

PDC ENERGY

**WELD COUNTY, COLORADO
NE SW SEC. 7 T4N R64W 6th P.M.
HONEBEIN 7K-403**

ORIGINAL WELLBORE

09 July, 2015

Plan: PROPOSAL #2



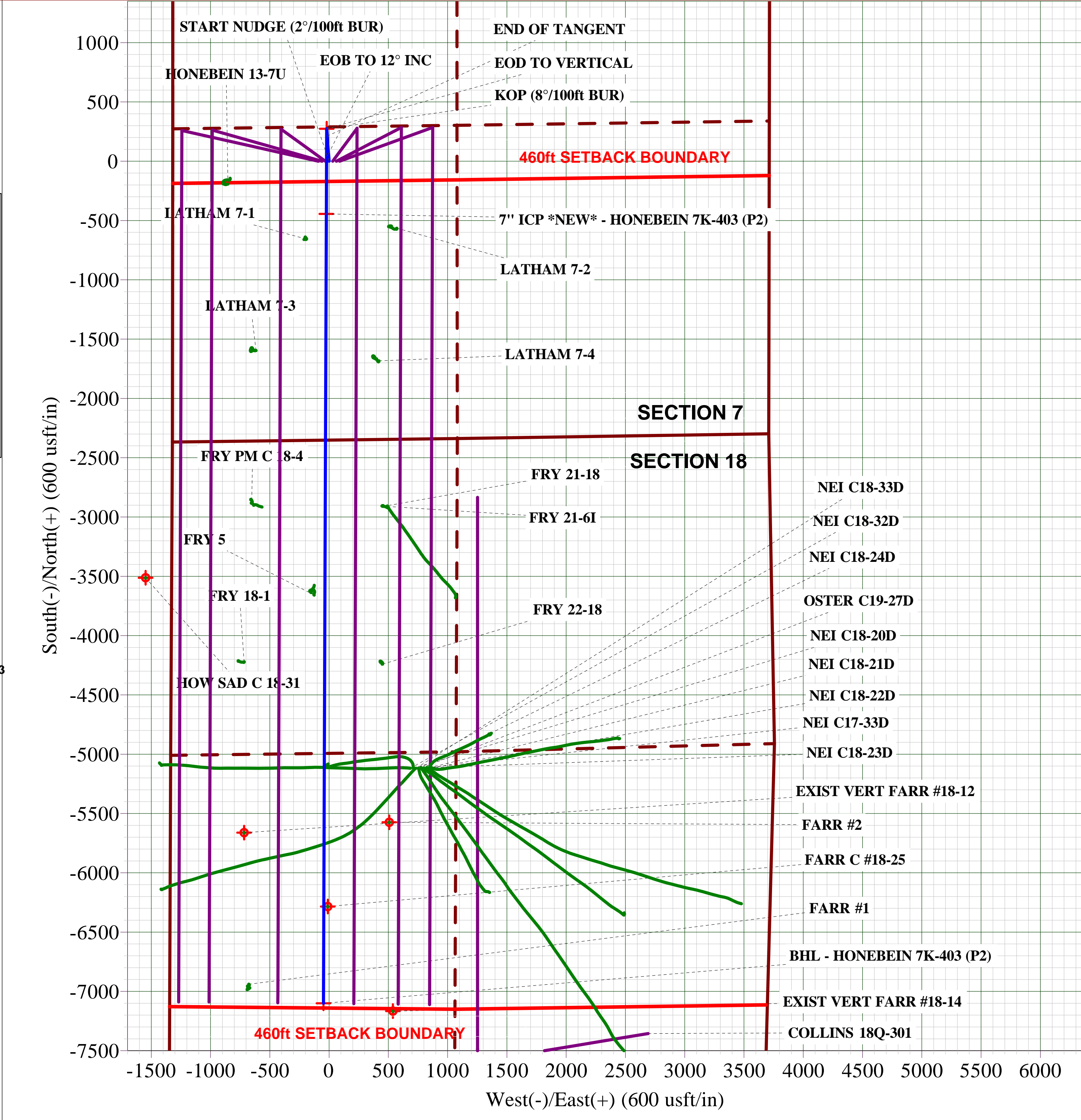
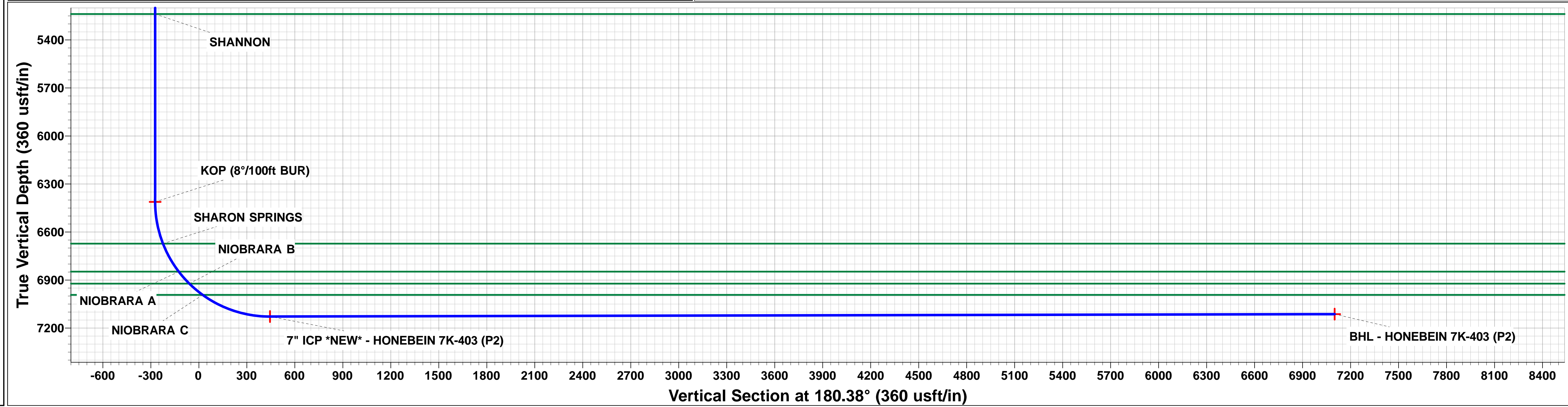
