

VERDAD RESOURCES

**WATTENBERG FIELD
9N-60W-13 ROHN FED 1324 PAD
ROHN FED 1324 07H**

Wellbore #1

Plan: Design #1

Standard Planning Report

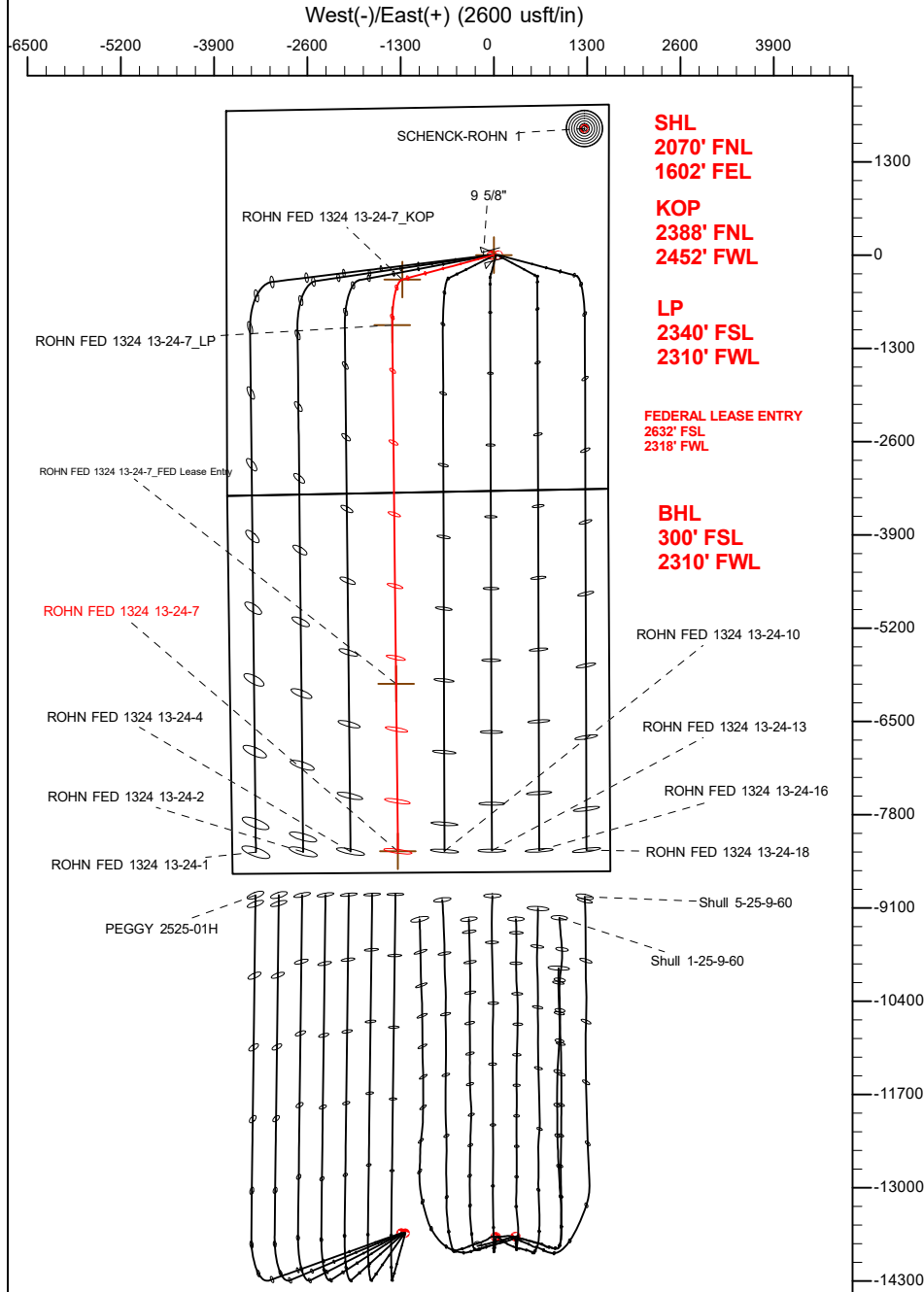
03 February, 2020

Project: WATTENBERG FIELD
 Site: 9N-60W-13 ROHN FED 1324 PAD
 Well: ROHN FED 1324 07H Wellbore:
 Wellbore #1
 Design: Design #1

