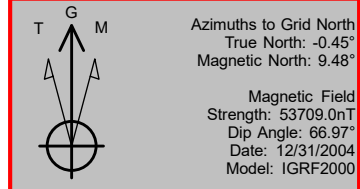




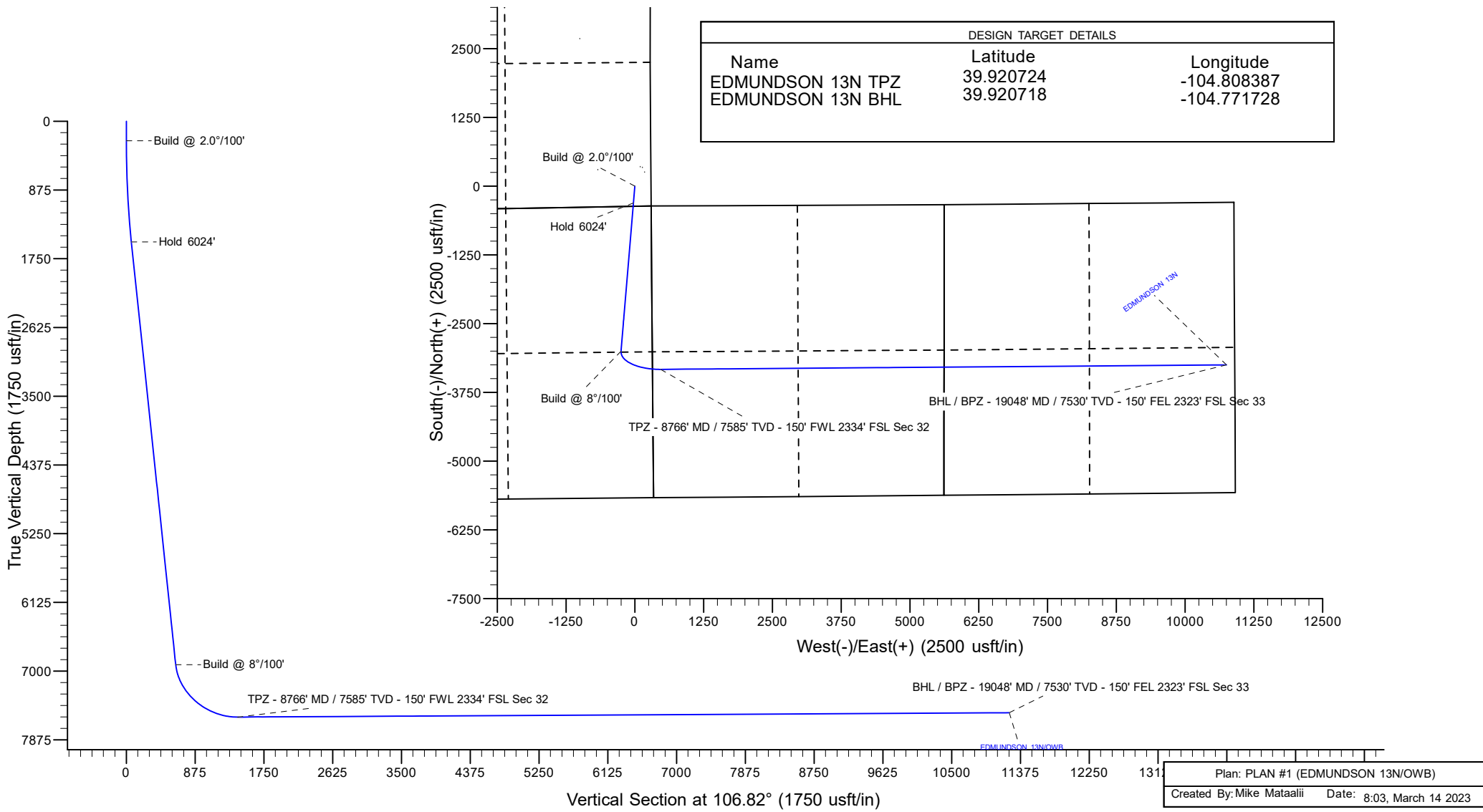
Project: WELD COUNTY
 Site: Edmundson Pad
 Well: EDMUNDSON 13N
 Wellbore: OWB
 Design: PLAN #1
 Lat: 39.929875
 Long: -104.809973
 GL: 5052.0
 KB: KB 25 @ 5077.0usft