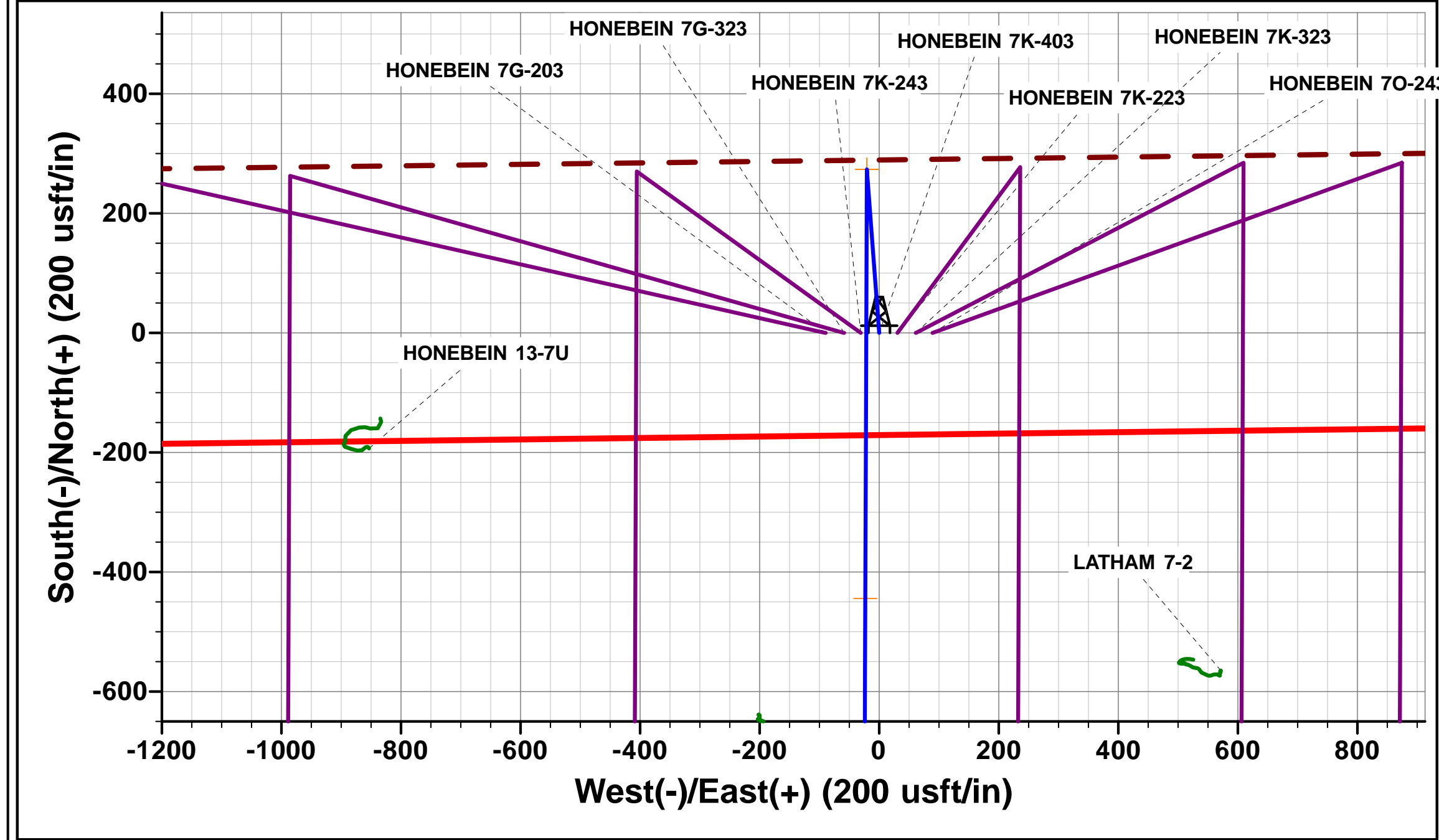
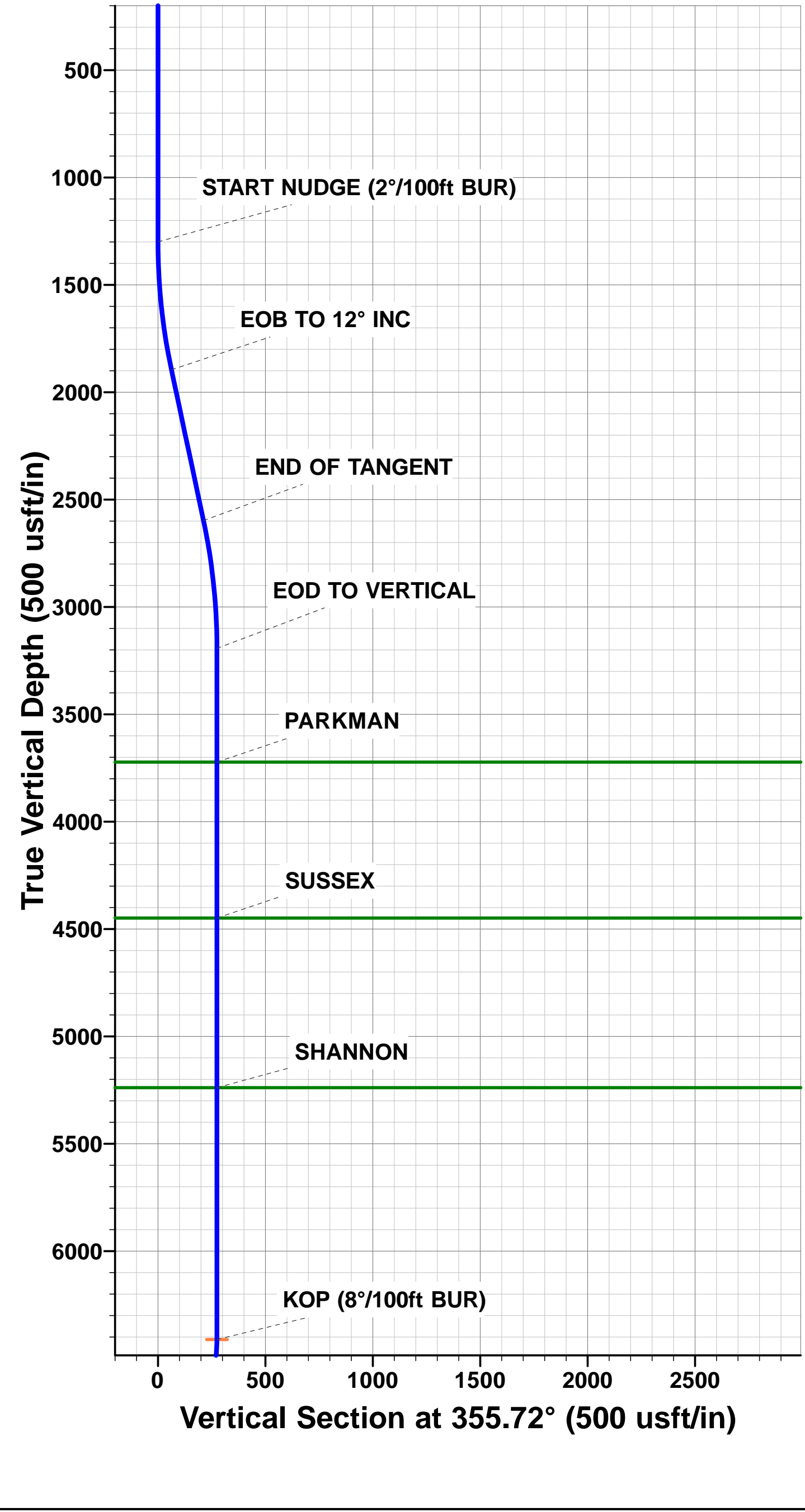


