

# **VERDAD RESOURCES**

**WATTENBERG FIELD**

**2N-63W-19 KBL PAD**

**KBL 1918-13H**

**Plan A**

**Plan: Design #1**

## **Standard Planning Report**

**17 September, 2024**

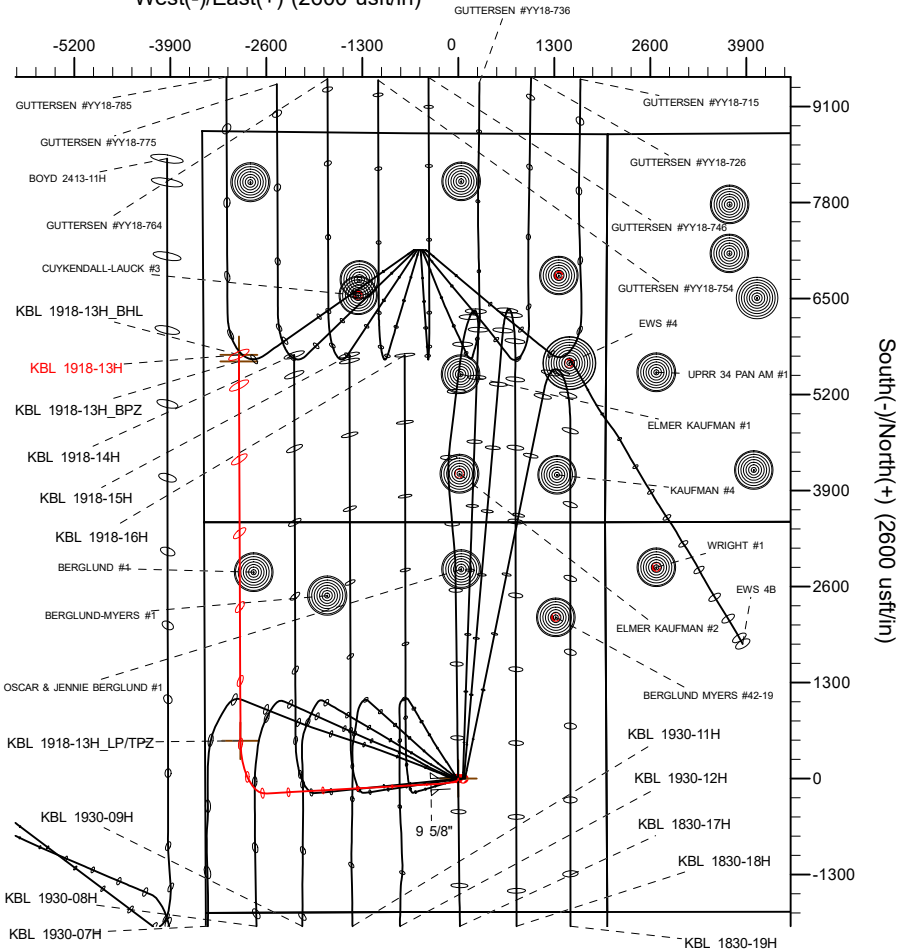
Project: WATTENBERG FIELD  
Site: 2N-63W-19 KBL PAD  
Well: KBL 1918-13H  
Wellbore: Plan A  
Design: Design #1

# VERDAD RESOURCES

## CASING DETAILS

TVD	MD	Name	Size
1816.00	1882.32	9 5/8"	9-5/8

West(-)/East(+) (2600 usft/in)



