

# **VERDAD RESOURCES**

**WATTENBERG FIELD**

**9N-60W-13 ROHN FED 1324 PAD**

**ROHN FED 1324-2H**

**Plan A**

**Plan: Permit Rev-1**

## **Standard Planning Report**

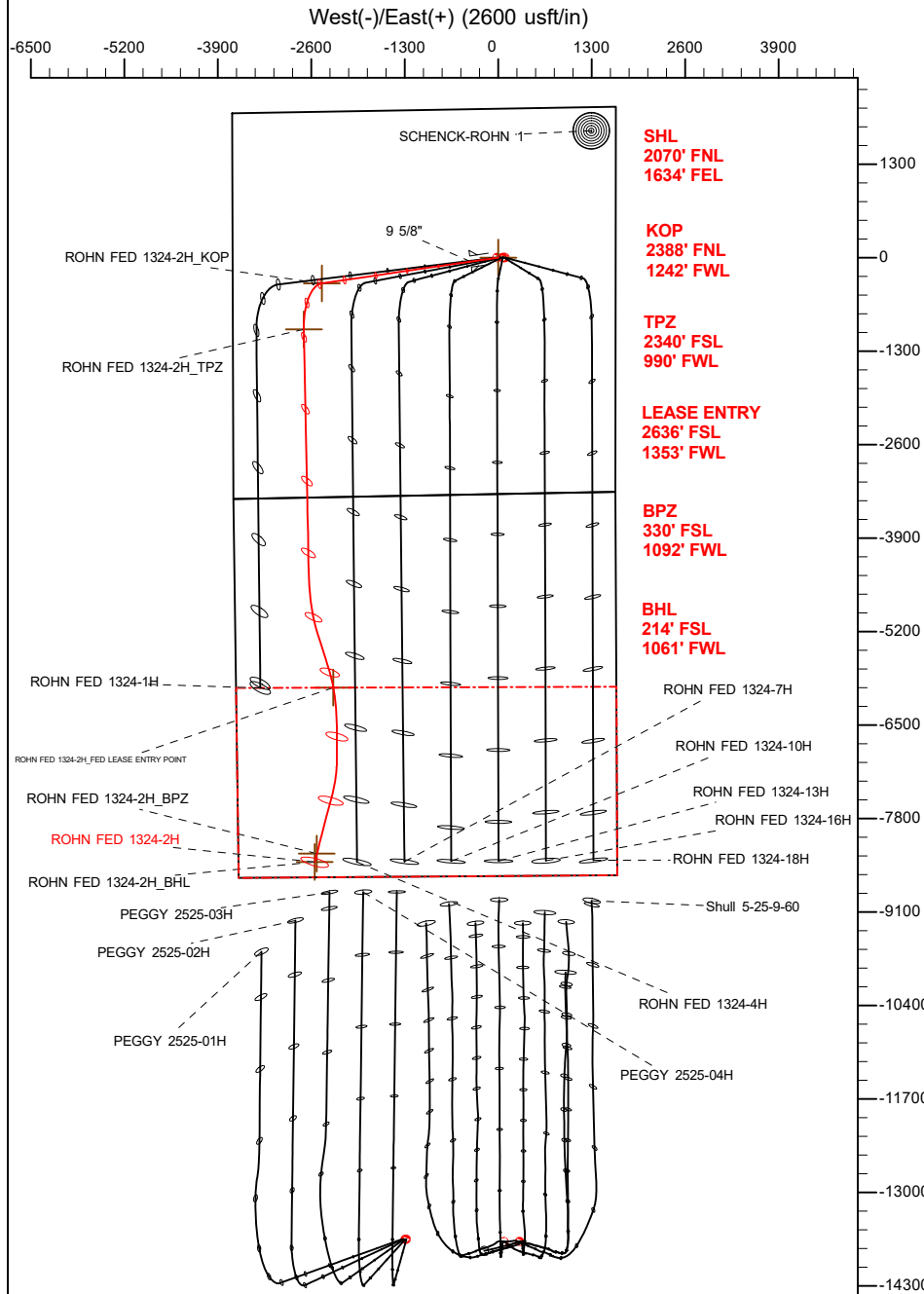
**26 July, 2022**

Project: WATTENBERG FIELD  
Site: 9N-60W-13 ROHN FED 1324 PAD  
Well: ROHN FED 1324-2H  
Wellbore: Plan A  
Design: Permit Rev-1

