

PDC ENERGY

WELD COUNTY, COLORADO

NE SW SEC. 7 T4N R64W 6th P.M.

HONEBEIN 7G-203

JOB # 2015-065-123

23 September, 2015

Survey: FINAL SURVEYS





Project: WELD COUNTY, COLORADO
 Site: NE SW SEC. 7 T4N R64W 6th P.M.
 Well: HONEBEIN 7G-203
 Wellbore: JOB # 2015-065-123
 Design: FINAL SURVEYS

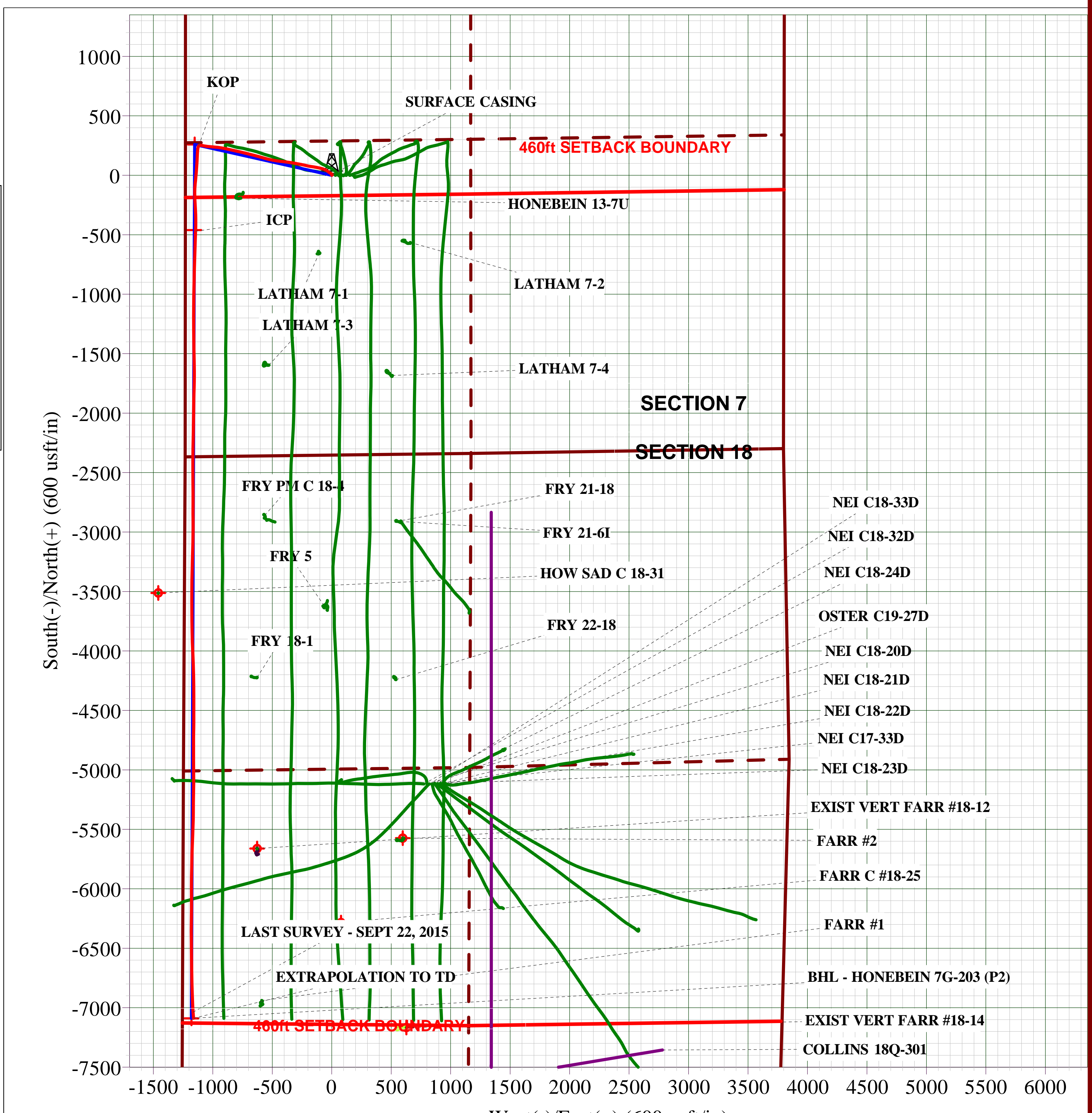
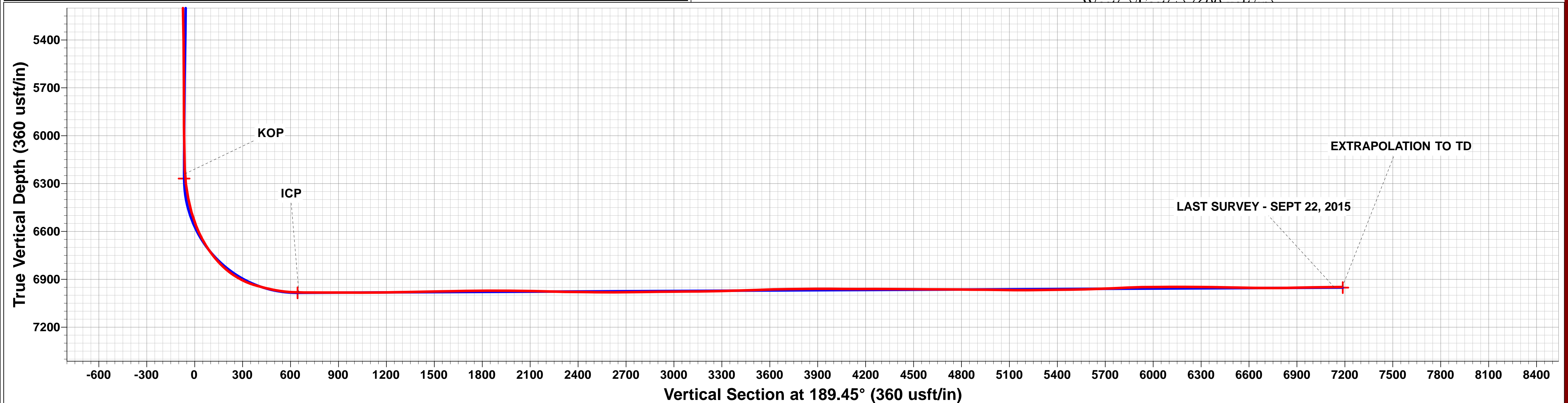
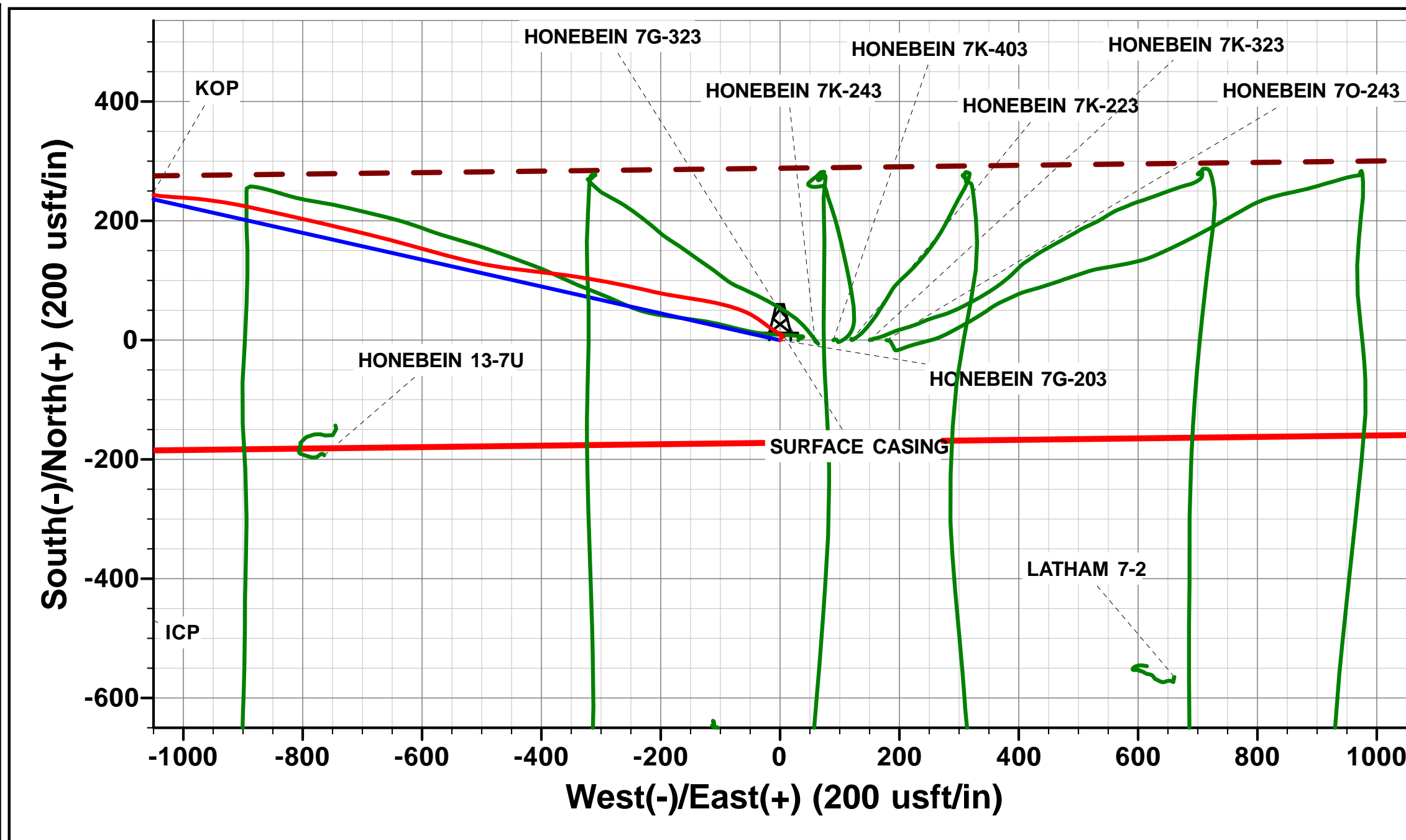
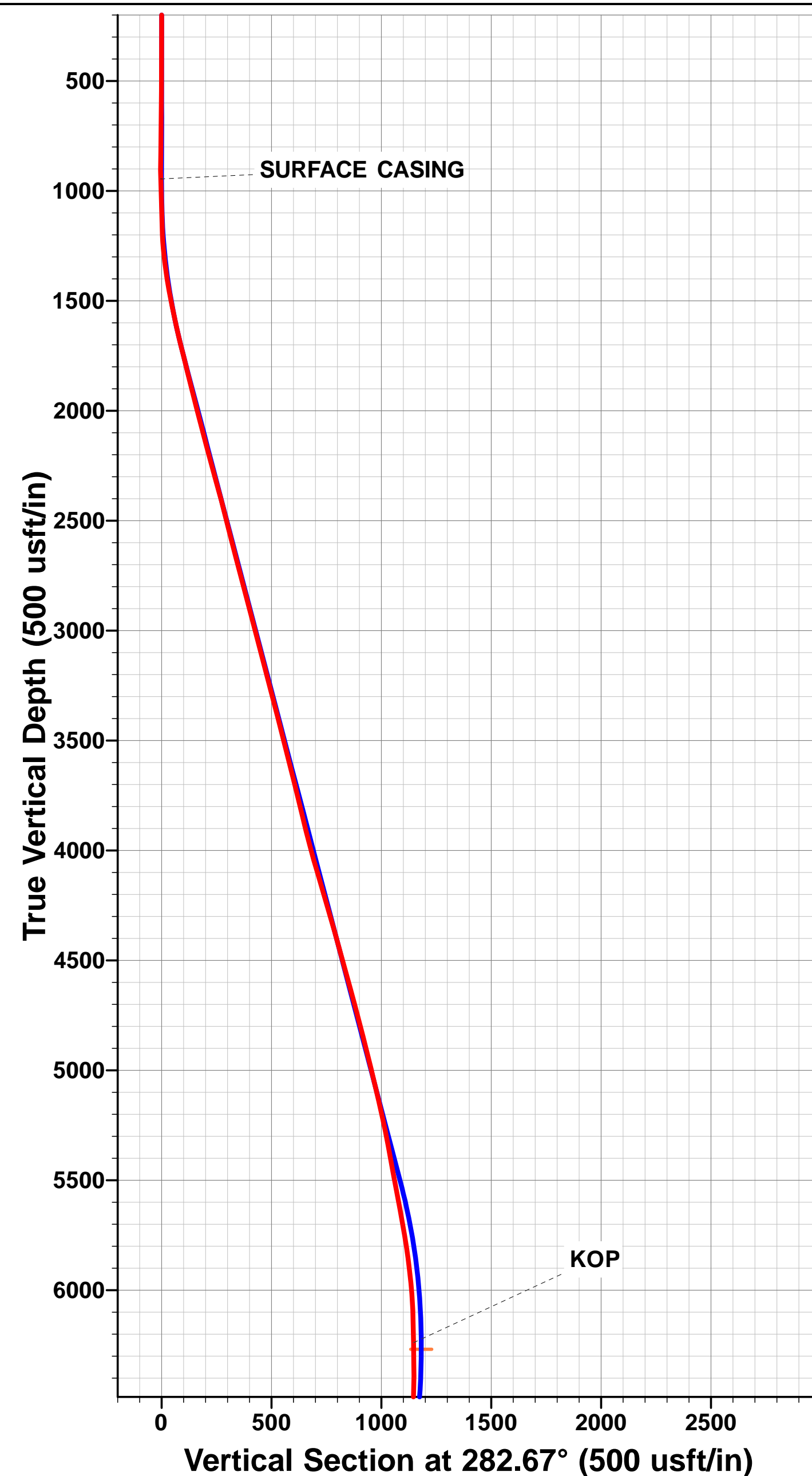
ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Dep	Annotation
945.9	946.0	0.49	21.61	6.6	6.7	-7.6	11.3	SURFACE CASING
6238.8	6378.0	3.13	201.69	248.3	-1118.9	-61.2	1177.7	KOP
6981.8	7541.0	88.58	181.59	-470.2	-1144.7	651.7	1897.7	ICP
6948.6	14110.0	90.70	176.40	-7036.9	-1165.6	7132.8	8465.8	LAST SURVEY - SEPT 22, 2015
6948.0	14162.0	90.70	176.40	-7088.8	-1162.3	7183.4	8517.8	EXTRAPOLATION TO TD

