	6.176	CC
EXIST DD WACKER B #10-20D - Wellbore #1 - Wellbore	8,500.0	6,765.9	477.5	400.2	6.173	ES
EXIST DD WACKER B #10-20D - Wellbore #1 - Wellbore	8,600.0	6,765.7	488.2	408.3	6.112	SF
EXIST HZ KELLY #B11-63-1HN - Wellbore #1 - Wellbore	11,805.7	6,652.3	2,008.6	1,850.6	12.713	CC
EXIST HZ KELLY #B11-63-1HN - Wellbore #1 - Wellbore	11,843.6	6,664.6	2,008.8	1,849.6	12.617	ES, SF
EXIST HZ MAX #B11-64-1HN - Wellbore #1 - Wellbore #	11,831.7	6,696.0	1,448.0	1,289.4	9.129	CC
EXIST HZ MAX #B11-64-1HN - Wellbore #1 - Wellbore #	11,843.6	6,696.0	1,448.0	1,289.0	9.110	ES, SF
EXIST HZ SEYLLOR #B10-64-1HN - Wellbore #1 - Wellbc	483.5	460.9	908.4	907.0	608.585	CC
EXIST HZ SEYLLOR #B10-64-1HN - Wellbore #1 - Wellbc	600.0	574.7	908.8	906.8	459.466	ES
EXIST HZ SEYLLOR #B10-64-1HN - Wellbore #1 - Wellbc	11,843.6	10,758.0	1,367.1	1,106.8	5.252	SF
EXIST HZ SEYLLOR STATE #B15-79HNM - Wellbore #1	1,551.4	1,557.6	875.0	867.5	116.684	CC, ES
EXIST HZ SEYLLOR STATE #B15-79HNM - Wellbore #1	7,400.0	6,266.4	1,009.5	968.0	24.338	SF
EXIST VERT BAUER #9-1 - Wellbore #1 - Wellbore #1	5,941.0	5,731.6	1,908.0	1,887.1	91.239	CC
EXIST VERT BAUER #9-1 - Wellbore #1 - Wellbore #1	6,017.4	5,804.1	1,908.9	1,885.2	80.398	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 WACKER 10G-212
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4634.0usft
Reference Site:	SW NW SEC. 10 T5N R64W 6th P.M.	MD Reference:	KB-EST @ 4634.0usft
Site Error:	0.0 usft	North Reference:	True
Reference Well:	WACKER 10G-212	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	Offset TVD Reference:	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Between Ellipses (usft)	Separation Factor	Warning
SW NW SEC. 10 T5N R64W 6th P.M.						
EXIST VERT BAUER #9-1 - Wellbore #1 - Wellbore #1	11,843.6	6,456.5	6,942.9	6,798.8	48.163	SF
EXIST VERT BLOSKAS #1 - Wellbore #1 - Design #1	6,047.4	5,897.1	4,183.0	4,043.4	29.962	CC, ES, SF
EXIST VERT BLOSKAS #12-9 - Wellbore #1 - Wellbore #1	6,047.4	6,038.4	3,887.2	3,860.8	146.981	ES
EXIST VERT BLOSKAS #12-9 - Wellbore #1 - Wellbore #1	6,076.3	6,070.3	3,886.7	3,869.6	227.930	CC
EXIST VERT BLOSKAS #12-9 - Wellbore #1 - Wellbore #1	11,843.6	6,700.0	9,231.8	9,087.5	64.008	SF
EXIST VERT BLOSKAS #9-23 - Wellbore #1 - Wellbore #1	6,047.4	5,962.6	2,908.2	2,882.0	110.984	ES
EXIST VERT BLOSKAS #9-23 - Wellbore #1 - Wellbore #1	6,069.3	5,986.0	2,907.9	2,890.8	169.790	CC
