

# **VERDAD RESOURCES**

**WATTENBERG FIELD**

**9N-59W-17 TIMBRO 1717 PAD**

**TIMBRO 1717-09H**

**Plan B**

**Plan: Design #1**

## **Standard Planning Report**

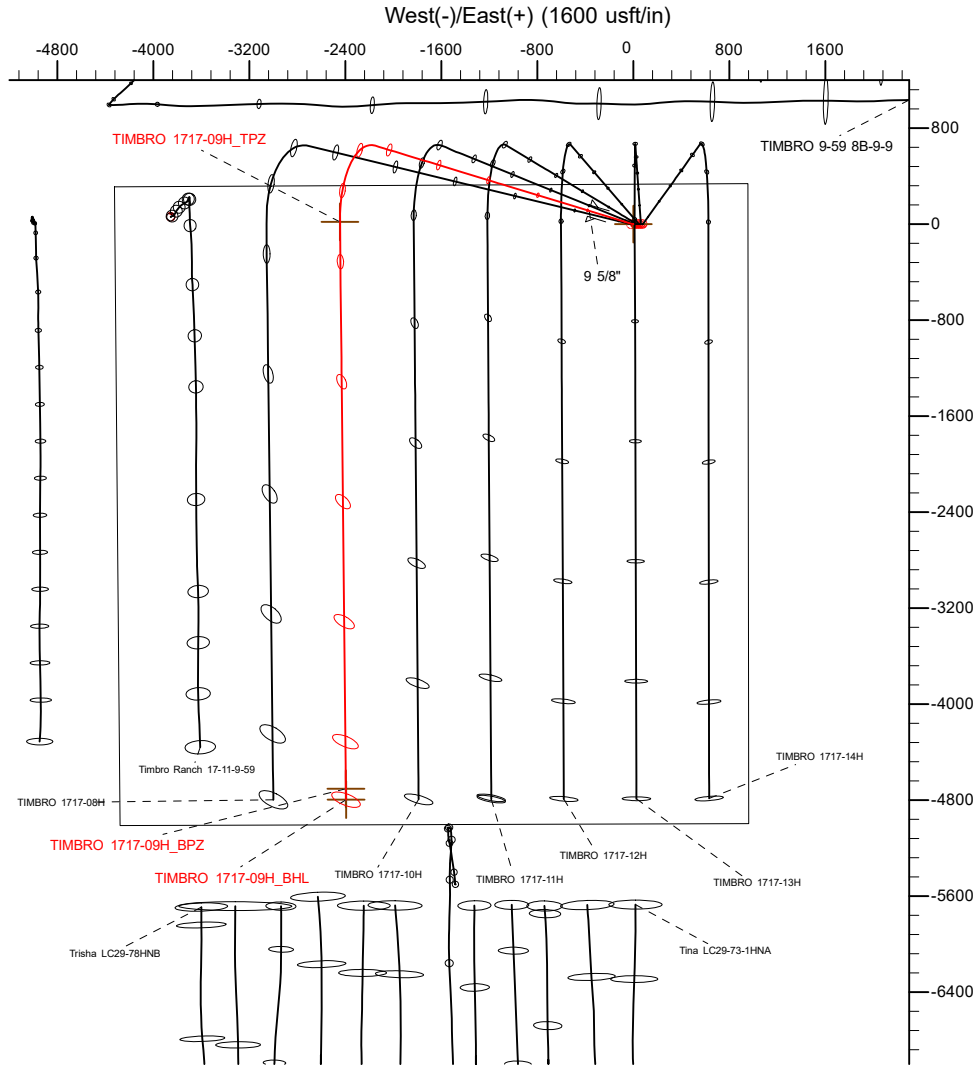
**02 September, 2021**

Project: WATTENBERG FIELD  
 Site: 9N-59W-17 TIMBRO 1717 PAD  
 Well: TIMBRO 1717-09H  
 Wellbore: Plan B  
 Design: Design #1

