

VERDAD RESOURCES

WATTENBERG FIELD

1N-64W-17 WARNER PAD

WARNER 1708-04H

Plan B

Plan: Design #1

Standard Planning Report

24 May, 2023

VERDAD RESOURCES

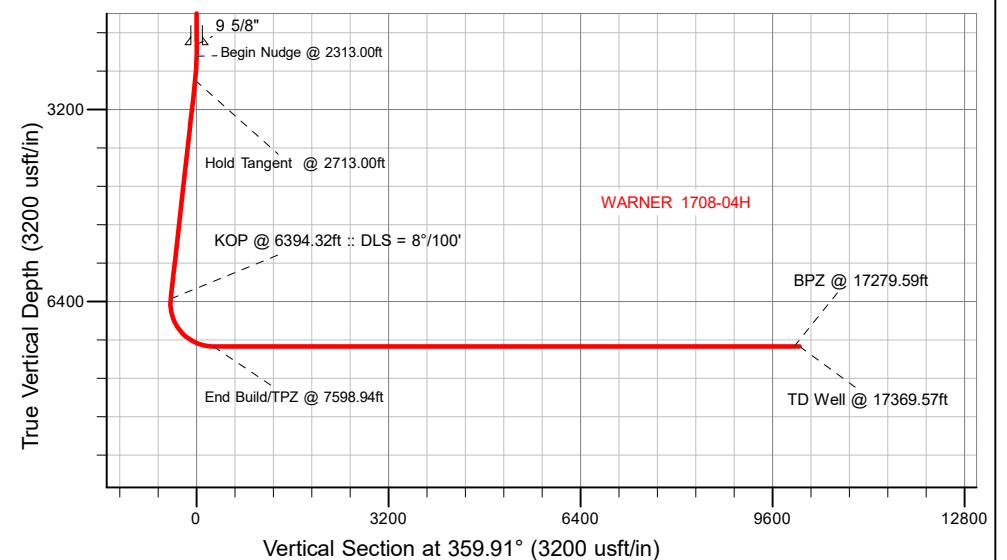
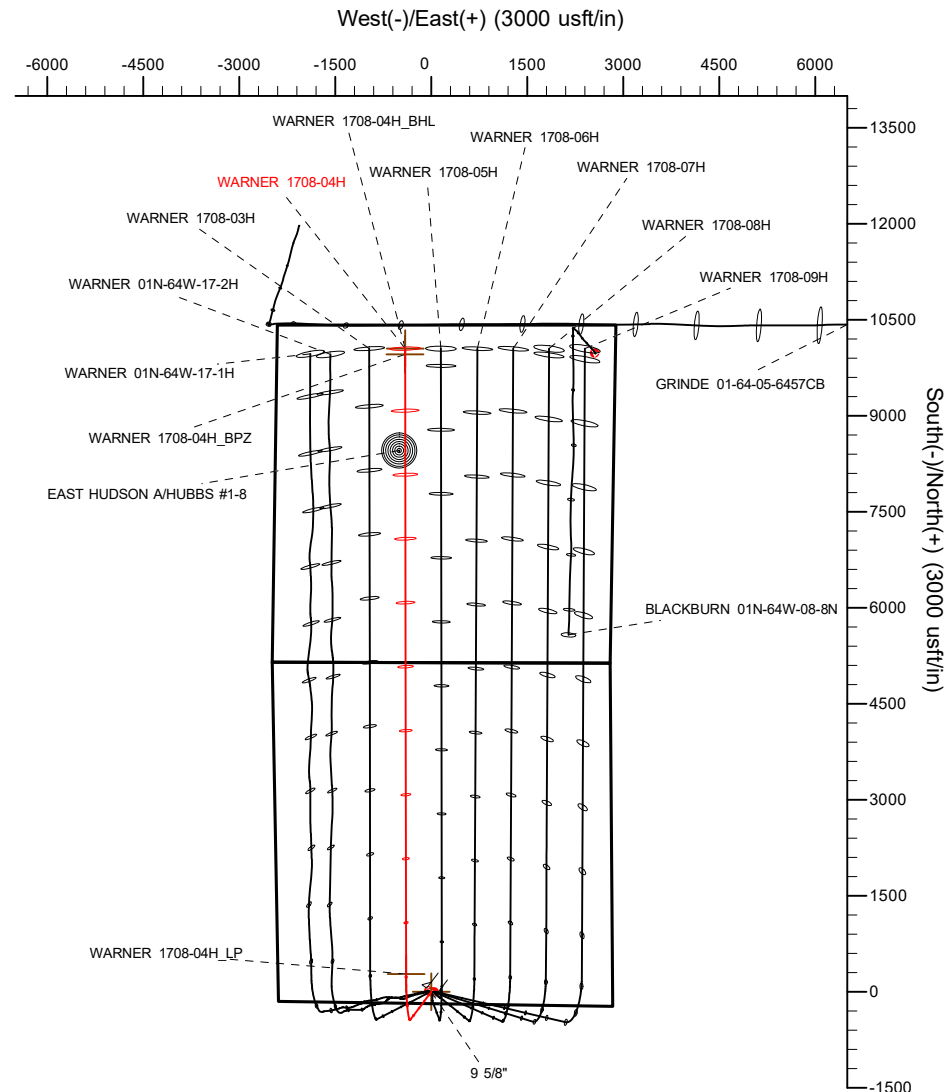
CASING DETAILS			
TVD	MD	Name	Size
2120.00	2120.00	9 5/8"	9-5/8