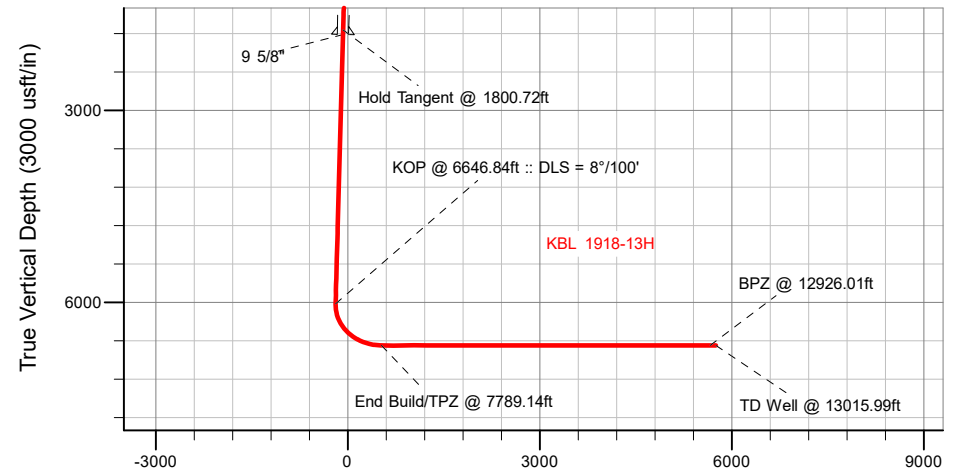
South(-)/North(+) (2600 usft/in)

## 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	
200.20	0.00	0.00	200.20	0.00	0.00	0.00	0.00	0.00	
400.20	4.00	180.00	400.04	-6.98	0.00	2.00	180.00	-6.98	
1800.72	27.97	266.81	1743.93	-75.47	-334.61	2.00	94.34	-74.07	
6646.84	27.97	266.81	6023.99	-201.95	-2603.96	0.00	0.00	-191.04	
7789.14	90.00	359.76	6672.00	512.60	-2950.60	8.00	92.61	524.96	
13015.99	90.00	359.76	6672.00	5739.41	-2972.31	0.00	0.00	5751.81	KBL 1918-13H_BHL

## WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	Northing	Easting	Latitude	Longitude
KBL 1918-13H_SHL	0.00	1288791.57	3285795.63	40.121605	-104.478016
KBL 1918-13H_LP/TPZ	6672.00	1289270.25	3282839.34	40.123012	-104.488567
KBL 1918-13H_BPZ	6672.00	1294406.37	3282758.95	40.137113	-104.488645
KBL 1918-13H_BHL	6672.00	1294496.34	3282757.36	40.137360	-104.488647



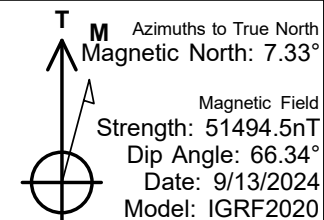
Vertical Section at 359.76° (3000 usft/in)

**SHL**  
1806' FSL  
2006' FEL

**TPZ**  
2330' FSL  
480' FWL

**BPZ**  
2178' FSL  
480' FWL

**BHL**  
2268' FSL  
480' FWL



## WELL DETAILS: KBL 1918-13H

GL = 4861'

RKB = 21' @ 4882.00usft (RIG)

Plan: Design #1 (KBL 1918-13H/Plan A)

Date: 9/17/2024

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well KBL 1918-13H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 21' @ 4882.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 21' @ 4882.00usft (RIG)
Site:	2N-63W-19 KBL PAD	North Reference:	True
Well:	KBL 1918-13H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Design #1		

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

Site		2N-63W-19 KBL PAD				
Site Position:		Northing:	1,288,791.50	usft	Latitude:	40.121610
From:	Lat/Long	Easting:	3,285,630.62	usft	Longitude:	-104.478606
Position Uncertainty:		0.00	usft	Slot Radius:	13-3/16	"

Well	KBL 1918-13H					
Well Position	+N/-S	0.00 usft	Northing:	1,288,791.57 usft	Latitude:	40.121605
	+E/-W	0.00 usft	Easting:	3,285,795.63 usft	Longitude:	-104.478016
Position Uncertainty		3.28 usft	Wellhead Elevation:	usft	Ground Level:	4,861.00 usft
Grid Convergence:		0.66 °				

Wellbore	Plan A				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF202013	9/13/2024	7.33	66.34	51,494.52050409

Design	Design #1				
Audit Notes:					
Version:		Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:		Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
		0.00	0.00	0.00	359.76

Plan Survey Tool Program		Date	9/17/2024		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	1,816.00	Design #1 (Plan A)	ISCWSA MWD	
				Fixed:v2:standard declination	
2	1,816.00	13,015.99	Design #1 (Plan A)	ISCWSA MWD	
				Fixed:v2:standard declination	

