

# **VERDAD RESOURCES**

**WATTENBERG FIELD**

**1N-65W-31 COUNTY LINE 3229 PAD**

**COUNTY LINE 3229-24H**

**Plan A**

**Plan: Design #2**

## **Standard Planning Report**

**24 May, 2022**

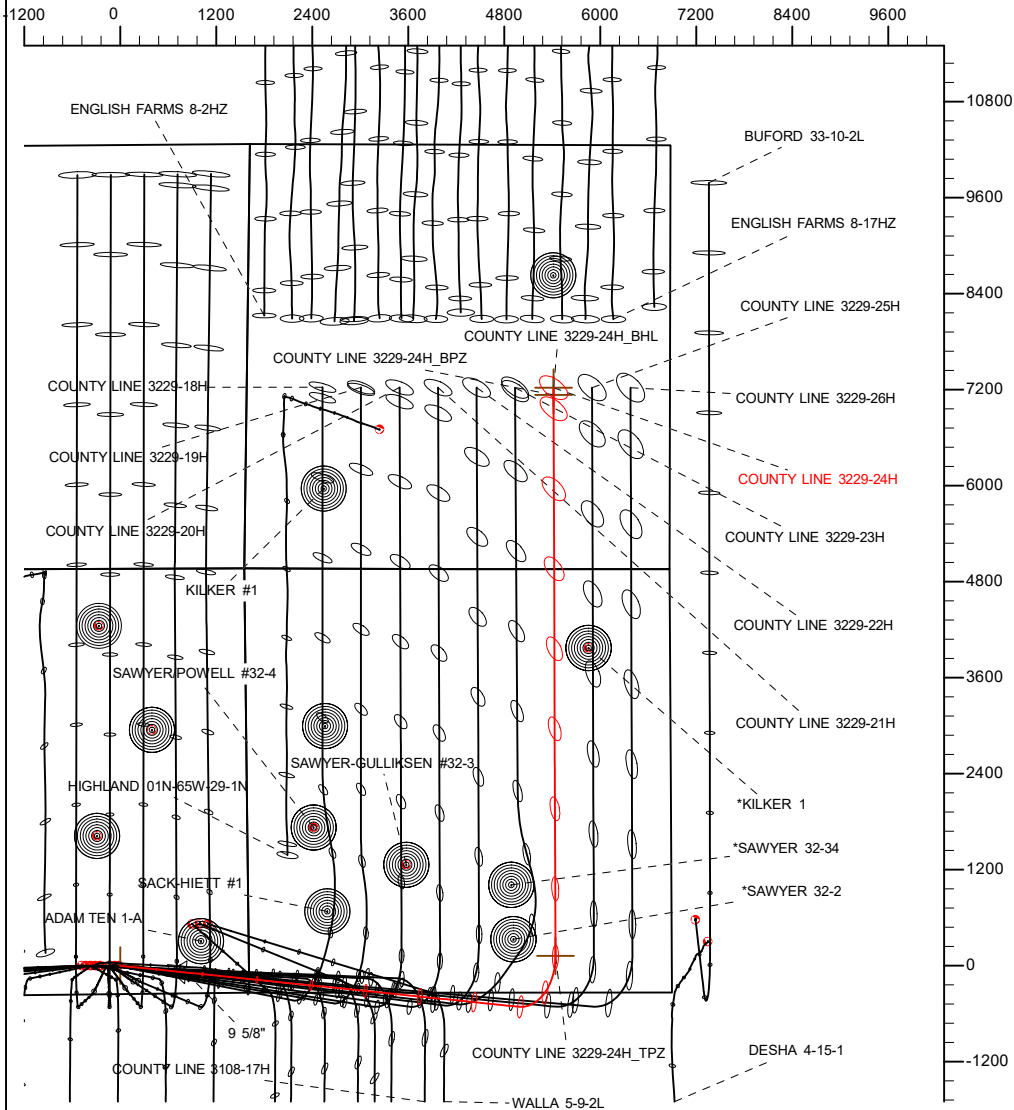
Project: WATTENBERG FIELD  
 Site: 1N-65W-31 COUNTY LINE 3229 PAD  
 Well: COUNTY LINE 3229-24H  
 Wellbore: Plan A  
 Design: Design #2