WELL DETAILS: EDMUNDSON 13N						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.0	0.0	1218055.19	3193510.24	39.929875	-104.809973	

SECTION DETAILS										
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Annotation	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.0	Build @ 2.0°/100'	
1584.4	26.69	184.78	1536.6	-304.1	-25.4	2.00	184.78	63.7	Hold 6024'	
7608.7	26.69	184.78	6919.2	-3000.4	-250.8	0.00	0.00	628.0	Build @ 8°/100'	
8766.4	90.31	89.55	7585.0	-3330.1	470.8	8.00	-94.53	1414.1	TPZ - 8766' MD / 7585' TVD - 150' FWL 2334' FSL Sec 32	
19048.8	90.31	89.55	7530.0	-3249.8	10752.7	0.00	0.00	11233.1	BHL / BPZ - 19048' MD / 7530' TVD - 150' FEL 2323' FSL Sec 33	

DESIGN TARGET DETAILS		
Name	Latitude	Longitude
EDMUNDSON 13N TPZ	39.920724	-104.808387
EDMUNDSON 13N BHL	39.920718	-104.771728



PDC Energy Inc.
Anticollision Summary Report

Company:	PDC - PLANNING DB	Local Co-ordinate Reference:	Well EDMUNDSON 13N
Project:	WELD COUNTY	TVD Reference:	KB 25 @ 5077.0usft
Reference Site:	Edmundson Pad	MD Reference:	KB 25 @ 5077.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EDMUNDSON 13N	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #1	Offset TVD Reference:	Offset Datum

