

VERDAD RESOURCES

**WATTENBERG FIELD
8N-60W-14 SCHNEIDER 1414 PAD
SCHNEIDER 1414-01H**

Plan C

Plan: Design #2

Standard Planning Report

30 March, 2021

Project: WATTENBERG FIELD
Site: 8N-60W-14 SCHNEIDER 1414 PAD
Well: SCHNEIDER 1414-01H
Wellbore: Plan C
Design: Design #2

VERDAD RESOURCES

CASING DETAILS

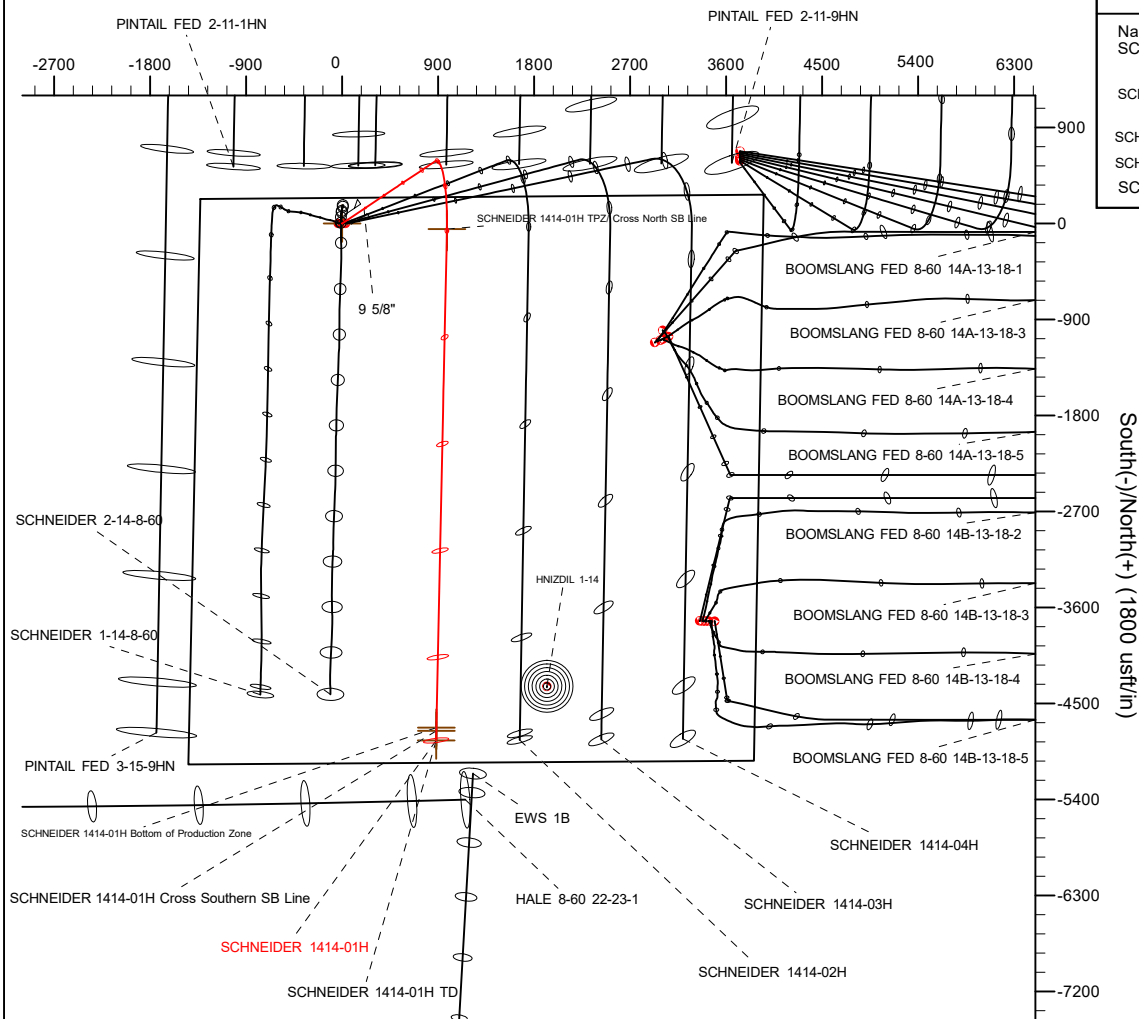
TVD	MD	Name	Size
1700.00	1724.01	9 5/8"	9-5/8