# VERDAD RESOURCES

## CASING DETAILS

TVD	MD	Name	Size
2275.00	2493.89	9 5/8"	9-5/8

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



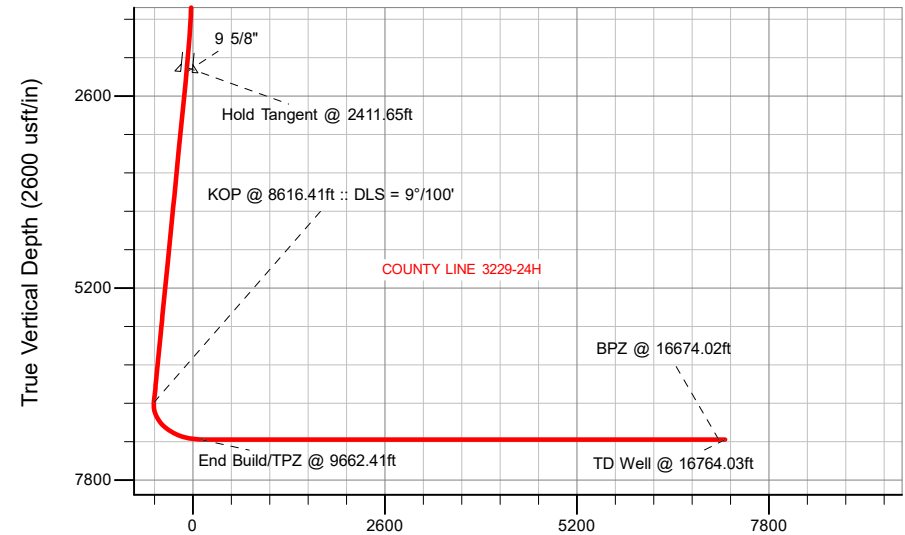
<b>SHL</b>	<b>TPZ</b>	<b>BPZ</b>	<b>BHL</b>
340' FSL	460' FSL	2180' FSL	2270' FSL
1610' FEL	1454' FEL	1455' FEL	1455' FEL

## SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSeet	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
259.65	0.00	0.00	259.65	0.00	0.00	0.00	0.00	0.00	
2411.65	43.04	95.88	2214.89	-78.98	766.92	2.00	95.88	-81.53	
8616.41	43.04	95.88	6749.81	-512.82	4979.45	0.00	0.00	-529.33	
9662.41	90.00	359.81	7250.00	123.70	5441.78	9.00	-94.45	105.65	
16764.03	90.00	359.81	7250.00	7225.27	5417.93	0.00	0.00	7207.26	COUNTY LINE 3229-24H_BHL

## WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
COUNTY LINE 3229-24H_SHL	0.00	0.00	0.00	40.001457	-104.703022
COUNTY LINE 3229-24H_TPZ	7250.00	123.70	5441.78	40.001796	-104.683597
COUNTY LINE 3229-24H_BPZ	7250.00	7135.26	5418.23	40.021043	-104.683675
COUNTY LINE 3229-24H_BHL	7250.00	7225.27	5417.93	40.021290	-104.683676



Vertical Section at 359.81° (2600 usft/in)

	WELL DETAILS: COUNTY LINE 3229-24H		
	GL = 5046'		
	RKB = 24' @ 5070.00usft (RIG)		
	Plan: Design #2 (COUNTY LINE 3229-24H/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 3229-24H
<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 3229-24H	<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 3229-24H			
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b>	1,244,380.98 usft
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b>	3,223,268.61 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	51,650.62657201

