

# **BISON IV OPERATING**

**WELD COUNTY, COLORADO (NAD 83)  
SW SE SEC. 25 T12N R63W 6th P.M.  
FOX CREEK 12-63 25-1-9**

## **ORIGINAL WELLBORE**

**12 December, 2024**

**Plan: PROPOSAL #1**





Project: WELD COUNTY, COLORADO (NAD 83)  
Site: SW SE SEC. 25 T12N R63W 6th P.M.  
Well: FOX CREEK 12-63 25-1-9  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #1

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: 930ft FSL & 1380ft FEL of Sec 25
2300.00	0.00	0.00	2300.00	0.00	0.00	0.00	0.00	START NUDGE (2°/100ft)
2789.31	9.79	228.19	2786.94	-27.79	-31.07	29.50	41.69	EOB TO 9.79° INC
7022.19	9.79	228.19	6958.22	-507.45	-567.33	538.60	761.16	KOP (10°/100ft)
7857.01	90.00	180.09	7462.00	-1076.60	-632.91	1110.54	1338.68	LP: 150ft FNL & 2003ft FEL of Sec 36
18191.96	90.00	180.09	7462.00	-11411.54	-649.26	11429.99	11673.63	BPZ: 150ft FSL & 2003ft FEL of Sec 1
18291.94	90.00	180.09	7462.00	-11511.52	-649.42	11529.82	11773.61	BHL: 50ft FSL & 2004ft FEL of Sec 1

PROPOSED LOCAL COORDINATES:

SHL: 930ft FSL & 1380ft FEL Sec 25  
LP: 150ft FNL & 2003ft FEL Sec 36  
BPZ: 150ft FSL & 2003ft FEL Sec 1  
BHL: 50ft FSL & 2004ft FEL Sec 1