AS DRILLED LOCAL COORDINATES:
 SHL: 2352ft FSL & 1230t FWL Sec 7
 7" ICP: 1881.8ft FSL & 85.3ft FWL Sec 7
 BHL: 500.6ft FSL & 92.5ft FWL of Sec 18

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
7" ICP *NEW* - HONEBEIN 7G-203 (P2)	6984.7	-460.5	-1155.2	40.324666	-104.601773	Point
BHL - HONEBEIN 7G-203 (P2)	6952.0	-7089.4	-1179.8	40.306470	-104.601860	Point
KOP - HONEBEIN 7G-203 (P2)	6268.5	259.2	-1152.6	40.326641	-104.601764	Point



Survey Report



Company: PDC ENERGY	Local Co-ordinate Reference: Well HONEBEIN 7G-203
Project: WELD COUNTY, COLORADO	TVD Reference: KB-EST @ 4859.5usft (Original Well Elev)
Site: NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference: KB-EST @ 4859.5usft (Original Well Elev)
Well: HONEBEIN 7G-203	North Reference: True
Wellbore: JOB # 2015-065-123	Survey Calculation Method: Minimum Curvature
Design: FINAL SURVEYS	Database: EDM 5000.1 Single User Db

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 NE SW SEC. 7 T4N R64W 6th P.M.			
Site Position:	Northing: 1,362,859.07 usft	Latitude: 40.325930	
From: Lat/Long	Easting: 3,251,768.07 usft	Longitude: -104.596990	
Position Uncertainty: 0.0 usft	Slot Radius: 1.10000ft	Grid Convergence: 0.58 °	

Well HONEBEIN 7G-203			
Well Position	+N/-S 0.0 usft	Northing: 1,362,857.24 usft	Latitude: 40.325930
	+E/-W 0.0 usft	Easting: 3,251,589.63 usft	Longitude: -104.597630
Position Uncertainty	0.0 usft	Wellhead Elevation: usft	Ground Level: 4,846.0 usft

Wellbore JOB # 2015-065-123					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	30/06/2015	8.32	66.87	52,595

Design FINAL SURVEYS					
Audit Notes:					
Version: 1.0	Phase: ACTUAL	Tie On Depth: 0.0			
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	189.45	

Survey Program		Date 23/09/2015			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
267.0	14,162.0	FINAL SURVEYS (JOB # 2015-065-123)	MWD	MWD - Standard	

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (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	-4,859.5	0.0	0.0	0.0	0.00	0.00	0.00
267.0	0.40	5.30	267.0	-4,592.5	0.9	0.1	-0.9	0.15	0.15	0.00
547.0	0.90	43.90	547.0	-4,312.5	3.5	1.7	-3.7	0.23	0.18	13.79
827.0	0.90	68.40	826.9	-4,032.6	5.9	5.3	-6.7	0.14	0.00	8.75
907.0	0.80	68.40	906.9	-3,952.6	6.3	6.4	-7.3	0.12	-0.12	0.00
SURFACE CASING										
946.0	0.49	21.61	945.9	-3,913.6	6.6	6.7	-7.6	1.50	-0.79	-119.99
1,200.0	3.80	293.60	1,199.7	-3,659.8	11.0	-0.6	-10.7	1.50	1.30	-34.65
1,480.0	11.80	307.30	1,476.9	-3,382.6	32.1	-32.0	-26.4	2.91	2.86	4.89
1,759.0	14.50	283.90	1,748.8	-3,110.7	57.8	-88.6	-42.4	2.12	0.97	-8.39
2,036.0	13.90	278.20	2,017.3	-2,842.2	70.8	-155.2	-44.4	0.55	-0.22	-2.06
2,306.0	15.80	282.80	2,278.3	-2,581.2	83.6	-223.2	-45.8	0.83	0.70	1.70
2,575.0	13.90	280.80	2,538.3	-2,321.2	97.8	-290.6	-48.7	0.73	-0.71	-0.74

