

# **VERDAD RESOURCES**

**WATTENBERG FIELD**

**1N-64W-19 ONION 1918 PAD**

**ONION 1918-06H**

**Wellbore #1**

**Plan: Design #1**

## **Standard Planning Report**

**21 May, 2019**

Project: WATTENBERG FIELD  
Site: 1N-64W-19 ONION 1918 PAD  
Well: ONION 1918-06H  
Wellbore: Wellbore #1  
Design: Design #1

# VERDAD RESOURCES

## CASING DETAILS

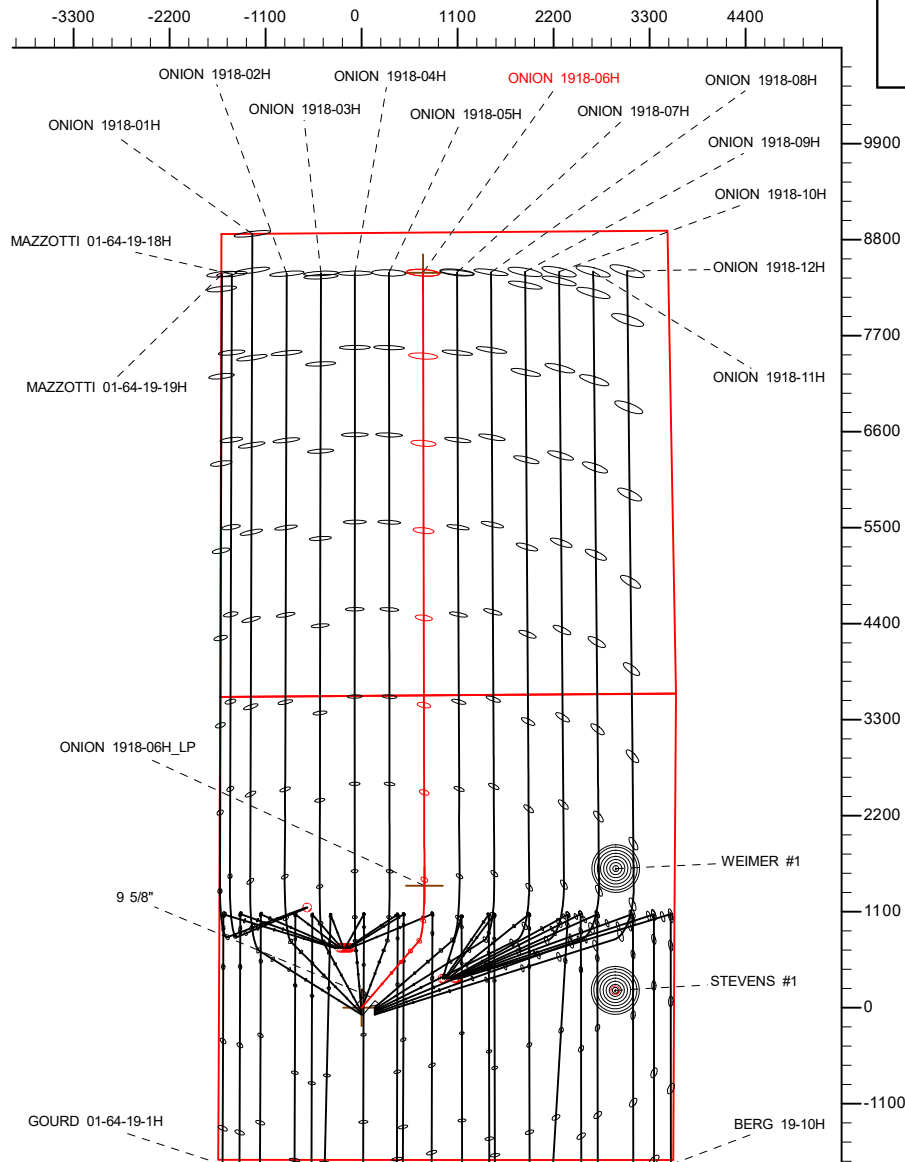
TVD	MD	Name	Size
1700.00	1712.46	9 5/8"	9-5/8

