

# **VERDAD RESOURCES**

**WATTENBERG FIELD**

**8N-60W-14 SCHNEIDER 1414 PAD**

**SCHNEIDER 1414-04H**

**Plan C**

**Plan: Design #2**

## **Standard Planning Report**

**30 March, 2021**

Project: WATTENBERG FIELD  
Site: 8N-60W-14 SCHNEIDER 1414 PAD  
Well: SCHNEIDER 1414-04H  
Wellbore: Plan C  
Design: Design #2

# VERDAD RESOURCES

## CASING DETAILS

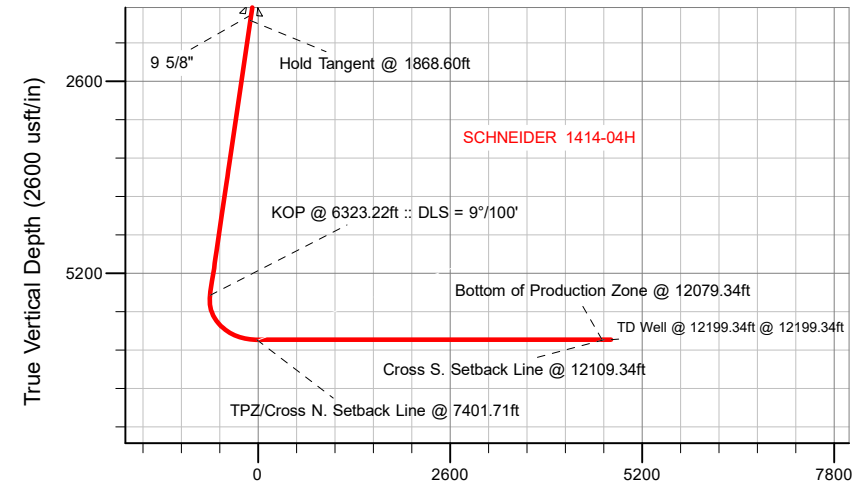
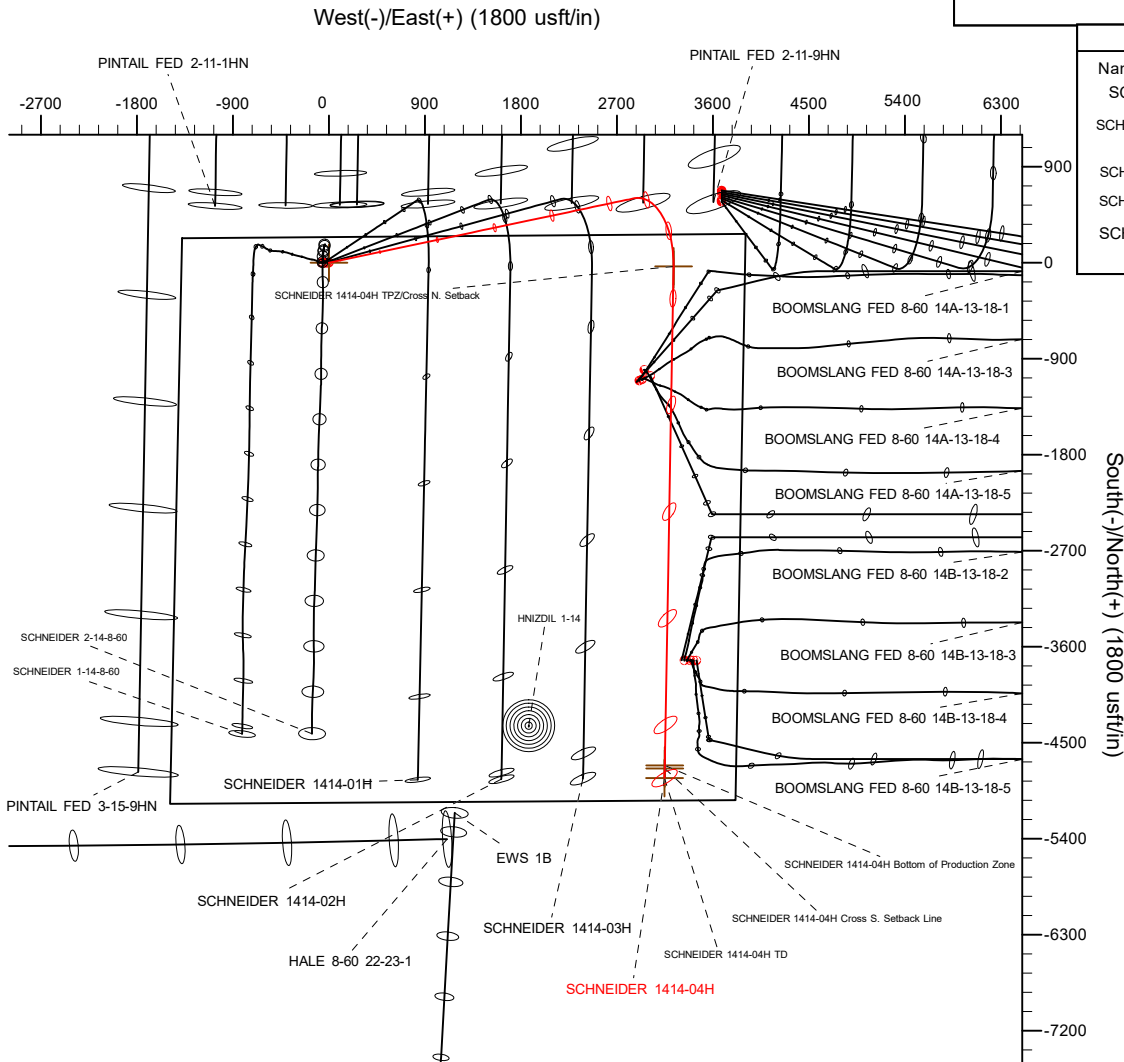
TVD	MD	Name	Size
1700.00	1778.33	9 5/8"	9-5/8

