

# **VERDAD RESOURCES**

**WATTENBERG FIELD  
1N-65W-31 COUNTY LINE 3229 PAD  
COUNTY LINE 3229-21H**

**Plan A**

**Plan: Design #2**

## **Standard Planning Report**

**24 May, 2022**

Project: WATTENBERG FIELD  
Site: 1N-65W-31 COUNTY LINE 3229 PAD  
Well: COUNTY LINE 3229-21H  
Wellbore: Plan A  
Design: Design #2

# VERDAD RESOURCES

## CASING DETAILS

TVD	MD	Name	Size
2275.00	2440.38	9 5/8"	9-5/8

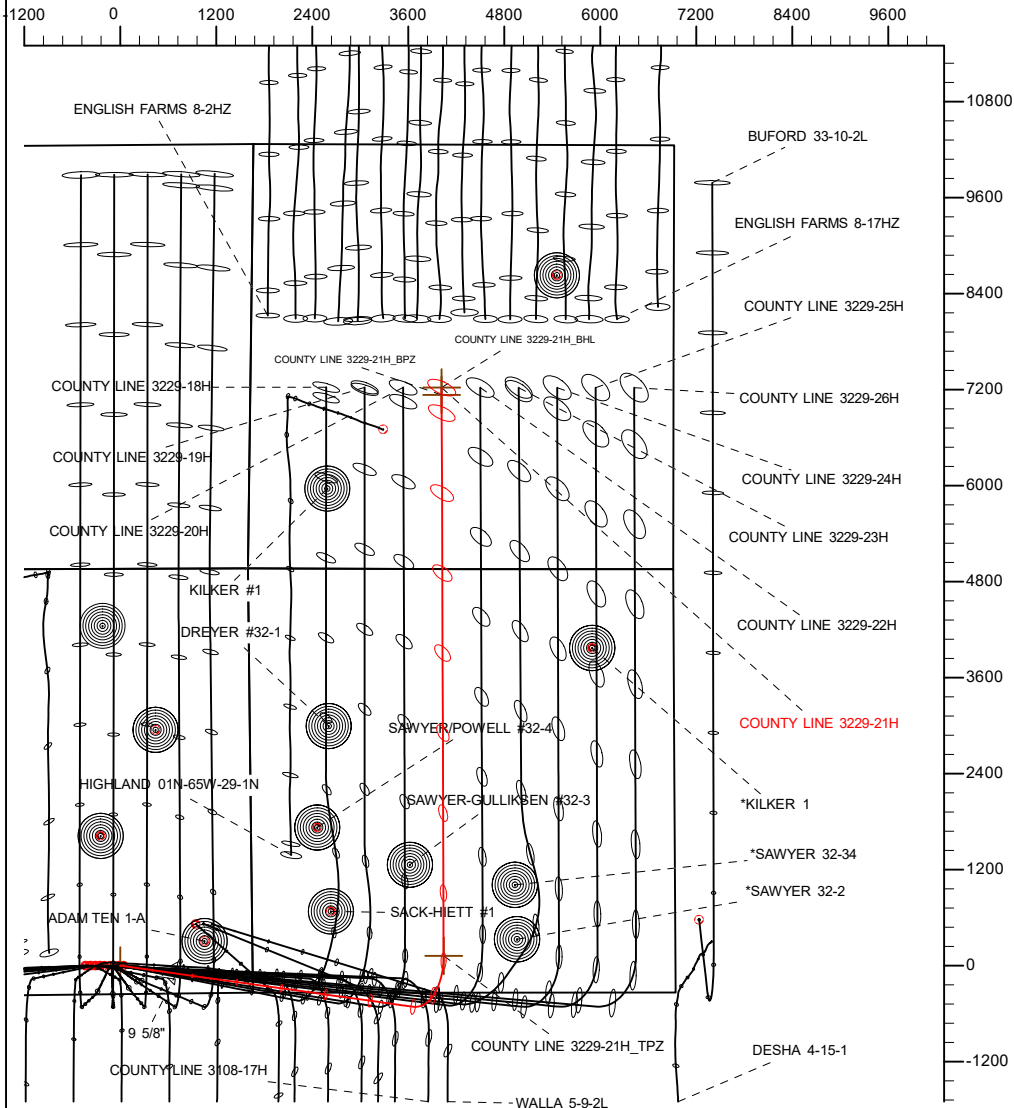
## SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
350.20	0.00	0.00	350.20	0.00	0.00	0.00	0.00	0.00	
2058.70	34.17	97.98	1959.21	-68.66	489.75	2.00	97.98	-70.36	
7763.66	34.17	97.98	6679.35	-513.48	3662.91	0.00	0.00	-526.27	
8814.60	90.00	359.80	7250.00	122.44	4044.11	9.00	-96.78	108.32	
15918.44	90.00	359.80	7250.00	7226.24	4019.15	0.00	0.00	7212.16	COUNTY LINE 3229-21H_BHL

## WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
COUNTY LINE 3229-21H_SHL	0.00	0.00	0.00	40.001457	-104.703182
COUNTY LINE 3229-21H_TPZ	7250.00	122.44	4044.11	40.001793	-104.688746
COUNTY LINE 3229-21H_BPZ	7250.00	7136.24	4019.46	40.021046	-104.688830
COUNTY LINE 3229-21H_BHL	7250.00	7226.24	4019.15	40.021294	-104.688831

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



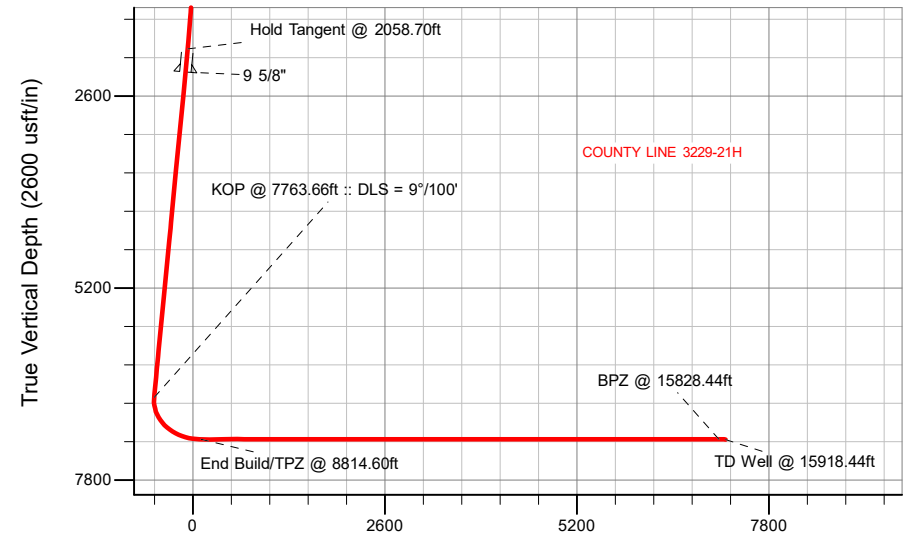
SHL  
340' FSL  
1655' FEL

TPZ  
460' FSL  
2391' FWL

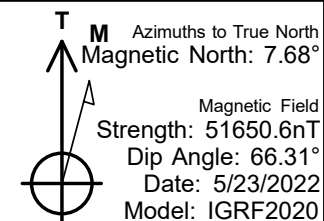
BPZ  
2180' FSL  
2393' FWL

BHL  
2270' FSL  
2392' FWL

South(-)/North(+) (2400 usft/in)



Vertical Section at 359.80° (2600 usft/in)



## WELL DETAILS: COUNTY LINE 3229-21H

GL = 5046'  
RKB = 24' @ 5070.00usft (RIG)

Plan: Design #2 (COUNTY LINE 3229-21H/Plan A)

Date: 5/24/2022

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well COUNTY LINE 3229-21H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 24' @ 5070.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 24' @ 5070.00usft (RIG)
<b>Site:</b>	1N-65W-31 COUNTY LINE 3229 PAD	<b>North Reference:</b>	True
<b>Well:</b>	COUNTY LINE 3229-21H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Design #2		

<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 3229 PAD			
<b>Site Position:</b>		<b>Northing:</b>	1,244,380.12 usft	<b>Latitude:</b> 40.001457
<b>From:</b>	Map	<b>Easting:</b>	3,223,178.62 usft	<b>Longitude:</b> -104.703343
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "	