VERDAD RESOURCES

CASING DETAILS

TVD	MD	Name	Size
1500.00	1515.63	9 5/8"	9-5/8

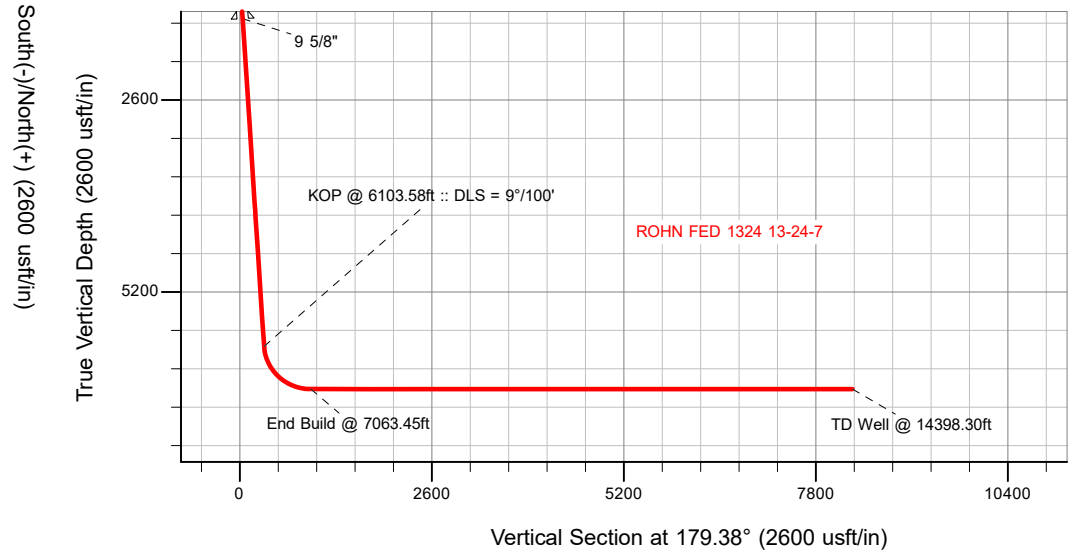


SECTION DETAILS

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	550.00	0.00	0.00	550.00	0.00	0.00	0.00	0.00	0.00	
3	1287.00	14.74	255.05	1278.90	-24.32	-91.09	2.00	255.05	23.33	
4	6103.58	14.74	255.05	5936.97	-340.47	-1275.10	0.00	0.00	326.65	
5	7063.45	90.00	179.38	6515.00	-977.37	-1415.61	9.00	-76.12	962.00	
6	14398.30	90.00	179.38	6515.00	-8311.79	-1336.73	0.00	0.00	8296.84	ROHN FED 1324 13-24-7_BHL

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	MD	+N/-S	+E/-W	Latitude	Longitude
ROHN FED 1324 13-24-7_SHL	0.00	0.00	0.00	0.00	40.752254	-104.036179
ROHN FED 1324 13-24-7_KOP	5936.97	6103.58	-340.47	-1275.10	40.751319	-104.040781
ROHN FED 1324 13-24-7_BHL	6515.00	14398.30	-8311.79	-1336.73	40.729440	-104.041002
ROHN FED 1324 13-24-7_FED LEASE ENTRY	6515.00	12065.31	-5978.94	-1361.82	40.735843	-104.041093



T M Azimuths to True North
 Magnetic North: 7.56°
 Magnetic Field
 Strength: 52344.5nT
 Dip Angle: 67.17°
 Date: 2/3/2020
 Model: IGRF2015

WELL DETAILS: ROHN FED 1324 13-24-7

GL = 5043'

RKB = 16' @ 5059.00usft (RIG)

Plan: Design #1 (ROHN FED 1324 13-24-7/Wellbore #1)

SherryEnergy.com

Date: 02/05/2020

HP

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well ROHN FED 1324 07H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 16' @ 5059.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 16' @ 5059.00usft (RIG)
Site:	9N-60W-13 ROHN FED 1324 PAD	North Reference:	True
Well:	ROHN FED 1324 07H Wellbore #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Design #1		
Design:			

