

EXTRACTION OIL & GAS

**WELD COUNTY
SEC 28-T5N-66W
T-BONE 22N-20-12**

OWB

Plan: PROPOSAL 1

Standard Planning Report

21 July, 2025

Civitas Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well T-BONE 22N-20-12
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 25' @ 4837.00usft
Project:	WELD COUNTY	MD Reference:	KB 25' @ 4837.00usft
Site:	SEC 28-T5N-66W	North Reference:	True
Well:	T-BONE 22N-20-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Project	WELD COUNTY		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	SEC 28-T5N-66W				
Site Position:		Northing:	1,375,980.59 usft	Latitude:	40.363261°N
From:	Lat/Long	Easting:	3,199,339.03 usft	Longitude:	104.784647°W
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.46 °

Well	T-BONE 22N-20-12					
Well Position	+N/-S	593.06 usft	Northing:	1,376,571.23 usft	Latitude:	40.364889°N
	+E/-W	-297.88 usft	Easting:	3,199,036.37 usft	Longitude:	104.785716°W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	4,812.00 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	1/30/2025	7.48	66.47	51,551.55250249

Design	PROPOSAL 1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	21.75

Plan Survey Tool Program		Date 7/21/2025		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	22,153.63 PROPOSAL 1 (OWB)	MWD OWSG	
			OWSG MWD - Standard	

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Well:	T-BONE 22N-20-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,643.31	58.87	54.21	3,152.15	809.17	1,122.30	2.00	2.00	0.00	54.21	
10,754.34	58.87	54.21	6,828.81	4,368.93	6,059.60	0.00	0.00	0.00	0.00	
11,354.79	90.00	359.89	7,000.00	4,865.78	6,288.88	10.00	5.19	-9.05	-69.63	LP-T-BONE 22N-20-1
11,404.79	90.00	359.89	7,000.00	4,915.78	6,288.79	0.00	0.00	0.00	0.00	
11,699.49	90.00	354.00	7,000.00	5,209.93	6,273.10	2.00	0.00	-2.00	-90.00	
11,799.49	90.00	354.00	7,000.00	5,309.38	6,262.65	0.00	0.00	0.00	0.00	
12,100.09	90.00	0.01	7,000.00	5,609.43	6,246.95	2.00	0.00	2.00	90.00	PBHL-T-BONE 22N-2
22,153.63	90.00	0.01	7,000.00	15,662.97	6,249.05	0.00	0.00	0.00	0.00	PBHL-T-BONE 22N-2