EXIST VERT BLOSKAS #9-23 - Wellbore #1 - Wellbore #1	11,843.6	6,600.0	8,167.7	8,023.1	56.484	SF
EXIST VERT BLOSKAS BOND #9D - Wellbore #1 - Wellbore #1	6,047.4	5,999.5	3,428.3	3,402.7	133.950	ES
EXIST VERT BLOSKAS BOND #9D - Wellbore #1 - Wellbore #1	6,073.0	6,029.4	3,427.9	3,409.8	189.727	CC
EXIST VERT BLOSKAS BOND #9D - Wellbore #1 - Wellbore #1	11,843.6	6,790.0	8,708.0	8,564.6	60.718	SF
EXIST VERT BOND #1 - Wellbore #1 - Wellbore #1	6,047.4	5,910.6	2,696.4	2,670.1	102.517	ES
EXIST VERT BOND #1 - Wellbore #1 - Wellbore #1	6,055.0	5,918.4	2,696.4	2,679.5	159.590	CC
EXIST VERT BOND #1 - Wellbore #1 - Wellbore #1	11,843.6	6,700.0	8,052.5	7,911.5	57.107	SF
EXIST VERT BOND #21-9 - Wellbore #1 - Design #1	6,047.4	5,905.1	3,008.1	2,869.7	21.737	CC, ES, SF
EXIST VERT BOND #32-9 - Wellbore #1 - Wellbore #1	6,047.4	5,884.4	1,294.7	1,268.9	50.238	ES
EXIST VERT BOND #32-9 - Wellbore #1 - Wellbore #1	6,048.8	5,885.5	1,294.7	1,277.5	75.375	CC
EXIST VERT BOND #32-9 - Wellbore #1 - Wellbore #1	11,843.6	6,528.6	6,665.0	6,530.1	49.377	SF
EXIST VERT DR B #10-12 - Wellbore #1 - Wellbore #1	7,761.6	6,577.6	883.4	846.1	23.702	CC, ES
EXIST VERT DR B #10-12 - Wellbore #1 - Wellbore #1	8,300.0	6,578.2	1,034.5	985.0	20.885	SF
EXIST VERT HECKENDORF #1 - Wellbore #1 - Design #1	6,047.4	5,898.1	5,542.8	5,402.9	39.598	CC, ES, SF
EXIST VERT HEINRICH #41-9 - Wellbore #1 - Design #1	4,641.7	4,541.0	1,560.7	1,452.1	14.364	CC
EXIST VERT HEINRICH #41-9 - Wellbore #1 - Design #1	6,500.0	6,346.1	1,574.5	1,425.3	10.553	ES
EXIST VERT HEINRICH #41-9 - Wellbore #1 - Design #1	6,750.0	6,518.2	1,587.7	1,435.7	10.450	SF
EXIST VERT JURGENS #8-1 - Wellbore #1 - Wellbore #1	6,047.4	5,936.7	5,301.9	5,275.5	200.706	ES
EXIST VERT JURGENS #8-1 - Wellbore #1 - Wellbore #1	6,054.4	5,942.1	5,301.9	5,285.3	319.552	CC
EXIST VERT JURGENS #8-1 - Wellbore #1 - Wellbore #1	11,200.0	6,675.9	9,979.4	9,852.6	78.709	SF
EXIST VERT JURGENS #8-13 - Wellbore #1 - Wellbore #1	5,976.2	5,722.5	6,503.1	6,486.5	391.539	CC
EXIST VERT JURGENS #8-13 - Wellbore #1 - Wellbore #1	6,017.4	5,764.1	6,503.4	6,476.9	246.151	ES
EXIST VERT JURGENS #8-13 - Wellbore #1 - Wellbore #1	9,900.0	6,400.0	9,957.4	9,889.8	147.237	SF
EXIST VERT JURGENS #8-14 - Wellbore #1 - Wellbore #1	5,964.2	5,700.0	5,443.8	5,426.9	321.969	CC
EXIST VERT JURGENS #8-14 - Wellbore #1 - Wellbore #1	6,017.4	5,738.9	5,444.3	5,417.3	201.264	ES
EXIST VERT JURGENS #8-14 - Wellbore #1 - Wellbore #1	6,047.4	5,756.3	5,445.0	5,417.9	201.061	SF