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	
2313.00	0.00	0.00	2313.00	0.00	0.00	0.00	0.00	0.00	
2713.00	8.00	217.05	2711.70	-22.25	-16.80	2.00	217.05	-22.22	
6394.32	8.00	217.05	6357.20	-431.16	-325.49	0.00	0.00	-430.64	
7598.94	90.00	359.91	7150.00	280.51	-393.87	8.00	142.59	281.13	
17369.57	90.00	359.91	7150.00	10051.13	-409.09	0.00	0.00	10051.76	WARNER 1708-04H_BHL

DESIGN TARGET DETAILS					
Name	TVD	Northing	Easting	Latitude	Longitude
WARNER 1708-04H_SHL	0.00	1260455.60	3258805.89	40.044636	-104.575578
WARNER 1708-04H_LP	7150.00	1260731.99	3258409.13	40.045406	-104.576985
WARNER 1708-04H_BPZ	7150.00	1270411.93	3258291.58	40.071981	-104.577045
WARNER 1708-04H_BHL	7150.00	1270501.91	3258292.04	40.072228	-104.577040

WELL DETAILS: WARNER 1708-04H	
GL = 5068'	
RKB = 20' @ 5088.00usft (RIG)	
Plan: Design #1 (WARNER 1708-04H/Plan B)	
Date:	5/25/2023

T Azimuths to True North
M Magnetic North: 7.51°
 Magnetic Field
 Strength: 51580.5nT
 Dip Angle: 66.32°
 Date: 5/24/2023
 Model: IGRF2020



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well WARNER 1708-04H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 5088.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 5088.00usft (RIG)
Site:	1N-64W-17 WARNER PAD	North Reference:	True
Well:	WARNER 1708-04H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B		
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	1N-64W-17 WARNER PAD			
Site Position:		Northing:	1,260,479.85 usft	Latitude: 40.044700
From:	Lat/Long	Easting:	3,258,893.90 usft	Longitude: -104.575263
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	

Well	WARNER 1708-04H			
Well Position	+N/-S	0.00 usft	Northing:	1,260,455.60 usft
	+E/-W	0.00 usft	Easting:	3,258,805.90 usft
Position Uncertainty		3.28 usft	Wellhead Elevation:	usft
Grid Convergence:		0.60 °	Ground Level:	5,068.00 usft