Planning Report

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Company:	VERDAD RESOURCES	TVD Reference:	RKB = 21' @ 4882.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 21' @ 4882.00usft (RIG)
Site:	2N-63W-19 KBL PAD	North Reference:	True
Well:	KBL 1918-13H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Design #1		

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	
200.20	0.00	0.00	200.20	0.00	0.00	0.00	0.00	0.00	0.00	
400.20	4.00	180.00	400.04	-6.98	0.00	2.00	2.00	0.00	180.00	
1,800.72	27.97	266.81	1,743.93	-75.47	-334.61	2.00	1.71	6.20	94.34	
6,646.84	27.97	266.81	6,023.99	-201.95	-2,603.96	0.00	0.00	0.00	0.00	
7,789.14	90.00	359.76	6,672.00	512.60	-2,950.60	8.00	5.43	8.14	92.61	
13,015.99	90.00	359.76	6,672.00	5,739.41	-2,972.31	0.00	0.00	0.00	0.00	KBL 1918-13H_BHL

# Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well KBL 1918-13H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 21' @ 4882.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 21' @ 4882.00usft (RIG)
<b>Site:</b>	2N-63W-19 KBL PAD	<b>North Reference:</b>	True
<b>Well:</b>	KBL 1918-13H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Design #1		

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
200.20	0.00	0.00	200.20	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 200.20ft									
300.00	2.00	180.00	299.98	-1.74	0.00	-1.74	2.00	2.00	0.00
400.20	4.00	180.00	400.04	-6.98	0.00	-6.98	2.00	2.00	0.00
Change Tangent @ 400.20ft									
500.00	4.33	207.37	499.58	-13.81	-1.73	-13.80	2.00	0.33	27.43
600.00	5.43	227.21	599.23	-20.38	-6.94	-20.35	2.00	1.10	19.84
700.00	6.95	239.45	698.64	-26.67	-15.63	-26.60	2.00	1.51	12.24
800.00	8.66	247.11	797.72	-32.67	-27.77	-32.56	2.00	1.71	7.66
900.00	10.47	252.20	896.32	-38.38	-43.36	-38.20	2.00	1.81	5.09
1,000.00	12.35	255.78	994.35	-43.79	-62.38	-43.52	2.00	1.87	3.58
1,100.00	14.25	258.42	1,091.66	-48.88	-84.80	-48.53	2.00	1.91	2.64
1,200.00	16.18	260.45	1,188.15	-53.67	-110.60	-53.20	2.00	1.93	2.03
1,300.00	18.12	262.05	1,283.70	-58.13	-139.75	-57.54	2.00	1.94	1.60
1,400.00	20.08	263.36	1,378.19	-62.26	-172.20	-61.54	2.00	1.95	1.30
1,500.00	22.04	264.44	1,471.51	-66.07	-207.93	-65.20	2.00	1.96	1.08
1,600.00	24.01	265.35	1,563.54	-69.54	-246.88	-68.50	2.00	1.97	0.91
1,700.00	25.98	266.13	1,654.17	-72.67	-289.01	-71.46	2.00	1.97	0.78