EXIST VERT JURGENS PC #B8-23 - Wellbore #1 - Wellbore #1	5,977.4	5,731.2	6,263.6	6,246.5	366.669	CC
EXIST VERT JURGENS PC #B8-23 - Wellbore #1 - Wellbore #1	6,017.4	5,766.5	6,263.9	6,237.6	237.656	ES
EXIST VERT JURGENS PC #B8-23 - Wellbore #1 - Wellbore #1	10,200.0	6,307.6	9,922.9	9,824.8	101.205	SF
EXIST VERT JURGENS PM B #B8-10 - Wellbore #1 - Design #1	6,047.4	5,908.1	6,426.2	6,284.9	45.461	CC, ES
EXIST VERT JURGENS PM B #B8-10 - Wellbore #1 - Design #1	10,000.0	6,587.8	9,941.7	9,721.0	45.056	SF
EXIST VERT LOWER LATHAM #8-15 - Wellbore #1 - Wellbore #1	5,979.9	5,743.0	5,915.4	5,898.6	350.857	CC
EXIST VERT LOWER LATHAM #8-15 - Wellbore #1 - Wellbore #1	6,017.4	5,780.6	5,915.7	5,889.1	222.630	ES
EXIST VERT LOWER LATHAM #8-15 - Wellbore #1 - Wellbore #1	10,500.0	6,422.8	9,958.0	9,858.4	99.906	SF
EXIST VERT MILLAGE #11-10 - Wellbore #1 - Design #1	400.0	385.0	1,831.2	1,823.1	226.548	CC
EXIST VERT MILLAGE #11-10 - Wellbore #1 - Design #1	7,800.0	6,622.1	1,910.8	1,741.7	11.300	ES
EXIST VERT MILLAGE #11-10 - Wellbore #1 - Design #1	8,200.0	6,617.0	1,967.6	1,789.5	11.050	SF
EXIST VERT OGRADY #31-9 - Wellbore #1 - Design #1	6,047.4	5,915.1	2,069.2	1,935.5	15.466	CC
EXIST VERT OGRADY #31-9 - Wellbore #1 - Design #1	6,050.0	5,917.7	2,069.3	1,929.3	14.791	ES
EXIST VERT OGRADY #31-9 - Wellbore #1 - Design #1	6,200.0	6,066.5	2,077.8	1,935.7	14.629	SF
EXIST VERT PAULINE #5 - Wellbore #1 - Wellbore #1	6,005.9	5,814.5	8,067.4	8,050.7	483.268	CC
EXIST VERT PAULINE #5 - Wellbore #1 - Wellbore #1	6,017.4	5,825.9	8,067.4	8,040.9	303.975	ES
EXIST VERT PAULINE #5 - Wellbore #1 - Wellbore #1	6,047.4	5,855.8	8,067.5	8,041.0	303.608	SF
EXIST VERT PJ #2 - Wellbore #1 - Wellbore #1	5,967.6	5,672.5	7,749.7	7,733.5	477.786	CC
EXIST VERT PJ #2 - Wellbore #1 - Wellbore #1	6,017.4	5,708.7	7,750.2	7,723.7	293.031	ES
EXIST VERT PJ #2 - Wellbore #1 - Wellbore #1	8,700.0	6,400.0	9,991.2	9,933.8	174.014	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 WACKER 10G-212
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4634.0usft
Reference Site:	SW NW SEC. 10 T5N R64W 6th P.M.	MD Reference:	KB-EST @ 4634.0usft
Site Error:	0.0 usft	North Reference:	True
Reference Well:	WACKER 10G-212	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	ORIGINAL WELLBORE	Database:	EDM 5000.1 Single User Db
Reference Design:	PROPOSAL #2	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
SW NW SEC. 10 T5N R64W 6th P.M.						
