

# **BISON OIL & GAS II, LLC**

**WELD COUNTY, COLORADO (NAD 83)**

**SW NE SEC. 13 T9N R60W 6th P.M.**

**ROHN FED 9-60 13-24-9**

**ORIGINAL WELLBORE**

**10 January, 2018**

**Plan: PROPOSAL #2**





Project: WELD COUNTY, COLORADO (NAD 83)  
Site: SW NE SEC. 13 T9N R60W 6th P.M.  
Well: ROHN FED 9-60 13-24-9  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #2

ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Dep	Annotation	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL: 1998ft FNL & 1485ft FEL of Sec 13	
900.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	START NUDGE (2°/100ft BUR)	
1880.77	1901.02	20.02	238.25	-91.10	-147.21	109.46	173.12	EOB TO 20.02° INC	
4749.76	4954.53	20.02	238.25	-641.25	-1036.12	770.46	1218.50	END OF TANGENT	
5730.54	5955.55	0.00	238.25	-732.35	-1183.33	879.92	1391.62	EOD TO VERTICAL	
5830.54	6055.55	0.00	0.00	-732.35	-1183.33	879.92	1391.62	KOP (10°/100ft BUR)	
6403.50	6955.55	90.00	179.37	-1305.27	-1177.03	1447.16	1964.57	BPI: 2078ft FSL & 2660ft FEL of Sec 13	
6403.50	13735.19	90.00	179.37	-8084.50	-1102.24	8159.18	8744.21	EPI: 600ft FSL & 2607ft FEL of Sec 24	
6403.50	14035.06	90.00	179.37	-8384.34	-1098.93	8456.05	9044.08	BHL: 300ft FSL & 2605ft FEL of Sec 24	

PROPOSED LOCAL COORDINATES:

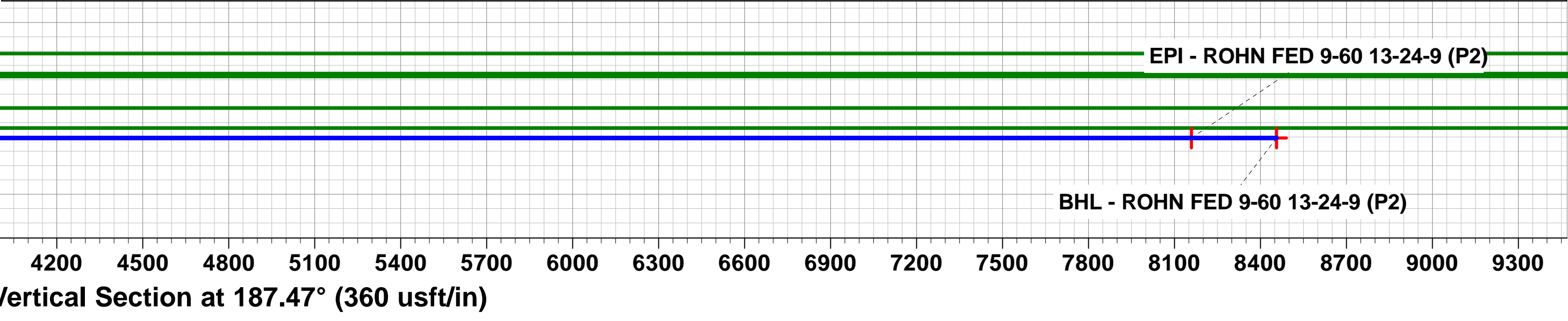
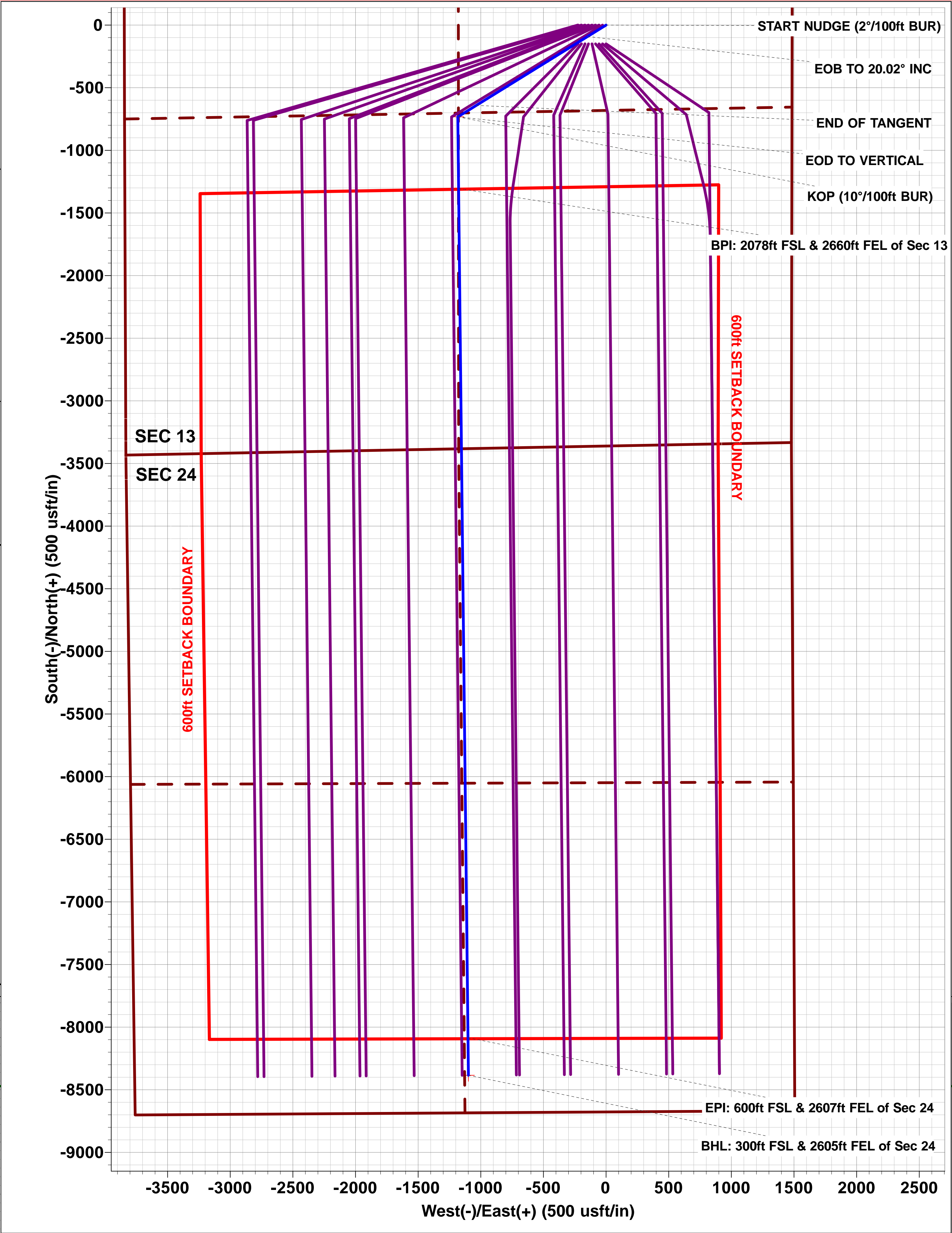
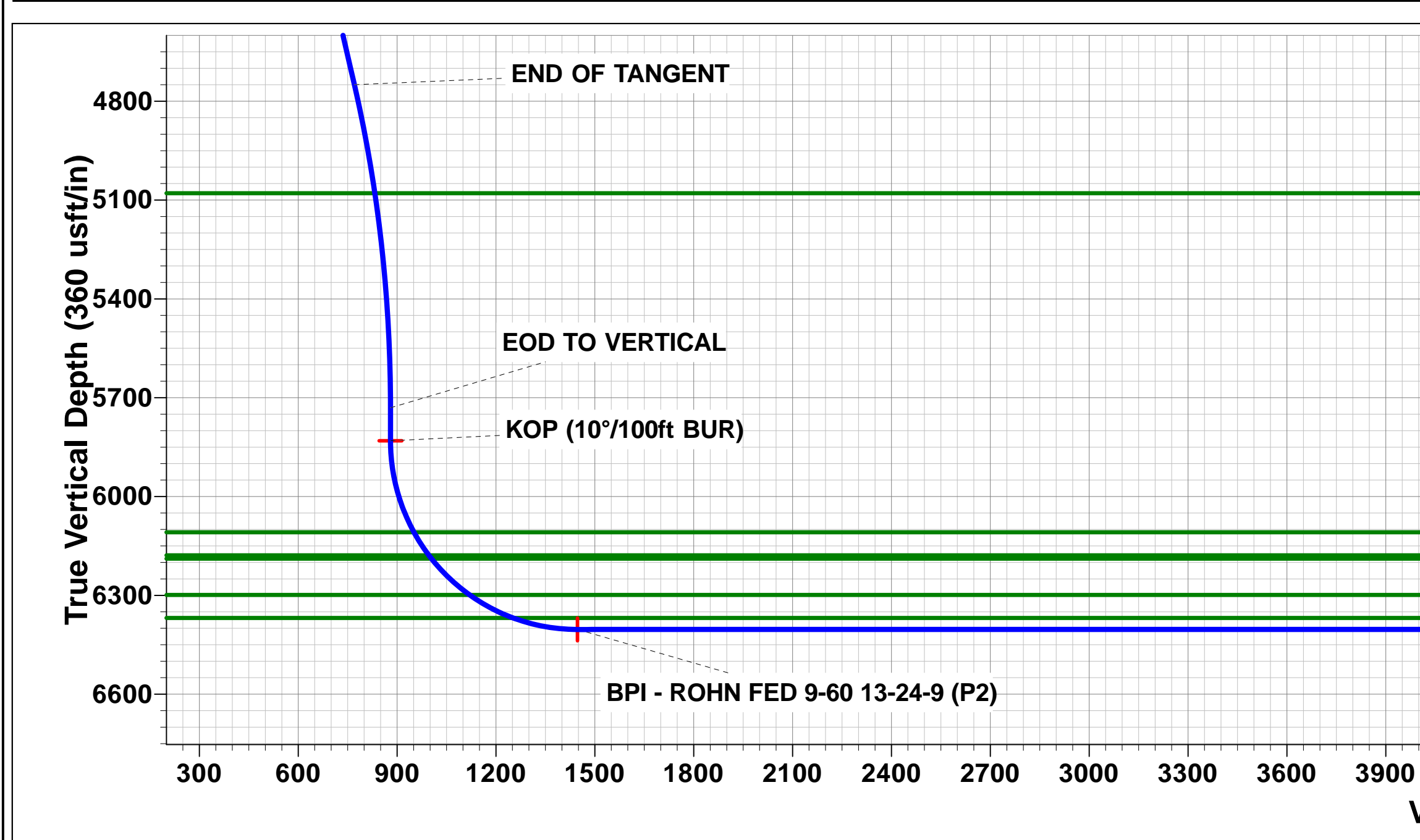