# VERDAD RESOURCES

## CASING DETAILS

TVD	MD	Name	Size
1704.00	1770.66	9 5/8"	9-5/8

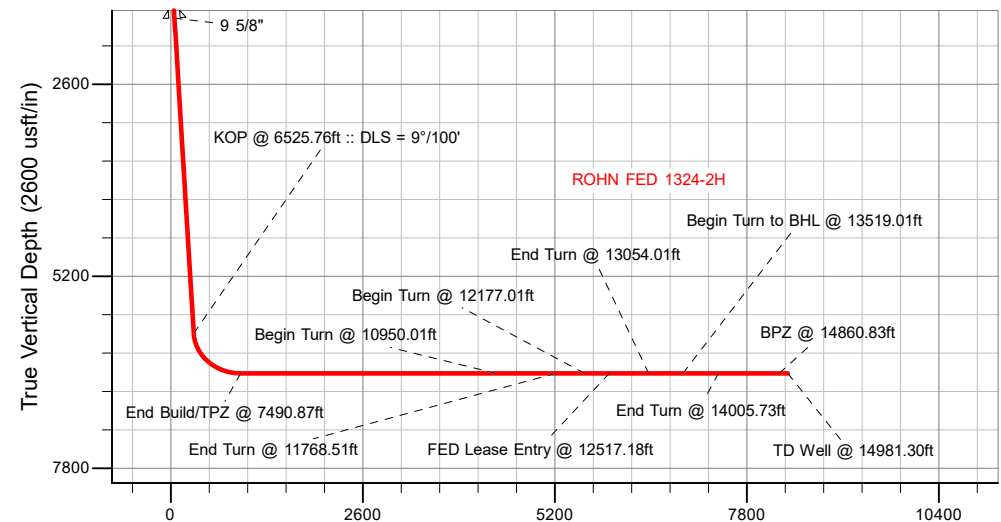



## SECTION DETAILS

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	250.15	0.00	0.00	250.15	0.00	0.00	0.00	0.00	0.00	
3	1555.65	26.11	261.68	1510.93	-42.30	-289.27	2.00	261.68	36.39	
4	6525.76	26.11	261.68	5973.85	-358.81	-2453.58	0.00	0.00	308.64	
5	7490.87	90.00	178.83	6515.00	-999.72	-2703.70	9.00	-83.57	944.30	
6	10950.01	90.00	178.83	6515.00	-4458.14	-2633.07	0.00	0.00	4403.44	
7	11768.51	90.00	162.46	6515.00	-5263.01	-2500.48	2.00	-90.00	5210.85	
8	12177.01	90.00	162.46	6515.00	-5652.51	-2377.37	0.00	0.00	5602.79	
9	13054.01	90.00	180.00	6515.00	-6515.88	-2244.17	2.00	90.00	6468.70	
10	13519.01	90.00	180.00	6515.00	-6980.88	-2244.17	0.00	0.00	6933.60	
11	14005.73	90.00	194.60	6515.00	-7462.34	-2305.86	3.00	90.00	7413.71	
12	14981.30	90.00	194.60	6515.00	-8406.41	-2551.79	0.00	0.00	8352.55	ROHN FED 1324-2H_BHL

## WELLBORE TARGET DETAILS (LAT/LONG)

Name	MD	TVD	Northing	Easting	Latitude	Longitude
ROHN FED 1324-2H_SHL	0.00	0.00	1520238.09	3405520.30	40.752254	-104.036295
ROHN FED 1324-2H_KOP	6525.76	5973.85	1519838.83	3403072.98	40.751269	-104.045151
ROHN FED 1324-2H_TPZ	7490.87	6515.00	1519193.67	3402833.48	40.749509	-104.046053
ROHN FED 1324-2H_LEASE ENTRY	12517.18	6515.00	1514218.84	3403324.71	40.735834	-104.044575
ROHN FED 1324-2H_BPZ	14860.83	6515.00	1511907.74	3403134.52	40.729500	-104.045398
ROHN FED 1324-2H_BHL	14981.30	6515.00	1511790.70	3403107.61	40.729180	-104.045502



 <p>Azimuths to True North Magnetic North: 7.37°</p> <p>Magnetic Field Strength: 52090.8nT Dip Angle: 66.99° Date: 7/26/2022 Model: IGRF2020</p>	WELL DETAILS: ROHN FED 1324-2H	
	GL = 5043'	
	RKB = 16' @ 5059.00usft (RIG)	
	Plan: Permit Rev-1 (ROHN FED 1324-2H/Plan A)	
	Date: 07/26/2022	

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ROHN FED 1324-2H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 16' @ 5059.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 16' @ 5059.00usft (RIG)
<b>Site:</b>	9N-60W-13 ROHN FED 1324 PAD	<b>North Reference:</b>	True
<b>Well:</b>	ROHN FED 1324-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-1		