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	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 13-24-7					
Well Position	+N/-S	0.00 usft	Northing:	1,520,238.63 usft	Latitude:	40.752254
	+E/-W	0.00 usft	Easting:	3,405,552.43 usft	Longitude:	-104.036179
Position Uncertainty		3.28 usft	Wellhead Elevation:	usft	Ground Level:	5,043.00 usft
Grid Convergence:		0.95 °				

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/3/2020	7.56	67.17	52,344.52066677

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	179.38	

Plan Survey Tool Program	Date	2/3/2020			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	1,500.00 Design #1 (Wellbore #1)	ISCWSA REV 2 MWD	Fixed:v2:standard declination	
2	1,500.00	14,398.30 Design #1 (Wellbore #1)	ISCWSA REV 2 MWD	Fixed:v2:standard declination	

HP

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Project:	WATTENBERG FIELD	MD Reference:	RKB = 16' @ 5059.00usft (RIG)
Site:	9N-60W-13 ROHN FED 1324 PAD	North Reference:	True
Well:	ROHN FED 1324 07H Wellbore #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Design #1		
Design:			

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	
550.00	0.00	0.00	550.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,287.00	14.74	255.05	1,278.90	-24.32	-91.09	2.00	2.00	0.00	255.05	
6,103.58	14.74	255.05	5,936.97	-340.47	-1,275.10	0.00	0.00	0.00	0.00	
7,063.45	90.00	179.38	6,515.00	-977.37	-1,415.61	9.00	7.84	-7.88	-76.12	
14,398.30	90.00	179.38	6,515.00	-8,311.79	-1,336.73	0.00	0.00	0.00	0.00	ROHN FED 1324 13:-

HP Planning Report

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Project:	WATTENBERG FIELD	MD Reference:	RKB = 16' @ 5059.00usft (RIG)
Site:	9N-60W-13 ROHN FED 1324 07H	North Reference:	True
Well:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Design #1		
Design:			