Survey Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7G-203
Project:	WELD COUNTY, COLORADO	TDV Reference:	KB-EST @ 4859.5usft (Original Well Elev)
Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4859.5usft (Original Well Elev)
Well:	HONEBEIN 7G-203	North Reference:	True
Wellbore:	JOB # 2015-065-123	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	Database:	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
2,845.0	15.10	278.00	2,799.7	-2,059.8	108.7	-357.3	-48.6	0.51	0.44	-1.04
3,116.0	15.00	275.70	3,061.4	-1,798.1	117.1	-427.1	-45.4	0.22	-0.04	-0.85
3,385.0	14.10	280.80	3,321.8	-1,537.7	126.7	-494.0	-43.9	0.58	-0.33	1.90
3,655.0	14.50	285.40	3,583.5	-1,276.0	141.9	-558.9	-48.2	0.45	0.15	1.70
3,925.0	13.30	285.60	3,845.5	-1,014.0	159.2	-621.4	-55.0	0.44	-0.44	0.07
4,195.0	16.60	284.00	4,106.4	-753.1	176.9	-688.7	-61.4	1.23	1.22	-0.59
4,464.0	15.80	283.10	4,364.7	-494.8	194.5	-761.7	-66.8	0.31	-0.30	-0.33
4,733.0	15.30	282.60	4,623.8	-235.7	210.5	-832.0	-71.1	0.19	-0.19	-0.19
5,003.0	14.10	281.80	4,885.0	25.5	225.0	-898.9	-74.4	0.45	-0.44	-0.30
5,272.0	13.10	276.60	5,146.5	287.0	235.2	-961.3	-74.2	0.59	-0.37	-1.93
5,542.0	10.20	272.20	5,410.9	551.4	239.7	-1,015.6	-69.7	1.12	-1.07	-1.63
5,812.0	10.90	282.00	5,676.3	816.8	245.9	-1,064.5	-67.8	0.71	0.26	3.63
6,082.0	6.00	272.40	5,943.3	1,083.8	251.8	-1,103.6	-67.2	1.88	-1.81	-3.56
6,352.0	1.40	196.10	6,212.8	1,353.3	249.2	-1,118.6	-62.2	2.16	-1.70	-28.26
KOP										
6,378.0	3.13	201.69	6,238.8	1,379.3	248.3	-1,118.9	-61.2	6.69	6.64	21.51
6,442.0	7.40	204.30	6,302.5	1,443.0	242.9	-1,121.3	-55.5	6.69	6.68	4.07
6,532.0	11.30	190.30	6,391.3	1,531.8	228.9	-1,125.2	-41.1	4.99	4.33	-15.56
6,622.0	15.50	186.30	6,478.8	1,619.3	208.3	-1,128.1	-20.3	4.78	4.67	-4.44
6,712.0	21.90	181.80	6,564.0	1,704.5	179.5	-1,130.0	8.4	7.28	7.11	-5.00
6,802.0	27.90	181.90	6,645.6	1,786.1	141.7	-1,131.2	46.0	6.67	6.67	0.11
6,892.0	35.50	185.20	6,722.1	1,862.6	94.5	-1,134.3	93.0	8.66	8.44	3.67
6,982.0	42.10	182.80	6,792.2	1,932.7	38.3	-1,138.1	149.1	7.52	7.33	-2.67
7,072.0	52.60	186.60	6,853.2	1,993.7	-27.6	-1,143.7	214.9	12.07	11.67	4.22
7,162.0	62.10	183.70	6,901.7	2,042.2	-102.9	-1,150.4	290.4	10.90	10.56	-3.22
7,252.0	73.80	177.90	6,935.4	2,075.9	-186.2	-1,151.4	372.6	14.30	13.00	-6.44
7,342.0	76.80	176.30	6,958.2	2,098.7	-273.1	-1,147.0	457.7	3.75	3.33	-1.78
7,432.0	82.60	179.20	6,974.3	2,114.8	-361.5	-1,143.5	544.3	7.18	6.44	3.22
7,511.0	87.90	181.30	6,980.9	2,121.4	-440.2	-1,143.9	622.0	7.21	6.71	2.66
ICP										
7,541.0	88.58	181.59	6,981.8	2,122.3	-470.2	-1,144.7	651.7	2.46	2.26	0.97
7,604.0	90.00	182.20	6,982.6	2,123.1	-533.1	-1,146.7	714.2	2.46	2.26	0.97
7,694.0	89.80	181.90	6,982.7	2,123.2	-623.1	-1,150.0	803.4	0.40	-0.22	-0.33
7,784.0	89.80	181.80	6,983.1	2,123.6	-713.0	-1,152.9	892.6	0.11	0.00	-0.11
7,874.0	89.90	181.80	6,983.3	2,123.8	-803.0	-1,155.7	981.8	0.11	0.11	0.00
7,967.0	90.10	181.10	6,983.3	2,123.8	-896.0	-1,158.0	1,073.9	0.78	0.22	-0.75
8,061.0	90.90	180.70	6,982.5	2,123.0	-990.0	-1,159.5	1,166.9	0.95	0.85	-0.43
8,154.0	90.90	180.20	6,981.0	2,121.5	-1,082.9	-1,160.2	1,258.7	0.54	0.00	-0.54
8,247.0	91.10	180.20	6,979.4	2,119.9	-1,175.9	-1,160.6	1,350.5	0.22	0.22	0.00
8,341.0	91.20	179.60	6,977.5	2,118.0	-1,269.9	-1,160.4	1,443.2	0.65	0.11	-0.64
8,434.0	90.90	179.70	6,975.8	2,116.3	-1,362.9	-1,159.8	1,534.8	0.34	-0.32	0.11
8,528.0	90.90	179.10	6,974.3	2,114.8	-1,456.9	-1,158.9	1,627.3	0.64	0.00	-0.64
8,621.0	91.30	178.50	6,972.5	2,113.0	-1,549.8	-1,156.9	1,718.7	0.78	0.43	-0.65
8,714.0	90.10	179.70	6,971.4	2,111.9	-1,642.8	-1,155.4	1,810.2	1.82	-1.29	1.29
8,808.0	90.10	180.90	6,971.2	2,111.7	-1,736.8	-1,155.9	1,903.0	1.28	0.00	1.28
8,901.0	89.20	181.90	6,971.8	2,112.3	-1,829.8	-1,158.2	1,995.1	1.45	-0.97	1.08
8,994.0	89.00	180.90	6,973.3	2,113.8	-1,922.7	-1,160.5	2,087.2	1.10	-0.22	-1.08
9,087.0	88.80	180.60	6,975.0	2,115.5	-2,015.7	-1,161.7	2,179.1	0.39	-0.22	-0.32
9,180.0	88.30	180.60	6,977.4	2,117.9	-2,108.7	-1,162.7	2,270.9	0.54	-0.54	0.00
9,273.0	89.70	181.60	6,979.0	2,119.5	-2,201.6	-1,164.5	2,362.9	1.85	1.51	1.08
9,367.0	89.30	181.00	6,979.8	2,120.3	-2,295.6	-1,166.6	2,456.0	0.77	-0.43	-0.64
9,460.0	89.00	180.10	6,981.2	2,121.7	-2,388.6	-1,167.5	2,547.8	1.02	-0.32	-0.97
9,553.0	90.70	179.90	6,981.5	2,122.0	-2,481.6	-1,167.5	2,639.6	1.84	1.83	-0.22