Wellbore	Plan B				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF202013	5/24/2023	7.51	66.32	51,580.52239581

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	359.91

Plan Survey Tool Program		Date	5/24/2023		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	2,120.00	Design #1 (Plan B)	ISCWSA MWD	
				Fixed:v2:standard declination	
2	2,120.00	17,369.57	Design #1 (Plan B)	ISCWSA MWD	
				Fixed:v2:standard declination	

Planning Report

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Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 5088.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 5088.00usft (RIG)
Site:	1N-64W-17 WARNER PAD	North Reference:	True
Well:	WARNER 1708-04H	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	
2,313.00	0.00	0.00	2,313.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,713.00	8.00	217.05	2,711.70	-22.25	-16.80	2.00	2.00	0.00	217.05	
6,394.32	8.00	217.05	6,357.20	-431.16	-325.49	0.00	0.00	0.00	0.00	
7,598.94	90.00	359.91	7,150.00	280.51	-393.87	8.00	6.81	11.86	142.59	
17,369.57	90.00	359.91	7,150.00	10,051.13	-409.09	0.00	0.00	0.00	0.00	WARNER 1708-04H_

Planning Report

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Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 5088.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 5088.00usft (RIG)
Site:	1N-64W-17 WARNER PAD	North Reference:	True
Well:	WARNER 1708-04H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B		
Design:	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
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,120.00	0.00	0.00	2,120.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"									
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,313.00	0.00	0.00	2,313.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 2313.00ft									
2,400.00	1.74	217.05	2,399.99	-1.05	-0.80	-1.05	2.00	2.00	0.00
2,500.00	3.74	217.05	2,499.87	-4.87	-3.68	-4.86	2.00	2.00	0.00
2,600.00	5.74	217.05	2,599.52	-11.46	-8.65	-11.45	2.00	2.00	0.00
2,700.00	7.74	217.05	2,698.82	-20.83	-15.73	-20.81	2.00	2.00	0.00
2,713.00	8.00	217.05	2,711.70	-22.25	-16.80	-22.22	2.00	2.00	0.00
Hold Tangent @ 2713.00ft									
2,800.00	8.00	217.05	2,797.85	-31.91	-24.09	-31.88	0.00	0.00	0.00
2,900.00	8.00	217.05	2,896.88	-43.02	-32.48	-42.97	0.00	0.00	0.00
3,000.00	8.00	217.05	2,995.91	-54.13	-40.86	-54.07	0.00	0.00	0.00
3,100.00	8.00	217.05	3,094.94	-65.24	-49.25	-65.16	0.00	0.00	0.00
3,200.00	8.00	217.05	3,193.96	-76.34	-57.63	-76.25	0.00	0.00	0.00
3,300.00	8.00	217.05	3,292.99	-87.45	-66.02	-87.35	0.00	0.00	0.00
3,400.00	8.00	217.05	3,392.02	-98.56	-74.41	-98.44	0.00	0.00	0.00
3,500.00	8.00	217.05	3,491.04	-109.67	-82.79	-109.54	0.00	0.00	0.00
3,600.00	8.00	217.05	3,590.07	-120.78	-91.18	-120.63	0.00	0.00	0.00
3,700.00	8.00	217.05	3,689.10	-131.88	-99.56	-131.73	0.00	0.00	0.00
3,800.00	8.00	217.05	3,788.12	-142.99	-107.95	-142.82	0.00	0.00	0.00
3,900.00	8.00	217.05	3,887.15	-154.10	-116.33	-153.91	0.00	0.00	0.00
4,000.00	8.00	217.05	3,986.18	-165.21	-124.72	-165.01	0.00	0.00	0.00
4,100.00	8.00	217.05	4,085.20	-176.31	-133.10	-176.10	0.00	0.00	0.00
4,200.00	8.00	217.05	4,184.23	-187.42	-141.49	-187.20	0.00	0.00	0.00
4,300.00	8.00	217.05	4,283.26	-198.53	-149.87	-198.29	0.00	0.00	0.00
4,400.00	8.00	217.05	4,382.28	-209.64	-158.26	-209.39	0.00	0.00	0.00
4,500.00	8.00	217.05	4,481.31	-220.74	-166.64	-220.48	0.00	0.00	0.00
4,600.00	8.00	217.05	4,580.34	-231.85	-175.03	-231.58	0.00	0.00	0.00

