

PDC ENERGY

**WELD COUNTY, COLORADO
NW SW SEC. 17 T5N R64W 6th P.M.
CECIL'S KERSEY FARM 17K-402**

ORIGINAL WELLBORE

16 September, 2015

Plan: PROPOSAL #2





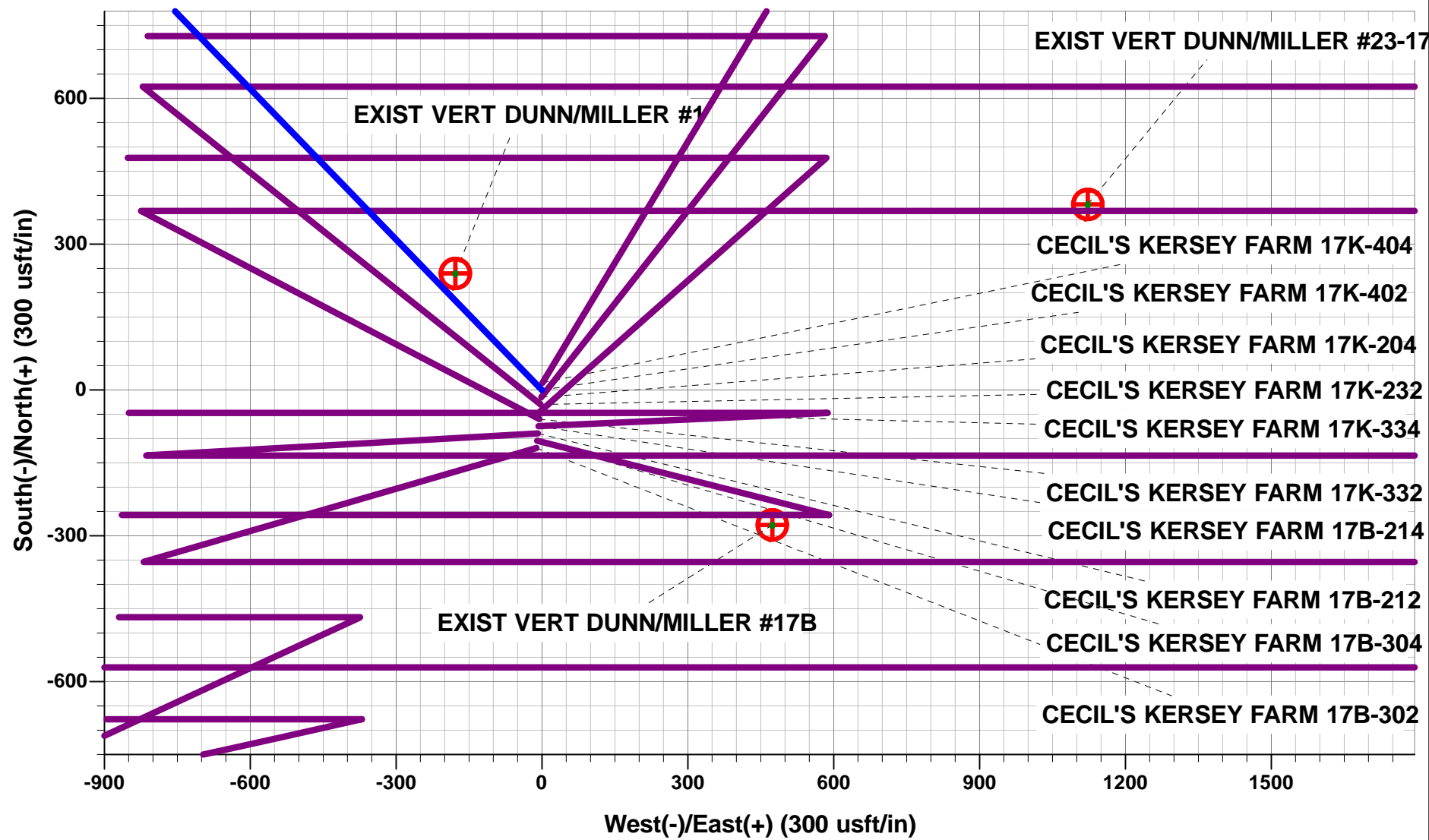
Project: WELD COUNTY, COLORADO
Site: NW SW SEC. 17 T5N R64W 6th P.M.
Well: CECIL'S KERSEY FARM 17K-402
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #2

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Dep	Annotation
1150.0	1150.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1934.9	1945.1	15.90	315.91	78.7	-76.3	-58.0	109.6	EOB TO 15.9° INC
5323.9	5468.9	15.90	315.91	772.3	-748.0	-568.4	1075.1	END OF TANGENT
6108.8	6264.0	0.00	0.00	851.0	-824.3	-626.3	1184.8	EOD TO VERTICAL
6138.8	6294.0	0.00	0.00	851.0	-824.3	-626.3	1184.8	KOP (8°/100ft BUR)
6855.0	7424.9	90.47	90.00	851.0	-102.2	79.5	1906.9	7" ICP *NEW* - CECIL'S KERSEY FARM 17K-402 (P2)
6822.0	11472.3	90.46	90.00	851.0	3945.0	4035.8	5954.1	BHL - CECIL'S KERSEY FARM 17K-402 (P2)

