

VERDAD RESOURCES

WATTENBERG FIELD

1N-64W-10 TIGER 0916 PAD

TIGER 0916-04H

Wellbore #1

Plan: Design #1

Standard Planning Report

27 December, 2022

Project: WATTENBERG FIELD
Site: 1N-64W-10 TIGER 0916 PAD
Well: TIGER 0916-04H
Wellbore: Wellbore #1
Design: Design #1

VERDAD RESOURCES

CASING DETAILS

TVD	MD	Name	Size
2304.00	2502.32	9 5/8"	9-5/8

SHL	LP/TPZ	BPZ	BHL
245' FNL	460' FNL	460' FSL	370' FSL
1355' FWL	2331' FWL	2331' FWL	2331' FWL

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	
276.00	0.00	0.00	276.00	0.00	0.00	0.00	0.00	0.00	
2085.00	36.18	276.16	1967.15	59.28	-549.24	2.00	276.16	-56.50	
7829.75	36.18	276.16	6604.12	423.18	-3920.92	0.00	0.00	-403.33	
8868.21	90.00	180.29	7150.00	-210.26	-4321.27	9.00	-94.74	232.13	
18715.32	90.00	180.29	7150.00	-10057.25	-4371.16	0.00	0.00	10079.25	TIGER 0916-04H_BHL

WELLBORE TARGET DETAILS

Name	TVD	Northing	Easting	Latitude	Longitude
TIGER 0916-04H_SHL	0.00	1270723.16	3268229.35	40.072546	-104.541525
TIGER 0916-04H_LP/TPZ	7150.00	1270465.95	3263910.59	40.071967	-104.556966
TIGER 0916-04H_BPZ	7150.00	1260709.21	3263965.64	40.045183	-104.557140
TIGER 0916-04H_BHL	7150.00	1260619.25	3263967.15	40.044936	-104.557138