<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	359.81

<b>Plan Survey Tool Program</b>	<b>Date</b>	5/24/2022		
<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	16,764.03	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 3229-24H
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 3229-24H	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	
259.65	0.00	0.00	259.65	0.00	0.00	0.00	0.00	0.00	0.00	
2,411.65	43.04	95.88	2,214.89	-78.98	766.92	2.00	2.00	0.00	95.88	
8,616.41	43.04	95.88	6,749.81	-512.82	4,979.45	0.00	0.00	0.00	0.00	
9,662.41	90.00	359.81	7,250.00	123.70	5,441.78	9.00	4.49	-9.18	-94.45	
16,764.03	90.00	359.81	7,250.00	7,225.27	5,417.93	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 3229-24H
<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 3229-24H	<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
259.65	0.00	0.00	259.65	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 259.65ft									
300.00	0.81	95.88	300.00	-0.03	0.28	-0.03	2.00	2.00	0.00
400.00	2.81	95.88	399.94	-0.35	3.42	-0.36	2.00	2.00	0.00
500.00	4.81	95.88	499.72	-1.03	10.02	-1.07	2.00	2.00	0.00
600.00	6.81	95.88	599.20	-2.07	20.09	-2.14	2.00	2.00	0.00
700.00	8.81	95.88	698.27	-3.46	33.60	-3.57	2.00	2.00	0.00
800.00	10.81	95.88	796.80	-5.21	50.54	-5.37	2.00	2.00	0.00
900.00	12.81	95.88	894.68	-7.30	70.89	-7.54	2.00	2.00	0.00
1,000.00	14.81	95.88	991.79	-9.75	94.63	-10.06	2.00	2.00	0.00
1,100.00	16.81	95.88	1,088.00	-12.54	121.73	-12.94	2.00	2.00	0.00
1,200.00	18.81	95.88	1,183.20	-15.67	152.15	-16.17	2.00	2.00	0.00
1,300.00	20.81	95.88	1,277.28	-19.14	185.85	-19.76	2.00	2.00	0.00
1,400.00	22.81	95.88	1,370.12	-22.95	222.80	-23.68	2.00	2.00	0.00
1,500.00	24.81	95.88	1,461.61	-27.08	262.95	-27.95	2.00	2.00	0.00
1,600.00	26.81	95.88	1,551.63	-31.54	306.26	-32.56	2.00	2.00	0.00
1,700.00	28.81	95.88	1,640.08	-36.32	352.66	-37.49	2.00	2.00	0.00
1,800.00	30.81	95.88	1,726.85	-41.41	402.10	-42.74	2.00	2.00	0.00
1,900.00	32.81	95.88	1,811.82	-46.81	454.53	-48.32	2.00	2.00	0.00
2,000.00	34.81	95.88	1,894.91	-52.51	509.87	-54.20	2.00	2.00	0.00
2,100.00	36.81	95.88	1,976.01	-58.50	568.07	-60.39	2.00	2.00	0.00
2,200.00	38.81	95.88	2,055.01	-64.78	629.04	-66.87	2.00	2.00	0.00
2,300.00	40.81	95.88	2,131.83	-71.34	692.72	-73.64	2.00	2.00	0.00
2,400.00	42.81	95.88	2,206.36	-78.17	759.03	-80.69	2.00	2.00	0.00
2,411.65	43.04	95.88	2,214.89	-78.98	766.92	-81.53	2.00	2.00	0.00
Hold Tangent @ 2411.65ft									
2,493.89	43.04	95.88	2,275.00	-84.73	822.76	-87.46	0.00	0.00	0.00
9 5/8"									
2,500.00	43.04	95.88	2,279.47	-85.16	826.91	-87.90	0.00	0.00	0.00
2,600.00	43.04	95.88	2,352.55	-92.15	894.80	-95.12	0.00	0.00	0.00