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
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
550.00	0.00	0.00	550.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 550.00ft									
600.00	1.00	255.05	600.00	-0.11	-0.42	0.11	2.00	2.00	0.00
700.00	3.00	255.05	699.93	-1.01	-3.79	0.97	2.00	2.00	0.00
800.00	5.00	255.05	799.68	-2.81	-10.53	2.70	2.00	2.00	0.00
900.00	7.00	255.05	899.13	-5.51	-20.63	5.29	2.00	2.00	0.00
1,000.00	9.00	255.05	998.15	-9.10	-34.08	8.73	2.00	2.00	0.00
1,100.00	11.00	255.05	1,096.63	-13.58	-50.85	13.03	2.00	2.00	0.00
1,200.00	13.00	255.05	1,194.44	-18.94	-70.94	18.17	2.00	2.00	0.00
1,287.00	14.74	255.05	1,278.90	-24.32	-91.09	23.33	2.00	2.00	0.00
Hold Tangent @ 1287.00ft									
1,300.00	14.74	255.05	1,291.47	-25.18	-94.28	24.15	0.00	0.00	0.00
1,400.00	14.74	255.05	1,388.18	-31.74	-118.87	30.45	0.00	0.00	0.00
1,500.00	14.74	255.05	1,484.89	-38.30	-143.45	36.75	0.00	0.00	0.00
1,515.63	14.74	255.05	1,500.00	-39.33	-147.29	37.73	0.00	0.00	0.00
9 5/8"									
1,600.00	14.74	255.05	1,581.60	-44.87	-168.03	43.05	0.00	0.00	0.00
1,700.00	14.74	255.05	1,678.31	-51.43	-192.61	49.34	0.00	0.00	0.00
1,800.00	14.74	255.05	1,775.01	-57.99	-217.19	55.64	0.00	0.00	0.00
1,900.00	14.74	255.05	1,871.72	-64.56	-241.78	61.94	0.00	0.00	0.00
2,000.00	14.74	255.05	1,968.43	-71.12	-266.36	68.24	0.00	0.00	0.00
2,100.00	14.74	255.05	2,065.14	-77.69	-290.94	74.53	0.00	0.00	0.00
2,200.00	14.74	255.05	2,161.85	-84.25	-315.52	80.83	0.00	0.00	0.00
2,300.00	14.74	255.05	2,258.56	-90.81	-340.10	87.13	0.00	0.00	0.00
2,400.00	14.74	255.05	2,355.27	-97.38	-364.69	93.42	0.00	0.00	0.00
2,500.00	14.74	255.05	2,451.98	-103.94	-389.27	99.72	0.00	0.00	0.00
2,600.00	14.74	255.05	2,548.69	-110.50	-413.85	106.02	0.00	0.00	0.00
2,700.00	14.74	255.05	2,645.40	-117.07	-438.43	112.32	0.00	0.00	0.00
2,800.00	14.74	255.05	2,742.11	-123.63	-463.02	118.61	0.00	0.00	0.00
2,900.00	14.74	255.05	2,838.81	-130.20	-487.60	124.91	0.00	0.00	0.00
3,000.00	14.74	255.05	2,935.52	-136.76	-512.18	131.21	0.00	0.00	0.00
3,100.00	14.74	255.05	3,032.23	-143.32	-536.76	137.51	0.00	0.00	0.00
3,200.00	14.74	255.05	3,128.94	-149.89	-561.34	143.80	0.00	0.00	0.00
3,300.00	14.74	255.05	3,225.65	-156.45	-585.93	150.10	0.00	0.00	0.00
3,400.00	14.74	255.05	3,322.36	-163.01	-610.51	156.40	0.00	0.00	0.00
3,500.00	14.74	255.05	3,419.07	-169.58	-635.09	162.70	0.00	0.00	0.00
3,600.00	14.74	255.05	3,515.78	-176.14	-659.67	168.99	0.00	0.00	0.00
3,700.00	14.74	255.05	3,612.49	-182.71	-684.25	175.29	0.00	0.00	0.00
3,800.00	14.74	255.05	3,709.20	-189.27	-708.84	181.59	0.00	0.00	0.00
3,900.00	14.74	255.05	3,805.90	-195.83	-733.42	187.89	0.00	0.00	0.00
4,000.00	14.74	255.05	3,902.61	-202.40	-758.00	194.18	0.00	0.00	0.00
4,100.00	14.74	255.05	3,999.32	-208.96	-782.58	200.48	0.00	0.00	0.00
4,200.00	14.74	255.05	4,096.03	-215.52	-807.16	206.78	0.00	0.00	0.00
4,300.00	14.74	255.05	4,192.74	-222.09	-831.75	213.07	0.00	0.00	0.00
4,400.00	14.74	255.05	4,289.45	-228.65	-856.33	219.37	0.00	0.00	0.00
4,500.00	14.74	255.05	4,386.16	-235.22	-880.91	225.67	0.00	0.00	0.00
4,600.00	14.74	255.05	4,482.87	-241.78	-905.49	231.97	0.00	0.00	0.00

HP Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well ROHN FED 1324 07H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 16' @ 5059.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 16' @ 5059.00usft (RIG)
Site:	9N-60W-13 ROHN FED 1324 PAD	North Reference:	True
Well:	ROHN FED 1324 07H Wellbore #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Design #1		
Design:			