Project: WELD COUNTY, COLORADO
Site: NE SW SEC. 7 T4N R64W 6th P.M.
Well: HONEBEIN 7K-403
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #2

ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Dep	Annotation	
1300.0	1300.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)	
1895.7	1900.1	12.00	355.72	62.4	-4.7	-62.4	62.6	EOB TO 12° INC	
2597.5	2617.6	12.00	355.72	211.2	-15.8	-211.1	211.8	END OF TANGENT	
3193.3	3217.7	0.00	355.72	273.7	-20.5	-273.6	274.5	EOD TO VERTICAL	
6411.8	6436.2	0.00	0.00	273.7	-20.5	-273.6	274.5	KOP (8°/100ft BUR)	
7128.0	7562.9	90.13	180.21	-444.1	-23.1	444.3	992.3	7" ICP *NEW* - HONEBEIN 7K-403 (P2)	
7113.0	14219.1	90.13	180.21	-7100.3	-47.4	7100.4	7648.5	BHL - HONEBEIN 7K-403 (P2)	

PROPOSED LOCAL COORDINATES:
SHL: 2352ft FSL & 1320t FWL Sec 7
7" ICP *NEW*: 1909.2ft FSL & 1297ft FWL Sec 7
BHL: 500ft FSL & 1297ft FWL of Sec 18

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - HONEBEIN 7K-403 (P2)	6411.8	273.7	-20.5	40.326681	-104.597384
BHL - HONEBEIN 7K-403 (P2)	7113.0	-7100.3	-47.4	40.306440	-104.597480
7" ICP *NEW* - HONEBEIN 7K-403 (P2)	7128.0	-444.1	-23.1	40.324711	-104.597393



Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well HONEBEIN 7K-403
Company:	PDC ENERGY	TVD Reference:	KB-EST @ 4862.5usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO	MD Reference:	KB-EST @ 4862.5usft (Original Well Elev)
Site:	NE SW SEC. 7 T4N R64W 6th P.M.	North Reference:	True
Well:	HONEBEIN 7K-403	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	NE SW SEC. 7 T4N R64W 6th P.M.		
Site Position:		Northing:	1,362,859.07 usft
From:	Lat/Long	Easting:	3,251,768.07 usft
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft
		Latitude:	40.325930
		Longitude:	-104.596990
		Grid Convergence:	0.58 °

Well	HONEBEIN 7K-403		
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	-89.2 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	30/06/2015	8.32	66.87	52,595

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 (°)
	7,113.0	0.0	0.0	180.38

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	-4,862.5	0.0	0.0	0.00	0.00	0.00	0.00	
1,300.0	0.00	0.00	1,300.0	-3,562.5	0.0	0.0	0.00	0.00	0.00	0.00	
1,900.1	12.00	355.72	1,895.8	-2,966.7	62.5	-4.7	2.00	2.00	0.00	355.72	
2,617.6	12.00	355.72	2,597.5	-2,265.0	211.2	-15.8	0.00	0.00	0.00	0.00	
3,217.7	0.00	0.00	3,193.3	-1,669.2	273.7	-20.5	2.00	-2.00	0.00	180.00	
6,436.2	0.00	0.00	6,411.8	1,549.3	273.7	-20.5	0.00	0.00	0.00	0.00	KOP - HONEBEIN
7,562.9	90.13	180.21	7,128.0	2,265.5	-444.1	-23.1	8.00	8.00	0.00	180.21	
14,219.1	90.13	180.21	7,113.0	2,250.5	-7,100.3	-47.4	0.00	0.00	0.00	-133.43	BHL - HONEBEIN