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Site:	SEC 28-T5N-66W	North Reference:	True
Well:	T-BONE 22N-20-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00										
800.00	2.00	54.21	799.98	1.02	1.42	1.47	2.00	2.00	2.00	0.00
900.00	4.00	54.21	899.84	4.08	5.66	5.89	2.00	2.00	2.00	0.00
1,000.00	6.00	54.21	999.45	9.18	12.73	13.24	2.00	2.00	2.00	0.00
1,100.00	8.00	54.21	1,098.70	16.31	22.61	23.52	2.00	2.00	2.00	0.00
1,200.00	10.00	54.21	1,197.47	25.45	35.30	36.72	2.00	2.00	2.00	0.00
1,300.00	12.00	54.21	1,295.62	36.61	50.78	52.82	2.00	2.00	2.00	0.00
1,400.00	14.00	54.21	1,393.06	49.77	69.03	71.80	2.00	2.00	2.00	0.00
1,500.00	16.00	54.21	1,489.64	64.90	90.02	93.64	2.00	2.00	2.00	0.00
1,510.78	16.22	54.21	1,500.00	66.65	92.45	96.16	2.00	2.00	2.00	0.00
Base of Upper Pierre aquifer										
1,600.00	18.00	54.21	1,585.27	82.00	113.73	118.31	2.00	2.00	2.00	0.00
1,700.00	20.00	54.21	1,679.82	101.04	140.14	145.78	2.00	2.00	2.00	0.00
1,800.00	22.00	54.21	1,773.17	122.00	169.21	176.02	2.00	2.00	2.00	0.00
1,900.00	24.00	54.21	1,865.21	144.85	200.90	208.98	2.00	2.00	2.00	0.00
2,000.00	26.00	54.21	1,955.84	169.56	235.18	244.64	2.00	2.00	2.00	0.00
2,100.00	28.00	54.21	2,044.94	196.11	272.00	282.95	2.00	2.00	2.00	0.00
2,200.00	30.00	54.21	2,132.39	224.47	311.33	323.85	2.00	2.00	2.00	0.00
2,300.00	32.00	54.21	2,218.11	254.59	353.10	367.31	2.00	2.00	2.00	0.00
2,400.00	34.00	54.21	2,301.97	286.44	397.28	413.26	2.00	2.00	2.00	0.00
2,500.00	36.00	54.21	2,383.88	319.98	443.80	461.66	2.00	2.00	2.00	0.00
2,600.00	38.00	54.21	2,463.74	355.17	492.62	512.43	2.00	2.00	2.00	0.00
2,700.00	40.00	54.21	2,541.45	391.98	543.66	565.53	2.00	2.00	2.00	0.00
2,800.00	42.00	54.21	2,616.92	430.34	596.88	620.89	2.00	2.00	2.00	0.00
2,900.00	44.00	54.21	2,690.05	470.23	652.19	678.43	2.00	2.00	2.00	0.00
3,000.00	46.00	54.21	2,760.76	511.58	709.55	738.09	2.00	2.00	2.00	0.00
3,100.00	48.00	54.21	2,828.95	554.35	768.87	799.80	2.00	2.00	2.00	0.00
3,200.00	50.00	54.21	2,894.55	598.49	830.08	863.48	2.00	2.00	2.00	0.00
3,300.00	52.00	54.21	2,957.48	643.93	893.12	929.05	2.00	2.00	2.00	0.00
3,400.00	54.00	54.21	3,017.66	690.64	957.90	996.43	2.00	2.00	2.00	0.00
3,500.00	56.00	54.21	3,075.02	738.54	1,024.34	1,065.55	2.00	2.00	2.00	0.00
3,600.00	58.00	54.21	3,129.48	787.59	1,092.37	1,136.31	2.00	2.00	2.00	0.00
3,635.14	58.70	54.21	3,147.91	805.08	1,116.63	1,161.55	2.00	2.00	2.00	0.00
Start 7084.96 hold at 3635.14 MD										
3,643.31	58.87	54.21	3,152.15	809.17	1,122.30	1,167.45	2.00	2.00	2.00	0.00
3,700.00	58.87	54.21	3,181.46	837.55	1,161.66	1,208.39	0.00	0.00	0.00	0.00
3,800.00	58.87	54.21	3,233.16	887.61	1,231.09	1,280.62	0.00	0.00	0.00	0.00
3,900.00	58.87	54.21	3,284.87	937.67	1,300.52	1,352.84	0.00	0.00	0.00	0.00
4,000.00	58.87	54.21	3,336.57	987.73	1,369.95	1,425.07	0.00	0.00	0.00	0.00
4,100.00	58.87	54.21	3,388.27	1,037.79	1,439.39	1,497.29	0.00	0.00	0.00	0.00
4,200.00	58.87	54.21	3,439.98	1,087.85	1,508.82	1,569.51	0.00	0.00	0.00	0.00
4,300.00	58.87	54.21	3,491.68	1,137.91	1,578.25	1,641.74	0.00	0.00	0.00	0.00
4,400.00	58.87	54.21	3,543.39	1,187.97	1,647.68	1,713.96	0.00	0.00	0.00	0.00
4,500.00	58.87	54.21	3,595.09	1,238.03	1,717.11	1,786.19	0.00	0.00	0.00	0.00
4,600.00	58.87	54.21	3,646.79	1,288.09	1,786.54	1,858.41	0.00	0.00	0.00	0.00