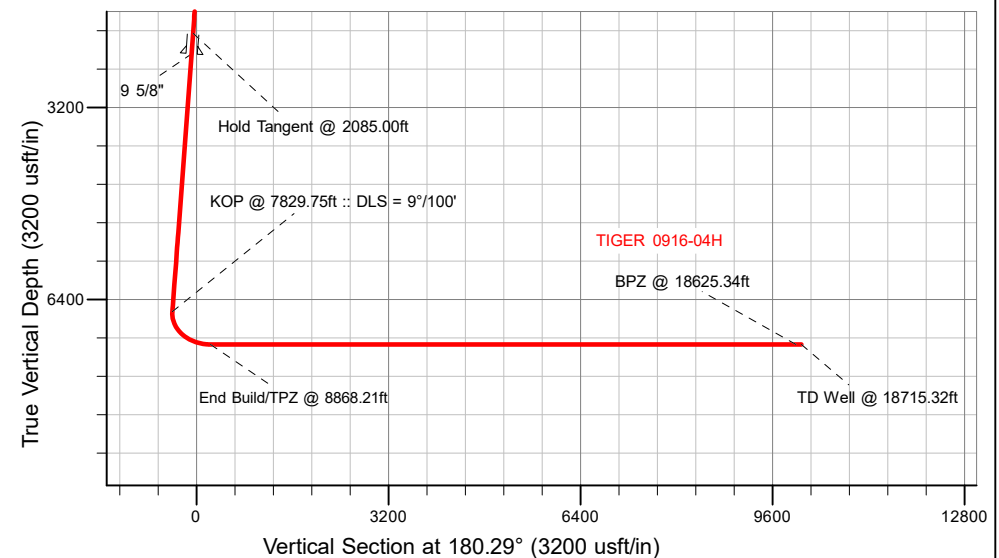
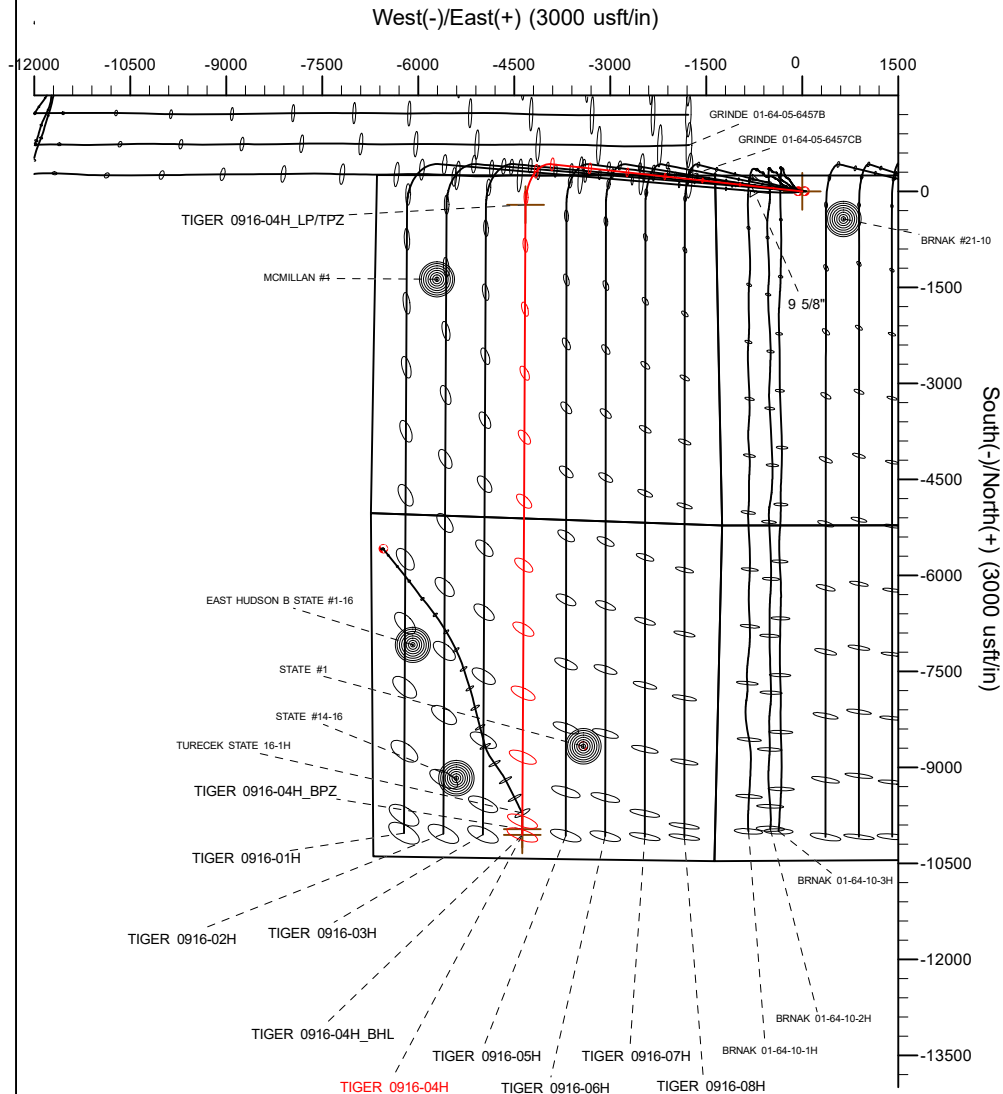
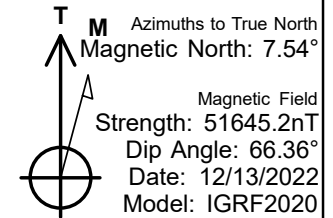
WELL DETAILS: TIGER 0916-04H

GL = 5105'

RKB = 24' @ 5129.00usft (RIG)

Plan: Design #1 (TIGER 0916-04H/Wellbore #1)

Date: 12/27/2022



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well TIGER 0916-04H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 24' @ 5129.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 24' @ 5129.00usft (RIG)
Site:	1N-64W-10 TIGER 0916 PAD	North Reference:	True
Well:	TIGER 0916-04H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
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-10 TIGER 0916 PAD				
Site Position:		Northing:	1,270,722.66	usft	Latitude:	40.072546
From:	Lat/Long	Easting:	3,268,181.22	usft	Longitude:	-104.541697
Position Uncertainty:		0.00	usft	Slot Radius:	13-3/16	"

Well		TIGER 0916-04H				
Well Position	+N/-S	0.00 usft	Northing:	1,270,723.15 usft	Latitude:	40.072546
	+E/-W	0.00 usft	Easting:	3,268,229.35 usft	Longitude:	-104.541525
Position Uncertainty		3.28 usft	Wellhead Elevation:	usft	Ground Level:	5,105.00 usft
Grid Convergence:		0.62 °				

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF202013	12/13/2022	7.54	66.36	51,645.21386197

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	180.29	

Plan Survey Tool Program	Date	12/27/2022			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	2,502.32	Design #1 (Wellbore #1)	ISCWSA MWD	
				Fixed:v2:standard declination	
2	2,502.32	18,715.32	Design #1 (Wellbore #1)	ISCWSA MWD	
				Fixed:v2:standard declination	

