

VERDAD RESOURCES

WATTENBERG FIELD

1N-64W-19 ONION 1907 PAD

ONION 1907-05H

Plan A

Plan: Design #1

Standard Planning Report

16 March, 2022

Project: WATTENBERG FIELD
Site: 1N-64W-19 ONION 1907 PAD
Well: ONION 1907-05H
Wellbore: Plan A
Design: Design #1

VERDAD RESOURCES

CASING DETAILS

TVD	MD	Name	Size
2156.00	2170.47	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	
503.00	0.00	0.00	503.00	0.00	0.00	0.00	0.00	0.00	
916.50	8.27	59.85	915.07	14.96	25.76	2.00	59.85	14.99	
6725.89	8.27	59.85	6664.05	434.66	748.32	0.00	0.00	435.31	
7679.79	90.00	0.05	7250.00	1069.55	822.51	9.00	-60.06	1070.26	
20076.60	90.00	0.05	7250.00	13466.36	833.75	0.00	0.00	13467.08	ONION 1907-05H_BHL

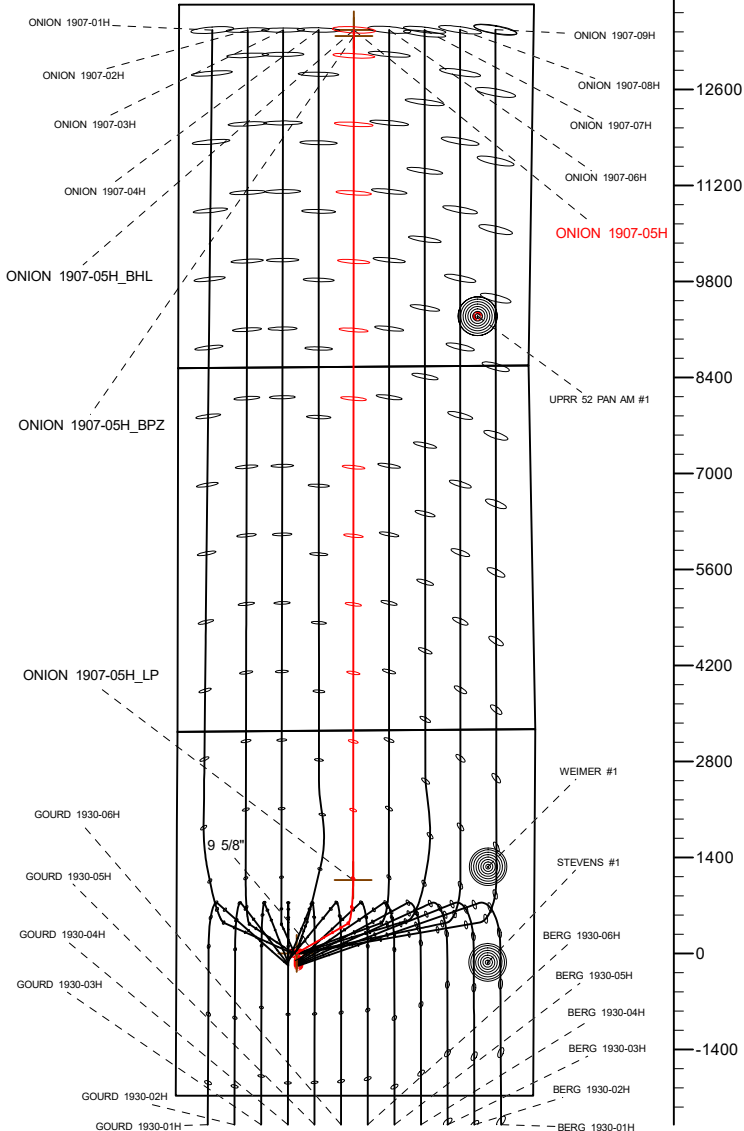
WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
ONION 1907-05H_SHL	0.00	0.00	0.00	40.035251	-104.596540
ONION 1907-05H_LP	7250.00	1069.55	822.51	40.038187	-104.593602
ONION 1907-05H_BPZ	7250.00	13376.38	833.67	40.071972	-104.593561
ONION 1907-05H_BHL	7250.00	13466.36	833.75	40.072219	-104.593561

West(-)/East(+) (2800 usft/in)