Planning Report

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Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 5088.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 5088.00usft (RIG)
Site:	1N-64W-17 WARNER PAD	North Reference:	True
Well:	WARNER 1708-04H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B		
Design:	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	8.00	217.05	4,679.36	-242.96	-183.41	-242.67	0.00	0.00	0.00
4,800.00	8.00	217.05	4,778.39	-254.07	-191.80	-253.76	0.00	0.00	0.00
4,900.00	8.00	217.05	4,877.42	-265.17	-200.19	-264.86	0.00	0.00	0.00
5,000.00	8.00	217.05	4,976.44	-276.28	-208.57	-275.95	0.00	0.00	0.00
5,100.00	8.00	217.05	5,075.47	-287.39	-216.96	-287.05	0.00	0.00	0.00
5,200.00	8.00	217.05	5,174.50	-298.50	-225.34	-298.14	0.00	0.00	0.00
5,300.00	8.00	217.05	5,273.53	-309.60	-233.73	-309.24	0.00	0.00	0.00
5,400.00	8.00	217.05	5,372.55	-320.71	-242.11	-320.33	0.00	0.00	0.00
5,500.00	8.00	217.05	5,471.58	-331.82	-250.50	-331.42	0.00	0.00	0.00
5,600.00	8.00	217.05	5,570.61	-342.93	-258.88	-342.52	0.00	0.00	0.00
5,700.00	8.00	217.05	5,669.63	-354.03	-267.27	-353.61	0.00	0.00	0.00
5,800.00	8.00	217.05	5,768.66	-365.14	-275.65	-364.71	0.00	0.00	0.00
5,900.00	8.00	217.05	5,867.69	-376.25	-284.04	-375.80	0.00	0.00	0.00
6,000.00	8.00	217.05	5,966.71	-387.36	-292.42	-386.90	0.00	0.00	0.00
6,100.00	8.00	217.05	6,065.74	-398.46	-300.81	-397.99	0.00	0.00	0.00
6,200.00	8.00	217.05	6,164.77	-409.57	-309.19	-409.09	0.00	0.00	0.00
6,300.00	8.00	217.05	6,263.79	-420.68	-317.58	-420.18	0.00	0.00	0.00
6,394.32	8.00	217.05	6,357.20	-431.16	-325.49	-430.64	0.00	0.00	0.00
KOP @ 6394.32ft :: DLS = 8°/100'									
6,400.00	7.64	219.13	6,362.82	-431.76	-325.97	-431.25	8.00	-6.27	36.54
6,450.00	5.21	248.33	6,412.52	-435.18	-330.18	-434.66	8.00	-4.86	58.41
6,500.00	5.28	293.20	6,462.33	-435.12	-334.40	-434.59	8.00	0.13	89.75
6,550.00	7.78	321.49	6,512.01	-431.56	-338.63	-431.03	8.00	4.99	56.57
6,600.00	11.18	334.48	6,561.33	-424.54	-342.82	-424.00	8.00	6.81	25.99
6,650.00	14.88	341.29	6,610.04	-414.08	-346.97	-413.53	8.00	7.40	13.61
6,700.00	18.70	345.39	6,657.90	-400.24	-351.05	-399.68	8.00	7.64	8.21
6,750.00	22.58	348.14	6,704.68	-383.08	-355.05	-382.52	8.00	7.76	5.49
6,800.00	26.50	350.11	6,750.15	-362.68	-358.94	-362.12	8.00	7.83	3.94
6,850.00	30.44	351.61	6,794.10	-339.15	-362.70	-338.58	8.00	7.87	2.99
6,900.00	34.39	352.79	6,836.30	-312.61	-366.33	-312.03	8.00	7.90	2.36
6,950.00	38.35	353.75	6,876.56	-283.17	-369.79	-282.59	8.00	7.92	1.93
7,000.00	42.31	354.56	6,914.67	-250.98	-373.07	-250.40	8.00	7.93	1.62
7,050.00	46.28	355.26	6,950.45	-216.21	-376.16	-215.62	8.00	7.94	1.39
7,100.00	50.26	355.86	6,983.72	-179.01	-379.04	-178.42	8.00	7.95	1.22
7,150.00	54.23	356.41	7,014.33	-139.58	-381.70	-138.98	8.00	7.95	1.08
