

# **VERDAD RESOURCES**

**WATTENBERG FIELD  
1N-64W-19 CHIVE & SHALLOT PAD  
SHALLOT 1930-18H**

**Plan A**

**Plan: Design #1**

## **Standard Planning Report**

**19 May, 2023**

Project: WATTENBERG FIELD  
Site: 1N-64W-19 CHIVE & SHALLOT PAD  
Well: SHALLOT 1930-18H  
Wellbore: Plan A  
Design: Design #1

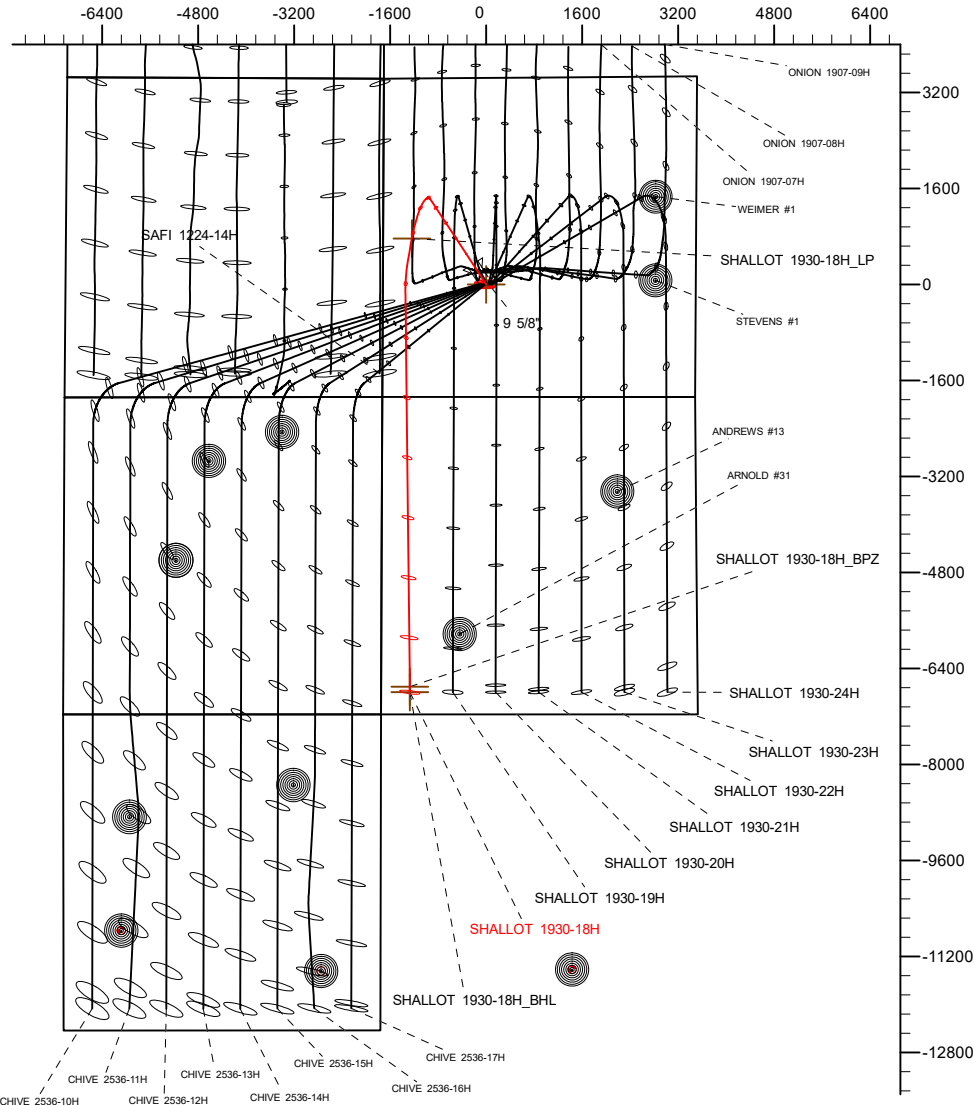
# VERDAD RESOURCES

## CASING DETAILS

TVD	MD	Name	Size
2070.00	2126.19	9 5/8"	9-5/8

SHL	LP/TPZ	BPZ	BHL
1875' FSL	2640' FSL	460' FSL	370' FSL
1723' FWL	480' FWL	480' FWL	480' FWL

West(-)/East(+) (3200 usft/in)