-2800 -1400 0 1400 2800 4200

FLANIGAN 2A-6R FLANIGAN 1D-6H

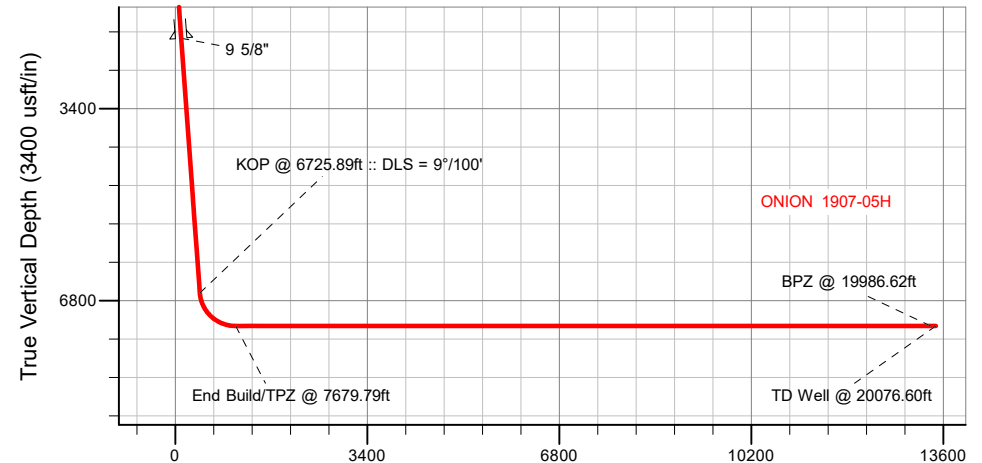


BHL
370' FNL
2620' FEL


BPZ
460' FNL
2619' FEL

TPZ
2180' FNL
2573' FWL

SHL
2075' FSL
1755' FWL



Vertical Section at 0.05° (3400 usft/in)

 <p>Azimuths to True North Magnetic North: 7.65° Magnetic Field Strength: 51700.5nT Dip Angle: 66.36° Date: 3/12/2022 Model: IGRF2020</p>	WELL DETAILS: ONION 1907-05H	
	GL = 5011'	
	RKB = 24' @ 5035.00usft (RIG)	
	Plan: Design #1 (ONION 1907-05H/Plan A)	
	Date: 3/16/2022	

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well ONION 1907-05H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 24' @ 5035.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 24' @ 5035.00usft (RIG)
Site:	1N-64W-19 ONION 1907 PAD	North Reference:	True
Well:	ONION 1907-05H	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	1N-64W-19 ONION 1907 PAD			
Site Position:		Northing:	1,256,976.07 usft	Latitude: 40.035252
From:	Lat/Long	Easting:	3,252,908.41 usft	Longitude: -104.596769
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	

Well	ONION 1907-05H			
Well Position	+N/-S	0.00 usft	Northing:	1,256,976.68 usft
	+E/-W	0.00 usft	Easting:	3,252,972.39 usft
Position Uncertainty		3.28 usft	Wellhead Elevation:	usft
Grid Convergence:		0.58 °	Ground Level:	5,011.00 usft

Wellbore	Plan A				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF202013	3/12/2022	7.65	66.36	51,700.54230179

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	0.05

Plan Survey Tool Program		Date	3/16/2022		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	2,156.00	Design #1 (Plan A)	ISCWSA MWD	
				Fixed:v2:standard declination	
2	2,156.00	20,076.60	Design #1 (Plan A)	ISCWSA MWD	
				Fixed:v2:standard declination	

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well ONION 1907-05H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 24' @ 5035.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 24' @ 5035.00usft (RIG)
Site:	1N-64W-19 ONION 1907 PAD	North Reference:	True
Well:	ONION 1907-05H	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	
503.00	0.00	0.00	503.00	0.00	0.00	0.00	0.00	0.00	0.00	
916.50	8.27	59.85	915.07	14.96	25.76	2.00	2.00	0.00	59.85	
6,725.89	8.27	59.85	6,664.05	434.66	748.32	0.00	0.00	0.00	0.00	
7,679.79	90.00	0.05	7,250.00	1,069.55	822.51	9.00	8.57	-6.27	-60.06	
20,076.60	90.00	0.05	7,250.00	13,466.36	833.75	0.00	0.00	0.00	0.00	ONION 1907-05H_BH