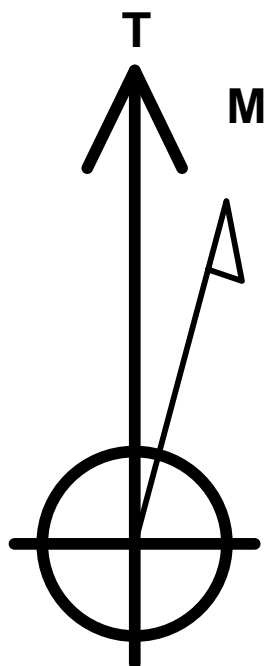
WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - CECIL'S KERSEY FARM 17K-402 (P2)	6138.8	851.0	-824.3	40.399038	-104.583351
7" ICP *NEW* - CECIL'S KERSEY FARM 17K-402 (P2)	6855.0	851.0	-102.2	40.399038	-104.580758
BHL - CECIL'S KERSEY FARM 17K-402 (P2)	6822.0	851.0	3945.0	40.399037	-104.566227



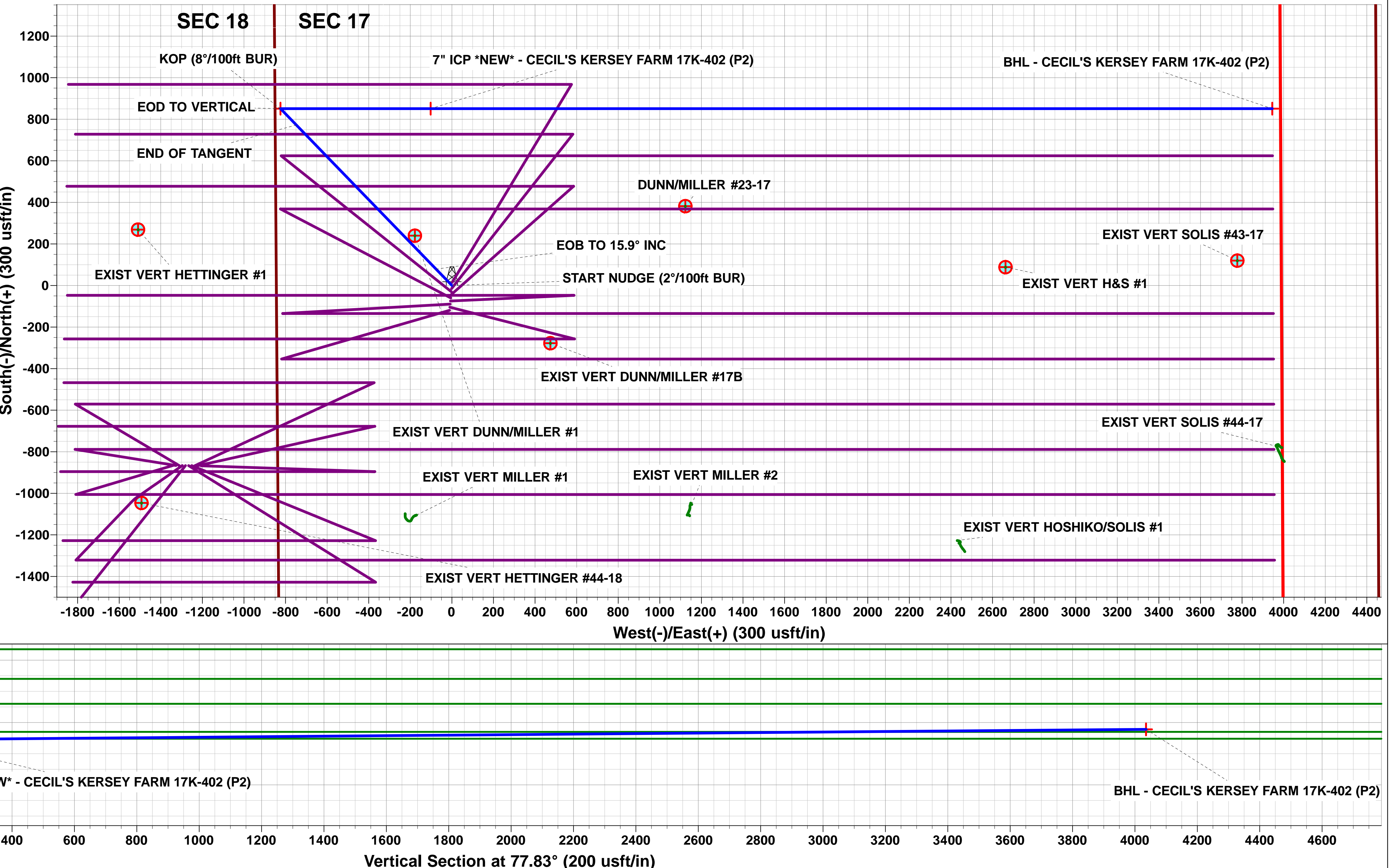
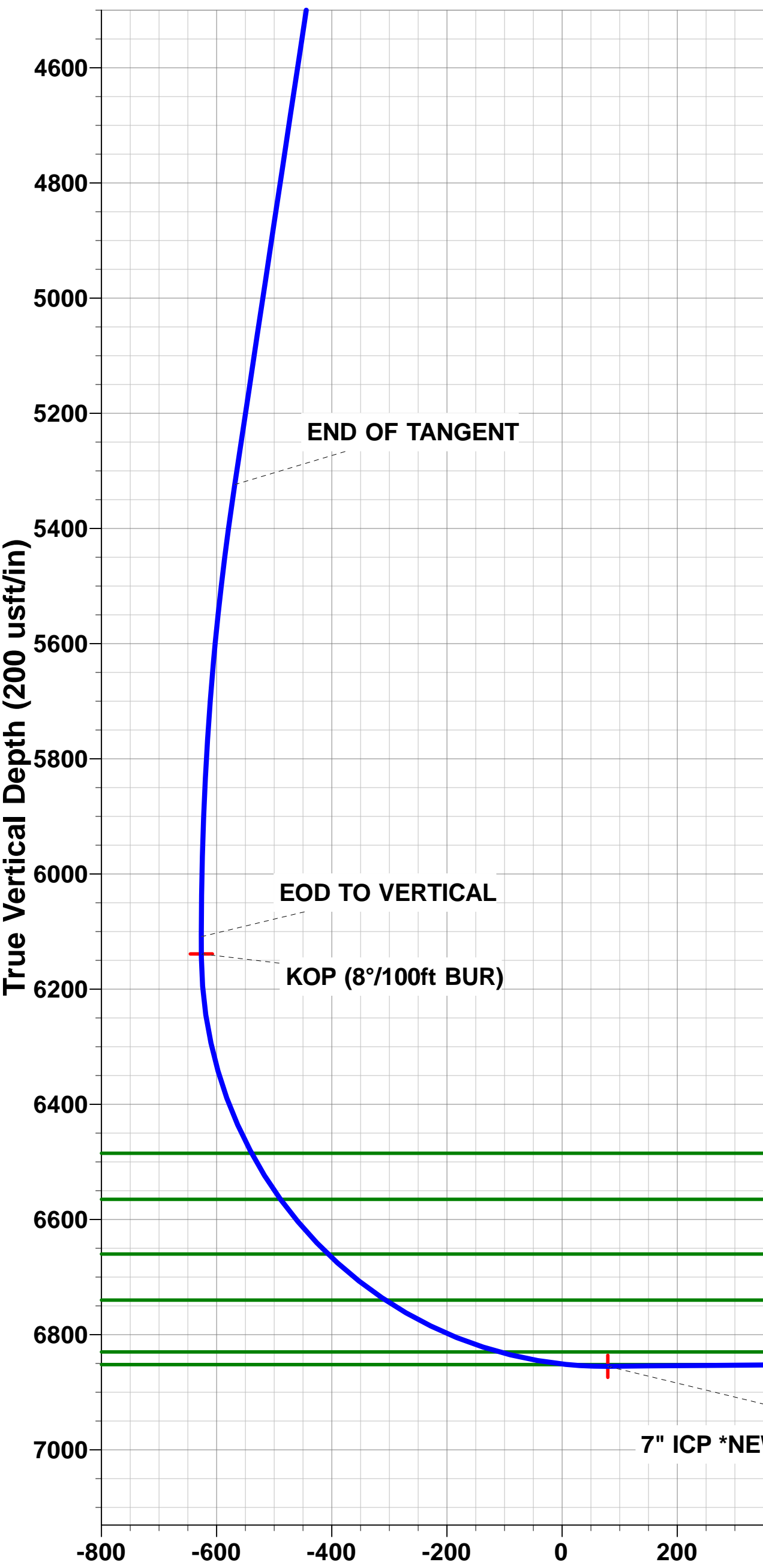
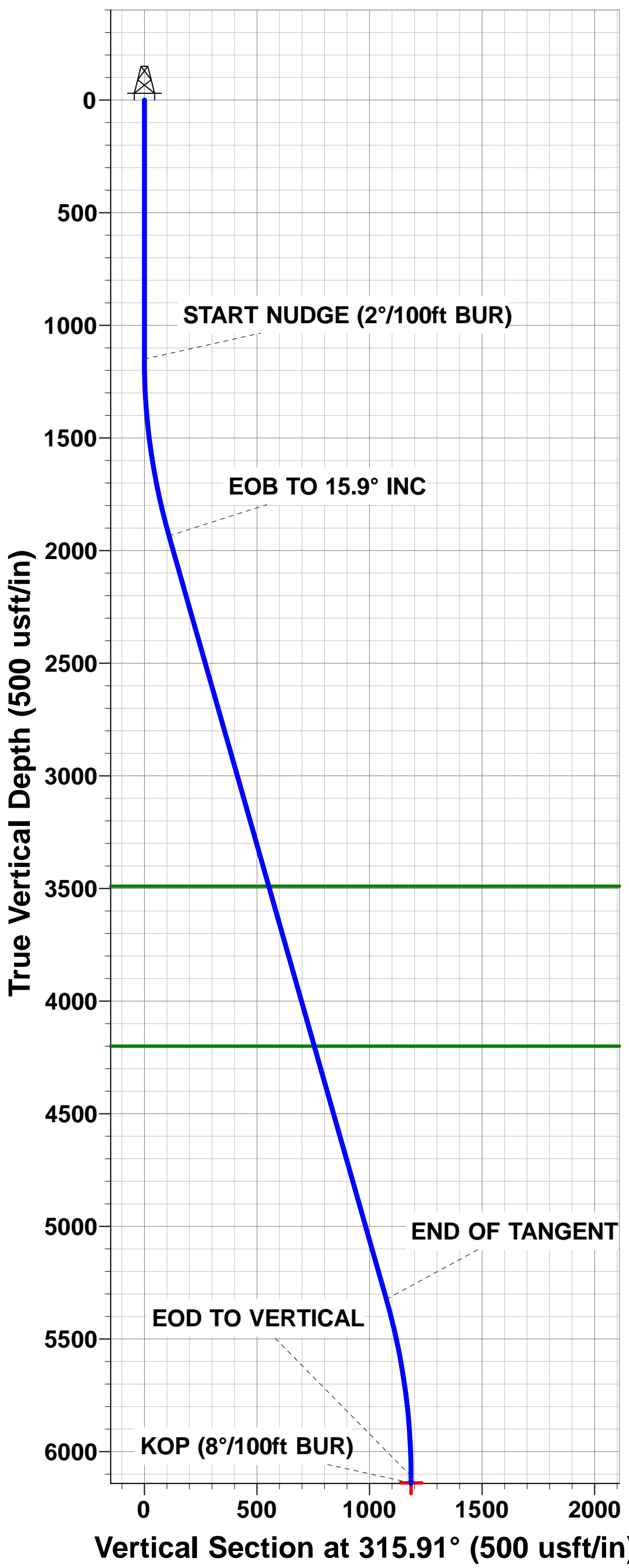
PROPOSED LOCAL COORDINATES:

SHL: 1740ft FSL & 844ft FWL of Sec 17
7" ICP *NEW*: 2591.7ft FSL & 748.5ft FWL of Sec 17
BHL: 2548ft FSL & 500ft FEL of Sec 17



Azimuths to True North
Magnetic North: 8.30°

Magnetic Field
Strength: 52614.6snT
Dip Angle: 66.93°
Date: 06/09/2015
Model: IGRF2015



Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well CECIL'S KERSEY FARM 17K-402
Company:	PDC ENERGY	TVD Reference:	KB-EST @ 4636.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO	MD Reference:	KB-EST @ 4636.0usft (Original Well Elev)
Site:	NW SW SEC. 17 T5N R64W 6th P.M.	North Reference:	True
Well:	CECIL'S KERSEY FARM 17K-402	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

Project	WELD COUNTY, COLORADO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site	NW SW SEC. 17 T5N R64W 6th P.M.		
Site Position:		Northing:	1,388,702.00 usft
From:	Lat/Long	Easting:	3,256,129.74 usft
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft
		Latitude:	40.396743
		Longitude:	-104.580386
		Grid Convergence:	0.59 °

Well	CECIL'S KERSEY FARM 17K-402		
Well Position	+N/-S	-14.9 usft	Northing:
	+E/-W	-1.4 usft	Easting:
Position Uncertainty	0.0 usft		Wellhead Elevation:
			Latitude:
			Longitude:
			Ground Level:

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	06/09/2015	8.30	66.93	52,615

Design	PROPOSAL #2			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	6,822.0	0.0	0.0	77.83

Plan Sections											
MD (usft)	Inc (°)	Azi (°)	Vertical Depth	SS (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100usf)	Turn Rate (°/100usf)	TFO (°)	Target
0.0	0.00	0.00	0.0	-4,636.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,150.0	0.00	0.00	1,150.0	-3,486.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,945.1	15.90	315.91	1,934.9	-2,701.1	78.7	-76.3	2.00	2.00	0.00	315.91	
5,468.9	15.90	315.91	5,323.9	687.9	772.3	-748.0	0.00	0.00	0.00	0.00	
6,264.0	0.00	0.00	6,108.8	1,472.8	851.0	-824.3	2.00	-2.00	0.00	180.00	
6,294.0	0.00	0.00	6,138.8	1,502.8	851.0	-824.3	0.00	0.00	0.00	0.00	KOP - CECIL'S KEI
7,424.9	90.47	90.00	6,855.0	2,219.0	851.0	-102.2	8.00	8.00	7.96	90.00	7" ICP *NEW* - CEI
11,472.3	90.46	90.00	6,822.0	2,186.0	851.0	3,945.0	0.00	0.00	0.00	177.21	BHL - CECIL'S KEF