Survey Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7G-203
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4859.5usft (Original Well Elev)
Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4859.5usft (Original Well Elev)
Well:	HONEBEIN 7G-203	North Reference:	True
Wellbore:	JOB # 2015-065-123	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	Database:	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,646.0	90.70	179.40	6,980.3	2,120.8	-2,574.6	-1,166.9	2,731.2	0.54	0.00	-0.54
9,740.0	90.90	179.00	6,979.0	2,119.5	-2,668.6	-1,165.6	2,823.7	0.48	0.21	-0.43
9,830.0	90.40	180.80	6,978.0	2,118.5	-2,758.6	-1,165.4	2,912.4	2.08	-0.56	2.00
9,920.0	90.50	180.00	6,977.3	2,117.8	-2,848.5	-1,166.1	3,001.3	0.90	0.11	-0.89
10,009.0	90.50	179.30	6,976.5	2,117.0	-2,937.5	-1,165.5	3,089.0	0.79	0.00	-0.79
10,099.0	90.80	181.40	6,975.5	2,116.0	-3,027.5	-1,166.1	3,177.9	2.36	0.33	2.33
10,189.0	90.60	180.90	6,974.4	2,114.9	-3,117.5	-1,167.9	3,266.9	0.60	-0.22	-0.56
10,279.0	91.90	182.10	6,972.4	2,112.9	-3,207.4	-1,170.2	3,356.0	1.97	1.44	1.33
10,369.0	92.10	181.60	6,969.3	2,109.8	-3,297.3	-1,173.1	3,445.2	0.60	0.22	-0.56
10,459.0	92.30	180.80	6,965.8	2,106.3	-3,387.3	-1,175.0	3,534.2	0.92	0.22	-0.89
10,549.0	91.00	180.50	6,963.2	2,103.7	-3,477.2	-1,176.1	3,623.1	1.48	-1.44	-0.33
10,639.0	91.10	179.70	6,961.6	2,102.1	-3,567.2	-1,176.2	3,711.9	0.90	0.11	-0.89
10,729.0	90.20	179.70	6,960.6	2,101.1	-3,657.2	-1,175.7	3,800.6	1.00	-1.00	0.00
10,819.0	90.50	179.60	6,960.0	2,100.5	-3,747.2	-1,175.2	3,889.3	0.35	0.33	-0.11
10,909.0	89.60	178.90	6,959.9	2,100.4	-3,837.2	-1,174.0	3,977.8	1.27	-1.00	-0.78
10,999.0	89.60	177.80	6,960.6	2,101.1	-3,927.1	-1,171.4	4,066.2	1.22	0.00	-1.22
11,089.0	90.00	177.80	6,960.9	2,101.4	-4,017.1	-1,168.0	4,154.3	0.44	0.44	0.00
11,179.0	90.20	177.70	6,960.7	2,101.2	-4,107.0	-1,164.4	4,242.4	0.25	0.22	-0.11
11,269.0	89.40	179.10	6,961.0	2,101.5	-4,197.0	-1,161.9	4,330.8	1.79	-0.89	1.56
11,359.0	90.00	178.70	6,961.5	2,102.0	-4,286.9	-1,160.2	4,419.2	0.80	0.67	-0.44
11,449.0	89.40	180.30	6,962.0	2,102.5	-4,376.9	-1,159.4	4,507.9	1.90	-0.67	1.78
11,539.0	89.50	180.20	6,962.8	2,103.3	-4,466.9	-1,159.8	4,596.7	0.16	0.11	-0.11
11,629.0	90.10	179.70	6,963.2	2,103.7	-4,556.9	-1,159.7	4,685.5	0.87	0.67	-0.56