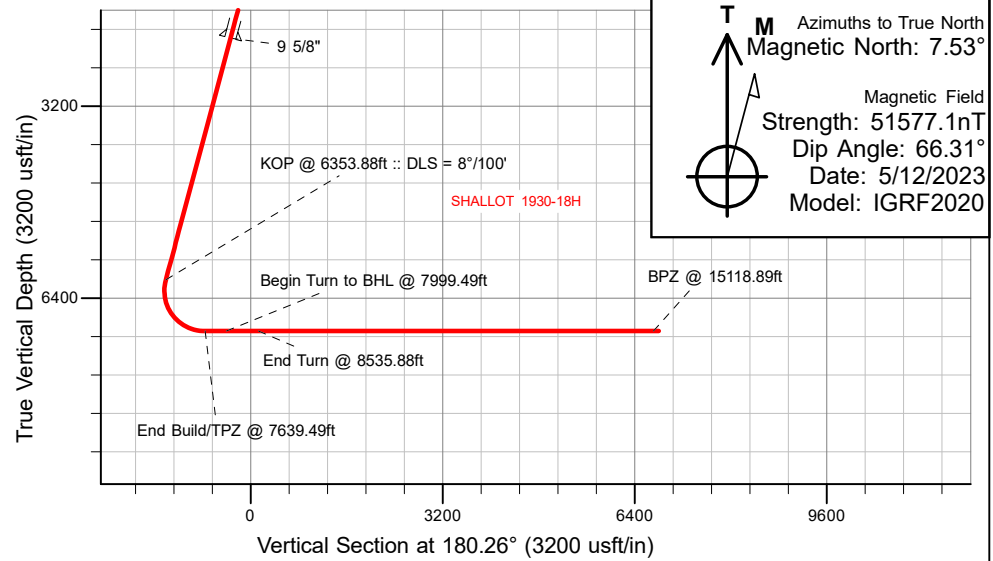


## SECTION DETAILS

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	
361.00	0.00	0.00	361.00	0.00	0.00	0.00	0.00	0.00	
1251.50	17.81	326.74	1237.23	114.80	-75.30	2.00	326.74	-114.46	
6353.88	17.81	326.74	6095.08	1419.78	-931.20	0.00	0.00	-1415.54	
7639.49	90.00	190.10	6950.00	765.40	-1239.30	8.00	-135.23	-759.77	
7999.49	90.00	190.10	6950.00	410.98	-1302.43	0.00	0.00	-405.07	
8535.88	90.00	179.37	6950.00	-122.80	-1346.66	2.00	-90.00	128.91	
15208.89	90.00	179.37	6950.00	-6795.40	-1273.53	0.00	0.00	6801.11	SHALLOT 1930-18H_BHL

## WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	Northing	Easting	Latitude	Longitude
SHALLOT 1930-18H_SHL	0.00	1256776.37	3252941.13	40.034702	-104.596659
SHALLOT 1930-18H_LP	6950.00	1257528.96	3251694.05	40.036803	-104.601085
SHALLOT 1930-18H_BPZ	6950.00	1250058.34	3251736.38	40.016295	-104.601204
SHALLOT 1930-18H_BHL	6950.00	1249968.34	3251736.89	40.016048	-104.601206



## WELL DETAILS: SHALLOT 1930-18H

GL = 5011'

RKB = 20' @ 5031.00usft (RIG)

Plan: Design #1 (SHALLOT 1930-18H/Plan A)

Date: 5/19/2023

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well SHALLOT 1930-18H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 20' @ 5031.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 20' @ 5031.00usft (RIG)
<b>Site:</b>	1N-64W-19 CHIVE & SHALLOT PAD	<b>North Reference:</b>	True
<b>Well:</b>	SHALLOT 1930-18H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Design #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		1N-64W-19 CHIVE & SHALLOT PAD				
Site Position:		Northing:	1,256,775.08	usft	Latitude:	40.034702
From:	Map	Easting:	3,252,813.14	usft	Longitude:	-104.597116
Position Uncertainty:		0.00	usft	Slot Radius:	13-3/16	"