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Site:	1N-64W-10 TIGER 0916 PAD	North Reference:	True
Well:	TIGER 0916-04H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
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	
276.00	0.00	0.00	276.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,085.00	36.18	276.16	1,967.15	59.28	-549.24	2.00	2.00	0.00	276.16	
7,829.75	36.18	276.16	6,604.12	423.18	-3,920.92	0.00	0.00	0.00	0.00	
8,868.21	90.00	180.29	7,150.00	-210.26	-4,321.27	9.00	5.18	-9.23	-94.74	
18,715.32	90.00	180.29	7,150.00	-10,057.25	-4,371.16	0.00	0.00	0.00	0.00	TIGER 0916-04H_BH

Planning Report

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Company:	VERDAD RESOURCES	TVD Reference:	RKB = 24' @ 5129.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 24' @ 5129.00usft (RIG)
Site:	1N-64W-10 TIGER 0916 PAD	North Reference:	True
Well:	TIGER 0916-04H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
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
276.00	0.00	0.00	276.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 276.00ft									
300.00	0.48	276.16	300.00	0.01	-0.10	-0.01	2.00	2.00	0.00
400.00	2.48	276.16	399.96	0.29	-2.67	-0.27	2.00	2.00	0.00
500.00	4.48	276.16	499.77	0.94	-8.70	-0.90	2.00	2.00	0.00
600.00	6.48	276.16	599.31	1.96	-18.20	-1.87	2.00	2.00	0.00
700.00	8.48	276.16	698.45	3.36	-31.14	-3.20	2.00	2.00	0.00
800.00	10.48	276.16	797.08	5.13	-47.51	-4.89	2.00	2.00	0.00
900.00	12.48	276.16	895.08	7.26	-67.30	-6.92	2.00	2.00	0.00
1,000.00	14.48	276.16	992.32	9.76	-90.47	-9.31	2.00	2.00	0.00
1,100.00	16.48	276.16	1,088.69	12.63	-117.01	-12.04	2.00	2.00	0.00
1,200.00	18.48	276.16	1,184.06	15.85	-146.87	-15.11	2.00	2.00	0.00
1,300.00	20.48	276.16	1,278.33	19.43	-180.03	-18.52	2.00	2.00	0.00
1,400.00	22.48	276.16	1,371.38	23.36	-216.43	-22.26	2.00	2.00	0.00
1,500.00	24.48	276.16	1,463.10	27.63	-256.04	-26.34	2.00	2.00	0.00
1,600.00	26.48	276.16	1,553.37	32.25	-298.81	-30.74	2.00	2.00	0.00
1,700.00	28.48	276.16	1,642.08	37.20	-344.68	-35.46	2.00	2.00	0.00
1,800.00	30.48	276.16	1,729.13	42.48	-393.61	-40.49	2.00	2.00	0.00
1,900.00	32.48	276.16	1,814.41	48.08	-445.53	-45.83	2.00	2.00	0.00
2,000.00	34.48	276.16	1,897.81	54.00	-500.37	-51.47	2.00	2.00	0.00
2,085.00	36.18	276.16	1,967.15	59.28	-549.24	-56.50	2.00	2.00	0.00
Hold Tangent @ 2085.00ft									
2,100.00	36.18	276.16	1,979.26	60.23	-558.04	-57.40	0.00	0.00	0.00
2,200.00	36.18	276.16	2,059.98	66.56	-616.73	-63.44	0.00	0.00	0.00
2,300.00	36.18	276.16	2,140.69	72.90	-675.42	-69.48	0.00	0.00	0.00
2,400.00	36.18	276.16	2,221.41	79.23	-734.12	-75.52	0.00	0.00	0.00
2,500.00	36.18	276.16	2,302.13	85.57	-792.81	-81.55	0.00	0.00	0.00
2,502.32	36.18	276.16	2,304.00	85.71	-794.17	-81.69	0.00	0.00	0.00
9 5/8"									
2,600.00	36.18	276.16	2,382.84	91.90	-851.50	-87.59	0.00	0.00	0.00
2,700.00	36.18	276.16	2,463.56	98.24	-910.19	-93.63	0.00	0.00	0.00
2,800.00	36.18	276.16	2,544.28	104.57	-968.88	-99.66	0.00	0.00	0.00
2,900.00	36.18	276.16	2,624.99	110.90	-1,027.57	-105.70	0.00	0.00	0.00
3,000.00	36.18	276.16	2,705.71	117.24	-1,086.27	-111.74	0.00	0.00	0.00
3,100.00	36.18	276.16	2,786.43	123.57	-1,144.96	-117.78	0.00	0.00	0.00
3,200.00	36.18	276.16	2,867.14	129.91	-1,203.65	-123.81	0.00	0.00	0.00
3,300.00	36.18	276.16	2,947.86	136.24	-1,262.34	-129.85	0.00	0.00	0.00
3,400.00	36.18	276.16	3,028.58	142.58	-1,321.03	-135.89	0.00	0.00	0.00
3,500.00	36.18	276.16	3,109.29	148.91	-1,379.72	-141.93	0.00	0.00	0.00
3,600.00	36.18	276.16	3,190.01	155.25	-1,438.41	-147.96	0.00	0.00	0.00
3,700.00	36.18	276.16	3,270.73	161.58	-1,497.11	-154.00	0.00	0.00	0.00
3,800.00	36.18	276.16	3,351.44	167.91	-1,555.80	-160.04	0.00	0.00	0.00
3,900.00	36.18	276.16	3,432.16	174.25	-1,614.49	-166.08	0.00	0.00	0.00
4,000.00	36.18	276.16	3,512.88	180.58	-1,673.18	-172.11	0.00	0.00	0.00
4,100.00	36.18	276.16	3,593.59	186.92	-1,731.87	-178.15	0.00	0.00	0.00
4,200.00	36.18	276.16	3,674.31	193.25	-1,790.56	-184.19	0.00	0.00	0.00
4,300.00	36.18	276.16	3,755.03	199.59	-1,849.26	-190.22	0.00	0.00	0.00
4,400.00	36.18	276.16	3,835.74	205.92	-1,907.95	-196.26	0.00	0.00	0.00
4,500.00	36.18	276.16	3,916.46	212.26	-1,966.64	-202.30	0.00	0.00	0.00
4,600.00	36.18	276.16	3,997.18	218.59	-2,025.33	-208.34	0.00	0.00	0.00