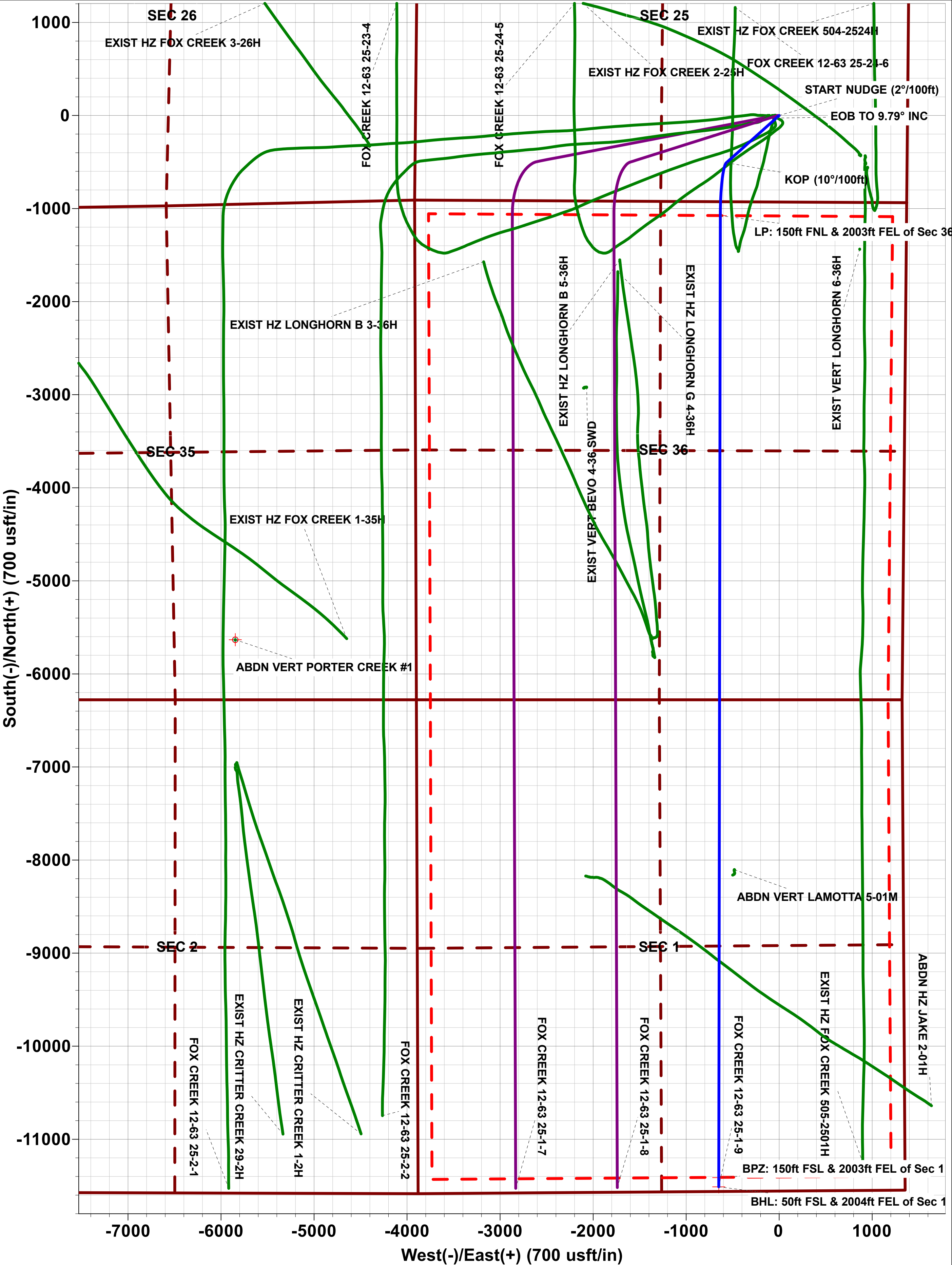
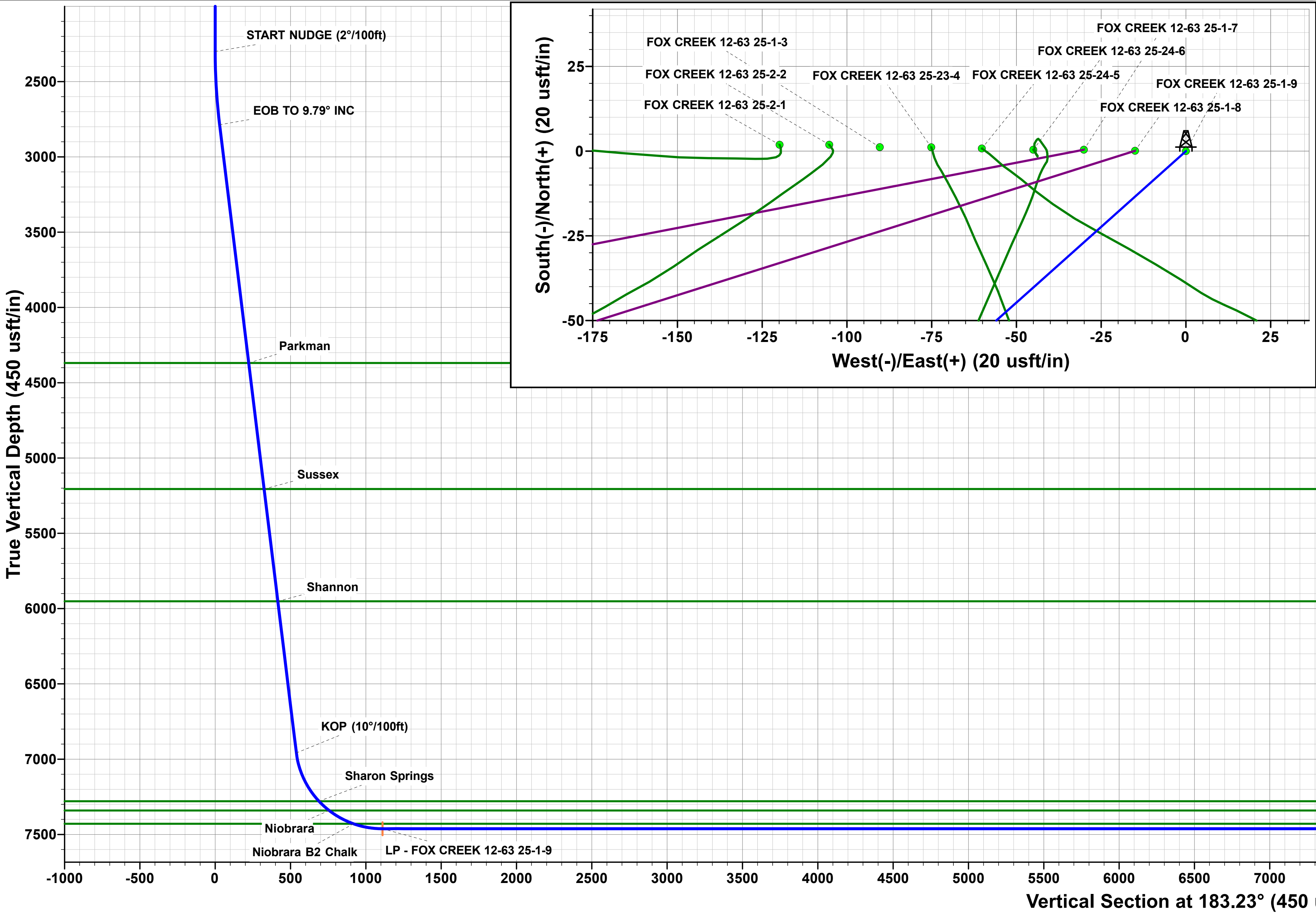
SETBACK

150ft FNL Sec 36 / 150ft FSL of Sec 1

150ft FE/WL of Sec 36/1

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
LP - FOX CREEK 12-63 25-1-9	7462.00	-1076.60	-632.91	40.972963	-104.378933
BPZ - FOX CREEK 12-63 25-1-9	7462.00	-11411.54	-649.26	40.944598	-104.378991
BHL - FOX CREEK 12-63 25-1-9	7462.00	-11511.52	-649.42	40.944324	-104.378992