2,700.00	43.04	95.88	2,425.64	-99.14	962.69	-102.34	0.00	0.00	0.00
2,800.00	43.04	95.88	2,498.73	-106.14	1,030.58	-109.55	0.00	0.00	0.00
2,900.00	43.04	95.88	2,571.82	-113.13	1,098.47	-116.77	0.00	0.00	0.00
3,000.00	43.04	95.88	2,644.91	-120.12	1,166.36	-123.99	0.00	0.00	0.00
3,100.00	43.04	95.88	2,717.99	-127.11	1,234.26	-131.20	0.00	0.00	0.00
3,200.00	43.04	95.88	2,791.08	-134.10	1,302.15	-138.42	0.00	0.00	0.00
3,300.00	43.04	95.88	2,864.17	-141.10	1,370.04	-145.64	0.00	0.00	0.00
3,400.00	43.04	95.88	2,937.26	-148.09	1,437.93	-152.86	0.00	0.00	0.00
3,500.00	43.04	95.88	3,010.34	-155.08	1,505.82	-160.07	0.00	0.00	0.00
3,600.00	43.04	95.88	3,083.43	-162.07	1,573.72	-167.29	0.00	0.00	0.00
3,700.00	43.04	95.88	3,156.52	-169.06	1,641.61	-174.51	0.00	0.00	0.00
3,800.00	43.04	95.88	3,229.61	-176.06	1,709.50	-181.72	0.00	0.00	0.00
3,900.00	43.04	95.88	3,302.70	-183.05	1,777.39	-188.94	0.00	0.00	0.00
4,000.00	43.04	95.88	3,375.78	-190.04	1,845.28	-196.16	0.00	0.00	0.00
4,100.00	43.04	95.88	3,448.87	-197.03	1,913.17	-203.38	0.00	0.00	0.00
4,200.00	43.04	95.88	3,521.96	-204.02	1,981.07	-210.59	0.00	0.00	0.00
4,300.00	43.04	95.88	3,595.05	-211.02	2,048.96	-217.81	0.00	0.00	0.00
4,400.00	43.04	95.88	3,668.13	-218.01	2,116.85	-225.03	0.00	0.00	0.00
4,500.00	43.04	95.88	3,741.22	-225.00	2,184.74	-232.24	0.00	0.00	0.00
4,600.00	43.04	95.88	3,814.31	-231.99	2,252.63	-239.46	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 3229-24H
<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 3229-24H	<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	43.04	95.88	3,887.40	-238.98	2,320.52	-246.68	0.00	0.00	0.00
4,800.00	43.04	95.88	3,960.48	-245.98	2,388.42	-253.90	0.00	0.00	0.00
4,900.00	43.04	95.88	4,033.57	-252.97	2,456.31	-261.11	0.00	0.00	0.00
5,000.00	43.04	95.88	4,106.66	-259.96	2,524.20	-268.33	0.00	0.00	0.00
5,100.00	43.04	95.88	4,179.75	-266.95	2,592.09	-275.55	0.00	0.00	0.00
5,200.00	43.04	95.88	4,252.84	-273.94	2,659.98	-282.76	0.00	0.00	0.00
5,300.00	43.04	95.88	4,325.92	-280.94	2,727.88	-289.98	0.00	0.00	0.00
5,400.00	43.04	95.88	4,399.01	-287.93	2,795.77	-297.20	0.00	0.00	0.00
5,500.00	43.04	95.88	4,472.10	-294.92	2,863.66	-304.41	0.00	0.00	0.00
5,600.00	43.04	95.88	4,545.19	-301.91	2,931.55	-311.63	0.00	0.00	0.00
5,700.00	43.04	95.88	4,618.27	-308.90	2,999.44	-318.85	0.00	0.00	0.00
5,800.00	43.04	95.88	4,691.36	-315.90	3,067.33	-326.07	0.00	0.00	0.00
5,900.00	43.04	95.88	4,764.45	-322.89	3,135.23	-333.28	0.00	0.00	0.00
6,000.00	43.04	95.88	4,837.54	-329.88	3,203.12	-340.50	0.00	0.00	0.00
6,100.00	43.04	95.88	4,910.63	-336.87	3,271.01	-347.72	0.00	0.00	0.00
6,200.00	43.04	95.88	4,983.71	-343.86	3,338.90	-354.93	0.00	0.00	0.00