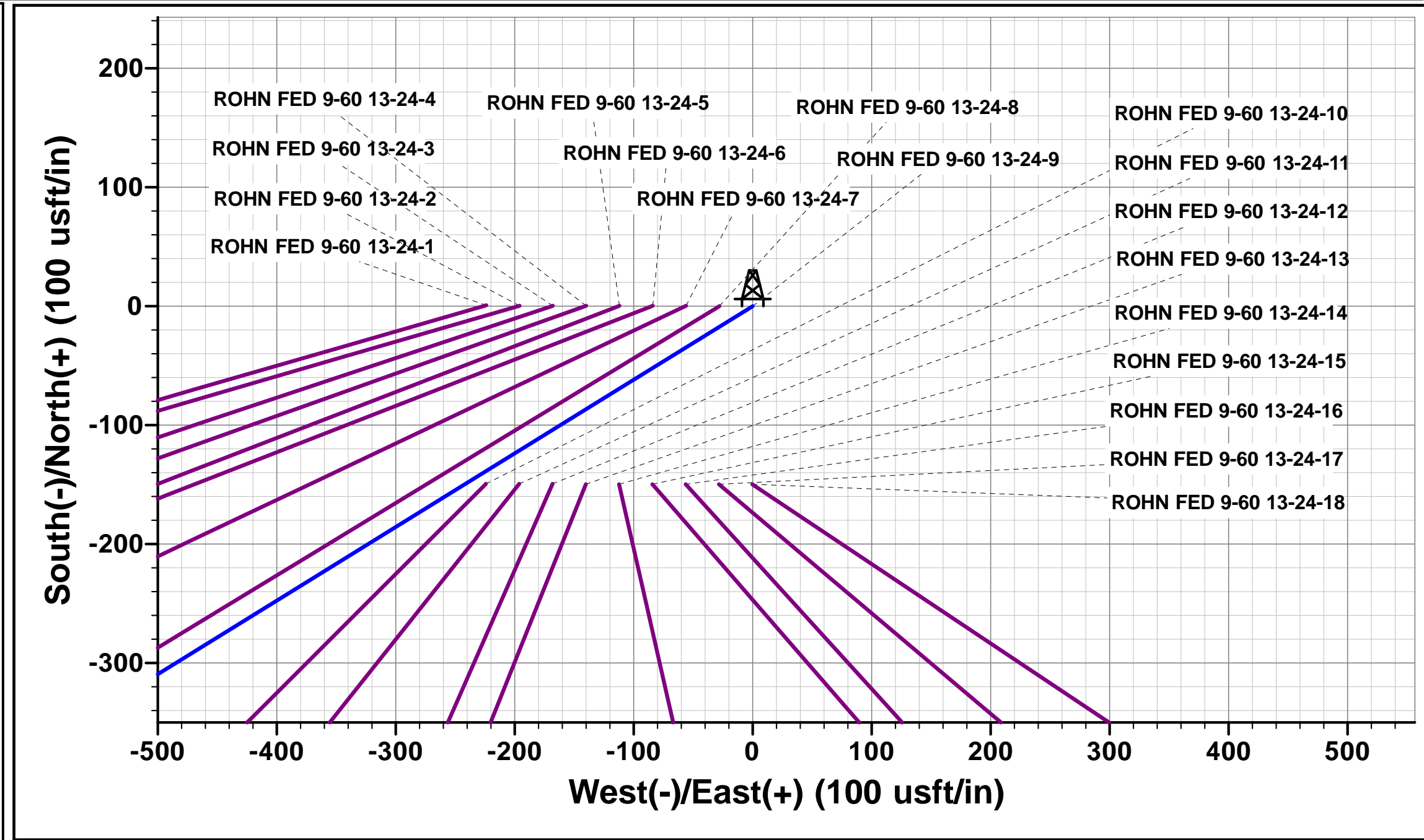
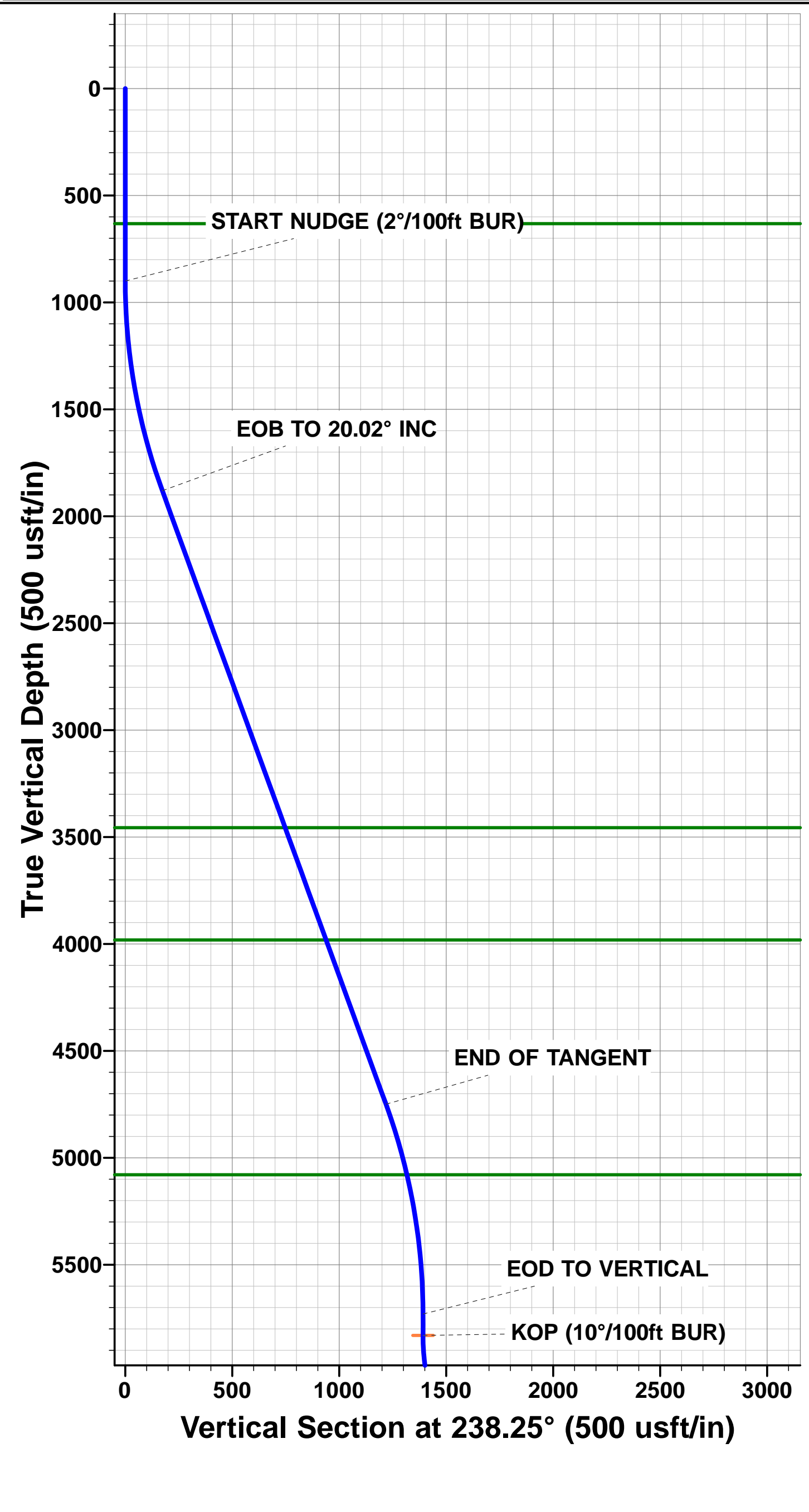
SHL: 1998ft FNL & 1485ft FEL Sec 13