1,800.72	27.97	266.81	1,743.93	-75.47	-334.61	-74.07	2.00	1.98	0.68
Hold Tangent @ 1800.72ft									
1,882.32	27.97	266.81	1,816.00	-77.60	-372.82	-76.04	0.00	0.00	0.00
9 5/8"									
1,900.00	27.97	266.81	1,831.61	-78.06	-381.10	-76.47	0.00	0.00	0.00
2,000.00	27.97	266.81	1,919.93	-80.67	-427.93	-78.88	0.00	0.00	0.00
2,100.00	27.97	266.81	2,008.25	-83.28	-474.76	-81.29	0.00	0.00	0.00
2,200.00	27.97	266.81	2,096.57	-85.89	-521.59	-83.71	0.00	0.00	0.00
2,300.00	27.97	266.81	2,184.89	-88.50	-568.41	-86.12	0.00	0.00	0.00
2,400.00	27.97	266.81	2,273.21	-91.11	-615.24	-88.53	0.00	0.00	0.00
2,500.00	27.97	266.81	2,361.53	-93.72	-662.07	-90.95	0.00	0.00	0.00
2,600.00	27.97	266.81	2,449.85	-96.33	-708.90	-93.36	0.00	0.00	0.00
2,700.00	27.97	266.81	2,538.17	-98.94	-755.73	-95.78	0.00	0.00	0.00
2,800.00	27.97	266.81	2,626.49	-101.55	-802.56	-98.19	0.00	0.00	0.00
2,900.00	27.97	266.81	2,714.81	-104.16	-849.38	-100.60	0.00	0.00	0.00
3,000.00	27.97	266.81	2,803.13	-106.77	-896.21	-103.02	0.00	0.00	0.00
3,100.00	27.97	266.81	2,891.44	-109.38	-943.04	-105.43	0.00	0.00	0.00
3,200.00	27.97	266.81	2,979.76	-111.99	-989.87	-107.84	0.00	0.00	0.00
3,300.00	27.97	266.81	3,068.08	-114.60	-1,036.70	-110.26	0.00	0.00	0.00
3,400.00	27.97	266.81	3,156.40	-117.21	-1,083.53	-112.67	0.00	0.00	0.00
3,500.00	27.97	266.81	3,244.72	-119.82	-1,130.35	-115.09	0.00	0.00	0.00
3,600.00	27.97	266.81	3,333.04	-122.43	-1,177.18	-117.50	0.00	0.00	0.00
3,700.00	27.97	266.81	3,421.36	-125.04	-1,224.01	-119.91	0.00	0.00	0.00
3,800.00	27.97	266.81	3,509.68	-127.65	-1,270.84	-122.33	0.00	0.00	0.00
3,900.00	27.97	266.81	3,598.00	-130.26	-1,317.67	-124.74	0.00	0.00	0.00
4,000.00	27.97	266.81	3,686.32	-132.87	-1,364.49	-127.15	0.00	0.00	0.00
4,100.00	27.97	266.81	3,774.64	-135.48	-1,411.32	-129.57	0.00	0.00	0.00
4,200.00	27.97	266.81	3,862.96	-138.09	-1,458.15	-131.98	0.00	0.00	0.00
4,300.00	27.97	266.81	3,951.28	-140.70	-1,504.98	-134.40	0.00	0.00	0.00
4,400.00	27.97	266.81	4,039.60	-143.31	-1,551.81	-136.81	0.00	0.00	0.00
4,500.00	27.97	266.81	4,127.92	-145.92	-1,598.64	-139.22	0.00	0.00	0.00
4,600.00	27.97	266.81	4,216.23	-148.53	-1,645.46	-141.64	0.00	0.00	0.00
4,700.00	27.97	266.81	4,304.55	-151.14	-1,692.29	-144.05	0.00	0.00	0.00
4,800.00	27.97	266.81	4,392.87	-153.75	-1,739.12	-146.46	0.00	0.00	0.00

