

# **VERDAD RESOURCES**

**WATTENBERG FIELD**

**1N-65W-31 COUNTY LINE 3130 PAD**

**COUNTY LINE 3130-06H**

**Wellbore #1**

**Plan: Design #3**

## **Standard Planning Report**

**02 June, 2020**

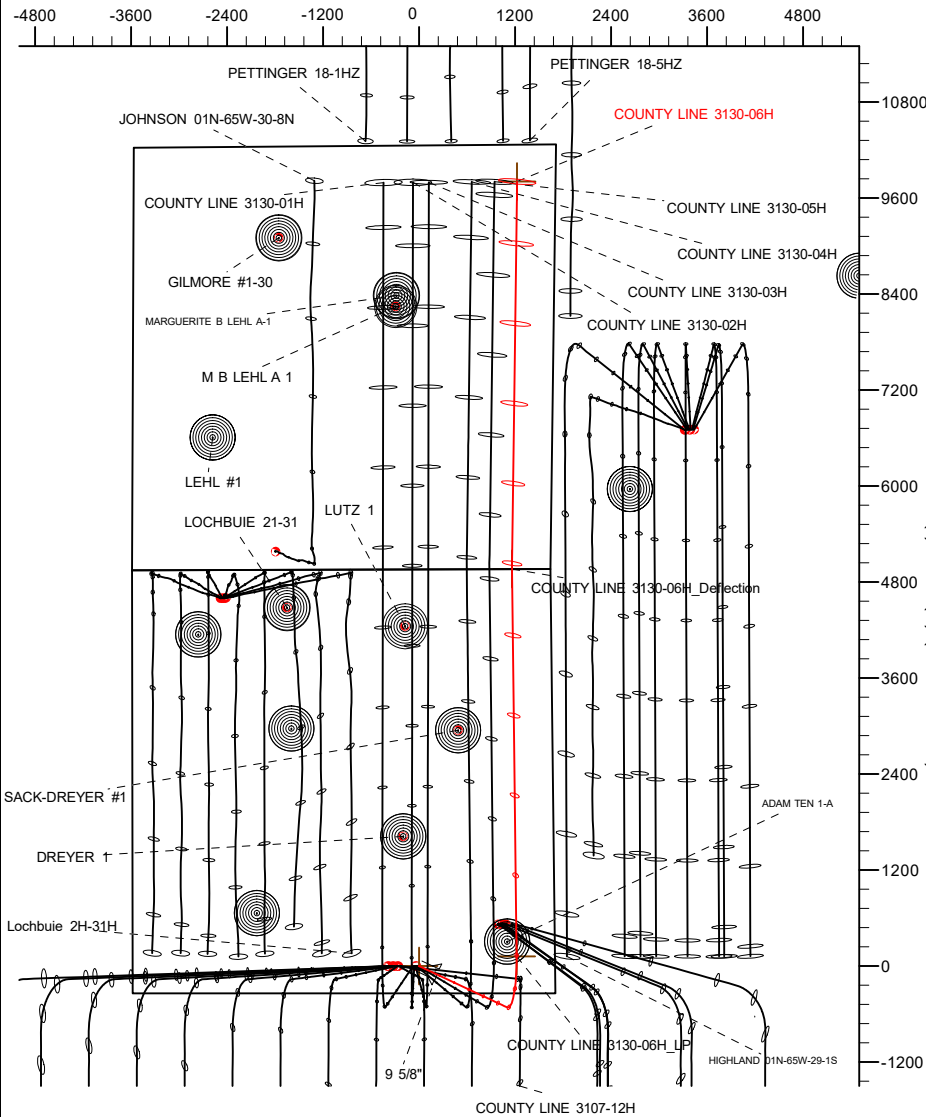
Project: WATTENBERG FIELD  
Site: 1N-65W-31 COUNTY LINE 3130 PAD  
Well: COUNTY LINE 3130-06H  
Wellbore: Wellbore #1  
Design: Design #3

# VERDAD RESOURCES

## CASING DETAILS

TVD	MD	Name	Size
1700.00	1723.22	9 5/8"	9-5/8

West(-)/East(+) (2400 usft/in)