# VERDAD RESOURCES

## CASING DETAILS

TVD	MD	Name	Size
1700.00	1765.30	9 5/8"	9-5/8

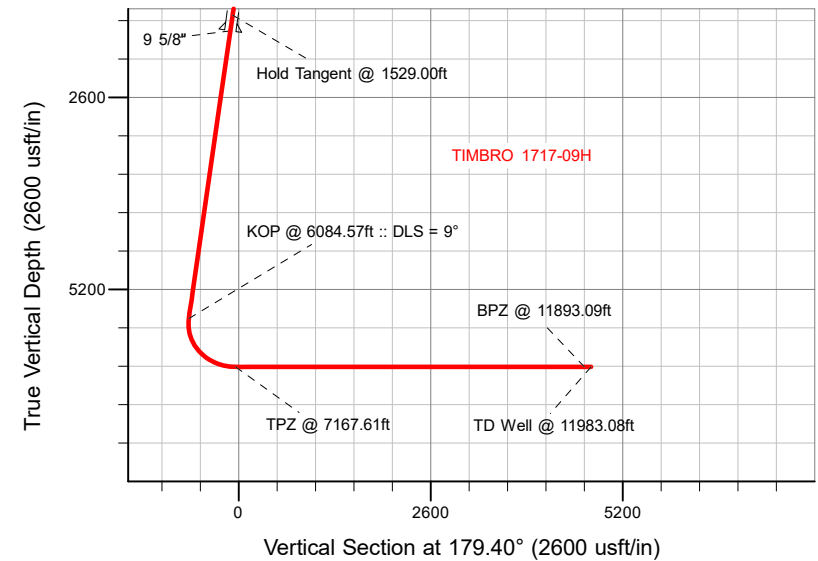


## SECTION DETAILS

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	249.50	0.00	0.00	249.50	0.00	0.00	0.00	0.00	0.00	
3	1529.00	25.59	286.93	1486.88	81.83	-268.83	2.00	286.93	-84.64	
4	6084.57	25.59	286.93	5595.59	654.83	-2151.24	0.00	0.00	-677.32	
5	7167.61	90.00	179.40	6250.00	20.54	-2443.51	9.00	-105.90	-46.13	
6	11983.08	90.00	179.40	6250.00	-4794.67	-2393.44	0.00	0.00	4769.34	TIMBRO 1717-09H_BHL

## WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
TIMBRO 1717-09H_SHL	0.00	0.00	0.00	40.756875	-103.996059
TIMBRO 1717-09H_TPZ	6250.00	20.54	-2443.51	40.756931	-104.004879
TIMBRO 1717-09H_BPZ	6250.00	-4704.68	-2394.34	40.743961	-104.004700
TIMBRO 1717-09H_BHL	6250.00	-4794.67	-2393.44	40.743714	-104.004697

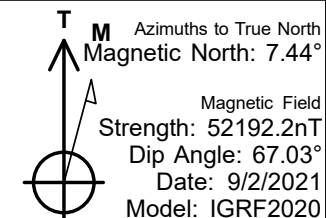


**SHL**  
**334 FNL**  
**956' FEL**

**TPZ**  
**300' FNL**  
**1876' FWL**

**BPZ**  
**300' FSL**  
**1884' FWL**

**BHL**  
**210' FSL**  
**1884' FWL**



## WELL DETAILS: TIMBRO 1717-09H

GL = 5010'

RKB = 20' @ 5030.00usft (RIG)

Plan: Design #1 (TIMBRO 1717-09H/Plan B)

Date: 9/02/2021

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well TIMBRO 1717-09H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 20' @ 5030.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 20' @ 5030.00usft (RIG)
<b>Site:</b>	9N-59W-17 TIMBRO 1717 PAD	<b>North Reference:</b>	True
<b>Well:</b>	TIMBRO 1717-09H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan B		
<b>Design:</b>	Design #1		

<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		

Site		9N-59W-17 TIMBRO 1717 PAD			
Site Position:		Northing:	1,522,135.25 usft	Latitude:	40.756951
From:	Lat/Long	Easting:	3,416,606.55 usft	Longitude:	-103.996171
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "		