Well		SHALLOT 1930-18H				
Well Position	+N/-S	0.00 usft	Northing:	1,256,776.36 usft	Latitude:	40.034702
	+E/-W	0.00 usft	Easting:	3,252,941.13 usft	Longitude:	-104.596659
Position Uncertainty		3.28 usft	Wellhead Elevation:	usft	Ground Level:	5,011.00 usft
Grid Convergence:		0.58 °				

<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	5/12/2023	7.53	66.31	51,577.05744501

<b>Design</b>	Design #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>	
	0.00	0.00	0.00	180.26	

<b>Plan Survey Tool Program</b>		<b>Date</b>	5/15/2023		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>	
1	0.00	2,070.00	Design #1 (Plan A)	ISCWSA MWD	
				Fixed:v2:standard declination	
2	2,070.00	15,208.89	Design #1 (Plan A)	ISCWSA MWD	
				Fixed:v2:standard declination	

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well SHALLOT 1930-18H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 5031.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 5031.00usft (RIG)
Site:	1N-64W-19 CHIVE & SHALLOT PAD	North Reference:	True
Well:	SHALLOT 1930-18H	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	
361.00	0.00	0.00	361.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,251.50	17.81	326.74	1,237.23	114.80	-75.30	2.00	2.00	0.00	326.74	
6,353.88	17.81	326.74	6,095.08	1,419.78	-931.20	0.00	0.00	0.00	0.00	
7,639.49	90.00	190.10	6,950.00	765.40	-1,239.30	8.00	5.62	-10.63	-135.23	
7,999.49	90.00	190.10	6,950.00	410.98	-1,302.43	0.00	0.00	0.00	0.00	
8,535.88	90.00	179.37	6,950.00	-122.80	-1,346.66	2.00	0.00	-2.00	-90.00	
15,208.89	90.00	179.37	6,950.00	-6,795.40	-1,273.53	0.00	0.00	0.00	0.00	SHALLOT 1930-18H_

# Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well SHALLOT 1930-18H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 20' @ 5031.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 20' @ 5031.00usft (RIG)
<b>Site:</b>	1N-64W-19 CHIVE & SHALLOT PAD	<b>North Reference:</b>	True
<b>Well:</b>	SHALLOT 1930-18H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	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
361.00	0.00	0.00	361.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 361.00ft									
400.00	0.78	326.74	400.00	0.22	-0.15	-0.22	2.00	2.00	0.00
500.00	2.78	326.74	499.95	2.82	-1.85	-2.81	2.00	2.00	0.00
600.00	4.78	326.74	599.72	8.33	-5.46	-8.31	2.00	2.00	0.00
700.00	6.78	326.74	699.21	16.75	-10.99	-16.70	2.00	2.00	0.00
800.00	8.78	326.74	798.28	28.07	-18.41	-27.99	2.00	2.00	0.00
900.00	10.78	326.74	896.83	42.27	-27.73	-42.15	2.00	2.00	0.00
1,000.00	12.78	326.74	994.71	59.34	-38.92	-59.17	2.00	2.00	0.00
1,100.00	14.78	326.74	1,091.83	79.26	-51.99	-79.02	2.00	2.00	0.00
1,200.00	16.78	326.74	1,188.06	102.00	-66.90	-101.70	2.00	2.00	0.00
1,251.50	17.81	326.74	1,237.23	114.80	-75.30	-114.46	2.00	2.00	0.00
Hold Tangent @ 1251.50ft									
1,300.00	17.81	326.74	1,283.40	127.21	-83.43	-126.83	0.00	0.00	0.00
1,400.00	17.81	326.74	1,378.61	152.78	-100.21	-152.33	0.00	0.00	0.00
1,500.00	17.81	326.74	1,473.82	178.36	-116.98	-177.83	0.00	0.00	0.00
1,600.00	17.81	326.74	1,569.03	203.93	-133.76	-203.33	0.00	0.00	0.00
1,700.00	17.81	326.74	1,664.23	229.51	-150.53	-228.82	0.00	0.00	0.00
1,800.00	17.81	326.74	1,759.44	255.09	-167.31	-254.32	0.00	0.00	0.00
1,900.00	17.81	326.74	1,854.65	280.66	-184.08	-279.82	0.00	0.00	0.00
2,000.00	17.81	326.74	1,949.86	306.24	-200.85	-305.32	0.00	0.00	0.00
2,100.00	17.81	326.74	2,045.07	331.81	-217.63	-330.82	0.00	0.00	0.00
2,126.19	17.81	326.74	2,070.00	338.51	-222.02	-337.50	0.00	0.00	0.00
9 5/8"									
2,200.00	17.81	326.74	2,140.27	357.39	-234.40	-356.32	0.00	0.00	0.00
2,300.00	17.81	326.74	2,235.48	382.97	-251.18	-381.82	0.00	0.00	0.00
2,400.00	17.81	326.74	2,330.69	408.54	-267.95	-407.32	0.00	0.00	0.00
2,500.00	17.81	326.74	2,425.90	434.12	-284.73	-432.82	0.00	0.00	0.00
2,600.00	17.81	326.74	2,521.10	459.69	-301.50	-458.32	0.00	0.00	0.00
2,700.00	17.81	326.74	2,616.31	485.27	-318.28	-483.82	0.00	0.00	0.00
2,800.00	17.81	326.74	2,711.52	510.84	-335.05	-509.32	0.00	0.00	0.00
2,900.00	17.81	326.74	2,806.73	536.42	-351.83	-534.82	0.00	0.00	0.00
3,000.00	17.81	326.74	2,901.93	562.00	-368.60	-560.32	0.00	0.00	0.00
3,100.00	17.81	326.74	2,997.14	587.57	-385.38	-585.82	0.00	0.00	0.00
3,200.00	17.81	326.74	3,092.35	613.15	-402.15	-611.32	0.00	0.00	0.00
3,300.00	17.81	326.74	3,187.56	638.72	-418.92	-636.82	0.00	0.00	0.00
3,400.00	17.81	326.74	3,282.76	664.30	-435.70	-662.32	0.00	0.00	0.00
3,500.00	17.81	326.74	3,377.97	689.88	-452.47	-687.81	0.00	0.00	0.00
3,600.00	17.81	326.74	3,473.18	715.45	-469.25	-713.31	0.00	0.00	0.00
3,700.00	17.81	326.74	3,568.39	741.03	-486.02	-738.81	0.00	0.00	0.00
3,800.00	17.81	326.74	3,663.59	766.60	-502.80	-764.31	0.00	0.00	0.00
3,900.00	17.81	326.74	3,758.80	792.18	-519.57	-789.81	0.00	0.00	0.00
4,000.00	17.81	326.74	3,854.01	817.75	-536.35	-815.31	0.00	0.00	0.00
4,100.00	17.81	326.74	3,949.22	843.33	-553.12	-840.81	0.00	0.00	0.00
4,200.00	17.81	326.74	4,044.42	868.91	-569.90	-866.31	0.00	0.00	0.00
4,300.00	17.81	326.74	4,139.63	894.48	-586.67	-891.81	0.00	0.00	0.00
4,400.00	17.81	326.74	4,234.84	920.06	-603.45	-917.31	0.00	0.00	0.00
4,500.00	17.81	326.74	4,330.05	945.63	-620.22	-942.81	0.00	0.00	0.00
4,600.00	17.81	326.74	4,425.26	971.21	-637.00	-968.31	0.00	0.00	0.00