6,300.00	43.04	95.88	5,056.80	-350.86	3,406.79	-362.15	0.00	0.00	0.00
6,400.00	43.04	95.88	5,129.89	-357.85	3,474.69	-369.37	0.00	0.00	0.00
6,500.00	43.04	95.88	5,202.98	-364.84	3,542.58	-376.59	0.00	0.00	0.00
6,600.00	43.04	95.88	5,276.06	-371.83	3,610.47	-383.80	0.00	0.00	0.00
6,700.00	43.04	95.88	5,349.15	-378.82	3,678.36	-391.02	0.00	0.00	0.00
6,800.00	43.04	95.88	5,422.24	-385.82	3,746.25	-398.24	0.00	0.00	0.00
6,900.00	43.04	95.88	5,495.33	-392.81	3,814.14	-405.45	0.00	0.00	0.00
7,000.00	43.04	95.88	5,568.42	-399.80	3,882.04	-412.67	0.00	0.00	0.00
7,100.00	43.04	95.88	5,641.50	-406.79	3,949.93	-419.89	0.00	0.00	0.00
7,200.00	43.04	95.88	5,714.59	-413.78	4,017.82	-427.11	0.00	0.00	0.00
7,300.00	43.04	95.88	5,787.68	-420.78	4,085.71	-434.32	0.00	0.00	0.00
7,400.00	43.04	95.88	5,860.77	-427.77	4,153.60	-441.54	0.00	0.00	0.00
7,500.00	43.04	95.88	5,933.85	-434.76	4,221.49	-448.76	0.00	0.00	0.00
7,600.00	43.04	95.88	6,006.94	-441.75	4,289.39	-455.97	0.00	0.00	0.00
7,700.00	43.04	95.88	6,080.03	-448.74	4,357.28	-463.19	0.00	0.00	0.00
7,800.00	43.04	95.88	6,153.12	-455.74	4,425.17	-470.41	0.00	0.00	0.00
7,900.00	43.04	95.88	6,226.20	-462.73	4,493.06	-477.62	0.00	0.00	0.00
8,000.00	43.04	95.88	6,299.29	-469.72	4,560.95	-484.84	0.00	0.00	0.00
8,100.00	43.04	95.88	6,372.38	-476.71	4,628.85	-492.06	0.00	0.00	0.00
8,200.00	43.04	95.88	6,445.47	-483.70	4,696.74	-499.28	0.00	0.00	0.00
8,300.00	43.04	95.88	6,518.56	-490.70	4,764.63	-506.49	0.00	0.00	0.00
8,400.00	43.04	95.88	6,591.64	-497.69	4,832.52	-513.71	0.00	0.00	0.00
8,500.00	43.04	95.88	6,664.73	-504.68	4,900.41	-520.93	0.00	0.00	0.00
8,600.00	43.04	95.88	6,737.82	-511.67	4,968.30	-528.14	0.00	0.00	0.00
8,616.41	43.04	95.88	6,749.81	-512.82	4,979.45	-529.33	0.00	0.00	0.00
<b>KOP @ 8616.41ft :: DLS = 9°/100'</b>									
8,650.00	42.89	91.45	6,774.40	-514.28	5,002.28	-530.87	9.00	-0.44	-13.19
8,700.00	42.99	84.84	6,811.02	-513.18	5,036.28	-529.88	9.00	0.19	-13.21
8,750.00	43.46	78.31	6,847.47	-508.16	5,070.12	-524.97	9.00	0.94	-13.07
8,800.00	44.30	71.93	6,883.53	-499.25	5,103.57	-516.17	9.00	1.67	-12.76
8,850.00	45.48	65.77	6,918.98	-486.52	5,136.44	-503.55	9.00	2.36	-12.31
8,900.00	46.97	59.89	6,953.58	-470.02	5,168.52	-487.16	9.00	2.99	-11.76
8,950.00	48.75	54.32	6,987.14	-449.88	5,199.61	-467.12	9.00	3.56	-11.15
9,000.00	50.79	49.06	7,019.44	-426.21	5,229.53	-443.55	9.00	4.07	-10.52
9,050.00	53.05	44.11	7,050.29	-399.16	5,258.08	-416.59	9.00	4.52	-9.89
9,100.00	55.50	39.46	7,079.49	-368.89	5,285.10	-386.42	9.00	4.90	-9.30
9,150.00	58.12	35.09	7,106.87	-335.60	5,310.41	-353.21	9.00	5.23	-8.75
9,200.00	60.88	30.96	7,132.26	-299.48	5,333.86	-317.17	9.00	5.52	-8.25