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Wellbore:	OWB		
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Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
4,700.00	58.87	54.21	3,698.50	1,338.15	1,855.98	1,930.64	0.00	0.00	0.00	
4,800.00	58.87	54.21	3,750.20	1,388.21	1,925.41	2,002.86	0.00	0.00	0.00	
4,838.30	58.87	54.21	3,770.00	1,407.38	1,952.00	2,030.52	0.00	0.00	0.00	
Larimer ("Parkman") sandstone										
4,900.00	58.87	54.21	3,801.90	1,438.27	1,994.84	2,075.09	0.00	0.00	0.00	
4,993.02	58.87	54.21	3,850.00	1,484.83	2,059.43	2,142.27	0.00	0.00	0.00	
Larimer ("Parkman") sandstone Base										
5,000.00	58.87	54.21	3,853.61	1,488.32	2,064.27	2,147.31	0.00	0.00	0.00	
5,100.00	58.87	54.21	3,905.31	1,538.38	2,133.70	2,219.54	0.00	0.00	0.00	
5,200.00	58.87	54.21	3,957.01	1,588.44	2,203.13	2,291.76	0.00	0.00	0.00	
5,300.00	58.87	54.21	4,008.72	1,638.50	2,272.57	2,363.99	0.00	0.00	0.00	
5,400.00	58.87	54.21	4,060.42	1,688.56	2,342.00	2,436.21	0.00	0.00	0.00	
5,500.00	58.87	54.21	4,112.13	1,738.62	2,411.43	2,508.44	0.00	0.00	0.00	
5,600.00	58.87	54.21	4,163.83	1,788.68	2,480.86	2,580.66	0.00	0.00	0.00	
5,700.00	58.87	54.21	4,215.53	1,838.74	2,550.29	2,652.89	0.00	0.00	0.00	
5,800.00	58.87	54.21	4,267.24	1,888.80	2,619.72	2,725.11	0.00	0.00	0.00	
5,900.00	58.87	54.21	4,318.94	1,938.86	2,689.16	2,797.34	0.00	0.00	0.00	
6,000.00	58.87	54.21	4,370.64	1,988.92	2,758.59	2,869.56	0.00	0.00	0.00	
6,095.46	58.87	54.21	4,420.00	2,036.71	2,824.87	2,938.51	0.00	0.00	0.00	
Terry ("Sussex") sandstone										
6,100.00	58.87	54.21	4,422.35	2,038.98	2,828.02	2,941.79	0.00	0.00	0.00	
6,200.00	58.87	54.21	4,474.05	2,089.04	2,897.45	3,014.01	0.00	0.00	0.00	
6,298.54	58.87	54.21	4,525.00	2,138.37	2,965.87	3,085.18	0.00	0.00	0.00	
Terry ("Sussex") sandstone Base										
6,300.00	58.87	54.21	4,525.75	2,139.10	2,966.88	3,086.23	0.00	0.00	0.00	
6,400.00	58.87	54.21	4,577.46	2,189.16	3,036.31	3,158.46	0.00	0.00	0.00	
6,500.00	58.87	54.21	4,629.16	2,239.22	3,105.75	3,230.68	0.00	0.00	0.00	
6,600.00	58.87	54.21	4,680.87	2,289.28	3,175.18	3,302.91	0.00	0.00	0.00	
6,700.00	58.87	54.21	4,732.57	2,339.34	3,244.61	3,375.13	0.00	0.00	0.00	
6,800.00	58.87	54.21	4,784.27	2,389.40	3,314.04	3,447.36	0.00	0.00	0.00	
6,900.00	58.87	54.21	4,835.98	2,439.46	3,383.47	3,519.58	0.00	0.00	0.00	
7,000.00	58.87	54.21	4,887.68	2,489.52	3,452.90	3,591.81	0.00	0.00	0.00	
7,100.00	58.87	54.21	4,939.38	2,539.58	3,522.34	3,664.03	0.00	0.00	0.00	
7,168.89	58.87	54.21	4,975.00	2,574.06	3,570.16	3,713.79	0.00	0.00	0.00	
Hygiene ("Shannon") sandstone										
7,200.00	58.87	54.21	4,991.09	2,589.64	3,591.77	3,736.26	0.00	0.00	0.00	
7,300.00	58.87	54.21	5,042.79	2,639.70	3,661.20	3,808.48	0.00	0.00	0.00	
7,400.00	58.87	54.21	5,094.49	2,689.76	3,730.63	3,880.71	0.00	0.00	0.00	
7,500.00	58.87	54.21	5,146.20	2,739.82	3,800.06	3,952.93	0.00	0.00	0.00	
7,600.00	58.87	54.21	5,197.90	2,789.88	3,869.49	4,025.16	0.00	0.00	0.00	
7,700.00	58.87	54.21	5,249.61	2,839.94	3,938.93	4,097.38	0.00	0.00	0.00	
7,797.47	58.87	54.21	5,300.00	2,888.73	4,006.60	4,167.78	0.00	0.00	0.00	
Hygiene ("Shannon") sandstone Base										
7,800.00	58.87	54.21	5,301.31	2,890.00	4,008.36	4,169.61	0.00	0.00	0.00	
7,900.00	58.87	54.21	5,353.01	2,940.06	4,077.79	4,241.83	0.00	0.00	0.00	
8,000.00	58.87	54.21	5,404.72	2,990.12	4,147.22	4,314.06	0.00	0.00	0.00	
8,100.00	58.87	54.21	5,456.42	3,040.18	4,216.65	4,386.28	0.00	0.00	0.00	
8,200.00	58.87	54.21	5,508.12	3,090.24	4,286.08	4,458.51	0.00	0.00	0.00	
8,300.00	58.87	54.21	5,559.83	3,140.30	4,355.52	4,530.73	0.00	0.00	0.00	
8,400.00	58.87	54.21	5,611.53	3,190.36	4,424.95	4,602.96	0.00	0.00	0.00	
8,500.00	58.87	54.21	5,663.23	3,240.42	4,494.38	4,675.18	0.00	0.00	0.00	
8,600.00	58.87	54.21	5,714.94	3,290.48	4,563.81	4,747.40	0.00	0.00	0.00	
8,700.00	58.87	54.21	5,766.64	3,340.54	4,633.24	4,819.63	0.00	0.00	0.00	