<b>Well</b>	COUNTY LINE 3229-21H			
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b>	1,244,380.55 usft
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b>	3,223,223.61 usft
<b>Position Uncertainty</b>		3.28 usft	<b>Wellhead Elevation:</b>	usft
<b>Grid Convergence:</b>		0.51 °	<b>Ground Level:</b>	5,046.00 usft

<b>Wellbore</b>	Plan A				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF202013	5/23/2022	7.68	66.31	51,650.60985358

<b>Design</b>	Design #2			
<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	359.80

<b>Plan Survey Tool Program</b>		<b>Date</b>	5/23/2022		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>	
1	0.00	2,275.00	Design #2 (Plan A)	ISCWSA MWD	Fixed:v2:standard declination
2	2,275.00	15,918.44	Design #2 (Plan A)	ISCWSA MWD	Fixed:v2:standard declination

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well COUNTY LINE 3229-21H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 24' @ 5070.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 24' @ 5070.00usft (RIG)
Site:	1N-65W-31 COUNTY LINE 3229 PAD	North Reference:	True
Well:	COUNTY LINE 3229-21H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Design #2		

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	
350.20	0.00	0.00	350.20	0.00	0.00	0.00	0.00	0.00	0.00	
2,058.70	34.17	97.98	1,959.21	-68.66	489.75	2.00	2.00	0.00	97.98	
7,763.66	34.17	97.98	6,679.35	-513.48	3,662.91	0.00	0.00	0.00	0.00	
8,814.60	90.00	359.80	7,250.00	122.44	4,044.11	9.00	5.31	-9.34	-96.78	
15,918.44	90.00	359.80	7,250.00	7,226.24	4,019.15	0.00	0.00	0.00	0.00	COUNTY LINE 3229-

# Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well COUNTY LINE 3229-21H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 24' @ 5070.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 24' @ 5070.00usft (RIG)
<b>Site:</b>	1N-65W-31 COUNTY LINE 3229 PAD	<b>North Reference:</b>	True
<b>Well:</b>	COUNTY LINE 3229-21H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Design #2		