SHL 241' FNL 1333' FWL
Top of Production Zone/Cross N. Setback Line 300' FNL 2317' FWL
BPZ 330' FSL 2317' FWL
Cross S. Setback Line 300' FSL 2317' FWL
TD 210' FSL 2317' FWL

SECTION DETAILS

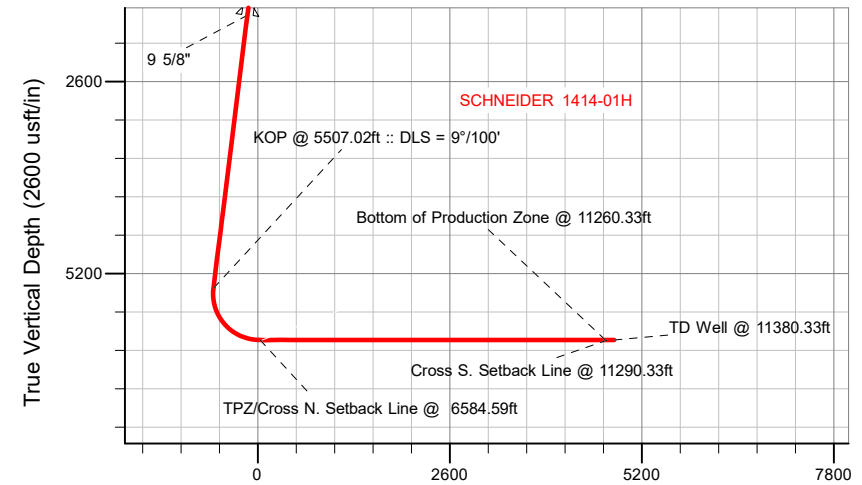
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
260.00	0.00	0.00	260.00	0.00	0.00	0.00	0.00	0.00	
872.00	12.24	56.23	867.36	36.20	54.13	2.00	56.23	-37.33	
5507.02	12.24	56.23	5397.01	582.42	870.99	0.00	0.00	-600.68	
6584.59	90.00	181.21	6100.00	-51.98	982.54	9.00	124.37	31.22	
11290.33	90.00	181.21	6100.00	-4756.67	882.93	0.00	0.00	4736.96	SCHNEIDER 1414-01H Cross Southern SB Line
11380.33	90.00	181.21	6100.00	-4846.65	881.02	0.00	0.00	4826.96	

West(-)/East(+) (1800 usft/in)

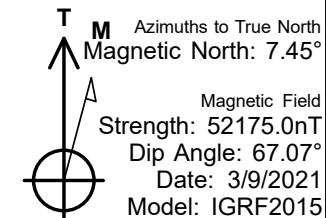


WELLBORE TARGET DETAILS (LAT/LONG)

Name	MD	TVD	+N/-S	+E/-W	Latitude	Longitude
SCHNEIDER 1414-01H SHL	0.00	0.00	0.00	0.00	40.669102	-104.062553
SCHNEIDER 1414-01H TPZ/Cross N. Setback	6584.59	6100.00	-51.89	982.63	40.668959	-104.059011
SCHNEIDER 1414-01H Bottom of Production Zone	11260.33	6100.00	-4726.67	883.56	40.656128	-104.059368
SCHNEIDER 1414-01H Cross S. Setback	11290.33	6100.00	-4756.67	882.93	40.656045	-104.059371
SCHNEIDER 1414-01H TD	11380.33	6100.00	-4846.65	881.02	40.655799	-104.059377



Vertical Section at 181.21° (2600 usft/in)



WELL DETAILS: SCHNEIDER 1414-01H

GL = 4943'

RKB = 20' @ 4963.00usft (RIG)

Plan: Design #2 (SCHNEIDER 1414-01H/Plan C)

Date: 3/30/2021

HP

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well SCHNEIDER 1414-01H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 4963.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 4963.00usft (RIG)
Site:	8N-60W-14 SCHNEIDER 1414 PAD	North Reference:	True
Well:	SCHNEIDER 1414-01H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan C		
Design:	Design #2		

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	8N-60W-14 SCHNEIDER 1414 PAD			
Site Position:		Northing:	1,489,828.18 usft	Latitude: 40.669102
From:	Lat/Long	Easting:	3,398,727.28 usft	Longitude: -104.062589
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	