7,200.00	58.21	356.90	7,042.12	-98.10	-384.13	-97.50	8.00	7.96	0.98
7,250.00	62.19	357.35	7,066.96	-54.77	-386.30	-54.17	8.00	7.96	0.90
7,300.00	66.18	357.76	7,088.73	-9.81	-388.22	-9.20	8.00	7.96	0.84
7,350.00	70.16	358.16	7,107.32	36.56	-389.87	37.17	8.00	7.97	0.79
7,400.00	74.14	358.53	7,122.65	84.12	-391.24	84.74	8.00	7.97	0.75
7,450.00	78.13	358.89	7,134.63	132.65	-392.33	133.26	8.00	7.97	0.72
7,500.00	82.11	359.24	7,143.20	181.89	-393.14	182.51	8.00	7.97	0.70
7,550.00	86.10	359.58	7,148.34	231.61	-393.65	232.23	8.00	7.97	0.68
7,598.94	90.00	359.91	7,150.00	280.51	-393.87	281.13	8.00	7.97	0.68
End Build/TPZ @ 7598.94ft									
7,600.00	90.00	359.91	7,150.00	281.57	-393.87	282.19	0.00	0.00	0.00
7,700.00	90.00	359.91	7,150.00	381.57	-394.03	382.19	0.00	0.00	0.00
7,800.00	90.00	359.91	7,150.00	481.57	-394.18	482.19	0.00	0.00	0.00
7,900.00	90.00	359.91	7,150.00	581.57	-394.34	582.19	0.00	0.00	0.00
8,000.00	90.00	359.91	7,150.00	681.57	-394.49	682.19	0.00	0.00	0.00
8,100.00	90.00	359.91	7,150.00	781.57	-394.65	782.19	0.00	0.00	0.00
8,200.00	90.00	359.91	7,150.00	881.57	-394.81	882.19	0.00	0.00	0.00
8,300.00	90.00	359.91	7,150.00	981.57	-394.96	982.19	0.00	0.00	0.00
8,400.00	90.00	359.91	7,150.00	1,081.57	-395.12	1,082.19	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well WARNER 1708-04H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 5088.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 5088.00usft (RIG)
Site:	1N-64W-17 WARNER PAD	North Reference:	True
Well:	WARNER 1708-04H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B		
Design:	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)	
8,500.00	90.00	359.91	7,150.00	1,181.57	-395.27	1,182.19	0.00	0.00	0.00	
8,600.00	90.00	359.91	7,150.00	1,281.57	-395.43	1,282.19	0.00	0.00	0.00	
8,700.00	90.00	359.91	7,150.00	1,381.57	-395.59	1,382.19	0.00	0.00	0.00	
8,800.00	90.00	359.91	7,150.00	1,481.57	-395.74	1,482.19	0.00	0.00	0.00	
8,900.00	90.00	359.91	7,150.00	1,581.57	-395.90	1,582.19	0.00	0.00	0.00	
9,000.00	90.00	359.91	7,150.00	1,681.57	-396.05	1,682.19	0.00	0.00	0.00	
9,100.00	90.00	359.91	7,150.00	1,781.57	-396.21	1,782.19	0.00	0.00	0.00	
9,200.00	90.00	359.91	7,150.00	1,881.57	-396.36	1,882.19	0.00	0.00	0.00	
9,300.00	90.00	359.91	7,150.00	1,981.57	-396.52	1,982.19	0.00	0.00	0.00	
9,400.00	90.00	359.91	7,150.00	2,081.57	-396.68	2,082.19	0.00	0.00	0.00	
9,500.00	90.00	359.91	7,150.00	2,181.57	-396.83	2,182.19	0.00	0.00	0.00	
9,600.00	90.00	359.91	7,150.00	2,281.57	-396.99	2,282.19	0.00	0.00	0.00	
9,700.00	90.00	359.91	7,150.00	2,381.57	-397.14	2,382.19	0.00	0.00	0.00	
9,800.00	90.00	359.91	7,150.00	2,481.57	-397.30	2,482.19	0.00	0.00	0.00	
9,900.00	90.00	359.91	7,150.00	2,581.57	-397.46	2,582.19	0.00	0.00	0.00	
10,000.00	90.00	359.91	7,150.00	2,681.57	-397.61	2,682.19	0.00	0.00	0.00	