11,719.0	89.20	181.40	6,963.7	2,104.2	-4,646.9	-1,160.6	4,774.4	2.14	-1.00	1.89
11,809.0	89.50	180.30	6,964.7	2,105.2	-4,736.9	-1,161.9	4,863.4	1.27	0.33	-1.22
11,899.0	89.70	179.80	6,965.4	2,105.9	-4,826.9	-1,162.0	4,952.2	0.60	0.22	-0.56
11,989.0	89.10	180.30	6,966.3	2,106.8	-4,916.9	-1,162.1	5,041.0	0.87	-0.67	0.56
12,079.0	89.10	178.70	6,967.7	2,108.2	-5,006.9	-1,161.3	5,129.6	1.78	0.00	-1.78
12,169.0	90.60	180.40	6,968.0	2,108.5	-5,096.9	-1,160.6	5,218.2	2.52	1.67	1.89
12,258.0	90.80	181.30	6,966.9	2,107.4	-5,185.8	-1,161.9	5,306.2	1.04	0.22	1.01
12,348.0	90.80	180.70	6,965.6	2,106.1	-5,275.8	-1,163.5	5,395.2	0.67	0.00	-0.67
12,437.0	90.80	180.10	6,964.4	2,104.9	-5,364.8	-1,164.1	5,483.1	0.67	0.00	-0.67
12,527.0	91.40	181.90	6,962.6	2,103.1	-5,454.8	-1,165.7	5,572.1	2.11	0.67	2.00
12,617.0	92.10	182.30	6,959.9	2,100.4	-5,544.7	-1,169.0	5,661.4	0.90	0.78	0.44
12,707.0	92.60	182.00	6,956.2	2,096.7	-5,634.5	-1,172.3	5,750.5	0.65	0.56	-0.33
12,797.0	92.90	181.60	6,951.9	2,092.4	-5,724.4	-1,175.2	5,839.6	0.56	0.33	-0.44
12,887.0	90.60	181.10	6,949.1	2,089.6	-5,814.3	-1,177.3	5,928.7	2.62	-2.56	-0.56
12,977.0	90.60	180.80	6,948.2	2,088.7	-5,904.3	-1,178.8	6,017.7	0.33	0.00	-0.33
13,066.0	90.20	180.30	6,947.6	2,088.1	-5,993.3	-1,179.6	6,106.6	0.72	-0.45	-0.56
13,156.0	89.90	178.90	6,947.5	2,088.0	-6,083.3	-1,179.0	6,194.3	1.59	-0.33	-1.56
13,246.0	89.40	180.90	6,948.0	2,088.5	-6,173.3	-1,178.8	6,283.0	2.29	-0.56	2.22
13,336.0	89.30	180.60	6,949.1	2,089.6	-6,263.3	-1,180.0	6,372.0	0.35	-0.11	-0.33
13,426.0	89.00	180.00	6,950.4	2,090.9	-6,353.3	-1,180.5	6,460.9	0.75	-0.33	-0.67
13,516.0	88.50	179.40	6,952.4	2,092.9	-6,443.2	-1,180.0	6,549.5	0.87	-0.56	-0.67
13,606.0	89.70	179.70	6,953.8	2,094.3	-6,533.2	-1,179.3	6,638.2	1.37	1.33	0.33
13,696.0	89.30	179.10	6,954.6	2,095.1	-6,623.2	-1,178.4	6,726.8	0.80	-0.44	-0.67
13,786.0	91.40	179.10	6,954.0	2,094.5	-6,713.2	-1,177.0	6,815.3	2.33	2.33	0.00
13,876.0	91.00	178.70	6,952.1	2,092.6	-6,803.2	-1,175.2	6,903.8	0.63	-0.44	-0.44
13,966.0	90.90	177.80	6,950.6	2,091.1	-6,893.1	-1,172.5	6,992.1	1.01	-0.11	-1.00
14,059.0	90.80	177.20	6,949.3	2,089.8	-6,986.0	-1,168.4	7,083.0	0.65	-0.11	-0.65
LAST SURVEY - SEPT 22, 2015										
14,110.0	90.70	176.40	6,948.6	2,089.1	-7,036.9	-1,165.6	7,132.8	1.58	-0.20	-1.57