Well	SCHNEIDER 1414-01H			
Well Position	+N/-S	0.00 usft	Northing:	1,489,828.48 usft
	+E/-W	0.00 usft	Easting:	3,398,737.29 usft
Position Uncertainty		3.28 usft	Wellhead Elevation:	usft
Grid Convergence:		0.93 °	Ground Level:	4,943.00 usft

Wellbore	Plan C				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	3/9/2021	7.45	67.07	52,174.98090393

Design	Design #2				
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	181.21	

Plan Survey Tool Program	Date	3/30/2021			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	1,700.00	Design #2 (Plan C)	ISCWSA MWD	
				Fixed:v2:standard declination	
2	1,700.00	11,380.33	Design #2 (Plan C)	ISCWSA MWD	
				Fixed:v2:standard declination	

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Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 4963.00usft (RIG)
Site:	8N-60W-14 SCHNEIDER 1414 PAD	North Reference:	True
Well:	SCHNEIDER 1414-01H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan C		
Design:	Design #2		

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	
260.00	0.00	0.00	260.00	0.00	0.00	0.00	0.00	0.00	0.00	
872.00	12.24	56.23	867.36	36.20	54.13	2.00	2.00	0.00	56.23	
5,507.02	12.24	56.23	5,397.01	582.42	870.99	0.00	0.00	0.00	0.00	
6,584.59	90.00	181.21	6,100.00	-51.98	982.54	9.00	7.22	11.60	124.37	
11,290.33	90.00	181.21	6,100.00	-4,756.67	882.93	0.00	0.00	0.00	0.00	SCHNEIDER 1414-01
11,380.33	90.00	181.21	6,100.00	-4,846.65	881.02	0.00	0.00	0.00	0.00	

HP

Planning Report

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Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 4963.00usft (RIG)
Site:	8N-60W-14 SCHNEIDER 1414 PAD	North Reference:	True
Well:	SCHNEIDER 1414-01H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan C		
Design:	Design #2		