BPI: 2078ft FSL & 2660ft FEL Sec 13

EPI: 600ft FSL & 2607ft FEL Sec 24

BHL: 300ft FSL & 2605ft FEL of Sec 24

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - ROHN FED 9-60 13-24-9 (P2)	5830.54	-732.35	-1183.33	40.750449	-104.040028
BPI - ROHN FED 9-60 13-24-9 (P2)	6403.50	-1305.27	-1177.03	40.748876	-104.040005
EPI - ROHN FED 9-60 13-24-9 (P2)	6403.50	-8084.50	-1102.24	40.730269	-104.039734
BHL - ROHN FED 9-60 13-24-9 (P2)	6403.50	-8384.34	-1098.93	40.729446	-104.039722



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ROHN FED 9-60 13-24-9
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB-EST @ 5069.50usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 5069.50usft (Original Well Elev)
<b>Site:</b>	SW NE SEC. 13 T9N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	ROHN FED 9-60 13-24-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

<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		Using geodetic scale factor

<b>Site</b>	SW NE SEC. 13 T9N R60W 6th P.M.		
<b>Site Position:</b>		<b>Northing:</b>	1,520,312.28 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,405,444.26 usft
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	1.10000 ft
		<b>Latitude:</b>	40.752461
		<b>Longitude:</b>	-104.036565
		<b>Grid Convergence:</b>	0.95 °

<b>Well</b>	ROHN FED 9-60 13-24-9		
<b>Well Position</b>	<b>+N/-S</b>	-0.74 usft	<b>Northing:</b>
	<b>+E/-W</b>	223.87 usft	<b>Easting:</b>
<b>Position Uncertainty</b>	0.00 usft		<b>Wellhead Elevation:</b>
			<b>Latitude:</b>
			<b>Longitude:</b>
			<b>Ground Level:</b>

<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>
	IGRF2015	09/01/2018	7.78	67.23	52,582

<b>Design</b>	PROPOSAL #2			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<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>
	6,403.50	0.00	0.00	187.47

<b>Plan Sections</b>											
MD (usft)	Inc (°)	Azi (°)	Vertical Depth	SS (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	-5,069.50	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	0.00	900.00	-4,169.50	0.00	0.00	0.00	0.00	0.00	0.00	
1,901.02	20.02	238.25	1,880.78	-3,188.72	-91.10	-147.21	2.00	2.00	0.00	238.25	
4,954.53	20.02	238.25	4,749.76	-319.74	-641.25	-1,036.12	0.00	0.00	0.00	0.00	
5,955.55	0.00	0.00	5,730.54	661.04	-732.35	-1,183.33	2.00	-2.00	0.00	180.00	
6,055.55	0.00	0.00	5,830.54	761.04	-732.35	-1,183.33	0.00	0.00	0.00	0.00	KOP - ROHN FED 9
6,955.55	90.00	179.37	6,403.50	1,334.00	-1,305.27	-1,177.03	10.00	10.00	19.93	179.37	BPI - ROHN FED 9
13,735.19	90.00	179.37	6,403.50	1,334.00	-8,084.50	-1,102.24	0.00	0.00	0.00	-74.10	EPI - ROHN FED 9
14,035.06	90.00	179.37	6,403.50	1,334.00	-8,384.34	-1,098.93	0.00	0.00	0.00	118.95	BHL - ROHN FED 9