<b>Database:</b>	Database 1	<b>Local Co-ordinate Reference:</b>	Well FOX CREEK 12-63 25-1-9
<b>Company:</b>	BISON IV OPERATING	<b>TVD Reference:</b>	KBE @ 5419.00usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KBE @ 5419.00usft
<b>Site:</b>	SW SE SEC. 25 T12N R63W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	FOX CREEK 12-63 25-1-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

<b>Project</b>	WELD COUNTY, COLORADO (NAD 83)		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

Site	SW SE SEC. 25 T12N R63W 6th P.M.				
Site Position:		Northing:	1,600,347.48 usft	Latitude:	40.975923
From:	Lat/Long	Easting:	3,310,080.87 usft	Longitude:	-104.377075
Position Uncertainty:	0.00 usft	Slot Radius:	1.10 ft	Grid Convergence:	0.73 °

Well	FOX CREEK 12-63 25-1-9					
Well Position	+N/-S	-1.90 usft	Northing:	1,600,347.10 usfi	Latitude:	40.975918
	+E/-W	119.84 usft	Easting:	3,310,200.73 usfi	Longitude:	-104.376641
Position Uncertainty	0.00 usft		Wellhead Elevation:	usfi	Ground Level:	5,399.00 usft

<b>Wellbore</b>	ORIGINAL WELLBORE				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2020	2024-12-12	7.33	67.01	51,918.26122561

<b>Design</b>	PROPOSAL #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	183.23

<b>Plan Sections</b>											
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	-5,419.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,300.00	0.00	0.00	2,300.00	-3,119.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,789.31	9.79	228.19	2,786.94	-2,632.06	-27.79	-31.07	2.00	2.00	0.00	228.19	
7,022.19	9.79	228.19	6,958.22	1,539.22	-507.45	-567.33	0.00	0.00	0.00	0.00	
7,857.01	90.00	180.09	7,462.00	2,043.00	-1,076.60	-632.91	10.00	9.61	-5.76	-48.52	LP - FOX CREEK 1
7,857.01	90.00	180.09	7,462.00	2,043.00	-1,076.60	-632.91	2.00	0.00	0.00	0.00	
18,191.91	90.00	180.09	7,462.00	2,043.00	-11,411.49	-649.26	0.00	0.00	0.00	0.00	
18,191.96	90.00	180.09	7,462.00	2,043.00	-11,411.54	-649.26	2.00	0.00	-2.00	-90.00	BPZ - FOX CREEK
18,291.94	90.00	180.09	7,462.00	2,043.00	-11,511.52	-649.42	0.00	0.00	0.00	0.00	BHL - FOX CREEK

<b>Database:</b>	Database 1	<b>Local Co-ordinate Reference:</b>	Well FOX CREEK 12-63 25-1-9
<b>Company:</b>	BISON IV OPERATING	<b>TVD Reference:</b>	KBE @ 5419.00usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KBE @ 5419.00usft
<b>Site:</b>	SW SE SEC. 25 T12N R63W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	FOX CREEK 12-63 25-1-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

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)
<b>SHL: 930ft FSL &amp; 1380ft FEL of Sec 25</b>										
0.00	0.00	0.00	0.00	5,419.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	5,319.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	5,219.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	5,119.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	5,019.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	4,919.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	4,819.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	4,719.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	4,619.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	4,519.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	4,419.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	4,319.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	4,219.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	4,119.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Fox Hills Base</b>										
1,369.00	0.00	0.00	1,369.00	4,050.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	4,019.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Pierre Shale</b>										
1,454.00	0.00	0.00	1,454.00	3,965.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	3,919.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	3,819.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	3,719.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	3,619.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	3,519.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	3,419.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	3,319.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	3,219.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>START NUDGE (2°/100ft)</b>										
2,300.00	0.00	0.00	2,300.00	3,119.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	2.00	228.19	2,399.98	3,019.02	-1.16	-1.30	1.23	2.00	2.00	0.00
2,500.00	4.00	228.19	2,499.84	2,919.16	-4.65	-5.20	4.94	2.00	2.00	0.00
2,600.00	6.00	228.19	2,599.45	2,819.55	-10.46	-11.70	11.10	2.00	2.00	0.00
2,700.00	8.00	228.19	2,698.70	2,720.30	-18.59	-20.78	19.73	2.00	2.00	0.00
<b>EOB TO 9.79° INC</b>										
2,789.31	9.79	228.19	2,786.94	2,632.06	-27.79	-31.07	29.50	2.00	2.00	0.00
2,800.00	9.79	228.19	2,797.47	2,621.53	-29.00	-32.42	30.78	0.00	0.00	0.00
2,900.00	9.79	228.19	2,896.01	2,522.99	-40.33	-45.09	42.81	0.00	0.00	0.00
3,000.00	9.79	228.19	2,994.56	2,424.44	-51.67	-57.76	54.84	0.00	0.00	0.00
3,100.00	9.79	228.19	3,093.10	2,325.90	-63.00	-70.43	66.86	0.00	0.00	0.00
3,200.00	9.79	228.19	3,191.65	2,227.35	-74.33	-83.10	78.89	0.00	0.00	0.00
3,300.00	9.79	228.19	3,290.19	2,128.81	-85.66	-95.77	90.92	0.00	0.00	0.00
3,400.00	9.79	228.19	3,388.74	2,030.26	-96.99	-108.44	102.95	0.00	0.00	0.00
3,500.00	9.79	228.19	3,487.28	1,931.72	-108.32	-121.11	114.97	0.00	0.00	0.00
3,600.00	9.79	228.19	3,585.83	1,833.17	-119.66	-133.78	127.00	0.00	0.00	0.00
3,700.00	9.79	228.19	3,684.37	1,734.63	-130.99	-146.45	139.03	0.00	0.00	0.00
3,800.00	9.79	228.19	3,782.92	1,636.08	-142.32	-159.11	151.06	0.00	0.00	0.00
3,900.00	9.79	228.19	3,881.46	1,537.54	-153.65	-171.78	163.08	0.00	0.00	0.00
4,000.00	9.79	228.19	3,980.01	1,438.99	-164.98	-184.45	175.11	0.00	0.00	0.00
4,100.00	9.79	228.19	4,078.55	1,340.45	-176.31	-197.12	187.14	0.00	0.00	0.00
4,200.00	9.79	228.19	4,177.10	1,241.90	-187.65	-209.79	199.16	0.00	0.00	0.00
4,300.00	9.79	228.19	4,275.64	1,143.36	-198.98	-222.46	211.19	0.00	0.00	0.00
<b>Parkman</b>										