## SECTION DETAILS

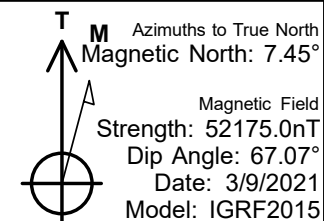
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	202.10	0.00	0.00	202.10	0.00	0.00	0.00	0.00	0.00	
3	1868.60	33.33	78.07	1776.19	97.41	461.02	2.00	78.07	-105.44	
4	6323.22	33.33	78.07	5498.11	603.37	2855.79	0.00	0.00	-653.12	
5	7401.71	90.00	181.00	6100.00	-35.07	3230.45	9.00	100.86	-21.31	
6	12109.34	90.00	181.00	6100.00	-4741.98	3148.01	0.00	0.00	4686.32	SCHNEIDER 1414-04H Cross S. Setback Line
7	12199.34	90.00	181.00	6100.00	-4831.97	3146.44	0.00	0.00	4776.32	

## WELLBORE TARGET DETAILS (LAT/LONG)

Name	MD	TVD	+N/-S	+E/-W	Latitude	Longitude
SCHNEIDER 1414-04H SHL	0.00	0.00	0.00	0.00	40.669103	-104.062380
SCHNEIDER 1414-04H TPZ/Cross N. Setback	7401.71	6100.00	-35.26	3230.44	40.669005	-104.050734
SCHNEIDER 1414-04H Bottom of Production Zone	12079.34	6100.00	-4711.99	3148.54	40.656169	-104.051032
SCHNEIDER 1414-04H Cross S. Setback Line	12109.34	6100.00	-4741.98	3148.01	40.656086	-104.051034
SCHNEIDER 1414-04H TD	12199.34	6100.00	-4831.97	3146.44	40.655839	-104.051039



Vertical Section at 181.00° (2600 usft/in)



## WELL DETAILS: SCHNEIDER 1414-04H

GL = 4943'

RKB = 20' @ 4963.00usft (RIG)