Well		TIMBRO 1717-09H				
Well Position	+N/-S	0.00 usft	Northing:	1,522,107.94 usft	Latitude:	40.756875
	+E/-W	0.00 usft	Easting:	3,416,638.04 usft	Longitude:	-103.996059
Position Uncertainty		3.28 usft	Wellhead Elevation:	usft	Ground Level:	5,010.00 usft
Grid Convergence:		0.97 °				

<b>Wellbore</b>	Plan B				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF202013	9/2/2021	7.44	67.03	52,192.17529206

<b>Design</b>	Design #1				
<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	179.40	

<b>Plan Survey Tool Program</b>		<b>Date</b>	9/2/2021		
<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 #1 (Plan B)	ISCWSA MWD	
				Fixed:v2:standard declination	
2	1,700.00	11,983.08	Design #1 (Plan B)	ISCWSA MWD	
				Fixed:v2:standard declination	

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well TIMBRO 1717-09H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 5030.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 5030.00usft (RIG)
Site:	9N-59W-17 TIMBRO 1717 PAD	North Reference:	True
Well:	TIMBRO 1717-09H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B		
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	
249.50	0.00	0.00	249.50	0.00	0.00	0.00	0.00	0.00	0.00	
1,529.00	25.59	286.93	1,486.88	81.83	-268.83	2.00	2.00	0.00	286.93	
6,084.57	25.59	286.93	5,595.59	654.83	-2,151.24	0.00	0.00	0.00	0.00	
7,167.61	90.00	179.40	6,250.00	20.54	-2,443.51	9.00	5.95	-9.93	-105.90	
11,983.08	90.00	179.40	6,250.00	-4,794.67	-2,393.44	0.00	0.00	0.00	0.00	TIMBRO 1717-09H_E

# Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well TIMBRO 1717-09H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 20' @ 5030.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 20' @ 5030.00usft (RIG)
<b>Site:</b>	9N-59W-17 TIMBRO 1717 PAD	<b>North Reference:</b>	True
<b>Well:</b>	TIMBRO 1717-09H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan B		
<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
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
249.50	0.00	0.00	249.50	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 249.50ft									
300.00	1.01	286.93	300.00	0.13	-0.43	-0.13	2.00	2.00	0.00
400.00	3.01	286.93	399.93	1.15	-3.78	-1.19	2.00	2.00	0.00
500.00	5.01	286.93	499.68	3.19	-10.47	-3.30	2.00	2.00	0.00
600.00	7.01	286.93	599.13	6.24	-20.49	-6.45	2.00	2.00	0.00
700.00	9.01	286.93	698.15	10.29	-33.82	-10.65	2.00	2.00	0.00
800.00	11.01	286.93	796.62	15.36	-50.44	-15.88	2.00	2.00	0.00
900.00	13.01	286.93	894.42	21.41	-70.35	-22.15	2.00	2.00	0.00
1,000.00	15.01	286.93	991.44	28.46	-93.51	-29.44	2.00	2.00	0.00
1,100.00	17.01	286.93	1,087.56	36.49	-119.89	-37.75	2.00	2.00	0.00
1,200.00	19.01	286.93	1,182.66	45.50	-149.47	-47.06	2.00	2.00	0.00
1,300.00	21.01	286.93	1,276.62	55.46	-182.20	-57.37	2.00	2.00	0.00
1,400.00	23.01	286.93	1,369.32	66.37	-218.05	-68.65	2.00	2.00	0.00
1,500.00	25.01	286.93	1,460.67	78.22	-256.98	-80.91	2.00	2.00	0.00
1,529.00	25.59	286.93	1,486.88	81.83	-268.83	-84.64	2.00	2.00	0.00
Hold Tangent @ 1529.00ft									
1,600.00	25.59	286.93	1,550.92	90.76	-298.17	-93.88	0.00	0.00	0.00
1,700.00	25.59	286.93	1,641.11	103.34	-339.49	-106.89	0.00	0.00	0.00
1,765.30	25.59	286.93	1,700.00	111.55	-366.47	-115.38	0.00	0.00	0.00
9 5/8"									
1,800.00	25.59	286.93	1,731.30	115.92	-380.81	-119.90	0.00	0.00	0.00
1,900.00	25.59	286.93	1,821.49	128.50	-422.13	-132.91	0.00	0.00	0.00
2,000.00	25.59	286.93	1,911.68	141.07	-463.46	-145.92	0.00	0.00	0.00
2,100.00	25.59	286.93	2,001.87	153.65	-504.78	-158.93	0.00	0.00	0.00
2,200.00	25.59	286.93	2,092.06	166.23	-546.10	-171.94	0.00	0.00	0.00
2,300.00	25.59	286.93	2,182.25	178.81	-587.42	-184.95	0.00	0.00	0.00
2,400.00	25.59	286.93	2,272.45	191.39	-628.74	-197.96	0.00	0.00	0.00
2,500.00	25.59	286.93	2,362.64	203.96	-670.06	-210.97	0.00	0.00	0.00
2,600.00	25.59	286.93	2,452.83	216.54	-711.38	-223.98	0.00	0.00	0.00
2,700.00	25.59	286.93	2,543.02	229.12	-752.70	-236.99	0.00	0.00	0.00
2,800.00	25.59	286.93	2,633.21	241.70	-794.02	-250.00	0.00	0.00	0.00
2,900.00	25.59	286.93	2,723.40	254.27	-835.34	-263.01	0.00	0.00	0.00
3,000.00	25.59	286.93	2,813.59	266.85	-876.66	-276.02	0.00	0.00	0.00
3,100.00	25.59	286.93	2,903.78	279.43	-917.99	-289.03	0.00	0.00	0.00
3,200.00	25.59	286.93	2,993.97	292.01	-959.31	-302.04	0.00	0.00	0.00
3,300.00	25.59	286.93	3,084.16	304.59	-1,000.63	-315.05	0.00	0.00	0.00
3,400.00	25.59	286.93	3,174.35	317.16	-1,041.95	-328.06	0.00	0.00	0.00
3,500.00	25.59	286.93	3,264.54	329.74	-1,083.27	-341.07	0.00	0.00	0.00
3,600.00	25.59	286.93	3,354.73	342.32	-1,124.59	-354.08	0.00	0.00	0.00
3,700.00	25.59	286.93	3,444.93	354.90	-1,165.91	-367.09	0.00	0.00	0.00
3,800.00	25.59	286.93	3,535.12	367.48	-1,207.23	-380.10	0.00	0.00	0.00
3,900.00	25.59	286.93	3,625.31	380.05	-1,248.55	-393.11	0.00	0.00	0.00
4,000.00	25.59	286.93	3,715.50	392.63	-1,289.87	-406.12	0.00	0.00	0.00
4,100.00	25.59	286.93	3,805.69	405.21	-1,331.19	-419.13	0.00	0.00	0.00
4,200.00	25.59	286.93	3,895.88	417.79	-1,372.52	-432.14	0.00	0.00	0.00
4,300.00	25.59	286.93	3,986.07	430.37	-1,413.84	-445.15	0.00	0.00	0.00
4,400.00	25.59	286.93	4,076.26	442.94	-1,455.16	-458.16	0.00	0.00	0.00
4,500.00	25.59	286.93	4,166.45	455.52	-1,496.48	-471.17	0.00	0.00	0.00
4,600.00	25.59	286.93	4,256.64	468.10	-1,537.80	-484.18	0.00	0.00	0.00