<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		9N-60W-13 ROHN FED 1324 PAD			
Site Position:		Northing:	1,520,237.85 usft	Latitude:	40.752254
From:	Lat/Long	Easting:	3,405,504.51 usft	Longitude:	-104.036352
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "		

Well		ROHN FED 1324-2H				
Well Position	+N/-S	0.00 usft	Northing:	1,520,238.09 usft	Latitude:	40.752254
	+E/-W	0.00 usft	Easting:	3,405,520.30 usft	Longitude:	-104.036295
Position Uncertainty		3.28 usft	Wellhead Elevation:	usft	Ground Level:	5,043.00 usft
Grid Convergence:		0.95 °				

<b>Wellbore</b>	Plan A				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF202013	7/26/2022	7.37	66.99	52,090.84405633

<b>Design</b>	Permit Rev-1				
<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>	
	6,515.00	0.00	0.00	178.83	

<b>Plan Survey Tool Program</b>		<b>Date</b>	7/26/2022		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>	
1	0.00	1,704.00	Permit Rev-1 (Plan A)	ISCWSA MWD	
				Fixed:v2:standard declination	
2	1,704.00	14,981.30	Permit Rev-1 (Plan A)	ISCWSA MWD	
				Fixed:v2:standard declination	

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ROHN FED 1324-2H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 16' @ 5059.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 16' @ 5059.00usft (RIG)
<b>Site:</b>	9N-60W-13 ROHN FED 1324 PAD	<b>North Reference:</b>	True
<b>Well:</b>	ROHN FED 1324-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-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	
250.15	0.00	0.00	250.15	0.00	0.00	0.00	0.00	0.00	0.00	
1,555.65	26.11	261.68	1,510.93	-42.30	-289.27	2.00	2.00	0.00	261.68	
6,525.76	26.11	261.68	5,973.85	-358.81	-2,453.58	0.00	0.00	0.00	0.00	
7,490.87	90.00	178.83	6,515.00	-999.72	-2,703.70	9.00	6.62	-8.58	-83.57	
10,950.01	90.00	178.83	6,515.00	-4,458.14	-2,633.07	0.00	0.00	0.00	0.00	
11,768.51	90.00	162.46	6,515.00	-5,263.01	-2,500.48	2.00	0.00	-2.00	-90.00	
12,177.01	90.00	162.46	6,515.00	-5,652.51	-2,377.37	0.00	0.00	0.00	0.00	
13,054.01	90.00	180.00	6,515.00	-6,515.88	-2,244.17	2.00	0.00	2.00	90.00	
13,519.01	90.00	180.00	6,515.00	-6,980.88	-2,244.17	0.00	0.00	0.00	0.00	
14,005.73	90.00	194.60	6,515.00	-7,462.35	-2,305.86	3.00	0.00	3.00	90.00	
14,981.30	90.00	194.60	6,515.00	-8,406.41	-2,551.79	0.00	0.00	0.00	0.00	ROHN FED 1324-2H_

# Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ROHN FED 1324-2H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 16' @ 5059.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 16' @ 5059.00usft (RIG)
<b>Site:</b>	9N-60W-13 ROHN FED 1324 PAD	<b>North Reference:</b>	True
<b>Well:</b>	ROHN FED 1324-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-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
250.15	0.00	0.00	250.15	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 250.15ft									
300.00	1.00	261.68	300.00	-0.06	-0.43	0.05	2.00	2.00	0.00
400.00	3.00	261.68	399.93	-0.57	-3.88	0.49	2.00	2.00	0.00
500.00	5.00	261.68	499.68	-1.58	-10.77	1.36	2.00	2.00	0.00
600.00	7.00	261.68	599.13	-3.09	-21.11	2.66	2.00	2.00	0.00
700.00	9.00	261.68	698.15	-5.10	-34.88	4.39	2.00	2.00	0.00
800.00	11.00	261.68	796.63	-7.61	-52.05	6.55	2.00	2.00	0.00
900.00	13.00	261.68	894.44	-10.62	-72.62	9.13	2.00	2.00	0.00
1,000.00	15.00	261.68	991.47	-14.12	-96.55	12.15	2.00	2.00	0.00
1,100.00	17.00	261.68	1,087.59	-18.11	-123.82	15.58	2.00	2.00	0.00
1,200.00	19.00	261.68	1,182.69	-22.58	-154.39	19.42	2.00	2.00	0.00
1,300.00	21.00	261.68	1,276.66	-27.53	-188.22	23.68	2.00	2.00	0.00
1,400.00	23.00	261.68	1,369.37	-32.95	-225.28	28.34	2.00	2.00	0.00
1,500.00	25.00	261.68	1,460.73	-38.83	-265.52	33.40	2.00	2.00	0.00
1,555.65	26.11	261.68	1,510.93	-42.30	-289.27	36.39	2.00	2.00	0.00
Hold Tangent @ 1555.65ft									
1,600.00	26.11	261.68	1,550.76	-45.13	-308.59	38.82	0.00	0.00	0.00
1,700.00	26.11	261.68	1,640.55	-51.50	-352.13	44.30	0.00	0.00	0.00
1,770.66	26.11	261.68	1,704.00	-56.00	-382.90	48.17	0.00	0.00	0.00
9 5/8"									
1,800.00	26.11	261.68	1,730.35	-57.86	-395.68	49.77	0.00	0.00	0.00
1,900.00	26.11	261.68	1,820.14	-64.23	-439.22	55.25	0.00	0.00	0.00
2,000.00	26.11	261.68	1,909.94	-70.60	-482.77	60.73	0.00	0.00	0.00
2,100.00	26.11	261.68	1,999.73	-76.97	-526.32	66.21	0.00	0.00	0.00
2,200.00	26.11	261.68	2,089.53	-83.34	-569.86	71.68	0.00	0.00	0.00
2,300.00	26.11	261.68	2,179.32	-89.71	-613.41	77.16	0.00	0.00	0.00
2,400.00	26.11	261.68	2,269.12	-96.07	-656.96	82.64	0.00	0.00	0.00
2,500.00	26.11	261.68	2,358.91	-102.44	-700.50	88.12	0.00	0.00	0.00
2,600.00	26.11	261.68	2,448.71	-108.81	-744.05	93.59	0.00	0.00	0.00
2,700.00	26.11	261.68	2,538.50	-115.18	-787.60	99.07	0.00	0.00	0.00
2,800.00	26.11	261.68	2,628.30	-121.55	-831.14	104.55	0.00	0.00	0.00
2,900.00	26.11	261.68	2,718.09	-127.92	-874.69	110.03	0.00	0.00	0.00
3,000.00	26.11	261.68	2,807.89	-134.28	-918.24	115.51	0.00	0.00	0.00
3,100.00	26.11	261.68	2,897.68	-140.65	-961.78	120.98	0.00	0.00	0.00
3,200.00	26.11	261.68	2,987.48	-147.02	-1,005.33	126.46	0.00	0.00	0.00
3,300.00	26.11	261.68	3,077.27	-153.39	-1,048.87	131.94	0.00	0.00	0.00
3,400.00	26.11	261.68	3,167.07	-159.76	-1,092.42	137.42	0.00	0.00	0.00
3,500.00	26.11	261.68	3,256.86	-166.12	-1,135.97	142.89	0.00	0.00	0.00
3,600.00	26.11	261.68	3,346.66	-172.49	-1,179.51	148.37	0.00	0.00	0.00
3,700.00	26.11	261.68	3,436.45	-178.86	-1,223.06	153.85	0.00	0.00	0.00
3,800.00	26.11	261.68	3,526.25	-185.23	-1,266.61	159.33	0.00	0.00	0.00
3,900.00	26.11	261.68	3,616.04	-191.60	-1,310.15	164.81	0.00	0.00	0.00
4,000.00	26.11	261.68	3,705.84	-197.97	-1,353.70	170.28	0.00	0.00	0.00
4,100.00	26.11	261.68	3,795.63	-204.33	-1,397.25	175.76	0.00	0.00	0.00
4,200.00	26.11	261.68	3,885.43	-210.70	-1,440.79	181.24	0.00	0.00	0.00
4,300.00	26.11	261.68	3,975.22	-217.07	-1,484.34	186.72	0.00	0.00	0.00
4,400.00	26.11	261.68	4,065.02	-223.44	-1,527.88	192.19	0.00	0.00	0.00
4,500.00	26.11	261.68	4,154.81	-229.81	-1,571.43	197.67	0.00	0.00	0.00
4,600.00	26.11	261.68	4,244.61	-236.18	-1,614.98	203.15	0.00	0.00	0.00

# Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ROHN FED 1324-2H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 16' @ 5059.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 16' @ 5059.00usft (RIG)
<b>Site:</b>	9N-60W-13 ROHN FED 1324 PAD	<b>North Reference:</b>	True
<b>Well:</b>	ROHN FED 1324-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-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	26.11	261.68	4,334.40	-242.54	-1,658.52	208.63	0.00	0.00	0.00
4,800.00	26.11	261.68	4,424.20	-248.91	-1,702.07	214.11	0.00	0.00	0.00
4,900.00	26.11	261.68	4,513.99	-255.28	-1,745.62	219.58	0.00	0.00	0.00
5,000.00	26.11	261.68	4,603.79	-261.65	-1,789.16	225.06	0.00	0.00	0.00
5,100.00	26.11	261.68	4,693.58	-268.02	-1,832.71	230.54	0.00	0.00	0.00
5,200.00	26.11	261.68	4,783.38	-274.39	-1,876.26	236.02	0.00	0.00	0.00
5,300.00	26.11	261.68	4,873.17	-280.75	-1,919.80	241.49	0.00	0.00	0.00
5,400.00	26.11	261.68	4,962.97	-287.12	-1,963.35	246.97	0.00	0.00	0.00
5,500.00	26.11	261.68	5,052.76	-293.49	-2,006.90	252.45	0.00	0.00	0.00
5,600.00	26.11	261.68	5,142.56	-299.86	-2,050.44	257.93	0.00	0.00	0.00
5,700.00	26.11	261.68	5,232.35	-306.23	-2,093.99	263.41	0.00	0.00	0.00
5,800.00	26.11	261.68	5,322.15	-312.59	-2,137.53	268.88	0.00	0.00	0.00
5,900.00	26.11	261.68	5,411.94	-318.96	-2,181.08	274.36	0.00	0.00	0.00
6,000.00	26.11	261.68	5,501.74	-325.33	-2,224.63	279.84	0.00	0.00	0.00
6,100.00	26.11	261.68	5,591.53	-331.70	-2,268.17	285.32	0.00	0.00	0.00
6,200.00	26.11	261.68	5,681.33	-338.07	-2,311.72	290.79	0.00	0.00	0.00
6,300.00	26.11	261.68	5,771.12	-344.44	-2,355.27	296.27	0.00	0.00	0.00
6,400.00	26.11	261.68	5,860.92	-350.80	-2,398.81	301.75	0.00	0.00	0.00
6,500.00	26.11	261.68	5,950.71	-357.17	-2,442.36	307.23	0.00	0.00	0.00
6,525.76	26.11	261.68	5,973.85	-358.81	-2,453.58	308.64	0.00	0.00	0.00
KOP @ 6525.76ft :: DLS = 9°/100'									
6,550.00	26.44	256.81	5,995.58	-360.82	-2,464.11	310.43	9.00	1.35	-20.11
6,600.00	27.61	247.23	6,040.15	-367.84	-2,485.64	317.01	9.00	2.35	-19.14
6,650.00	29.38	238.55	6,084.11	-378.73	-2,506.80	327.47	9.00	3.55	-17.36
6,700.00	31.66	230.90	6,127.19	-393.41	-2,527.46	341.72	9.00	4.54	-15.31
6,750.00	34.33	224.24	6,169.14	-411.80	-2,547.49	359.70	9.00	5.34	-13.32
6,800.00	37.31	218.48	6,209.69	-433.77	-2,566.76	381.27	9.00	5.97	-11.52
6,850.00	40.54	213.48	6,248.59	-459.20	-2,585.16	406.32	9.00	6.45	-9.99
6,900.00	43.95	209.12	6,285.61	-487.93	-2,602.58	434.69	9.00	6.83	-8.72
6,950.00	47.52	205.28	6,320.51	-519.78	-2,618.91	466.19	9.00	7.12	-7.69
7,000.00	51.19	201.85	6,353.08	-554.55	-2,634.04	500.65	9.00	7.35	-6.85
7,050.00	54.96	198.77	6,383.11	-592.03	-2,647.88	537.84	9.00	7.53	-6.17
7,100.00	58.79	195.96	6,410.44	-631.98	-2,660.36	577.53	9.00	7.67	-5.62
7,150.00	62.69	193.37	6,434.87	-674.18	-2,671.38	619.49	9.00	7.79	-5.18
7,200.00	66.63	190.96	6,456.27	-718.34	-2,680.89	663.45	9.00	7.88	-4.82
7,250.00	70.60	188.69	6,474.51	-764.20	-2,688.82	709.14	9.00	7.94	-4.54
7,300.00	74.60	186.53	6,489.46	-811.48	-2,695.13	756.28	9.00	8.00	-4.33
7,350.00	78.62	184.45	6,501.04	-859.89	-2,699.77	804.58	9.00	8.04	-4.16
7,400.00	82.65	182.43	6,509.18	-909.12	-2,702.72	853.74	9.00	8.07	-4.04
7,450.00	86.69	180.44	6,513.82	-958.87	-2,703.97	903.46	9.00	8.08	-3.97
7,490.87	90.00	178.83	6,515.00	-999.72	-2,703.70	944.30	9.00	8.09	-3.94
End Build/TPZ @ 7490.87ft									
7,500.00	90.00	178.83	6,515.00	-1,008.85	-2,703.52	953.43	0.00	0.00	0.00
7,600.00	90.00	178.83	6,515.00	-1,108.83	-2,701.48	1,053.43	0.00	0.00	0.00
7,700.00	90.00	178.83	6,515.00	-1,208.80	-2,699.43	1,153.43	0.00	0.00	0.00
7,800.00	90.00	178.83	6,515.00	-1,308.78	-2,697.39	1,253.43	0.00	0.00	0.00
7,900.00	90.00	178.83	6,515.00	-1,408.76	-2,695.35	1,353.43	0.00	0.00	0.00
8,000.00	90.00	178.83	6,515.00	-1,508.74	-2,693.31	1,453.43	0.00	0.00	0.00
8,100.00	90.00	178.83	6,515.00	-1,608.72	-2,691.27	1,553.43	0.00	0.00	0.00
8,200.00	90.00	178.83	6,515.00	-1,708.70	-2,689.22	1,653.43	0.00	0.00	0.00
8,300.00	90.00	178.83	6,515.00	-1,808.68	-2,687.18	1,753.43	0.00	0.00	0.00
8,400.00	90.00	178.83	6,515.00	-1,908.66	-2,685.14	1,853.43	0.00	0.00	0.00
8,500.00	90.00	178.83	6,515.00	-2,008.64	-2,683.10	1,953.43	0.00	0.00	0.00
8,600.00	90.00	178.83	6,515.00	-2,108.62	-2,681.06	2,053.43	0.00	0.00	0.00