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ROHN FED 9-60 13-24-9
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB-EST @ 5069.50usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 5069.50usft (Original Well Elev)
<b>Site:</b>	SW NE SEC. 13 T9N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	ROHN FED 9-60 13-24-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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)
<b>SHL: 1998ft FNL &amp; 1485ft FEL of Sec 13</b>										
0.00	0.00	0.00	0.00	5,069.50	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	4,969.50	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	4,869.50	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	4,769.50	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	4,669.50	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	4,569.50	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	4,469.50	0.00	0.00	0.00	0.00	0.00	0.00
<b>PIERRE SHALE (BASE OF FOX HILLS)</b>										
632.50	0.00	0.00	632.50	4,437.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	4,369.50	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	4,269.50	0.00	0.00	0.00	0.00	0.00	0.00
<b>START NUDGE (2°/100ft BUR)</b>										
900.00	0.00	0.00	900.00	4,169.50	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	2.00	238.25	999.98	4,069.52	-0.92	-1.48	1.10	2.00	2.00	0.00
1,100.00	4.00	238.25	1,099.84	3,969.66	-3.67	-5.93	4.41	2.00	2.00	0.00
1,200.00	6.00	238.25	1,199.45	3,870.05	-8.26	-13.34	9.92	2.00	2.00	0.00
1,300.00	8.00	238.25	1,298.70	3,770.80	-14.67	-23.71	17.63	2.00	2.00	0.00
1,400.00	10.00	238.25	1,397.47	3,672.03	-22.90	-37.01	27.52	2.00	2.00	0.00
1,500.00	12.00	238.25	1,495.62	3,573.88	-32.95	-53.23	39.58	2.00	2.00	0.00
1,600.00	14.00	238.25	1,593.06	3,476.44	-44.78	-72.36	53.81	2.00	2.00	0.00
1,700.00	16.00	238.25	1,689.64	3,379.86	-58.40	-94.37	70.17	2.00	2.00	0.00
1,800.00	18.00	238.25	1,785.27	3,284.23	-73.79	-119.23	88.66	2.00	2.00	0.00
1,900.00	20.00	238.25	1,879.82	3,189.68	-90.92	-146.91	109.24	2.00	2.00	0.00
<b>EOB TO 20.02° INC</b>										
1,901.02	20.02	238.25	1,880.77	3,188.73	-91.10	-147.21	109.46	2.00	2.00	0.00
2,000.00	20.02	238.25	1,973.77	3,095.73	-108.94	-176.02	130.89	0.00	0.00	0.00
2,100.00	20.02	238.25	2,067.73	3,001.77	-126.95	-205.13	152.54	0.00	0.00	0.00
2,200.00	20.02	238.25	2,161.69	2,907.81	-144.97	-234.24	174.18	0.00	0.00	0.00
2,300.00	20.02	238.25	2,255.64	2,813.86	-162.99	-263.35	195.83	0.00	0.00	0.00
2,400.00	20.02	238.25	2,349.60	2,719.90	-181.00	-292.47	217.48	0.00	0.00	0.00
2,500.00	20.02	238.25	2,443.56	2,625.94	-199.02	-321.58	239.12	0.00	0.00	0.00
2,600.00	20.02	238.25	2,537.52	2,531.98	-217.04	-350.69	260.77	0.00	0.00	0.00
2,700.00	20.02	238.25	2,631.47	2,438.03	-235.05	-379.80	282.42	0.00	0.00	0.00
2,800.00	20.02	238.25	2,725.43	2,344.07	-253.07	-408.91	304.07	0.00	0.00	0.00
2,900.00	20.02	238.25	2,819.39	2,250.11	-271.09	-438.02	325.71	0.00	0.00	0.00
3,000.00	20.02	238.25	2,913.34	2,156.16	-289.10	-467.13	347.36	0.00	0.00	0.00
3,100.00	20.02	238.25	3,007.30	2,062.20	-307.12	-496.24	369.01	0.00	0.00	0.00
3,200.00	20.02	238.25	3,101.26	1,968.24	-325.14	-525.36	390.65	0.00	0.00	0.00
3,300.00	20.02	238.25	3,195.21	1,874.29	-343.15	-554.47	412.30	0.00	0.00	0.00
3,400.00	20.02	238.25	3,289.17	1,780.33	-361.17	-583.58	433.95	0.00	0.00	0.00
3,500.00	20.02	238.25	3,383.13	1,686.37	-379.19	-612.69	455.60	0.00	0.00	0.00
<b>PARKMAN</b>										
3,578.09	20.02	238.25	3,456.50	1,613.00	-393.26	-635.42	472.50	0.00	0.00	0.00
3,600.00	20.02	238.25	3,477.09	1,592.41	-397.20	-641.80	477.24	0.00	0.00	0.00
3,700.00	20.02	238.25	3,571.04	1,498.46	-415.22	-670.91	498.89	0.00	0.00	0.00
3,800.00	20.02	238.25	3,665.00	1,404.50	-433.24	-700.02	520.54	0.00	0.00	0.00
3,900.00	20.02	238.25	3,758.96	1,310.54	-451.25	-729.14	542.18	0.00	0.00	0.00
4,000.00	20.02	238.25	3,852.91	1,216.59	-469.27	-758.25	563.83	0.00	0.00	0.00
4,100.00	20.02	238.25	3,946.87	1,122.63	-487.29	-787.36	585.48	0.00	0.00	0.00
<b>SUSSEX</b>										
4,136.86	20.02	238.25	3,981.50	1,088.00	-493.93	-798.09	593.46	0.00	0.00	0.00
4,200.00	20.02	238.25	4,040.83	1,028.67	-505.30	-816.47	607.13	0.00	0.00	0.00