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well COUNTY LINE 3229-24H
<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 3229-24H	<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)	
9,250.00	63.76	27.05	7,155.49	-260.76	5,355.30	-278.52	9.00	5.76	-7.81	
9,300.00	66.73	23.34	7,176.43	-219.69	5,374.61	-237.51	9.00	5.96	-7.43	
9,350.00	69.80	19.79	7,194.95	-176.50	5,391.66	-194.38	9.00	6.12	-7.10	
9,400.00	72.93	16.38	7,210.93	-131.47	5,406.35	-149.40	9.00	6.26	-6.82	
9,450.00	76.11	13.08	7,224.28	-84.88	5,418.59	-102.85	9.00	6.37	-6.60	
9,500.00	79.34	9.87	7,234.90	-37.01	5,428.30	-55.01	9.00	6.46	-6.42	
9,550.00	82.60	6.73	7,242.75	11.84	5,435.42	-6.18	9.00	6.52	-6.28	
9,600.00	85.89	3.64	7,247.76	61.38	5,439.91	43.34	9.00	6.57	-6.19	
9,650.00	89.18	0.57	7,249.91	111.28	5,441.74	93.24	9.00	6.59	-6.14	
9,662.41	90.00	359.81	7,250.00	123.70	5,441.78	105.65	9.00	6.59	-6.12	
End Build/TPZ @ 9662.41ft										
9,700.00	90.00	359.81	7,250.00	161.28	5,441.65	143.24	0.00	0.00	0.00	
9,800.00	90.00	359.81	7,250.00	261.28	5,441.32	243.24	0.00	0.00	0.00	
9,900.00	90.00	359.81	7,250.00	361.28	5,440.98	343.24	0.00	0.00	0.00	
10,000.00	90.00	359.81	7,250.00	461.28	5,440.64	443.24	0.00	0.00	0.00	
10,100.00	90.00	359.81	7,250.00	561.28	5,440.31	543.24	0.00	0.00	0.00	
10,200.00	90.00	359.81	7,250.00	661.28	5,439.97	643.24	0.00	0.00	0.00	
10,300.00	90.00	359.81	7,250.00	761.28	5,439.64	743.24	0.00	0.00	0.00	
10,400.00	90.00	359.81	7,250.00	861.28	5,439.30	843.24	0.00	0.00	0.00	
10,500.00	90.00	359.81	7,250.00	961.28	5,438.96	943.24	0.00	0.00	0.00	
10,600.00	90.00	359.81	7,250.00	1,061.28	5,438.63	1,043.24	0.00	0.00	0.00	
10,700.00	90.00	359.81	7,250.00	1,161.28	5,438.29	1,143.24	0.00	0.00	0.00	
10,800.00	90.00	359.81	7,250.00	1,261.28	5,437.96	1,243.24	0.00	0.00	0.00	
10,900.00	90.00	359.81	7,250.00	1,361.28	5,437.62	1,343.24	0.00	0.00	0.00	
11,000.00	90.00	359.81	7,250.00	1,461.27	5,437.29	1,443.24	0.00	0.00	0.00	
11,100.00	90.00	359.81	7,250.00	1,561.27	5,436.95	1,543.24	0.00	0.00	0.00	
11,200.00	90.00	359.81	7,250.00	1,661.27	5,436.61	1,643.24	0.00	0.00	0.00	
11,300.00	90.00	359.81	7,250.00	1,761.27	5,436.28	1,743.24	0.00	0.00	0.00	
11,400.00	90.00	359.81	7,250.00	1,861.27	5,435.94	1,843.24	0.00	0.00	0.00	
11,500.00	90.00	359.81	7,250.00	1,961.27	5,435.61	1,943.24	0.00	0.00	0.00	