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
260.00	0.00	0.00	260.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 260.00ft									
300.00	0.80	56.23	300.00	0.16	0.23	-0.16	2.00	2.00	0.00
400.00	2.80	56.23	399.94	1.90	2.84	-1.96	2.00	2.00	0.00
500.00	4.80	56.23	499.72	5.58	8.35	-5.76	2.00	2.00	0.00
600.00	6.80	56.23	599.20	11.20	16.75	-11.55	2.00	2.00	0.00
700.00	8.80	56.23	698.27	18.75	28.03	-19.33	2.00	2.00	0.00
800.00	10.80	56.23	796.81	28.21	42.18	-29.09	2.00	2.00	0.00
872.00	12.24	56.23	867.36	36.20	54.13	-37.33	2.00	2.00	0.00
Hold Tangent @ 872.00ft									
900.00	12.24	56.23	894.72	39.50	59.07	-40.74	0.00	0.00	0.00
1,000.00	12.24	56.23	992.45	51.28	76.69	-52.89	0.00	0.00	0.00
1,100.00	12.24	56.23	1,090.17	63.07	94.32	-65.05	0.00	0.00	0.00
1,200.00	12.24	56.23	1,187.90	74.85	111.94	-77.20	0.00	0.00	0.00
1,300.00	12.24	56.23	1,285.63	86.64	129.56	-89.35	0.00	0.00	0.00
1,400.00	12.24	56.23	1,383.35	98.42	147.19	-101.51	0.00	0.00	0.00
1,500.00	12.24	56.23	1,481.08	110.21	164.81	-113.66	0.00	0.00	0.00
1,600.00	12.24	56.23	1,578.81	121.99	182.43	-125.82	0.00	0.00	0.00
1,700.00	12.24	56.23	1,676.53	133.78	200.06	-137.97	0.00	0.00	0.00
1,724.01	12.24	56.23	1,700.00	136.61	204.29	-140.89	0.00	0.00	0.00
9 5/8"									
1,800.00	12.24	56.23	1,774.26	145.56	217.68	-150.12	0.00	0.00	0.00
1,900.00	12.24	56.23	1,871.99	157.34	235.31	-162.28	0.00	0.00	0.00
2,000.00	12.24	56.23	1,969.71	169.13	252.93	-174.43	0.00	0.00	0.00
2,100.00	12.24	56.23	2,067.44	180.91	270.55	-186.59	0.00	0.00	0.00
2,200.00	12.24	56.23	2,165.17	192.70	288.18	-198.74	0.00	0.00	0.00
2,300.00	12.24	56.23	2,262.89	204.48	305.80	-210.90	0.00	0.00	0.00
2,400.00	12.24	56.23	2,360.62	216.27	323.42	-223.05	0.00	0.00	0.00
2,500.00	12.24	56.23	2,458.35	228.05	341.05	-235.20	0.00	0.00	0.00
2,600.00	12.24	56.23	2,556.08	239.84	358.67	-247.36	0.00	0.00	0.00
2,700.00	12.24	56.23	2,653.80	251.62	376.29	-259.51	0.00	0.00	0.00
2,800.00	12.24	56.23	2,751.53	263.41	393.92	-271.67	0.00	0.00	0.00
2,900.00	12.24	56.23	2,849.26	275.19	411.54	-283.82	0.00	0.00	0.00
3,000.00	12.24	56.23	2,946.98	286.98	429.17	-295.97	0.00	0.00	0.00
3,100.00	12.24	56.23	3,044.71	298.76	446.79	-308.13	0.00	0.00	0.00
3,200.00	12.24	56.23	3,142.44	310.55	464.41	-320.28	0.00	0.00	0.00
3,300.00	12.24	56.23	3,240.16	322.33	482.04	-332.44	0.00	0.00	0.00
3,400.00	12.24	56.23	3,337.89	334.11	499.66	-344.59	0.00	0.00	0.00
3,500.00	12.24	56.23	3,435.62	345.90	517.28	-356.75	0.00	0.00	0.00
3,600.00	12.24	56.23	3,533.34	357.68	534.91	-368.90	0.00	0.00	0.00
3,700.00	12.24	56.23	3,631.07	369.47	552.53	-381.05	0.00	0.00	0.00
3,800.00	12.24	56.23	3,728.80	381.25	570.15	-393.21	0.00	0.00	0.00
3,900.00	12.24	56.23	3,826.52	393.04	587.78	-405.36	0.00	0.00	0.00
4,000.00	12.24	56.23	3,924.25	404.82	605.40	-417.52	0.00	0.00	0.00
4,100.00	12.24	56.23	4,021.98	416.61	623.03	-429.67	0.00	0.00	0.00
4,200.00	12.24	56.23	4,119.70	428.39	640.65	-441.82	0.00	0.00	0.00
4,300.00	12.24	56.23	4,217.43	440.18	658.27	-453.98	0.00	0.00	0.00
4,400.00	12.24	56.23	4,315.16	451.96	675.90	-466.13	0.00	0.00	0.00
4,500.00	12.24	56.23	4,412.88	463.75	693.52	-478.29	0.00	0.00	0.00
4,600.00	12.24	56.23	4,510.61	475.53	711.14	-490.44	0.00	0.00	0.00

HP

Planning Report

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Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 4963.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 4963.00usft (RIG)
Site:	8N-60W-14 SCHNEIDER 1414 PAD	North Reference:	True
Well:	SCHNEIDER 1414-01H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan C		
Design:	Design #2		