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well CECIL'S KERSEY FARM 17K-402
Company:	PDC ENERGY	TVD Reference:	KB-EST @ 4636.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO	MD Reference:	KB-EST @ 4636.0usft (Original Well Elev)
Site:	NW SW SEC. 17 T5N R64W 6th P.M.	North Reference:	True
Well:	CECIL'S KERSEY FARM 17K-402	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	4,636.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,536.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,436.00	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,336.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,236.00	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,136.00	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,036.00	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	3,936.00	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	3,836.00	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	3,736.00	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	3,636.00	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	3,536.00	0.0	0.0	0.0	0.00	0.00	0.00
START NUDGE (2°/100ft BUR)										
1,150.0	0.00	0.00	1,150.0	3,486.00	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	1.00	315.91	1,200.0	3,436.00	0.3	-0.3	-0.2	2.00	2.00	0.00
1,300.0	3.00	315.91	1,299.9	3,336.07	2.8	-2.7	-2.1	2.00	2.00	0.00
1,400.0	5.00	315.91	1,399.7	3,236.32	7.8	-7.6	-5.8	2.00	2.00	0.00
1,500.0	7.00	315.91	1,499.1	3,136.87	15.3	-14.9	-11.3	2.00	2.00	0.00
1,600.0	9.00	315.91	1,598.2	3,037.85	25.3	-24.5	-18.6	2.00	2.00	0.00
1,700.0	11.00	315.91	1,696.6	2,939.37	37.8	-36.6	-27.8	2.00	2.00	0.00
1,800.0	13.00	315.91	1,794.4	2,841.56	52.7	-51.1	-38.8	2.00	2.00	0.00
1,900.0	15.00	315.91	1,891.5	2,744.54	70.1	-67.9	-51.6	2.00	2.00	0.00
EOB TO 15.9° INC										
1,945.1	15.90	315.91	1,934.9	2,701.07	78.7	-76.3	-58.0	2.00	2.00	0.00
2,000.0	15.90	315.91	1,987.7	2,648.27	89.6	-86.7	-65.9	0.00	0.00	0.00
2,100.0	15.90	315.91	2,083.9	2,552.10	109.2	-105.8	-80.4	0.00	0.00	0.00
2,200.0	15.90	315.91	2,180.1	2,455.92	128.9	-124.9	-94.9	0.00	0.00	0.00
2,300.0	15.90	315.91	2,276.2	2,359.75	148.6	-143.9	-109.4	0.00	0.00	0.00
2,400.0	15.90	315.91	2,372.4	2,263.58	168.3	-163.0	-123.8	0.00	0.00	0.00
2,500.0	15.90	315.91	2,468.6	2,167.40	188.0	-182.1	-138.3	0.00	0.00	0.00
2,600.0	15.90	315.91	2,564.8	2,071.23	207.6	-201.1	-152.8	0.00	0.00	0.00
2,700.0	15.90	315.91	2,660.9	1,975.06	227.3	-220.2	-167.3	0.00	0.00	0.00
2,800.0	15.90	315.91	2,757.1	1,878.88	247.0	-239.2	-181.8	0.00	0.00	0.00
2,900.0	15.90	315.91	2,853.3	1,782.71	266.7	-258.3	-196.3	0.00	0.00	0.00
3,000.0	15.90	315.91	2,949.5	1,686.54	286.4	-277.4	-210.8	0.00	0.00	0.00
3,100.0	15.90	315.91	3,045.6	1,590.37	306.0	-296.4	-225.2	0.00	0.00	0.00
3,200.0	15.90	315.91	3,141.8	1,494.19	325.7	-315.5	-239.7	0.00	0.00	0.00
3,300.0	15.90	315.91	3,238.0	1,398.02	345.4	-334.6	-254.2	0.00	0.00	0.00
3,400.0	15.90	315.91	3,334.2	1,301.85	365.1	-353.6	-268.7	0.00	0.00	0.00
3,500.0	15.90	315.91	3,430.3	1,205.67	384.8	-372.7	-283.2	0.00	0.00	0.00
PARKMAN SANDSTONE										
3,562.0	15.90	315.91	3,490.0	1,146.00	397.0	-384.5	-292.2	0.00	0.00	0.00
3,600.0	15.90	315.91	3,526.5	1,109.50	404.4	-391.8	-297.7	0.00	0.00	0.00
3,700.0	15.90	315.91	3,622.7	1,013.33	424.1	-410.8	-312.1	0.00	0.00	0.00
3,800.0	15.90	315.91	3,718.8	917.15	443.8	-429.9	-326.6	0.00	0.00	0.00
3,900.0	15.90	315.91	3,815.0	820.98	463.5	-448.9	-341.1	0.00	0.00	0.00
4,000.0	15.90	315.91	3,911.2	724.81	483.2	-468.0	-355.6	0.00	0.00	0.00
4,100.0	15.90	315.91	4,007.4	628.63	502.8	-487.1	-370.1	0.00	0.00	0.00
4,200.0	15.90	315.91	4,103.5	532.46	522.5	-506.1	-384.6	0.00	0.00	0.00
4,300.0	15.90	315.91	4,199.7	436.29	542.2	-525.2	-399.1	0.00	0.00	0.00
SUSSEX SANDSTONE										
4,300.3	15.90	315.91	4,200.0	436.00	542.3	-525.3	-399.1	0.00	0.00	0.00
4,400.0	15.90	315.91	4,295.9	340.12	561.9	-544.3	-413.5	0.00	0.00	0.00
4,500.0	15.90	315.91	4,392.1	243.94	581.6	-563.3	-428.0	0.00	0.00	0.00