SHL  
1745' FSL  
1635' FWL

LP  
2180' FNL  
2349' FWL

BHL  
460' FNL  
2310' FWL

West(-)/East(+) (2200 usft/in)

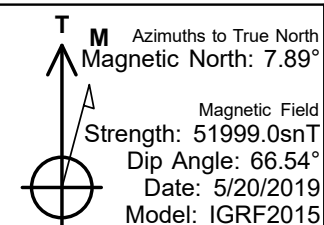
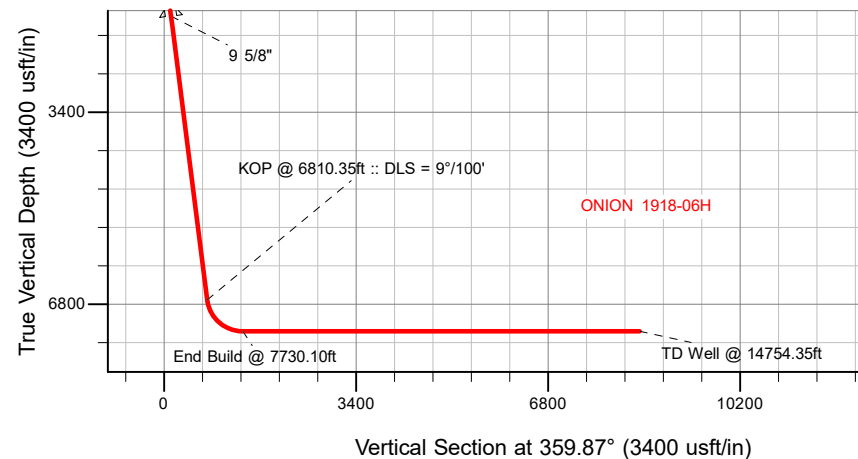


## SECTION DETAILS

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	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	
979.00	9.58	40.80	976.77	30.24	26.11	2.00	40.80	30.18	
6810.35	9.58	40.80	6726.80	764.69	660.24	0.00	0.00	763.39	
7730.10	90.00	359.87	7280.00	1396.60	719.95	9.00	-41.33	1394.96	
14754.35	90.00	359.87	7280.00	8420.83	703.71	0.00	0.00	8419.21	ONION 1918-06H_BHL

## WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
ONION 1918-06H_SHL	0.00	0.00	0.00	40.034345	-104.596976
ONION 1918-06H_BHL	7280.00	8420.83	703.71	40.057462	-104.594462



## WELL DETAILS: ONION 1918-06H

GL = 5012'

RKB = 24' @ 5036.00usft (RIG)

Plan: Design #1 (ONION 1918-06H/Wellbore #1)

Date: 5/21/2019

# Hewlett-Packard

## Planning Report

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ONION 1918-06H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 24' @ 5036.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 24' @ 5036.00usft (RIG)
<b>Site:</b>	1N-64W-19 ONION 1918 PAD	<b>North Reference:</b>	True
<b>Well:</b>	ONION 1918-06H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<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		

<b>Site</b>	1N-64W-19 ONION 1918 PAD			
<b>Site Position:</b>		<b>Northing:</b>	1,256,565.51 usft	<b>Latitude:</b> 40.034126
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,252,854.15 usft	<b>Longitude:</b> -104.596977
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b> 0.58 °

<b>Well</b>	ONION 1918-06H			
<b>Well Position</b>	<b>+N/-S</b>	79.99 usft	<b>Northing:</b>	1,256,645.50 usft
	<b>+E/-W</b>	0.39 usft	<b>Easting:</b>	3,252,853.72 usft
<b>Position Uncertainty</b>		3.28 usft	<b>Wellhead Elevation:</b>	<b>Ground Level:</b> 5,012.00 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	5/20/2019	7.89	66.54	51,999.00162862

