



BISON OIL & GAS II, LLC

WELD COUNTY, COLORADO (NAD 83)

NE NW SEC. 4 T8N R60W 6th P.M.

STAMPEDE FED 8-60 4-9-5

ORIGINAL WELLBORE

12 November, 2019

Plan: PROPOSAL #3





Project: WELD COUNTY, COLORADO (NAD 83)
Site: NE NW SEC. 4 T8N R60W 6th P.M.
Well: STAMPEDE FED 8-60 4-9-5
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #3

ANNOTATIONS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Dep	Annotation	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL: 409ft FNL & 2372ft FWL of Sec 4	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	START NUDGE (2°/100ft BUR)	
800.00	12.00	24.34	795.62	57.04	25.80	-56.10	62.60	EOB TO 12° INC	
2674.88	12.00	24.34	2629.53	412.20	186.46	-405.42	452.41	ENTER COC 073402	
3816.73	12.00	24.34	3746.43	628.50	284.31	-618.16	689.82	END OF TANGENT	
4416.73	0.00	0.00	4342.05	685.54	310.11	-674.26	752.42	EOD TO VERTICAL	
5827.22	0.00	0.00	5752.54	685.54	310.11	-674.26	752.42	KOP (10°/100ft BUR)	
6727.22	90.00	179.76	6325.50	112.59	312.51	-101.57	1325.38	BPI: 300ft FNL & 2660ft FEL of Sec 4	
14453.27	90.00	179.76	6325.54	-7613.40	344.80	7620.80	9051.43	EXIT COC 073402	
16809.74	90.00	179.76	6325.50	-9969.84	354.52	9976.14	11407.89	EPI: 300ft FSL & 2454ft FEL of Sec 9	
16864.61	90.00	181.41	6325.50	-10024.72	353.96	10030.96	11462.77	EOT TO 181.41° AZ	
16909.58	90.00	181.41	6325.50	-10069.67	352.86	10075.85	11507.74	BHL: 200ft FSL & 2454ft FEL of Sec 9	

PROPOSED LOCAL COORDINATES:

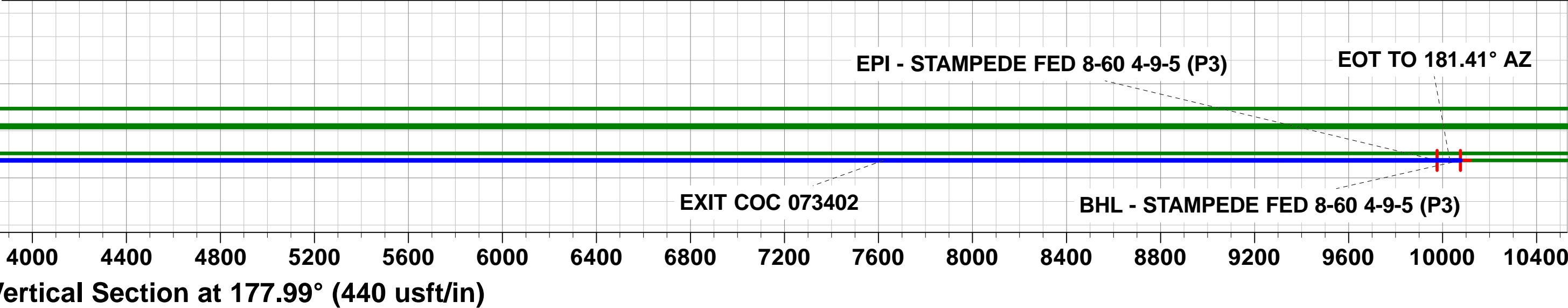
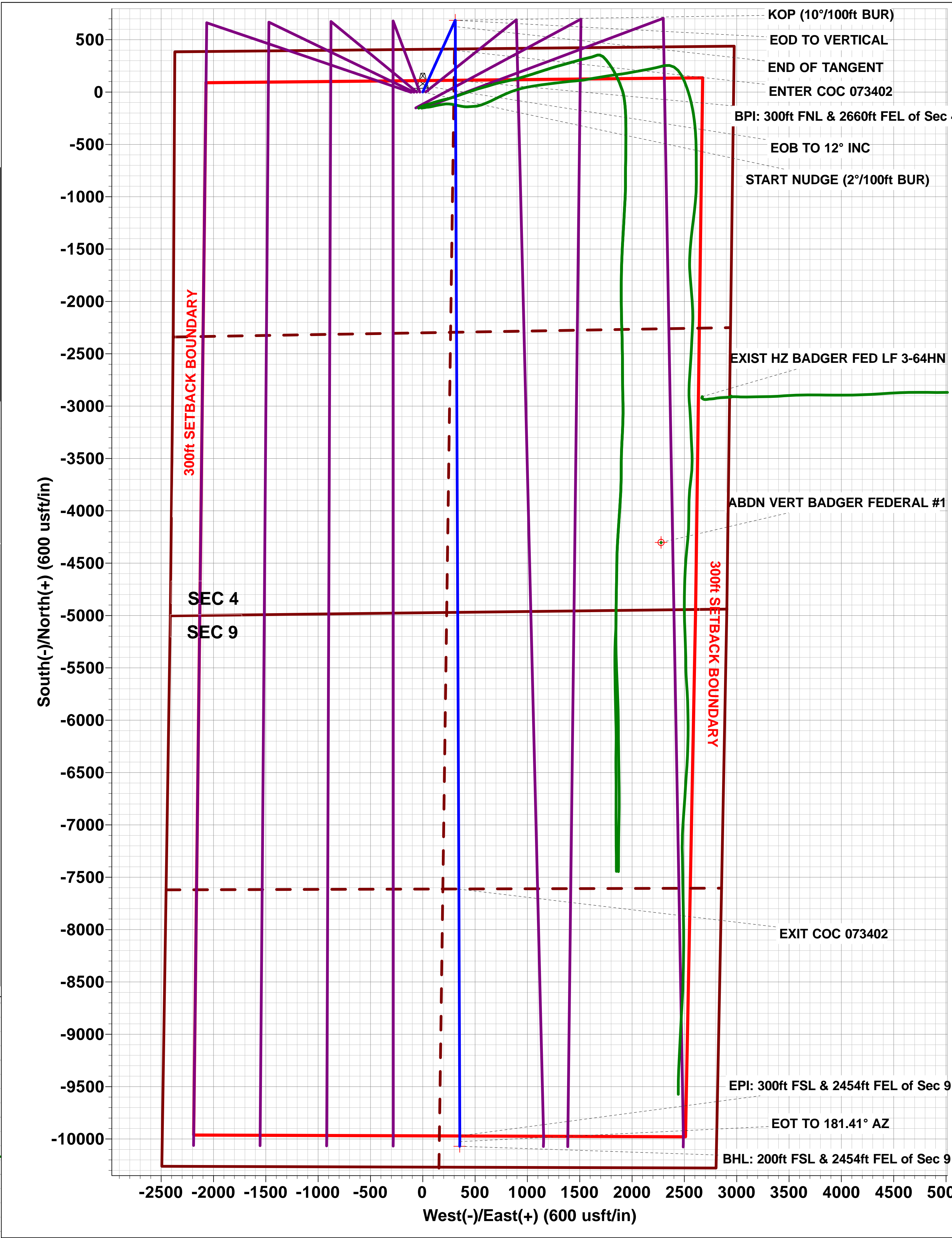
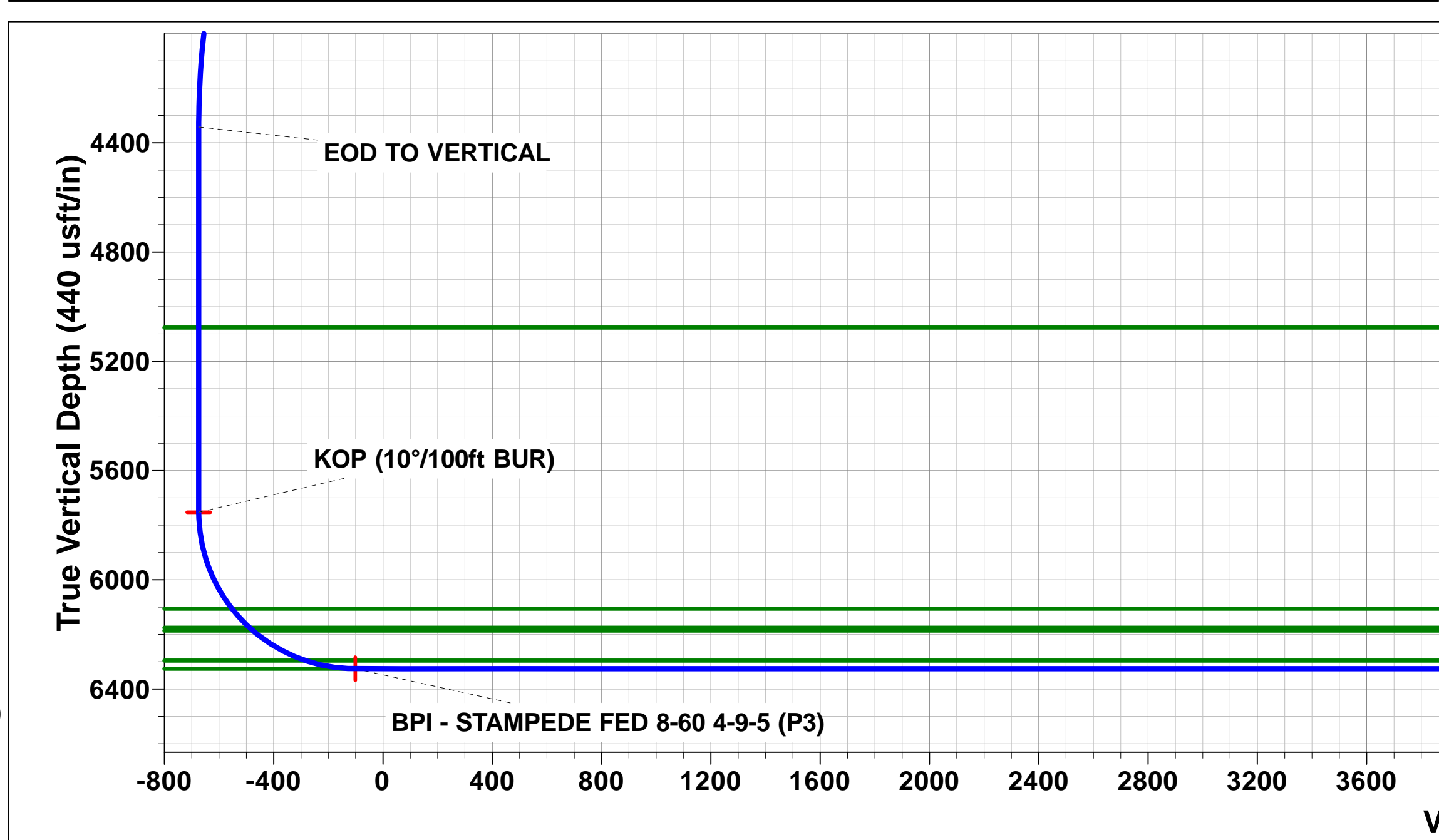