11,600.00	90.00	359.81	7,250.00	2,061.27	5,435.27	2,043.24	0.00	0.00	0.00	
11,700.00	90.00	359.81	7,250.00	2,161.27	5,434.93	2,143.24	0.00	0.00	0.00	
11,800.00	90.00	359.81	7,250.00	2,261.27	5,434.60	2,243.24	0.00	0.00	0.00	
11,900.00	90.00	359.81	7,250.00	2,361.27	5,434.26	2,343.24	0.00	0.00	0.00	
12,000.00	90.00	359.81	7,250.00	2,461.27	5,433.93	2,443.24	0.00	0.00	0.00	
12,100.00	90.00	359.81	7,250.00	2,561.27	5,433.59	2,543.24	0.00	0.00	0.00	
12,200.00	90.00	359.81	7,250.00	2,661.27	5,433.26	2,643.24	0.00	0.00	0.00	
12,300.00	90.00	359.81	7,250.00	2,761.27	5,432.92	2,743.24	0.00	0.00	0.00	
12,400.00	90.00	359.81	7,250.00	2,861.27	5,432.58	2,843.24	0.00	0.00	0.00	
12,500.00	90.00	359.81	7,250.00	2,961.27	5,432.25	2,943.24	0.00	0.00	0.00	
12,600.00	90.00	359.81	7,250.00	3,061.27	5,431.91	3,043.24	0.00	0.00	0.00	
12,700.00	90.00	359.81	7,250.00	3,161.26	5,431.58	3,143.24	0.00	0.00	0.00	
12,800.00	90.00	359.81	7,250.00	3,261.26	5,431.24	3,243.24	0.00	0.00	0.00	
12,900.00	90.00	359.81	7,250.00	3,361.26	5,430.90	3,343.24	0.00	0.00	0.00	
13,000.00	90.00	359.81	7,250.00	3,461.26	5,430.57	3,443.24	0.00	0.00	0.00	
13,100.00	90.00	359.81	7,250.00	3,561.26	5,430.23	3,543.24	0.00	0.00	0.00	
13,200.00	90.00	359.81	7,250.00	3,661.26	5,429.90	3,643.24	0.00	0.00	0.00	
13,300.00	90.00	359.81	7,250.00	3,761.26	5,429.56	3,743.24	0.00	0.00	0.00	
13,400.00	90.00	359.81	7,250.00	3,861.26	5,429.22	3,843.24	0.00	0.00	0.00	
13,500.00	90.00	359.81	7,250.00	3,961.26	5,428.89	3,943.24	0.00	0.00	0.00	
13,600.00	90.00	359.81	7,250.00	4,061.26	5,428.55	4,043.24	0.00	0.00	0.00	
13,700.00	90.00	359.81	7,250.00	4,161.26	5,428.22	4,143.24	0.00	0.00	0.00	
13,800.00	90.00	359.81	7,250.00	4,261.26	5,427.88	4,243.24	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 3229-24H
<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 3229-24H	<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)
13,900.00	90.00	359.81	7,250.00	4,361.26	5,427.55	4,343.24	0.00	0.00	0.00
14,000.00	90.00	359.81	7,250.00	4,461.26	5,427.21	4,443.24	0.00	0.00	0.00
14,100.00	90.00	359.81	7,250.00	4,561.26	5,426.87	4,543.24	0.00	0.00	0.00
14,200.00	90.00	359.81	7,250.00	4,661.26	5,426.54	4,643.24	0.00	0.00	0.00
14,300.00	90.00	359.81	7,250.00	4,761.26	5,426.20	4,743.24	0.00	0.00	0.00
14,400.00	90.00	359.81	7,250.00	4,861.26	5,425.87	4,843.24	0.00	0.00	0.00