<b>Database:</b>	Database 1	<b>Local Co-ordinate Reference:</b>	Well FOX CREEK 12-63 25-1-9
<b>Company:</b>	BISON IV OPERATING	<b>TVD Reference:</b>	KBE @ 5419.00usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KBE @ 5419.00usft
<b>Site:</b>	SW SE SEC. 25 T12N R63W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	FOX CREEK 12-63 25-1-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

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)
4,394.74	9.79	228.19	4,369.00	1,050.00	-209.71	-234.46	222.59	0.00	0.00	0.00
4,400.00	9.79	228.19	4,374.19	1,044.81	-210.31	-235.13	223.22	0.00	0.00	0.00
4,500.00	9.79	228.19	4,472.73	946.27	-221.64	-247.80	235.25	0.00	0.00	0.00
4,600.00	9.79	228.19	4,571.28	847.72	-232.97	-260.47	247.27	0.00	0.00	0.00
4,700.00	9.79	228.19	4,669.82	749.18	-244.30	-273.14	259.30	0.00	0.00	0.00
4,800.00	9.79	228.19	4,768.37	650.63	-255.64	-285.80	271.33	0.00	0.00	0.00
4,900.00	9.79	228.19	4,866.91	552.09	-266.97	-298.47	283.36	0.00	0.00	0.00
5,000.00	9.79	228.19	4,965.46	453.54	-278.30	-311.14	295.38	0.00	0.00	0.00
5,100.00	9.79	228.19	5,064.00	355.00	-289.63	-323.81	307.41	0.00	0.00	0.00
5,200.00	9.79	228.19	5,162.55	256.45	-300.96	-336.48	319.44	0.00	0.00	0.00
Sussex										
5,244.10	9.79	228.19	5,206.00	213.00	-305.96	-342.07	324.74	0.00	0.00	0.00
5,300.00	9.79	228.19	5,261.09	157.91	-312.29	-349.15	331.46	0.00	0.00	0.00
5,400.00	9.79	228.19	5,359.64	59.36	-323.63	-361.82	343.49	0.00	0.00	0.00
5,500.00	9.79	228.19	5,458.18	-39.18	-334.96	-374.49	355.52	0.00	0.00	0.00
5,600.00	9.79	228.19	5,556.72	-137.72	-346.29	-387.16	367.55	0.00	0.00	0.00
5,700.00	9.79	228.19	5,655.27	-236.27	-357.62	-399.83	379.57	0.00	0.00	0.00
5,800.00	9.79	228.19	5,753.81	-334.81	-368.95	-412.49	391.60	0.00	0.00	0.00
5,900.00	9.79	228.19	5,852.36	-433.36	-380.28	-425.16	403.63	0.00	0.00	0.00
6,000.00	9.79	228.19	5,950.90	-531.90	-391.62	-437.83	415.66	0.00	0.00	0.00
Shannon										
6,000.10	9.79	228.19	5,951.00	-532.00	-391.63	-437.84	415.67	0.00	0.00	0.00
6,100.00	9.79	228.19	6,049.45	-630.45	-402.95	-450.50	427.68	0.00	0.00	0.00
6,200.00	9.79	228.19	6,147.99	-728.99	-414.28	-463.17	439.71	0.00	0.00	0.00
6,300.00	9.79	228.19	6,246.54	-827.54	-425.61	-475.84	451.74	0.00	0.00	0.00
6,400.00	9.79	228.19	6,345.08	-926.08	-436.94	-488.51	463.76	0.00	0.00	0.00
6,500.00	9.79	228.19	6,443.63	-1,024.63	-448.27	-501.18	475.79	0.00	0.00	0.00
6,600.00	9.79	228.19	6,542.17	-1,123.17	-459.61	-513.85	487.82	0.00	0.00	0.00
6,700.00	9.79	228.19	6,640.72	-1,221.72	-470.94	-526.52	499.85	0.00	0.00	0.00
6,800.00	9.79	228.19	6,739.26	-1,320.26	-482.27	-539.18	511.87	0.00	0.00	0.00
6,900.00	9.79	228.19	6,837.81	-1,418.81	-493.60	-551.85	523.90	0.00	0.00	0.00
7,000.00	9.79	228.19	6,936.35	-1,517.35	-504.93	-564.52	535.93	0.00	0.00	0.00
KOP (10°/100ft)										
7,022.19	9.79	228.19	6,958.22	-1,539.22	-507.45	-567.33	538.60	0.00	0.00	0.00
7,100.00	16.03	206.64	7,034.07	-1,615.07	-521.48	-577.09	553.16	10.00	8.02	-27.70
7,200.00	25.31	195.84	7,127.56	-1,708.56	-554.47	-589.15	586.77	10.00	9.29	-10.80
7,300.00	34.98	190.66	7,213.95	-1,794.95	-603.33	-600.32	636.18	10.00	9.66	-5.18
Sharon Springs										
7,383.87	43.19	187.95	7,279.00	-1,860.00	-655.47	-608.75	688.72	10.00	9.79	-3.24
7,400.00	44.78	187.52	7,290.61	-1,871.61	-666.57	-610.26	699.88	10.00	9.83	-2.64
Niobrara										
7,476.14	52.28	185.79	7,341.00	-1,922.00	-723.20	-616.82	756.79	10.00	9.85	-2.28
7,500.00	54.63	185.32	7,355.20	-1,936.20	-742.27	-618.67	775.94	10.00	9.87	-1.97
7,600.00	64.52	183.60	7,405.78	-1,986.78	-828.14	-625.30	862.04	10.00	9.89	-1.72
Niobrara B2 Chalk										
7,660.79	70.54	182.69	7,429.00	-2,010.00	-884.20	-628.37	918.19	10.00	9.90	-1.49
7,700.00	74.43	182.14	7,440.80	-2,021.80	-921.55	-629.94	955.57	10.00	9.91	-1.40
7,800.00	84.35	180.82	7,459.19	-2,040.19	-1,019.69	-632.46	1,053.69	10.00	9.92	-1.32
LP: 150ft FNL & 2003ft FEL of Sec 36										
7,857.01	90.00	180.09	7,462.00	-2,043.00	-1,076.60	-632.91	1,110.54	10.00	9.92	-1.28
7,900.00	90.00	180.09	7,462.00	-2,043.00	-1,119.59	-632.98	1,153.47	0.00	0.00	0.00
8,000.00	90.00	180.09	7,462.00	-2,043.00	-1,219.59	-633.14	1,253.32	0.00	0.00	0.00
8,100.00	90.00	180.09	7,462.00	-2,043.00	-1,319.59	-633.29	1,353.17	0.00	0.00	0.00