# Planning Report

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<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 20' @ 5031.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 20' @ 5031.00usft (RIG)
<b>Site:</b>	1N-64W-19 CHIVE & SHALLOT PAD	<b>North Reference:</b>	True
<b>Well:</b>	SHALLOT 1930-18H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	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)
4,700.00	17.81	326.74	4,520.46	996.79	-653.77	-993.81	0.00	0.00	0.00
4,800.00	17.81	326.74	4,615.67	1,022.36	-670.54	-1,019.31	0.00	0.00	0.00
4,900.00	17.81	326.74	4,710.88	1,047.94	-687.32	-1,044.81	0.00	0.00	0.00
5,000.00	17.81	326.74	4,806.09	1,073.51	-704.09	-1,070.31	0.00	0.00	0.00
5,100.00	17.81	326.74	4,901.29	1,099.09	-720.87	-1,095.81	0.00	0.00	0.00
5,200.00	17.81	326.74	4,996.50	1,124.66	-737.64	-1,121.31	0.00	0.00	0.00
5,300.00	17.81	326.74	5,091.71	1,150.24	-754.42	-1,146.81	0.00	0.00	0.00
5,400.00	17.81	326.74	5,186.92	1,175.82	-771.19	-1,172.30	0.00	0.00	0.00
5,500.00	17.81	326.74	5,282.12	1,201.39	-787.97	-1,197.80	0.00	0.00	0.00
5,600.00	17.81	326.74	5,377.33	1,226.97	-804.74	-1,223.30	0.00	0.00	0.00
5,700.00	17.81	326.74	5,472.54	1,252.54	-821.52	-1,248.80	0.00	0.00	0.00
5,800.00	17.81	326.74	5,567.75	1,278.12	-838.29	-1,274.30	0.00	0.00	0.00
5,900.00	17.81	326.74	5,662.95	1,303.70	-855.07	-1,299.80	0.00	0.00	0.00
6,000.00	17.81	326.74	5,758.16	1,329.27	-871.84	-1,325.30	0.00	0.00	0.00
6,100.00	17.81	326.74	5,853.37	1,354.85	-888.61	-1,350.80	0.00	0.00	0.00
6,200.00	17.81	326.74	5,948.58	1,380.42	-905.39	-1,376.30	0.00	0.00	0.00
6,300.00	17.81	326.74	6,043.78	1,406.00	-922.16	-1,401.80	0.00	0.00	0.00
6,353.88	17.81	326.74	6,095.08	1,419.78	-931.20	-1,415.54	0.00	0.00	0.00
<b>KOP @ 6353.88ft :: DLS = 8°/100'</b>									
6,400.00	15.40	316.92	6,139.28	1,430.15	-939.26	-1,425.88	8.00	-5.22	-21.30
6,450.00	13.45	302.84	6,187.72	1,438.16	-948.68	-1,433.84	8.00	-3.91	-28.15
6,500.00	12.49	285.47	6,236.46	1,442.76	-958.78	-1,438.39	8.00	-1.92	-34.75
6,550.00	12.75	267.13	6,285.27	1,443.92	-969.51	-1,439.51	8.00	0.52	-36.68
6,600.00	14.17	250.98	6,333.92	1,441.65	-980.81	-1,437.19	8.00	2.83	-32.29
6,650.00	16.44	238.46	6,382.15	1,435.95	-992.64	-1,431.44	8.00	4.55	-25.05
6,700.00	19.27	229.21	6,429.75	1,426.86	-1,004.92	-1,422.28	8.00	5.66	-18.51
6,750.00	22.45	222.36	6,476.47	1,414.41	-1,017.61	-1,409.77	8.00	6.35	-13.69
6,800.00	25.85	217.18	6,522.09	1,398.66	-1,030.63	-1,393.97	8.00	6.79	-10.35
6,850.00	29.39	213.16	6,566.39	1,379.70	-1,043.93	-1,374.95	8.00	7.08	-8.05
6,900.00	33.02	209.94	6,609.15	1,357.61	-1,057.45	-1,352.80	8.00	7.27	-6.44
6,950.00	36.73	207.29	6,650.17	1,332.51	-1,071.11	-1,327.64	8.00	7.41	-5.28
7,000.00	40.48	205.08	6,689.24	1,304.51	-1,084.85	-1,299.58	8.00	7.51	-4.44
7,050.00	44.27	203.18	6,726.17	1,273.76	-1,098.60	-1,268.76	8.00	7.58	-3.80
7,100.00	48.09	201.52	6,760.78	1,240.39	-1,112.30	-1,235.33	8.00	7.63	-3.31
7,150.00	51.93	200.05	6,792.91	1,204.58	-1,125.88	-1,199.46	8.00	7.68	-2.94
7,200.00	55.78	198.73	6,822.40	1,166.50	-1,139.27	-1,161.32	8.00	7.71	-2.65
7,250.00	59.65	197.52	6,849.10	1,126.33	-1,152.40	-1,121.09	8.00	7.74	-2.41
7,300.00	63.53	196.41	6,872.88	1,084.27	-1,165.22	-1,078.97	8.00	7.76	-2.23
7,350.00	67.41	195.36	6,893.64	1,040.53	-1,177.67	-1,035.18	8.00	7.77	-2.08
7,400.00	71.31	194.38	6,911.26	995.31	-1,189.67	-989.91	8.00	7.79	-1.97
7,450.00	75.20	193.44	6,925.66	948.85	-1,201.17	-943.39	8.00	7.79	-1.88
7,500.00	79.11	192.53	6,936.77	901.35	-1,212.12	-895.84	8.00	7.80	-1.81
7,550.00	83.01	191.65	6,944.54	853.07	-1,222.46	-847.51	8.00	7.81	-1.77
7,600.00	86.92	190.78	6,948.93	804.22	-1,232.15	-798.62	8.00	7.81	-1.74
7,639.49	90.00	190.10	6,950.00	765.40	-1,239.30	-759.77	8.00	7.81	-1.72
<b>End Build/TPZ @ 7639.49ft</b>									
7,700.00	90.00	190.10	6,950.00	705.83	-1,249.91	-700.15	0.00	0.00	0.00
7,800.00	90.00	190.10	6,950.00	607.38	-1,267.45	-601.62	0.00	0.00	0.00
7,900.00	90.00	190.10	6,950.00	508.93	-1,284.98	-503.09	0.00	0.00	0.00
7,999.49	90.00	190.10	6,950.00	410.98	-1,302.43	-405.07	0.00	0.00	0.00
<b>Begin Turn to BHL @ 7999.49ft</b>									
8,100.00	90.00	188.09	6,950.00	311.74	-1,318.32	-305.76	2.00	0.00	-2.00
8,200.00	90.00	186.09	6,950.00	212.51	-1,330.66	-206.47	2.00	0.00	-2.00