Reference	PLAN #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 2,500.0 usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	3/14/2023		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	19,048.8	PLAN #1 (OWB)	MWD	OWSG MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Edmundson Offsets						
CUTLER 1-A - OWB - OWB	11,900.0	7,581.2	982.8	742.3	4.087	SF
CUTLER 1-A - OWB - OWB	11,929.9	7,581.1	982.3	742.0	4.088	CC, ES
CUTLER 1D - OWB - OWB	12,727.7	7,579.8	2,041.0	1,780.9	7.847	CC, ES
CUTLER 1D - OWB - OWB	12,800.0	7,579.4	2,042.3	1,781.6	7.832	SF
EDMUNDSON LE 33-082HC - OWB - OWB	496.6	498.5	46.7	42.0	9.869	CC
EDMUNDSON LE 33-082HC - OWB - OWB	500.0	501.9	46.7	41.9	9.817	ES
EDMUNDSON LE 33-082HC - OWB - OWB	18,900.0	18,427.4	1,765.0	1,196.8	3.107	SF
ERGER 1 - OWB - OWB	11,834.9	7,596.6	1,549.4	1,311.1	6.503	CC
ERGER 1 - OWB - OWB	11,900.0	7,596.2	1,550.7	1,309.7	6.433	ES
ERGER 1 - OWB - OWB	12,100.0	7,595.2	1,571.9	1,323.3	6.323	SF
ERNEST H KALLSEN 2 - OWB - OWB						Out of range
ERNST H KALLSEN 1 - OWB - OWB						Out of range
EVERETTE DAHLINGER A1 - OWB - OWB						Out of range
FARNER 1 - OWB - OWB	13,082.9	7,579.9	368.9	220.1	2.478	CC
FARNER 1 - OWB - OWB	13,100.0	7,579.8	369.3	218.7	2.452	ES, SF
FREEMAN 1 - OWB - OWB	8,129.6	7,372.0	556.5	381.5	3.180	CC
FREEMAN 1 - OWB - OWB	8,150.0	7,386.0	556.9	381.2	3.169	ES
FREEMAN 1 - OWB - OWB	8,200.0	7,418.7	561.1	383.5	3.159	SF
FREEMAN 1-A - OWB - OWB	8,129.6	7,366.0	556.5	381.6	3.182	CC
FREEMAN 1-A - OWB - OWB	8,150.0	7,380.0	556.9	381.3	3.171	ES
FREEMAN 1-A - OWB - OWB	8,200.0	7,412.7	561.1	383.6	3.161	SF
GREEN 1 - OWB - OWB						Out of range
IKE 1 - OWB - OWB	19,048.8	7,588.0	2,314.0	2,126.4	12.333	CC, ES, SF
KIMMEL 12-33 - OWB - OWB	14,618.2	7,580.7	1,143.5	835.0	3.707	CC, ES, SF
OHD 1 - OWB - OWB						Out of range
PC 1S-66-2928 - OWB - OWB	286.1	321.8	2,161.1	2,157.8	661.868	CC
PC 1S-66-2928 - OWB - OWB	300.0	333.5	2,161.1	2,157.8	652.150	ES
PC 1S-66-2928 - OWB - OWB	1,800.0	1,772.5	2,470.8	2,457.0	179.421	SF
PC 1S-66-2928 14CDH - OWB - OWB	0.0	17.0	2,126.7			
PC 1S-66-2928 14CDH - OWB - OWB	200.0	199.4	2,127.7	2,125.1	823.380	ES
PC 1S-66-2928 14CDH - OWB - OWB	2,600.0	2,925.4	2,490.5	2,465.5	99.675	SF
PC 1S-66-2928 17NH - OWB - OWB	0.0	17.0	2,105.4			
PC 1S-66-2928 17NH - OWB - OWB	277.3	308.5	2,107.1	2,104.2	721.593	ES