10,100.00	90.00	359.91	7,150.00	2,781.57	-397.77	2,782.19	0.00	0.00	0.00	
10,200.00	90.00	359.91	7,150.00	2,881.57	-397.92	2,882.19	0.00	0.00	0.00	
10,300.00	90.00	359.91	7,150.00	2,981.57	-398.08	2,982.19	0.00	0.00	0.00	
10,400.00	90.00	359.91	7,150.00	3,081.57	-398.23	3,082.19	0.00	0.00	0.00	
10,500.00	90.00	359.91	7,150.00	3,181.57	-398.39	3,182.19	0.00	0.00	0.00	
10,600.00	90.00	359.91	7,150.00	3,281.57	-398.55	3,282.19	0.00	0.00	0.00	
10,700.00	90.00	359.91	7,150.00	3,381.57	-398.70	3,382.19	0.00	0.00	0.00	
10,800.00	90.00	359.91	7,150.00	3,481.57	-398.86	3,482.19	0.00	0.00	0.00	
10,900.00	90.00	359.91	7,150.00	3,581.57	-399.01	3,582.19	0.00	0.00	0.00	
11,000.00	90.00	359.91	7,150.00	3,681.57	-399.17	3,682.19	0.00	0.00	0.00	
11,100.00	90.00	359.91	7,150.00	3,781.57	-399.33	3,782.19	0.00	0.00	0.00	
11,200.00	90.00	359.91	7,150.00	3,881.57	-399.48	3,882.19	0.00	0.00	0.00	
11,300.00	90.00	359.91	7,150.00	3,981.57	-399.64	3,982.19	0.00	0.00	0.00	
11,400.00	90.00	359.91	7,150.00	4,081.57	-399.79	4,082.19	0.00	0.00	0.00	
11,500.00	90.00	359.91	7,150.00	4,181.57	-399.95	4,182.19	0.00	0.00	0.00	
11,600.00	90.00	359.91	7,150.00	4,281.57	-400.10	4,282.19	0.00	0.00	0.00	
11,700.00	90.00	359.91	7,150.00	4,381.57	-400.26	4,382.19	0.00	0.00	0.00	
11,800.00	90.00	359.91	7,150.00	4,481.57	-400.42	4,482.19	0.00	0.00	0.00	
11,900.00	90.00	359.91	7,150.00	4,581.57	-400.57	4,582.19	0.00	0.00	0.00	
12,000.00	90.00	359.91	7,150.00	4,681.57	-400.73	4,682.19	0.00	0.00	0.00	
12,100.00	90.00	359.91	7,150.00	4,781.57	-400.88	4,782.19	0.00	0.00	0.00	
12,200.00	90.00	359.91	7,150.00	4,881.57	-401.04	4,882.19	0.00	0.00	0.00	
12,300.00	90.00	359.91	7,150.00	4,981.57	-401.20	4,982.19	0.00	0.00	0.00	
12,400.00	90.00	359.91	7,150.00	5,081.57	-401.35	5,082.19	0.00	0.00	0.00	
12,500.00	90.00	359.91	7,150.00	5,181.57	-401.51	5,182.19	0.00	0.00	0.00	
12,600.00	90.00	359.91	7,150.00	5,281.57	-401.66	5,282.19	0.00	0.00	0.00	
12,700.00	90.00	359.91	7,150.00	5,381.57	-401.82	5,382.19	0.00	0.00	0.00	
12,800.00	90.00	359.91	7,150.00	5,481.57	-401.97	5,482.19	0.00	0.00	0.00	
12,900.00	90.00	359.91	7,150.00	5,581.57	-402.13	5,582.19	0.00	0.00	0.00	
13,000.00	90.00	359.91	7,150.00	5,681.57	-402.29	5,682.19	0.00	0.00	0.00	
13,100.00	90.00	359.91	7,150.00	5,781.57	-402.44	5,782.19	0.00	0.00	0.00	
13,200.00	90.00	359.91	7,150.00	5,881.57	-402.60	5,882.19	0.00	0.00	0.00	
13,300.00	90.00	359.91	7,150.00	5,981.57	-402.75	5,982.19	0.00	0.00	0.00	
13,400.00	90.00	359.91	7,150.00	6,081.57	-402.91	6,082.19	0.00	0.00	0.00	
13,500.00	90.00	359.91	7,150.00	6,181.57	-403.07	6,182.19	0.00	0.00	0.00	
13,600.00	90.00	359.91	7,150.00	6,281.57	-403.22	6,282.19	0.00	0.00	0.00	
13,700.00	90.00	359.91	7,150.00	6,381.57	-403.38	6,382.19	0.00	0.00	0.00	
13,800.00	90.00	359.91	7,150.00	6,481.57	-403.53	6,482.19	0.00	0.00	0.00	