# Planning Report



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<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 5069.50usft (Original Well Elev)
<b>Site:</b>	SW NE SEC. 13 T9N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	ROHN FED 9-60 13-24-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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)
4,300.00	20.02	238.25	4,134.79	934.71	-523.32	-845.58	628.77	0.00	0.00	0.00
4,400.00	20.02	238.25	4,228.74	840.76	-541.34	-874.69	650.42	0.00	0.00	0.00
4,500.00	20.02	238.25	4,322.70	746.80	-559.35	-903.80	672.07	0.00	0.00	0.00
4,600.00	20.02	238.25	4,416.66	652.84	-577.37	-932.91	693.71	0.00	0.00	0.00
4,700.00	20.02	238.25	4,510.61	558.89	-595.39	-962.03	715.36	0.00	0.00	0.00
4,800.00	20.02	238.25	4,604.57	464.93	-613.40	-991.14	737.01	0.00	0.00	0.00
4,900.00	20.02	238.25	4,698.53	370.97	-631.42	-1,020.25	758.66	0.00	0.00	0.00
<b>END OF TANGENT</b>										
<b>4,954.53</b>	<b>20.02</b>	<b>238.25</b>	<b>4,749.76</b>	<b>319.74</b>	<b>-641.25</b>	<b>-1,036.12</b>	<b>770.46</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
5,000.00	19.11	238.25	4,792.61	276.89	-649.26	-1,049.07	780.09	2.00	-2.00	0.00
5,100.00	17.11	238.25	4,887.65	181.85	-665.62	-1,075.50	799.74	2.00	-2.00	0.00
5,200.00	15.11	238.25	4,983.71	85.79	-680.22	-1,099.10	817.29	2.00	-2.00	0.00
<b>SHANNON</b>										
<b>5,298.78</b>	<b>13.14</b>	<b>238.25</b>	<b>5,079.50</b>	<b>-10.00</b>	<b>-692.90</b>	<b>-1,119.59</b>	<b>832.53</b>	<b>2.00</b>	<b>-2.00</b>	<b>0.00</b>
5,300.00	13.11	238.25	5,080.69	-11.19	-693.05	-1,119.83	832.70	2.00	-2.00	0.00
5,400.00	11.11	238.25	5,178.46	-108.96	-704.09	-1,137.67	845.97	2.00	-2.00	0.00
5,500.00	9.11	238.25	5,276.90	-207.40	-713.33	-1,152.60	857.07	2.00	-2.00	0.00
5,600.00	7.11	238.25	5,375.90	-306.40	-720.75	-1,164.59	865.99	2.00	-2.00	0.00
5,700.00	5.11	238.25	5,475.32	-405.82	-726.36	-1,173.64	872.72	2.00	-2.00	0.00
5,800.00	3.11	238.25	5,575.06	-505.56	-730.13	-1,179.74	877.25	2.00	-2.00	0.00
5,900.00	1.11	238.25	5,674.99	-605.49	-732.07	-1,182.87	879.58	2.00	-2.00	0.00
<b>EOD TO VERTICAL</b>										
<b>5,955.55</b>	<b>0.00</b>	<b>238.25</b>	<b>5,730.54</b>	<b>-661.04</b>	<b>-732.35</b>	<b>-1,183.33</b>	<b>879.92</b>	<b>2.00</b>	<b>-2.00</b>	<b>0.00</b>
6,000.00	0.00	0.00	5,774.99	-705.49	-732.35	-1,183.33	879.92	0.00	0.00	0.00
<b>KOP (10°/100ft BUR)</b>										
<b>6,055.55</b>	<b>0.00</b>	<b>0.00</b>	<b>5,830.54</b>	<b>-761.04</b>	<b>-732.35</b>	<b>-1,183.33</b>	<b>879.92</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
6,100.00	4.44	179.37	5,874.94	-805.44	-734.07	-1,183.31	881.63	10.00	10.00	0.00
6,200.00	14.44	179.37	5,973.46	-903.96	-750.46	-1,183.13	897.85	10.00	10.00	0.00
6,300.00	24.44	179.37	6,067.64	-998.14	-783.71	-1,182.77	930.77	10.00	10.00	0.00
<b>SHARON SPRINGS SHALE</b>										
<b>6,345.76</b>	<b>29.02</b>	<b>179.37</b>	<b>6,108.50</b>	<b>-1,039.00</b>	<b>-804.29</b>	<b>-1,182.54</b>	<b>951.14</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
6,400.00	34.44	179.37	6,154.61	-1,085.11	-832.80	-1,182.23	979.38	10.00	10.00	0.00
<b>NIOBRARA FORMATION</b>										
<b>6,429.50</b>	<b>37.39</b>	<b>179.37</b>	<b>6,178.50</b>	<b>-1,109.00</b>	<b>-850.10</b>	<b>-1,182.03</b>	<b>996.51</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
<b>NIOBRARA A CHALK</b>										
<b>6,442.20</b>	<b>38.66</b>	<b>179.37</b>	<b>6,188.50</b>	<b>-1,119.00</b>	<b>-857.92</b>	<b>-1,181.95</b>	<b>1,004.25</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
6,500.00	44.44	179.37	6,231.74	-1,162.24	-896.25	-1,181.53	1,042.20	10.00	10.00	0.00
6,600.00	54.44	179.37	6,296.67	-1,227.17	-972.12	-1,180.69	1,117.32	10.00	10.00	0.00
<b>NIOBRARA B CHALK</b>										
<b>6,603.15</b>	<b>54.76</b>	<b>179.37</b>	<b>6,298.50</b>	<b>-1,229.00</b>	<b>-974.69</b>	<b>-1,180.66</b>	<b>1,119.87</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
6,700.00	64.44	179.37	6,347.45	-1,277.95	-1,058.12	-1,179.75	1,202.47	10.00	10.00	0.00
<b>NIOBRARA C CHALK</b>										
<b>6,754.26</b>	<b>69.87</b>	<b>179.37</b>	<b>6,368.50</b>	<b>-1,299.00</b>	<b>-1,108.10</b>	<b>-1,179.20</b>	<b>1,251.95</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
6,800.00	74.44	179.37	6,382.51	-1,313.01	-1,151.63	-1,178.72	1,295.05	10.00	10.00	0.00
6,900.00	84.44	179.37	6,400.81	-1,331.31	-1,249.81	-1,177.64	1,392.25	10.00	10.00	0.00
<b>BPI: 2078ft FSL &amp; 2660ft FEL of Sec 13</b>										
<b>6,955.55</b>	<b>90.00</b>	<b>179.37</b>	<b>6,403.50</b>	<b>-1,334.00</b>	<b>-1,305.27</b>	<b>-1,177.03</b>	<b>1,447.16</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
7,000.00	90.00	179.37	6,403.50	-1,334.00	-1,349.72	-1,176.54	1,491.17	0.00	0.00	0.00
7,100.00	90.00	179.37	6,403.50	-1,334.00	-1,449.71	-1,175.44	1,590.17	0.00	0.00	0.00
7,200.00	90.00	179.37	6,403.50	-1,334.00	-1,549.70	-1,174.34	1,689.18	0.00	0.00	0.00
7,300.00	90.00	179.37	6,403.50	-1,334.00	-1,649.70	-1,173.24	1,788.18	0.00	0.00	0.00
7,400.00	90.00	179.37	6,403.50	-1,334.00	-1,749.69	-1,172.14	1,887.18	0.00	0.00	0.00
7,500.00	90.00	179.37	6,403.50	-1,334.00	-1,849.68	-1,171.04	1,986.18	0.00	0.00	0.00