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
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
350.20	0.00	0.00	350.20	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 350.20ft									
400.00	1.00	97.98	400.00	-0.06	0.43	-0.06	2.00	2.00	0.00
500.00	3.00	97.98	499.93	-0.54	3.88	-0.56	2.00	2.00	0.00
600.00	5.00	97.98	599.68	-1.51	10.78	-1.55	2.00	2.00	0.00
700.00	7.00	97.98	699.13	-2.96	21.12	-3.03	2.00	2.00	0.00
800.00	9.00	97.98	798.15	-4.89	34.90	-5.01	2.00	2.00	0.00
900.00	11.00	97.98	896.63	-7.30	52.09	-7.48	2.00	2.00	0.00
1,000.00	13.00	97.98	994.44	-10.19	72.67	-10.44	2.00	2.00	0.00
1,100.00	15.00	97.98	1,091.47	-13.54	96.62	-13.88	2.00	2.00	0.00
1,200.00	17.00	97.98	1,187.59	-17.37	123.91	-17.80	2.00	2.00	0.00
1,300.00	19.00	97.98	1,282.69	-21.66	154.50	-22.20	2.00	2.00	0.00
1,400.00	21.00	97.98	1,376.66	-26.41	188.36	-27.06	2.00	2.00	0.00
1,500.00	23.00	97.98	1,469.38	-31.61	225.45	-32.39	2.00	2.00	0.00
1,600.00	25.00	97.98	1,560.73	-37.25	265.73	-38.18	2.00	2.00	0.00
1,700.00	27.00	97.98	1,650.61	-43.34	309.13	-44.41	2.00	2.00	0.00
1,800.00	29.00	97.98	1,738.90	-49.85	355.61	-51.09	2.00	2.00	0.00
1,900.00	31.00	97.98	1,825.50	-56.79	405.12	-58.21	2.00	2.00	0.00
2,000.00	33.00	97.98	1,910.31	-64.15	457.59	-65.74	2.00	2.00	0.00
2,058.70	34.17	97.98	1,959.21	-68.66	489.75	-70.36	2.00	2.00	0.00
Hold Tangent @ 2058.70ft									
2,100.00	34.17	97.98	1,993.38	-71.88	512.72	-73.66	0.00	0.00	0.00
2,200.00	34.17	97.98	2,076.12	-79.67	568.34	-81.66	0.00	0.00	0.00
2,300.00	34.17	97.98	2,158.86	-87.47	623.96	-89.65	0.00	0.00	0.00
2,400.00	34.17	97.98	2,241.59	-95.27	679.58	-97.64	0.00	0.00	0.00
2,440.38	34.17	97.98	2,275.00	-98.42	702.04	-100.87	0.00	0.00	0.00
9 5/8"									
2,500.00	34.17	97.98	2,324.33	-103.06	735.20	-105.63	0.00	0.00	0.00
2,600.00	34.17	97.98	2,407.07	-110.86	790.82	-113.62	0.00	0.00	0.00
2,700.00	34.17	97.98	2,489.80	-118.66	846.44	-121.61	0.00	0.00	0.00
2,800.00	34.17	97.98	2,572.54	-126.46	902.07	-129.60	0.00	0.00	0.00
2,900.00	34.17	97.98	2,655.28	-134.25	957.69	-137.60	0.00	0.00	0.00
3,000.00	34.17	97.98	2,738.02	-142.05	1,013.31	-145.59	0.00	0.00	0.00
3,100.00	34.17	97.98	2,820.75	-149.85	1,068.93	-153.58	0.00	0.00	0.00
3,200.00	34.17	97.98	2,903.49	-157.64	1,124.55	-161.57	0.00	0.00	0.00
3,300.00	34.17	97.98	2,986.23	-165.44	1,180.17	-169.56	0.00	0.00	0.00
3,400.00	34.17	97.98	3,068.97	-173.24	1,235.79	-177.55	0.00	0.00	0.00
3,500.00	34.17	97.98	3,151.70	-181.04	1,291.41	-185.54	0.00	0.00	0.00
3,600.00	34.17	97.98	3,234.44	-188.83	1,347.03	-193.53	0.00	0.00	0.00
3,700.00	34.17	97.98	3,317.18	-196.63	1,402.66	-201.53	0.00	0.00	0.00
3,800.00	34.17	97.98	3,399.92	-204.43	1,458.28	-209.52	0.00	0.00	0.00
3,900.00	34.17	97.98	3,482.65	-212.23	1,513.90	-217.51	0.00	0.00	0.00
4,000.00	34.17	97.98	3,565.39	-220.02	1,569.52	-225.50	0.00	0.00	0.00
4,100.00	34.17	97.98	3,648.13	-227.82	1,625.14	-233.49	0.00	0.00	0.00
4,200.00	34.17	97.98	3,730.87	-235.62	1,680.76	-241.48	0.00	0.00	0.00
4,300.00	34.17	97.98	3,813.60	-243.41	1,736.38	-249.47	0.00	0.00	0.00
4,400.00	34.17	97.98	3,896.34	-251.21	1,792.00	-257.47	0.00	0.00	0.00
4,500.00	34.17	97.98	3,979.08	-259.01	1,847.63	-265.46	0.00	0.00	0.00
4,600.00	34.17	97.98	4,061.82	-266.81	1,903.25	-273.45	0.00	0.00	0.00

# Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well COUNTY LINE 3229-21H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 24' @ 5070.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 24' @ 5070.00usft (RIG)
<b>Site:</b>	1N-65W-31 COUNTY LINE 3229 PAD	<b>North Reference:</b>	True
<b>Well:</b>	COUNTY LINE 3229-21H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Design #2		