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well CECIL'S KERSEY FARM 17K-402
Company:	PDC ENERGY	TVD Reference:	KB-EST @ 4636.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO	MD Reference:	KB-EST @ 4636.0usft (Original Well Elev)
Site:	NW SW SEC. 17 T5N R64W 6th P.M.	North Reference:	True
Well:	CECIL'S KERSEY FARM 17K-402	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

Planned Survey										
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,600.0	15.90	315.91	4,488.2	147.77	601.3	-582.4	-442.5	0.00	0.00	0.00
4,700.0	15.90	315.91	4,584.4	51.60	620.9	-601.4	-457.0	0.00	0.00	0.00
4,800.0	15.90	315.91	4,680.6	-44.58	640.6	-620.5	-471.5	0.00	0.00	0.00
4,900.0	15.90	315.91	4,776.7	-140.75	660.3	-639.6	-486.0	0.00	0.00	0.00
5,000.0	15.90	315.91	4,872.9	-236.92	680.0	-658.6	-500.4	0.00	0.00	0.00
5,100.0	15.90	315.91	4,969.1	-333.10	699.7	-677.7	-514.9	0.00	0.00	0.00
5,200.0	15.90	315.91	5,065.3	-429.27	719.3	-696.8	-529.4	0.00	0.00	0.00
5,300.0	15.90	315.91	5,161.4	-525.44	739.0	-715.8	-543.9	0.00	0.00	0.00
5,400.0	15.90	315.91	5,257.6	-621.62	758.7	-734.9	-558.4	0.00	0.00	0.00
END OF TANGENT										
5,468.9	15.90	315.91	5,323.9	-687.88	772.3	-748.0	-568.4	0.00	0.00	0.00
5,500.0	15.28	315.91	5,353.8	-717.83	778.3	-753.8	-572.8	2.00	-2.00	0.00
5,600.0	13.28	315.91	5,450.7	-814.74	796.0	-771.0	-585.8	2.00	-2.00	0.00
5,700.0	11.28	315.91	5,548.4	-912.45	811.3	-785.8	-597.1	2.00	-2.00	0.00
5,800.0	9.28	315.91	5,646.8	-1,010.84	824.1	-798.2	-606.5	2.00	-2.00	0.00
5,900.0	7.28	315.91	5,745.8	-1,109.79	834.4	-808.2	-614.1	2.00	-2.00	0.00
6,000.0	5.28	315.91	5,845.2	-1,209.18	842.3	-815.8	-619.9	2.00	-2.00	0.00
6,100.0	3.28	315.91	5,944.9	-1,308.90	847.6	-821.0	-623.8	2.00	-2.00	0.00
6,200.0	1.28	315.91	6,044.8	-1,408.82	850.5	-823.8	-625.9	2.00	-2.00	0.00
EOD TO VERTICAL										
6,264.0	0.00	0.00	6,108.8	-1,472.81	851.0	-824.3	-626.3	2.00	-2.00	0.00
KOP (8°/100ft BUR)										
6,294.0	0.00	0.00	6,138.8	-1,502.81	851.0	-824.3	-626.3	0.00	0.00	0.00
6,300.0	0.48	90.00	6,144.8	-1,508.81	851.0	-824.3	-626.3	8.01	8.01	0.00
6,400.0	8.48	90.00	6,244.4	-1,608.42	851.0	-816.5	-618.7	8.00	8.00	0.00
6,500.0	16.48	90.00	6,342.0	-1,705.98	851.0	-794.9	-597.6	8.00	8.00	0.00
6,600.0	24.48	90.00	6,435.6	-1,799.58	851.0	-759.9	-563.4	8.00	8.00	0.00
SHARON SPRINGS										
6,655.3	28.91	90.00	6,485.0	-1,849.00	851.0	-735.1	-539.1	8.00	8.00	0.00
6,700.0	32.48	90.00	6,523.4	-1,887.41	851.0	-712.3	-516.8	8.00	8.00	0.00
NIOBRARA A										
6,750.5	36.52	90.00	6,565.0	-1,929.00	851.0	-683.7	-488.9	8.00	8.00	0.00
6,800.0	40.48	90.00	6,603.8	-1,967.75	851.0	-652.9	-458.7	8.00	8.00	0.00
NIOBRARA B										
6,877.7	46.69	90.00	6,660.0	-2,024.00	851.0	-599.3	-406.4	8.00	8.00	0.00
6,900.0	48.48	90.00	6,675.0	-2,039.05	851.0	-582.9	-390.3	8.00	8.00	0.00
7,000.0	56.48	90.00	6,735.9	-2,099.90	851.0	-503.6	-312.8	8.00	8.00	0.00
NIOBRARA C										
7,007.5	57.08	90.00	6,740.0	-2,104.00	851.0	-497.4	-306.7	8.00	8.00	0.00
7,100.0	64.48	90.00	6,785.1	-2,149.14	851.0	-416.7	-227.9	8.00	8.00	0.00
7,200.0	72.48	90.00	6,821.8	-2,185.79	851.0	-323.7	-137.0	8.00	8.00	0.00
FT HAYES										
7,229.1	74.81	90.00	6,830.0	-2,194.00	851.0	-295.7	-109.7	8.00	8.00	0.00
7,300.0	80.48	90.00	6,845.2	-2,209.16	851.0	-226.6	-42.0	8.00	8.00	0.00
CODELL										
7,353.2	84.73	90.00	6,852.0	-2,216.00	851.0	-173.8	9.5	8.00	8.00	0.00
7,400.0	88.48	90.00	6,854.8	-2,218.77	851.0	-127.1	55.2	8.00	8.00	0.00
7" ICP *NEW* - CECIL'S KERSEY FARM 17K-402 (P2)										
7,424.9	90.47	90.00	6,855.0	-2,219.00	851.0	-102.2	79.5	8.00	8.00	0.00
7,500.0	90.47	90.00	6,854.4	-2,218.38	851.0	-27.1	152.9	0.00	0.00	0.00
7,600.0	90.47	90.00	6,853.6	-2,217.56	851.0	72.9	250.7	0.00	0.00	0.00
7,700.0	90.47	90.00	6,852.7	-2,216.74	851.0	172.9	348.4	0.00	0.00	0.00