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ROHN FED 1324-2H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 16' @ 5059.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 16' @ 5059.00usft (RIG)
<b>Site:</b>	9N-60W-13 ROHN FED 1324 PAD	<b>North Reference:</b>	True
<b>Well:</b>	ROHN FED 1324-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-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)	
8,700.00	90.00	178.83	6,515.00	-2,208.60	-2,679.02	2,153.43	0.00	0.00	0.00	
8,800.00	90.00	178.83	6,515.00	-2,308.57	-2,676.97	2,253.43	0.00	0.00	0.00	
8,900.00	90.00	178.83	6,515.00	-2,408.55	-2,674.93	2,353.43	0.00	0.00	0.00	
9,000.00	90.00	178.83	6,515.00	-2,508.53	-2,672.89	2,453.43	0.00	0.00	0.00	
9,100.00	90.00	178.83	6,515.00	-2,608.51	-2,670.85	2,553.43	0.00	0.00	0.00	
9,200.00	90.00	178.83	6,515.00	-2,708.49	-2,668.81	2,653.43	0.00	0.00	0.00	
9,300.00	90.00	178.83	6,515.00	-2,808.47	-2,666.76	2,753.43	0.00	0.00	0.00	
9,400.00	90.00	178.83	6,515.00	-2,908.45	-2,664.72	2,853.43	0.00	0.00	0.00	
9,500.00	90.00	178.83	6,515.00	-3,008.43	-2,662.68	2,953.43	0.00	0.00	0.00	
9,600.00	90.00	178.83	6,515.00	-3,108.41	-2,660.64	3,053.43	0.00	0.00	0.00	
9,700.00	90.00	178.83	6,515.00	-3,208.39	-2,658.60	3,153.43	0.00	0.00	0.00	
9,800.00	90.00	178.83	6,515.00	-3,308.37	-2,656.55	3,253.43	0.00	0.00	0.00	
9,900.00	90.00	178.83	6,515.00	-3,408.35	-2,654.51	3,353.43	0.00	0.00	0.00	
10,000.00	90.00	178.83	6,515.00	-3,508.32	-2,652.47	3,453.43	0.00	0.00	0.00	
10,100.00	90.00	178.83	6,515.00	-3,608.30	-2,650.43	3,553.43	0.00	0.00	0.00	
10,200.00	90.00	178.83	6,515.00	-3,708.28	-2,648.39	3,653.43	0.00	0.00	0.00	
10,300.00	90.00	178.83	6,515.00	-3,808.26	-2,646.35	3,753.43	0.00	0.00	0.00	
10,400.00	90.00	178.83	6,515.00	-3,908.24	-2,644.30	3,853.43	0.00	0.00	0.00	
10,500.00	90.00	178.83	6,515.00	-4,008.22	-2,642.26	3,953.43	0.00	0.00	0.00	
10,600.00	90.00	178.83	6,515.00	-4,108.20	-2,640.22	4,053.43	0.00	0.00	0.00	
10,700.00	90.00	178.83	6,515.00	-4,208.18	-2,638.18	4,153.43	0.00	0.00	0.00	
10,800.00	90.00	178.83	6,515.00	-4,308.16	-2,636.14	4,253.43	0.00	0.00	0.00	
10,900.00	90.00	178.83	6,515.00	-4,408.14	-2,634.09	4,353.43	0.00	0.00	0.00	