EXIST VERT PJ #3 - Wellbore #1 - Wellbore #1	6,047.4	5,938.8	9,255.4	9,228.8	347.475	ES, SF
EXIST VERT PJ #3 - Wellbore #1 - Wellbore #1	6,051.1	5,941.4	9,255.4	9,238.5	545.960	CC
EXIST VERT PJ #5 - Wellbore #1 - Design #1	6,047.4	5,902.1	8,609.6	8,468.5	61.041	CC, ES
EXIST VERT PJ #5 - Wellbore #1 - Design #1	7,181.2	6,618.0	9,331.9	9,177.0	60.235	SF
EXIST VERT SLW RANCH #1-10 - Wellbore #1 - Wellbo	11,578.5	6,567.4	652.6	515.3	4.755	CC
EXIST VERT SLW RANCH #1-10 - Wellbore #1 - Wellbo	11,600.0	6,567.0	652.9	515.1	4.737	ES
EXIST VERT SLW RANCH #1-10 - Wellbore #1 - Wellbo	11,700.0	6,565.3	663.8	523.2	4.721	SF
EXIST VERT TREBOR #B10-11 - Wellbore #1 - Wellbore	9,267.9	6,545.0	1,098.2	1,023.3	14.669	CC
EXIST VERT TREBOR #B10-11 - Wellbore #1 - Wellbore	9,300.0	6,546.2	1,098.7	1,022.9	14.510	ES
EXIST VERT TREBOR #B10-11 - Wellbore #1 - Wellbore	9,700.0	6,561.9	1,180.0	1,093.6	13.649	SF
EXIST VERT TREBOR B #10-10 - Wellbore #1 - Wellbor	10,384.4	6,559.8	1,006.2	901.7	9.637	CC
EXIST VERT TREBOR B #10-10 - Wellbore #1 - Wellbor	10,400.0	6,559.7	1,006.3	901.4	9.599	ES
EXIST VERT TREBOR B #10-10 - Wellbore #1 - Wellbor	10,700.0	6,557.0	1,054.5	941.4	9.328	SF
EXIST VERT WACKER #1 - Wellbore #1 - Wellbore #1	419.1	396.7	380.0	378.9	343.200	CC, ES
EXIST VERT WACKER #1 - Wellbore #1 - Wellbore #1	7,800.0	6,617.3	503.3	465.4	13.263	SF
EXIST VERT WACKER #10D - Wellbore #1 - Wellbore #	8,401.0	6,631.2	850.0	797.5	16.188	CC, ES
EXIST VERT WACKER #10D - Wellbore #1 - Wellbore #	8,800.0	6,620.4	938.9	876.3	14.996	SF
EXIST VERT WACKER #2 - Wellbore #1 - Wellbore #1	9,355.7	6,636.5	1,291.4	1,214.2	16.723	CC
EXIST VERT WACKER #2 - Wellbore #1 - Wellbore #1	9,400.0	6,638.1	1,292.2	1,213.8	16.482	ES
EXIST VERT WACKER #2 - Wellbore #1 - Wellbore #1	9,900.0	6,657.5	1,401.3	1,309.5	15.262	SF
EXIST VERT WACKER #22-10 - Wellbore #1 - Wellbore	9,312.6	6,610.5	94.7	19.5	1.259	Level 3, CC, ES, SF
EXIST VERT WACKER #31-10 - Wellbore #1 - Wellbore	10,223.2	6,633.4	1,651.7	1,551.8	16.531	CC
EXIST VERT WACKER #31-10 - Wellbore #1 - Wellbore	10,300.0	6,633.9	1,653.5	1,551.5	16.210	ES
EXIST VERT WACKER #31-10 - Wellbore #1 - Wellbore	11,000.0	6,638.4	1,825.3	1,704.1	15.063	SF
EXIST VERT WACKER #32-10 - Wellbore #1 - Design #	10,208.0	6,592.1	465.7	237.6	2.042	CC, ES, SF
EXIST VERT WACKER #32-10 - Wellbore #1 - Wellbore	10,278.5	6,595.6	449.2	347.7	4.427	CC
EXIST VERT WACKER #32-10 - Wellbore #1 - Wellbore	10,300.0	6,596.1	449.7	347.6	4.406	ES, SF
EXIST VERT WACKER #41-10 - Wellbore #1 - Wellbore	11,843.6	6,462.4	1,666.9	1,522.4	11.534	CC, ES, SF
EXIST VERT WACKER #42-10 - Wellbore #1 - Wellbore	11,716.3	6,500.0	358.9	219.0	2.565	CC, ES, SF