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well ONION 1907-05H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 24' @ 5035.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 24' @ 5035.00usft (RIG)
Site:	1N-64W-19 ONION 1907 PAD	North Reference:	True
Well:	ONION 1907-05H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
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
503.00	0.00	0.00	503.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 503.00ft									
600.00	1.94	59.85	599.98	0.82	1.42	0.83	2.00	2.00	0.00
700.00	3.94	59.85	699.84	3.40	5.85	3.41	2.00	2.00	0.00
800.00	5.94	59.85	799.47	7.73	13.30	7.74	2.00	2.00	0.00
900.00	7.94	59.85	898.73	13.79	23.75	13.81	2.00	2.00	0.00
916.50	8.27	59.85	915.07	14.96	25.76	14.99	2.00	2.00	0.00
Hold Tangent @ 916.50ft									
1,000.00	8.27	59.85	997.70	21.00	36.15	21.03	0.00	0.00	0.00
1,100.00	8.27	59.85	1,096.66	28.22	48.58	28.26	0.00	0.00	0.00
1,200.00	8.27	59.85	1,195.62	35.44	61.02	35.50	0.00	0.00	0.00
1,300.00	8.27	59.85	1,294.58	42.67	73.46	42.73	0.00	0.00	0.00
1,400.00	8.27	59.85	1,393.54	49.89	85.90	49.97	0.00	0.00	0.00
1,500.00	8.27	59.85	1,492.50	57.12	98.34	57.20	0.00	0.00	0.00
1,600.00	8.27	59.85	1,591.46	64.34	110.77	64.44	0.00	0.00	0.00
1,700.00	8.27	59.85	1,690.42	71.57	123.21	71.67	0.00	0.00	0.00
1,800.00	8.27	59.85	1,789.38	78.79	135.65	78.91	0.00	0.00	0.00
1,900.00	8.27	59.85	1,888.34	86.02	148.09	86.14	0.00	0.00	0.00
2,000.00	8.27	59.85	1,987.30	93.24	160.52	93.38	0.00	0.00	0.00
2,100.00	8.27	59.85	2,086.26	100.46	172.96	100.62	0.00	0.00	0.00
2,170.47	8.27	59.85	2,156.00	105.56	181.73	105.71	0.00	0.00	0.00
9 5/8"									
2,200.00	8.27	59.85	2,185.22	107.69	185.40	107.85	0.00	0.00	0.00
2,300.00	8.27	59.85	2,284.18	114.91	197.84	115.09	0.00	0.00	0.00
2,400.00	8.27	59.85	2,383.14	122.14	210.28	122.32	0.00	0.00	0.00
2,500.00	8.27	59.85	2,482.10	129.36	222.71	129.56	0.00	0.00	0.00
2,600.00	8.27	59.85	2,581.06	136.59	235.15	136.79	0.00	0.00	0.00
2,700.00	8.27	59.85	2,680.02	143.81	247.59	144.03	0.00	0.00	0.00
2,800.00	8.27	59.85	2,778.98	151.04	260.03	151.26	0.00	0.00	0.00
2,900.00	8.27	59.85	2,877.94	158.26	272.47	158.50	0.00	0.00	0.00
3,000.00	8.27	59.85	2,976.90	165.48	284.90	165.73	0.00	0.00	0.00
3,100.00	8.27	59.85	3,075.86	172.71	297.34	172.97	0.00	0.00	0.00
3,200.00	8.27	59.85	3,174.82	179.93	309.78	180.20	0.00	0.00	0.00
3,300.00	8.27	59.85	3,273.78	187.16	322.22	187.44	0.00	0.00	0.00
3,400.00	8.27	59.85	3,372.74	194.38	334.65	194.67	0.00	0.00	0.00
3,500.00	8.27	59.85	3,471.70	201.61	347.09	201.91	0.00	0.00	0.00
3,600.00	8.27	59.85	3,570.66	208.83	359.53	209.15	0.00	0.00	0.00
3,700.00	8.27	59.85	3,669.62	216.06	371.97	216.38	0.00	0.00	0.00
3,800.00	8.27	59.85	3,768.58	223.28	384.41	223.62	0.00	0.00	0.00
3,900.00	8.27	59.85	3,867.54	230.51	396.84	230.85	0.00	0.00	0.00
4,000.00	8.27	59.85	3,966.50	237.73	409.28	238.09	0.00	0.00	0.00
4,100.00	8.27	59.85	4,065.46	244.95	421.72	245.32	0.00	0.00	0.00
4,200.00	8.27	59.85	4,164.42	252.18	434.16	252.56	0.00	0.00	0.00
4,300.00	8.27	59.85	4,263.38	259.40	446.60	259.79	0.00	0.00	0.00
4,400.00	8.27	59.85	4,362.34	266.63	459.03	267.03	0.00	0.00	0.00
4,500.00	8.27	59.85	4,461.30	273.85	471.47	274.26	0.00	0.00	0.00
4,600.00	8.27	59.85	4,560.26	281.08	483.91	281.50	0.00	0.00	0.00
4,700.00	8.27	59.85	4,659.22	288.30	496.35	288.73	0.00	0.00	0.00