PC 1S-66-2928 17NH - OWB - OWB	3,900.0	4,303.3	2,497.7	2,456.0	59.971	SF
PC 1S-66-2928 17NH - ST01 - ST01	0.0	17.0	2,105.4			
PC 1S-66-2928 17NH - ST01 - ST01	277.3	308.5	2,107.1	2,104.2	721.593	ES
PC 1S-66-2928 17NH - ST01 - ST01	3,900.0	4,303.3	2,497.7	2,456.0	59.971	SF

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

PDC Energy Inc.
Anticollision Summary Report

Company:	PDC - PLANNING DB	Local Co-ordinate Reference:	Well EDMUNDSON 13N
Project:	WELD COUNTY	TVD Reference:	KB 25 @ 5077.0usft
Reference Site:	Edmundson Pad	MD Reference:	KB 25 @ 5077.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EDMUNDSON 13N	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #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
Edmundson Offsets						
PC 1S-66-2928 19NH - OWB - OWB	1,615.4	2,352.0	1,952.8	1,932.8	97.713	CC
PC 1S-66-2928 19NH - OWB - OWB	1,700.0	2,415.0	1,953.4	1,932.6	93.819	ES
PC 1S-66-2928 19NH - OWB - OWB	5,700.0	6,009.0	2,491.0	2,426.3	38.451	SF
PC 1S-66-2928 20CDH - OWB - OWB	1,816.7	2,518.1	1,880.6	1,856.9	79.327	CC
PC 1S-66-2928 20CDH - OWB - OWB	1,900.0	2,575.2	1,881.2	1,856.7	76.712	ES
PC 1S-66-2928 20CDH - OWB - OWB	6,700.0	6,967.7	2,424.1	2,346.9	31.415	SF
PC 1S-66-2928 9NH - OWB - OWB	0.0	15.0	1,939.8			
PC 1S-66-2928 9NH - OWB - OWB	200.0	201.7	1,940.8	1,938.2	748.111	ES
PC 1S-66-2928 9NH - OWB - OWB	2,300.0	1,993.3	2,486.7	2,467.5	128.928	SF
POLLARD 1 - OWB - OWB						Out of range
PRAIRIE LE 31-369HC - OWB - OWB	7,875.1	17,047.7	1,902.1	1,707.2	9.763	CC
PRAIRIE LE 31-369HC - OWB - OWB	7,900.0	17,056.0	1,902.6	1,706.6	9.708	ES
PRAIRIE LE 31-369HC - OWB - OWB	8,050.0	17,097.0	1,929.8	1,727.3	9.530	SF
REASONER 1 - OWB - OWB	9,913.1	7,620.9	1,356.4	1,160.9	6.939	CC
REASONER 1 - OWB - OWB	10,000.0	7,620.4	1,359.2	1,160.6	6.842	ES
REASONER 1 - OWB - OWB	10,200.0	7,619.3	1,386.4	1,180.7	6.738	SF
REASONER 1-A - OWB - OWB	10,580.7	7,624.3	369.2	159.8	1.763	Collision Risk Procedures R
REASONER 1-A - OWB - OWB	10,600.0	7,624.2	369.7	158.5	1.751	Collision Risk Procedures R
REASONER 1A-X - OWB - OWB	9,913.1	7,628.9	1,356.4	1,160.8	6.934	CC
REASONER 1A-X - OWB - OWB	10,000.0	7,628.4	1,359.2	1,160.4	6.837	ES
REASONER 1A-X - OWB - OWB	10,200.0	7,627.3	1,386.4	1,180.5	6.733	SF
SUPERS 1 - OWB - OWB	9,259.6	7,592.4	982.2	798.3	5.342	CC, ES, SF