Plan: Design #2 (SCHNEIDER 1414-04H/Plan C)

Date: 3/30/2021

# HP

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well SCHNEIDER 1414-04H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 20' @ 4963.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 20' @ 4963.00usft (RIG)
<b>Site:</b>	8N-60W-14 SCHNEIDER 1414 PAD	<b>North Reference:</b>	True
<b>Well:</b>	SCHNEIDER 1414-04H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan C		
<b>Design:</b>	Design #2		

<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		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 1414-04H				
Well Position	+N/-S	0.00 usft	Northing:	1,489,829.63 usft	Latitude:	40.669103
	+E/-W	0.00 usft	Easting:	3,398,785.30 usft	Longitude:	-104.062380
Position Uncertainty		3.28 usft	Wellhead Elevation:	usft	Ground Level:	4,943.00 usft
Grid Convergence:		0.93 °				

<b>Wellbore</b>	Plan C				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	3/9/2021	7.45	67.07	52,174.99838890

<b>Design</b>	Design #2				
<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	181.00	

<b>Plan Survey Tool Program</b>	<b>Date</b>	3/30/2021			
<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 #2 (Plan C)	ISCWSA MWD	
				Fixed:v2:standard declination	
2	1,700.00	12,199.34	Design #2 (Plan C)	ISCWSA MWD	
				Fixed:v2:standard declination	

# HP

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well SCHNEIDER 1414-04H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 20' @ 4963.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 20' @ 4963.00usft (RIG)
<b>Site:</b>	8N-60W-14 SCHNEIDER 1414 PAD	<b>North Reference:</b>	True
<b>Well:</b>	SCHNEIDER 1414-04H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan C		
<b>Design:</b>	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	
202.10	0.00	0.00	202.10	0.00	0.00	0.00	0.00	0.00	0.00	
1,868.60	33.33	78.07	1,776.19	97.41	461.02	2.00	2.00	0.00	78.07	
6,323.22	33.33	78.07	5,498.11	603.37	2,855.79	0.00	0.00	0.00	0.00	
7,401.71	90.00	181.00	6,100.00	-35.07	3,230.45	9.00	5.25	9.54	100.86	
12,109.34	90.00	181.00	6,100.00	-4,741.98	3,148.01	0.00	0.00	0.00	0.00	SCHNEIDER 1414-04
12,199.34	90.00	181.00	6,100.00	-4,831.97	3,146.44	0.00	0.00	0.00	0.00	