<b>Database:</b>	Database 1	<b>Local Co-ordinate Reference:</b>	Well FOX CREEK 12-63 25-1-9
<b>Company:</b>	BISON IV OPERATING	<b>TVD Reference:</b>	KBE @ 5419.00usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KBE @ 5419.00usft
<b>Site:</b>	SW SE SEC. 25 T12N R63W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	FOX CREEK 12-63 25-1-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

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)
8,200.00	90.00	180.09	7,462.00	-2,043.00	-1,419.59	-633.45	1,453.02	0.00	0.00	0.00
8,300.00	90.00	180.09	7,462.00	-2,043.00	-1,519.59	-633.61	1,552.87	0.00	0.00	0.00
8,400.00	90.00	180.09	7,462.00	-2,043.00	-1,619.59	-633.77	1,652.72	0.00	0.00	0.00
8,500.00	90.00	180.09	7,462.00	-2,043.00	-1,719.59	-633.93	1,752.57	0.00	0.00	0.00
8,600.00	90.00	180.09	7,462.00	-2,043.00	-1,819.59	-634.08	1,852.42	0.00	0.00	0.00
8,700.00	90.00	180.09	7,462.00	-2,043.00	-1,919.59	-634.24	1,952.27	0.00	0.00	0.00
8,800.00	90.00	180.09	7,462.00	-2,043.00	-2,019.59	-634.40	2,052.12	0.00	0.00	0.00
8,900.00	90.00	180.09	7,462.00	-2,043.00	-2,119.59	-634.56	2,151.97	0.00	0.00	0.00
9,000.00	90.00	180.09	7,462.00	-2,043.00	-2,219.59	-634.72	2,251.82	0.00	0.00	0.00
9,100.00	90.00	180.09	7,462.00	-2,043.00	-2,319.59	-634.88	2,351.67	0.00	0.00	0.00
9,200.00	90.00	180.09	7,462.00	-2,043.00	-2,419.59	-635.03	2,451.52	0.00	0.00	0.00
9,300.00	90.00	180.09	7,462.00	-2,043.00	-2,519.59	-635.19	2,551.37	0.00	0.00	0.00
9,400.00	90.00	180.09	7,462.00	-2,043.00	-2,619.59	-635.35	2,651.22	0.00	0.00	0.00
9,500.00	90.00	180.09	7,462.00	-2,043.00	-2,719.59	-635.51	2,751.07	0.00	0.00	0.00
9,600.00	90.00	180.09	7,462.00	-2,043.00	-2,819.59	-635.67	2,850.92	0.00	0.00	0.00
9,700.00	90.00	180.09	7,462.00	-2,043.00	-2,919.59	-635.83	2,950.77	0.00	0.00	0.00
9,800.00	90.00	180.09	7,462.00	-2,043.00	-3,019.59	-635.98	3,050.62	0.00	0.00	0.00
9,900.00	90.00	180.09	7,462.00	-2,043.00	-3,119.59	-636.14	3,150.47	0.00	0.00	0.00
10,000.00	90.00	180.09	7,462.00	-2,043.00	-3,219.59	-636.30	3,250.32	0.00	0.00	0.00
10,100.00	90.00	180.09	7,462.00	-2,043.00	-3,319.59	-636.46	3,350.17	0.00	0.00	0.00
10,200.00	90.00	180.09	7,462.00	-2,043.00	-3,419.59	-636.62	3,450.02	0.00	0.00	0.00
10,300.00	90.00	180.09	7,462.00	-2,043.00	-3,519.59	-636.77	3,549.87	0.00	0.00	0.00
10,400.00	90.00	180.09	7,462.00	-2,043.00	-3,619.59	-636.93	3,649.72	0.00	0.00	0.00
10,500.00	90.00	180.09	7,462.00	-2,043.00	-3,719.59	-637.09	3,749.57	0.00	0.00	0.00
10,600.00	90.00	180.09	7,462.00	-2,043.00	-3,819.59	-637.25	3,849.42	0.00	0.00	0.00
10,700.00	90.00	180.09	7,462.00	-2,043.00	-3,919.59	-637.41	3,949.27	0.00	0.00	0.00
10,800.00	90.00	180.09	7,462.00	-2,043.00	-4,019.59	-637.57	4,049.12	0.00	0.00	0.00
10,900.00	90.00	180.09	7,462.00	-2,043.00	-4,119.59	-637.72	4,148.97	0.00	0.00	0.00
11,000.00	90.00	180.09	7,462.00	-2,043.00	-4,219.59	-637.88	4,248.82	0.00	0.00	0.00
11,100.00	90.00	180.09	7,462.00	-2,043.00	-4,319.59	-638.04	4,348.67	0.00	0.00	0.00
11,200.00	90.00	180.09	7,462.00	-2,043.00	-4,419.59	-638.20	4,448.52	0.00	0.00	0.00
11,300.00	90.00	180.09	7,462.00	-2,043.00	-4,519.59	-638.36	4,548.37	0.00	0.00	0.00
11,400.00	90.00	180.09	7,462.00	-2,043.00	-4,619.59	-638.52	4,648.22	0.00	0.00	0.00
11,500.00	90.00	180.09	7,462.00	-2,043.00	-4,719.59	-638.67	4,748.07	0.00	0.00	0.00
11,600.00	90.00	180.09	7,462.00	-2,043.00	-4,819.59	-638.83	4,847.92	0.00	0.00	0.00
11,700.00	90.00	180.09	7,462.00	-2,043.00	-4,919.59	-638.99	4,947.77	0.00	0.00	0.00
11,800.00	90.00	180.09	7,462.00	-2,043.00	-5,019.59	-639.15	5,047.62	0.00	0.00	0.00
11,900.00	90.00	180.09	7,462.00	-2,043.00	-5,119.59	-639.31	5,147.47	0.00	0.00	0.00
12,000.00	90.00	180.09	7,462.00	-2,043.00	-5,219.59	-639.46	5,247.32	0.00	0.00	0.00
12,100.00	90.00	180.09	7,462.00	-2,043.00	-5,319.59	-639.62	5,347.17	0.00	0.00	0.00
12,200.00	90.00	180.09	7,462.00	-2,043.00	-5,419.59	-639.78	5,447.02	0.00	0.00	0.00
12,300.00	90.00	180.09	7,462.00	-2,043.00	-5,519.59	-639.94	5,546.87	0.00	0.00	0.00
12,400.00	90.00	180.09	7,462.00	-2,043.00	-5,619.59	-640.10	5,646.72	0.00	0.00	0.00
12,500.00	90.00	180.09	7,462.00	-2,043.00	-5,719.59	-640.26	5,746.57	0.00	0.00	0.00
12,600.00	90.00	180.09	7,462.00	-2,043.00	-5,819.59	-640.41	5,846.42	0.00	0.00	0.00
12,700.00	90.00	180.09	7,462.00	-2,043.00	-5,919.59	-640.57	5,946.27	0.00	0.00	0.00
12,800.00	90.00	180.09	7,462.00	-2,043.00	-6,019.59	-640.73	6,046.12	0.00	0.00	0.00
12,900.00	90.00	180.09	7,462.00	-2,043.00	-6,119.59	-640.89	6,145.97	0.00	0.00	0.00
13,000.00	90.00	180.09	7,462.00	-2,043.00	-6,219.59	-641.05	6,245.82	0.00	0.00	0.00
13,100.00	90.00	180.09	7,462.00	-2,043.00	-6,319.59	-641.21	6,345.67	0.00	0.00	0.00
13,200.00	90.00	180.09	7,462.00	-2,043.00	-6,419.58	-641.36	6,445.52	0.00	0.00	0.00
13,300.00	90.00	180.09	7,462.00	-2,043.00	-6,519.58	-641.52	6,545.37	0.00	0.00	0.00
13,400.00	90.00	180.09	7,462.00	-2,043.00	-6,619.58	-641.68	6,645.22	0.00	0.00	0.00
13,500.00	90.00	180.09	7,462.00	-2,043.00	-6,719.58	-641.84	6,745.07	0.00	0.00	0.00