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	14.74	255.05	4,579.58	-248.34	-930.07	238.26	0.00	0.00	0.00
4,800.00	14.74	255.05	4,676.29	-254.91	-954.66	244.56	0.00	0.00	0.00
4,900.00	14.74	255.05	4,772.99	-261.47	-979.24	250.86	0.00	0.00	0.00
5,000.00	14.74	255.05	4,869.70	-268.03	-1,003.82	257.16	0.00	0.00	0.00
5,100.00	14.74	255.05	4,966.41	-274.60	-1,028.40	263.45	0.00	0.00	0.00
5,200.00	14.74	255.05	5,063.12	-281.16	-1,052.99	269.75	0.00	0.00	0.00
5,300.00	14.74	255.05	5,159.83	-287.73	-1,077.57	276.05	0.00	0.00	0.00
5,400.00	14.74	255.05	5,256.54	-294.29	-1,102.15	282.35	0.00	0.00	0.00
5,500.00	14.74	255.05	5,353.25	-300.85	-1,126.73	288.64	0.00	0.00	0.00
5,600.00	14.74	255.05	5,449.96	-307.42	-1,151.31	294.94	0.00	0.00	0.00
5,700.00	14.74	255.05	5,546.67	-313.98	-1,175.90	301.24	0.00	0.00	0.00
5,800.00	14.74	255.05	5,643.38	-320.54	-1,200.48	307.54	0.00	0.00	0.00
5,900.00	14.74	255.05	5,740.09	-327.11	-1,225.06	313.83	0.00	0.00	0.00
6,000.00	14.74	255.05	5,836.79	-333.67	-1,249.64	320.13	0.00	0.00	0.00
6,100.00	14.74	255.05	5,933.50	-340.24	-1,274.22	326.43	0.00	0.00	0.00
6,103.58	14.74	255.05	5,936.97	-340.47	-1,275.10	326.65	0.00	0.00	0.00
KOP @ 6103.58ft :: DLS = 9°/100'									
6,200.00	18.77	227.97	6,029.41	-354.05	-1,298.52	339.98	9.00	4.18	-28.08
6,300.00	25.46	211.75	6,122.09	-383.15	-1,321.84	368.83	9.00	6.69	-16.22
6,400.00	33.20	202.31	6,209.25	-426.85	-1,343.58	412.29	9.00	7.74	-9.45
6,500.00	41.41	196.18	6,288.75	-484.06	-1,363.23	469.29	9.00	8.21	-6.12
6,600.00	49.85	191.80	6,358.63	-553.38	-1,380.30	538.41	9.00	8.44	-4.38
6,700.00	58.42	188.40	6,417.17	-633.10	-1,394.37	617.97	9.00	8.57	-3.40
6,800.00	67.07	185.58	6,462.93	-721.25	-1,405.09	706.00	9.00	8.64	-2.82
6,900.00	75.75	183.09	6,494.78	-815.67	-1,412.19	800.34	9.00	8.69	-2.48
7,000.00	84.47	180.80	6,511.94	-914.02	-1,415.51	898.65	9.00	8.71	-2.30
7,063.45	90.00	179.38	6,515.00	-977.37	-1,415.61	962.00	9.00	8.72	-2.23
End Build @ 7063.45ft									
7,100.00	90.00	179.38	6,515.00	-1,013.92	-1,415.21	998.55	0.00	0.00	0.00
7,200.00	90.00	179.38	6,515.00	-1,113.91	-1,414.14	1,098.55	0.00	0.00	0.00
7,300.00	90.00	179.38	6,515.00	-1,213.91	-1,413.06	1,198.55	0.00	0.00	0.00
7,400.00	90.00	179.38	6,515.00	-1,313.90	-1,411.99	1,298.55	0.00	0.00	0.00
7,500.00	90.00	179.38	6,515.00	-1,413.90	-1,410.91	1,398.55	0.00	0.00	0.00
7,600.00	90.00	179.38	6,515.00	-1,513.89	-1,409.84	1,498.55	0.00	0.00	0.00
7,700.00	90.00	179.38	6,515.00	-1,613.88	-1,408.76	1,598.55	0.00	0.00	0.00
7,800.00	90.00	179.38	6,515.00	-1,713.88	-1,407.68	1,698.55	0.00	0.00	0.00
7,900.00	90.00	179.38	6,515.00	-1,813.87	-1,406.61	1,798.55	0.00	0.00	0.00
8,000.00	90.00	179.38	6,515.00	-1,913.87	-1,405.53	1,898.55	0.00	0.00	0.00
8,100.00	90.00	179.38	6,515.00	-2,013.86	-1,404.46	1,998.55	0.00	0.00	0.00
8,200.00	90.00	179.38	6,515.00	-2,113.86	-1,403.38	2,098.55	0.00	0.00	0.00
8,300.00	90.00	179.38	6,515.00	-2,213.85	-1,402.31	2,198.55	0.00	0.00	0.00
8,400.00	90.00	179.38	6,515.00	-2,313.84	-1,401.23	2,298.55	0.00	0.00	0.00
8,500.00	90.00	179.38	6,515.00	-2,413.84	-1,400.16	2,398.55	0.00	0.00	0.00
8,600.00	90.00	179.38	6,515.00	-2,513.83	-1,399.08	2,498.55	0.00	0.00	0.00
8,700.00	90.00	179.38	6,515.00	-2,613.83	-1,398.01	2,598.55	0.00	0.00	0.00
8,800.00	90.00	179.38	6,515.00	-2,713.82	-1,396.93	2,698.55	0.00	0.00	0.00
8,900.00	90.00	179.38	6,515.00	-2,813.82	-1,395.86	2,798.55	0.00	0.00	0.00
9,000.00	90.00	179.38	6,515.00	-2,913.81	-1,394.78	2,898.55	0.00	0.00	0.00
9,100.00	90.00	179.38	6,515.00	-3,013.80	-1,393.70	2,998.55	0.00	0.00	0.00
9,200.00	90.00	179.38	6,515.00	-3,113.80	-1,392.63	3,098.55	0.00	0.00	0.00
9,300.00	90.00	179.38	6,515.00	-3,213.79	-1,391.55	3,198.55	0.00	0.00	0.00
9,400.00	90.00	179.38	6,515.00	-3,313.79	-1,390.48	3,298.55	0.00	0.00	0.00
9,500.00	90.00	179.38	6,515.00	-3,413.78	-1,389.40	3,398.55	0.00	0.00	0.00
9,600.00	90.00	179.38	6,515.00	-3,513.77	-1,388.33	3,498.55	0.00	0.00	0.00