PDC Energy Inc.
Anticollision Summary Report

Company:	PDC - PLANNING DB	Local Co-ordinate Reference:	Well EDMUNDSON 13N
Project:	WELD COUNTY	TVD Reference:	KB 25 @ 5077.0usft
Reference Site:	Edmundson Pad	MD Reference:	KB 25 @ 5077.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EDMUNDSON 13N	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #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
Edmundson Pad						
Edmundson Pad						
EDMUNDSON 01N - OWB - PLAN #1	250.0	250.0	50.0	47.2	18.115	CC
EDMUNDSON 01N - OWB - PLAN #1	500.0	503.9	51.1	44.1	7.317	ES
EDMUNDSON 01N - OWB - PLAN #1	700.0	703.9	59.1	50.2	6.611	SF
EDMUNDSON 02N - OWB - PLAN #1	250.0	250.0	51.5	48.8	18.673	CC
EDMUNDSON 02N - OWB - PLAN #1	600.0	605.2	53.8	45.6	6.533	ES
EDMUNDSON 02N - OWB - PLAN #1	700.0	705.2	56.9	47.7	6.166	SF
EDMUNDSON 03N - OWB - PLAN #1	250.0	250.0	55.9	53.1	20.254	CC
EDMUNDSON 03N - OWB - PLAN #1	600.0	605.2	57.9	50.2	7.493	ES
EDMUNDSON 03N - OWB - PLAN #1	19,048.8	18,437.2	2,324.8	1,741.0	3.982	SF
EDMUNDSON 04NA - OWB - PLAN #1	250.0	250.0	62.5	59.7	22.644	CC
EDMUNDSON 04NA - OWB - PLAN #1	600.0	605.1	64.1	56.9	8.829	ES
EDMUNDSON 04NA - OWB - PLAN #1	19,048.8	18,255.1	2,118.4	1,537.6	3.647	SF
EDMUNDSON 05N - OWB - PLAN #1	250.0	250.0	70.7	68.0	25.619	CC
EDMUNDSON 05N - OWB - PLAN #1	900.0	909.7	73.5	63.8	7.571	ES
EDMUNDSON 05N - OWB - PLAN #1	19,048.8	18,483.9	1,690.5	1,106.5	2.894	SF
EDMUNDSON 06N - OWB - PLAN #1	250.0	250.0	80.0	77.3	28.999	CC
EDMUNDSON 06N - OWB - PLAN #1	1,000.0	1,011.1	82.2	72.1	8.121	ES
EDMUNDSON 06N - OWB - PLAN #1	19,048.8	18,620.9	1,479.9	894.9	2.530	SF
EDMUNDSON 07NA - OWB - PLAN #1	250.0	250.0	90.1	87.4	32.658	CC
EDMUNDSON 07NA - OWB - PLAN #1	1,200.0	1,212.7	91.9	80.4	8.032	ES
EDMUNDSON 07NA - OWB - PLAN #1	19,048.8	18,464.7	1,276.7	698.7	2.209	SF
EDMUNDSON 08C - OWB - PLAN #1	1,156.3	1,169.5	99.9	89.2	9.364	CC
EDMUNDSON 08C - OWB - PLAN #1	1,200.0	1,213.2	100.0	89.0	9.044	ES
EDMUNDSON 08C - OWB - PLAN #1	19,048.8	18,890.3	1,075.3	494.6	1.852	Collision Risk Procedures Re
EDMUNDSON 09N - OWB - PLAN #1	1,307.9	1,322.9	108.3	96.4	9.081	CC
EDMUNDSON 09N - OWB - PLAN #1	1,400.0	1,414.9	108.9	95.9	8.351	ES
EDMUNDSON 09N - OWB - PLAN #1	19,048.8	18,728.4	845.3	260.4	1.445	Collision Avoidance Req., SF
EDMUNDSON 10N - OWB - PLAN #1	1,414.4	1,430.4	117.0	104.1	9.045	CC
EDMUNDSON 10N - OWB - PLAN #1	19,048.8	18,891.2	635.9	50.1	1.086	Collision Avoidance Req., ES
EDMUNDSON 11NA - OWB - PLAN #1	1,579.7	1,597.5	124.4	109.5	8.353	CC
EDMUNDSON 11NA - OWB - PLAN #1	19,048.8	18,777.4	446.8	-102.4	0.814	No-Go Zone - Stop Drilling, E
EDMUNDSON 12C - OWB - PLAN #1	2,055.4	2,073.3	131.8	110.2	6.087	CC
EDMUNDSON 12C - OWB - PLAN #1	19,048.8	19,199.0	301.5	-153.3	0.663	No-Go Zone - Stop Drilling, E
EDMUNDSON 14N - OWB - PLAN #1	1,660.2	1,659.8	9.7	-5.7	0.629	No-Go Zone - Stop Drilling, C
EDMUNDSON 14N - OWB - PLAN #1	19,048.8	19,231.9	218.4	-343.3	0.389	No-Go Zone - Stop Drilling, E
EDMUNDSON 15NA - OWB - PLAN #1	1,697.2	1,696.3	19.2	3.2	1.204	Collision Avoidance Req., CC
EDMUNDSON 15NA - OWB - PLAN #1	19,048.8	19,153.7	445.2	-122.7	0.784	No-Go Zone - Stop Drilling, E
EDMUNDSON 16C - OWB - PLAN #1	1,736.1	1,734.8	28.7	12.1	1.733	Collision Risk Procedures Re
EDMUNDSON 16C - OWB - PLAN #1	1,900.0	1,898.3	30.8	10.5	1.515	Collision Risk Procedures Re
EDMUNDSON 16C - OWB - PLAN #1	19,048.8	19,565.6	671.0	122.9	1.224	Collision Avoidance Req., SF
EDMUNDSON 17N - OWB - PLAN #1	1,794.9	1,792.9	49.4	31.9	2.829	CC
EDMUNDSON 17N - OWB - PLAN #1	1,900.0	1,897.0	50.8	31.0	2.571	ES
EDMUNDSON 17N - OWB - PLAN #1	19,048.8	19,468.9	845.3	259.9	1.444	Collision Avoidance Req., SF
EDMUNDSON 18N - OWB - PLAN #1	1,822.8	1,820.4	59.5	41.6	3.321	CC
EDMUNDSON 18N - OWB - PLAN #1	1,900.0	1,896.8	60.2	40.7	3.084	ES
EDMUNDSON 18N - OWB - PLAN #1	19,048.8	19,661.6	1,058.6	475.5	1.816	Collision Risk Procedures Re
EDMUNDSON 19NA - OWB - PLAN #1	1,849.2	1,846.5	69.5	51.2	3.792	CC
EDMUNDSON 19NA - OWB - PLAN #1	1,900.0	1,896.7	69.8	50.5	3.609	ES
EDMUNDSON 19NA - OWB - PLAN #1	19,048.8	19,614.2	1,275.1	689.0	2.176	SF
EDMUNDSON 20C - OWB - PLAN #1	1,874.3	1,871.3	79.6	60.8	4.247	CC
EDMUNDSON 20C - OWB - PLAN #1	2,000.0	1,994.9	81.7	60.4	3.834	ES
EDMUNDSON 20C - OWB - PLAN #1	19,048.8	20,024.7	1,496.2	920.2	2.598	SF
EDMUNDSON 21N - OWB - PLAN #1	1,897.8	1,894.5	89.8	70.7	4.698	CC