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well SHALLOT 1930-18H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 20' @ 5031.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 20' @ 5031.00usft (RIG)
<b>Site:</b>	1N-64W-19 CHIVE & SHALLOT PAD	<b>North Reference:</b>	True
<b>Well:</b>	SHALLOT 1930-18H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	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)
8,300.00	90.00	184.09	6,950.00	112.91	-1,339.53	-106.83	2.00	0.00	-2.00
8,400.00	90.00	182.09	6,950.00	13.06	-1,344.92	-6.96	2.00	0.00	-2.00
8,500.00	90.00	180.09	6,950.00	-86.92	-1,346.82	93.03	2.00	0.00	-2.00
8,535.88	90.00	179.37	6,950.00	-122.80	-1,346.66	128.91	2.00	0.00	-2.00
End Turn @ 8535.88ft									
8,600.00	90.00	179.37	6,950.00	-186.91	-1,345.95	193.02	0.00	0.00	0.00
8,700.00	90.00	179.37	6,950.00	-286.91	-1,344.86	293.01	0.00	0.00	0.00
8,800.00	90.00	179.37	6,950.00	-386.90	-1,343.76	392.99	0.00	0.00	0.00
8,900.00	90.00	179.37	6,950.00	-486.89	-1,342.67	492.98	0.00	0.00	0.00
9,000.00	90.00	179.37	6,950.00	-586.89	-1,341.57	592.97	0.00	0.00	0.00
9,100.00	90.00	179.37	6,950.00	-686.88	-1,340.47	692.96	0.00	0.00	0.00
9,200.00	90.00	179.37	6,950.00	-786.88	-1,339.38	792.95	0.00	0.00	0.00
9,300.00	90.00	179.37	6,950.00	-886.87	-1,338.28	892.93	0.00	0.00	0.00
9,400.00	90.00	179.37	6,950.00	-986.86	-1,337.19	992.92	0.00	0.00	0.00
9,500.00	90.00	179.37	6,950.00	-1,086.86	-1,336.09	1,092.91	0.00	0.00	0.00
9,600.00	90.00	179.37	6,950.00	-1,186.85	-1,334.99	1,192.90	0.00	0.00	0.00
9,700.00	90.00	179.37	6,950.00	-1,286.85	-1,333.90	1,292.89	0.00	0.00	0.00
9,800.00	90.00	179.37	6,950.00	-1,386.84	-1,332.80	1,392.87	0.00	0.00	0.00
9,900.00	90.00	179.37	6,950.00	-1,486.83	-1,331.71	1,492.86	0.00	0.00	0.00
10,000.00	90.00	179.37	6,950.00	-1,586.83	-1,330.61	1,592.85	0.00	0.00	0.00
10,100.00	90.00	179.37	6,950.00	-1,686.82	-1,329.52	1,692.84	0.00	0.00	0.00
10,200.00	90.00	179.37	6,950.00	-1,786.82	-1,328.42	1,792.83	0.00	0.00	0.00
10,300.00	90.00	179.37	6,950.00	-1,886.81	-1,327.32	1,892.81	0.00	0.00	0.00
10,400.00	90.00	179.37	6,950.00	-1,986.80	-1,326.23	1,992.80	0.00	0.00	0.00
10,500.00	90.00	179.37	6,950.00	-2,086.80	-1,325.13	2,092.79	0.00	0.00	0.00