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well CECIL'S KERSEY FARM 17K-402
Company:	PDC ENERGY	TVD Reference:	KB-EST @ 4636.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO	MD Reference:	KB-EST @ 4636.0usft (Original Well Elev)
Site:	NW SW SEC. 17 T5N R64W 6th P.M.	North Reference:	True
Well:	CECIL'S KERSEY FARM 17K-402	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

Planned Survey										
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,800.0	90.47	90.00	6,851.9	-2,215.92	851.0	272.9	446.2	0.00	0.00	0.00
7,900.0	90.47	90.00	6,851.1	-2,215.11	851.0	372.9	543.9	0.00	0.00	0.00
8,000.0	90.47	90.00	6,850.3	-2,214.29	851.0	472.9	641.7	0.00	0.00	0.00
8,100.0	90.47	90.00	6,849.5	-2,213.47	851.0	572.9	739.4	0.00	0.00	0.00
8,200.0	90.47	90.00	6,848.6	-2,212.65	851.0	672.9	837.2	0.00	0.00	0.00
8,300.0	90.47	90.00	6,847.8	-2,211.83	851.0	772.9	934.9	0.00	0.00	0.00
8,400.0	90.47	90.00	6,847.0	-2,211.01	851.0	872.9	1,032.7	0.00	0.00	0.00
8,500.0	90.47	90.00	6,846.2	-2,210.19	851.0	972.9	1,130.4	0.00	0.00	0.00
8,600.0	90.47	90.00	6,845.4	-2,209.38	851.0	1,072.9	1,228.2	0.00	0.00	0.00
8,700.0	90.47	90.00	6,844.6	-2,208.56	851.0	1,172.8	1,325.9	0.00	0.00	0.00
8,800.0	90.47	90.00	6,843.7	-2,207.74	851.0	1,272.8	1,423.7	0.00	0.00	0.00
8,900.0	90.47	90.00	6,842.9	-2,206.93	851.0	1,372.8	1,521.4	0.00	0.00	0.00
9,000.0	90.47	90.00	6,842.1	-2,206.11	851.0	1,472.8	1,619.2	0.00	0.00	0.00
9,100.0	90.47	90.00	6,841.3	-2,205.29	851.0	1,572.8	1,716.9	0.00	0.00	0.00
9,200.0	90.47	90.00	6,840.5	-2,204.48	851.0	1,672.8	1,814.7	0.00	0.00	0.00
9,300.0	90.47	90.00	6,839.7	-2,203.66	851.0	1,772.8	1,912.4	0.00	0.00	0.00
9,400.0	90.47	90.00	6,838.8	-2,202.85	851.0	1,872.8	2,010.2	0.00	0.00	0.00
9,500.0	90.47	90.00	6,838.0	-2,202.03	851.0	1,972.8	2,107.9	0.00	0.00	0.00
9,600.0	90.47	90.00	6,837.2	-2,201.21	851.0	2,072.8	2,205.7	0.00	0.00	0.00
9,700.0	90.47	90.00	6,836.4	-2,200.40	851.0	2,172.8	2,303.4	0.00	0.00	0.00
9,800.0	90.47	90.00	6,835.6	-2,199.59	851.0	2,272.8	2,401.2	0.00	0.00	0.00
9,900.0	90.47	90.00	6,834.8	-2,198.77	851.0	2,372.8	2,498.9	0.00	0.00	0.00
10,000.0	90.47	90.00	6,834.0	-2,197.96	851.0	2,472.8	2,596.6	0.00	0.00	0.00
10,100.0	90.47	90.00	6,833.1	-2,197.14	851.0	2,572.8	2,694.4	0.00	0.00	0.00
10,200.0	90.47	90.00	6,832.3	-2,196.33	851.0	2,672.8	2,792.1	0.00	0.00	0.00
10,300.0	90.47	90.00	6,831.5	-2,195.52	851.0	2,772.8	2,889.9	0.00	0.00	0.00
10,400.0	90.47	90.00	6,830.7	-2,194.70	851.0	2,872.8	2,987.6	0.00	0.00	0.00
10,500.0	90.47	90.00	6,829.9	-2,193.89	851.0	2,972.8	3,085.4	0.00	0.00	0.00
10,600.0	90.47	90.00	6,829.1	-2,193.08	851.0	3,072.8	3,183.1	0.00	0.00	0.00
10,700.0	90.47	90.00	6,828.3	-2,192.27	851.0	3,172.8	3,280.9	0.00	0.00	0.00
10,800.0	90.47	90.00	6,827.5	-2,191.45	851.0	3,272.8	3,378.6	0.00	0.00	0.00
10,900.0	90.47	90.00	6,826.6	-2,190.64	851.0	3,372.8	3,476.4	0.00	0.00	0.00
11,000.0	90.46	90.00	6,825.8	-2,189.83	851.0	3,472.8	3,574.1	0.00	0.00	0.00
11,100.0	90.46	90.00	6,825.0	-2,189.02	851.0	3,572.8	3,671.9	0.00	0.00	0.00
11,200.0	90.46	90.00	6,824.2	-2,188.21	851.0	3,672.8	3,769.6	0.00	0.00	0.00
11,300.0	90.46	90.00	6,823.4	-2,187.40	851.0	3,772.8	3,867.4	0.00	0.00	0.00
11,400.0	90.46	90.00	6,822.6	-2,186.59	851.0	3,872.8	3,965.1	0.00	0.00	0.00
BHL - CECIL'S KERSEY FARM 17K-402 (P2)										
11,472.3	90.46	90.00	6,822.0	-2,186.00	851.0	3,945.0	4,035.8	0.00	0.00	0.00



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well CECIL'S KERSEY FARM 17K-402
Company:	PDC ENERGY	TVD Reference:	KB-EST @ 4636.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO	MD Reference:	KB-EST @ 4636.0usft (Original Well Elev)
Site:	NW SW SEC. 17 T5N R64W 6th P.M.	North Reference:	True
Well:	CECIL'S KERSEY FARM 17K-402	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

Formations					
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,562.0	3,490.0	PARKMAN SANDSTONE			
4,300.3	4,200.0	SUSSEX SANDSTONE			
6,655.3	6,485.0	SHARON SPRINGS			
6,750.5	6,565.0	NIOBRARA A			
6,877.7	6,660.0	NIOBRARA B			
7,007.5	6,740.0	NIOBRARA C			
7,229.1	6,830.0	FT HAYES			
7,353.2	6,852.0	CODELL			

Plan Annotations				
MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,150.0	1,150.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1,945.1	1,934.9	78.7	-76.3	EOB TO 15.9° INC
5,468.9	5,323.9	772.3	-748.0	END OF TANGENT
6,264.0	6,108.8	851.0	-824.3	EOD TO VERTICAL
6,294.0	6,138.8	851.0	-824.3	KOP (8°/100ft BUR)
7,424.9	6,855.0	851.0	-102.2	7" ICP *NEW* - CECIL'S KERSEY FARM 17K-402 (P2)
11,472.3	6,822.0	851.0	3,945.0	BHL - CECIL'S KERSEY FARM 17K-402 (P2)