Planning Report

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Company:	VERDAD RESOURCES	TVD Reference:	RKB = 24' @ 5035.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 24' @ 5035.00usft (RIG)
Site:	1N-64W-19 ONION 1907 PAD	North Reference:	True
Well:	ONION 1907-05H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
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)
4,800.00	8.27	59.85	4,758.18	295.53	508.78	295.97	0.00	0.00	0.00
4,900.00	8.27	59.85	4,857.14	302.75	521.22	303.20	0.00	0.00	0.00
5,000.00	8.27	59.85	4,956.10	309.97	533.66	310.44	0.00	0.00	0.00
5,100.00	8.27	59.85	5,055.06	317.20	546.10	317.68	0.00	0.00	0.00
5,200.00	8.27	59.85	5,154.02	324.42	558.54	324.91	0.00	0.00	0.00
5,300.00	8.27	59.85	5,252.98	331.65	570.97	332.15	0.00	0.00	0.00
5,400.00	8.27	59.85	5,351.94	338.87	583.41	339.38	0.00	0.00	0.00
5,500.00	8.27	59.85	5,450.90	346.10	595.85	346.62	0.00	0.00	0.00
5,600.00	8.27	59.85	5,549.86	353.32	608.29	353.85	0.00	0.00	0.00
5,700.00	8.27	59.85	5,648.82	360.55	620.73	361.09	0.00	0.00	0.00
5,800.00	8.27	59.85	5,747.78	367.77	633.16	368.32	0.00	0.00	0.00
5,900.00	8.27	59.85	5,846.74	375.00	645.60	375.56	0.00	0.00	0.00
6,000.00	8.27	59.85	5,945.70	382.22	658.04	382.79	0.00	0.00	0.00
6,100.00	8.27	59.85	6,044.66	389.44	670.48	390.03	0.00	0.00	0.00
6,200.00	8.27	59.85	6,143.62	396.67	682.91	397.26	0.00	0.00	0.00
6,300.00	8.27	59.85	6,242.58	403.89	695.35	404.50	0.00	0.00	0.00
6,400.00	8.27	59.85	6,341.54	411.12	707.79	411.74	0.00	0.00	0.00
6,500.00	8.27	59.85	6,440.50	418.34	720.23	418.97	0.00	0.00	0.00
6,600.00	8.27	59.85	6,539.46	425.57	732.67	426.21	0.00	0.00	0.00
6,700.00	8.27	59.85	6,638.42	432.79	745.10	433.44	0.00	0.00	0.00
6,725.89	8.27	59.85	6,664.05	434.66	748.32	435.31	0.00	0.00	0.00
KOP @ 6725.89ft :: DLS = 9°/100'									
6,750.00	9.54	48.43	6,687.87	436.86	751.32	437.51	9.00	5.26	-47.36
6,800.00	12.95	33.16	6,736.91	444.30	757.49	444.96	9.00	6.82	-30.53
6,850.00	16.87	24.52	6,785.22	455.60	763.57	456.27	9.00	7.85	-17.29
6,900.00	21.02	19.13	6,832.51	470.68	769.52	471.35	9.00	8.30	-10.78
6,950.00	25.29	15.47	6,878.47	489.46	775.31	490.14	9.00	8.53	-7.32
7,000.00	29.62	12.82	6,922.83	511.81	780.90	512.49	9.00	8.66	-5.31
7,050.00	33.99	10.79	6,965.31	537.60	786.26	538.29	9.00	8.74	-4.06
7,100.00	38.39	9.17	7,005.65	566.68	791.36	567.37	9.00	8.80	-3.23
7,150.00	42.81	7.85	7,043.61	598.85	796.15	599.54	9.00	8.83	-2.66
7,200.00	47.24	6.72	7,078.94	633.93	800.62	634.62	9.00	8.86	-2.25
7,250.00	51.68	5.75	7,111.44	671.69	804.74	672.39	9.00	8.88	-1.95
7,300.00	56.12	4.89	7,140.89	711.90	808.48	712.61	9.00	8.89	-1.72
7,350.00	60.57	4.12	7,167.12	754.32	811.81	755.03	9.00	8.90	-1.55
7,400.00	65.03	3.41	7,189.97	798.69	814.72	799.40	9.00	8.91	-1.42