<b>Database:</b>	Database 1	<b>Local Co-ordinate Reference:</b>	Well FOX CREEK 12-63 25-1-9
<b>Company:</b>	BISON IV OPERATING	<b>TVD Reference:</b>	KBE @ 5419.00usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KBE @ 5419.00usft
<b>Site:</b>	SW SE SEC. 25 T12N R63W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	FOX CREEK 12-63 25-1-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

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)
13,600.00	90.00	180.09	7,462.00	-2,043.00	-6,819.58	-642.00	6,844.92	0.00	0.00	0.00
13,700.00	90.00	180.09	7,462.00	-2,043.00	-6,919.58	-642.15	6,944.77	0.00	0.00	0.00
13,800.00	90.00	180.09	7,462.00	-2,043.00	-7,019.58	-642.31	7,044.62	0.00	0.00	0.00
13,900.00	90.00	180.09	7,462.00	-2,043.00	-7,119.58	-642.47	7,144.47	0.00	0.00	0.00
14,000.00	90.00	180.09	7,462.00	-2,043.00	-7,219.58	-642.63	7,244.32	0.00	0.00	0.00
14,100.00	90.00	180.09	7,462.00	-2,043.00	-7,319.58	-642.79	7,344.17	0.00	0.00	0.00
14,200.00	90.00	180.09	7,462.00	-2,043.00	-7,419.58	-642.95	7,444.02	0.00	0.00	0.00
14,300.00	90.00	180.09	7,462.00	-2,043.00	-7,519.58	-643.10	7,543.87	0.00	0.00	0.00
14,400.00	90.00	180.09	7,462.00	-2,043.00	-7,619.58	-643.26	7,643.72	0.00	0.00	0.00
14,500.00	90.00	180.09	7,462.00	-2,043.00	-7,719.58	-643.42	7,743.57	0.00	0.00	0.00
14,600.00	90.00	180.09	7,462.00	-2,043.00	-7,819.58	-643.58	7,843.42	0.00	0.00	0.00
14,700.00	90.00	180.09	7,462.00	-2,043.00	-7,919.58	-643.74	7,943.27	0.00	0.00	0.00
14,800.00	90.00	180.09	7,462.00	-2,043.00	-8,019.58	-643.90	8,043.12	0.00	0.00	0.00
14,900.00	90.00	180.09	7,462.00	-2,043.00	-8,119.58	-644.05	8,142.97	0.00	0.00	0.00
15,000.00	90.00	180.09	7,462.00	-2,043.00	-8,219.58	-644.21	8,242.82	0.00	0.00	0.00
15,100.00	90.00	180.09	7,462.00	-2,043.00	-8,319.58	-644.37	8,342.67	0.00	0.00	0.00
15,200.00	90.00	180.09	7,462.00	-2,043.00	-8,419.58	-644.53	8,442.52	0.00	0.00	0.00
15,300.00	90.00	180.09	7,462.00	-2,043.00	-8,519.58	-644.69	8,542.37	0.00	0.00	0.00
15,400.00	90.00	180.09	7,462.00	-2,043.00	-8,619.58	-644.85	8,642.22	0.00	0.00	0.00
15,500.00	90.00	180.09	7,462.00	-2,043.00	-8,719.58	-645.00	8,742.07	0.00	0.00	0.00
15,600.00	90.00	180.09	7,462.00	-2,043.00	-8,819.58	-645.16	8,841.92	0.00	0.00	0.00
15,700.00	90.00	180.09	7,462.00	-2,043.00	-8,919.58	-645.32	8,941.77	0.00	0.00	0.00
15,800.00	90.00	180.09	7,462.00	-2,043.00	-9,019.58	-645.48	9,041.62	0.00	0.00	0.00
15,900.00	90.00	180.09	7,462.00	-2,043.00	-9,119.58	-645.64	9,141.47	0.00	0.00	0.00
16,000.00	90.00	180.09	7,462.00	-2,043.00	-9,219.58	-645.79	9,241.32	0.00	0.00	0.00
16,100.00	90.00	180.09	7,462.00	-2,043.00	-9,319.58	-645.95	9,341.17	0.00	0.00	0.00
16,200.00	90.00	180.09	7,462.00	-2,043.00	-9,419.58	-646.11	9,441.02	0.00	0.00	0.00
16,300.00	90.00	180.09	7,462.00	-2,043.00	-9,519.58	-646.27	9,540.87	0.00	0.00	0.00
16,400.00	90.00	180.09	7,462.00	-2,043.00	-9,619.58	-646.43	9,640.72	0.00	0.00	0.00
16,500.00	90.00	180.09	7,462.00	-2,043.00	-9,719.58	-646.59	9,740.57	0.00	0.00	0.00
16,600.00	90.00	180.09	7,462.00	-2,043.00	-9,819.58	-646.74	9,840.42	0.00	0.00	0.00
16,700.00	90.00	180.09	7,462.00	-2,043.00	-9,919.58	-646.90	9,940.27	0.00	0.00	0.00
16,800.00	90.00	180.09	7,462.00	-2,043.00	-10,019.58	-647.06	10,040.12	0.00	0.00	0.00
16,900.00	90.00	180.09	7,462.00	-2,043.00	-10,119.58	-647.22	10,139.97	0.00	0.00	0.00
17,000.00	90.00	180.09	7,462.00	-2,043.00	-10,219.58	-647.38	10,239.82	0.00	0.00	0.00
17,100.00	90.00	180.09	7,462.00	-2,043.00	-10,319.58	-647.54	10,339.67	0.00	0.00	0.00
17,200.00	90.00	180.09	7,462.00	-2,043.00	-10,419.58	-647.69	10,439.52	0.00	0.00	0.00
17,300.00	90.00	180.09	7,462.00	-2,043.00	-10,519.58	-647.85	10,539.37	0.00	0.00	0.00
17,400.00	90.00	180.09	7,462.00	-2,043.00	-10,619.58	-648.01	10,639.22	0.00	0.00	0.00
17,500.00	90.00	180.09	7,462.00	-2,043.00	-10,719.58	-648.17	10,739.07	0.00	0.00	0.00
17,600.00	90.00	180.09	7,462.00	-2,043.00	-10,819.58	-648.33	10,838.92	0.00	0.00	0.00
17,700.00	90.00	180.09	7,462.00	-2,043.00	-10,919.58	-648.48	10,938.77	0.00	0.00	0.00
17,800.00	90.00	180.09	7,462.00	-2,043.00	-11,019.58	-648.64	11,038.62	0.00	0.00	0.00
17,900.00	90.00	180.09	7,462.00	-2,043.00	-11,119.58	-648.80	11,138.47	0.00	0.00	0.00
18,000.00	90.00	180.09	7,462.00	-2,043.00	-11,219.58	-648.96	11,238.32	0.00	0.00	0.00
18,100.00	90.00	180.09	7,462.00	-2,043.00	-11,319.58	-649.12	11,338.17	0.00	0.00	0.00
18,191.91	90.00	180.09	7,462.00	-2,043.00	-11,411.49	-649.26	11,429.95	0.00	0.00	0.00
<b>BPZ: 150ft FSL &amp; 2003ft FEL of Sec 1</b>										
<b>18,191.96</b>	<b>90.00</b>	<b>180.09</b>	<b>7,462.00</b>	<b>-2,043.00</b>	<b>-11,411.54</b>	<b>-649.26</b>	<b>11,429.99</b>	<b>2.00</b>	<b>0.00</b>	<b>-2.00</b>
18,200.00	90.00	180.09	7,462.00	-2,043.00	-11,419.58	-649.28	11,438.02	0.00	0.00	0.00
<b>BHL: 50ft FSL &amp; 2004ft FEL of Sec 1</b>										
<b>18,291.94</b>	<b>90.00</b>	<b>180.09</b>	<b>7,462.00</b>	<b>-2,043.00</b>	<b>-11,511.52</b>	<b>-649.42</b>	<b>11,529.82</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