Planning Report



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Project:	WELD COUNTY, COLORADO	MD Reference:	KB-EST @ 4862.5usft (Original Well Elev)
Site:	NE SW SEC. 7 T4N R64W 6th P.M.	North Reference:	True
Well:	HONEBEIN 7K-403	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	4,862.50	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,762.50	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,662.50	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,562.50	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,462.50	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,362.50	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,262.50	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	4,162.50	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	4,062.50	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	3,962.50	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	3,862.50	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	3,762.50	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	3,662.50	0.0	0.0	0.0	0.00	0.00	0.00
START NUDGE (2°/100ft BUR)										
1,300.0	0.00	0.00	1,300.0	3,562.50	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	2.00	355.72	1,400.0	3,462.52	1.7	-0.1	-1.7	2.00	2.00	0.00
1,500.0	4.00	355.72	1,499.8	3,362.66	7.0	-0.5	-7.0	2.00	2.00	0.00
1,600.0	6.00	355.72	1,599.5	3,263.05	15.6	-1.2	-15.6	2.00	2.00	0.00
1,700.0	8.00	355.72	1,698.7	3,163.80	27.8	-2.1	-27.8	2.00	2.00	0.00
1,800.0	10.00	355.72	1,797.5	3,065.03	43.4	-3.3	-43.4	2.00	2.00	0.00
1,900.0	12.00	355.72	1,895.6	2,966.88	62.4	-4.7	-62.4	2.00	2.00	0.00
EOB TO 12° INC										
1,900.1	12.00	355.72	1,895.7	2,966.78	62.4	-4.7	-62.4	2.00	2.00	0.00
2,000.0	12.00	355.72	1,993.4	2,869.06	83.2	-6.2	-83.1	0.00	0.00	0.00
2,100.0	12.00	355.72	2,091.3	2,771.25	103.9	-7.8	-103.8	0.00	0.00	0.00
2,200.0	12.00	355.72	2,189.1	2,673.44	124.6	-9.3	-124.6	0.00	0.00	0.00
2,300.0	12.00	355.72	2,286.9	2,575.62	145.4	-10.9	-145.3	0.00	0.00	0.00
2,400.0	12.00	355.72	2,384.7	2,477.81	166.1	-12.4	-166.0	0.00	0.00	0.00
2,500.0	12.00	355.72	2,482.5	2,379.99	186.9	-14.0	-186.8	0.00	0.00	0.00
2,600.0	12.00	355.72	2,580.3	2,282.18	207.6	-15.5	-207.5	0.00	0.00	0.00
END OF TANGENT										
2,617.6	12.00	355.72	2,597.5	2,264.97	211.2	-15.8	-211.1	0.00	0.00	0.00
2,700.0	10.35	355.72	2,678.4	2,184.13	227.2	-17.0	-227.1	2.00	-2.00	0.00
2,800.0	8.35	355.72	2,777.0	2,085.47	243.4	-18.2	-243.3	2.00	-2.00	0.00
2,900.0	6.35	355.72	2,876.2	1,986.29	256.1	-19.2	-256.0	2.00	-2.00	0.00
3,000.0	4.35	355.72	2,975.8	1,886.74	265.5	-19.9	-265.3	2.00	-2.00	0.00
3,100.0	2.35	355.72	3,075.6	1,786.91	271.3	-20.3	-271.1	2.00	-2.00	0.00
3,200.0	0.35	355.72	3,175.6	1,686.95	273.6	-20.5	-273.5	2.00	-2.00	0.00
EOD TO VERTICAL										
3,217.7	0.00	355.72	3,193.3	1,669.25	273.7	-20.5	-273.6	2.00	-2.00	0.00
3,300.0	0.00	0.00	3,275.6	1,586.95	273.7	-20.5	-273.6	0.00	0.00	0.00
3,400.0	0.00	0.00	3,375.6	1,486.95	273.7	-20.5	-273.6	0.00	0.00	0.00
3,500.0	0.00	0.00	3,475.6	1,386.95	273.7	-20.5	-273.6	0.00	0.00	0.00
3,600.0	0.00	0.00	3,575.6	1,286.95	273.7	-20.5	-273.6	0.00	0.00	0.00
3,700.0	0.00	0.00	3,675.6	1,186.95	273.7	-20.5	-273.6	0.00	0.00	0.00
PARKMAN										
3,746.9	0.00	0.00	3,722.5	1,140.00	273.7	-20.5	-273.6	0.00	0.00	0.00
3,800.0	0.00	0.00	3,775.6	1,086.95	273.7	-20.5	-273.6	0.00	0.00	0.00
3,900.0	0.00	0.00	3,875.6	986.95	273.7	-20.5	-273.6	0.00	0.00	0.00
4,000.0	0.00	0.00	3,975.6	886.95	273.7	-20.5	-273.6	0.00	0.00	0.00
4,100.0	0.00	0.00	4,075.6	786.95	273.7	-20.5	-273.6	0.00	0.00	0.00
4,200.0	0.00	0.00	4,175.6	686.95	273.7	-20.5	-273.6	0.00	0.00	0.00
4,300.0	0.00	0.00	4,275.6	586.95	273.7	-20.5	-273.6	0.00	0.00	0.00
4,400.0	0.00	0.00	4,375.6	486.95	273.7	-20.5	-273.6	0.00	0.00	0.00