# Planning Report

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<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 21' @ 4882.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 21' @ 4882.00usft (RIG)
<b>Site:</b>	2N-63W-19 KBL PAD	<b>North Reference:</b>	True
<b>Well:</b>	KBL 1918-13H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Design #1		

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)
4,900.00	27.97	266.81	4,481.19	-156.36	-1,785.95	-148.88	0.00	0.00	0.00
5,000.00	27.97	266.81	4,569.51	-158.97	-1,832.78	-151.29	0.00	0.00	0.00
5,100.00	27.97	266.81	4,657.83	-161.58	-1,879.61	-153.71	0.00	0.00	0.00
5,200.00	27.97	266.81	4,746.15	-164.19	-1,926.43	-156.12	0.00	0.00	0.00
5,300.00	27.97	266.81	4,834.47	-166.80	-1,973.26	-158.53	0.00	0.00	0.00
5,400.00	27.97	266.81	4,922.79	-169.41	-2,020.09	-160.95	0.00	0.00	0.00
5,500.00	27.97	266.81	5,011.11	-172.02	-2,066.92	-163.36	0.00	0.00	0.00
5,600.00	27.97	266.81	5,099.43	-174.63	-2,113.75	-165.77	0.00	0.00	0.00
5,700.00	27.97	266.81	5,187.75	-177.24	-2,160.57	-168.19	0.00	0.00	0.00
5,800.00	27.97	266.81	5,276.07	-179.85	-2,207.40	-170.60	0.00	0.00	0.00
5,900.00	27.97	266.81	5,364.39	-182.46	-2,254.23	-173.02	0.00	0.00	0.00
6,000.00	27.97	266.81	5,452.71	-185.07	-2,301.06	-175.43	0.00	0.00	0.00
6,100.00	27.97	266.81	5,541.02	-187.68	-2,347.89	-177.84	0.00	0.00	0.00
6,200.00	27.97	266.81	5,629.34	-190.29	-2,394.72	-180.26	0.00	0.00	0.00
6,300.00	27.97	266.81	5,717.66	-192.90	-2,441.54	-182.67	0.00	0.00	0.00
6,400.00	27.97	266.81	5,805.98	-195.51	-2,488.37	-185.08	0.00	0.00	0.00
6,500.00	27.97	266.81	5,894.30	-198.12	-2,535.20	-187.50	0.00	0.00	0.00
6,600.00	27.97	266.81	5,982.62	-200.73	-2,582.03	-189.91	0.00	0.00	0.00
6,646.84	27.97	266.81	6,023.99	-201.95	-2,603.96	-191.04	0.00	0.00	0.00
KOP @ 6646.84ft :: DLS = 8°/100'									
6,650.00	27.96	267.35	6,026.78	-202.03	-2,605.44	-191.11	8.00	-0.33	17.05
6,700.00	28.07	275.87	6,070.94	-201.37	-2,628.87	-190.35	8.00	0.23	17.04
6,750.00	28.70	284.18	6,114.94	-197.22	-2,652.22	-186.11	8.00	1.26	16.63
6,800.00	29.82	292.05	6,158.58	-189.61	-2,675.39	-178.40	8.00	2.23	15.73
6,850.00	31.36	299.30	6,201.63	-178.57	-2,698.27	-167.27	8.00	3.09	14.51
6,900.00	33.28	305.87	6,243.90	-164.16	-2,720.75	-152.76	8.00	3.83	13.14
6,950.00	35.51	311.76	6,285.16	-146.44	-2,742.70	-134.95	8.00	4.46	11.77
7,000.00	37.99	317.00	6,325.23	-125.51	-2,764.04	-113.93	8.00	4.97	10.49
7,050.00	40.68	321.67	6,363.91	-101.46	-2,784.65	-89.79	8.00	5.38	9.34
7,100.00	43.54	325.85	6,401.00	-74.41	-2,804.44	-62.66	8.00	5.72	8.35
7,150.00	46.54	329.59	6,436.33	-44.49	-2,823.30	-32.67	8.00	5.99	7.49
7,200.00	49.65	332.98	6,469.73	-11.86	-2,841.15	0.04	8.00	6.21	6.77
7,250.00	52.84	336.06	6,501.03	23.34	-2,857.89	35.31	8.00	6.39	6.17
7,300.00	56.11	338.90	6,530.08	60.93	-2,873.45	72.96	8.00	6.54	5.66
7,350.00	59.44	341.52	6,556.74	100.72	-2,887.76	112.82	8.00	6.66	5.24
7,400.00	62.82	343.96	6,580.88	142.53	-2,900.73	154.68	8.00	6.76	4.89
7,450.00	66.24	346.26	6,602.38	186.15	-2,912.32	198.35	8.00	6.84	4.60
7,500.00	69.69	348.44	6,621.13	231.37	-2,922.45	243.61	8.00	6.90	4.36
7,550.00	73.17	350.53	6,637.05	277.96	-2,931.09	290.24	8.00	6.95	4.17
7,600.00	76.67	352.54	6,650.06	325.70	-2,938.19	338.01	8.00	6.99	4.02
7,650.00	80.18	354.49	6,660.09	374.36	-2,943.71	386.69	8.00	7.03	3.91
7,700.00	83.70	356.41	6,667.10	423.70	-2,947.63	436.05	8.00	7.05	3.82
7,750.00	87.23	358.29	6,671.05	473.48	-2,949.93	485.84	8.00	7.06	3.77
7,789.14	90.00	359.76	6,672.00	512.60	-2,950.60	524.96	8.00	7.07	3.75
End Build/TPZ @ 7789.14ft									
7,800.00	90.00	359.76	6,672.00	523.46	-2,950.64	535.82	0.00	0.00	0.00
7,900.00	90.00	359.76	6,672.00	623.46	-2,951.06	635.82	0.00	0.00	0.00
8,000.00	90.00	359.76	6,672.00	723.46	-2,951.47	735.82	0.00	0.00	0.00
8,100.00	90.00	359.76	6,672.00	823.46	-2,951.89	835.82	0.00	0.00	0.00
8,200.00	90.00	359.76	6,672.00	923.46	-2,952.30	935.82	0.00	0.00	0.00
8,300.00	90.00	359.76	6,672.00	1,023.46	-2,952.72	1,035.82	0.00	0.00	0.00
8,400.00	90.00	359.76	6,672.00	1,123.46	-2,953.13	1,135.82	0.00	0.00	0.00
8,500.00	90.00	359.76	6,672.00	1,223.46	-2,953.55	1,235.82	0.00	0.00	0.00