SHL  
340' FSL  
1700' FEL

LP  
460' FSL  
480' FEL

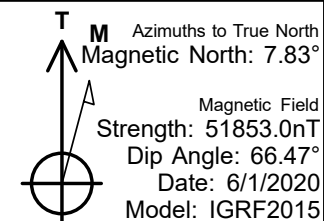
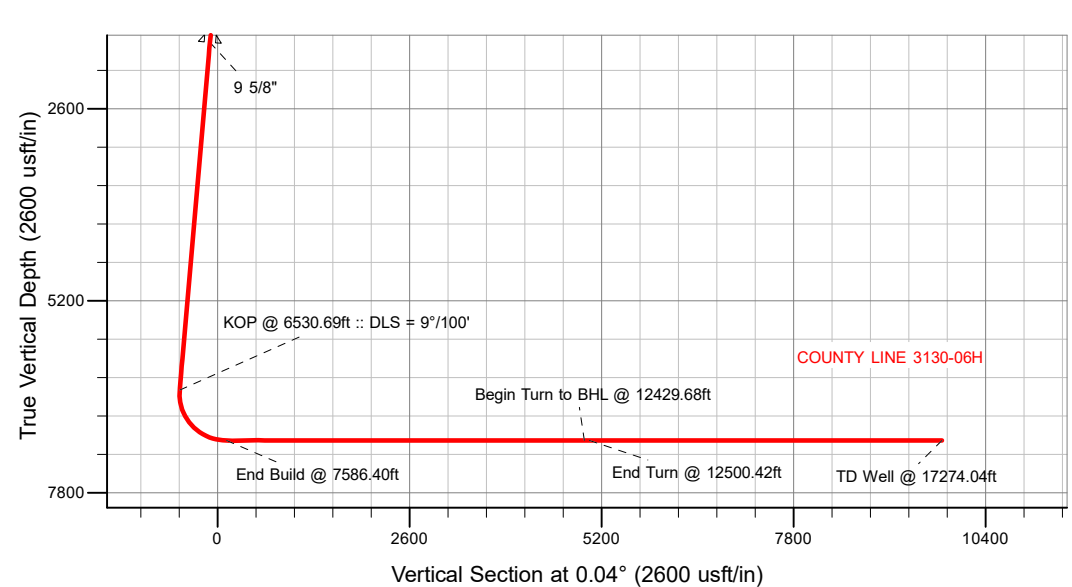
BHL  
460' FNL  
480' FEL

## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
3	780.00	11.60	115.10	776.05	-24.82	52.99	2.00	115.10	-24.78	
4	6530.69	11.60	115.10	6409.28	-515.34	1100.13	0.00	0.00	-514.57	
5	7586.40	90.00	359.34	7090.00	120.26	1218.65	9.00	-115.30	121.11	
6	12429.68	90.00	359.34	7090.00	4963.22	1162.74	0.00	0.00	4964.03	COUNTY LINE 3130-06H_Deflection
7	12500.42	90.00	0.75	7090.00	5033.96	1162.80	2.00	90.00	5034.77	COUNTY LINE 3130-06H_BHL
8	17274.04	90.00	0.75	7090.00	9807.16	1225.58	0.00	0.00	9808.01	COUNTY LINE 3130-06H_BHL

## WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
COUNTY LINE 3130-06H_SHL	0.00	0.00	0.00	40.001457	-104.703343
COUNTY LINE 3130-06H_BHL	7090.00	9807.16	1225.58	40.028379	-104.698966



## WELL DETAILS: COUNTY LINE 3130-06H

GL = 5045'
RKB = 24' @ 5069.00usft (RIG)
Plan: Design #3 (COUNTY LINE 3130-06H/Wellbore #1)
Created By: Clinton Eshelman
Date: 6/02/2020

# HP

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well COUNTY LINE 3130-06H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 24' @ 5069.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 24' @ 5069.00usft (RIG)
<b>Site:</b>	1N-65W-31 COUNTY LINE 3130 PAD	<b>North Reference:</b>	True
<b>Well:</b>	COUNTY LINE 3130-06H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #3		

<b>Project</b>	WATTENBERG FIELD		
<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		

<b>Site</b>	1N-65W-31 COUNTY LINE 3130 PAD			
<b>Site Position:</b>		<b>Northing:</b>	1,244,936.30 usft	<b>Latitude:</b> 40.002996
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,222,683.37 usft	<b>Longitude:</b> -104.705093
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "	