Survey Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7G-203
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4859.5usft (Original Well Elev)
Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4859.5usft (Original Well Elev)
Well:	HONEBEIN 7G-203	North Reference:	True
Wellbore:	JOB # 2015-065-123	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	Database:	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	Subsea Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
EXTRAPOLATION TO TD										
14,162.0	90.70	176.40	6,948.0	2,088.5	-7,088.8	-1,162.3	7,183.4	0.00	0.00	0.00

Survey Report



Company:	PDC ENERGY	Local Co-ordinate Reference:	Well HONEBEIN 7G-203
Project:	WELD COUNTY, COLORADO	TVD Reference:	KB-EST @ 4859.5usft (Original Well Elev)
Site:	NE SW SEC. 7 T4N R64W 6th P.M.	MD Reference:	KB-EST @ 4859.5usft (Original Well Elev)
Well:	HONEBEIN 7G-203	North Reference:	True
Wellbore:	JOB # 2015-065-123	Survey Calculation Method:	Minimum Curvature
Design:	FINAL SURVEYS	Database:	EDM 5000.1 Single User Db

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
KOP - HONEBEIN 7G-2 - survey misses target center by 51.1usft at 6408.3usft MD (6269.0 TVD, 246.2 N, -1119.8 E) - Point	0.00	0.00	6,268.5	261.5	-1,168.5	1,363,106.83	3,250,418.58	40.326648	-104.601821
BHL - HONEBEIN 7G-2(- survey misses target center by 9.0usft at 11582.1usft MD (6963.1 TVD, -4510.1 N, -1159.9 E) - Point	0.00	0.00	6,960.5	-4,510.1	-1,168.5	1,358,335.70	3,250,467.14	40.313550	-104.601820
KOP - HONEBEIN 7G-2 - survey misses target center by 35.3usft at 6407.9usft MD (6268.6 TVD, 246.3 N, -1119.8 E) - Point	0.00	0.00	6,268.5	259.2	-1,152.6	1,363,104.69	3,250,434.51	40.326641	-104.601764
EXIST VERT FARR #18 - survey misses target center by 633.0usft at 12700.1usft MD (6956.5 TVD, -5627.7 N, -1172.1 E) - Circle (radius 30.0)	0.00	0.00	7,277.5	-5,661.3	-627.5	1,357,190.08	3,251,019.80	40.310390	-104.599880
BHL - HONEBEIN 7G-2(- survey misses target center by 17.9usft at 14161.4usft MD (6948.0 TVD, -7088.2 N, -1162.3 E) - Point	0.00	0.00	6,952.0	-7,089.4	-1,179.8	1,355,756.55	3,250,482.11	40.306470	-104.601860
HOW SAD C 18-31 - survey misses target center by 430.3usft at 10578.2usft MD (6962.7 TVD, -3506.4 N, -1176.2 E) - Circle (radius 30.0)	0.00	0.00	7,287.5	-3,511.9	-1,458.5	1,359,330.86	3,250,167.04	40.316290	-104.602860
7" ICP *NEW* - HONEB - survey misses target center by 11.3usft at 7531.7usft MD (6981.6 TVD, -460.9 N, -1144.4 E) - Point	0.00	0.00	6,984.7	-460.5	-1,155.2	1,362,385.03	3,250,439.23	40.324666	-104.601773
EXIST VERT FARR #2 - survey misses target center by 1789.9usft at 12572.5usft MD (6961.4 TVD, -5500.2 N, -1167.3 E) - Circle (radius 30.0)	0.00	0.00	7,255.5	-5,573.9	596.8	1,357,289.96	3,252,243.12	40.310630	-104.595490
EXIST VERT FARR C # - survey misses target center by 1282.0usft at 13354.1usft MD (6949.3 TVD, -6281.3 N, -1180.2 E) - Circle (radius 30.0)	0.00	0.00	7,194.5	-6,284.3	78.1	1,356,574.35	3,251,731.66	40.308680	-104.597350
EXIST VERT FARR #18 - survey misses target center by 1818.2usft at 14162.0usft MD (6948.0 TVD, -7088.8 N, -1162.3 E) - Circle (radius 30.0)	0.00	0.00	7,258.5	-7,165.9	627.5	1,355,698.41	3,252,290.03	40.306260	-104.595380
7" ICP *NEW* - HONEB - survey misses target center by 24.4usft at 7530.4usft MD (6981.5 TVD, -459.6 N, -1144.4 E) - Point	0.00	0.00	6,984.7	-458.9	-1,168.5	1,362,386.50	3,250,425.91	40.324670	-104.601821

Survey Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
946.0	945.9	6.6	6.7	SURFACE CASING
6,378.0	6,238.8	248.3	-1,118.9	KOP
7,541.0	6,981.8	-470.2	-1,144.7	ICP
14,110.0	6,948.6	-7,036.9	-1,165.6	LAST SURVEY - SEPT 22, 2015
14,162.0	6,948.0	-7,088.8	-1,162.3	EXTRAPOLATION TO TD

Checked By: _____ Approved By: _____ Date: _____