EXIST VERT WILLIAMS #1 - Wellbore #1 - Wellbore #1	5,183.9	5,028.6	988.9	964.9	41.194	CC
EXIST VERT WILLIAMS #1 - Wellbore #1 - Wellbore #1	5,300.0	5,142.7	989.2	964.6	40.226	ES
EXIST VERT WILLIAMS #1 - Wellbore #1 - Wellbore #1	11,843.6	6,573.5	5,254.3	5,109.7	36.339	SF
WACKER 10F-204 - ORIGINAL WELLBORE - PROPOS	300.0	300.0	134.8	133.7	125.736	CC, ES
WACKER 10F-204 - ORIGINAL WELLBORE - PROPOS	6,450.0	7,714.2	1,034.7	977.6	18.117	SF
WACKER 10F-232 - ORIGINAL WELLBORE - PROPOS	400.0	400.0	29.9	28.4	19.640	CC
WACKER 10F-232 - ORIGINAL WELLBORE - PROPOS	500.0	500.0	30.1	28.2	15.378	ES
WACKER 10F-232 - ORIGINAL WELLBORE - PROPOS	11,843.6	11,864.5	454.3	168.3	1.589	SF
WACKER 10F-234 - ORIGINAL WELLBORE - PROPOS	400.0	400.0	104.9	103.4	68.956	CC
WACKER 10F-234 - ORIGINAL WELLBORE - PROPOS	500.0	500.0	105.1	103.1	53.661	ES
WACKER 10F-234 - ORIGINAL WELLBORE - PROPOS	6,750.0	7,470.6	532.1	480.2	10.259	SF
WACKER 10F-302 - ORIGINAL WELLBORE - PROPOS	400.0	400.0	44.8	43.3	29.448	CC
WACKER 10F-302 - ORIGINAL WELLBORE - PROPOS	500.0	500.0	45.0	43.0	22.977	ES
WACKER 10F-302 - ORIGINAL WELLBORE - PROPOS	11,843.6	11,976.9	699.6	414.8	2.456	SF
WACKER 10F-304 - ORIGINAL WELLBORE - PROPOS	400.0	400.0	119.9	118.3	78.772	CC, ES
WACKER 10F-304 - ORIGINAL WELLBORE - PROPOS	6,650.0	7,637.0	790.1	737.2	14.916	SF
WACKER 10G-214 - ORIGINAL WELLBORE - PROPOS	7,260.9	6,975.7	49.9	4.0	1.087	Level 2, CC, ES, SF
WACKER 10G-302 - ORIGINAL WELLBORE - PROPOS	300.0	300.0	15.3	14.2	14.275	CC, ES
WACKER 10G-302 - ORIGINAL WELLBORE - PROPOS	11,843.6	11,943.0	316.8	37.9	1.136	Level 2, SF
WACKER 10G-304 - ORIGINAL WELLBORE - PROPOS	300.0	300.0	59.7	58.7	55.730	CC
WACKER 10G-304 - ORIGINAL WELLBORE - PROPOS	400.0	399.9	59.8	58.3	39.573	ES
WACKER 10G-304 - ORIGINAL WELLBORE - PROPOS	7,500.0	6,819.3	265.2	219.0	5.744	SF
WACKER 10G-312 - ORIGINAL WELLBORE - PROPOS	400.0	400.0	15.0	13.4	9.831	CC
WACKER 10G-312 - ORIGINAL WELLBORE - PROPOS	11,843.6	11,947.5	260.6	-15.7	0.943	Level 1, ES, SF

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

Header Information	measured depth (ft)	inclination (°)	azimuth (°)	true vertical depth (ft)
Operator Name	0	0	0	0
PDC ENERGY	100	0	0	100
Operator Number	200	0	0	200
69175	300	0	0	300
Well Name and Number	400	0	0	400
WACKER 10G-212	500	2	265.53	499.98
API Number (if available)	600	4	265.53	599.84
	700	6	265.53	699.45
Location: QQ SEC TWP RGE	800	8	265.53	798.7
SW NW SEC. 10 T5N R64W	900	10	265.53	897.47
Citing Type: Planned or Actual	1000	12	265.53	995.62
Planned	1039.77	12.8	265.53	1034.47
Deviation Indicator	1100	12.8	265.53	1093.2
Horizontal	1200	12.8	265.53	1190.72