HP Planning Report

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Project:	WATTENBERG FIELD	MD Reference:	RKB = 16' @ 5059.00usft (RIG)
Site:	9N-60W-13 ROHN FED 1324 PAD	North Reference:	True
Well:	ROHN FED 1324 07H Wellbore #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Design #1		
Design:			

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	179.38	6,515.00	-3,613.77	-1,387.25	3,598.55	0.00	0.00	0.00
9,800.00	90.00	179.38	6,515.00	-3,713.76	-1,386.18	3,698.55	0.00	0.00	0.00
9,900.00	90.00	179.38	6,515.00	-3,813.76	-1,385.10	3,798.55	0.00	0.00	0.00
10,000.00	90.00	179.38	6,515.00	-3,913.75	-1,384.03	3,898.55	0.00	0.00	0.00
10,100.00	90.00	179.38	6,515.00	-4,013.75	-1,382.95	3,998.55	0.00	0.00	0.00
10,200.00	90.00	179.38	6,515.00	-4,113.74	-1,381.88	4,098.55	0.00	0.00	0.00
10,300.00	90.00	179.38	6,515.00	-4,213.73	-1,380.80	4,198.55	0.00	0.00	0.00
10,400.00	90.00	179.38	6,515.00	-4,313.73	-1,379.72	4,298.55	0.00	0.00	0.00
10,500.00	90.00	179.38	6,515.00	-4,413.72	-1,378.65	4,398.55	0.00	0.00	0.00
10,600.00	90.00	179.38	6,515.00	-4,513.72	-1,377.57	4,498.55	0.00	0.00	0.00
10,700.00	90.00	179.38	6,515.00	-4,613.71	-1,376.50	4,598.55	0.00	0.00	0.00
10,800.00	90.00	179.38	6,515.00	-4,713.71	-1,375.42	4,698.55	0.00	0.00	0.00
10,900.00	90.00	179.38	6,515.00	-4,813.70	-1,374.35	4,798.55	0.00	0.00	0.00
11,000.00	90.00	179.38	6,515.00	-4,913.69	-1,373.27	4,898.55	0.00	0.00	0.00
11,100.00	90.00	179.38	6,515.00	-5,013.69	-1,372.20	4,998.55	0.00	0.00	0.00
11,200.00	90.00	179.38	6,515.00	-5,113.68	-1,371.12	5,098.55	0.00	0.00	0.00
11,300.00	90.00	179.38	6,515.00	-5,213.68	-1,370.05	5,198.55	0.00	0.00	0.00
11,400.00	90.00	179.38	6,515.00	-5,313.67	-1,368.97	5,298.55	0.00	0.00	0.00
11,500.00	90.00	179.38	6,515.00	-5,413.67	-1,367.90	5,398.55	0.00	0.00	0.00
11,600.00	90.00	179.38	6,515.00	-5,513.66	-1,366.82	5,498.55	0.00	0.00	0.00
11,700.00	90.00	179.38	6,515.00	-5,613.65	-1,365.74	5,598.55	0.00	0.00	0.00
11,800.00	90.00	179.38	6,515.00	-5,713.65	-1,364.67	5,698.55	0.00	0.00	0.00
11,900.00	90.00	179.38	6,515.00	-5,813.64	-1,363.59	5,798.55	0.00	0.00	0.00
12,000.00	90.00	179.38	6,515.00	-5,913.64	-1,362.52	5,898.55	0.00	0.00	0.00
12,100.00	90.00	179.38	6,515.00	-6,013.63	-1,361.44	5,998.55	0.00	0.00	0.00
12,200.00	90.00	179.38	6,515.00	-6,113.62	-1,360.37	6,098.55	0.00	0.00	0.00
12,300.00	90.00	179.38	6,515.00	-6,213.62	-1,359.29	6,198.55	0.00	0.00	0.00