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

PDC Energy Inc.
Anticollision Summary Report

Company:	PDC - PLANNING DB	Local Co-ordinate Reference:	Well EDMUNDSON 13N
Project:	WELD COUNTY	TVD Reference:	KB 25 @ 5077.0usft
Reference Site:	Edmundson Pad	MD Reference:	KB 25 @ 5077.0usft
Site Error:	0.0 usft	North Reference:	Grid
Reference Well:	EDMUNDSON 13N	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0 usft	Output errors are at	2.00 sigma
Reference Wellbore	OWB	Database:	EDM 5000.15 Single User Db
Reference Design:	PLAN #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
Edmundson Pad						
Edmundson Pad						
EDMUNDSON 21N - OWB - PLAN #1	2,000.0	1,994.9	91.1	70.0	4.308	ES
EDMUNDSON 21N - OWB - PLAN #1	19,048.8	19,963.5	1,690.5	1,104.5	2.885	SF
EDMUNDSON 22N - OWB - PLAN #1	1,919.2	1,915.7	100.3	80.8	5.155	CC
EDMUNDSON 22N - OWB - PLAN #1	2,000.0	1,995.0	101.1	80.1	4.806	ES
EDMUNDSON 22N - OWB - PLAN #1	19,048.8	20,163.5	1,903.1	1,318.1	3.253	SF
EDMUNDSON 23N - OWB - PLAN #1	1,940.5	1,936.7	110.6	90.8	5.587	CC
EDMUNDSON 23N - OWB - PLAN #1	2,000.0	1,995.0	111.1	90.1	5.303	ES
EDMUNDSON 23N - OWB - PLAN #1	19,048.8	20,233.0	2,113.1	1,526.7	3.603	SF