<b>Well</b>	COUNTY LINE 3130-06H			
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b>	1,244,380.12 usft
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b>	3,223,178.61 usft
<b>Position Uncertainty</b>		3.28 usft	<b>Wellhead Elevation:</b>	usft
<b>Grid Convergence:</b>		0.51 °	<b>Ground Level:</b>	5,045.00 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	6/1/2020	7.83	66.47	51,852.97486465

<b>Design</b>	Design #3				
<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	0.04	

<b>Plan Survey Tool Program</b>		<b>Date</b>	6/2/2020		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>	
1	0.00	1,700.00	Design #3 (Wellbore #1)	ISCWSA REV 2 MWD	
				Fixed:v2:standard declination	
2	1,700.00	17,274.04	Design #3 (Wellbore #1)	ISCWSA REV 2 MWD	
				Fixed:v2:standard declination	

# HP

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well COUNTY LINE 3130-06H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 24' @ 5069.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 24' @ 5069.00usft (RIG)
<b>Site:</b>	1N-65W-31 COUNTY LINE 3130 PAD	<b>North Reference:</b>	True
<b>Well:</b>	COUNTY LINE 3130-06H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #3		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (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	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	
780.00	11.60	115.10	776.05	-24.82	52.99	2.00	2.00	0.00	115.10	
6,530.69	11.60	115.10	6,409.28	-515.34	1,100.13	0.00	0.00	0.00	0.00	
7,586.40	90.00	359.34	7,090.00	120.26	1,218.65	9.00	7.43	-10.97	-115.30	
12,429.68	90.00	359.34	7,090.00	4,963.22	1,162.74	0.00	0.00	0.00	0.00	COUNTY LINE 3130-
12,500.42	90.00	0.75	7,090.00	5,033.96	1,162.80	2.00	0.00	2.00	90.00	
17,274.04	90.00	0.75	7,090.00	9,807.16	1,225.58	0.00	0.00	0.00	0.00	COUNTY LINE 3130-