# HP

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well SCHNEIDER 1414-04H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 20' @ 4963.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 20' @ 4963.00usft (RIG)
<b>Site:</b>	8N-60W-14 SCHNEIDER 1414 PAD	<b>North Reference:</b>	True
<b>Well:</b>	SCHNEIDER 1414-04H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan C		
<b>Design:</b>	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
202.10	0.00	0.00	202.10	0.00	0.00	0.00	0.00	0.00	0.00
<b>Begin Nudge @ 202.10ft</b>									
300.00	1.96	78.07	299.98	0.35	1.64	-0.37	2.00	2.00	0.00
400.00	3.96	78.07	399.84	1.41	6.69	-1.53	2.00	2.00	0.00
500.00	5.96	78.07	499.46	3.20	15.14	-3.46	2.00	2.00	0.00
600.00	7.96	78.07	598.72	5.70	26.99	-6.17	2.00	2.00	0.00
700.00	9.96	78.07	697.50	8.92	42.23	-9.66	2.00	2.00	0.00
800.00	11.96	78.07	795.67	12.85	60.82	-13.91	2.00	2.00	0.00
900.00	13.96	78.07	893.12	17.49	82.76	-18.93	2.00	2.00	0.00
1,000.00	15.96	78.07	989.72	22.82	108.01	-24.70	2.00	2.00	0.00
1,100.00	17.96	78.07	1,085.37	28.85	136.55	-31.23	2.00	2.00	0.00
1,200.00	19.96	78.07	1,179.94	35.57	168.33	-38.50	2.00	2.00	0.00
1,300.00	21.96	78.07	1,273.32	42.96	203.33	-46.50	2.00	2.00	0.00
1,400.00	23.96	78.07	1,365.40	51.02	241.49	-55.23	2.00	2.00	0.00
1,500.00	25.96	78.07	1,456.05	59.74	282.77	-64.67	2.00	2.00	0.00
1,600.00	27.96	78.07	1,545.18	69.11	327.12	-74.81	2.00	2.00	0.00
1,700.00	29.96	78.07	1,632.68	79.12	374.49	-85.65	2.00	2.00	0.00
1,778.33	31.52	78.07	1,700.00	87.40	413.67	-94.61	2.00	2.00	0.00
<b>9 5/8"</b>									
1,800.00	31.96	78.07	1,718.43	89.76	424.82	-97.16	2.00	2.00	0.00
1,868.60	33.33	78.07	1,776.19	97.41	461.02	-105.44	2.00	2.00	0.00
<b>Hold Tangent @ 1868.60ft</b>									
1,900.00	33.33	78.07	1,802.42	100.97	477.90	-109.30	0.00	0.00	0.00
2,000.00	33.33	78.07	1,885.98	112.33	531.66	-121.59	0.00	0.00	0.00
2,100.00	33.33	78.07	1,969.53	123.69	585.42	-133.89	0.00	0.00	0.00
2,200.00	33.33	78.07	2,053.08	135.05	639.18	-146.18	0.00	0.00	0.00
2,300.00	33.33	78.07	2,136.63	146.40	692.94	-158.48	0.00	0.00	0.00
2,400.00	33.33	78.07	2,220.18	157.76	746.70	-170.77	0.00	0.00	0.00
2,500.00	33.33	78.07	2,303.74	169.12	800.46	-183.07	0.00	0.00	0.00
2,600.00	33.33	78.07	2,387.29	180.48	854.22	-195.36	0.00	0.00	0.00
2,700.00	33.33	78.07	2,470.84	191.84	907.98	-207.65	0.00	0.00	0.00
2,800.00	33.33	78.07	2,554.39	203.20	961.74	-219.95	0.00	0.00	0.00
2,900.00	33.33	78.07	2,637.94	214.55	1,015.50	-232.24	0.00	0.00	0.00
3,000.00	33.33	78.07	2,721.50	225.91	1,069.26	-244.54	0.00	0.00	0.00
3,100.00	33.33	78.07	2,805.05	237.27	1,123.02	-256.83	0.00	0.00	0.00
3,200.00	33.33	78.07	2,888.60	248.63	1,176.77	-269.13	0.00	0.00	0.00
3,300.00	33.33	78.07	2,972.15	259.99	1,230.53	-281.42	0.00	0.00	0.00
3,400.00	33.33	78.07	3,055.70	271.35	1,284.29	-293.72	0.00	0.00	0.00
3,500.00	33.33	78.07	3,139.26	282.70	1,338.05	-306.01	0.00	0.00	0.00
3,600.00	33.33	78.07	3,222.81	294.06	1,391.81	-318.31	0.00	0.00	0.00
3,700.00	33.33	78.07	3,306.36	305.42	1,445.57	-330.60	0.00	0.00	0.00
3,800.00	33.33	78.07	3,389.91	316.78	1,499.33	-342.90	0.00	0.00	0.00
3,900.00	33.33	78.07	3,473.46	328.14	1,553.09	-355.19	0.00	0.00	0.00
4,000.00	33.33	78.07	3,557.01	339.49	1,606.85	-367.49	0.00	0.00	0.00
4,100.00	33.33	78.07	3,640.57	350.85	1,660.61	-379.78	0.00	0.00	0.00
4,200.00	33.33	78.07	3,724.12	362.21	1,714.37	-392.08	0.00	0.00	0.00
4,300.00	33.33	78.07	3,807.67	373.57	1,768.13	-404.37	0.00	0.00	0.00
4,400.00	33.33	78.07	3,891.22	384.93	1,821.89	-416.67	0.00	0.00	0.00
4,500.00	33.33	78.07	3,974.77	396.29	1,875.64	-428.96	0.00	0.00	0.00
4,600.00	33.33	78.07	4,058.33	407.64	1,929.40	-441.26	0.00	0.00	0.00