12,400.00	90.00	179.38	6,515.00	-6,313.61	-1,358.22	6,298.55	0.00	0.00	0.00
12,500.00	90.00	179.38	6,515.00	-6,413.61	-1,357.14	6,398.55	0.00	0.00	0.00
12,600.00	90.00	179.38	6,515.00	-6,513.60	-1,356.07	6,498.55	0.00	0.00	0.00
12,700.00	90.00	179.38	6,515.00	-6,613.60	-1,354.99	6,598.55	0.00	0.00	0.00
12,800.00	90.00	179.38	6,515.00	-6,713.59	-1,353.92	6,698.55	0.00	0.00	0.00
12,900.00	90.00	179.38	6,515.00	-6,813.58	-1,352.84	6,798.55	0.00	0.00	0.00
13,000.00	90.00	179.38	6,515.00	-6,913.58	-1,351.76	6,898.55	0.00	0.00	0.00
13,100.00	90.00	179.38	6,515.00	-7,013.57	-1,350.69	6,998.55	0.00	0.00	0.00
13,200.00	90.00	179.38	6,515.00	-7,113.57	-1,349.61	7,098.55	0.00	0.00	0.00
13,300.00	90.00	179.38	6,515.00	-7,213.56	-1,348.54	7,198.55	0.00	0.00	0.00
13,400.00	90.00	179.38	6,515.00	-7,313.56	-1,347.46	7,298.55	0.00	0.00	0.00
13,500.00	90.00	179.38	6,515.00	-7,413.55	-1,346.39	7,398.55	0.00	0.00	0.00
13,600.00	90.00	179.38	6,515.00	-7,513.54	-1,345.31	7,498.55	0.00	0.00	0.00
13,700.00	90.00	179.38	6,515.00	-7,613.54	-1,344.24	7,598.55	0.00	0.00	0.00
13,800.00	90.00	179.38	6,515.00	-7,713.53	-1,343.16	7,698.55	0.00	0.00	0.00
13,900.00	90.00	179.38	6,515.00	-7,813.53	-1,342.09	7,798.55	0.00	0.00	0.00
14,000.00	90.00	179.38	6,515.00	-7,913.52	-1,341.01	7,898.55	0.00	0.00	0.00
14,100.00	90.00	179.38	6,515.00	-8,013.51	-1,339.94	7,998.55	0.00	0.00	0.00
14,200.00	90.00	179.38	6,515.00	-8,113.51	-1,338.86	8,098.55	0.00	0.00	0.00
14,300.00	90.00	179.38	6,515.00	-8,213.50	-1,337.78	8,198.55	0.00	0.00	0.00
14,398.30	90.00	179.38	6,515.00	-8,311.79	-1,336.73	8,296.84	0.00	0.00	0.00
TD Well @ 14398.30ft									

HP Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well ROHN FED 1324 07H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 16' @ 5059.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 16' @ 5059.00usft (RIG)
Site:	9N-60W-13 ROHN FED 1324 PAD	North Reference:	True
Well:	ROHN FED 1324 07H Wellbore #1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Design #1		
Design:			

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,515.63	1,500.00	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)		
550.00	550.00	0.00	0.00	Begin Nudge @ 550.00ft	
1,287.00	1,278.90	-24.32	-91.09	Hold Tangent @ 1287.00ft	
6,103.58	5,936.97	-340.47	-1,275.10	KOP @ 6103.58ft :: DLS = 9°/100'	
7,063.45	6,515.00	-977.37	-1,415.61	End Build @ 7063.45ft	
14,398.30	6,515.00	-8,311.79	-1,336.73	TD Well @ 14398.30ft	