<b>Database:</b>	Database 1	<b>Local Co-ordinate Reference:</b>	Well FOX CREEK 12-63 25-1-9
<b>Company:</b>	BISON IV OPERATING	<b>TVD Reference:</b>	KBE @ 5419.00usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KBE @ 5419.00usft
<b>Site:</b>	SW SE SEC. 25 T12N R63W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	FOX CREEK 12-63 25-1-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

Formations					
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,369.00	1,369.00	Fox Hills Base		0.00	
1,454.00	1,454.00	Pierre Shale		0.00	
4,394.74	4,369.00	Parkman		0.00	
5,244.10	5,206.00	Sussex		0.00	
6,000.10	5,951.00	Shannon		0.00	
7,383.87	7,279.00	Sharon Springs		0.00	
7,476.14	7,341.00	Niobrara		0.00	
7,660.79	7,429.00	Niobrara B2 Chalk		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: 930ft FSL & 1380ft FEL of Sec 25
2,300.00	2,300.00	0.00	0.00	START NUDGE (2°/100ft)
2,789.31	2,786.94	-27.79	-31.07	EOB TO 9.79° INC
7,022.19	6,958.22	-507.45	-567.33	KOP (10°/100ft)
7,857.01	7,462.00	-1,076.60	-632.91	LP: 150ft FNL & 2003ft FEL of Sec 36
18,191.96	7,462.00	-11,411.54	-649.26	BPZ: 150ft FSL & 2003ft FEL of Sec 1
18,291.94	7,462.00	-11,511.52	-649.42	BHL: 50ft FSL & 2004ft FEL of Sec 1