<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	359.87

<b>Plan Survey Tool Program</b>	<b>Date</b>	5/20/2019		
<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 #1 (Wellbore #1)	ISCWSA REV 2 MWD Fixed:v2:standard declination
2	7,717.00	14,754.35	Design #1 (Wellbore #1)	ISCWSA REV 2 MWD Fixed:v2:standard declination

<b>Plan Sections</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.00	0.00	0.00	0.00	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	
979.00	9.58	40.80	976.77	30.24	26.11	2.00	2.00	0.00	40.80	
6,810.35	9.58	40.80	6,726.80	764.89	660.24	0.00	0.00	0.00	0.00	
7,730.10	90.00	359.87	7,280.00	1,396.60	719.95	9.00	8.74	-4.45	-41.33	
14,754.35	90.00	359.87	7,280.00	8,420.83	703.71	0.00	0.00	0.00	0.00	ONION 1918-06H_BF

# Hewlett-Packard

## Planning Report

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ONION 1918-06H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 24' @ 5036.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 24' @ 5036.00usft (RIG)
<b>Site:</b>	1N-64W-19 ONION 1918 PAD	<b>North Reference:</b>	True
<b>Well:</b>	ONION 1918-06H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<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
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
Begin Nudge @ 500.00ft									
600.00	2.00	40.80	599.98	1.32	1.14	1.32	2.00	2.00	0.00
700.00	4.00	40.80	699.84	5.28	4.56	5.27	2.00	2.00	0.00
800.00	6.00	40.80	799.45	11.88	10.25	11.86	2.00	2.00	0.00
900.00	8.00	40.80	898.70	21.10	18.22	21.06	2.00	2.00	0.00
979.00	9.58	40.80	976.77	30.24	26.11	30.18	2.00	2.00	0.00
Hold Tangent @ 979.00ft									
1,000.00	9.58	40.80	997.48	32.89	28.39	32.82	0.00	0.00	0.00
1,100.00	9.58	40.80	1,096.08	45.49	39.26	45.40	0.00	0.00	0.00
1,200.00	9.58	40.80	1,194.69	58.09	50.14	57.97	0.00	0.00	0.00
1,300.00	9.58	40.80	1,293.29	70.68	61.01	70.55	0.00	0.00	0.00
1,400.00	9.58	40.80	1,391.90	83.28	71.89	83.12	0.00	0.00	0.00
1,500.00	9.58	40.80	1,490.51	95.88	82.76	95.69	0.00	0.00	0.00
1,600.00	9.58	40.80	1,589.11	108.48	93.64	108.27	0.00	0.00	0.00
1,700.00	9.58	40.80	1,687.72	121.08	104.51	120.84	0.00	0.00	0.00
1,712.46	9.58	40.80	1,700.00	122.65	105.87	122.41	0.00	0.00	0.00
9 5/8"									
1,800.00	9.58	40.80	1,786.32	133.68	115.39	133.41	0.00	0.00	0.00
1,900.00	9.58	40.80	1,884.93	146.27	126.26	145.99	0.00	0.00	0.00
2,000.00	9.58	40.80	1,983.53	158.87	137.13	158.56	0.00	0.00	0.00
2,100.00	9.58	40.80	2,082.14	171.47	148.01	171.13	0.00	0.00	0.00
2,200.00	9.58	40.80	2,180.74	184.07	158.88	183.71	0.00	0.00	0.00
2,300.00	9.58	40.80	2,279.35	196.67	169.76	196.28	0.00	0.00	0.00
2,400.00	9.58	40.80	2,377.95	209.26	180.63	208.85	0.00	0.00	0.00
2,500.00	9.58	40.80	2,476.56	221.86	191.51	221.43	0.00	0.00	0.00
2,600.00	9.58	40.80	2,575.17	234.46	202.38	234.00	0.00	0.00	0.00
2,700.00	9.58	40.80	2,673.77	247.06	213.26	246.57	0.00	0.00	0.00
2,800.00	9.58	40.80	2,772.38	259.66	224.13	259.15	0.00	0.00	0.00
2,900.00	9.58	40.80	2,870.98	272.26	235.00	271.72	0.00	0.00	0.00
3,000.00	9.58	40.80	2,969.59	284.85	245.88	284.30	0.00	0.00	0.00
3,100.00	9.58	40.80	3,068.19	297.45	256.75	296.87	0.00	0.00	0.00
3,200.00	9.58	40.80	3,166.80	310.05	267.63	309.44	0.00	0.00	0.00
3,300.00	9.58	40.80	3,265.40	322.65	278.50	322.02	0.00	0.00	0.00
3,400.00	9.58	40.80	3,364.01	335.25	289.38	334.59	0.00	0.00	0.00
3,500.00	9.58	40.80	3,462.61	347.85	300.25	347.16	0.00	0.00	0.00
3,600.00	9.58	40.80	3,561.22	360.44	311.13	359.74	0.00	0.00	0.00
3,700.00	9.58	40.80	3,659.82	373.04	322.00	372.31	0.00	0.00	0.00
3,800.00	9.58	40.80	3,758.43	385.64	332.88	384.88	0.00	0.00	0.00
3,900.00	9.58	40.80	3,857.04	398.24	343.75	397.46	0.00	0.00	0.00
4,000.00	9.58	40.80	3,955.64	410.84	354.62	410.03	0.00	0.00	0.00
4,100.00	9.58	40.80	4,054.25	423.43	365.50	422.60	0.00	0.00	0.00
4,200.00	9.58	40.80	4,152.85	436.03	376.37	435.18	0.00	0.00	0.00
4,300.00	9.58	40.80	4,251.46	448.63	387.25	447.75	0.00	0.00	0.00
4,400.00	9.58	40.80	4,350.06	461.23	398.12	460.33	0.00	0.00	0.00
4,500.00	9.58	40.80	4,448.67	473.83	409.00	472.90	0.00	0.00	0.00
4,600.00	9.58	40.80	4,547.27	486.43	419.87	485.47	0.00	0.00	0.00
4,700.00	9.58	40.80	4,645.88	499.02	430.75	498.05	0.00	0.00	0.00

