

# **VERDAD RESOURCES**

**WATTENBERG FIELD**

**9N-60W-25 PEGGY 2501 PAD**

**PEGGY 2501-04H**

**Plan B**

**Plan: Design #1**

## **Standard Planning Report**

**11 October, 2021**

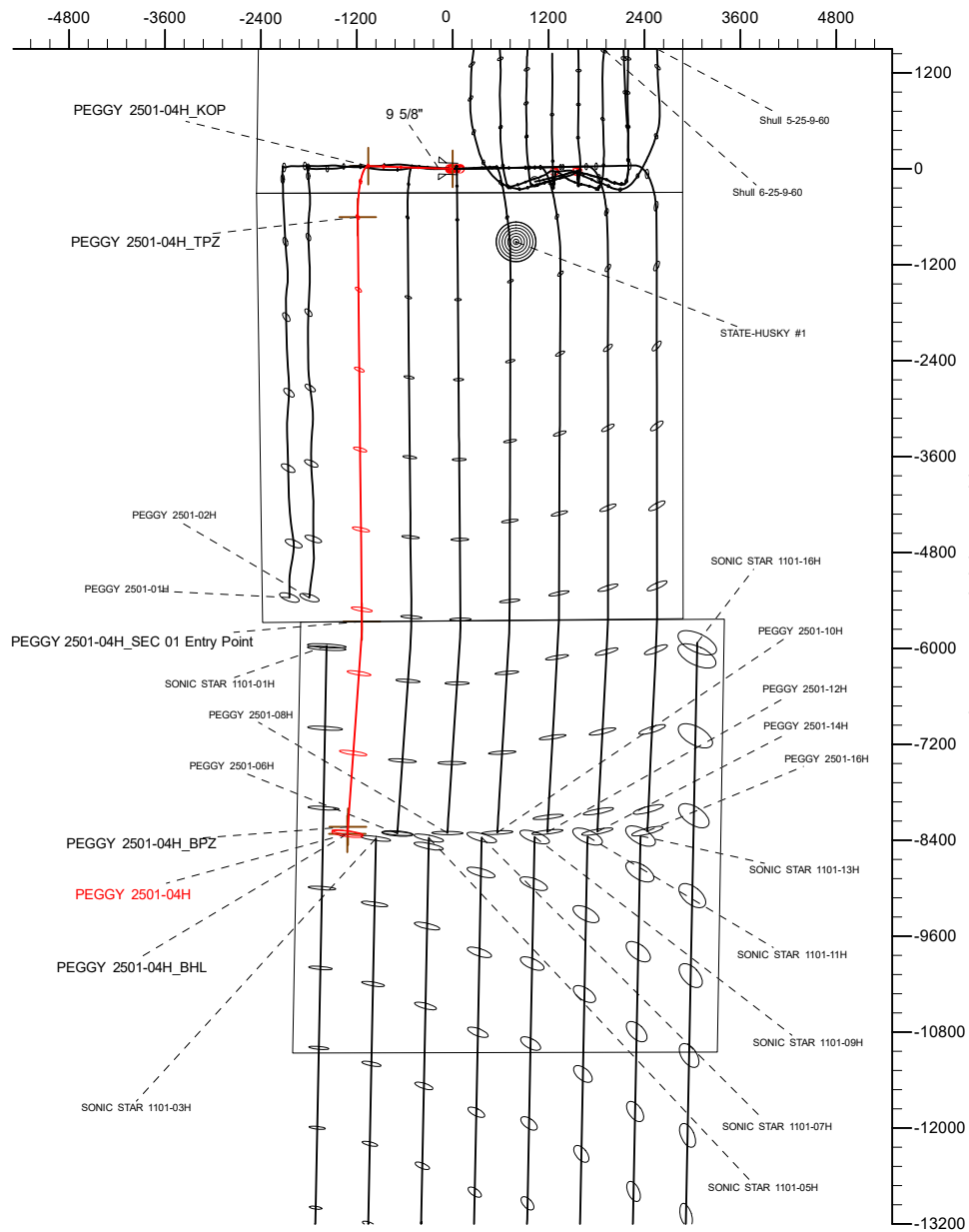
Project: WATTENBERG FIELD  
Site: 9N-60W-25 PEGGY 2501 PAD  
Well: PEGGY 2501-04H  
Wellbore: Plan B  
Design: Design #1