Planning Report



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Project:	WELD COUNTY, COLORADO	MD Reference:	KB-EST @ 4862.5usft (Original Well Elev)
Site:	NE SW SEC. 7 T4N R64W 6th P.M.	North Reference:	True
Well:	HONEBEIN 7K-403	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)
SUSSEX										
4,472.9	0.00	0.00	4,448.5	414.00	273.7	-20.5	-273.6	0.00	0.00	0.00
4,500.0	0.00	0.00	4,475.6	386.95	273.7	-20.5	-273.6	0.00	0.00	0.00
4,600.0	0.00	0.00	4,575.6	286.95	273.7	-20.5	-273.6	0.00	0.00	0.00
4,700.0	0.00	0.00	4,675.6	186.95	273.7	-20.5	-273.6	0.00	0.00	0.00
4,800.0	0.00	0.00	4,775.6	86.95	273.7	-20.5	-273.6	0.00	0.00	0.00
4,900.0	0.00	0.00	4,875.6	-13.05	273.7	-20.5	-273.6	0.00	0.00	0.00
5,000.0	0.00	0.00	4,975.6	-113.05	273.7	-20.5	-273.6	0.00	0.00	0.00
5,100.0	0.00	0.00	5,075.6	-213.05	273.7	-20.5	-273.6	0.00	0.00	0.00
5,200.0	0.00	0.00	5,175.6	-313.05	273.7	-20.5	-273.6	0.00	0.00	0.00
SHANNON										
5,262.9	0.00	0.00	5,238.5	-376.00	273.7	-20.5	-273.6	0.00	0.00	0.00
5,300.0	0.00	0.00	5,275.6	-413.05	273.7	-20.5	-273.6	0.00	0.00	0.00
5,400.0	0.00	0.00	5,375.6	-513.05	273.7	-20.5	-273.6	0.00	0.00	0.00
5,500.0	0.00	0.00	5,475.6	-613.05	273.7	-20.5	-273.6	0.00	0.00	0.00
5,600.0	0.00	0.00	5,575.6	-713.05	273.7	-20.5	-273.6	0.00	0.00	0.00
5,700.0	0.00	0.00	5,675.6	-813.05	273.7	-20.5	-273.6	0.00	0.00	0.00
5,800.0	0.00	0.00	5,775.6	-913.05	273.7	-20.5	-273.6	0.00	0.00	0.00
5,900.0	0.00	0.00	5,875.6	-1,013.05	273.7	-20.5	-273.6	0.00	0.00	0.00
6,000.0	0.00	0.00	5,975.6	-1,113.05	273.7	-20.5	-273.6	0.00	0.00	0.00
6,100.0	0.00	0.00	6,075.6	-1,213.05	273.7	-20.5	-273.6	0.00	0.00	0.00
6,200.0	0.00	0.00	6,175.6	-1,313.05	273.7	-20.5	-273.6	0.00	0.00	0.00
6,300.0	0.00	0.00	6,275.6	-1,413.05	273.7	-20.5	-273.6	0.00	0.00	0.00
6,400.0	0.00	0.00	6,375.6	-1,513.05	273.7	-20.5	-273.6	0.00	0.00	0.00
KOP (8°/100ft BUR)										
6,436.2	0.00	0.00	6,411.8	-1,549.25	273.7	-20.5	-273.6	0.00	0.00	0.00
6,500.0	5.10	180.21	6,475.5	-1,612.97	270.9	-20.5	-270.7	7.99	7.99	0.00
6,600.0	13.10	180.21	6,574.1	-1,711.63	255.1	-20.6	-254.9	8.00	8.00	0.00
6,700.0	21.10	180.21	6,669.6	-1,807.13	225.7	-20.7	-225.5	8.00	8.00	0.00
SHARON SPRINGS										
6,703.1	21.35	180.21	6,672.5	-1,810.00	224.6	-20.7	-224.4	8.00	8.00	0.00
6,800.0	29.10	180.21	6,760.1	-1,897.62	183.3	-20.8	-183.2	8.00	8.00	0.00
6,900.0	37.10	180.21	6,843.8	-1,981.32	128.7	-21.0	-128.6	8.00	8.00	0.00
NIOBRARA A										
6,904.6	37.47	180.21	6,847.5	-1,985.00	125.9	-21.0	-125.8	8.00	8.00	0.00
7,000.0	45.10	180.21	6,919.1	-2,056.61	63.0	-21.3	-62.9	8.00	8.00	0.00
NIOBRARA B										
7,004.8	45.49	180.21	6,922.5	-2,060.00	59.6	-21.3	-59.5	8.00	8.00	0.00
7,100.0	53.10	180.21	6,984.5	-2,122.03	-12.5	-21.5	12.6	8.00	8.00	0.00
NIOBRARA C										
7,113.4	54.18	180.21	6,992.5	-2,130.00	-23.3	-21.6	23.4	8.00	8.00	0.00
7,200.0	61.10	180.21	7,038.8	-2,176.31	-96.4	-21.9	96.5	8.00	8.00	0.00
7,300.0	69.10	180.21	7,080.9	-2,218.38	-187.0	-22.2	187.1	8.00	8.00	0.00
7,400.0	77.10	180.21	7,109.9	-2,247.42	-282.6	-22.5	282.8	8.00	8.00	0.00
7,500.0	85.10	180.21	7,125.4	-2,262.88	-381.3	-22.9	381.5	8.00	8.00	0.00
7" ICP *NEW* - HONEBEIN 7K-403 (P2)										
7,562.9	90.13	180.21	7,128.0	-2,265.50	-444.1	-23.1	444.3	8.00	8.00	0.00
7,600.0	90.13	180.21	7,127.9	-2,265.41	-481.2	-23.3	481.4	0.00	0.00	0.00
7,700.0	90.13	180.21	7,127.7	-2,265.18	-581.2	-23.6	581.4	0.00	0.00	0.00
7,800.0	90.13	180.21	7,127.5	-2,264.96	-681.2	-24.0	681.4	0.00	0.00	0.00
7,900.0	90.13	180.21	7,127.2	-2,264.73	-781.2	-24.4	781.4	0.00	0.00	0.00
8,000.0	90.13	180.21	7,127.0	-2,264.50	-881.2	-24.7	881.4	0.00	0.00	0.00
8,100.0	90.13	180.21	7,126.8	-2,264.28	-981.2	-25.1	981.4	0.00	0.00	0.00