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Site:	SEC 28-T5N-66W	North Reference:	True
Well:	T-BONE 22N-20-12	Survey Calculation Method:	Minimum Curvature
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Design:	PROPOSAL 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
8,800.00	58.87	54.21	5,818.35	3,390.60	4,702.67	4,891.85	0.00	0.00	0.00	
8,900.00	58.87	54.21	5,870.05	3,440.66	4,772.11	4,964.08	0.00	0.00	0.00	
9,000.00	58.87	54.21	5,921.75	3,490.71	4,841.54	5,036.30	0.00	0.00	0.00	
9,100.00	58.87	54.21	5,973.46	3,540.77	4,910.97	5,108.53	0.00	0.00	0.00	
9,200.00	58.87	54.21	6,025.16	3,590.83	4,980.40	5,180.75	0.00	0.00	0.00	
9,300.00	58.87	54.21	6,076.86	3,640.89	5,049.83	5,252.98	0.00	0.00	0.00	
9,400.00	58.87	54.21	6,128.57	3,690.95	5,119.26	5,325.20	0.00	0.00	0.00	
9,500.00	58.87	54.21	6,180.27	3,741.01	5,188.70	5,397.43	0.00	0.00	0.00	
9,600.00	58.87	54.21	6,231.97	3,791.07	5,258.13	5,469.65	0.00	0.00	0.00	
9,700.00	58.87	54.21	6,283.68	3,841.13	5,327.56	5,541.88	0.00	0.00	0.00	
9,800.00	58.87	54.21	6,335.38	3,891.19	5,396.99	5,614.10	0.00	0.00	0.00	
9,900.00	58.87	54.21	6,387.09	3,941.25	5,466.42	5,686.33	0.00	0.00	0.00	
10,000.00	58.87	54.21	6,438.79	3,991.31	5,535.85	5,758.55	0.00	0.00	0.00	
10,100.00	58.87	54.21	6,490.49	4,041.37	5,605.29	5,830.78	0.00	0.00	0.00	
10,200.00	58.87	54.21	6,542.20	4,091.43	5,674.72	5,903.00	0.00	0.00	0.00	
10,300.00	58.87	54.21	6,593.90	4,141.49	5,744.15	5,975.23	0.00	0.00	0.00	
10,400.00	58.87	54.21	6,645.60	4,191.55	5,813.58	6,047.45	0.00	0.00	0.00	
10,500.00	58.87	54.21	6,697.31	4,241.61	5,883.01	6,119.68	0.00	0.00	0.00	
10,600.00	58.87	54.21	6,749.01	4,291.67	5,952.44	6,191.90	0.00	0.00	0.00	
10,700.00	58.87	54.21	6,800.71	4,341.73	6,021.88	6,264.13	0.00	0.00	0.00	
10,720.10	58.87	54.21	6,811.10	4,351.79	6,035.83	6,278.64	0.00	0.00	0.00	
Start DLS 10.00 TFO -69.40										
10,754.34	58.87	54.21	6,828.81	4,368.93	6,059.60	6,303.37	0.00	0.00	0.00	
10,800.00	60.55	49.29	6,851.85	4,393.34	6,090.54	6,337.51	10.00	3.69	-10.77	
10,850.00	62.59	44.10	6,875.67	4,423.50	6,122.51	6,377.36	10.00	4.08	-10.38	
10,900.00	64.82	39.11	6,897.83	4,457.01	6,152.25	6,419.51	10.00	4.45	-9.99	
10,929.37	66.20	36.26	6,910.00	4,478.16	6,168.58	6,445.20	10.00	4.72	-9.69	
Sharon Springs										
10,950.00	67.21	34.30	6,918.16	4,493.63	6,179.52	6,463.63	10.00	4.87	-9.51	
11,000.00	69.74	29.66	6,936.52	4,533.07	6,204.13	6,509.38	10.00	5.06	-9.28	
11,050.00	72.38	25.17	6,952.75	4,575.04	6,225.89	6,556.43	10.00	5.29	-8.97	
11,100.00	75.12	20.82	6,966.75	4,619.22	6,244.62	6,604.40	10.00	5.49	-8.71	
11,150.00	77.95	16.58	6,978.39	4,665.27	6,260.19	6,652.94	10.00	5.65	-8.49	
11,200.00	80.84	12.42	6,987.60	4,712.83	6,272.49	6,701.67	10.00	5.77	-8.31	
11,250.00	83.77	8.34	6,994.30	4,761.56	6,281.40	6,750.23	10.00	5.87	-8.17	
11,300.00	86.73	4.30	6,998.44	4,811.07	6,286.88	6,798.25	10.00	5.93	-8.08	
11,319.46	87.89	2.73	6,999.35	4,830.47	6,288.07	6,816.71	10.00	5.96	-8.04	
Start 50.00 hold at 11319.46 MD										
11,354.79	90.00	359.89	7,000.00	4,865.78	6,288.88	6,849.81	10.00	5.97	-8.03	
Niobrara A Chalk										
11,369.46	90.00	359.89	7,000.00	4,880.45	6,288.85	6,863.42	0.00	0.00	0.00	
Start DLS 2.00 TFO -90.00										
11,404.79	90.00	359.89	7,000.00	4,915.78	6,288.79	6,896.21	0.00	0.00	0.00	
11,500.00	90.00	357.99	7,000.00	5,010.97	6,287.03	6,983.97	2.00	0.00	-2.00	
11,600.00	90.00	355.99	7,000.00	5,110.82	6,281.78	7,074.77	2.00	0.00	-2.00	
11,664.16	90.00	354.71	7,000.00	5,174.77	6,276.58	7,132.24	2.00	0.00	-2.00	
Start 100.00 hold at 11664.16 MD										
11,699.49	90.00	354.00	7,000.00	5,209.93	6,273.10	7,163.61	2.00	0.00	-2.00	
11,764.16	90.00	354.00	7,000.00	5,274.24	6,266.34	7,220.84	0.00	0.00	0.00	
Start Turn 2.00										
11,799.49	90.00	354.00	7,000.00	5,309.38	6,262.65	7,252.11	0.00	0.00	0.00	
11,900.00	90.00	356.01	7,000.00	5,409.50	6,253.90	7,341.86	2.00	0.00	2.00	
12,000.00	90.00	358.01	7,000.00	5,509.36	6,248.68	7,432.68	2.00	0.00	2.00	