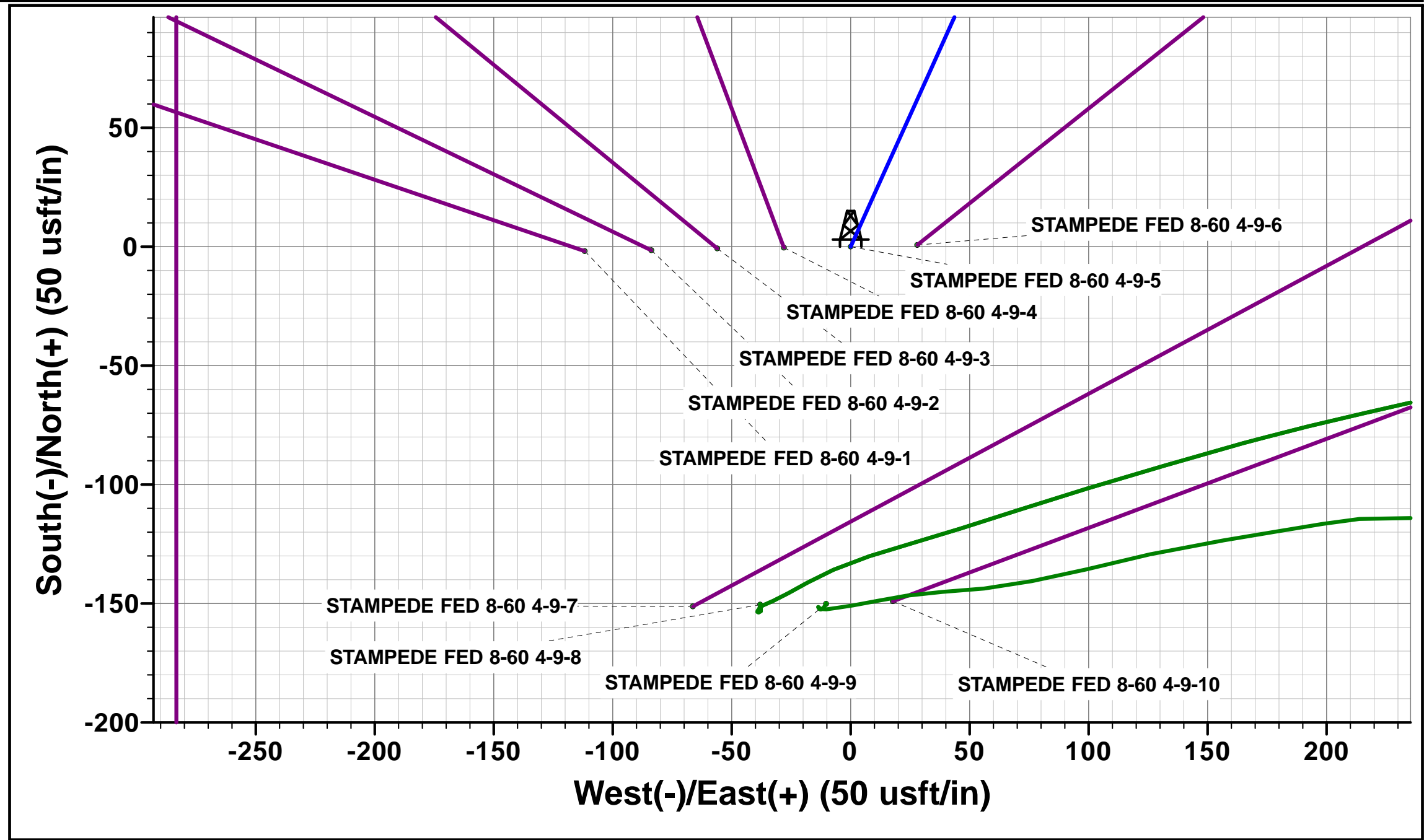
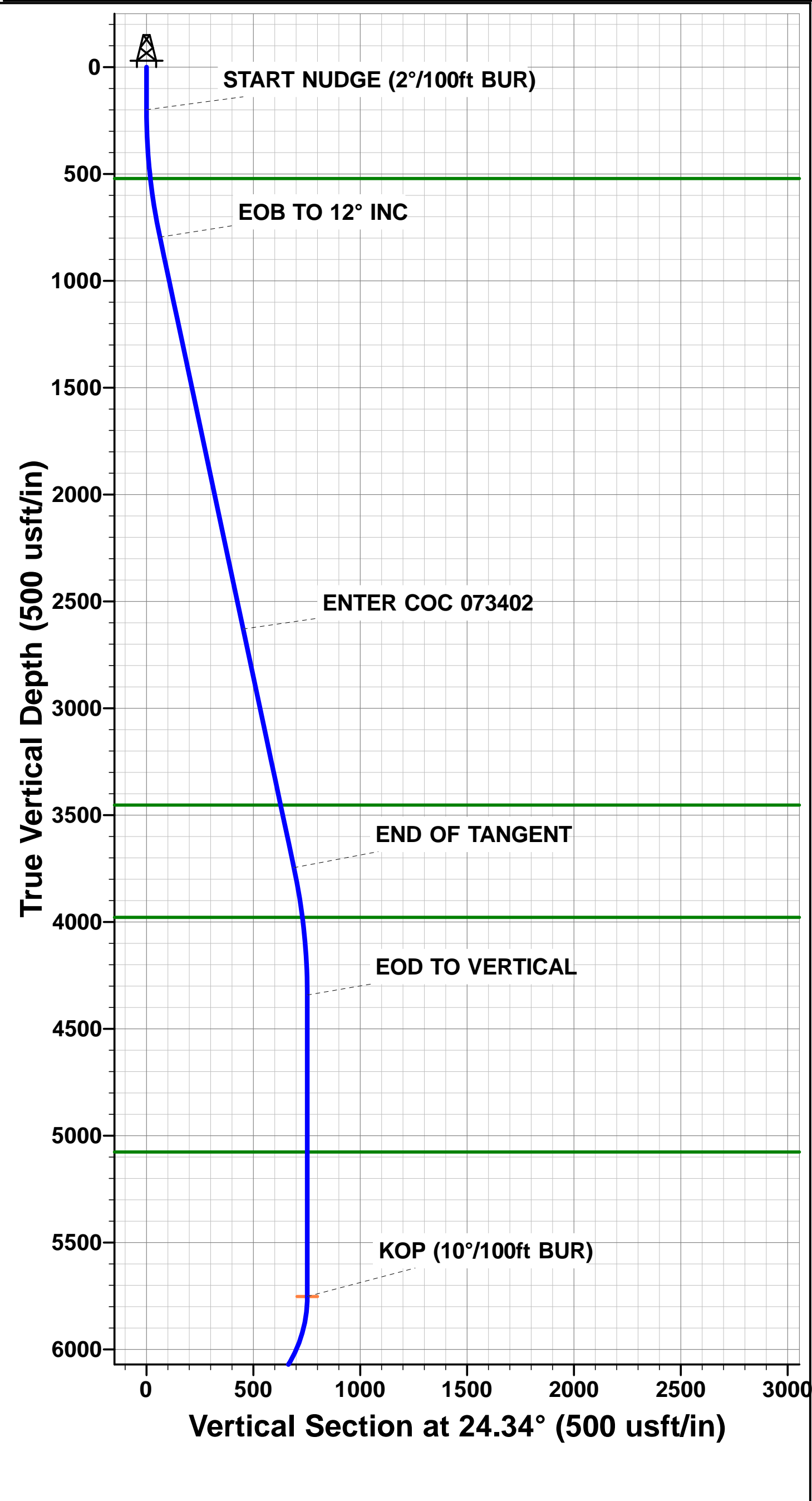
SHL: 409ft FNL & 2372ft FWL Sec 4