# HP

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well COUNTY LINE 3130-06H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 24' @ 5069.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 24' @ 5069.00usft (RIG)
<b>Site:</b>	1N-65W-31 COUNTY LINE 3130 PAD	<b>North Reference:</b>	True
<b>Well:</b>	COUNTY LINE 3130-06H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #3		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
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
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 200.00ft									
300.00	2.00	115.10	299.98	-0.74	1.58	-0.74	2.00	2.00	0.00
400.00	4.00	115.10	399.84	-2.96	6.32	-2.96	2.00	2.00	0.00
500.00	6.00	115.10	499.45	-6.66	14.21	-6.65	2.00	2.00	0.00
600.00	8.00	115.10	598.70	-11.83	25.25	-11.81	2.00	2.00	0.00
700.00	10.00	115.10	697.47	-18.46	39.41	-18.43	2.00	2.00	0.00
780.00	11.60	115.10	776.05	-24.82	52.99	-24.78	2.00	2.00	0.00
Hold Tangent @ 780.00ft									
800.00	11.60	115.10	795.64	-26.53	56.63	-26.49	0.00	0.00	0.00
900.00	11.60	115.10	893.59	-35.06	74.84	-35.00	0.00	0.00	0.00
1,000.00	11.60	115.10	991.55	-43.59	93.05	-43.52	0.00	0.00	0.00
1,100.00	11.60	115.10	1,089.51	-52.12	111.26	-52.04	0.00	0.00	0.00
1,200.00	11.60	115.10	1,187.47	-60.65	129.46	-60.56	0.00	0.00	0.00
1,300.00	11.60	115.10	1,285.42	-69.18	147.67	-69.07	0.00	0.00	0.00
1,400.00	11.60	115.10	1,383.38	-77.71	165.88	-77.59	0.00	0.00	0.00
1,500.00	11.60	115.10	1,481.34	-86.23	184.09	-86.11	0.00	0.00	0.00
1,600.00	11.60	115.10	1,579.30	-94.76	202.30	-94.62	0.00	0.00	0.00
1,700.00	11.60	115.10	1,677.26	-103.29	220.51	-103.14	0.00	0.00	0.00
1,723.22	11.60	115.10	1,700.00	-105.27	224.74	-105.12	0.00	0.00	0.00
9 5/8"									
1,800.00	11.60	115.10	1,775.21	-111.82	238.72	-111.66	0.00	0.00	0.00
1,900.00	11.60	115.10	1,873.17	-120.35	256.93	-120.17	0.00	0.00	0.00
2,000.00	11.60	115.10	1,971.13	-128.88	275.14	-128.69	0.00	0.00	0.00
2,100.00	11.60	115.10	2,069.09	-137.41	293.35	-137.21	0.00	0.00	0.00
2,200.00	11.60	115.10	2,167.04	-145.94	311.55	-145.73	0.00	0.00	0.00
2,300.00	11.60	115.10	2,265.00	-154.47	329.76	-154.24	0.00	0.00	0.00
2,400.00	11.60	115.10	2,362.96	-163.00	347.97	-162.76	0.00	0.00	0.00
2,500.00	11.60	115.10	2,460.92	-171.53	366.18	-171.28	0.00	0.00	0.00
2,600.00	11.60	115.10	2,558.87	-180.06	384.39	-179.79	0.00	0.00	0.00
2,700.00	11.60	115.10	2,656.83	-188.59	402.60	-188.31	0.00	0.00	0.00
2,800.00	11.60	115.10	2,754.79	-197.12	420.81	-196.83	0.00	0.00	0.00
2,900.00	11.60	115.10	2,852.75	-205.65	439.02	-205.34	0.00	0.00	0.00
3,000.00	11.60	115.10	2,950.70	-214.18	457.23	-213.86	0.00	0.00	0.00
3,100.00	11.60	115.10	3,048.66	-222.71	475.44	-222.38	0.00	0.00	0.00
3,200.00	11.60	115.10	3,146.62	-231.24	493.64	-230.90	0.00	0.00	0.00
3,300.00	11.60	115.10	3,244.58	-239.77	511.85	-239.41	0.00	0.00	0.00
3,400.00	11.60	115.10	3,342.53	-248.30	530.06	-247.93	0.00	0.00	0.00
3,500.00	11.60	115.10	3,440.49	-256.83	548.27	-256.45	0.00	0.00	0.00
3,600.00	11.60	115.10	3,538.45	-265.36	566.48	-264.96	0.00	0.00	0.00
3,700.00	11.60	115.10	3,636.41	-273.89	584.69	-273.48	0.00	0.00	0.00
3,800.00	11.60	115.10	3,734.36	-282.42	602.90	-282.00	0.00	0.00	0.00
3,900.00	11.60	115.10	3,832.32	-290.95	621.11	-290.51	0.00	0.00	0.00
4,000.00	11.60	115.10	3,930.28	-299.48	639.32	-299.03	0.00	0.00	0.00
4,100.00	11.60	115.10	4,028.24	-308.01	657.53	-307.55	0.00	0.00	0.00
4,200.00	11.60	115.10	4,126.19	-316.54	675.73	-316.07	0.00	0.00	0.00
4,300.00	11.60	115.10	4,224.15	-325.07	693.94	-324.58	0.00	0.00	0.00
4,400.00	11.60	115.10	4,322.11	-333.60	712.15	-333.10	0.00	0.00	0.00
4,500.00	11.60	115.10	4,420.07	-342.13	730.36	-341.62	0.00	0.00	0.00
4,600.00	11.60	115.10	4,518.02	-350.66	748.57	-350.13	0.00	0.00	0.00
4,700.00	11.60	115.10	4,615.98	-359.19	766.78	-358.65	0.00	0.00	0.00