Civitas Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well T-BONE 22N-20-12
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 25' @ 4837.00usft
Project:	WELD COUNTY	MD Reference:	KB 25' @ 4837.00usft
Site:	SEC 28-T5N-66W	North Reference:	True
Well:	T-BONE 22N-20-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
12,078.88	90.00	359.59	7,000.00	5,588.22	6,247.03	7,505.31	2.00	0.00	2.00	
Start 10041.55 hold at 12078.88 MD										
12,100.09	90.00	0.01	7,000.00	5,609.43	6,246.95	7,524.98	2.00	0.00	2.00	
12,200.00	90.00	0.01	7,000.00	5,709.34	6,246.97	7,617.79	0.00	0.00	0.00	
12,300.00	90.00	0.01	7,000.00	5,809.34	6,246.99	7,710.67	0.00	0.00	0.00	
12,400.00	90.00	0.01	7,000.00	5,909.34	6,247.01	7,803.56	0.00	0.00	0.00	
12,500.00	90.00	0.01	7,000.00	6,009.34	6,247.04	7,896.45	0.00	0.00	0.00	
12,600.00	90.00	0.01	7,000.00	6,109.34	6,247.06	7,989.34	0.00	0.00	0.00	
12,700.00	90.00	0.01	7,000.00	6,209.34	6,247.08	8,082.23	0.00	0.00	0.00	
12,800.00	90.00	0.01	7,000.00	6,309.34	6,247.10	8,175.12	0.00	0.00	0.00	
12,900.00	90.00	0.01	7,000.00	6,409.34	6,247.12	8,268.00	0.00	0.00	0.00	
13,000.00	90.00	0.01	7,000.00	6,509.34	6,247.14	8,360.89	0.00	0.00	0.00	
13,100.00	90.00	0.01	7,000.00	6,609.34	6,247.16	8,453.78	0.00	0.00	0.00	
13,200.00	90.00	0.01	7,000.00	6,709.34	6,247.18	8,546.67	0.00	0.00	0.00	
13,300.00	90.00	0.01	7,000.00	6,809.34	6,247.20	8,639.56	0.00	0.00	0.00	
13,400.00	90.00	0.01	7,000.00	6,909.34	6,247.22	8,732.45	0.00	0.00	0.00	
13,500.00	90.00	0.01	7,000.00	7,009.34	6,247.24	8,825.33	0.00	0.00	0.00	
13,600.00	90.00	0.01	7,000.00	7,109.34	6,247.26	8,918.22	0.00	0.00	0.00	
13,700.00	90.00	0.01	7,000.00	7,209.34	6,247.29	9,011.11	0.00	0.00	0.00	
13,800.00	90.00	0.01	7,000.00	7,309.34	6,247.31	9,104.00	0.00	0.00	0.00	
13,900.00	90.00	0.01	7,000.00	7,409.34	6,247.33	9,196.89	0.00	0.00	0.00	
14,000.00	90.00	0.01	7,000.00	7,509.34	6,247.35	9,289.78	0.00	0.00	0.00	
14,100.00	90.00	0.01	7,000.00	7,609.34	6,247.37	9,382.66	0.00	0.00	0.00	
14,200.00	90.00	0.01	7,000.00	7,709.34	6,247.39	9,475.55	0.00	0.00	0.00	
14,300.00	90.00	0.01	7,000.00	7,809.34	6,247.41	9,568.44	0.00	0.00	0.00	