BPI: 300ft FNL & 2660ft FEL Sec 4

EPI: 300ft FSL & 2454ft FEL Sec 9

BHL: 200ft FSL & 2454ft FEL of Sec 9

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - STAMPEDE FED 8-60 4-9-5 (P3)	5752.54	685.54	310.11	40.699633	-104.095474
BPI - STAMPEDE FED 8-60 4-9-5 (P3)	6325.50	112.59	312.51	40.698060	-104.095465
EPI - STAMPEDE FED 8-60 4-9-5 (P3)	6325.50	-9969.84	354.52	40.670386	-104.095314
BHL - STAMPEDE FED 8-60 4-9-5 (P3)	6325.50	-10069.67	352.86	40.670112	-104.095320



Planning Report

Database:	EDM 5000.15.1	Local Co-ordinate Reference:	Well STAMPEDE FED 8-60 4-9-5
Company:	BISON OIL & GAS II, LLC	TVD Reference:	KB 25' @ 4951.50usft
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB 25' @ 4951.50usft
Site:	NE NW SEC. 4 T8N R60W 6th P.M.	North Reference:	True
Well:	STAMPEDE FED 8-60 4-9-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #3		

Project	WELD COUNTY, COLORADO (NAD 83)		
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 NW SEC. 4 T8N R60W 6th P.M.		
Site Position:		Northing:	1,500,110.53 usft
From:	Lat/Long	Easting:	3,389,033.65 usft
Position Uncertainty:	0.00 usft	Slot Radius:	1.10000 ft
		Latitude:	40.697747
		Longitude:	-104.096942
		Grid Convergence:	0.91 °

Well	STAMPEDE FED 8-60 4-9-5		
Well Position	+N/-S	1.45 usft	Northing:
	+E/-W	97.05 usft	Easting:
Position Uncertainty	0.00 usft		Wellhead Elevation:
			Latitude:
			Longitude:
			Ground Level:

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2019-11-12	7.62	67.13	52,337.68425017

Design	PROPOSAL #3			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	6,325.50	0.00	0.00	177.99

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
0.00	0.00	0.00	0.00	-4,951.50	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	-4,751.50	0.00	0.00	0.00	0.00	0.00	0.00	
800.00	12.00	24.34	795.62	-4,155.88	57.04	25.80	2.00	2.00	0.00	24.34	
3,816.73	12.00	24.34	3,746.43	-1,205.07	628.50	284.31	0.00	0.00	0.00	0.00	
4,416.73	0.00	0.00	4,342.05	-609.45	685.54	310.11	2.00	-2.00	0.00	180.00	
5,827.22	0.00	0.00	5,752.54	801.04	685.54	310.11	0.00	0.00	0.00	0.00	KOP - STAMPEDE
6,727.22	90.00	179.76	6,325.50	1,374.00	112.59	312.51	10.00	10.00	19.97	179.76	BPI - STAMPEDE F
16,809.74	90.00	179.76	6,325.50	1,374.00	-9,969.84	354.52	0.00	0.00	0.00	0.00	EPI - STAMPEDE F
16,864.61	90.00	181.41	6,325.50	1,374.00	-10,024.72	353.96	3.00	0.00	3.00	89.99	
16,909.58	90.00	181.41	6,325.50	1,374.00	-10,069.67	352.86	0.00	0.00	0.00	0.00	BHL - STAMPEDE

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Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB 25' @ 4951.50usft
Site:	NE NW SEC. 4 T8N R60W 6th P.M.	North Reference:	True
Well:	STAMPEDE FED 8-60 4-9-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #3		

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)
SHL: 409ft FNL & 2372ft FWL of Sec 4										
0.00	0.00	0.00	0.00	4,951.50	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	4,851.50	0.00	0.00	0.00	0.00	0.00	0.00
START NUDGE (2°/100ft BUR)										
200.00	0.00	0.00	200.00	4,751.50	0.00	0.00	0.00	0.00	0.00	0.00
300.00	2.00	24.34	299.98	4,651.52	1.59	0.72	-1.56	2.00	2.00	0.00
400.00	4.00	24.34	399.84	4,551.66	6.36	2.88	-6.25	2.00	2.00	0.00
500.00	6.00	24.34	499.45	4,452.05	14.30	6.47	-14.06	2.00	2.00	0.00
PIERRE SHALE (BASE FOX HILLS)										
522.18	6.44	24.34	521.50	4,430.00	16.49	7.46	-16.22	2.00	2.00	0.00
600.00	8.00	24.34	598.70	4,352.80	25.40	11.49	-24.98	2.00	2.00	0.00
700.00	10.00	24.34	697.47	4,254.03	39.65	17.94	-39.00	2.00	2.00	0.00
EOB TO 12° INC										
800.00	12.00	24.34	795.62	4,155.88	57.04	25.80	-56.10	2.00	2.00	0.00
900.00	12.00	24.34	893.44	4,058.06	75.98	34.37	-74.73	0.00	0.00	0.00
1,000.00	12.00	24.34	991.25	3,960.25	94.92	42.94	-93.36	0.00	0.00	0.00
1,100.00	12.00	24.34	1,089.07	3,862.43	113.87	51.51	-111.99	0.00	0.00	0.00
1,200.00	12.00	24.34	1,186.88	3,764.62	132.81	60.08	-130.63	0.00	0.00	0.00
1,300.00	12.00	24.34	1,284.70	3,666.80	151.75	68.65	-149.26	0.00	0.00	0.00
1,400.00	12.00	24.34	1,382.51	3,568.99	170.70	77.22	-167.89	0.00	0.00	0.00
1,500.00	12.00	24.34	1,480.33	3,471.17	189.64	85.79	-186.52	0.00	0.00	0.00
1,600.00	12.00	24.34	1,578.14	3,373.36	208.58	94.35	-205.15	0.00	0.00	0.00
1,700.00	12.00	24.34	1,675.96	3,275.54	227.53	102.92	-223.78	0.00	0.00	0.00
1,800.00	12.00	24.34	1,773.77	3,177.73	246.47	111.49	-242.41	0.00	0.00	0.00
1,900.00	12.00	24.34	1,871.59	3,079.91	265.41	120.06	-261.05	0.00	0.00	0.00
2,000.00	12.00	24.34	1,969.40	2,982.10	284.36	128.63	-279.68	0.00	0.00	0.00
2,100.00	12.00	24.34	2,067.22	2,884.28	303.30	137.20	-298.31	0.00	0.00	0.00
2,200.00	12.00	24.34	2,165.03	2,786.47	322.24	145.77	-316.94	0.00	0.00	0.00
2,300.00	12.00	24.34	2,262.84	2,688.66	341.19	154.34	-335.57	0.00	0.00	0.00
2,400.00	12.00	24.34	2,360.66	2,590.84	360.13	162.91	-354.20	0.00	0.00	0.00
2,500.00	12.00	24.34	2,458.47	2,493.03	379.07	171.48	-372.83	0.00	0.00	0.00
2,600.00	12.00	24.34	2,556.29	2,395.21	398.01	180.05	-391.47	0.00	0.00	0.00
ENTER COC 073402										
2,674.88	12.00	24.34	2,629.53	2,321.97	412.20	186.46	-405.42	0.00	0.00	0.00
2,700.00	12.00	24.34	2,654.10	2,297.40	416.96	188.61	-410.10	0.00	0.00	0.00
2,800.00	12.00	24.34	2,751.92	2,199.58	435.90	197.18	-428.73	0.00	0.00	0.00
2,900.00	12.00	24.34	2,849.73	2,101.77	454.84	205.75	-447.36	0.00	0.00	0.00
3,000.00	12.00	24.34	2,947.55	2,003.95	473.79	214.32	-465.99	0.00	0.00	0.00
3,100.00	12.00	24.34	3,045.36	1,906.14	492.73	222.89	-484.62	0.00	0.00	0.00
3,200.00	12.00	24.34	3,143.18	1,808.32	511.67	231.46	-503.25	0.00	0.00	0.00
3,300.00	12.00	24.34	3,240.99	1,710.51	530.62	240.03	-521.89	0.00	0.00	0.00
3,400.00	12.00	24.34	3,338.81	1,612.69	549.56	248.60	-540.52	0.00	0.00	0.00
3,500.00	12.00	24.34	3,436.62	1,514.88	568.50	257.17	-559.15	0.00	0.00	0.00
PARKMAN										
3,517.26	12.00	24.34	3,453.50	1,498.00	571.77	258.65	-562.36	0.00	0.00	0.00
3,600.00	12.00	24.34	3,534.44	1,417.06	587.45	265.74	-577.78	0.00	0.00	0.00
3,700.00	12.00	24.34	3,632.25	1,319.25	606.39	274.31	-596.41	0.00	0.00	0.00
3,800.00	12.00	24.34	3,730.07	1,221.43	625.33	282.87	-615.04	0.00	0.00	0.00
END OF TANGENT										
3,816.73	12.00	24.34	3,746.43	1,205.07	628.50	284.31	-618.16	0.00	0.00	0.00
3,900.00	10.33	24.34	3,828.12	1,123.38	643.20	290.96	-632.61	2.00	-2.00	0.00
4,000.00	8.33	24.34	3,926.79	1,024.71	657.97	297.64	-647.15	2.00	-2.00	0.00
SUSSEX										