14,500.00	90.00	359.81	7,250.00	4,961.25	5,425.53	4,943.24	0.00	0.00	0.00
14,600.00	90.00	359.81	7,250.00	5,061.25	5,425.19	5,043.24	0.00	0.00	0.00
14,700.00	90.00	359.81	7,250.00	5,161.25	5,424.86	5,143.24	0.00	0.00	0.00
14,800.00	90.00	359.81	7,250.00	5,261.25	5,424.52	5,243.24	0.00	0.00	0.00
14,900.00	90.00	359.81	7,250.00	5,361.25	5,424.19	5,343.24	0.00	0.00	0.00
15,000.00	90.00	359.81	7,250.00	5,461.25	5,423.85	5,443.24	0.00	0.00	0.00
15,100.00	90.00	359.81	7,250.00	5,561.25	5,423.52	5,543.24	0.00	0.00	0.00
15,200.00	90.00	359.81	7,250.00	5,661.25	5,423.18	5,643.24	0.00	0.00	0.00
15,300.00	90.00	359.81	7,250.00	5,761.25	5,422.84	5,743.24	0.00	0.00	0.00
15,400.00	90.00	359.81	7,250.00	5,861.25	5,422.51	5,843.24	0.00	0.00	0.00
15,500.00	90.00	359.81	7,250.00	5,961.25	5,422.17	5,943.24	0.00	0.00	0.00
15,600.00	90.00	359.81	7,250.00	6,061.25	5,421.84	6,043.24	0.00	0.00	0.00
15,700.00	90.00	359.81	7,250.00	6,161.25	5,421.50	6,143.24	0.00	0.00	0.00
15,800.00	90.00	359.81	7,250.00	6,261.25	5,421.16	6,243.24	0.00	0.00	0.00
15,900.00	90.00	359.81	7,250.00	6,361.25	5,420.83	6,343.24	0.00	0.00	0.00
16,000.00	90.00	359.81	7,250.00	6,461.25	5,420.49	6,443.24	0.00	0.00	0.00
16,100.00	90.00	359.81	7,250.00	6,561.25	5,420.16	6,543.24	0.00	0.00	0.00
16,200.00	90.00	359.81	7,250.00	6,661.25	5,419.82	6,643.24	0.00	0.00	0.00
16,300.00	90.00	359.81	7,250.00	6,761.24	5,419.48	6,743.24	0.00	0.00	0.00
16,400.00	90.00	359.81	7,250.00	6,861.24	5,419.15	6,843.24	0.00	0.00	0.00
16,500.00	90.00	359.81	7,250.00	6,961.24	5,418.81	6,943.24	0.00	0.00	0.00
16,600.00	90.00	359.81	7,250.00	7,061.24	5,418.48	7,043.24	0.00	0.00	0.00
16,674.02	90.00	359.81	7,250.00	7,135.26	5,418.23	7,117.26	0.00	0.00	0.00
BPZ @ 16674.02ft									
16,700.00	90.00	359.81	7,250.00	7,161.24	5,418.14	7,143.24	0.00	0.00	0.00
16,764.03	90.00	359.81	7,250.00	7,225.27	5,417.93	7,207.26	0.00	0.00	0.00
TD Well @ 16764.03ft									

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
2,493.89	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)	
259.65	259.65	0.00	0.00	Begin Nudge @ 259.65ft
2,411.65	2,214.89	-78.98	766.92	Hold Tangent @ 2411.65ft
8,616.41	6,749.81	-512.82	4,979.45	KOP @ 8616.41ft :: DLS = 9°/100'
9,662.41	7,250.00	123.70	5,441.78	End Build/TPZ @ 9662.41ft
16,674.02	7,250.00	7,135.26	5,418.23	BPZ @ 16674.02ft
16,764.03	7,250.00	7,225.27	5,417.93	TD Well @ 16764.03ft