# Planning Report

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<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 20' @ 5030.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 20' @ 5030.00usft (RIG)
<b>Site:</b>	9N-59W-17 TIMBRO 1717 PAD	<b>North Reference:</b>	True
<b>Well:</b>	TIMBRO 1717-09H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan B		
<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)
4,700.00	25.59	286.93	4,346.83	480.68	-1,579.12	-497.19	0.00	0.00	0.00
4,800.00	25.59	286.93	4,437.02	493.25	-1,620.44	-510.20	0.00	0.00	0.00
4,900.00	25.59	286.93	4,527.22	505.83	-1,661.76	-523.21	0.00	0.00	0.00
5,000.00	25.59	286.93	4,617.41	518.41	-1,703.08	-536.22	0.00	0.00	0.00
5,100.00	25.59	286.93	4,707.60	530.99	-1,744.40	-549.23	0.00	0.00	0.00
5,200.00	25.59	286.93	4,797.79	543.57	-1,785.72	-562.24	0.00	0.00	0.00
5,300.00	25.59	286.93	4,887.98	556.14	-1,827.05	-575.25	0.00	0.00	0.00
5,400.00	25.59	286.93	4,978.17	568.72	-1,868.37	-588.26	0.00	0.00	0.00
5,500.00	25.59	286.93	5,068.36	581.30	-1,909.69	-601.27	0.00	0.00	0.00
5,600.00	25.59	286.93	5,158.55	593.88	-1,951.01	-614.28	0.00	0.00	0.00
5,700.00	25.59	286.93	5,248.74	606.46	-1,992.33	-627.29	0.00	0.00	0.00
5,800.00	25.59	286.93	5,338.93	619.03	-2,033.65	-640.30	0.00	0.00	0.00
5,900.00	25.59	286.93	5,429.12	631.61	-2,074.97	-653.31	0.00	0.00	0.00
6,000.00	25.59	286.93	5,519.31	644.19	-2,116.29	-666.32	0.00	0.00	0.00
6,084.57	25.59	286.93	5,595.59	654.83	-2,151.24	-677.32	0.00	0.00	0.00
KOP @ 6084.57ft :: DLS = 9°									
6,100.00	25.24	283.80	5,609.53	656.58	-2,157.62	-679.14	9.00	-2.25	-20.31
6,150.00	24.59	273.21	5,654.89	659.71	-2,178.37	-682.48	9.00	-1.30	-21.16
6,200.00	24.71	262.42	5,700.36	658.91	-2,199.13	-681.91	9.00	0.23	-21.60
6,250.00	25.57	252.01	5,745.65	654.20	-2,219.76	-677.41	9.00	1.73	-20.81
6,300.00	27.12	242.48	5,790.47	645.59	-2,240.14	-669.02	9.00	3.10	-19.07
6,350.00	29.24	234.06	5,834.56	633.15	-2,260.15	-656.78	9.00	4.24	-16.83
6,400.00	31.82	226.79	5,877.64	616.95	-2,279.66	-640.79	9.00	5.16	-14.54
6,450.00	34.75	220.57	5,919.44	597.09	-2,298.54	-621.13	9.00	5.87	-12.45