# HP

## Planning Report

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<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 20' @ 4963.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 20' @ 4963.00usft (RIG)
<b>Site:</b>	8N-60W-14 SCHNEIDER 1414 PAD	<b>North Reference:</b>	True
<b>Well:</b>	SCHNEIDER 1414-04H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan C		
<b>Design:</b>	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	33.33	78.07	4,141.88	419.00	1,983.16	-453.55	0.00	0.00	0.00
4,800.00	33.33	78.07	4,225.43	430.36	2,036.92	-465.84	0.00	0.00	0.00
4,900.00	33.33	78.07	4,308.98	441.72	2,090.68	-478.14	0.00	0.00	0.00
5,000.00	33.33	78.07	4,392.53	453.08	2,144.44	-490.43	0.00	0.00	0.00
5,100.00	33.33	78.07	4,476.09	464.44	2,198.20	-502.73	0.00	0.00	0.00
5,200.00	33.33	78.07	4,559.64	475.79	2,251.96	-515.02	0.00	0.00	0.00
5,300.00	33.33	78.07	4,643.19	487.15	2,305.72	-527.32	0.00	0.00	0.00
5,400.00	33.33	78.07	4,726.74	498.51	2,359.48	-539.61	0.00	0.00	0.00
5,500.00	33.33	78.07	4,810.29	509.87	2,413.24	-551.91	0.00	0.00	0.00
5,600.00	33.33	78.07	4,893.85	521.23	2,467.00	-564.20	0.00	0.00	0.00
5,700.00	33.33	78.07	4,977.40	532.59	2,520.76	-576.50	0.00	0.00	0.00
5,800.00	33.33	78.07	5,060.95	543.94	2,574.51	-588.79	0.00	0.00	0.00
5,900.00	33.33	78.07	5,144.50	555.30	2,628.27	-601.09	0.00	0.00	0.00
6,000.00	33.33	78.07	5,228.05	566.66	2,682.03	-613.38	0.00	0.00	0.00
6,100.00	33.33	78.07	5,311.61	578.02	2,735.79	-625.68	0.00	0.00	0.00
6,200.00	33.33	78.07	5,395.16	589.38	2,789.55	-637.97	0.00	0.00	0.00
6,300.00	33.33	78.07	5,478.71	600.73	2,843.31	-650.27	0.00	0.00	0.00
6,323.22	33.33	78.07	5,498.11	603.37	2,855.79	-653.12	0.00	0.00	0.00
KOP @ 6323.22ft :: DLS = 9°/100'									
6,400.00	32.66	90.72	5,562.59	607.48	2,897.20	-657.95	9.00	-0.88	16.47
6,500.00	33.71	107.09	5,646.45	598.97	2,950.81	-650.37	9.00	1.05	16.37
6,600.00	36.74	121.83	5,728.28	574.99	3,002.85	-627.31	9.00	3.03	14.73
6,700.00	41.31	134.17	5,806.07	536.14	3,052.03	-589.33	9.00	4.57	12.35
6,800.00	46.96	144.25	5,877.90	483.38	3,097.15	-537.36	9.00	5.66	10.08