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	12.24	56.23	4,608.34	487.31	728.77	-502.60	0.00	0.00	0.00
4,800.00	12.24	56.23	4,706.06	499.10	746.39	-514.75	0.00	0.00	0.00
4,900.00	12.24	56.23	4,803.79	510.88	764.01	-526.90	0.00	0.00	0.00
5,000.00	12.24	56.23	4,901.52	522.67	781.64	-539.06	0.00	0.00	0.00
5,100.00	12.24	56.23	4,999.25	534.45	799.26	-551.21	0.00	0.00	0.00
5,200.00	12.24	56.23	5,096.97	546.24	816.89	-563.37	0.00	0.00	0.00
5,300.00	12.24	56.23	5,194.70	558.02	834.51	-575.52	0.00	0.00	0.00
5,400.00	12.24	56.23	5,292.43	569.81	852.13	-587.67	0.00	0.00	0.00
5,500.00	12.24	56.23	5,390.15	581.59	869.76	-599.83	0.00	0.00	0.00
5,507.02	12.24	56.23	5,397.01	582.42	870.99	-600.68	0.00	0.00	0.00
KOP @ 5507.02ft :: DLS = 9°/100'									
5,600.00	10.17	99.09	5,488.37	586.61	887.32	-605.21	9.00	-2.22	46.09
5,700.00	14.43	137.54	5,586.20	576.00	904.49	-594.97	9.00	4.26	38.45
5,800.00	21.76	154.77	5,681.26	549.98	920.84	-569.30	9.00	7.33	17.23
5,900.00	29.98	163.27	5,771.19	509.20	935.97	-528.85	9.00	8.22	8.50
6,000.00	38.53	168.31	5,853.78	454.66	949.49	-474.61	9.00	8.55	5.05
6,100.00	47.22	171.75	5,927.01	387.70	961.09	-407.91	9.00	8.69	3.43
6,200.00	55.99	174.33	5,989.06	309.98	970.48	-330.40	9.00	8.77	2.58
6,300.00	64.81	176.42	6,038.40	223.39	977.42	-243.99	9.00	8.82	2.09
6,400.00	73.65	178.22	6,073.83	130.09	981.74	-150.79	9.00	8.84	1.81
6,500.00	82.50	179.87	6,094.47	32.36	983.34	-53.12	9.00	8.85	1.65
6,584.59	90.00	181.21	6,100.00	-51.98	982.54	31.22	9.00	8.86	1.58
TPZ/Cross N. Setback Line @ 6584.59ft									
6,600.00	90.00	181.21	6,100.00	-67.39	982.21	46.63	0.00	0.00	0.00
6,700.00	90.00	181.21	6,100.00	-167.36	980.10	146.63	0.00	0.00	0.00
6,800.00	90.00	181.21	6,100.00	-267.34	977.98	246.63	0.00	0.00	0.00
6,900.00	90.00	181.21	6,100.00	-367.32	975.86	346.63	0.00	0.00	0.00
7,000.00	90.00	181.21	6,100.00	-467.30	973.75	446.63	0.00	0.00	0.00
7,100.00	90.00	181.21	6,100.00	-567.27	971.63	546.63	0.00	0.00	0.00
7,200.00	90.00	181.21	6,100.00	-667.25	969.51	646.63	0.00	0.00	0.00
7,300.00	90.00	181.21	6,100.00	-767.23	967.40	746.63	0.00	0.00	0.00
7,400.00	90.00	181.21	6,100.00	-867.21	965.28	846.63	0.00	0.00	0.00
7,500.00	90.00	181.21	6,100.00	-967.19	963.16	946.63	0.00	0.00	0.00
7,600.00	90.00	181.21	6,100.00	-1,067.16	961.05	1,046.63	0.00	0.00	0.00
7,700.00	90.00	181.21	6,100.00	-1,167.14	958.93	1,146.63	0.00	0.00	0.00
7,800.00	90.00	181.21	6,100.00	-1,267.12	956.81	1,246.63	0.00	0.00	0.00
7,900.00	90.00	181.21	6,100.00	-1,367.10	954.69	1,346.63	0.00	0.00	0.00
8,000.00	90.00	181.21	6,100.00	-1,467.07	952.58	1,446.63	0.00	0.00	0.00
8,100.00	90.00	181.21	6,100.00	-1,567.05	950.46	1,546.63	0.00	0.00	0.00
8,200.00	90.00	181.21	6,100.00	-1,667.03	948.34	1,646.63	0.00	0.00	0.00
8,300.00	90.00	181.21	6,100.00	-1,767.01	946.23	1,746.63	0.00	0.00	0.00
8,400.00	90.00	181.21	6,100.00	-1,866.98	944.11	1,846.63	0.00	0.00	0.00
8,500.00	90.00	181.21	6,100.00	-1,966.96	941.99	1,946.63	0.00	0.00	0.00
8,600.00	90.00	181.21	6,100.00	-2,066.94	939.88	2,046.63	0.00	0.00	0.00
8,700.00	90.00	181.21	6,100.00	-2,166.92	937.76	2,146.63	0.00	0.00	0.00
8,800.00	90.00	181.21	6,100.00	-2,266.89	935.64	2,246.63	0.00	0.00	0.00
8,900.00	90.00	181.21	6,100.00	-2,366.87	933.53	2,346.63	0.00	0.00	0.00
9,000.00	90.00	181.21	6,100.00	-2,466.85	931.41	2,446.63	0.00	0.00	0.00
9,100.00	90.00	181.21	6,100.00	-2,566.83	929.29	2,546.63	0.00	0.00	0.00
9,200.00	90.00	181.21	6,100.00	-2,666.80	927.18	2,646.63	0.00	0.00	0.00
9,300.00	90.00	181.21	6,100.00	-2,766.78	925.06	2,746.63	0.00	0.00	0.00
9,400.00	90.00	181.21	6,100.00	-2,866.76	922.94	2,846.63	0.00	0.00	0.00
9,500.00	90.00	181.21	6,100.00	-2,966.74	920.83	2,946.63	0.00	0.00	0.00
9,600.00	90.00	181.21	6,100.00	-3,066.71	918.71	3,046.63	0.00	0.00	0.00