10,950.01	90.00	178.83	6,515.00	-4,458.14	-2,633.07	4,403.44	0.00	0.00	0.00	
Begin Turn @ 10950.01ft										
11,000.00	90.00	177.83	6,515.00	-4,508.10	-2,631.62	4,453.43	2.00	0.00	-2.00	
11,100.00	90.00	175.83	6,515.00	-4,607.95	-2,626.09	4,553.36	2.00	0.00	-2.00	
11,200.00	90.00	173.83	6,515.00	-4,707.53	-2,617.08	4,653.12	2.00	0.00	-2.00	
11,300.00	90.00	171.83	6,515.00	-4,806.75	-2,604.60	4,752.56	2.00	0.00	-2.00	
11,400.00	90.00	169.83	6,515.00	-4,905.46	-2,588.66	4,851.58	2.00	0.00	-2.00	
11,500.00	90.00	167.83	6,515.00	-5,003.57	-2,569.29	4,950.06	2.00	0.00	-2.00	
11,600.00	90.00	165.83	6,515.00	-5,100.93	-2,546.51	5,047.87	2.00	0.00	-2.00	
11,700.00	90.00	163.83	6,515.00	-5,197.44	-2,520.34	5,144.89	2.00	0.00	-2.00	
11,768.51	90.00	162.46	6,515.00	-5,263.01	-2,500.48	5,210.85	2.00	0.00	-2.00	
End Turn @ 11768.51ft										
11,800.00	90.00	162.46	6,515.00	-5,293.03	-2,490.99	5,241.07	0.00	0.00	0.00	
11,900.00	90.00	162.46	6,515.00	-5,388.38	-2,460.85	5,337.01	0.00	0.00	0.00	
12,000.00	90.00	162.46	6,515.00	-5,483.73	-2,430.71	5,432.96	0.00	0.00	0.00	
12,100.00	90.00	162.46	6,515.00	-5,579.08	-2,400.58	5,528.90	0.00	0.00	0.00	
12,177.01	90.00	162.46	6,515.00	-5,652.51	-2,377.37	5,602.79	0.00	0.00	0.00	
Begin Turn @ 12177.01ft										
12,200.00	90.00	162.92	6,515.00	-5,674.46	-2,370.53	5,624.88	2.00	0.00	2.00	
12,300.00	90.00	164.92	6,515.00	-5,770.55	-2,342.83	5,721.50	2.00	0.00	2.00	
12,400.00	90.00	166.92	6,515.00	-5,867.54	-2,318.50	5,818.97	2.00	0.00	2.00	
12,500.00	90.00	168.92	6,515.00	-5,965.32	-2,297.58	5,917.16	2.00	0.00	2.00	
12,517.18	90.00	169.26	6,515.00	-5,982.19	-2,294.32	5,934.09	2.00	0.00	2.00	
FED Lease Entry @ 12517.18ft										
12,600.00	90.00	170.92	6,515.00	-6,063.77	-2,280.07	6,015.95	2.00	0.00	2.00	
12,700.00	90.00	172.92	6,515.00	-6,162.77	-2,266.02	6,115.22	2.00	0.00	2.00	
12,800.00	90.00	174.92	6,515.00	-6,262.20	-2,255.43	6,214.84	2.00	0.00	2.00	
12,900.00	90.00	176.92	6,515.00	-6,361.94	-2,248.31	6,314.71	2.00	0.00	2.00	
13,000.00	90.00	178.92	6,515.00	-6,461.87	-2,244.68	6,414.69	2.00	0.00	2.00	
13,054.01	90.00	180.00	6,515.00	-6,515.88	-2,244.17	6,468.70	2.00	0.00	2.00	