# HP

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well COUNTY LINE 3130-06H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 24' @ 5069.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 24' @ 5069.00usft (RIG)
<b>Site:</b>	1N-65W-31 COUNTY LINE 3130 PAD	<b>North Reference:</b>	True
<b>Well:</b>	COUNTY LINE 3130-06H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #3		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,800.00	11.60	115.10	4,713.94	-367.72	784.99	-367.17	0.00	0.00	0.00
4,900.00	11.60	115.10	4,811.90	-376.25	803.20	-375.68	0.00	0.00	0.00
5,000.00	11.60	115.10	4,909.85	-384.77	821.41	-384.20	0.00	0.00	0.00
5,100.00	11.60	115.10	5,007.81	-393.30	839.62	-392.72	0.00	0.00	0.00
5,200.00	11.60	115.10	5,105.77	-401.83	857.82	-401.24	0.00	0.00	0.00
5,300.00	11.60	115.10	5,203.73	-410.36	876.03	-409.75	0.00	0.00	0.00
5,400.00	11.60	115.10	5,301.68	-418.89	894.24	-418.27	0.00	0.00	0.00
5,500.00	11.60	115.10	5,399.64	-427.42	912.45	-426.79	0.00	0.00	0.00
5,600.00	11.60	115.10	5,497.60	-435.95	930.66	-435.30	0.00	0.00	0.00
5,700.00	11.60	115.10	5,595.56	-444.48	948.87	-443.82	0.00	0.00	0.00
5,800.00	11.60	115.10	5,693.51	-453.01	967.08	-452.34	0.00	0.00	0.00
5,900.00	11.60	115.10	5,791.47	-461.54	985.29	-460.85	0.00	0.00	0.00
6,000.00	11.60	115.10	5,889.43	-470.07	1,003.50	-469.37	0.00	0.00	0.00
6,100.00	11.60	115.10	5,987.39	-478.60	1,021.71	-477.89	0.00	0.00	0.00
6,200.00	11.60	115.10	6,085.34	-487.13	1,039.91	-486.41	0.00	0.00	0.00
6,300.00	11.60	115.10	6,183.30	-495.66	1,058.12	-494.92	0.00	0.00	0.00
6,400.00	11.60	115.10	6,281.26	-504.19	1,076.33	-503.44	0.00	0.00	0.00
6,500.00	11.60	115.10	6,379.22	-512.72	1,094.54	-511.96	0.00	0.00	0.00
6,530.69	11.60	115.10	6,409.28	-515.34	1,100.13	-514.57	0.00	0.00	0.00
<b>KOP @ 6530.69ft :: DLS = 9°/100'</b>									
6,600.00	10.54	82.63	6,477.36	-517.48	1,112.74	-516.71	9.00	-1.52	-46.84
6,700.00	14.60	44.56	6,575.11	-507.31	1,130.70	-506.52	9.00	4.05	-38.07
6,800.00	21.80	26.87	6,670.11	-481.72	1,147.97	-480.92	9.00	7.20	-17.69
6,900.00	29.95	18.05	6,760.04	-441.34	1,164.13	-440.53	9.00	8.16	-8.82
7,000.00	38.46	12.80	6,842.69	-387.16	1,178.78	-386.34	9.00	8.51	-5.25
7,100.00	47.13	9.22	6,916.00	-320.52	1,191.56	-319.69	9.00	8.67	-3.58
7,200.00	55.88	6.53	6,978.19	-243.06	1,202.17	-242.23	9.00	8.75	-2.69
7,300.00	64.68	4.36	7,027.71	-156.69	1,210.33	-155.85	9.00	8.80	-2.18
7,400.00	73.51	2.48	7,063.36	-63.53	1,215.84	-62.69	9.00	8.83	-1.88
7,500.00	82.35	0.76	7,084.24	34.12	1,218.58	34.97	9.00	8.84	-1.71
7,586.40	90.00	359.34	7,090.00	120.26	1,218.65	121.11	9.00	8.85	-1.65
<b>End Build @ 7586.40ft</b>									
7,600.00	90.00	359.34	7,090.00	133.86	1,218.49	134.71	0.00	0.00	0.00
7,700.00	90.00	359.34	7,090.00	233.85	1,217.33	234.70	0.00	0.00	0.00
7,800.00	90.00	359.34	7,090.00	333.84	1,216.18	334.69	0.00	0.00	0.00
7,900.00	90.00	359.34	7,090.00	433.84	1,215.03	434.69	0.00	0.00	0.00
8,000.00	90.00	359.34	7,090.00	533.83	1,213.87	534.68	0.00	0.00	0.00
8,100.00	90.00	359.34	7,090.00	633.82	1,212.72	634.67	0.00	0.00	0.00
8,200.00	90.00	359.34	7,090.00	733.82	1,211.56	734.66	0.00	0.00	0.00
8,300.00	90.00	359.34	7,090.00	833.81	1,210.41	834.66	0.00	0.00	0.00
8,400.00	90.00	359.34	7,090.00	933.80	1,209.26	934.65	0.00	0.00	0.00
8,500.00	90.00	359.34	7,090.00	1,033.80	1,208.10	1,034.64	0.00	0.00	0.00
8,600.00	90.00	359.34	7,090.00	1,133.79	1,206.95	1,134.63	0.00	0.00	0.00
8,700.00	90.00	359.34	7,090.00	1,233.78	1,205.79	1,234.63	0.00	0.00	0.00
8,800.00	90.00	359.34	7,090.00	1,333.78	1,204.64	1,334.62	0.00	0.00	0.00
8,900.00	90.00	359.34	7,090.00	1,433.77	1,203.48	1,434.61	0.00	0.00	0.00
9,000.00	90.00	359.34	7,090.00	1,533.76	1,202.33	1,534.60	0.00	0.00	0.00
9,100.00	90.00	359.34	7,090.00	1,633.76	1,201.18	1,634.60	0.00	0.00	0.00
9,200.00	90.00	359.34	7,090.00	1,733.75	1,200.02	1,734.59	0.00	0.00	0.00
9,300.00	90.00	359.34	7,090.00	1,833.74	1,198.87	1,834.58	0.00	0.00	0.00
9,400.00	90.00	359.34	7,090.00	1,933.74	1,197.71	1,934.57	0.00	0.00	0.00
9,500.00	90.00	359.34	7,090.00	2,033.73	1,196.56	2,034.57	0.00	0.00	0.00
9,600.00	90.00	359.34	7,090.00	2,133.72	1,195.40	2,134.56	0.00	0.00	0.00
9,700.00	90.00	359.34	7,090.00	2,233.72	1,194.25	2,234.55	0.00	0.00	0.00