HP

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well SCHNEIDER 1414-01H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 4963.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 4963.00usft (RIG)
Site:	8N-60W-14 SCHNEIDER 1414 PAD	North Reference:	True
Well:	SCHNEIDER 1414-01H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan C		
Design:	Design #2		

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)	
9,700.00	90.00	181.21	6,100.00	-3,166.69	916.59	3,146.63	0.00	0.00	0.00	
9,800.00	90.00	181.21	6,100.00	-3,266.67	914.48	3,246.63	0.00	0.00	0.00	
9,900.00	90.00	181.21	6,100.00	-3,366.65	912.36	3,346.63	0.00	0.00	0.00	
10,000.00	90.00	181.21	6,100.00	-3,466.63	910.24	3,446.63	0.00	0.00	0.00	
10,100.00	90.00	181.21	6,100.00	-3,566.60	908.13	3,546.63	0.00	0.00	0.00	
10,200.00	90.00	181.21	6,100.00	-3,666.58	906.01	3,646.63	0.00	0.00	0.00	
10,300.00	90.00	181.21	6,100.00	-3,766.56	903.89	3,746.63	0.00	0.00	0.00	
10,400.00	90.00	181.21	6,100.00	-3,866.54	901.77	3,846.63	0.00	0.00	0.00	
10,500.00	90.00	181.21	6,100.00	-3,966.51	899.66	3,946.63	0.00	0.00	0.00	
10,600.00	90.00	181.21	6,100.00	-4,066.49	897.54	4,046.63	0.00	0.00	0.00	
10,700.00	90.00	181.21	6,100.00	-4,166.47	895.42	4,146.63	0.00	0.00	0.00	
10,800.00	90.00	181.21	6,100.00	-4,266.45	893.31	4,246.63	0.00	0.00	0.00	
10,900.00	90.00	181.21	6,100.00	-4,366.42	891.19	4,346.63	0.00	0.00	0.00	
11,000.00	90.00	181.21	6,100.00	-4,466.40	889.07	4,446.63	0.00	0.00	0.00	
11,100.00	90.00	181.21	6,100.00	-4,566.38	886.96	4,546.63	0.00	0.00	0.00	
11,200.00	90.00	181.21	6,100.00	-4,666.36	884.84	4,646.63	0.00	0.00	0.00	
11,260.33	90.00	181.21	6,100.00	-4,726.67	883.56	4,706.96	0.00	0.00	0.00	
Bottom of Production Zone @ 11260.33ft										
11,290.33	90.00	181.21	6,100.00	-4,756.67	882.93	4,736.96	0.00	0.00	0.00	
Cross S. Setback Line @ 11290.33ft										
11,300.00	90.00	181.21	6,100.00	-4,766.33	882.72	4,746.63	0.00	0.00	0.00	
11,380.33	90.00	181.21	6,100.00	-4,846.65	881.02	4,826.96	0.00	0.00	0.00	
TD Well @ 11380.33ft										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (")	Hole Diameter (")
1,724.01	1,700.00	9 5/8"		9-5/8	13-1/2

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
260.00	260.00	+N/-S (usft)	+E/-W (usft)	Begin Nudge @ 260.00ft	
872.00	867.36	36.20	54.13	Hold Tangent @ 872.00ft	
5,507.02	5,397.01	582.42	870.99	KOP @ 5507.02ft :: DLS = 9°/100'	
6,584.59	6,100.00	-51.98	982.54	TPZ/Cross N. Setback Line @ 6584.59ft	
11,260.33	6,100.00	-4,726.67	883.56	Bottom of Production Zone @ 11260.33ft	
11,290.33	6,100.00	-4,756.67	882.93	Cross S. Setback Line @ 11290.33ft	
11,380.33	6,100.00	-4,846.65	881.02	TD Well @ 11380.33ft	