North Reference	1300	12.8	265.53	1288.23
True	1400	12.8	265.53	1385.75
Grid Type	1500	12.8	265.53	1483.27
	1600	12.8	265.53	1580.78
	1700	12.8	265.53	1678.3
	1800	12.8	265.53	1775.82
	1900	12.8	265.53	1873.33
	2000	12.8	265.53	1970.85
	2100	12.8	265.53	2068.37
	2200	12.8	265.53	2165.88
	2300	12.8	265.53	2263.4
	2400	12.8	265.53	2360.92
	2500	12.8	265.53	2458.43
	2600	12.8	265.53	2555.95
	2700	12.8	265.53	2653.47
	2800	12.8	265.53	2750.98
	2900	12.8	265.53	2848.5
	3000	12.8	265.53	2946.02
	3100	12.8	265.53	3043.53
	3200	12.8	265.53	3141.05
	3300	12.8	265.53	3238.57
	3400	12.8	265.53	3336.08
	3500	12.8	265.53	3433.6
	3600	12.8	265.53	3531.12
	3700	12.8	265.53	3628.63
	3800	12.8	265.53	3726.15
	3900	12.8	265.53	3823.67
	4000	12.8	265.53	3921.18

4100	12.8	265.53	4018.7
4200	12.8	265.53	4116.22
4300	12.8	265.53	4213.73
4400	12.8	265.53	4311.25
4500	12.8	265.53	4408.77
4600	12.8	265.53	4506.28
4700	12.8	265.53	4603.8
4800	12.8	265.53	4701.32
4900	12.8	265.53	4798.83
5000	12.8	265.53	4896.35
5100	12.8	265.53	4993.87
5200	12.8	265.53	5091.38
5300	12.8	265.53	5188.9
5377.66	12.8	265.53	5264.63
5400	12.35	265.53	5286.44
5500	10.35	265.53	5384.48
5600	8.35	265.53	5483.14
5700	6.35	265.53	5582.32
5800	4.35	265.53	5681.88
5900	2.35	265.53	5781.7
6000	0.35	265.53	5881.67
6017.43	0	0	5899.1
6047.43	0	0	5929.1
6100	4.21	90	5981.62
6200	12.21	90	6080.52
6300	20.21	90	6176.46
6400	28.21	90	6267.59
6500	36.22	90	6352.13
6600	44.22	90	6428.42
6700	52.22	90	6494.99
6800	60.23	90	6550.54
6900	68.23	90	6593.99
7000	76.23	90	6624.48
7100	84.23	90	6641.44
7181.21	90.73	90	6645
7200	90.73	90	6644.76
7300	90.73	90	6643.48
7400	90.73	90	6642.2
7500	90.73	90	6640.92
7600	90.73	90	6639.64
7700	90.73	90	6638.36
7800	90.73	90	6637.08
7900	90.73	90	6635.8
8000	90.73	90	6634.52
8100	90.73	90	6633.24
8200	90.73	90	6631.95
8300	90.73	90	6630.67

8400	90.74	90	6629.39
8500	90.74	90	6628.11
8600	90.74	90	6626.82
8700	90.74	90	6625.54
8800	90.74	90	6624.25
8900	90.74	90	6622.97
9000	90.74	90	6621.68
9100	90.74	90	6620.4
9200	90.74	90	6619.11
9300	90.74	90	6617.83
9400	90.74	90	6616.54
9500	90.74	90	6615.25
9600	90.74	90	6613.97
9700	90.74	90	6612.68
9800	90.74	90	6611.39
9900	90.74	90	6610.1
10000	90.74	90	6608.82
10100	90.74	90	6607.53
10200	90.74	90	6606.24
10300	90.74	90	6604.95
10400	90.74	90	6603.66
10500	90.74	90	6602.37
10600	90.74	90	6601.08
10700	90.74	90	6599.79
10800	90.74	90	6598.5
10900	90.74	90	6597.2
11000	90.74	90	6595.91
11100	90.74	90	6594.62
11200	90.74	90	6593.33
11300	90.74	90	6592.03
11400	90.74	90	6590.74
11500	90.74	90	6589.45
11600	90.74	90	6588.15
11700	90.74	90	6586.86
11800	90.74	90	6585.56
11843.58	90.74	90	6585