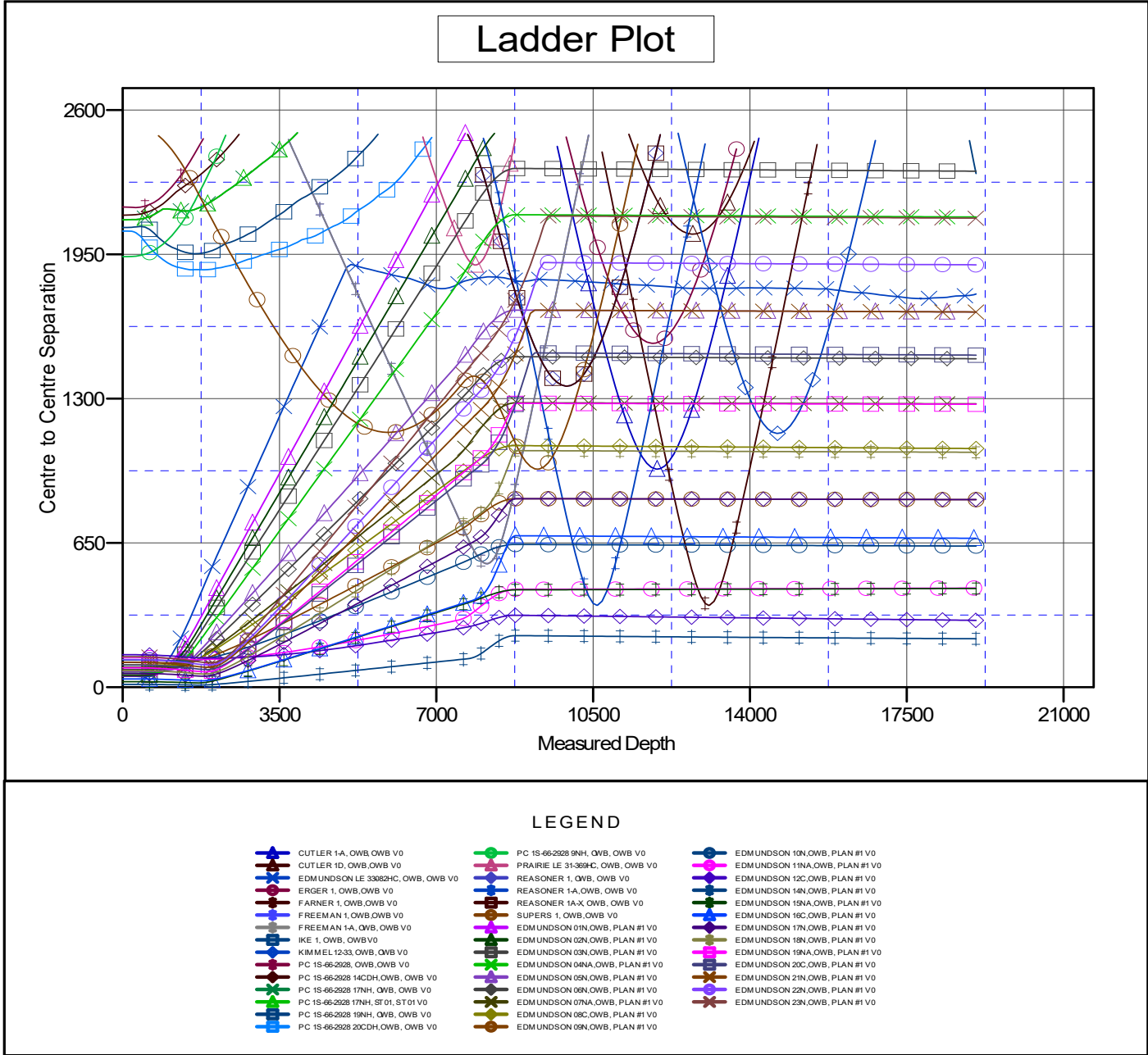
PDC Energy Inc.

Anticollision Summary Report

Company: PDC - PLANNING DB	Local Co-ordinate Reference: Well EDMUNDSON 13N
Project: WELD COUNTY	TVD Reference: KB 25 @ 5077.0usft
Reference Site: Edmundson Pad	MD Reference: KB 25 @ 5077.0usft
Site Error: 0.0 usft	North Reference: Grid
Reference Well: EDMUNDSON 13N	Survey Calculation Method: Minimum Curvature
Well Error: 0.0 usft	Output errors are at: 2.00 sigma
Reference Wellbore: OWB	Database: EDM 5000.15 Single User Db
Reference Design: PLAN #1	Offset TVD Reference: Offset Datum

Reference Depths are relative to KB 25 @ 5077.0usft
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000

Coordinates are relative to: EDMUNDSON 13N
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.45°