Planning Report

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Project:	WATTENBERG FIELD	MD Reference:	RKB = 24' @ 5129.00usft (RIG)
Site:	1N-64W-10 TIGER 0916 PAD	North Reference:	True
Well:	TIGER 0916-04H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
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	36.18	276.16	4,077.89	224.93	-2,084.02	-214.37	0.00	0.00	0.00	
4,800.00	36.18	276.16	4,158.61	231.26	-2,142.71	-220.41	0.00	0.00	0.00	
4,900.00	36.18	276.16	4,239.33	237.59	-2,201.40	-226.45	0.00	0.00	0.00	
5,000.00	36.18	276.16	4,320.04	243.93	-2,260.10	-232.49	0.00	0.00	0.00	
5,100.00	36.18	276.16	4,400.76	250.26	-2,318.79	-238.52	0.00	0.00	0.00	
5,200.00	36.18	276.16	4,481.48	256.60	-2,377.48	-244.56	0.00	0.00	0.00	
5,300.00	36.18	276.16	4,562.19	262.93	-2,436.17	-250.60	0.00	0.00	0.00	
5,400.00	36.18	276.16	4,642.91	269.27	-2,494.86	-256.64	0.00	0.00	0.00	
5,500.00	36.18	276.16	4,723.63	275.60	-2,553.55	-262.67	0.00	0.00	0.00	
5,600.00	36.18	276.16	4,804.34	281.94	-2,612.25	-268.71	0.00	0.00	0.00	
5,700.00	36.18	276.16	4,885.06	288.27	-2,670.94	-274.75	0.00	0.00	0.00	
5,800.00	36.18	276.16	4,965.78	294.60	-2,729.63	-280.79	0.00	0.00	0.00	
5,900.00	36.18	276.16	5,046.49	300.94	-2,788.32	-286.82	0.00	0.00	0.00	
6,000.00	36.18	276.16	5,127.21	307.27	-2,847.01	-292.86	0.00	0.00	0.00	
6,100.00	36.18	276.16	5,207.93	313.61	-2,905.70	-298.90	0.00	0.00	0.00	
6,200.00	36.18	276.16	5,288.64	319.94	-2,964.40	-304.93	0.00	0.00	0.00	
6,300.00	36.18	276.16	5,369.36	326.28	-3,023.09	-310.97	0.00	0.00	0.00	
6,400.00	36.18	276.16	5,450.08	332.61	-3,081.78	-317.01	0.00	0.00	0.00	
6,500.00	36.18	276.16	5,530.79	338.95	-3,140.47	-323.05	0.00	0.00	0.00	
6,600.00	36.18	276.16	5,611.51	345.28	-3,199.16	-329.08	0.00	0.00	0.00	
6,700.00	36.18	276.16	5,692.23	351.62	-3,257.85	-335.12	0.00	0.00	0.00	
6,800.00	36.18	276.16	5,772.94	357.95	-3,316.54	-341.16	0.00	0.00	0.00	
6,900.00	36.18	276.16	5,853.66	364.28	-3,375.24	-347.20	0.00	0.00	0.00	
7,000.00	36.18	276.16	5,934.38	370.62	-3,433.93	-353.23	0.00	0.00	0.00	
7,100.00	36.18	276.16	6,015.09	376.95	-3,492.62	-359.27	0.00	0.00	0.00	
7,200.00	36.18	276.16	6,095.81	383.29	-3,551.31	-365.31	0.00	0.00	0.00	
7,300.00	36.18	276.16	6,176.53	389.62	-3,610.00	-371.35	0.00	0.00	0.00	
7,400.00	36.18	276.16	6,257.24	395.96	-3,668.69	-377.38	0.00	0.00	0.00	
7,500.00	36.18	276.16	6,337.96	402.29	-3,727.39	-383.42	0.00	0.00	0.00	
7,600.00	36.18	276.16	6,418.68	408.63	-3,786.08	-389.46	0.00	0.00	0.00	
7,700.00	36.18	276.16	6,499.39	414.96	-3,844.77	-395.49	0.00	0.00	0.00	
7,800.00	36.18	276.16	6,580.11	421.29	-3,903.46	-401.53	0.00	0.00	0.00	
7,829.75	36.18	276.16	6,604.12	423.18	-3,920.92	-403.33	0.00	0.00	0.00	
KOP @ 7829.75ft :: DLS = 9°/100'										
7,850.00	36.07	273.07	6,620.48	424.14	-3,932.82	-404.23	9.00	-0.55	-15.24	
7,900.00	36.13	265.43	6,660.90	423.76	-3,962.22	-403.70	9.00	0.13	-15.28	
7,950.00	36.68	257.90	6,701.16	419.45	-3,991.54	-399.24	9.00	1.09	-15.06	
8,000.00	37.69	250.64	6,741.02	411.25	-4,020.57	-390.90	9.00	2.01	-14.52	
8,050.00	39.11	243.77	6,780.22	399.21	-4,049.16	-378.71	9.00	2.86	-13.75	
8,100.00	40.92	237.36	6,818.53	383.40	-4,077.11	-362.76	9.00	3.61	-12.83	
8,150.00	43.05	231.43	6,855.70	363.91	-4,104.25	-343.14	9.00	4.27	-11.85	
8,200.00	45.47	225.99	6,891.52	340.88	-4,130.43	-319.97	9.00	4.83	-10.88	
8,250.00	48.12	221.00	6,925.76	314.43	-4,155.47	-293.40	9.00	5.31	-9.98	
8,300.00	50.97	216.42	6,958.21	284.74	-4,179.23	-263.58	9.00	5.70	-9.15	
8,350.00	53.99	212.21	6,988.66	251.99	-4,201.55	-230.72	9.00	6.03	-8.42	
8,400.00	57.14	208.32	7,016.94	216.37	-4,222.30	-195.00	9.00	6.30	-7.79	
8,450.00	60.41	204.69	7,042.86	178.11	-4,241.35	-156.64	9.00	6.53	-7.25	
8,500.00	63.76	201.30	7,066.27	137.45	-4,258.59	-115.89	9.00	6.71	-6.79	
8,550.00	67.20	198.10	7,087.02	94.63	-4,273.91	-72.99	9.00	6.86	-6.40	
8,600.00	70.69	195.06	7,104.98	49.91	-4,287.20	-28.21	9.00	6.99	-6.08	
8,650.00	74.23	192.15	7,120.05	3.59	-4,298.40	18.17	9.00	7.08	-5.83	
8,700.00	77.81	189.33	7,132.13	-44.07	-4,307.43	65.87	9.00	7.16	-5.63	
8,750.00	81.41	186.60	7,141.15	-92.77	-4,314.24	114.60	9.00	7.21	-5.47	
8,800.00	85.04	183.91	7,147.05	-142.20	-4,318.78	164.05	9.00	7.25	-5.37	