# Hewlett-Packard

## Planning Report

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<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 24' @ 5036.00usft (RIG)
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<b>Site:</b>	1N-64W-19 ONION 1918 PAD	<b>North Reference:</b>	True
<b>Well:</b>	ONION 1918-06H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<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)
4,800.00	9.58	40.80	4,744.48	511.62	441.62	510.62	0.00	0.00	0.00
4,900.00	9.58	40.80	4,843.09	524.22	452.50	523.19	0.00	0.00	0.00
5,000.00	9.58	40.80	4,941.70	536.82	463.37	535.77	0.00	0.00	0.00
5,100.00	9.58	40.80	5,040.30	549.42	474.24	548.34	0.00	0.00	0.00
5,200.00	9.58	40.80	5,138.91	562.02	485.12	560.91	0.00	0.00	0.00
5,300.00	9.58	40.80	5,237.51	574.61	495.99	573.49	0.00	0.00	0.00
5,400.00	9.58	40.80	5,336.12	587.21	506.87	586.06	0.00	0.00	0.00
5,500.00	9.58	40.80	5,434.72	599.81	517.74	598.63	0.00	0.00	0.00
5,600.00	9.58	40.80	5,533.33	612.41	528.62	611.21	0.00	0.00	0.00
5,700.00	9.58	40.80	5,631.93	625.01	539.49	623.78	0.00	0.00	0.00
5,800.00	9.58	40.80	5,730.54	637.61	550.37	636.35	0.00	0.00	0.00
5,900.00	9.58	40.80	5,829.14	650.20	561.24	648.93	0.00	0.00	0.00
6,000.00	9.58	40.80	5,927.75	662.80	572.12	661.50	0.00	0.00	0.00
6,100.00	9.58	40.80	6,026.35	675.40	582.99	674.08	0.00	0.00	0.00
6,200.00	9.58	40.80	6,124.96	688.00	593.86	686.65	0.00	0.00	0.00
6,300.00	9.58	40.80	6,223.57	700.60	604.74	699.22	0.00	0.00	0.00
6,400.00	9.58	40.80	6,322.17	713.19	615.61	711.80	0.00	0.00	0.00
6,500.00	9.58	40.80	6,420.78	725.79	626.49	724.37	0.00	0.00	0.00
6,600.00	9.58	40.80	6,519.38	738.39	637.36	736.94	0.00	0.00	0.00
6,700.00	9.58	40.80	6,617.99	750.99	648.24	749.52	0.00	0.00	0.00
6,800.00	9.58	40.80	6,716.59	763.59	659.11	762.09	0.00	0.00	0.00
6,810.35	9.58	40.80	6,726.80	764.89	660.24	763.39	0.00	0.00	0.00
KOP @ 6810.35ft :: DLS = 9°/100'									
6,900.00	16.51	21.77	6,814.12	782.40	669.85	780.88	9.00	7.73	-21.23
7,000.00	25.05	13.55	6,907.55	816.25	680.10	814.70	9.00	8.54	-8.21