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ROHN FED 9-60 13-24-9
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB-EST @ 5069.50usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 5069.50usft (Original Well Elev)
<b>Site:</b>	SW NE SEC. 13 T9N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	ROHN FED 9-60 13-24-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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)
7,600.00	90.00	179.37	6,403.51	-1,334.01	-1,949.68	-1,169.94	2,085.19	0.00	0.00	0.00
7,700.00	90.00	179.37	6,403.51	-1,334.01	-2,049.67	-1,168.84	2,184.19	0.00	0.00	0.00
7,800.00	90.00	179.37	6,403.51	-1,334.01	-2,149.67	-1,167.74	2,283.19	0.00	0.00	0.00
7,900.00	90.00	179.37	6,403.51	-1,334.01	-2,249.66	-1,166.64	2,382.20	0.00	0.00	0.00
8,000.00	90.00	179.37	6,403.51	-1,334.01	-2,349.65	-1,165.54	2,481.20	0.00	0.00	0.00
8,100.00	90.00	179.37	6,403.51	-1,334.01	-2,449.65	-1,164.44	2,580.20	0.00	0.00	0.00
8,200.00	90.00	179.37	6,403.51	-1,334.01	-2,549.64	-1,163.33	2,679.20	0.00	0.00	0.00
8,300.00	90.00	179.37	6,403.51	-1,334.01	-2,649.64	-1,162.23	2,778.21	0.00	0.00	0.00
8,400.00	90.00	179.37	6,403.51	-1,334.01	-2,749.63	-1,161.13	2,877.21	0.00	0.00	0.00
8,500.00	90.00	179.37	6,403.51	-1,334.01	-2,849.62	-1,160.03	2,976.21	0.00	0.00	0.00
8,600.00	90.00	179.37	6,403.51	-1,334.01	-2,949.62	-1,158.93	3,075.22	0.00	0.00	0.00
8,700.00	90.00	179.37	6,403.51	-1,334.01	-3,049.61	-1,157.83	3,174.22	0.00	0.00	0.00
8,800.00	90.00	179.37	6,403.51	-1,334.01	-3,149.61	-1,156.73	3,273.22	0.00	0.00	0.00
8,900.00	90.00	179.37	6,403.51	-1,334.01	-3,249.60	-1,155.63	3,372.22	0.00	0.00	0.00
9,000.00	90.00	179.37	6,403.51	-1,334.01	-3,349.59	-1,154.52	3,471.23	0.00	0.00	0.00
9,100.00	90.00	179.37	6,403.51	-1,334.01	-3,449.59	-1,153.42	3,570.23	0.00	0.00	0.00
9,200.00	90.00	179.37	6,403.51	-1,334.01	-3,549.58	-1,152.32	3,669.23	0.00	0.00	0.00
9,300.00	90.00	179.37	6,403.51	-1,334.01	-3,649.58	-1,151.22	3,768.24	0.00	0.00	0.00
9,400.00	90.00	179.37	6,403.51	-1,334.01	-3,749.57	-1,150.12	3,867.24	0.00	0.00	0.00
9,500.00	90.00	179.37	6,403.51	-1,334.01	-3,849.56	-1,149.01	3,966.24	0.00	0.00	0.00
9,600.00	90.00	179.37	6,403.52	-1,334.02	-3,949.56	-1,147.91	4,065.24	0.00	0.00	0.00
9,700.00	90.00	179.37	6,403.52	-1,334.02	-4,049.55	-1,146.81	4,164.25	0.00	0.00	0.00
9,800.00	90.00	179.37	6,403.52	-1,334.02	-4,149.55	-1,145.71	4,263.25	0.00	0.00	0.00
9,900.00	90.00	179.37	6,403.52	-1,334.02	-4,249.54	-1,144.60	4,362.25	0.00	0.00	0.00
10,000.00	90.00	179.37	6,403.52	-1,334.02	-4,349.53	-1,143.50	4,461.25	0.00	0.00	0.00
10,100.00	90.00	179.37	6,403.52	-1,334.02	-4,449.53	-1,142.40	4,560.26	0.00	0.00	0.00
10,200.00	90.00	179.37	6,403.52	-1,334.02	-4,549.52	-1,141.30	4,659.26	0.00	0.00	0.00
10,300.00	90.00	179.37	6,403.52	-1,334.02	-4,649.52	-1,140.19	4,758.26	0.00	0.00	0.00
10,400.00	90.00	179.37	6,403.52	-1,334.02	-4,749.51	-1,139.09	4,857.26	0.00	0.00	0.00
10,500.00	90.00	179.37	6,403.52	-1,334.02	-4,849.50	-1,137.99	4,956.27	0.00	0.00	0.00
10,600.00	90.00	179.37	6,403.52	-1,334.02	-4,949.50	-1,136.88	5,055.27	0.00	0.00	0.00
10,700.00	90.00	179.37	6,403.52	-1,334.02	-5,049.49	-1,135.78	5,154.27	0.00	0.00	0.00
10,800.00	90.00	179.37	6,403.52	-1,334.02	-5,149.48	-1,134.68	5,253.27	0.00	0.00	0.00
10,900.00	90.00	179.37	6,403.52	-1,334.02	-5,249.48	-1,133.57	5,352.28	0.00	0.00	0.00
11,000.00	90.00	179.37	6,403.52	-1,334.02	-5,349.47	-1,132.47	5,451.28	0.00	0.00	0.00
11,100.00	90.00	179.37	6,403.52	-1,334.02	-5,449.47	-1,131.37	5,550.28	0.00	0.00	0.00
11,200.00	90.00	179.37	6,403.51	-1,334.01	-5,549.46	-1,130.26	5,649.28	0.00	0.00	0.00
11,300.00	90.00	179.37	6,403.51	-1,334.01	-5,649.45	-1,129.16	5,748.29	0.00	0.00	0.00
11,400.00	90.00	179.37	6,403.51	-1,334.01	-5,749.45	-1,128.05	5,847.29	0.00	0.00	0.00
11,500.00	90.00	179.37	6,403.51	-1,334.01	-5,849.44	-1,126.95	5,946.29	0.00	0.00	0.00
11,600.00	90.00	179.37	6,403.51	-1,334.01	-5,949.44	-1,125.85	6,045.29	0.00	0.00	0.00
11,700.00	90.00	179.37	6,403.51	-1,334.01	-6,049.43	-1,124.74	6,144.30	0.00	0.00	0.00
11,800.00	90.00	179.37	6,403.51	-1,334.01	-6,149.42	-1,123.64	6,243.30	0.00	0.00	0.00
11,900.00	90.00	179.37	6,403.51	-1,334.01	-6,249.42	-1,122.53	6,342.30	0.00	0.00	0.00
12,000.00	90.00	179.37	6,403.51	-1,334.01	-6,349.41	-1,121.43	6,441.30	0.00	0.00	0.00
12,100.00	90.00	179.37	6,403.51	-1,334.01	-6,449.41	-1,120.32	6,540.31	0.00	0.00	0.00
12,200.00	90.00	179.37	6,403.51	-1,334.01	-6,549.40	-1,119.22	6,639.31	0.00	0.00	0.00
12,300.00	90.00	179.37	6,403.51	-1,334.01	-6,649.39	-1,118.11	6,738.31	0.00	0.00	0.00
12,400.00	90.00	179.37	6,403.51	-1,334.01	-6,749.39	-1,117.01	6,837.31	0.00	0.00	0.00
12,500.00	90.00	179.37	6,403.51	-1,334.01	-6,849.38	-1,115.90	6,936.32	0.00	0.00	0.00
12,600.00	90.00	179.37	6,403.51	-1,334.01	-6,949.37	-1,114.80	7,035.32	0.00	0.00	0.00
12,700.00	90.00	179.37	6,403.51	-1,334.01	-7,049.37	-1,113.69	7,134.32	0.00	0.00	0.00
12,800.00	90.00	179.37	6,403.51	-1,334.01	-7,149.36	-1,112.59	7,233.32	0.00	0.00	0.00
12,900.00	90.00	179.37	6,403.51	-1,334.01	-7,249.36	-1,111.48	7,332.32	0.00	0.00	0.00