Planning Report

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Well:	STAMPEDE FED 8-60 4-9-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #3		

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)
4,052.19	7.29	24.34	3,978.50	973.00	664.44	300.56	-653.50	2.00	-2.00	0.00
4,100.00	6.33	24.34	4,025.97	925.53	669.60	302.90	-658.59	2.00	-2.00	0.00
4,200.00	4.33	24.34	4,125.53	825.97	678.07	306.73	-666.92	2.00	-2.00	0.00
4,300.00	2.33	24.34	4,225.36	726.14	683.37	309.13	-672.13	2.00	-2.00	0.00
4,400.00	0.33	24.34	4,325.32	626.18	685.50	310.09	-674.22	2.00	-2.00	0.00
EOD TO VERTICAL										
4,416.73	0.00	0.00	4,342.05	609.45	685.54	310.11	-674.26	2.00	-2.00	0.00
4,500.00	0.00	0.00	4,425.32	526.18	685.54	310.11	-674.26	0.00	0.00	0.00
4,600.00	0.00	0.00	4,525.32	426.18	685.54	310.11	-674.26	0.00	0.00	0.00
4,700.00	0.00	0.00	4,625.32	326.18	685.54	310.11	-674.26	0.00	0.00	0.00
4,800.00	0.00	0.00	4,725.32	226.18	685.54	310.11	-674.26	0.00	0.00	0.00
4,900.00	0.00	0.00	4,825.32	126.18	685.54	310.11	-674.26	0.00	0.00	0.00
5,000.00	0.00	0.00	4,925.32	26.18	685.54	310.11	-674.26	0.00	0.00	0.00
5,100.00	0.00	0.00	5,025.32	-73.82	685.54	310.11	-674.26	0.00	0.00	0.00
SHANNON										
5,151.18	0.00	0.00	5,076.50	-125.00	685.54	310.11	-674.26	0.00	0.00	0.00
5,200.00	0.00	0.00	5,125.32	-173.82	685.54	310.11	-674.26	0.00	0.00	0.00
5,300.00	0.00	0.00	5,225.32	-273.82	685.54	310.11	-674.26	0.00	0.00	0.00
5,400.00	0.00	0.00	5,325.32	-373.82	685.54	310.11	-674.26	0.00	0.00	0.00
5,500.00	0.00	0.00	5,425.32	-473.82	685.54	310.11	-674.26	0.00	0.00	0.00
5,600.00	0.00	0.00	5,525.32	-573.82	685.54	310.11	-674.26	0.00	0.00	0.00
5,700.00	0.00	0.00	5,625.32	-673.82	685.54	310.11	-674.26	0.00	0.00	0.00
5,800.00	0.00	0.00	5,725.32	-773.82	685.54	310.11	-674.26	0.00	0.00	0.00
KOP (10°/100ft BUR)										
5,827.22	0.00	0.00	5,752.54	-801.04	685.54	310.11	-674.26	0.00	0.00	0.00
5,900.00	7.28	179.76	5,825.13	-873.63	680.92	310.13	-669.64	10.00	10.00	0.00
6,000.00	17.28	179.76	5,922.72	-971.22	659.68	310.22	-648.42	10.00	10.00	0.00
6,100.00	27.28	179.76	6,015.13	-1,063.63	621.82	310.38	-610.57	10.00	10.00	0.00
6,200.00	37.28	179.76	6,099.57	-1,148.07	568.49	310.60	-557.26	10.00	10.00	0.00
SHARON SPRINGS SHALE										
6,207.49	38.03	179.76	6,105.50	-1,154.00	563.92	310.62	-552.69	10.00	10.00	0.00
6,300.00	47.28	179.76	6,173.47	-1,221.97	501.30	310.88	-490.11	10.00	10.00	0.00
NIOBRARA FORMATION										
6,303.00	47.58	179.76	6,175.50	-1,224.00	499.09	310.89	-487.90	10.00	10.00	0.00
NIOBRARA A CHALK										
6,318.04	49.08	179.76	6,185.50	-1,234.00	487.85	310.94	-476.67	10.00	10.00	0.00
6,400.00	57.28	179.76	6,234.57	-1,283.07	422.30	311.21	-411.14	10.00	10.00	0.00
6,500.00	67.28	179.76	6,281.03	-1,329.53	333.89	311.58	-322.78	10.00	10.00	0.00
NIOBRARA B CHALK										
6,540.99	71.38	179.76	6,295.50	-1,344.00	295.55	311.74	-284.45	10.00	10.00	0.00
6,600.00	77.28	179.76	6,311.43	-1,359.93	238.76	311.98	-227.69	10.00	10.00	0.00
6,700.00	87.28	179.76	6,324.85	-1,373.35	139.79	312.39	-128.77	10.00	10.00	0.00
BPI: 300ft FNL & 2660ft FEL of Sec 4 - NIOBRARA B LP										
6,727.22	90.00	179.76	6,325.50	-1,374.00	112.59	312.51	-101.57	10.00	10.00	0.00
6,800.00	90.00	179.76	6,325.50	-1,374.00	39.81	312.81	-28.83	0.00	0.00	0.00
6,900.00	90.00	179.76	6,325.50	-1,374.00	-60.19	313.23	71.13	0.00	0.00	0.00
7,000.00	90.00	179.76	6,325.50	-1,374.00	-160.19	313.65	171.08	0.00	0.00	0.00
7,100.00	90.00	179.76	6,325.50	-1,374.00	-260.19	314.06	271.03	0.00	0.00	0.00
7,200.00	90.00	179.76	6,325.50	-1,374.00	-360.19	314.48	370.98	0.00	0.00	0.00
7,300.00	90.00	179.76	6,325.50	-1,374.00	-460.19	314.90	470.94	0.00	0.00	0.00
7,400.00	90.00	179.76	6,325.50	-1,374.00	-560.19	315.32	570.89	0.00	0.00	0.00
7,500.00	90.00	179.76	6,325.50	-1,374.00	-660.19	315.74	670.84	0.00	0.00	0.00
7,600.00	90.00	179.76	6,325.50	-1,374.00	-760.19	316.15	770.79	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.15.1	Local Co-ordinate Reference:	Well STAMPEDE FED 8-60 4-9-5
Company:	BISON OIL & GAS II, LLC	TVD Reference:	KB 25' @ 4951.50usft
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB 25' @ 4951.50usft
Site:	NE NW SEC. 4 T8N R60W 6th P.M.	North Reference:	True
Well:	STAMPEDE FED 8-60 4-9-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #3		