7,450.00	69.49	2.75	7,209.29	844.72	817.19	845.43	9.00	8.92	-1.32
7,500.00	73.95	2.12	7,224.97	892.14	819.20	892.86	9.00	8.92	-1.25
7,550.00	78.41	1.53	7,236.91	940.66	820.75	941.37	9.00	8.93	-1.19
7,600.00	82.88	0.95	7,245.04	989.97	821.81	990.69	9.00	8.93	-1.15
7,650.00	87.34	0.39	7,249.30	1,039.77	822.39	1,040.49	9.00	8.93	-1.13
7,679.79	90.00	0.05	7,250.00	1,069.55	822.51	1,070.26	9.00	8.93	-1.12
End Build/TPZ @ 7679.79ft									
7,700.00	90.00	0.05	7,250.00	1,089.76	822.53	1,090.48	0.00	0.00	0.00
7,800.00	90.00	0.05	7,250.00	1,189.76	822.62	1,190.48	0.00	0.00	0.00
7,900.00	90.00	0.05	7,250.00	1,289.76	822.71	1,290.48	0.00	0.00	0.00
8,000.00	90.00	0.05	7,250.00	1,389.76	822.80	1,390.48	0.00	0.00	0.00
8,100.00	90.00	0.05	7,250.00	1,489.76	822.89	1,490.48	0.00	0.00	0.00
8,200.00	90.00	0.05	7,250.00	1,589.76	822.98	1,590.48	0.00	0.00	0.00
8,300.00	90.00	0.05	7,250.00	1,689.76	823.07	1,690.48	0.00	0.00	0.00
8,400.00	90.00	0.05	7,250.00	1,789.76	823.16	1,790.48	0.00	0.00	0.00
8,500.00	90.00	0.05	7,250.00	1,889.76	823.25	1,890.48	0.00	0.00	0.00
8,600.00	90.00	0.05	7,250.00	1,989.76	823.34	1,990.48	0.00	0.00	0.00
8,700.00	90.00	0.05	7,250.00	2,089.76	823.43	2,090.48	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well ONION 1907-05H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 24' @ 5035.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 24' @ 5035.00usft (RIG)
Site:	1N-64W-19 ONION 1907 PAD	North Reference:	True
Well:	ONION 1907-05H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
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)	
8,800.00	90.00	0.05	7,250.00	2,189.76	823.52	2,190.48	0.00	0.00	0.00	
8,900.00	90.00	0.05	7,250.00	2,289.76	823.61	2,290.48	0.00	0.00	0.00	
9,000.00	90.00	0.05	7,250.00	2,389.76	823.70	2,390.48	0.00	0.00	0.00	
9,100.00	90.00	0.05	7,250.00	2,489.76	823.80	2,490.48	0.00	0.00	0.00	
9,200.00	90.00	0.05	7,250.00	2,589.76	823.89	2,590.48	0.00	0.00	0.00	
9,300.00	90.00	0.05	7,250.00	2,689.76	823.98	2,690.48	0.00	0.00	0.00	
9,400.00	90.00	0.05	7,250.00	2,789.76	824.07	2,790.48	0.00	0.00	0.00	
9,500.00	90.00	0.05	7,250.00	2,889.76	824.16	2,890.48	0.00	0.00	0.00	
9,600.00	90.00	0.05	7,250.00	2,989.76	824.25	2,990.48	0.00	0.00	0.00	
9,700.00	90.00	0.05	7,250.00	3,089.76	824.34	3,090.48	0.00	0.00	0.00	
9,800.00	90.00	0.05	7,250.00	3,189.76	824.43	3,190.48	0.00	0.00	0.00	
9,900.00	90.00	0.05	7,250.00	3,289.76	824.52	3,290.48	0.00	0.00	0.00	
10,000.00	90.00	0.05	7,250.00	3,389.76	824.61	3,390.48	0.00	0.00	0.00	
10,100.00	90.00	0.05	7,250.00	3,489.76	824.70	3,490.48	0.00	0.00	0.00	
10,200.00	90.00	0.05	7,250.00	3,589.76	824.79	3,590.48	0.00	0.00	0.00	
10,300.00	90.00	0.05	7,250.00	3,689.76	824.88	3,690.48	0.00	0.00	0.00	