14,400.00	90.00	0.01	7,000.00	7,909.34	6,247.43	9,661.33	0.00	0.00	0.00	
14,500.00	90.00	0.01	7,000.00	8,009.34	6,247.45	9,754.22	0.00	0.00	0.00	
14,600.00	90.00	0.01	7,000.00	8,109.34	6,247.47	9,847.11	0.00	0.00	0.00	
14,700.00	90.00	0.01	7,000.00	8,209.34	6,247.49	9,940.00	0.00	0.00	0.00	
14,800.00	90.00	0.01	7,000.00	8,309.34	6,247.51	10,032.88	0.00	0.00	0.00	
14,900.00	90.00	0.01	7,000.00	8,409.34	6,247.54	10,125.77	0.00	0.00	0.00	
15,000.00	90.00	0.01	7,000.00	8,509.34	6,247.56	10,218.66	0.00	0.00	0.00	
15,100.00	90.00	0.01	7,000.00	8,609.34	6,247.58	10,311.55	0.00	0.00	0.00	
15,200.00	90.00	0.01	7,000.00	8,709.34	6,247.60	10,404.44	0.00	0.00	0.00	
15,300.00	90.00	0.01	7,000.00	8,809.34	6,247.62	10,497.33	0.00	0.00	0.00	
15,400.00	90.00	0.01	7,000.00	8,909.34	6,247.64	10,590.21	0.00	0.00	0.00	
15,500.00	90.00	0.01	7,000.00	9,009.34	6,247.66	10,683.10	0.00	0.00	0.00	
15,600.00	90.00	0.01	7,000.00	9,109.34	6,247.68	10,775.99	0.00	0.00	0.00	
15,700.00	90.00	0.01	7,000.00	9,209.34	6,247.70	10,868.88	0.00	0.00	0.00	
15,800.00	90.00	0.01	7,000.00	9,309.34	6,247.72	10,961.77	0.00	0.00	0.00	
15,900.00	90.00	0.01	7,000.00	9,409.34	6,247.74	11,054.66	0.00	0.00	0.00	
16,000.00	90.00	0.01	7,000.00	9,509.34	6,247.76	11,147.54	0.00	0.00	0.00	
16,100.00	90.00	0.01	7,000.00	9,609.34	6,247.79	11,240.43	0.00	0.00	0.00	
16,200.00	90.00	0.01	7,000.00	9,709.34	6,247.81	11,333.32	0.00	0.00	0.00	
16,300.00	90.00	0.01	7,000.00	9,809.34	6,247.83	11,426.21	0.00	0.00	0.00	
16,400.00	90.00	0.01	7,000.00	9,909.34	6,247.85	11,519.10	0.00	0.00	0.00	
16,500.00	90.00	0.01	7,000.00	10,009.34	6,247.87	11,611.99	0.00	0.00	0.00	
16,600.00	90.00	0.01	7,000.00	10,109.34	6,247.89	11,704.87	0.00	0.00	0.00	
16,700.00	90.00	0.01	7,000.00	10,209.34	6,247.91	11,797.76	0.00	0.00	0.00	
16,800.00	90.00	0.01	7,000.00	10,309.34	6,247.93	11,890.65	0.00	0.00	0.00	
16,900.00	90.00	0.01	7,000.00	10,409.34	6,247.95	11,983.54	0.00	0.00	0.00	
17,000.00	90.00	0.01	7,000.00	10,509.34	6,247.97	12,076.43	0.00	0.00	0.00	
17,100.00	90.00	0.01	7,000.00	10,609.34	6,247.99	12,169.32	0.00	0.00	0.00	