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)	
4,700.00	34.17	97.98	4,144.55	-274.60	1,958.87	-281.44	0.00	0.00	0.00	
4,800.00	34.17	97.98	4,227.29	-282.40	2,014.49	-289.43	0.00	0.00	0.00	
4,900.00	34.17	97.98	4,310.03	-290.20	2,070.11	-297.42	0.00	0.00	0.00	
5,000.00	34.17	97.98	4,392.77	-298.00	2,125.73	-305.41	0.00	0.00	0.00	
5,100.00	34.17	97.98	4,475.50	-305.79	2,181.35	-313.41	0.00	0.00	0.00	
5,200.00	34.17	97.98	4,558.24	-313.59	2,236.97	-321.40	0.00	0.00	0.00	
5,300.00	34.17	97.98	4,640.98	-321.39	2,292.59	-329.39	0.00	0.00	0.00	
5,400.00	34.17	97.98	4,723.72	-329.18	2,348.22	-337.38	0.00	0.00	0.00	
5,500.00	34.17	97.98	4,806.45	-336.98	2,403.84	-345.37	0.00	0.00	0.00	
5,600.00	34.17	97.98	4,889.19	-344.78	2,459.46	-353.36	0.00	0.00	0.00	
5,700.00	34.17	97.98	4,971.93	-352.58	2,515.08	-361.35	0.00	0.00	0.00	
5,800.00	34.17	97.98	5,054.67	-360.37	2,570.70	-369.34	0.00	0.00	0.00	
5,900.00	34.17	97.98	5,137.40	-368.17	2,626.32	-377.34	0.00	0.00	0.00	
6,000.00	34.17	97.98	5,220.14	-375.97	2,681.94	-385.33	0.00	0.00	0.00	
6,100.00	34.17	97.98	5,302.88	-383.77	2,737.56	-393.32	0.00	0.00	0.00	
6,200.00	34.17	97.98	5,385.62	-391.56	2,793.19	-401.31	0.00	0.00	0.00	
6,300.00	34.17	97.98	5,468.35	-399.36	2,848.81	-409.30	0.00	0.00	0.00	
6,400.00	34.17	97.98	5,551.09	-407.16	2,904.43	-417.29	0.00	0.00	0.00	
6,500.00	34.17	97.98	5,633.83	-414.95	2,960.05	-425.28	0.00	0.00	0.00	
6,600.00	34.17	97.98	5,716.57	-422.75	3,015.67	-433.28	0.00	0.00	0.00	
6,700.00	34.17	97.98	5,799.30	-430.55	3,071.29	-441.27	0.00	0.00	0.00	
6,800.00	34.17	97.98	5,882.04	-438.35	3,126.91	-449.26	0.00	0.00	0.00	
6,900.00	34.17	97.98	5,964.78	-446.14	3,182.53	-457.25	0.00	0.00	0.00	
7,000.00	34.17	97.98	6,047.52	-453.94	3,238.15	-465.24	0.00	0.00	0.00	
7,100.00	34.17	97.98	6,130.25	-461.74	3,293.78	-473.23	0.00	0.00	0.00	
7,200.00	34.17	97.98	6,212.99	-469.53	3,349.40	-481.22	0.00	0.00	0.00	
7,300.00	34.17	97.98	6,295.73	-477.33	3,405.02	-489.21	0.00	0.00	0.00	
7,400.00	34.17	97.98	6,378.47	-485.13	3,460.64	-497.21	0.00	0.00	0.00	
7,500.00	34.17	97.98	6,461.20	-492.93	3,516.26	-505.20	0.00	0.00	0.00	
7,600.00	34.17	97.98	6,543.94	-500.72	3,571.88	-513.19	0.00	0.00	0.00	
7,700.00	34.17	97.98	6,626.68	-508.52	3,627.50	-521.18	0.00	0.00	0.00	
7,763.66	34.17	97.98	6,679.35	-513.48	3,662.91	-526.27	0.00	0.00	0.00	
KOP @ 7763.66ft :: DLS = 9°/100'										
7,800.00	33.92	92.15	6,709.47	-515.28	3,683.16	-528.14	9.00	-0.69	-16.03	
7,850.00	34.03	84.10	6,750.95	-514.37	3,711.03	-527.32	9.00	0.22	-16.11	
7,900.00	34.66	76.20	6,792.26	-509.54	3,738.76	-522.58	9.00	1.25	-15.81	
7,950.00	35.77	68.63	6,833.13	-500.81	3,766.19	-513.96	9.00	2.23	-15.13	
8,000.00	37.34	61.54	6,873.31	-488.26	3,793.15	-501.49	9.00	3.13	-14.18	
8,050.00	39.29	55.00	6,912.55	-471.94	3,819.46	-485.27	9.00	3.91	-13.08	
8,100.00	41.58	49.02	6,950.62	-451.97	3,844.97	-465.39	9.00	4.58	-11.95	
8,150.00	44.15	43.59	6,987.28	-428.47	3,869.52	-441.97	9.00	5.14	-10.86	
8,200.00	46.96	38.66	7,022.29	-401.57	3,892.95	-415.16	9.00	5.61	-9.86	
8,250.00	49.96	34.18	7,055.46	-371.46	3,915.13	-385.12	9.00	6.00	-8.97	
8,300.00	53.11	30.08	7,086.56	-338.30	3,935.91	-352.04	9.00	6.31	-8.20	
8,350.00	56.40	26.31	7,115.42	-302.31	3,955.18	-316.12	9.00	6.57	-7.53	
8,400.00	59.79	22.83	7,141.85	-263.72	3,972.80	-277.58	9.00	6.78	-6.97	
8,450.00	63.27	19.58	7,165.68	-222.75	3,988.67	-236.67	9.00	6.95	-6.50	
8,500.00	66.82	16.52	7,186.78	-179.65	4,002.70	-193.62	9.00	7.09	-6.11	
8,550.00	70.42	13.63	7,205.01	-134.71	4,014.79	-148.72	9.00	7.21	-5.79	
8,600.00	74.07	10.86	7,220.26	-88.18	4,024.87	-102.23	9.00	7.29	-5.54	
8,650.00	77.75	8.19	7,232.43	-40.37	4,032.88	-54.45	9.00	7.36	-5.34	
8,700.00	81.45	5.59	7,241.46	8.44	4,038.77	-5.65	9.00	7.41	-5.19	
8,750.00	85.18	3.05	7,247.28	57.95	4,042.51	43.84	9.00	7.45	-5.09	
8,800.00	88.91	0.53	7,249.86	107.85	4,044.07	93.73	9.00	7.47	-5.03	

# Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well COUNTY LINE 3229-21H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 24' @ 5070.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 24' @ 5070.00usft (RIG)
<b>Site:</b>	1N-65W-31 COUNTY LINE 3229 PAD	<b>North Reference:</b>	True
<b>Well:</b>	COUNTY LINE 3229-21H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Design #2		

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)	
8,814.60	90.00	359.80	7,250.00	122.44	4,044.11	108.32	9.00	7.47	-5.02	
End Build/TPZ @ 8814.60ft										
8,900.00	90.00	359.80	7,250.00	207.84	4,043.81	193.73	0.00	0.00	0.00	
9,000.00	90.00	359.80	7,250.00	307.84	4,043.46	293.73	0.00	0.00	0.00	
9,100.00	90.00	359.80	7,250.00	407.84	4,043.11	393.73	0.00	0.00	0.00	
9,200.00	90.00	359.80	7,250.00	507.84	4,042.76	493.73	0.00	0.00	0.00	
9,300.00	90.00	359.80	7,250.00	607.84	4,042.41	593.73	0.00	0.00	0.00	
9,400.00	90.00	359.80	7,250.00	707.84	4,042.05	693.73	0.00	0.00	0.00	
9,500.00	90.00	359.80	7,250.00	807.84	4,041.70	793.73	0.00	0.00	0.00	
9,600.00	90.00	359.80	7,250.00	907.84	4,041.35	893.73	0.00	0.00	0.00	
9,700.00	90.00	359.80	7,250.00	1,007.84	4,041.00	993.73	0.00	0.00	0.00	
9,800.00	90.00	359.80	7,250.00	1,107.84	4,040.65	1,093.73	0.00	0.00	0.00	
9,900.00	90.00	359.80	7,250.00	1,207.84	4,040.30	1,193.73	0.00	0.00	0.00	
10,000.00	90.00	359.80	7,250.00	1,307.84	4,039.95	1,293.73	0.00	0.00	0.00	
10,100.00	90.00	359.80	7,250.00	1,407.84	4,039.59	1,393.73	0.00	0.00	0.00	
10,200.00	90.00	359.80	7,250.00	1,507.84	4,039.24	1,493.73	0.00	0.00	0.00	
10,300.00	90.00	359.80	7,250.00	1,607.84	4,038.89	1,593.73	0.00	0.00	0.00	
10,400.00	90.00	359.80	7,250.00	1,707.83	4,038.54	1,693.73	0.00	0.00	0.00	
10,500.00	90.00	359.80	7,250.00	1,807.83	4,038.19	1,793.73	0.00	0.00	0.00	
10,600.00	90.00	359.80	7,250.00	1,907.83	4,037.84	1,893.73	0.00	0.00	0.00	
10,700.00	90.00	359.80	7,250.00	2,007.83	4,037.48	1,993.73	0.00	0.00	0.00	
10,800.00	90.00	359.80	7,250.00	2,107.83	4,037.13	2,093.73	0.00	0.00	0.00	
10,900.00	90.00	359.80	7,250.00	2,207.83	4,036.78	2,193.73	0.00	0.00	0.00	
11,000.00	90.00	359.80	7,250.00	2,307.83	4,036.43	2,293.73	0.00	0.00	0.00	