# HP

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well COUNTY LINE 3130-06H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 24' @ 5069.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 24' @ 5069.00usft (RIG)
<b>Site:</b>	1N-65W-31 COUNTY LINE 3130 PAD	<b>North Reference:</b>	True
<b>Well:</b>	COUNTY LINE 3130-06H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #3		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,800.00	90.00	359.34	7,090.00	2,333.71	1,193.10	2,334.54	0.00	0.00	0.00
9,900.00	90.00	359.34	7,090.00	2,433.70	1,191.94	2,434.54	0.00	0.00	0.00
10,000.00	90.00	359.34	7,090.00	2,533.70	1,190.79	2,534.53	0.00	0.00	0.00
10,100.00	90.00	359.34	7,090.00	2,633.69	1,189.63	2,634.52	0.00	0.00	0.00
10,200.00	90.00	359.34	7,090.00	2,733.68	1,188.48	2,734.51	0.00	0.00	0.00
10,300.00	90.00	359.34	7,090.00	2,833.68	1,187.33	2,834.51	0.00	0.00	0.00
10,400.00	90.00	359.34	7,090.00	2,933.67	1,186.17	2,934.50	0.00	0.00	0.00
10,500.00	90.00	359.34	7,090.00	3,033.66	1,185.02	3,034.49	0.00	0.00	0.00
10,600.00	90.00	359.34	7,090.00	3,133.66	1,183.86	3,134.48	0.00	0.00	0.00
10,700.00	90.00	359.34	7,090.00	3,233.65	1,182.71	3,234.48	0.00	0.00	0.00
10,800.00	90.00	359.34	7,090.00	3,333.64	1,181.55	3,334.47	0.00	0.00	0.00
10,900.00	90.00	359.34	7,090.00	3,433.64	1,180.40	3,434.46	0.00	0.00	0.00
11,000.00	90.00	359.34	7,090.00	3,533.63	1,179.25	3,534.45	0.00	0.00	0.00
11,100.00	90.00	359.34	7,090.00	3,633.62	1,178.09	3,634.45	0.00	0.00	0.00
11,200.00	90.00	359.34	7,090.00	3,733.62	1,176.94	3,734.44	0.00	0.00	0.00
11,300.00	90.00	359.34	7,090.00	3,833.61	1,175.78	3,834.43	0.00	0.00	0.00
11,400.00	90.00	359.34	7,090.00	3,933.60	1,174.63	3,934.42	0.00	0.00	0.00
11,500.00	90.00	359.34	7,090.00	4,033.60	1,173.47	4,034.42	0.00	0.00	0.00
11,600.00	90.00	359.34	7,090.00	4,133.59	1,172.32	4,134.41	0.00	0.00	0.00
11,700.00	90.00	359.34	7,090.00	4,233.58	1,171.17	4,234.40	0.00	0.00	0.00
11,800.00	90.00	359.34	7,090.00	4,333.58	1,170.01	4,334.39	0.00	0.00	0.00
11,900.00	90.00	359.34	7,090.00	4,433.57	1,168.86	4,434.39	0.00	0.00	0.00
12,000.00	90.00	359.34	7,090.00	4,533.56	1,167.70	4,534.38	0.00	0.00	0.00