6,500.00	37.96	215.23	5,959.71	573.69	-2,316.69	-597.92	9.00	6.41	-10.67
6,550.00	41.37	210.63	5,998.20	546.90	-2,333.99	-571.31	9.00	6.83	-9.20
6,600.00	44.95	206.63	6,034.68	516.88	-2,350.33	-541.46	9.00	7.15	-8.01
6,650.00	48.64	203.11	6,068.91	483.81	-2,365.62	-508.56	9.00	7.39	-7.05
6,700.00	52.43	199.97	6,100.68	447.91	-2,379.76	-472.81	9.00	7.58	-6.28
6,750.00	56.30	197.13	6,129.81	409.39	-2,392.66	-434.42	9.00	7.73	-5.67
6,800.00	60.23	194.55	6,156.11	368.49	-2,404.25	-393.64	9.00	7.85	-5.17
6,850.00	64.20	192.16	6,179.42	325.46	-2,414.45	-350.72	9.00	7.95	-4.78
6,900.00	68.21	189.92	6,199.59	280.56	-2,423.19	-305.92	9.00	8.02	-4.47
6,950.00	72.25	187.81	6,216.50	234.09	-2,430.43	-259.52	9.00	8.08	-4.22
7,000.00	76.31	185.79	6,230.05	186.31	-2,436.12	-211.81	9.00	8.12	-4.04
7,050.00	80.38	183.84	6,240.15	137.52	-2,440.23	-163.07	9.00	8.15	-3.90
7,100.00	84.47	181.94	6,246.74	88.04	-2,442.72	-113.61	9.00	8.17	-3.81
7,150.00	88.56	180.06	6,249.78	38.15	-2,443.59	-63.74	9.00	8.18	-3.75
7,167.61	90.00	179.40	6,250.00	20.54	-2,443.51	-46.13	9.00	8.19	-3.74
TPZ @ 7167.61ft									
7,200.00	90.00	179.40	6,250.00	-11.85	-2,443.17	-13.74	0.00	0.00	0.00
7,300.00	90.00	179.40	6,250.00	-111.84	-2,442.14	86.26	0.00	0.00	0.00
7,400.00	90.00	179.40	6,250.00	-211.84	-2,441.10	186.26	0.00	0.00	0.00
7,500.00	90.00	179.40	6,250.00	-311.83	-2,440.06	286.26	0.00	0.00	0.00
7,600.00	90.00	179.40	6,250.00	-411.83	-2,439.02	386.26	0.00	0.00	0.00
7,700.00	90.00	179.40	6,250.00	-511.82	-2,437.98	486.26	0.00	0.00	0.00
7,800.00	90.00	179.40	6,250.00	-611.81	-2,436.94	586.26	0.00	0.00	0.00
7,900.00	90.00	179.40	6,250.00	-711.81	-2,435.90	686.26	0.00	0.00	0.00
8,000.00	90.00	179.40	6,250.00	-811.80	-2,434.86	786.26	0.00	0.00	0.00
8,100.00	90.00	179.40	6,250.00	-911.80	-2,433.82	886.26	0.00	0.00	0.00
8,200.00	90.00	179.40	6,250.00	-1,011.79	-2,432.78	986.26	0.00	0.00	0.00
8,300.00	90.00	179.40	6,250.00	-1,111.79	-2,431.74	1,086.26	0.00	0.00	0.00
8,400.00	90.00	179.40	6,250.00	-1,211.78	-2,430.70	1,186.26	0.00	0.00	0.00
8,500.00	90.00	179.40	6,250.00	-1,311.78	-2,429.66	1,286.26	0.00	0.00	0.00