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ROHN FED 1324-2H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 16' @ 5059.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 16' @ 5059.00usft (RIG)
<b>Site:</b>	9N-60W-13 ROHN FED 1324 PAD	<b>North Reference:</b>	True
<b>Well:</b>	ROHN FED 1324-2H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-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)	
End Turn @ 13054.01ft										
13,100.00	90.00	180.00	6,515.00	-6,561.87	-2,244.17	6,514.68	0.00	0.00	0.00	
13,200.00	90.00	180.00	6,515.00	-6,661.87	-2,244.17	6,614.66	0.00	0.00	0.00	
13,300.00	90.00	180.00	6,515.00	-6,761.87	-2,244.17	6,714.64	0.00	0.00	0.00	
13,400.00	90.00	180.00	6,515.00	-6,861.87	-2,244.17	6,814.62	0.00	0.00	0.00	
13,500.00	90.00	180.00	6,515.00	-6,961.87	-2,244.17	6,914.59	0.00	0.00	0.00	
13,519.01	90.00	180.00	6,515.00	-6,980.88	-2,244.17	6,933.60	0.00	0.00	0.00	
Begin Turn to BHL @ 13519.01ft										
13,600.00	90.00	182.43	6,515.00	-7,061.85	-2,245.89	7,014.51	3.00	0.00	3.00	
13,700.00	90.00	185.43	6,515.00	-7,161.60	-2,252.74	7,114.11	3.00	0.00	3.00	
13,800.00	90.00	188.43	6,515.00	-7,260.86	-2,264.81	7,213.10	3.00	0.00	3.00	
13,900.00	90.00	191.43	6,515.00	-7,359.35	-2,282.05	7,311.22	3.00	0.00	3.00	
14,005.73	90.00	194.60	6,515.00	-7,462.35	-2,305.86	7,413.71	3.00	0.00	3.00	
End Turn @ 14005.73ft										
14,100.00	90.00	194.60	6,515.00	-7,553.57	-2,329.62	7,504.43	0.00	0.00	0.00	
14,200.00	90.00	194.60	6,515.00	-7,650.34	-2,354.83	7,600.67	0.00	0.00	0.00	
14,300.00	90.00	194.60	6,515.00	-7,747.11	-2,380.04	7,696.90	0.00	0.00	0.00	
14,400.00	90.00	194.60	6,515.00	-7,843.88	-2,405.25	7,793.14	0.00	0.00	0.00	
14,500.00	90.00	194.60	6,515.00	-7,940.66	-2,430.46	7,889.37	0.00	0.00	0.00	
14,600.00	90.00	194.60	6,515.00	-8,037.43	-2,455.67	7,985.61	0.00	0.00	0.00	
14,700.00	90.00	194.60	6,515.00	-8,134.20	-2,480.88	8,081.84	0.00	0.00	0.00	
14,800.00	90.00	194.60	6,515.00	-8,230.97	-2,506.09	8,178.08	0.00	0.00	0.00	
14,860.83	90.00	194.60	6,515.00	-8,289.83	-2,521.42	8,236.62	0.00	0.00	0.00	
BPZ @ 14860.83ft										
14,900.00	90.00	194.60	6,515.00	-8,327.74	-2,531.30	8,274.31	0.00	0.00	0.00	
14,981.30	90.00	194.60	6,515.00	-8,406.41	-2,551.79	8,352.55	0.00	0.00	0.00	
TD Well @ 14981.30ft										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (")	Hole Diameter (")
1,770.66	1,704.00	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)		
250.15	250.15	0.00	0.00	Begin Nudge @ 250.15ft	
1,555.65	1,510.93	-42.30	-289.27	Hold Tangent @ 1555.65ft	
6,525.76	5,973.85	-358.81	-2,453.58	KOP @ 6525.76ft :: DLS = 9°/100'	
7,490.87	6,515.00	-999.72	-2,703.70	End Build/TPZ @ 7490.87ft	
10,950.01	6,515.00	-4,458.14	-2,633.07	Begin Turn @ 10950.01ft	
11,768.51	6,515.00	-5,263.01	-2,500.48	End Turn @ 11768.51ft	
12,177.01	6,515.00	-5,652.51	-2,377.37	Begin Turn @ 12177.01ft	
12,517.18	6,515.00	-5,982.19	-2,294.32	FED Lease Entry @ 12517.18ft	
13,054.01	6,515.00	-6,515.88	-2,244.17	End Turn @ 13054.01ft	
13,519.01	6,515.00	-6,980.88	-2,244.17	Begin Turn to BHL @ 13519.01ft	
14,005.73	6,515.00	-7,462.35	-2,305.86	End Turn @ 14005.73ft	
14,860.83	6,515.00	-8,289.83	-2,521.42	BPZ @ 14860.83ft	
14,981.30	6,515.00	-8,406.41	-2,551.79	TD Well @ 14981.30ft	