6,900.00	53.35	152.52	5,942.00	418.00	3,137.10	-472.68	9.00	6.39	8.28
7,000.00	60.22	159.49	5,996.79	341.60	3,170.88	-396.89	9.00	6.87	6.96
7,100.00	67.40	165.53	6,040.93	256.09	3,197.68	-311.85	9.00	7.19	6.05
7,200.00	74.79	170.97	6,073.32	163.55	3,216.83	-219.66	9.00	7.39	5.44
7,300.00	82.30	176.03	6,093.18	66.26	3,227.85	-122.59	9.00	7.51	5.06
7,400.00	89.87	180.92	6,100.00	-33.36	3,230.48	-23.02	9.00	7.57	4.89
7,401.71	90.00	181.00	6,100.00	-35.07	3,230.45	-21.31	9.00	7.58	4.86
TPZ/Cross N. Setback @ 7401.71ft									
7,500.00	90.00	181.00	6,100.00	-133.35	3,228.73	76.98	0.00	0.00	0.00
7,600.00	90.00	181.00	6,100.00	-233.33	3,226.98	176.98	0.00	0.00	0.00
7,700.00	90.00	181.00	6,100.00	-333.32	3,225.23	276.98	0.00	0.00	0.00
7,800.00	90.00	181.00	6,100.00	-433.30	3,223.48	376.98	0.00	0.00	0.00
7,900.00	90.00	181.00	6,100.00	-533.29	3,221.72	476.98	0.00	0.00	0.00
8,000.00	90.00	181.00	6,100.00	-633.27	3,219.97	576.98	0.00	0.00	0.00
8,100.00	90.00	181.00	6,100.00	-733.26	3,218.22	676.98	0.00	0.00	0.00
8,200.00	90.00	181.00	6,100.00	-833.24	3,216.47	776.98	0.00	0.00	0.00
8,300.00	90.00	181.00	6,100.00	-933.23	3,214.72	876.98	0.00	0.00	0.00
8,400.00	90.00	181.00	6,100.00	-1,033.21	3,212.97	976.98	0.00	0.00	0.00
8,500.00	90.00	181.00	6,100.00	-1,133.20	3,211.22	1,076.98	0.00	0.00	0.00
8,600.00	90.00	181.00	6,100.00	-1,233.18	3,209.47	1,176.98	0.00	0.00	0.00
8,700.00	90.00	181.00	6,100.00	-1,333.17	3,207.72	1,276.98	0.00	0.00	0.00
8,800.00	90.00	181.00	6,100.00	-1,433.15	3,205.96	1,376.98	0.00	0.00	0.00
8,900.00	90.00	181.00	6,100.00	-1,533.13	3,204.21	1,476.98	0.00	0.00	0.00
9,000.00	90.00	181.00	6,100.00	-1,633.12	3,202.46	1,576.98	0.00	0.00	0.00
9,100.00	90.00	181.00	6,100.00	-1,733.10	3,200.71	1,676.98	0.00	0.00	0.00
9,200.00	90.00	181.00	6,100.00	-1,833.09	3,198.96	1,776.98	0.00	0.00	0.00
9,300.00	90.00	181.00	6,100.00	-1,933.07	3,197.21	1,876.98	0.00	0.00	0.00
9,400.00	90.00	181.00	6,100.00	-2,033.06	3,195.46	1,976.98	0.00	0.00	0.00
9,500.00	90.00	181.00	6,100.00	-2,133.04	3,193.71	2,076.98	0.00	0.00	0.00
9,600.00	90.00	181.00	6,100.00	-2,233.03	3,191.96	2,176.98	0.00	0.00	0.00