10,400.00	90.00	0.05	7,250.00	3,789.76	824.97	3,790.48	0.00	0.00	0.00	
10,500.00	90.00	0.05	7,250.00	3,889.76	825.06	3,890.48	0.00	0.00	0.00	
10,600.00	90.00	0.05	7,250.00	3,989.76	825.16	3,990.48	0.00	0.00	0.00	
10,700.00	90.00	0.05	7,250.00	4,089.76	825.25	4,090.48	0.00	0.00	0.00	
10,800.00	90.00	0.05	7,250.00	4,189.76	825.34	4,190.48	0.00	0.00	0.00	
10,900.00	90.00	0.05	7,250.00	4,289.76	825.43	4,290.48	0.00	0.00	0.00	
11,000.00	90.00	0.05	7,250.00	4,389.76	825.52	4,390.48	0.00	0.00	0.00	
11,100.00	90.00	0.05	7,250.00	4,489.76	825.61	4,490.48	0.00	0.00	0.00	
11,200.00	90.00	0.05	7,250.00	4,589.76	825.70	4,590.48	0.00	0.00	0.00	
11,300.00	90.00	0.05	7,250.00	4,689.76	825.79	4,690.48	0.00	0.00	0.00	
11,400.00	90.00	0.05	7,250.00	4,789.76	825.88	4,790.48	0.00	0.00	0.00	
11,500.00	90.00	0.05	7,250.00	4,889.76	825.97	4,890.48	0.00	0.00	0.00	
11,600.00	90.00	0.05	7,250.00	4,989.76	826.06	4,990.48	0.00	0.00	0.00	
11,700.00	90.00	0.05	7,250.00	5,089.76	826.15	5,090.48	0.00	0.00	0.00	
11,800.00	90.00	0.05	7,250.00	5,189.76	826.24	5,190.48	0.00	0.00	0.00	
11,900.00	90.00	0.05	7,250.00	5,289.76	826.33	5,290.48	0.00	0.00	0.00	
12,000.00	90.00	0.05	7,250.00	5,389.76	826.43	5,390.48	0.00	0.00	0.00	
12,100.00	90.00	0.05	7,250.00	5,489.76	826.52	5,490.48	0.00	0.00	0.00	
12,200.00	90.00	0.05	7,250.00	5,589.76	826.61	5,590.48	0.00	0.00	0.00	
12,300.00	90.00	0.05	7,250.00	5,689.76	826.70	5,690.48	0.00	0.00	0.00	
12,400.00	90.00	0.05	7,250.00	5,789.76	826.79	5,790.48	0.00	0.00	0.00	
12,500.00	90.00	0.05	7,250.00	5,889.76	826.88	5,890.48	0.00	0.00	0.00	
12,600.00	90.00	0.05	7,250.00	5,989.76	826.97	5,990.48	0.00	0.00	0.00	
12,700.00	90.00	0.05	7,250.00	6,089.76	827.06	6,090.48	0.00	0.00	0.00	
12,800.00	90.00	0.05	7,250.00	6,189.76	827.15	6,190.48	0.00	0.00	0.00	
12,900.00	90.00	0.05	7,250.00	6,289.76	827.24	6,290.48	0.00	0.00	0.00	
13,000.00	90.00	0.05	7,250.00	6,389.76	827.33	6,390.48	0.00	0.00	0.00	
13,100.00	90.00	0.05	7,250.00	6,489.76	827.42	6,490.48	0.00	0.00	0.00	
13,200.00	90.00	0.05	7,250.00	6,589.76	827.51	6,590.48	0.00	0.00	0.00	
13,300.00	90.00	0.05	7,250.00	6,689.76	827.60	6,690.48	0.00	0.00	0.00	
13,400.00	90.00	0.05	7,250.00	6,789.76	827.69	6,790.48	0.00	0.00	0.00	
13,500.00	90.00	0.05	7,250.00	6,889.76	827.79	6,890.48	0.00	0.00	0.00	
13,600.00	90.00	0.05	7,250.00	6,989.76	827.88	6,990.48	0.00	0.00	0.00	
13,700.00	90.00	0.05	7,250.00	7,089.76	827.97	7,090.48	0.00	0.00	0.00	
13,800.00	90.00	0.05	7,250.00	7,189.76	828.06	7,190.48	0.00	0.00	0.00	
13,900.00	90.00	0.05	7,250.00	7,289.76	828.15	7,290.48	0.00	0.00	0.00	
14,000.00	90.00	0.05	7,250.00	7,389.76	828.24	7,390.48	0.00	0.00	0.00	
14,100.00	90.00	0.05	7,250.00	7,489.76	828.33	7,490.48	0.00	0.00	0.00	