10,600.00	90.00	179.37	6,950.00	-2,186.79	-1,324.04	2,192.78	0.00	0.00	0.00
10,700.00	90.00	179.37	6,950.00	-2,286.79	-1,322.94	2,292.77	0.00	0.00	0.00
10,800.00	90.00	179.37	6,950.00	-2,386.78	-1,321.84	2,392.75	0.00	0.00	0.00
10,900.00	90.00	179.37	6,950.00	-2,486.77	-1,320.75	2,492.74	0.00	0.00	0.00
11,000.00	90.00	179.37	6,950.00	-2,586.77	-1,319.65	2,592.73	0.00	0.00	0.00
11,100.00	90.00	179.37	6,950.00	-2,686.76	-1,318.56	2,692.72	0.00	0.00	0.00
11,200.00	90.00	179.37	6,950.00	-2,786.76	-1,317.46	2,792.71	0.00	0.00	0.00
11,300.00	90.00	179.37	6,950.00	-2,886.75	-1,316.37	2,892.69	0.00	0.00	0.00
11,400.00	90.00	179.37	6,950.00	-2,986.74	-1,315.27	2,992.68	0.00	0.00	0.00
11,500.00	90.00	179.37	6,950.00	-3,086.74	-1,314.17	3,092.67	0.00	0.00	0.00
11,600.00	90.00	179.37	6,950.00	-3,186.73	-1,313.08	3,192.66	0.00	0.00	0.00
11,700.00	90.00	179.37	6,950.00	-3,286.73	-1,311.98	3,292.65	0.00	0.00	0.00
11,800.00	90.00	179.37	6,950.00	-3,386.72	-1,310.89	3,392.63	0.00	0.00	0.00
11,900.00	90.00	179.37	6,950.00	-3,486.71	-1,309.79	3,492.62	0.00	0.00	0.00
12,000.00	90.00	179.37	6,950.00	-3,586.71	-1,308.69	3,592.61	0.00	0.00	0.00
12,100.00	90.00	179.37	6,950.00	-3,686.70	-1,307.60	3,692.60	0.00	0.00	0.00
12,200.00	90.00	179.37	6,950.00	-3,786.70	-1,306.50	3,792.59	0.00	0.00	0.00
12,300.00	90.00	179.37	6,950.00	-3,886.69	-1,305.41	3,892.57	0.00	0.00	0.00
12,400.00	90.00	179.37	6,950.00	-3,986.68	-1,304.31	3,992.56	0.00	0.00	0.00
12,500.00	90.00	179.37	6,950.00	-4,086.68	-1,303.22	4,092.55	0.00	0.00	0.00
12,600.00	90.00	179.37	6,950.00	-4,186.67	-1,302.12	4,192.54	0.00	0.00	0.00
12,700.00	90.00	179.37	6,950.00	-4,286.67	-1,301.02	4,292.53	0.00	0.00	0.00
12,800.00	90.00	179.37	6,950.00	-4,386.66	-1,299.93	4,392.51	0.00	0.00	0.00
12,900.00	90.00	179.37	6,950.00	-4,486.65	-1,298.83	4,492.50	0.00	0.00	0.00
13,000.00	90.00	179.37	6,950.00	-4,586.65	-1,297.74	4,592.49	0.00	0.00	0.00
13,100.00	90.00	179.37	6,950.00	-4,686.64	-1,296.64	4,692.48	0.00	0.00	0.00
13,200.00	90.00	179.37	6,950.00	-4,786.64	-1,295.54	4,792.47	0.00	0.00	0.00
13,300.00	90.00	179.37	6,950.00	-4,886.63	-1,294.45	4,892.45	0.00	0.00	0.00
13,400.00	90.00	179.37	6,950.00	-4,986.62	-1,293.35	4,992.44	0.00	0.00	0.00