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)
7,700.00	90.00	179.76	6,325.51	-1,374.01	-860.19	316.57	870.75	0.00	0.00	0.00
7,800.00	90.00	179.76	6,325.51	-1,374.01	-960.19	316.99	970.70	0.00	0.00	0.00
7,900.00	90.00	179.76	6,325.51	-1,374.01	-1,060.18	317.41	1,070.65	0.00	0.00	0.00
8,000.00	90.00	179.76	6,325.51	-1,374.01	-1,160.18	317.83	1,170.60	0.00	0.00	0.00
8,100.00	90.00	179.76	6,325.51	-1,374.01	-1,260.18	318.24	1,270.55	0.00	0.00	0.00
8,200.00	90.00	179.76	6,325.51	-1,374.01	-1,360.18	318.66	1,370.51	0.00	0.00	0.00
8,300.00	90.00	179.76	6,325.51	-1,374.01	-1,460.18	319.08	1,470.46	0.00	0.00	0.00
8,400.00	90.00	179.76	6,325.51	-1,374.01	-1,560.18	319.50	1,570.41	0.00	0.00	0.00
8,500.00	90.00	179.76	6,325.51	-1,374.01	-1,660.18	319.92	1,670.36	0.00	0.00	0.00
8,600.00	90.00	179.76	6,325.51	-1,374.01	-1,760.18	320.33	1,770.32	0.00	0.00	0.00
8,700.00	90.00	179.76	6,325.51	-1,374.01	-1,860.18	320.75	1,870.27	0.00	0.00	0.00
8,800.00	90.00	179.76	6,325.51	-1,374.01	-1,960.18	321.17	1,970.22	0.00	0.00	0.00
8,900.00	90.00	179.76	6,325.51	-1,374.01	-2,060.18	321.59	2,070.17	0.00	0.00	0.00
9,000.00	90.00	179.76	6,325.51	-1,374.01	-2,160.18	322.01	2,170.13	0.00	0.00	0.00
9,100.00	90.00	179.76	6,325.51	-1,374.01	-2,260.17	322.42	2,270.08	0.00	0.00	0.00
9,200.00	90.00	179.76	6,325.51	-1,374.01	-2,360.17	322.84	2,370.03	0.00	0.00	0.00
9,300.00	90.00	179.76	6,325.51	-1,374.01	-2,460.17	323.26	2,469.98	0.00	0.00	0.00
9,400.00	90.00	179.76	6,325.51	-1,374.01	-2,560.17	323.68	2,569.94	0.00	0.00	0.00
9,500.00	90.00	179.76	6,325.51	-1,374.01	-2,660.17	324.10	2,669.89	0.00	0.00	0.00
9,600.00	90.00	179.76	6,325.51	-1,374.01	-2,760.17	324.51	2,769.84	0.00	0.00	0.00
9,700.00	90.00	179.76	6,325.52	-1,374.02	-2,860.17	324.93	2,869.79	0.00	0.00	0.00
9,800.00	90.00	179.76	6,325.52	-1,374.02	-2,960.17	325.35	2,969.75	0.00	0.00	0.00
9,900.00	90.00	179.76	6,325.52	-1,374.02	-3,060.17	325.77	3,069.70	0.00	0.00	0.00
10,000.00	90.00	179.76	6,325.52	-1,374.02	-3,160.17	326.19	3,169.65	0.00	0.00	0.00
10,100.00	90.00	179.76	6,325.52	-1,374.02	-3,260.17	326.60	3,269.60	0.00	0.00	0.00
10,200.00	90.00	179.76	6,325.52	-1,374.02	-3,360.16	327.02	3,369.56	0.00	0.00	0.00
10,300.00	90.00	179.76	6,325.52	-1,374.02	-3,460.16	327.44	3,469.51	0.00	0.00	0.00
10,400.00	90.00	179.76	6,325.52	-1,374.02	-3,560.16	327.86	3,569.46	0.00	0.00	0.00
10,500.00	90.00	179.76	6,325.52	-1,374.02	-3,660.16	328.28	3,669.41	0.00	0.00	0.00
10,600.00	90.00	179.76	6,325.52	-1,374.02	-3,760.16	328.69	3,769.37	0.00	0.00	0.00
10,700.00	90.00	179.76	6,325.52	-1,374.02	-3,860.16	329.11	3,869.32	0.00	0.00	0.00
10,800.00	90.00	179.76	6,325.52	-1,374.02	-3,960.16	329.53	3,969.27	0.00	0.00	0.00
10,900.00	90.00	179.76	6,325.52	-1,374.02	-4,060.16	329.95	4,069.22	0.00	0.00	0.00
11,000.00	90.00	179.76	6,325.52	-1,374.02	-4,160.16	330.37	4,169.18	0.00	0.00	0.00
11,100.00	90.00	179.76	6,325.52	-1,374.02	-4,260.16	330.78	4,269.13	0.00	0.00	0.00
11,200.00	90.00	179.76	6,325.52	-1,374.02	-4,360.16	331.20	4,369.08	0.00	0.00	0.00
11,300.00	90.00	179.76	6,325.52	-1,374.02	-4,460.16	331.62	4,469.03	0.00	0.00	0.00
11,400.00	90.00	179.76	6,325.52	-1,374.02	-4,560.15	332.04	4,568.99	0.00	0.00	0.00
11,500.00	90.00	179.76	6,325.52	-1,374.02	-4,660.15	332.46	4,668.94	0.00	0.00	0.00
11,600.00	90.00	179.76	6,325.53	-1,374.03	-4,760.15	332.87	4,768.89	0.00	0.00	0.00
11,700.00	90.00	179.76	6,325.53	-1,374.03	-4,860.15	333.29	4,868.84	0.00	0.00	0.00
11,800.00	90.00	179.76	6,325.53	-1,374.03	-4,960.15	333.71	4,968.79	0.00	0.00	0.00
11,900.00	90.00	179.76	6,325.53	-1,374.03	-5,060.15	334.13	5,068.75	0.00	0.00	0.00
12,000.00	90.00	179.76	6,325.53	-1,374.03	-5,160.15	334.55	5,168.70	0.00	0.00	0.00
12,100.00	90.00	179.76	6,325.53	-1,374.03	-5,260.15	334.96	5,268.65	0.00	0.00	0.00
12,200.00	90.00	179.76	6,325.53	-1,374.03	-5,360.15	335.38	5,368.60	0.00	0.00	0.00
12,300.00	90.00	179.76	6,325.53	-1,374.03	-5,460.15	335.80	5,468.56	0.00	0.00	0.00
12,400.00	90.00	179.76	6,325.53	-1,374.03	-5,560.15	336.22	5,568.51	0.00	0.00	0.00
12,500.00	90.00	179.76	6,325.53	-1,374.03	-5,660.14	336.64	5,668.46	0.00	0.00	0.00
12,600.00	90.00	179.76	6,325.53	-1,374.03	-5,760.14	337.05	5,768.41	0.00	0.00	0.00
12,700.00	90.00	179.76	6,325.53	-1,374.03	-5,860.14	337.47	5,868.37	0.00	0.00	0.00
12,800.00	90.00	179.76	6,325.53	-1,374.03	-5,960.14	337.89	5,968.32	0.00	0.00	0.00
12,900.00	90.00	179.76	6,325.53	-1,374.03	-6,060.14	338.31	6,068.27	0.00	0.00	0.00
13,000.00	90.00	179.76	6,325.53	-1,374.03	-6,160.14	338.73	6,168.22	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.15.1	Local Co-ordinate Reference:	Well STAMPEDE FED 8-60 4-9-5
Company:	BISON OIL & GAS II, LLC	TVD Reference:	KB 25' @ 4951.50usft
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB 25' @ 4951.50usft
Site:	NE NW SEC. 4 T8N R60W 6th P.M.	North Reference:	True
Well:	STAMPEDE FED 8-60 4-9-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #3		