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well ONION 1907-05H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 24' @ 5035.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 24' @ 5035.00usft (RIG)
Site:	1N-64W-19 ONION 1907 PAD	North Reference:	True
Well:	ONION 1907-05H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
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)
14,200.00	90.00	0.05	7,250.00	7,589.76	828.42	7,590.48	0.00	0.00	0.00
14,300.00	90.00	0.05	7,250.00	7,689.76	828.51	7,690.48	0.00	0.00	0.00
14,400.00	90.00	0.05	7,250.00	7,789.76	828.60	7,790.48	0.00	0.00	0.00
14,500.00	90.00	0.05	7,250.00	7,889.76	828.69	7,890.48	0.00	0.00	0.00
14,600.00	90.00	0.05	7,250.00	7,989.76	828.78	7,990.48	0.00	0.00	0.00
14,700.00	90.00	0.05	7,250.00	8,089.76	828.87	8,090.48	0.00	0.00	0.00
14,800.00	90.00	0.05	7,250.00	8,189.76	828.96	8,190.48	0.00	0.00	0.00
14,900.00	90.00	0.05	7,250.00	8,289.76	829.06	8,290.48	0.00	0.00	0.00
15,000.00	90.00	0.05	7,250.00	8,389.76	829.15	8,390.48	0.00	0.00	0.00
15,100.00	90.00	0.05	7,250.00	8,489.76	829.24	8,490.48	0.00	0.00	0.00
15,200.00	90.00	0.05	7,250.00	8,589.76	829.33	8,590.48	0.00	0.00	0.00
15,300.00	90.00	0.05	7,250.00	8,689.76	829.42	8,690.48	0.00	0.00	0.00
15,400.00	90.00	0.05	7,250.00	8,789.76	829.51	8,790.48	0.00	0.00	0.00
15,500.00	90.00	0.05	7,250.00	8,889.76	829.60	8,890.48	0.00	0.00	0.00
15,600.00	90.00	0.05	7,250.00	8,989.76	829.69	8,990.48	0.00	0.00	0.00
15,700.00	90.00	0.05	7,250.00	9,089.76	829.78	9,090.48	0.00	0.00	0.00
15,800.00	90.00	0.05	7,250.00	9,189.76	829.87	9,190.48	0.00	0.00	0.00
15,900.00	90.00	0.05	7,250.00	9,289.76	829.96	9,290.48	0.00	0.00	0.00
16,000.00	90.00	0.05	7,250.00	9,389.76	830.05	9,390.48	0.00	0.00	0.00
16,100.00	90.00	0.05	7,250.00	9,489.76	830.14	9,490.48	0.00	0.00	0.00
16,200.00	90.00	0.05	7,250.00	9,589.76	830.23	9,590.48	0.00	0.00	0.00
16,300.00	90.00	0.05	7,250.00	9,689.76	830.32	9,690.48	0.00	0.00	0.00
16,400.00	90.00	0.05	7,250.00	9,789.76	830.42	9,790.48	0.00	0.00	0.00
16,500.00	90.00	0.05	7,250.00	9,889.76	830.51	9,890.48	0.00	0.00	0.00
16,600.00	90.00	0.05	7,250.00	9,989.76	830.60	9,990.48	0.00	0.00	0.00
16,700.00	90.00	0.05	7,250.00	10,089.76	830.69	10,090.48	0.00	0.00	0.00
16,800.00	90.00	0.05	7,250.00	10,189.76	830.78	10,190.48	0.00	0.00	0.00
16,900.00	90.00	0.05	7,250.00	10,289.76	830.87	10,290.48	0.00	0.00	0.00
17,000.00	90.00	0.05	7,250.00	10,389.76	830.96	10,390.48	0.00	0.00	0.00
17,100.00	90.00	0.05	7,250.00	10,489.76	831.05	10,490.48	0.00	0.00	0.00
17,200.00	90.00	0.05	7,250.00	10,589.76	831.14	10,590.48	0.00	0.00	0.00
17,300.00	90.00	0.05	7,250.00	10,689.76	831.23	10,690.48	0.00	0.00	0.00
17,400.00	90.00	0.05	7,250.00	10,789.76	831.32	10,790.48	0.00	0.00	0.00
17,500.00	90.00	0.05	7,250.00	10,889.76	831.41	10,890.48	0.00	0.00	0.00