Civitas Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well T-BONE 22N-20-12
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 25' @ 4837.00usft
Project:	WELD COUNTY	MD Reference:	KB 25' @ 4837.00usft
Site:	SEC 28-T5N-66W	North Reference:	True
Well:	T-BONE 22N-20-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
17,200.00	90.00	0.01	7,000.00	10,709.34	6,248.01	12,262.20	0.00	0.00	0.00	
17,300.00	90.00	0.01	7,000.00	10,809.34	6,248.04	12,355.09	0.00	0.00	0.00	
17,400.00	90.00	0.01	7,000.00	10,909.34	6,248.06	12,447.98	0.00	0.00	0.00	
17,500.00	90.00	0.01	7,000.00	11,009.34	6,248.08	12,540.87	0.00	0.00	0.00	
17,600.00	90.00	0.01	7,000.00	11,109.34	6,248.10	12,633.76	0.00	0.00	0.00	
17,700.00	90.00	0.01	7,000.00	11,209.34	6,248.12	12,726.65	0.00	0.00	0.00	
17,800.00	90.00	0.01	7,000.00	11,309.34	6,248.14	12,819.53	0.00	0.00	0.00	
17,900.00	90.00	0.01	7,000.00	11,409.34	6,248.16	12,912.42	0.00	0.00	0.00	
18,000.00	90.00	0.01	7,000.00	11,509.34	6,248.18	13,005.31	0.00	0.00	0.00	
18,100.00	90.00	0.01	7,000.00	11,609.34	6,248.20	13,098.20	0.00	0.00	0.00	
18,200.00	90.00	0.01	7,000.00	11,709.34	6,248.22	13,191.09	0.00	0.00	0.00	
18,300.00	90.00	0.01	7,000.00	11,809.34	6,248.24	13,283.98	0.00	0.00	0.00	
18,400.00	90.00	0.01	7,000.00	11,909.34	6,248.26	13,376.86	0.00	0.00	0.00	
18,500.00	90.00	0.01	7,000.00	12,009.34	6,248.29	13,469.75	0.00	0.00	0.00	
18,600.00	90.00	0.01	7,000.00	12,109.34	6,248.31	13,562.64	0.00	0.00	0.00	
18,700.00	90.00	0.01	7,000.00	12,209.34	6,248.33	13,655.53	0.00	0.00	0.00	
18,800.00	90.00	0.01	7,000.00	12,309.34	6,248.35	13,748.42	0.00	0.00	0.00	
18,900.00	90.00	0.01	7,000.00	12,409.34	6,248.37	13,841.31	0.00	0.00	0.00	
19,000.00	90.00	0.01	7,000.00	12,509.34	6,248.39	13,934.19	0.00	0.00	0.00	
19,100.00	90.00	0.01	7,000.00	12,609.34	6,248.41	14,027.08	0.00	0.00	0.00	
19,200.00	90.00	0.01	7,000.00	12,709.34	6,248.43	14,119.97	0.00	0.00	0.00	
19,300.00	90.00	0.01	7,000.00	12,809.34	6,248.45	14,212.86	0.00	0.00	0.00	
19,400.00	90.00	0.01	7,000.00	12,909.34	6,248.47	14,305.75	0.00	0.00	0.00	
19,500.00	90.00	0.01	7,000.00	13,009.34	6,248.49	14,398.64	0.00	0.00	0.00	
19,600.00	90.00	0.01	7,000.00	13,109.34	6,248.51	14,491.52	0.00	0.00	0.00	
19,700.00	90.00	0.01	7,000.00	13,209.34	6,248.53	14,584.41	0.00	0.00	0.00	
19,800.00	90.00	0.01	7,000.00	13,309.34	6,248.56	14,677.30	0.00	0.00	0.00	
19,900.00	90.00	0.01	7,000.00	13,409.34	6,248.58	14,770.19	0.00	0.00	0.00	
20,000.00	90.00	0.01	7,000.00	13,509.34	6,248.60	14,863.08	0.00	0.00	0.00	
20,100.00	90.00	0.01	7,000.00	13,609.34	6,248.62	14,955.97	0.00	0.00	0.00	
20,200.00	90.00	0.01	7,000.00	13,709.34	6,248.64	15,048.85	0.00	0.00	0.00	
20,300.00	90.00	0.01	7,000.00	13,809.34	6,248.66	15,141.74	0.00	0.00	0.00	
20,400.00	90.00	0.01	7,000.00	13,909.34	6,248.68	15,234.63	0.00	0.00	0.00	
20,500.00	90.00	0.01	7,000.00	14,009.34	6,248.70	15,327.52	0.00	0.00	0.00	
20,600.00	90.00	0.01	7,000.00	14,109.34	6,248.72	15,420.41	0.00	0.00	0.00	
20,700.00	90.00	0.01	7,000.00	14,209.34	6,248.74	15,513.30	0.00	0.00	0.00	
20,800.00	90.00	0.01	7,000.00	14,309.34	6,248.76	15,606.18	0.00	0.00	0.00	
20,900.00	90.00	0.01	7,000.00	14,409.34	6,248.78	15,699.07	0.00	0.00	0.00	
21,000.00	90.00	0.01	7,000.00	14,509.34	6,248.81	15,791.96	0.00	0.00	0.00	
21,100.00	90.00	0.01	7,000.00	14,609.34	6,248.83	15,884.85	0.00	0.00	0.00	
21,200.00	90.00	0.01	7,000.00	14,709.34	6,248.85	15,977.74	0.00	0.00	0.00	
21,300.00	90.00	0.01	7,000.00	14,809.34	6,248.87	16,070.63	0.00	0.00	0.00	
21,400.00	90.00	0.01	7,000.00	14,909.34	6,248.89	16,163.52	0.00	0.00	0.00	
21,500.00	90.00	0.01	7,000.00	15,009.34	6,248.91	16,256.40	0.00	0.00	0.00	
21,600.00	90.00	0.01	7,000.00	15,109.34	6,248.93	16,349.29	0.00	0.00	0.00	
21,700.00	90.00	0.01	7,000.00	15,209.34	6,248.95	16,442.18	0.00	0.00	0.00	
21,800.00	90.00	0.01	7,000.00	15,309.34	6,248.97	16,535.07	0.00	0.00	0.00	
21,900.00	90.00	0.01	7,000.00	15,409.34	6,248.99	16,627.96	0.00	0.00	0.00	
22,000.00	90.00	0.01	7,000.00	15,509.34	6,249.01	16,720.85	0.00	0.00	0.00	
22,100.00	90.00	0.01	7,000.00	15,609.34	6,249.03	16,813.73	0.00	0.00	0.00	
22,120.43	90.00	0.01	7,000.00	15,629.78	6,249.04	16,832.71	0.00	0.00	0.00	
TD at 22120.43										
22,153.63	90.00	0.01	7,000.00	15,662.97	6,249.05	16,863.55	0.00	0.00	0.00	