12,100.00	90.00	359.34	7,090.00	4,633.56	1,166.55	4,634.37	0.00	0.00	0.00
12,200.00	90.00	359.34	7,090.00	4,733.55	1,165.40	4,734.36	0.00	0.00	0.00
12,300.00	90.00	359.34	7,090.00	4,833.54	1,164.24	4,834.36	0.00	0.00	0.00
12,400.00	90.00	359.34	7,090.00	4,933.54	1,163.09	4,934.35	0.00	0.00	0.00
12,429.68	90.00	359.34	7,090.00	4,963.22	1,162.74	4,964.03	0.00	0.00	0.00
Begin Turn to BHL @ 12429.68ft									
12,500.00	90.00	0.75	7,090.00	5,033.53	1,162.80	5,034.34	2.00	0.00	2.00
12,500.42	90.00	0.75	7,090.00	5,033.96	1,162.80	5,034.77	2.00	0.00	2.00
End Turn @ 12500.42ft									
12,600.00	90.00	0.75	7,090.00	5,133.53	1,164.11	5,134.34	0.00	0.00	0.00
12,700.00	90.00	0.75	7,090.00	5,233.52	1,165.43	5,234.33	0.00	0.00	0.00
12,800.00	90.00	0.75	7,090.00	5,333.51	1,166.74	5,334.32	0.00	0.00	0.00
12,900.00	90.00	0.75	7,090.00	5,433.50	1,168.06	5,434.31	0.00	0.00	0.00
13,000.00	90.00	0.75	7,090.00	5,533.49	1,169.37	5,534.31	0.00	0.00	0.00
13,100.00	90.00	0.75	7,090.00	5,633.48	1,170.69	5,634.30	0.00	0.00	0.00
13,200.00	90.00	0.75	7,090.00	5,733.47	1,172.00	5,734.29	0.00	0.00	0.00
13,300.00	90.00	0.75	7,090.00	5,833.47	1,173.32	5,834.28	0.00	0.00	0.00
13,400.00	90.00	0.75	7,090.00	5,933.46	1,174.63	5,934.28	0.00	0.00	0.00
13,500.00	90.00	0.75	7,090.00	6,033.45	1,175.95	6,034.27	0.00	0.00	0.00
13,600.00	90.00	0.75	7,090.00	6,133.44	1,177.26	6,134.26	0.00	0.00	0.00
13,700.00	90.00	0.75	7,090.00	6,233.43	1,178.58	6,234.25	0.00	0.00	0.00
13,800.00	90.00	0.75	7,090.00	6,333.42	1,179.89	6,334.24	0.00	0.00	0.00
13,900.00	90.00	0.75	7,090.00	6,433.41	1,181.21	6,434.24	0.00	0.00	0.00
14,000.00	90.00	0.75	7,090.00	6,533.40	1,182.52	6,534.23	0.00	0.00	0.00
14,100.00	90.00	0.75	7,090.00	6,633.40	1,183.84	6,634.22	0.00	0.00	0.00
14,200.00	90.00	0.75	7,090.00	6,733.39	1,185.15	6,734.21	0.00	0.00	0.00
14,300.00	90.00	0.75	7,090.00	6,833.38	1,186.47	6,834.21	0.00	0.00	0.00
14,400.00	90.00	0.75	7,090.00	6,933.37	1,187.78	6,934.20	0.00	0.00	0.00
14,500.00	90.00	0.75	7,090.00	7,033.36	1,189.10	7,034.19	0.00	0.00	0.00
14,600.00	90.00	0.75	7,090.00	7,133.35	1,190.41	7,134.18	0.00	0.00	0.00
14,700.00	90.00	0.75	7,090.00	7,233.34	1,191.73	7,234.17	0.00	0.00	0.00