# VERDAD RESOURCES

## CASING DETAILS

TVD	MD	Name	Size
1560.00	1575.68	9 5/8"	9-5/8

West(-)/East(+) (2400 usft/in)



SHL  
300' FSL  
2448' FWL

KOP  
338' FSL  
1392' FWL

TPZ  
300' FNL  
1260' FWL

SEC 01 Entry  
0' FSL  
1244' FWL

BPZ  
2565' FNL  
637' FWL

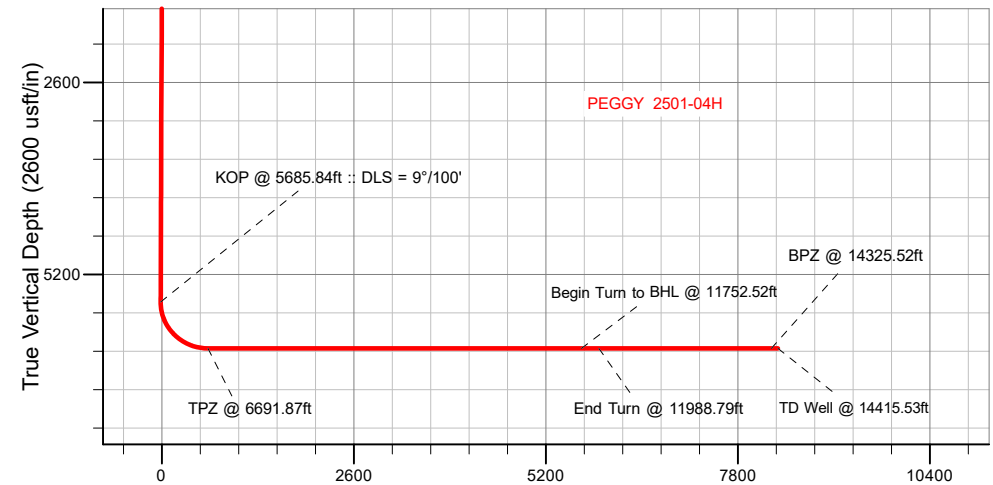
BHL  
2655' FNL  
632' FWL

## SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	498.50	0.00	0.00	498.50	0.00	0.00	0.00	0.00	0.00	
3	1124.00	12.51	271.91	1119.04	2.27	-67.98	2.00	271.91	-1.13	
4	5685.84	12.51	271.91	5572.58	35.20	-1055.57	0.00	0.00	-17.51	
5	6691.87	90.00	179.40	6200.00	-602.81	-1187.99	9.00	-92.45	622.63	
6	11752.52	90.00	179.40	6200.00	-5663.18	-1135.16	0.00	0.00	5681.40	PEGGY 2501-04H_SEC 01 Entry Point
7	11988.79	90.00	184.13	6200.00	-5899.27	-1142.43	2.00	90.00	5917.58	
8	14415.53	90.00	184.13	6200.00	-8319.71	-1317.09	0.00	0.00	8340.61	PEGGY 2501-04H_BHL

## WELLBORE TARGET DETAILS (LAT/LONG)

Name	MD	TVD	+N/-S	+E/-W	Latitude	Longitude
PEGGY 2501-04H_SHL	0.00	0.00	0.00	0.00	40.714775	-104.040712
PEGGY 2501-04H_KOP	5685.84	5572.58	35.20	-1055.57	40.714871	-104.044519
PEGGY 2501-04H_TPZ	6691.87	6200.00	-602.70	-1188.00	40.713120	-104.044997
PEGGY 2501-04H_SEC 01 Entry Point	11752.52	6200.00	-5663.18	-1135.16	40.699231	-104.044805
PEGGY 2501-04H_BPZ	14325.52	6200.00	-8229.94	-1310.82	40.692185	-104.045438
PEGGY 2501-04H_BHL	14415.53	6200.00	-8319.71	-1317.09	40.691939	-104.045461