7,100.00	33.82	9.37	6,994.56	864.38	689.62	862.82	9.00	8.77	-4.18
7,200.00	42.67	6.76	7,073.03	925.62	698.15	924.03	9.00	8.86	-2.61
7,300.00	51.57	4.90	7,141.01	998.45	705.50	996.85	9.00	8.90	-1.86
7,400.00	60.49	3.46	7,196.83	1,081.08	711.48	1,079.46	9.00	8.92	-1.45
7,500.00	69.42	2.25	7,239.12	1,171.47	715.95	1,169.84	9.00	8.93	-1.21
7,600.00	78.36	1.17	7,266.84	1,267.41	718.79	1,265.77	9.00	8.94	-1.07
7,700.00	87.31	0.17	7,279.30	1,366.52	719.94	1,364.88	9.00	8.94	-1.01
7,730.10	90.00	359.87	7,280.00	1,396.60	719.95	1,394.96	9.00	8.95	-0.99
End Build @ 7730.10ft									
7,800.00	90.00	359.87	7,280.00	1,466.50	719.79	1,464.87	0.00	0.00	0.00
7,900.00	90.00	359.87	7,280.00	1,566.50	719.56	1,564.87	0.00	0.00	0.00
8,000.00	90.00	359.87	7,280.00	1,666.50	719.33	1,664.87	0.00	0.00	0.00
8,100.00	90.00	359.87	7,280.00	1,766.50	719.09	1,764.87	0.00	0.00	0.00
8,200.00	90.00	359.87	7,280.00	1,866.50	718.86	1,864.87	0.00	0.00	0.00
8,300.00	90.00	359.87	7,280.00	1,966.50	718.63	1,964.87	0.00	0.00	0.00
8,400.00	90.00	359.87	7,280.00	2,066.50	718.40	2,064.87	0.00	0.00	0.00
8,500.00	90.00	359.87	7,280.00	2,166.50	718.17	2,164.87	0.00	0.00	0.00
8,600.00	90.00	359.87	7,280.00	2,266.50	717.94	2,264.87	0.00	0.00	0.00
8,700.00	90.00	359.87	7,280.00	2,366.50	717.71	2,364.87	0.00	0.00	0.00
8,800.00	90.00	359.87	7,280.00	2,466.50	717.48	2,464.87	0.00	0.00	0.00
8,900.00	90.00	359.87	7,280.00	2,566.50	717.25	2,564.87	0.00	0.00	0.00
9,000.00	90.00	359.87	7,280.00	2,666.50	717.01	2,664.87	0.00	0.00	0.00
9,100.00	90.00	359.87	7,280.00	2,766.50	716.78	2,764.87	0.00	0.00	0.00
9,200.00	90.00	359.87	7,280.00	2,866.50	716.55	2,864.87	0.00	0.00	0.00
9,300.00	90.00	359.87	7,280.00	2,966.50	716.32	2,964.87	0.00	0.00	0.00
9,400.00	90.00	359.87	7,280.00	3,066.50	716.09	3,064.87	0.00	0.00	0.00
9,500.00	90.00	359.87	7,280.00	3,166.50	715.86	3,164.87	0.00	0.00	0.00
9,600.00	90.00	359.87	7,280.00	3,266.50	715.63	3,264.87	0.00	0.00	0.00
9,700.00	90.00	359.87	7,280.00	3,366.50	715.40	3,364.87	0.00	0.00	0.00