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well HONEBEIN 7K-403
Company:	PDC ENERGY	TVD Reference:	KB-EST @ 4862.5usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO	MD Reference:	KB-EST @ 4862.5usft (Original Well Elev)
Site:	NE SW SEC. 7 T4N R64W 6th P.M.	North Reference:	True
Well:	HONEBEIN 7K-403	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)
8,200.0	90.13	180.21	7,126.6	-2,264.05	-1,081.2	-25.5	1,081.4	0.00	0.00	0.00
8,300.0	90.13	180.21	7,126.3	-2,263.82	-1,181.2	-25.8	1,181.4	0.00	0.00	0.00
8,400.0	90.13	180.21	7,126.1	-2,263.60	-1,281.2	-26.2	1,281.4	0.00	0.00	0.00
8,500.0	90.13	180.21	7,125.9	-2,263.37	-1,381.2	-26.6	1,381.4	0.00	0.00	0.00
8,600.0	90.13	180.21	7,125.6	-2,263.14	-1,481.2	-26.9	1,481.4	0.00	0.00	0.00
8,700.0	90.13	180.21	7,125.4	-2,262.92	-1,581.2	-27.3	1,581.4	0.00	0.00	0.00
8,800.0	90.13	180.21	7,125.2	-2,262.69	-1,681.2	-27.7	1,681.4	0.00	0.00	0.00
8,900.0	90.13	180.21	7,125.0	-2,262.47	-1,781.2	-28.0	1,781.4	0.00	0.00	0.00
9,000.0	90.13	180.21	7,124.7	-2,262.24	-1,881.2	-28.4	1,881.4	0.00	0.00	0.00
9,100.0	90.13	180.21	7,124.5	-2,262.01	-1,981.2	-28.8	1,981.4	0.00	0.00	0.00
9,200.0	90.13	180.21	7,124.3	-2,261.79	-2,081.2	-29.1	2,081.4	0.00	0.00	0.00
9,300.0	90.13	180.21	7,124.1	-2,261.56	-2,181.2	-29.5	2,181.4	0.00	0.00	0.00
9,400.0	90.13	180.21	7,123.8	-2,261.34	-2,281.2	-29.9	2,281.4	0.00	0.00	0.00
9,500.0	90.13	180.21	7,123.6	-2,261.11	-2,381.2	-30.2	2,381.4	0.00	0.00	0.00
9,600.0	90.13	180.21	7,123.4	-2,260.88	-2,481.2	-30.6	2,481.4	0.00	0.00	0.00
9,700.0	90.13	180.21	7,123.2	-2,260.66	-2,581.2	-31.0	2,581.4	0.00	0.00	0.00
9,800.0	90.13	180.21	7,122.9	-2,260.43	-2,681.2	-31.3	2,681.4	0.00	0.00	0.00
9,900.0	90.13	180.21	7,122.7	-2,260.21	-2,781.2	-31.7	2,781.4	0.00	0.00	0.00
10,000.0	90.13	180.21	7,122.5	-2,259.98	-2,881.2	-32.0	2,881.4	0.00	0.00	0.00
10,100.0	90.13	180.21	7,122.3	-2,259.75	-2,981.2	-32.4	2,981.4	0.00	0.00	0.00
10,200.0	90.13	180.21	7,122.0	-2,259.53	-3,081.2	-32.8	3,081.4	0.00	0.00	0.00
10,300.0	90.13	180.21	7,121.8	-2,259.30	-3,181.2	-33.1	3,181.4	0.00	0.00	0.00
10,400.0	90.13	180.21	7,121.6	-2,259.08	-3,281.2	-33.5	3,281.4	0.00	0.00	0.00
10,500.0	90.13	180.21	7,121.4	-2,258.85	-3,381.2	-33.9	3,381.4	0.00	0.00	0.00
10,600.0	90.13	180.21	7,121.1	-2,258.63	-3,481.2	-34.2	3,481.4	0.00	0.00	0.00
10,700.0	90.13	180.21	7,120.9	-2,258.40	-3,581.2	-34.6	3,581.4	0.00	0.00	0.00
10,800.0	90.13	180.21	7,120.7	-2,258.18	-3,681.2	-35.0	3,681.4	0.00	0.00	0.00
10,900.0	90.13	180.21	7,120.5	-2,257.95	-3,781.2	-35.3	3,781.4	0.00	0.00	0.00
11,000.0	90.13	180.21	7,120.2	-2,257.73	-3,881.2	-35.7	3,881.4	0.00	0.00	0.00
11,100.0	90.13	180.21	7,120.0	-2,257.50	-3,981.2	-36.1	3,981.4	0.00	0.00	0.00
11,200.0	90.13	180.21	7,119.8	-2,257.28	-4,081.2	-36.4	4,081.4	0.00	0.00	0.00
11,300.0	90.13	180.21	7,119.5	-2,257.05	-4,181.2	-36.8	4,181.4	0.00	0.00	0.00
11,400.0	90.13	180.21	7,119.3	-2,256.82	-4,281.2	-37.2	4,281.4	0.00	0.00	0.00
11,500.0	90.13	180.21	7,119.1	-2,256.60	-4,381.2	-37.5	4,381.4	0.00	0.00	0.00
11,600.0	90.13	180.21	7,118.9	-2,256.37	-4,481.2	-37.9	4,481.4	0.00	0.00	0.00
11,700.0	90.13	180.21	7,118.6	-2,256.15	-4,581.2	-38.3	4,581.4	0.00	0.00	0.00
11,800.0	90.13	180.21	7,118.4	-2,255.93	-4,681.2	-38.6	4,681.4	0.00	0.00	0.00
11,900.0	90.13	180.21	7,118.2	-2,255.70	-4,781.2	-39.0	4,781.4	0.00	0.00	0.00
12,000.0	90.13	180.21	7,118.0	-2,255.48	-4,881.2	-39.3	4,881.4	0.00	0.00	0.00
12,100.0	90.13	180.21	7,117.8	-2,255.25	-4,981.2	-39.7	4,981.4	0.00	0.00	0.00
12,200.0	90.13	180.21	7,117.5	-2,255.03	-5,081.2	-40.1	5,081.4	0.00	0.00	0.00
12,300.0	90.13	180.21	7,117.3	-2,254.80	-5,181.2	-40.4	5,181.4	0.00	0.00	0.00
12,400.0	90.13	180.21	7,117.1	-2,254.58	-5,281.2	-40.8	5,281.4	0.00	0.00	0.00
12,500.0	90.13	180.21	7,116.9	-2,254.35	-5,381.2	-41.2	5,381.4	0.00	0.00	0.00
12,600.0	90.13	180.21	7,116.6	-2,254.13	-5,481.2	-41.5	5,481.4	0.00	0.00	0.00
12,700.0	90.13	180.21	7,116.4	-2,253.90	-5,581.2	-41.9	5,581.4	0.00	0.00	0.00
12,800.0	90.13	180.21	7,116.2	-2,253.68	-5,681.2	-42.3	5,681.4	0.00	0.00	0.00
12,900.0	90.13	180.21	7,116.0	-2,253.45	-5,781.2	-42.6	5,781.4	0.00	0.00	0.00
13,000.0	90.13	180.21	7,115.7	-2,253.23	-5,881.2	-43.0	5,881.4	0.00	0.00	0.00
13,100.0	90.13	180.21	7,115.5	-2,253.01	-5,981.2	-43.3	5,981.4	0.00	0.00	0.00
13,200.0	90.13	180.21	7,115.3	-2,252.78	-6,081.2	-43.7	6,081.4	0.00	0.00	0.00
13,300.0	90.13	180.21	7,115.1	-2,252.56	-6,181.2	-44.1	6,181.4	0.00	0.00	0.00
13,400.0	90.13	180.21	7,114.8	-2,252.33	-6,281.2	-44.4	6,281.3	0.00	0.00	0.00
13,500.0	90.13	180.21	7,114.6	-2,252.11	-6,381.2	-44.8	6,381.3	0.00	0.00	0.00