Civitas Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well T-BONE 22N-20-12
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB 25' @ 4837.00usft
Project:	WELD COUNTY	MD Reference:	KB 25' @ 4837.00usft
Site:	SEC 28-T5N-66W	North Reference:	True
Well:	T-BONE 22N-20-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target - Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
PBHL-T-BONE 22N-20- - plan hits target center - Point	0.00	0.00	7,000.00	15,662.97	6,249.05	1,392,284.03	3,205,159.05	40.407882°N	104.763276°W
LP-T-BONE 22N-20-12 - plan hits target center - Point	0.00	0.00	7,000.00	4,865.78	6,288.88	1,381,487.51	3,205,285.85	40.378244°N	104.763143°W

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(usft)	(usft)			(°)	(°)
1,510.78	1,500.00	Base of Upper Pierre aquifer			
4,838.30	3,770.00	Larimer ("Parkman") sandstone			
4,993.02	3,850.00	Larimer ("Parkman") sandstone Base			
6,095.46	4,420.00	Terry ("Sussex") sandstone			
6,298.54	4,525.00	Terry ("Sussex") sandstone Base			
7,168.89	4,975.00	Hygiene ("Shannon") sandstone			
7,797.47	5,300.00	Hygiene ("Shannon") sandstone Base			
10,929.37	6,910.00	Sharon Springs			
11,354.79	7,000.00	Niobrara A Chalk			

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(usft)	(usft)	+N/-S	+E/-W		
		(usft)	(usft)		
700.00	700.00	0.00	0.00	Start Build 2.00	
3,635.14	3,147.91	805.08	1,116.63	Start 7084.96 hold at 3635.14 MD	
10,720.10	6,811.10	4,351.79	6,035.83	Start DLS 10.00 TFO -69.40	
11,319.46	6,999.35	4,830.47	6,288.07	Start 50.00 hold at 11319.46 MD	
11,369.46	7,000.00	4,880.45	6,288.85	Start DLS 2.00 TFO -90.00	
11,664.16	7,000.00	5,174.77	6,276.58	Start 100.00 hold at 11664.16 MD	
11,764.16	7,000.00	5,274.24	6,266.34	Start Turn 2.00	
12,078.88	7,000.00	5,588.22	6,247.03	Start 10041.55 hold at 12078.88 MD	
22,120.43	7,000.00	15,629.78	6,249.04	TD at 22120.43	