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ROHN FED 9-60 13-24-9
<b>Company:</b>	BISON OIL & GAS II, LLC	<b>TVD Reference:</b>	KB-EST @ 5069.50usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 5069.50usft (Original Well Elev)
<b>Site:</b>	SW NE SEC. 13 T9N R60W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	ROHN FED 9-60 13-24-9	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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)
13,000.00	90.00	179.37	6,403.51	-1,334.01	-7,349.35	-1,110.38	7,431.33	0.00	0.00	0.00
13,100.00	90.00	179.37	6,403.51	-1,334.01	-7,449.34	-1,109.27	7,530.33	0.00	0.00	0.00
13,200.00	90.00	179.37	6,403.50	-1,334.00	-7,549.34	-1,108.16	7,629.33	0.00	0.00	0.00
13,300.00	90.00	179.37	6,403.50	-1,334.00	-7,649.33	-1,107.06	7,728.33	0.00	0.00	0.00
13,400.00	90.00	179.37	6,403.50	-1,334.00	-7,749.33	-1,105.95	7,827.34	0.00	0.00	0.00
13,500.00	90.00	179.37	6,403.50	-1,334.00	-7,849.32	-1,104.85	7,926.34	0.00	0.00	0.00
13,600.00	90.00	179.37	6,403.50	-1,334.00	-7,949.31	-1,103.74	8,025.34	0.00	0.00	0.00
13,700.00	90.00	179.37	6,403.50	-1,334.00	-8,049.31	-1,102.63	8,124.34	0.00	0.00	0.00
<b>EPI: 600ft FSL &amp; 2607ft FEL of Sec 24</b>										
<b>13,735.19</b>	<b>90.00</b>	<b>179.37</b>	<b>6,403.50</b>	<b>-1,334.00</b>	<b>-8,084.50</b>	<b>-1,102.24</b>	<b>8,159.18</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
13,800.00	90.00	179.37	6,403.50	-1,334.00	-8,149.30	-1,101.53	8,223.34	0.00	0.00	0.00
13,900.00	90.00	179.37	6,403.50	-1,334.00	-8,249.30	-1,100.42	8,322.35	0.00	0.00	0.00
14,000.00	90.00	179.37	6,403.50	-1,334.00	-8,349.29	-1,099.32	8,421.35	0.00	0.00	0.00
<b>BHL: 300ft FSL &amp; 2605ft FEL of Sec 24</b>										
<b>14,035.06</b>	<b>90.00</b>	<b>179.37</b>	<b>6,403.50</b>	<b>-1,334.00</b>	<b>-8,384.34</b>	<b>-1,098.93</b>	<b>8,456.05</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Formations					
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
632.50	632.50	PIERRE SHALE (BASE OF FOX HI			
3,578.09	3,456.50	PARKMAN			
4,136.86	3,981.50	SUSSEX			
5,298.78	5,079.50	SHANNON			
6,345.76	6,108.50	SHARON SPRINGS SHALE			
6,429.50	6,178.50	NIOBRARA FORMATION			
6,442.20	6,188.50	NIOBRARA A CHALK			
6,603.15	6,298.50	NIOBRARA B CHALK			
6,754.26	6,368.50	NIOBRARA C CHALK			

Plan Annotations				
MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
0.00	0.00	0.00	0.00	SHL: 1998ft FNL & 1485ft FEL of Sec 13
900.00	900.00	0.00	0.00	START NUDGE (2°/100ft BUR)
1,901.02	1,880.77	-91.10	-147.21	EOB TO 20.02° INC
4,954.53	4,749.76	-641.25	-1,036.12	END OF TANGENT
5,955.55	5,730.54	-732.35	-1,183.33	EOD TO VERTICAL
6,055.55	5,830.54	-732.35	-1,183.33	KOP (10°/100ft BUR)
6,955.55	6,403.50	-1,305.27	-1,177.03	BPI: 2078ft FSL & 2660ft FEL of Sec 13
13,735.19	6,403.50	-8,084.50	-1,102.24	EPI: 600ft FSL & 2607ft FEL of Sec 24
14,035.06	6,403.50	-8,384.34	-1,098.93	BHL: 300ft FSL & 2605ft FEL of Sec 24