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well SHALLOT 1930-18H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 20' @ 5031.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 20' @ 5031.00usft (RIG)
<b>Site:</b>	1N-64W-19 CHIVE & SHALLOT PAD	<b>North Reference:</b>	True
<b>Well:</b>	SHALLOT 1930-18H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	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)	
13,500.00	90.00	179.37	6,950.00	-5,086.62	-1,292.26	5,092.43	0.00	0.00	0.00	
13,600.00	90.00	179.37	6,950.00	-5,186.61	-1,291.16	5,192.42	0.00	0.00	0.00	
13,700.00	90.00	179.37	6,950.00	-5,286.61	-1,290.07	5,292.41	0.00	0.00	0.00	
13,800.00	90.00	179.37	6,950.00	-5,386.60	-1,288.97	5,392.39	0.00	0.00	0.00	
13,900.00	90.00	179.37	6,950.00	-5,486.59	-1,287.87	5,492.38	0.00	0.00	0.00	
14,000.00	90.00	179.37	6,950.00	-5,586.59	-1,286.78	5,592.37	0.00	0.00	0.00	
14,100.00	90.00	179.37	6,950.00	-5,686.58	-1,285.68	5,692.36	0.00	0.00	0.00	
14,200.00	90.00	179.37	6,950.00	-5,786.58	-1,284.59	5,792.35	0.00	0.00	0.00	
14,300.00	90.00	179.37	6,950.00	-5,886.57	-1,283.49	5,892.33	0.00	0.00	0.00	
14,400.00	90.00	179.37	6,950.00	-5,986.56	-1,282.39	5,992.32	0.00	0.00	0.00	
14,500.00	90.00	179.37	6,950.00	-6,086.56	-1,281.30	6,092.31	0.00	0.00	0.00	
14,600.00	90.00	179.37	6,950.00	-6,186.55	-1,280.20	6,192.30	0.00	0.00	0.00	
14,700.00	90.00	179.37	6,950.00	-6,286.55	-1,279.11	6,292.29	0.00	0.00	0.00	
14,800.00	90.00	179.37	6,950.00	-6,386.54	-1,278.01	6,392.27	0.00	0.00	0.00	
14,900.00	90.00	179.37	6,950.00	-6,486.53	-1,276.92	6,492.26	0.00	0.00	0.00	
15,000.00	90.00	179.37	6,950.00	-6,586.53	-1,275.82	6,592.25	0.00	0.00	0.00	
15,100.00	90.00	179.37	6,950.00	-6,686.52	-1,274.72	6,692.24	0.00	0.00	0.00	
15,118.89	90.00	179.37	6,950.00	-6,705.41	-1,274.52	6,711.12	0.00	0.00	0.00	
BPZ @ 15118.89ft										
15,208.89	90.00	179.37	6,950.00	-6,795.40	-1,273.53	6,801.11	0.00	0.00	0.00	
TD Well @ 15208.89ft										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
2,126.19	2,070.00	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)	
361.00	361.00	0.00	0.00	Begin Nudge @ 361.00ft
1,251.50	1,237.23	114.80	-75.30	Hold Tangent @ 1251.50ft
6,353.88	6,095.08	1,419.78	-931.20	KOP @ 6353.88ft :: DLS = 8°/100'
7,639.49	6,950.00	765.40	-1,239.30	End Build/TPZ @ 7639.49ft
7,999.49	6,950.00	410.98	-1,302.43	Begin Turn to BHL @ 7999.49ft
8,535.88	6,950.00	-122.80	-1,346.66	End Turn @ 8535.88ft
15,118.89	6,950.00	-6,705.41	-1,274.52	BPZ @ 15118.89ft
15,208.89	6,950.00	-6,795.40	-1,273.53	TD Well @ 15208.89ft