## Planning Report

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)
9,800.00	90.00	359.87	7,280.00	3,466.50	715.16	3,464.87	0.00	0.00	0.00
9,900.00	90.00	359.87	7,280.00	3,566.50	714.93	3,564.87	0.00	0.00	0.00
10,000.00	90.00	359.87	7,280.00	3,666.50	714.70	3,664.87	0.00	0.00	0.00
10,100.00	90.00	359.87	7,280.00	3,766.50	714.47	3,764.87	0.00	0.00	0.00
10,200.00	90.00	359.87	7,280.00	3,866.50	714.24	3,864.87	0.00	0.00	0.00
10,300.00	90.00	359.87	7,280.00	3,966.50	714.01	3,964.87	0.00	0.00	0.00
10,400.00	90.00	359.87	7,280.00	4,066.50	713.78	4,064.87	0.00	0.00	0.00
10,500.00	90.00	359.87	7,280.00	4,166.50	713.55	4,164.87	0.00	0.00	0.00
10,600.00	90.00	359.87	7,280.00	4,266.50	713.32	4,264.87	0.00	0.00	0.00
10,700.00	90.00	359.87	7,280.00	4,366.50	713.08	4,364.87	0.00	0.00	0.00
10,800.00	90.00	359.87	7,280.00	4,466.50	712.85	4,464.87	0.00	0.00	0.00
10,900.00	90.00	359.87	7,280.00	4,566.50	712.62	4,564.87	0.00	0.00	0.00
11,000.00	90.00	359.87	7,280.00	4,666.50	712.39	4,664.87	0.00	0.00	0.00
11,100.00	90.00	359.87	7,280.00	4,766.50	712.16	4,764.87	0.00	0.00	0.00
11,200.00	90.00	359.87	7,280.00	4,866.50	711.93	4,864.87	0.00	0.00	0.00
11,300.00	90.00	359.87	7,280.00	4,966.50	711.70	4,964.87	0.00	0.00	0.00
11,400.00	90.00	359.87	7,280.00	5,066.49	711.47	5,064.87	0.00	0.00	0.00
11,500.00	90.00	359.87	7,280.00	5,166.49	711.24	5,164.87	0.00	0.00	0.00
11,600.00	90.00	359.87	7,280.00	5,266.49	711.00	5,264.87	0.00	0.00	0.00
11,700.00	90.00	359.87	7,280.00	5,366.49	710.77	5,364.87	0.00	0.00	0.00
11,800.00	90.00	359.87	7,280.00	5,466.49	710.54	5,464.87	0.00	0.00	0.00
11,900.00	90.00	359.87	7,280.00	5,566.49	710.31	5,564.87	0.00	0.00	0.00
12,000.00	90.00	359.87	7,280.00	5,666.49	710.08	5,664.87	0.00	0.00	0.00
12,100.00	90.00	359.87	7,280.00	5,766.49	709.85	5,764.87	0.00	0.00	0.00
12,200.00	90.00	359.87	7,280.00	5,866.49	709.62	5,864.87	0.00	0.00	0.00
12,300.00	90.00	359.87	7,280.00	5,966.49	709.39	5,964.87	0.00	0.00	0.00
12,400.00	90.00	359.87	7,280.00	6,066.49	709.15	6,064.87	0.00	0.00	0.00
12,500.00	90.00	359.87	7,280.00	6,166.49	708.92	6,164.87	0.00	0.00	0.00
12,600.00	90.00	359.87	7,280.00	6,266.49	708.69	6,264.87	0.00	0.00	0.00
12,700.00	90.00	359.87	7,280.00	6,366.49	708.46	6,364.87	0.00	0.00	0.00
12,800.00	90.00	359.87	7,280.00	6,466.49	708.23	6,464.87	0.00	0.00	0.00