11,100.00	90.00	359.80	7,250.00	2,407.83	4,036.08	2,393.73	0.00	0.00	0.00	
11,200.00	90.00	359.80	7,250.00	2,507.83	4,035.73	2,493.73	0.00	0.00	0.00	
11,300.00	90.00	359.80	7,250.00	2,607.83	4,035.38	2,593.73	0.00	0.00	0.00	
11,400.00	90.00	359.80	7,250.00	2,707.83	4,035.02	2,693.73	0.00	0.00	0.00	
11,500.00	90.00	359.80	7,250.00	2,807.83	4,034.67	2,793.73	0.00	0.00	0.00	
11,600.00	90.00	359.80	7,250.00	2,907.83	4,034.32	2,893.73	0.00	0.00	0.00	
11,700.00	90.00	359.80	7,250.00	3,007.83	4,033.97	2,993.73	0.00	0.00	0.00	
11,800.00	90.00	359.80	7,250.00	3,107.83	4,033.62	3,093.73	0.00	0.00	0.00	
11,900.00	90.00	359.80	7,250.00	3,207.83	4,033.27	3,193.73	0.00	0.00	0.00	
12,000.00	90.00	359.80	7,250.00	3,307.83	4,032.92	3,293.73	0.00	0.00	0.00	
12,100.00	90.00	359.80	7,250.00	3,407.82	4,032.56	3,393.73	0.00	0.00	0.00	
12,200.00	90.00	359.80	7,250.00	3,507.82	4,032.21	3,493.73	0.00	0.00	0.00	
12,300.00	90.00	359.80	7,250.00	3,607.82	4,031.86	3,593.73	0.00	0.00	0.00	
12,400.00	90.00	359.80	7,250.00	3,707.82	4,031.51	3,693.73	0.00	0.00	0.00	
12,500.00	90.00	359.80	7,250.00	3,807.82	4,031.16	3,793.73	0.00	0.00	0.00	
12,600.00	90.00	359.80	7,250.00	3,907.82	4,030.81	3,893.73	0.00	0.00	0.00	
12,700.00	90.00	359.80	7,250.00	4,007.82	4,030.46	3,993.73	0.00	0.00	0.00	
12,800.00	90.00	359.80	7,250.00	4,107.82	4,030.10	4,093.73	0.00	0.00	0.00	
12,900.00	90.00	359.80	7,250.00	4,207.82	4,029.75	4,193.73	0.00	0.00	0.00	
13,000.00	90.00	359.80	7,250.00	4,307.82	4,029.40	4,293.73	0.00	0.00	0.00	
13,100.00	90.00	359.80	7,250.00	4,407.82	4,029.05	4,393.73	0.00	0.00	0.00	
13,200.00	90.00	359.80	7,250.00	4,507.82	4,028.70	4,493.73	0.00	0.00	0.00	
13,300.00	90.00	359.80	7,250.00	4,607.82	4,028.35	4,593.73	0.00	0.00	0.00	
13,400.00	90.00	359.80	7,250.00	4,707.82	4,028.00	4,693.73	0.00	0.00	0.00	
13,500.00	90.00	359.80	7,250.00	4,807.82	4,027.64	4,793.73	0.00	0.00	0.00	
13,600.00	90.00	359.80	7,250.00	4,907.82	4,027.29	4,893.73	0.00	0.00	0.00	
13,700.00	90.00	359.80	7,250.00	5,007.81	4,026.94	4,993.73	0.00	0.00	0.00	
13,800.00	90.00	359.80	7,250.00	5,107.81	4,026.59	5,093.73	0.00	0.00	0.00	
13,900.00	90.00	359.80	7,250.00	5,207.81	4,026.24	5,193.73	0.00	0.00	0.00	