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well TIMBRO 1717-09H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 20' @ 5030.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 20' @ 5030.00usft (RIG)
<b>Site:</b>	9N-59W-17 TIMBRO 1717 PAD	<b>North Reference:</b>	True
<b>Well:</b>	TIMBRO 1717-09H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan B		
<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	179.40	6,250.00	-1,411.77	-2,428.62	1,386.26	0.00	0.00	0.00	
8,700.00	90.00	179.40	6,250.00	-1,511.77	-2,427.58	1,486.26	0.00	0.00	0.00	
8,800.00	90.00	179.40	6,250.00	-1,611.76	-2,426.54	1,586.26	0.00	0.00	0.00	
8,900.00	90.00	179.40	6,250.00	-1,711.76	-2,425.50	1,686.26	0.00	0.00	0.00	
9,000.00	90.00	179.40	6,250.00	-1,811.75	-2,424.46	1,786.26	0.00	0.00	0.00	
9,100.00	90.00	179.40	6,250.00	-1,911.74	-2,423.42	1,886.26	0.00	0.00	0.00	
9,200.00	90.00	179.40	6,250.00	-2,011.74	-2,422.38	1,986.26	0.00	0.00	0.00	
9,300.00	90.00	179.40	6,250.00	-2,111.73	-2,421.34	2,086.26	0.00	0.00	0.00	
9,400.00	90.00	179.40	6,250.00	-2,211.73	-2,420.30	2,186.26	0.00	0.00	0.00	
9,500.00	90.00	179.40	6,250.00	-2,311.72	-2,419.26	2,286.26	0.00	0.00	0.00	
9,600.00	90.00	179.40	6,250.00	-2,411.72	-2,418.22	2,386.26	0.00	0.00	0.00	
9,700.00	90.00	179.40	6,250.00	-2,511.71	-2,417.18	2,486.26	0.00	0.00	0.00	
9,800.00	90.00	179.40	6,250.00	-2,611.71	-2,416.14	2,586.26	0.00	0.00	0.00	
9,900.00	90.00	179.40	6,250.00	-2,711.70	-2,415.10	2,686.26	0.00	0.00	0.00	
10,000.00	90.00	179.40	6,250.00	-2,811.70	-2,414.06	2,786.26	0.00	0.00	0.00	
10,100.00	90.00	179.40	6,250.00	-2,911.69	-2,413.02	2,886.26	0.00	0.00	0.00	
10,200.00	90.00	179.40	6,250.00	-3,011.69	-2,411.98	2,986.26	0.00	0.00	0.00	
10,300.00	90.00	179.40	6,250.00	-3,111.68	-2,410.94	3,086.26	0.00	0.00	0.00	
10,400.00	90.00	179.40	6,250.00	-3,211.67	-2,409.90	3,186.26	0.00	0.00	0.00	
10,500.00	90.00	179.40	6,250.00	-3,311.67	-2,408.86	3,286.26	0.00	0.00	0.00	
10,600.00	90.00	179.40	6,250.00	-3,411.66	-2,407.82	3,386.26	0.00	0.00	0.00	
10,700.00	90.00	179.40	6,250.00	-3,511.66	-2,406.78	3,486.26	0.00	0.00	0.00	
10,800.00	90.00	179.40	6,250.00	-3,611.65	-2,405.74	3,586.26	0.00	0.00	0.00	
10,900.00	90.00	179.40	6,250.00	-3,711.65	-2,404.70	3,686.26	0.00	0.00	0.00	
11,000.00	90.00	179.40	6,250.00	-3,811.64	-2,403.66	3,786.26	0.00	0.00	0.00	
11,100.00	90.00	179.40	6,250.00	-3,911.64	-2,402.62	3,886.26	0.00	0.00	0.00	
11,200.00	90.00	179.40	6,250.00	-4,011.63	-2,401.58	3,986.26	0.00	0.00	0.00	
11,300.00	90.00	179.40	6,250.00	-4,111.63	-2,400.54	4,086.26	0.00	0.00	0.00	
11,400.00	90.00	179.40	6,250.00	-4,211.62	-2,399.50	4,186.26	0.00	0.00	0.00	
11,500.00	90.00	179.40	6,250.00	-4,311.61	-2,398.46	4,286.26	0.00	0.00	0.00	
11,600.00	90.00	179.40	6,250.00	-4,411.61	-2,397.42	4,386.26	0.00	0.00	0.00	
11,700.00	90.00	179.40	6,250.00	-4,511.60	-2,396.38	4,486.26	0.00	0.00	0.00	
11,800.00	90.00	179.40	6,250.00	-4,611.60	-2,395.34	4,586.26	0.00	0.00	0.00	
11,893.09	90.00	179.40	6,250.00	-4,704.68	-2,394.37	4,679.35	0.00	0.00	0.00	
BPZ @ 11893.09ft										
11,900.00	90.00	179.40	6,250.00	-4,711.59	-2,394.30	4,686.26	0.00	0.00	0.00	
11,983.08	90.00	179.40	6,250.00	-4,794.67	-2,393.44	4,769.34	0.00	0.00	0.00	
TD Well @ 11983.08ft										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (")	Hole Diameter (")
1,765.30	1,700.00	9 5/8"		9-5/8	13-1/2

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well TIMBRO 1717-09H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 5030.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 5030.00usft (RIG)
Site:	9N-59W-17 TIMBRO 1717 PAD	North Reference:	True
Well:	TIMBRO 1717-09H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B		
Design:	Design #1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
249.50	249.50	0.00	0.00	Begin Nudge @ 249.50ft
1,529.00	1,486.88	81.83	-268.83	Hold Tangent @ 1529.00ft
6,084.57	5,595.59	654.83	-2,151.24	KOP @ 6084.57ft :: DLS = 9°
7,167.61	6,250.00	20.54	-2,443.51	TPZ @ 7167.61ft
11,893.09	6,250.00	-4,704.68	-2,394.37	BPZ @ 11893.09ft
11,983.08	6,250.00	-4,794.67	-2,393.44	TD Well @ 11983.08ft