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well KBL 1918-13H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 21' @ 4882.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 21' @ 4882.00usft (RIG)
<b>Site:</b>	2N-63W-19 KBL PAD	<b>North Reference:</b>	True
<b>Well:</b>	KBL 1918-13H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Design #1		

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)	
8,600.00	90.00	359.76	6,672.00	1,323.46	-2,953.96	1,335.82	0.00	0.00	0.00	
8,700.00	90.00	359.76	6,672.00	1,423.46	-2,954.38	1,435.82	0.00	0.00	0.00	
8,800.00	90.00	359.76	6,672.00	1,523.45	-2,954.80	1,535.82	0.00	0.00	0.00	
8,900.00	90.00	359.76	6,672.00	1,623.45	-2,955.21	1,635.82	0.00	0.00	0.00	
9,000.00	90.00	359.76	6,672.00	1,723.45	-2,955.63	1,735.82	0.00	0.00	0.00	
9,100.00	90.00	359.76	6,672.00	1,823.45	-2,956.04	1,835.82	0.00	0.00	0.00	
9,200.00	90.00	359.76	6,672.00	1,923.45	-2,956.46	1,935.82	0.00	0.00	0.00	
9,300.00	90.00	359.76	6,672.00	2,023.45	-2,956.87	2,035.82	0.00	0.00	0.00	
9,400.00	90.00	359.76	6,672.00	2,123.45	-2,957.29	2,135.82	0.00	0.00	0.00	
9,500.00	90.00	359.76	6,672.00	2,223.45	-2,957.70	2,235.82	0.00	0.00	0.00	
9,600.00	90.00	359.76	6,672.00	2,323.45	-2,958.12	2,335.82	0.00	0.00	0.00	
9,700.00	90.00	359.76	6,672.00	2,423.45	-2,958.54	2,435.82	0.00	0.00	0.00	
9,800.00	90.00	359.76	6,672.00	2,523.45	-2,958.95	2,535.82	0.00	0.00	0.00	
9,900.00	90.00	359.76	6,672.00	2,623.44	-2,959.37	2,635.82	0.00	0.00	0.00	
10,000.00	90.00	359.76	6,672.00	2,723.44	-2,959.78	2,735.82	0.00	0.00	0.00	
10,100.00	90.00	359.76	6,672.00	2,823.44	-2,960.20	2,835.82	0.00	0.00	0.00	
10,200.00	90.00	359.76	6,672.00	2,923.44	-2,960.61	2,935.82	0.00	0.00	0.00	
10,300.00	90.00	359.76	6,672.00	3,023.44	-2,961.03	3,035.82	0.00	0.00	0.00	
10,400.00	90.00	359.76	6,672.00	3,123.44	-2,961.44	3,135.82	0.00	0.00	0.00	
10,500.00	90.00	359.76	6,672.00	3,223.44	-2,961.86	3,235.82	0.00	0.00	0.00	
10,600.00	90.00	359.76	6,672.00	3,323.44	-2,962.28	3,335.82	0.00	0.00	0.00	
10,700.00	90.00	359.76	6,672.00	3,423.44	-2,962.69	3,435.82	0.00	0.00	0.00	
10,800.00	90.00	359.76	6,672.00	3,523.44	-2,963.11	3,535.82	0.00	0.00	0.00	
10,900.00	90.00	359.76	6,672.00	3,623.44	-2,963.52	3,635.82	0.00	0.00	0.00	
11,000.00	90.00	359.76	6,672.00	3,723.44	-2,963.94	3,735.82	0.00	0.00	0.00	
11,100.00	90.00	359.76	6,672.00	3,823.43	-2,964.35	3,835.82	0.00	0.00	0.00	
11,200.00	90.00	359.76	6,672.00	3,923.43	-2,964.77	3,935.82	0.00	0.00	0.00	