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well WARNER 1708-04H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 5088.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 5088.00usft (RIG)
Site:	1N-64W-17 WARNER PAD	North Reference:	True
Well:	WARNER 1708-04H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B		
Design:	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)
13,900.00	90.00	359.91	7,150.00	6,581.56	-403.69	6,582.19	0.00	0.00	0.00
14,000.00	90.00	359.91	7,150.00	6,681.56	-403.84	6,682.19	0.00	0.00	0.00
14,100.00	90.00	359.91	7,150.00	6,781.56	-404.00	6,782.19	0.00	0.00	0.00
14,200.00	90.00	359.91	7,150.00	6,881.56	-404.16	6,882.19	0.00	0.00	0.00
14,300.00	90.00	359.91	7,150.00	6,981.56	-404.31	6,982.19	0.00	0.00	0.00
14,400.00	90.00	359.91	7,150.00	7,081.56	-404.47	7,082.19	0.00	0.00	0.00
14,500.00	90.00	359.91	7,150.00	7,181.56	-404.62	7,182.19	0.00	0.00	0.00
14,600.00	90.00	359.91	7,150.00	7,281.56	-404.78	7,282.19	0.00	0.00	0.00
14,700.00	90.00	359.91	7,150.00	7,381.56	-404.93	7,382.19	0.00	0.00	0.00
14,800.00	90.00	359.91	7,150.00	7,481.56	-405.09	7,482.19	0.00	0.00	0.00
14,900.00	90.00	359.91	7,150.00	7,581.56	-405.25	7,582.19	0.00	0.00	0.00
15,000.00	90.00	359.91	7,150.00	7,681.56	-405.40	7,682.19	0.00	0.00	0.00
15,100.00	90.00	359.91	7,150.00	7,781.56	-405.56	7,782.19	0.00	0.00	0.00
15,200.00	90.00	359.91	7,150.00	7,881.56	-405.71	7,882.19	0.00	0.00	0.00
15,300.00	90.00	359.91	7,150.00	7,981.56	-405.87	7,982.19	0.00	0.00	0.00
15,400.00	90.00	359.91	7,150.00	8,081.56	-406.03	8,082.19	0.00	0.00	0.00
15,500.00	90.00	359.91	7,150.00	8,181.56	-406.18	8,182.19	0.00	0.00	0.00
15,600.00	90.00	359.91	7,150.00	8,281.56	-406.34	8,282.19	0.00	0.00	0.00
15,700.00	90.00	359.91	7,150.00	8,381.56	-406.49	8,382.19	0.00	0.00	0.00
15,800.00	90.00	359.91	7,150.00	8,481.56	-406.65	8,482.19	0.00	0.00	0.00
15,900.00	90.00	359.91	7,150.00	8,581.56	-406.80	8,582.19	0.00	0.00	0.00