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well COUNTY LINE 3229-21H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 24' @ 5070.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 24' @ 5070.00usft (RIG)
<b>Site:</b>	1N-65W-31 COUNTY LINE 3229 PAD	<b>North Reference:</b>	True
<b>Well:</b>	COUNTY LINE 3229-21H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Design #2		

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)
14,000.00	90.00	359.80	7,250.00	5,307.81	4,025.89	5,293.73	0.00	0.00	0.00
14,100.00	90.00	359.80	7,250.00	5,407.81	4,025.54	5,393.73	0.00	0.00	0.00
14,200.00	90.00	359.80	7,250.00	5,507.81	4,025.18	5,493.73	0.00	0.00	0.00
14,300.00	90.00	359.80	7,250.00	5,607.81	4,024.83	5,593.73	0.00	0.00	0.00
14,400.00	90.00	359.80	7,250.00	5,707.81	4,024.48	5,693.73	0.00	0.00	0.00
14,500.00	90.00	359.80	7,250.00	5,807.81	4,024.13	5,793.73	0.00	0.00	0.00
14,600.00	90.00	359.80	7,250.00	5,907.81	4,023.78	5,893.73	0.00	0.00	0.00
14,700.00	90.00	359.80	7,250.00	6,007.81	4,023.43	5,993.73	0.00	0.00	0.00
14,800.00	90.00	359.80	7,250.00	6,107.81	4,023.08	6,093.73	0.00	0.00	0.00
14,900.00	90.00	359.80	7,250.00	6,207.81	4,022.72	6,193.73	0.00	0.00	0.00
15,000.00	90.00	359.80	7,250.00	6,307.81	4,022.37	6,293.73	0.00	0.00	0.00
15,100.00	90.00	359.80	7,250.00	6,407.81	4,022.02	6,393.73	0.00	0.00	0.00
15,200.00	90.00	359.80	7,250.00	6,507.81	4,021.67	6,493.73	0.00	0.00	0.00
15,300.00	90.00	359.80	7,250.00	6,607.80	4,021.32	6,593.73	0.00	0.00	0.00
15,400.00	90.00	359.80	7,250.00	6,707.80	4,020.97	6,693.73	0.00	0.00	0.00
15,500.00	90.00	359.80	7,250.00	6,807.80	4,020.62	6,793.73	0.00	0.00	0.00
15,600.00	90.00	359.80	7,250.00	6,907.80	4,020.26	6,893.73	0.00	0.00	0.00
15,700.00	90.00	359.80	7,250.00	7,007.80	4,019.91	6,993.73	0.00	0.00	0.00
15,800.00	90.00	359.80	7,250.00	7,107.80	4,019.56	7,093.73	0.00	0.00	0.00
15,828.44	90.00	359.80	7,250.00	7,136.24	4,019.46	7,122.17	0.00	0.00	0.00
BPZ @ 15828.44ft									
15,900.00	90.00	359.80	7,250.00	7,207.80	4,019.21	7,193.73	0.00	0.00	0.00
15,918.44	90.00	359.80	7,250.00	7,226.24	4,019.15	7,212.16	0.00	0.00	0.00
TD Well @ 15918.44ft									

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
2,440.38	2,275.00	9 5/8"	9-5/8	13-1/2

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
350.20	350.20	0.00	0.00	Begin Nudge @ 350.20ft
2,058.70	1,959.21	-68.66	489.75	Hold Tangent @ 2058.70ft
7,763.66	6,679.35	-513.48	3,662.91	KOP @ 7763.66ft :: DLS = 9°/100'
8,814.60	7,250.00	122.44	4,044.11	End Build/TPZ @ 8814.60ft
15,828.44	7,250.00	7,136.24	4,019.46	BPZ @ 15828.44ft
15,918.44	7,250.00	7,226.24	4,019.15	TD Well @ 15918.44ft