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)
13,100.00	90.00	179.76	6,325.53	-1,374.03	-6,260.14	339.14	6,268.18	0.00	0.00	0.00
13,200.00	90.00	179.76	6,325.53	-1,374.03	-6,360.14	339.56	6,368.13	0.00	0.00	0.00
13,300.00	90.00	179.76	6,325.53	-1,374.03	-6,460.14	339.98	6,468.08	0.00	0.00	0.00
13,400.00	90.00	179.76	6,325.53	-1,374.03	-6,560.14	340.40	6,568.03	0.00	0.00	0.00
13,500.00	90.00	179.76	6,325.54	-1,374.04	-6,660.14	340.82	6,667.99	0.00	0.00	0.00
13,600.00	90.00	179.76	6,325.54	-1,374.04	-6,760.13	341.23	6,767.94	0.00	0.00	0.00
13,700.00	90.00	179.76	6,325.54	-1,374.04	-6,860.13	341.65	6,867.89	0.00	0.00	0.00
13,800.00	90.00	179.76	6,325.54	-1,374.04	-6,960.13	342.07	6,967.84	0.00	0.00	0.00
13,900.00	90.00	179.76	6,325.54	-1,374.04	-7,060.13	342.49	7,067.80	0.00	0.00	0.00
14,000.00	90.00	179.76	6,325.54	-1,374.04	-7,160.13	342.91	7,167.75	0.00	0.00	0.00
14,100.00	90.00	179.76	6,325.54	-1,374.04	-7,260.13	343.33	7,267.70	0.00	0.00	0.00
14,200.00	90.00	179.76	6,325.54	-1,374.04	-7,360.13	343.74	7,367.65	0.00	0.00	0.00
14,300.00	90.00	179.76	6,325.54	-1,374.04	-7,460.13	344.16	7,467.61	0.00	0.00	0.00
14,400.00	90.00	179.76	6,325.54	-1,374.04	-7,560.13	344.58	7,567.56	0.00	0.00	0.00
EXIT COC 073402										
14,453.27	90.00	179.76	6,325.54	-1,374.04	-7,613.40	344.80	7,620.80	0.00	0.00	0.00
14,500.00	90.00	179.76	6,325.54	-1,374.04	-7,660.13	345.00	7,667.51	0.00	0.00	0.00
14,600.00	90.00	179.76	6,325.54	-1,374.04	-7,760.13	345.42	7,767.46	0.00	0.00	0.00
14,700.00	90.00	179.76	6,325.54	-1,374.04	-7,860.13	345.83	7,867.42	0.00	0.00	0.00
14,800.00	90.00	179.76	6,325.54	-1,374.04	-7,960.12	346.25	7,967.37	0.00	0.00	0.00
14,900.00	90.00	179.76	6,325.54	-1,374.04	-8,060.12	346.67	8,067.32	0.00	0.00	0.00
15,000.00	90.00	179.76	6,325.54	-1,374.04	-8,160.12	347.09	8,167.27	0.00	0.00	0.00
15,100.00	90.00	179.76	6,325.54	-1,374.04	-8,260.12	347.51	8,267.22	0.00	0.00	0.00
15,200.00	90.00	179.76	6,325.54	-1,374.04	-8,360.12	347.92	8,367.18	0.00	0.00	0.00
15,300.00	90.00	179.76	6,325.54	-1,374.04	-8,460.12	348.34	8,467.13	0.00	0.00	0.00
15,400.00	90.00	179.76	6,325.55	-1,374.05	-8,560.12	348.76	8,567.08	0.00	0.00	0.00
15,500.00	90.00	179.76	6,325.55	-1,374.05	-8,660.12	349.18	8,667.03	0.00	0.00	0.00
15,600.00	90.00	179.76	6,325.55	-1,374.05	-8,760.12	349.60	8,766.99	0.00	0.00	0.00
15,700.00	90.00	179.76	6,325.55	-1,374.05	-8,860.12	350.01	8,866.94	0.00	0.00	0.00
15,800.00	90.00	179.76	6,325.55	-1,374.05	-8,960.12	350.43	8,966.89	0.00	0.00	0.00
15,900.00	90.00	179.76	6,325.55	-1,374.05	-9,060.11	350.85	9,066.84	0.00	0.00	0.00
16,000.00	90.00	179.76	6,325.55	-1,374.05	-9,160.11	351.27	9,166.80	0.00	0.00	0.00
16,100.00	90.00	179.76	6,325.55	-1,374.05	-9,260.11	351.69	9,266.75	0.00	0.00	0.00
16,200.00	90.00	179.76	6,325.55	-1,374.05	-9,360.11	352.10	9,366.70	0.00	0.00	0.00
16,300.00	90.00	179.76	6,325.55	-1,374.05	-9,460.11	352.52	9,466.65	0.00	0.00	0.00
16,400.00	90.00	179.76	6,325.55	-1,374.05	-9,560.11	352.94	9,566.61	0.00	0.00	0.00
16,500.00	90.00	179.76	6,325.55	-1,374.05	-9,660.11	353.36	9,666.56	0.00	0.00	0.00
16,600.00	90.00	179.76	6,325.55	-1,374.05	-9,760.11	353.78	9,766.51	0.00	0.00	0.00
16,700.00	90.00	179.76	6,325.55	-1,374.05	-9,860.11	354.19	9,866.46	0.00	0.00	0.00
16,800.00	90.00	179.76	6,325.55	-1,374.05	-9,960.11	354.61	9,966.42	0.00	0.00	0.00
EPI: 300ft FSL & 2454ft FEL of Sec 9										
16,809.74	90.00	179.76	6,325.50	-1,374.00	-9,969.84	354.52	9,976.14	0.00	0.00	0.00
EOT TO 181.41° AZ										
16,864.61	90.00	181.41	6,325.50	-1,374.00	-10,024.72	353.96	10,030.96	3.00	0.00	3.00
16,900.00	90.00	181.41	6,325.50	-1,374.00	-10,060.09	353.09	10,066.29	0.00	0.00	0.00
BHL: 200ft FSL & 2454ft FEL of Sec 9										
16,909.58	90.00	181.41	6,325.50	-1,374.00	-10,069.67	352.86	10,075.85	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.15.1	Local Co-ordinate Reference:	Well STAMPEDE FED 8-60 4-9-5
Company:	BISON OIL & GAS II, LLC	TVD Reference:	KB 25' @ 4951.50usft
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB 25' @ 4951.50usft
Site:	NE NW SEC. 4 T8N R60W 6th P.M.	North Reference:	True
Well:	STAMPEDE FED 8-60 4-9-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #3		