17,600.00	90.00	0.05	7,250.00	10,989.76	831.50	10,990.48	0.00	0.00	0.00
17,700.00	90.00	0.05	7,250.00	11,089.76	831.59	11,090.48	0.00	0.00	0.00
17,800.00	90.00	0.05	7,250.00	11,189.76	831.69	11,190.48	0.00	0.00	0.00
17,900.00	90.00	0.05	7,250.00	11,289.76	831.78	11,290.48	0.00	0.00	0.00
18,000.00	90.00	0.05	7,250.00	11,389.76	831.87	11,390.48	0.00	0.00	0.00
18,100.00	90.00	0.05	7,250.00	11,489.76	831.96	11,490.48	0.00	0.00	0.00
18,200.00	90.00	0.05	7,250.00	11,589.76	832.05	11,590.48	0.00	0.00	0.00
18,300.00	90.00	0.05	7,250.00	11,689.76	832.14	11,690.48	0.00	0.00	0.00
18,400.00	90.00	0.05	7,250.00	11,789.76	832.23	11,790.48	0.00	0.00	0.00
18,500.00	90.00	0.05	7,250.00	11,889.76	832.32	11,890.48	0.00	0.00	0.00
18,600.00	90.00	0.05	7,250.00	11,989.76	832.41	11,990.48	0.00	0.00	0.00
18,700.00	90.00	0.05	7,250.00	12,089.76	832.50	12,090.48	0.00	0.00	0.00
18,800.00	90.00	0.05	7,250.00	12,189.76	832.59	12,190.48	0.00	0.00	0.00
18,900.00	90.00	0.05	7,250.00	12,289.76	832.68	12,290.48	0.00	0.00	0.00
19,000.00	90.00	0.05	7,250.00	12,389.76	832.77	12,390.48	0.00	0.00	0.00
19,100.00	90.00	0.05	7,250.00	12,489.76	832.86	12,490.48	0.00	0.00	0.00
19,200.00	90.00	0.05	7,250.00	12,589.76	832.95	12,590.48	0.00	0.00	0.00
19,300.00	90.00	0.05	7,250.00	12,689.76	833.05	12,690.48	0.00	0.00	0.00
19,400.00	90.00	0.05	7,250.00	12,789.76	833.14	12,790.48	0.00	0.00	0.00
19,500.00	90.00	0.05	7,250.00	12,889.76	833.23	12,890.48	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well ONION 1907-05H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 24' @ 5035.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 24' @ 5035.00usft (RIG)
Site:	1N-64W-19 ONION 1907 PAD	North Reference:	True
Well:	ONION 1907-05H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
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)
19,600.00	90.00	0.05	7,250.00	12,989.76	833.32	12,990.48	0.00	0.00	0.00
19,700.00	90.00	0.05	7,250.00	13,089.76	833.41	13,090.48	0.00	0.00	0.00
19,800.00	90.00	0.05	7,250.00	13,189.76	833.50	13,190.48	0.00	0.00	0.00
19,900.00	90.00	0.05	7,250.00	13,289.76	833.59	13,290.48	0.00	0.00	0.00
19,986.62	90.00	0.05	7,250.00	13,376.38	833.67	13,377.10	0.00	0.00	0.00
BPZ @ 19986.62ft									
20,000.00	90.00	0.05	7,250.00	13,389.76	833.68	13,390.48	0.00	0.00	0.00
20,076.60	90.00	0.05	7,250.00	13,466.36	833.75	13,467.08	0.00	0.00	0.00
TD Well @ 20076.60ft									

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
2,170.47	2,156.00	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)	
503.00	503.00	0.00	0.00	Begin Nudge @ 503.00ft
916.50	915.07	14.96	25.76	Hold Tangent @ 916.50ft
6,725.89	6,664.05	434.66	748.32	KOP @ 6725.89ft :: DLS = 9°/100'
7,679.79	7,250.00	1,069.55	822.51	End Build/TPZ @ 7679.79ft
19,986.62	7,250.00	13,376.38	833.67	BPZ @ 19986.62ft
20,076.60	7,250.00	13,466.36	833.75	TD Well @ 20076.60ft