12,900.00	90.00	359.87	7,280.00	6,566.49	708.00	6,564.87	0.00	0.00	0.00
13,000.00	90.00	359.87	7,280.00	6,666.49	707.77	6,664.87	0.00	0.00	0.00
13,100.00	90.00	359.87	7,280.00	6,766.49	707.54	6,764.87	0.00	0.00	0.00
13,200.00	90.00	359.87	7,280.00	6,866.49	707.31	6,864.87	0.00	0.00	0.00
13,300.00	90.00	359.87	7,280.00	6,966.49	707.07	6,964.87	0.00	0.00	0.00
13,400.00	90.00	359.87	7,280.00	7,066.49	706.84	7,064.87	0.00	0.00	0.00
13,500.00	90.00	359.87	7,280.00	7,166.49	706.61	7,164.87	0.00	0.00	0.00
13,600.00	90.00	359.87	7,280.00	7,266.49	706.38	7,264.87	0.00	0.00	0.00
13,700.00	90.00	359.87	7,280.00	7,366.49	706.15	7,364.87	0.00	0.00	0.00
13,800.00	90.00	359.87	7,280.00	7,466.49	705.92	7,464.87	0.00	0.00	0.00
13,900.00	90.00	359.87	7,280.00	7,566.49	705.69	7,564.87	0.00	0.00	0.00
14,000.00	90.00	359.87	7,280.00	7,666.49	705.46	7,664.87	0.00	0.00	0.00
14,100.00	90.00	359.87	7,280.00	7,766.49	705.23	7,764.87	0.00	0.00	0.00
14,200.00	90.00	359.87	7,280.00	7,866.49	704.99	7,864.87	0.00	0.00	0.00
14,300.00	90.00	359.87	7,280.00	7,966.49	704.76	7,964.87	0.00	0.00	0.00
14,400.00	90.00	359.87	7,280.00	8,066.49	704.53	8,064.87	0.00	0.00	0.00
14,500.00	90.00	359.87	7,280.00	8,166.49	704.30	8,164.87	0.00	0.00	0.00
14,600.00	90.00	359.87	7,280.00	8,266.49	704.07	8,264.87	0.00	0.00	0.00
14,700.00	90.00	359.87	7,280.00	8,366.49	703.84	8,364.87	0.00	0.00	0.00
14,754.35	90.00	359.87	7,280.00	8,420.83	703.71	8,419.21	0.00	0.00	0.00
TD Well @ 14754.35ft									

# Hewlett-Packard

## Planning Report

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well ONION 1918-06H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 24' @ 5036.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 24' @ 5036.00usft (RIG)
<b>Site:</b>	1N-64W-19 ONION 1918 PAD	<b>North Reference:</b>	True
<b>Well:</b>	ONION 1918-06H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (")	Hole Diameter (")
1,712.46	1,700.00	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)		
500.00	500.00	0.00	0.00	Begin Nudge @ 500.00ft	
979.00	976.77	30.24	26.11	Hold Tangent @ 979.00ft	
6,810.35	6,726.80	764.89	660.24	KOP @ 6810.35ft :: DLS = 9°/100'	
7,730.10	7,280.00	1,396.60	719.95	End Build @ 7730.10ft	
14,754.35	7,280.00	8,420.83	703.71	TD Well @ 14754.35ft	