Formations					
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
522.18	521.50	PIERRE SHALE (BASE FOX HILLS		0.00	
3,517.26	3,453.50	PARKMAN		0.00	
4,052.19	3,978.50	SUSSEX		0.00	
5,151.18	5,076.50	SHANNON		0.00	
6,207.49	6,105.50	SHARON SPRINGS SHALE		0.00	
6,303.00	6,175.50	NIOBRARA FORMATION		0.00	
6,318.04	6,185.50	NIOBRARA A CHALK		0.00	
6,540.99	6,295.50	NIOBRARA B CHALK		0.00	
6,727.22	6,325.50	NIOBRARA B LP		0.00	

Plan Annotations				
MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
0.00	0.00	0.00	0.00	SHL: 409ft FNL & 2372ft FWL of Sec 4
200.00	200.00	0.00	0.00	START NUDGE (2°/100ft BUR)
800.00	795.62	57.04	25.80	EOB TO 12° INC
2,674.88	2,629.53	412.20	186.46	ENTER COC 073402
3,816.73	3,746.43	628.50	284.31	END OF TANGENT
4,416.73	4,342.05	685.54	310.11	EOD TO VERTICAL
5,827.22	5,752.54	685.54	310.11	KOP (10°/100ft BUR)
6,727.22	6,325.50	112.59	312.51	BPI: 300ft FNL & 2660ft FEL of Sec 4
14,453.27	6,325.54	-7,613.40	344.80	EXIT COC 073402
16,809.74	6,325.50	-9,969.84	354.52	EPI: 300ft FSL & 2454ft FEL of Sec 9
16,864.61	6,325.50	-10,024.72	353.96	EOT TO 181.41° AZ
16,909.58	6,325.50	-10,069.67	352.86	BHL: 200ft FSL & 2454ft FEL of Sec 9