11,300.00	90.00	359.76	6,672.00	4,023.43	-2,965.18	4,035.82	0.00	0.00	0.00	
11,400.00	90.00	359.76	6,672.00	4,123.43	-2,965.60	4,135.82	0.00	0.00	0.00	
11,500.00	90.00	359.76	6,672.00	4,223.43	-2,966.01	4,235.82	0.00	0.00	0.00	
11,600.00	90.00	359.76	6,672.00	4,323.43	-2,966.43	4,335.82	0.00	0.00	0.00	
11,700.00	90.00	359.76	6,672.00	4,423.43	-2,966.85	4,435.82	0.00	0.00	0.00	
11,800.00	90.00	359.76	6,672.00	4,523.43	-2,967.26	4,535.82	0.00	0.00	0.00	
11,900.00	90.00	359.76	6,672.00	4,623.43	-2,967.68	4,635.82	0.00	0.00	0.00	
12,000.00	90.00	359.76	6,672.00	4,723.43	-2,968.09	4,735.82	0.00	0.00	0.00	
12,100.00	90.00	359.76	6,672.00	4,823.43	-2,968.51	4,835.82	0.00	0.00	0.00	
12,200.00	90.00	359.76	6,672.00	4,923.43	-2,968.92	4,935.82	0.00	0.00	0.00	
12,300.00	90.00	359.76	6,672.00	5,023.42	-2,969.34	5,035.82	0.00	0.00	0.00	
12,400.00	90.00	359.76	6,672.00	5,123.42	-2,969.75	5,135.82	0.00	0.00	0.00	
12,500.00	90.00	359.76	6,672.00	5,223.42	-2,970.17	5,235.82	0.00	0.00	0.00	
12,600.00	90.00	359.76	6,672.00	5,323.42	-2,970.59	5,335.82	0.00	0.00	0.00	
12,700.00	90.00	359.76	6,672.00	5,423.42	-2,971.00	5,435.82	0.00	0.00	0.00	
12,800.00	90.00	359.76	6,672.00	5,523.42	-2,971.42	5,535.82	0.00	0.00	0.00	
12,900.00	90.00	359.76	6,672.00	5,623.42	-2,971.83	5,635.82	0.00	0.00	0.00	
12,926.01	90.00	359.76	6,672.00	5,649.43	-2,971.94	5,661.83	0.00	0.00	0.00	
BPZ @ 12926.01ft										
13,000.00	90.00	359.76	6,672.00	5,723.42	-2,972.25	5,735.82	0.00	0.00	0.00	
13,015.99	90.00	359.76	6,672.00	5,739.41	-2,972.31	5,751.81	0.00	0.00	0.00	
TD Well @ 13015.99ft										

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well KBL 1918-13H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 21' @ 4882.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 21' @ 4882.00usft (RIG)
<b>Site:</b>	2N-63W-19 KBL PAD	<b>North Reference:</b>	True
<b>Well:</b>	KBL 1918-13H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Design #1		

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (")	Hole Diameter (")
1,882.32	1,816.00	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)		
200.20	200.20	0.00	0.00	Begin Nudge @ 200.20ft	
400.20	400.04	-6.98	0.00	Change Tangent @ 400.20ft	
1,800.72	1,743.93	-75.47	-334.61	Hold Tangent @ 1800.72ft	
6,646.84	6,023.99	-201.95	-2,603.96	KOP @ 6646.84ft :: DLS = 8"/100'	
7,789.14	6,672.00	512.60	-2,950.60	End Build/TPZ @ 7789.14ft	
12,926.01	6,672.00	5,649.43	-2,971.94	BPZ @ 12926.01ft	
13,015.99	6,672.00	5,739.41	-2,972.31	TD Well @ 13015.99ft	