16,000.00	90.00	359.91	7,150.00	8,681.56	-406.96	8,682.19	0.00	0.00	0.00
16,100.00	90.00	359.91	7,150.00	8,781.56	-407.12	8,782.19	0.00	0.00	0.00
16,200.00	90.00	359.91	7,150.00	8,881.56	-407.27	8,882.19	0.00	0.00	0.00
16,300.00	90.00	359.91	7,150.00	8,981.56	-407.43	8,982.19	0.00	0.00	0.00
16,400.00	90.00	359.91	7,150.00	9,081.56	-407.58	9,082.19	0.00	0.00	0.00
16,500.00	90.00	359.91	7,150.00	9,181.56	-407.74	9,182.19	0.00	0.00	0.00
16,600.00	90.00	359.91	7,150.00	9,281.56	-407.90	9,282.19	0.00	0.00	0.00
16,700.00	90.00	359.91	7,150.00	9,381.56	-408.05	9,382.19	0.00	0.00	0.00
16,800.00	90.00	359.91	7,150.00	9,481.56	-408.21	9,482.19	0.00	0.00	0.00
16,900.00	90.00	359.91	7,150.00	9,581.56	-408.36	9,582.19	0.00	0.00	0.00
17,000.00	90.00	359.91	7,150.00	9,681.56	-408.52	9,682.19	0.00	0.00	0.00
17,100.00	90.00	359.91	7,150.00	9,781.56	-408.67	9,782.19	0.00	0.00	0.00
17,200.00	90.00	359.91	7,150.00	9,881.56	-408.83	9,882.19	0.00	0.00	0.00
17,279.59	90.00	359.91	7,150.00	9,961.15	-408.95	9,961.78	0.00	0.00	0.00
BPZ @ 17279.59ft									
17,300.00	90.00	359.91	7,150.00	9,981.56	-408.99	9,982.19	0.00	0.00	0.00
17,369.57	90.00	359.91	7,150.00	10,051.13	-409.09	10,051.76	0.00	0.00	0.00
TD Well @ 17369.57ft									

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
2,120.00	2,120.00	9 5/8"	9-5/8	13-1/2

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well WARNER 1708-04H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 5088.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 5088.00usft (RIG)
Site:	1N-64W-17 WARNER PAD	North Reference:	True
Well:	WARNER 1708-04H	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)	
2,313.00	2,313.00	0.00	0.00	Begin Nudge @ 2313.00ft
2,713.00	2,711.70	-22.25	-16.80	Hold Tangent @ 2713.00ft
6,394.32	6,357.20	-431.16	-325.49	KOP @ 6394.32ft :: DLS = 8"/100'
7,598.94	7,150.00	280.51	-393.87	End Build/TPZ @ 7598.94ft
17,279.59	7,150.00	9,961.15	-408.95	BPZ @ 17279.59ft
17,369.57	7,150.00	10,051.13	-409.09	TD Well @ 17369.57ft