# HP

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well COUNTY LINE 3130-06H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 24' @ 5069.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 24' @ 5069.00usft (RIG)
<b>Site:</b>	1N-65W-31 COUNTY LINE 3130 PAD	<b>North Reference:</b>	True
<b>Well:</b>	COUNTY LINE 3130-06H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #3		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
14,800.00	90.00	0.75	7,090.00	7,333.34	1,193.04	7,334.17	0.00	0.00	0.00	
14,900.00	90.00	0.75	7,090.00	7,433.33	1,194.36	7,434.16	0.00	0.00	0.00	
15,000.00	90.00	0.75	7,090.00	7,533.32	1,195.67	7,534.15	0.00	0.00	0.00	
15,100.00	90.00	0.75	7,090.00	7,633.31	1,196.99	7,634.14	0.00	0.00	0.00	
15,200.00	90.00	0.75	7,090.00	7,733.30	1,198.31	7,734.14	0.00	0.00	0.00	
15,300.00	90.00	0.75	7,090.00	7,833.29	1,199.62	7,834.13	0.00	0.00	0.00	
15,400.00	90.00	0.75	7,090.00	7,933.28	1,200.94	7,934.12	0.00	0.00	0.00	
15,500.00	90.00	0.75	7,090.00	8,033.27	1,202.25	8,034.11	0.00	0.00	0.00	
15,600.00	90.00	0.75	7,090.00	8,133.27	1,203.57	8,134.10	0.00	0.00	0.00	
15,700.00	90.00	0.75	7,090.00	8,233.26	1,204.88	8,234.10	0.00	0.00	0.00	
15,800.00	90.00	0.75	7,090.00	8,333.25	1,206.20	8,334.09	0.00	0.00	0.00	
15,900.00	90.00	0.75	7,090.00	8,433.24	1,207.51	8,434.08	0.00	0.00	0.00	
16,000.00	90.00	0.75	7,090.00	8,533.23	1,208.83	8,534.07	0.00	0.00	0.00	
16,100.00	90.00	0.75	7,090.00	8,633.22	1,210.14	8,634.07	0.00	0.00	0.00	
16,200.00	90.00	0.75	7,090.00	8,733.21	1,211.46	8,734.06	0.00	0.00	0.00	
16,300.00	90.00	0.75	7,090.00	8,833.21	1,212.77	8,834.05	0.00	0.00	0.00	
16,400.00	90.00	0.75	7,090.00	8,933.20	1,214.09	8,934.04	0.00	0.00	0.00	
16,500.00	90.00	0.75	7,090.00	9,033.19	1,215.40	9,034.03	0.00	0.00	0.00	
16,600.00	90.00	0.75	7,090.00	9,133.18	1,216.72	9,134.03	0.00	0.00	0.00	
16,700.00	90.00	0.75	7,090.00	9,233.17	1,218.03	9,234.02	0.00	0.00	0.00	
16,800.00	90.00	0.75	7,090.00	9,333.16	1,219.35	9,334.01	0.00	0.00	0.00	
16,900.00	90.00	0.75	7,090.00	9,433.15	1,220.66	9,434.00	0.00	0.00	0.00	
17,000.00	90.00	0.75	7,090.00	9,533.15	1,221.98	9,534.00	0.00	0.00	0.00	
17,100.00	90.00	0.75	7,090.00	9,633.14	1,223.29	9,633.99	0.00	0.00	0.00	
17,200.00	90.00	0.75	7,090.00	9,733.13	1,224.61	9,733.98	0.00	0.00	0.00	
17,274.04	90.00	0.75	7,090.00	9,807.16	1,225.58	9,808.01	0.00	0.00	0.00	
TD Well @ 17274.04ft										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (")	Hole Diameter (")
1,723.22	1,700.00	9 5/8"		9-5/8	13-1/2

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
200.00	200.00	0.00	0.00	Begin Nudge @ 200.00ft	
780.00	776.05	-24.82	52.99	Hold Tangent @ 780.00ft	
6,530.69	6,409.28	-515.34	1,100.13	KOP @ 6530.69ft :: DLS = 9°/100'	
7,586.40	7,090.00	120.26	1,218.65	End Build @ 7586.40ft	
12,429.68	7,090.00	4,963.22	1,162.74	Begin Turn to BHL @ 12429.68ft	
12,500.42	7,090.00	5,033.96	1,162.80	End Turn @ 12500.42ft	
17,274.04	7,090.00	9,807.16	1,225.58	TD Well @ 17274.04ft	