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

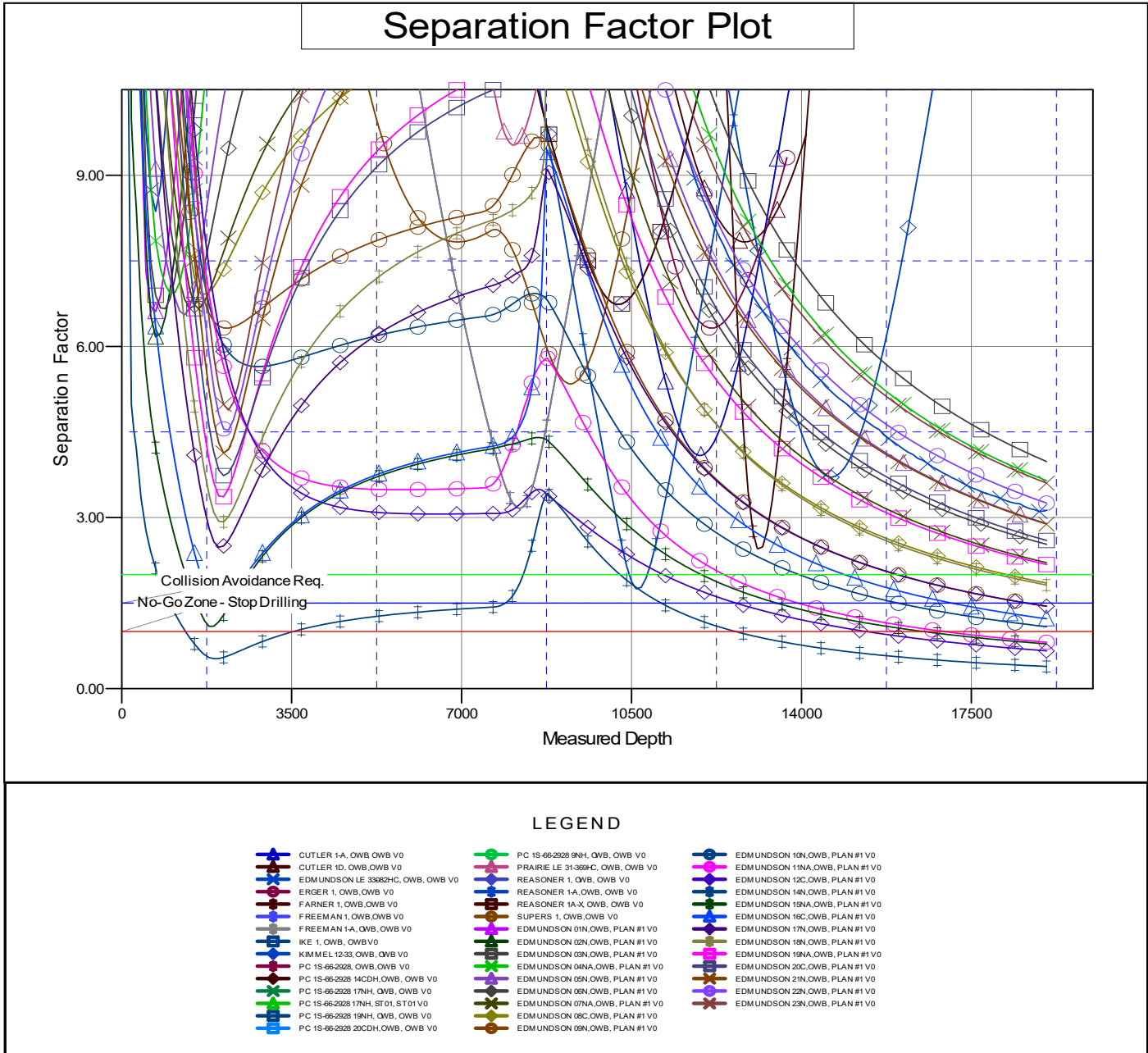
PDC Energy Inc.

Anticollision Summary Report

Company: PDC - PLANNING DB	Local Co-ordinate Reference: Well EDMUNDSON 13N
Project: WELD COUNTY	TVD Reference: KB 25 @ 5077.0usft
Reference Site: Edmundson Pad	MD Reference: KB 25 @ 5077.0usft
Site Error: 0.0 usft	North Reference: Grid
Reference Well: EDMUNDSON 13N	Survey Calculation Method: Minimum Curvature
Well Error: 0.0 usft	Output errors are at: 2.00 sigma
Reference Wellbore: OWB	Database: EDM 5000.15 Single User Db
Reference Design: PLAN #1	Offset TVD Reference: Offset Datum

Reference Depths are relative to KB 25 @ 5077.0usft
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000

Coordinates are relative to: EDMUNDSON 13N
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.45°



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