Planning Report

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Project:	WATTENBERG FIELD	MD Reference:	RKB = 24' @ 5129.00usft (RIG)
Site:	1N-64W-10 TIGER 0916 PAD	North Reference:	True
Well:	TIGER 0916-04H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
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)	
8,850.00	88.68	181.25	7,149.79	-192.06	-4,321.02	213.92	9.00	7.27	-5.31	
8,868.21	90.00	180.29	7,150.00	-210.26	-4,321.27	232.13	9.00	7.28	-5.30	
End Build/TPZ @ 8868.21ft										
8,900.00	90.00	180.29	7,150.00	-242.05	-4,321.43	263.92	0.00	0.00	0.00	
9,000.00	90.00	180.29	7,150.00	-342.05	-4,321.94	363.92	0.00	0.00	0.00	
9,100.00	90.00	180.29	7,150.00	-442.05	-4,322.44	463.92	0.00	0.00	0.00	
9,200.00	90.00	180.29	7,150.00	-542.05	-4,322.95	563.92	0.00	0.00	0.00	
9,300.00	90.00	180.29	7,150.00	-642.05	-4,323.46	663.92	0.00	0.00	0.00	
9,400.00	90.00	180.29	7,150.00	-742.05	-4,323.96	763.92	0.00	0.00	0.00	
9,500.00	90.00	180.29	7,150.00	-842.04	-4,324.47	863.92	0.00	0.00	0.00	
9,600.00	90.00	180.29	7,150.00	-942.04	-4,324.98	963.92	0.00	0.00	0.00	
9,700.00	90.00	180.29	7,150.00	-1,042.04	-4,325.48	1,063.92	0.00	0.00	0.00	
9,800.00	90.00	180.29	7,150.00	-1,142.04	-4,325.99	1,163.92	0.00	0.00	0.00	
9,900.00	90.00	180.29	7,150.00	-1,242.04	-4,326.50	1,263.92	0.00	0.00	0.00	
10,000.00	90.00	180.29	7,150.00	-1,342.04	-4,327.00	1,363.92	0.00	0.00	0.00	
10,100.00	90.00	180.29	7,150.00	-1,442.04	-4,327.51	1,463.92	0.00	0.00	0.00	
10,200.00	90.00	180.29	7,150.00	-1,542.04	-4,328.02	1,563.92	0.00	0.00	0.00	
10,300.00	90.00	180.29	7,150.00	-1,642.03	-4,328.52	1,663.92	0.00	0.00	0.00	
10,400.00	90.00	180.29	7,150.00	-1,742.03	-4,329.03	1,763.92	0.00	0.00	0.00	
10,500.00	90.00	180.29	7,150.00	-1,842.03	-4,329.54	1,863.92	0.00	0.00	0.00	
10,600.00	90.00	180.29	7,150.00	-1,942.03	-4,330.04	1,963.92	0.00	0.00	0.00	
10,700.00	90.00	180.29	7,150.00	-2,042.03	-4,330.55	2,063.92	0.00	0.00	0.00	
10,800.00	90.00	180.29	7,150.00	-2,142.03	-4,331.06	2,163.92	0.00	0.00	0.00	
10,900.00	90.00	180.29	7,150.00	-2,242.03	-4,331.56	2,263.92	0.00	0.00	0.00	
11,000.00	90.00	180.29	7,150.00	-2,342.03	-4,332.07	2,363.92	0.00	0.00	0.00	
11,100.00	90.00	180.29	7,150.00	-2,442.02	-4,332.58	2,463.92	0.00	0.00	0.00	
11,200.00	90.00	180.29	7,150.00	-2,542.02	-4,333.08	2,563.92	0.00	0.00	0.00	
11,300.00	90.00	180.29	7,150.00	-2,642.02	-4,333.59	2,663.92	0.00	0.00	0.00	
11,400.00	90.00	180.29	7,150.00	-2,742.02	-4,334.10	2,763.92	0.00	0.00	0.00	
11,500.00	90.00	180.29	7,150.00	-2,842.02	-4,334.60	2,863.92	0.00	0.00	0.00	
11,600.00	90.00	180.29	7,150.00	-2,942.02	-4,335.11	2,963.92	0.00	0.00	0.00	
11,700.00	90.00	180.29	7,150.00	-3,042.02	-4,335.62	3,063.92	0.00	0.00	0.00	
11,800.00	90.00	180.29	7,150.00	-3,142.02	-4,336.12	3,163.92	0.00	0.00	0.00	
11,900.00	90.00	180.29	7,150.00	-3,242.01	-4,336.63	3,263.92	0.00	0.00	0.00	
12,000.00	90.00	180.29	7,150.00	-3,342.01	-4,337.14	3,363.92	0.00	0.00	0.00	
12,100.00	90.00	180.29	7,150.00	-3,442.01	-4,337.64	3,463.92	0.00	0.00	0.00	
12,200.00	90.00	180.29	7,150.00	-3,542.01	-4,338.15	3,563.92	0.00	0.00	0.00	
12,300.00	90.00	180.29	7,150.00	-3,642.01	-4,338.66	3,663.92	0.00	0.00	0.00	
12,400.00	90.00	180.29	7,150.00	-3,742.01	-4,339.16	3,763.92	0.00	0.00	0.00	
12,500.00	90.00	180.29	7,150.00	-3,842.01	-4,339.67	3,863.92	0.00	0.00	0.00	
12,600.00	90.00	180.29	7,150.00	-3,942.01	-4,340.18	3,963.92	0.00	0.00	0.00	
12,700.00	90.00	180.29	7,150.00	-4,042.00	-4,340.68	4,063.92	0.00	0.00	0.00	
12,800.00	90.00	180.29	7,150.00	-4,142.00	-4,341.19	4,163.92	0.00	0.00	0.00	
12,900.00	90.00	180.29	7,150.00	-4,242.00	-4,341.70	4,263.92	0.00	0.00	0.00	
13,000.00	90.00	180.29	7,150.00	-4,342.00	-4,342.20	4,363.92	0.00	0.00	0.00	
13,100.00	90.00	180.29	7,150.00	-4,442.00	-4,342.71	4,463.92	0.00	0.00	0.00	
13,200.00	90.00	180.29	7,150.00	-4,542.00	-4,343.21	4,563.92	0.00	0.00	0.00	
13,300.00	90.00	180.29	7,150.00	-4,642.00	-4,343.72	4,663.92	0.00	0.00	0.00	
13,400.00	90.00	180.29	7,150.00	-4,741.99	-4,344.23	4,763.92	0.00	0.00	0.00	
13,500.00	90.00	180.29	7,150.00	-4,841.99	-4,344.73	4,863.92	0.00	0.00	0.00	
13,600.00	90.00	180.29	7,150.00	-4,941.99	-4,345.24	4,963.92	0.00	0.00	0.00	
13,700.00	90.00	180.29	7,150.00	-5,041.99	-4,345.75	5,063.92	0.00	0.00	0.00	
13,800.00	90.00	180.29	7,150.00	-5,141.99	-4,346.25	5,163.92	0.00	0.00	0.00	