# HP

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well SCHNEIDER 1414-04H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 20' @ 4963.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 20' @ 4963.00usft (RIG)
<b>Site:</b>	8N-60W-14 SCHNEIDER 1414 PAD	<b>North Reference:</b>	True
<b>Well:</b>	SCHNEIDER 1414-04H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan C		
<b>Design:</b>	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	181.00	6,100.00	-2,333.01	3,190.20	2,276.98	0.00	0.00	0.00	
9,800.00	90.00	181.00	6,100.00	-2,433.00	3,188.45	2,376.98	0.00	0.00	0.00	
9,900.00	90.00	181.00	6,100.00	-2,532.98	3,186.70	2,476.98	0.00	0.00	0.00	
10,000.00	90.00	181.00	6,100.00	-2,632.97	3,184.95	2,576.98	0.00	0.00	0.00	
10,100.00	90.00	181.00	6,100.00	-2,732.95	3,183.20	2,676.98	0.00	0.00	0.00	
10,200.00	90.00	181.00	6,100.00	-2,832.94	3,181.45	2,776.98	0.00	0.00	0.00	
10,300.00	90.00	181.00	6,100.00	-2,932.92	3,179.70	2,876.98	0.00	0.00	0.00	
10,400.00	90.00	181.00	6,100.00	-3,032.90	3,177.95	2,976.98	0.00	0.00	0.00	
10,500.00	90.00	181.00	6,100.00	-3,132.89	3,176.20	3,076.98	0.00	0.00	0.00	
10,600.00	90.00	181.00	6,100.00	-3,232.87	3,174.44	3,176.98	0.00	0.00	0.00	
10,700.00	90.00	181.00	6,100.00	-3,332.86	3,172.69	3,276.98	0.00	0.00	0.00	
10,800.00	90.00	181.00	6,100.00	-3,432.84	3,170.94	3,376.98	0.00	0.00	0.00	
10,900.00	90.00	181.00	6,100.00	-3,532.83	3,169.19	3,476.98	0.00	0.00	0.00	
11,000.00	90.00	181.00	6,100.00	-3,632.81	3,167.44	3,576.98	0.00	0.00	0.00	
11,100.00	90.00	181.00	6,100.00	-3,732.80	3,165.69	3,676.98	0.00	0.00	0.00	
11,200.00	90.00	181.00	6,100.00	-3,832.78	3,163.94	3,776.98	0.00	0.00	0.00	
11,300.00	90.00	181.00	6,100.00	-3,932.77	3,162.19	3,876.98	0.00	0.00	0.00	
11,400.00	90.00	181.00	6,100.00	-4,032.75	3,160.44	3,976.98	0.00	0.00	0.00	
11,500.00	90.00	181.00	6,100.00	-4,132.74	3,158.68	4,076.98	0.00	0.00	0.00	
11,600.00	90.00	181.00	6,100.00	-4,232.72	3,156.93	4,176.98	0.00	0.00	0.00	
11,700.00	90.00	181.00	6,100.00	-4,332.71	3,155.18	4,276.98	0.00	0.00	0.00	
11,800.00	90.00	181.00	6,100.00	-4,432.69	3,153.43	4,376.98	0.00	0.00	0.00	
11,900.00	90.00	181.00	6,100.00	-4,532.67	3,151.68	4,476.98	0.00	0.00	0.00	
12,000.00	90.00	181.00	6,100.00	-4,632.66	3,149.93	4,576.98	0.00	0.00	0.00	
12,079.34	90.00	181.00	6,100.00	-4,711.99	3,148.54	4,656.32	0.00	0.00	0.00	
Bottom of Production Zone @ 12079.34ft										
12,100.00	90.00	181.00	6,100.00	-4,732.64	3,148.18	4,676.98	0.00	0.00	0.00	
12,109.34	90.00	181.00	6,100.00	-4,741.98	3,148.01	4,686.32	0.00	0.00	0.00	
Cross S. Setback Line @ 12109.34ft										
12,199.34	90.00	181.00	6,100.00	-4,831.97	3,146.44	4,776.32	0.00	0.00	0.00	
TD Well @ 12199.34ft @ 12199.34ft										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (")	Hole Diameter (")
1,778.33	1,700.00	9 5/8"		9-5/8	13-1/2

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
202.10	202.10	0.00	0.00	Begin Nudge @ 202.10ft	
1,868.60	1,776.19	97.41	461.02	Hold Tangent @ 1868.60ft	
6,323.22	5,498.11	603.37	2,855.79	KOP @ 6323.22ft :: DLS = 9°/100'	
7,401.71	6,100.00	-35.07	3,230.45	TPZ/Cross N. Setback @ 7401.71ft	
12,079.34	6,100.00	-65.07	3,229.92	Bottom of Production Zone @ 12079.34ft	
12,109.34	6,100.00	-4,711.99	3,148.54	Cross S. Setback Line @ 12109.34ft	
12,199.34	6,100.00	-4,741.98	3,148.01	TD Well @ 12199.34ft @ 12199.34ft	