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well HONEBEIN 7K-403
Company:	PDC ENERGY	TVD Reference:	KB-EST @ 4862.5usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO	MD Reference:	KB-EST @ 4862.5usft (Original Well Elev)
Site:	NE SW SEC. 7 T4N R64W 6th P.M.	North Reference:	True
Well:	HONEBEIN 7K-403	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)
13,600.0	90.13	180.21	7,114.4	-2,251.89	-6,481.2	-45.2	6,481.3	0.00	0.00	0.00
13,700.0	90.13	180.21	7,114.2	-2,251.66	-6,581.2	-45.5	6,581.3	0.00	0.00	0.00
13,800.0	90.13	180.21	7,113.9	-2,251.44	-6,681.2	-45.9	6,681.3	0.00	0.00	0.00
13,900.0	90.13	180.21	7,113.7	-2,251.21	-6,781.2	-46.3	6,781.3	0.00	0.00	0.00
14,000.0	90.13	180.21	7,113.5	-2,250.99	-6,881.2	-46.6	6,881.3	0.00	0.00	0.00
14,100.0	90.13	180.21	7,113.3	-2,250.77	-6,981.2	-47.0	6,981.3	0.00	0.00	0.00
14,200.0	90.13	180.21	7,113.0	-2,250.54	-7,081.2	-47.3	7,081.3	0.00	0.00	0.00
BHL - HONEBEIN 7K-403 (P2)										
14,219.1	90.13	180.21	7,113.0	-2,250.50	-7,100.3	-47.4	7,100.4	0.00	0.00	0.00

Formations						
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,746.9	3,722.5	PARKMAN		0.00		
4,472.9	4,448.5	SUSSEX		0.00		
5,262.9	5,238.5	SHANNON		0.00		
6,703.1	6,672.5	SHARON SPRINGS		0.00		
6,904.6	6,847.5	NIOBRARA A		0.00		
7,004.8	6,922.5	NIOBRARA B		0.00		
7,113.4	6,992.5	NIOBRARA C		0.00		

Plan Annotations				
MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,300.0	1,300.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1,900.1	1,895.7	62.4	-4.7	EOB TO 12° INC
2,617.6	2,597.5	211.2	-15.8	END OF TANGENT
3,217.7	3,193.3	273.7	-20.5	EOD TO VERTICAL
6,436.2	6,411.8	273.7	-20.5	KOP (8°/100ft BUR)
7,562.9	7,128.0	-444.1	-23.1	7" ICP *NEW* - HONEBEIN 7K-403 (P2)
14,219.1	7,113.0	-7,100.3	-47.4	BHL - HONEBEIN 7K-403 (P2)