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well TIGER 0916-04H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 24' @ 5129.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 24' @ 5129.00usft (RIG)
Site:	1N-64W-10 TIGER 0916 PAD	North Reference:	True
Well:	TIGER 0916-04H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
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	180.29	7,150.00	-5,241.99	-4,346.76	5,263.92	0.00	0.00	0.00	
14,000.00	90.00	180.29	7,150.00	-5,341.99	-4,347.27	5,363.92	0.00	0.00	0.00	
14,100.00	90.00	180.29	7,150.00	-5,441.99	-4,347.77	5,463.92	0.00	0.00	0.00	
14,200.00	90.00	180.29	7,150.00	-5,541.98	-4,348.28	5,563.92	0.00	0.00	0.00	
14,300.00	90.00	180.29	7,150.00	-5,641.98	-4,348.79	5,663.92	0.00	0.00	0.00	
14,400.00	90.00	180.29	7,150.00	-5,741.98	-4,349.29	5,763.92	0.00	0.00	0.00	
14,500.00	90.00	180.29	7,150.00	-5,841.98	-4,349.80	5,863.92	0.00	0.00	0.00	
14,600.00	90.00	180.29	7,150.00	-5,941.98	-4,350.31	5,963.92	0.00	0.00	0.00	
14,700.00	90.00	180.29	7,150.00	-6,041.98	-4,350.81	6,063.92	0.00	0.00	0.00	
14,800.00	90.00	180.29	7,150.00	-6,141.98	-4,351.32	6,163.92	0.00	0.00	0.00	
14,900.00	90.00	180.29	7,150.00	-6,241.98	-4,351.83	6,263.92	0.00	0.00	0.00	
15,000.00	90.00	180.29	7,150.00	-6,341.97	-4,352.33	6,363.92	0.00	0.00	0.00	
15,100.00	90.00	180.29	7,150.00	-6,441.97	-4,352.84	6,463.92	0.00	0.00	0.00	
15,200.00	90.00	180.29	7,150.00	-6,541.97	-4,353.35	6,563.92	0.00	0.00	0.00	
15,300.00	90.00	180.29	7,150.00	-6,641.97	-4,353.85	6,663.92	0.00	0.00	0.00	
15,400.00	90.00	180.29	7,150.00	-6,741.97	-4,354.36	6,763.92	0.00	0.00	0.00	
15,500.00	90.00	180.29	7,150.00	-6,841.97	-4,354.87	6,863.92	0.00	0.00	0.00	
15,600.00	90.00	180.29	7,150.00	-6,941.97	-4,355.37	6,963.92	0.00	0.00	0.00	
15,700.00	90.00	180.29	7,150.00	-7,041.97	-4,355.88	7,063.92	0.00	0.00	0.00	
15,800.00	90.00	180.29	7,150.00	-7,141.96	-4,356.39	7,163.92	0.00	0.00	0.00	
15,900.00	90.00	180.29	7,150.00	-7,241.96	-4,356.89	7,263.92	0.00	0.00	0.00	
16,000.00	90.00	180.29	7,150.00	-7,341.96	-4,357.40	7,363.92	0.00	0.00	0.00	
16,100.00	90.00	180.29	7,150.00	-7,441.96	-4,357.91	7,463.92	0.00	0.00	0.00	
16,200.00	90.00	180.29	7,150.00	-7,541.96	-4,358.41	7,563.92	0.00	0.00	0.00	
16,300.00	90.00	180.29	7,150.00	-7,641.96	-4,358.92	7,663.92	0.00	0.00	0.00	
16,400.00	90.00	180.29	7,150.00	-7,741.96	-4,359.43	7,763.92	0.00	0.00	0.00	
16,500.00	90.00	180.29	7,150.00	-7,841.96	-4,359.93	7,863.92	0.00	0.00	0.00	
16,600.00	90.00	180.29	7,150.00	-7,941.95	-4,360.44	7,963.92	0.00	0.00	0.00	
16,700.00	90.00	180.29	7,150.00	-8,041.95	-4,360.95	8,063.92	0.00	0.00	0.00	
16,800.00	90.00	180.29	7,150.00	-8,141.95	-4,361.45	8,163.92	0.00	0.00	0.00	
16,900.00	90.00	180.29	7,150.00	-8,241.95	-4,361.96	8,263.92	0.00	0.00	0.00	
17,000.00	90.00	180.29	7,150.00	-8,341.95	-4,362.47	8,363.92	0.00	0.00	0.00	
17,100.00	90.00	180.29	7,150.00	-8,441.95	-4,362.97	8,463.92	0.00	0.00	0.00	
17,200.00	90.00	180.29	7,150.00	-8,541.95	-4,363.48	8,563.92	0.00	0.00	0.00	
17,300.00	90.00	180.29	7,150.00	-8,641.95	-4,363.99	8,663.92	0.00	0.00	0.00	
17,400.00	90.00	180.29	7,150.00	-8,741.94	-4,364.49	8,763.92	0.00	0.00	0.00	
17,500.00	90.00	180.29	7,150.00	-8,841.94	-4,365.00	8,863.92	0.00	0.00	0.00	
17,600.00	90.00	180.29	7,150.00	-8,941.94	-4,365.51	8,963.92	0.00	0.00	0.00	
17,700.00	90.00	180.29	7,150.00	-9,041.94	-4,366.01	9,063.92	0.00	0.00	0.00	
17,800.00	90.00	180.29	7,150.00	-9,141.94	-4,366.52	9,163.92	0.00	0.00	0.00	
17,900.00	90.00	180.29	7,150.00	-9,241.94	-4,367.03	9,263.92	0.00	0.00	0.00	
18,000.00	90.00	180.29	7,150.00	-9,341.94	-4,367.53	9,363.92	0.00	0.00	0.00	
18,100.00	90.00	180.29	7,150.00	-9,441.93	-4,368.04	9,463.92	0.00	0.00	0.00	
18,200.00	90.00	180.29	7,150.00	-9,541.93	-4,368.55	9,563.92	0.00	0.00	0.00	
18,300.00	90.00	180.29	7,150.00	-9,641.93	-4,369.05	9,663.92	0.00	0.00	0.00	
18,400.00	90.00	180.29	7,150.00	-9,741.93	-4,369.56	9,763.92	0.00	0.00	0.00	
18,500.00	90.00	180.29	7,150.00	-9,841.93	-4,370.07	9,863.92	0.00	0.00	0.00	
18,600.00	90.00	180.29	7,150.00	-9,941.93	-4,370.57	9,963.92	0.00	0.00	0.00	
18,625.34	90.00	180.29	7,150.00	-9,967.27	-4,370.70	9,989.26	0.00	0.00	0.00	
BPZ @ 18625.34ft										
18,700.00	90.00	180.29	7,150.00	-10,041.93	-4,371.08	10,063.92	0.00	0.00	0.00	
18,715.32	90.00	180.29	7,150.00	-10,057.25	-4,371.16	10,079.25	0.00	0.00	0.00	
TD Well @ 18715.32ft										

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well TIGER 0916-04H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 24' @ 5129.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 24' @ 5129.00usft (RIG)
Site:	1N-64W-10 TIGER 0916 PAD	North Reference:	True
Well:	TIGER 0916-04H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Casing Points					
	Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
	2,502.32	2,304.00	9 5/8"	9-5/8	13-1/2

Plan Annotations					
	Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		
			+N/-S (usft)	+E/-W (usft)	Comment
	276.00	276.00	0.00	0.00	Begin Nudge @ 276.00ft
	2,085.00	1,967.15	59.28	-549.24	Hold Tangent @ 2085.00ft
	7,829.75	6,604.12	423.18	-3,920.92	KOP @ 7829.75ft :: DLS = 9"/100'
	8,868.21	7,150.00	-210.26	-4,321.27	End Build/TPZ @ 8868.21ft
	18,625.34	7,150.00	-9,967.27	-4,370.70	BPZ @ 18625.34ft
	18,715.32	7,150.00	-10,057.25	-4,371.16	TD Well @ 18715.32ft