Vertical Section at 180.96° (2600 usft/in)



Azimuths to True North  
Magnetic North: 7.46°  
Magnetic Field  
Strength: 52156.9nT  
Dip Angle: 66.99°  
Date: 10/7/2021  
Model: IGRF2020

## WELL DETAILS: PEGGY 2501-04H

GL = 4894'
RKB = 16' @ 4910.00usft (RIG)
Plan: Design #1 (PEGGY 2501-04H/Plan B)
Date: 10/11/2021

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well PEGGY 2501-04H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 16' @ 4910.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 16' @ 4910.00usft (RIG)
<b>Site:</b>	9N-60W-25 PEGGY 2501 PAD	<b>North Reference:</b>	True
<b>Well:</b>	PEGGY 2501-04H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan B		
<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>	9N-60W-25 PEGGY 2501 PAD			
<b>Site Position:</b>		<b>Northing:</b>	1,506,564.37 usft	<b>Latitude:</b> 40.714775
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,404,485.26 usft	<b>Longitude:</b> -104.040843
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "	

<b>Well</b>	PEGGY 2501-04H			
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b>	1,506,565.04 usft
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b>	3,404,521.52 usft
<b>Position Uncertainty</b>		3.28 usft	<b>Wellhead Elevation:</b>	usft
<b>Grid Convergence:</b>		0.94 °	<b>Ground Level:</b>	4,894.00 usft

<b>Wellbore</b>	Plan B				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF202013	10/7/2021	7.46	66.99	52,156.89598941

<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	180.96	

<b>Plan Survey Tool Program</b>		<b>Date</b>	10/11/2021		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>	
1	0.00	1,560.00	Design #1 (Plan B)	ISCWSA MWD	Fixed:v2:standard declination
2	1,560.00	14,415.53	Design #1 (Plan B)	ISCWSA MWD	Fixed:v2:standard declination

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well PEGGY 2501-04H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 16' @ 4910.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 16' @ 4910.00usft (RIG)
<b>Site:</b>	9N-60W-25 PEGGY 2501 PAD	<b>North Reference:</b>	True
<b>Well:</b>	PEGGY 2501-04H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan B		
<b>Design:</b>	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	
498.50	0.00	0.00	498.50	0.00	0.00	0.00	0.00	0.00	0.00	
1,124.00	12.51	271.91	1,119.04	2.27	-67.98	2.00	2.00	0.00	271.91	
5,685.84	12.51	271.91	5,572.58	35.20	-1,055.57	0.00	0.00	0.00	0.00	
6,691.88	90.00	179.40	6,200.00	-602.81	-1,187.99	9.00	7.70	-9.20	-92.45	
11,752.52	90.00	179.40	6,200.00	-5,663.18	-1,135.16	0.00	0.00	0.00	0.00	PEGGY 2501-04H_SI
11,988.79	90.00	184.13	6,200.00	-5,899.27	-1,142.43	2.00	0.00	2.00	90.00	
14,415.53	90.00	184.13	6,200.00	-8,319.71	-1,317.09	0.00	0.00	0.00	0.00	PEGGY 2501-04H_BI

# Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well PEGGY 2501-04H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 16' @ 4910.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 16' @ 4910.00usft (RIG)
<b>Site:</b>	9N-60W-25 PEGGY 2501 PAD	<b>North Reference:</b>	True
<b>Well:</b>	PEGGY 2501-04H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan B		
<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
498.50	0.00	0.00	498.50	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 498.50ft									
500.00	0.03	271.91	500.00	0.00	0.00	0.00	2.00	2.00	0.00
600.00	2.03	271.91	599.98	0.06	-1.80	-0.03	2.00	2.00	0.00
700.00	4.03	271.91	699.83	0.24	-7.08	-0.12	2.00	2.00	0.00
800.00	6.03	271.91	799.44	0.53	-15.84	-0.26	2.00	2.00	0.00
900.00	8.03	271.91	898.69	0.94	-28.07	-0.47	2.00	2.00	0.00
1,000.00	10.03	271.91	997.44	1.46	-43.76	-0.73	2.00	2.00	0.00
1,100.00	12.03	271.91	1,095.59	2.10	-62.88	-1.04	2.00	2.00	0.00
1,124.00	12.51	271.91	1,119.04	2.27	-67.98	-1.13	2.00	2.00	0.00
Hold Tangent @ 1124.00ft									
1,200.00	12.51	271.91	1,193.24	2.82	-84.43	-1.40	0.00	0.00	0.00
1,300.00	12.51	271.91	1,290.86	3.54	-106.08	-1.76	0.00	0.00	0.00
1,400.00	12.51	271.91	1,388.49	4.26	-127.73	-2.12	0.00	0.00	0.00
1,500.00	12.51	271.91	1,486.12	4.98	-149.38	-2.48	0.00	0.00	0.00
1,575.68	12.51	271.91	1,560.00	5.53	-165.76	-2.75	0.00	0.00	0.00
9 5/8"									
1,600.00	12.51	271.91	1,583.74	5.70	-171.03	-2.84	0.00	0.00	0.00
1,700.00	12.51	271.91	1,681.37	6.43	-192.68	-3.20	0.00	0.00	0.00
1,800.00	12.51	271.91	1,778.99	7.15	-214.32	-3.56	0.00	0.00	0.00
1,900.00	12.51	271.91	1,876.62	7.87	-235.97	-3.91	0.00	0.00	0.00
2,000.00	12.51	271.91	1,974.24	8.59	-257.62	-4.27	0.00	0.00	0.00
2,100.00	12.51	271.91	2,071.87	9.31	-279.27	-4.63	0.00	0.00	0.00
2,200.00	12.51	271.91	2,169.50	10.04	-300.92	-4.99	0.00	0.00	0.00
2,300.00	12.51	271.91	2,267.12	10.76	-322.57	-5.35	0.00	0.00	0.00
2,400.00	12.51	271.91	2,364.75	11.48	-344.22	-5.71	0.00	0.00	0.00
2,500.00	12.51	271.91	2,462.37	12.20	-365.87	-6.07	0.00	0.00	0.00
2,600.00	12.51	271.91	2,560.00	12.92	-387.52	-6.43	0.00	0.00	0.00
2,700.00	12.51	271.91	2,657.62	13.64	-409.17	-6.79	0.00	0.00	0.00
2,800.00	12.51	271.91	2,755.25	14.37	-430.81	-7.15	0.00	0.00	0.00
2,900.00	12.51	271.91	2,852.88	15.09	-452.46	-7.51	0.00	0.00	0.00
3,000.00	12.51	271.91	2,950.50	15.81	-474.11	-7.87	0.00	0.00	0.00
3,100.00	12.51	271.91	3,048.13	16.53	-495.76	-8.22	0.00	0.00	0.00
3,200.00	12.51	271.91	3,145.75	17.25	-517.41	-8.58	0.00	0.00	0.00
3,300.00	12.51	271.91	3,243.38	17.98	-539.06	-8.94	0.00	0.00	0.00
3,400.00	12.51	271.91	3,341.01	18.70	-560.71	-9.30	0.00	0.00	0.00
3,500.00	12.51	271.91	3,438.63	19.42	-582.36	-9.66	0.00	0.00	0.00
3,600.00	12.51	271.91	3,536.26	20.14	-604.01	-10.02	0.00	0.00	0.00
3,700.00	12.51	271.91	3,633.88	20.86	-625.65	-10.38	0.00	0.00	0.00
3,800.00	12.51	271.91	3,731.51	21.59	-647.30	-10.74	0.00	0.00	0.00
3,900.00	12.51	271.91	3,829.13	22.31	-668.95	-11.10	0.00	0.00	0.00
4,000.00	12.51	271.91	3,926.76	23.03	-690.60	-11.46	0.00	0.00	0.00
4,100.00	12.51	271.91	4,024.39	23.75	-712.25	-11.82	0.00	0.00	0.00
4,200.00	12.51	271.91	4,122.01	24.47	-733.90	-12.17	0.00	0.00	0.00
4,300.00	12.51	271.91	4,219.64	25.20	-755.55	-12.53	0.00	0.00	0.00
4,400.00	12.51	271.91	4,317.26	25.92	-777.20	-12.89	0.00	0.00	0.00
4,500.00	12.51	271.91	4,414.89	26.64	-798.85	-13.25	0.00	0.00	0.00
4,600.00	12.51	271.91	4,512.52	27.36	-820.50	-13.61	0.00	0.00	0.00

# Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well PEGGY 2501-04H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 16' @ 4910.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 16' @ 4910.00usft (RIG)
<b>Site:</b>	9N-60W-25 PEGGY 2501 PAD	<b>North Reference:</b>	True
<b>Well:</b>	PEGGY 2501-04H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan B		
<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	12.51	271.91	4,610.14	28.08	-842.14	-13.97	0.00	0.00	0.00
4,800.00	12.51	271.91	4,707.77	28.81	-863.79	-14.33	0.00	0.00	0.00
4,900.00	12.51	271.91	4,805.39	29.53	-885.44	-14.69	0.00	0.00	0.00
5,000.00	12.51	271.91	4,903.02	30.25	-907.09	-15.05	0.00	0.00	0.00
5,100.00	12.51	271.91	5,000.64	30.97	-928.74	-15.41	0.00	0.00	0.00
5,200.00	12.51	271.91	5,098.27	31.69	-950.39	-15.77	0.00	0.00	0.00
5,300.00	12.51	271.91	5,195.90	32.42	-972.04	-16.13	0.00	0.00	0.00
5,400.00	12.51	271.91	5,293.52	33.14	-993.69	-16.48	0.00	0.00	0.00
5,500.00	12.51	271.91	5,391.15	33.86	-1,015.34	-16.84	0.00	0.00	0.00
5,600.00	12.51	271.91	5,488.77	34.58	-1,036.99	-17.20	0.00	0.00	0.00
5,685.84	12.51	271.91	5,572.58	35.20	-1,055.57	-17.51	0.00	0.00	0.00
KOP @ 5685.84ft :: DLS = 9°/100'									
5,700.00	12.52	266.03	5,586.40	35.15	-1,058.63	-17.40	9.00	0.07	-41.55
5,750.00	13.53	246.47	5,635.14	32.43	-1,069.41	-14.51	9.00	2.03	-39.11
5,800.00	15.79	231.01	5,683.52	25.81	-1,080.07	-7.71	9.00	4.52	-30.93
5,850.00	18.85	219.88	5,731.26	15.33	-1,090.54	2.95	9.00	6.12	-22.26
5,900.00	22.39	211.95	5,778.06	1.04	-1,100.76	17.41	9.00	7.08	-15.85
5,950.00	26.21	206.16	5,823.63	-16.97	-1,110.68	35.57	9.00	7.64	-11.58
6,000.00	30.21	201.78	5,867.68	-38.57	-1,120.22	57.33	9.00	8.00	-8.76
6,050.00	34.32	198.35	5,909.95	-63.65	-1,129.33	82.56	9.00	8.22	-6.86
6,100.00	38.51	195.57	5,950.18	-92.04	-1,137.95	111.09	9.00	8.38	-5.54
6,150.00	42.76	193.27	5,988.12	-123.57	-1,146.03	142.75	9.00	8.49	-4.60
6,200.00	47.04	191.31	6,023.53	-158.05	-1,153.52	177.35	9.00	8.57	-3.92
6,250.00	51.35	189.61	6,056.20	-195.26	-1,160.37	214.67	9.00	8.62	-3.40
6,300.00	55.69	188.10	6,085.92	-234.97	-1,166.54	254.48	9.00	8.67	-3.02
6,350.00	60.04	186.74	6,112.51	-276.94	-1,172.00	296.54	9.00	8.70	-2.72
6,400.00	64.40	185.50	6,135.81	-320.92	-1,176.71	340.59	9.00	8.73	-2.49
6,450.00	68.77	184.34	6,155.68	-366.62	-1,180.63	386.35	9.00	8.75	-2.31
6,500.00	73.15	183.25	6,171.98	-413.77	-1,183.76	433.54	9.00	8.76	-2.18
6,550.00	77.54	182.21	6,184.63	-462.08	-1,186.06	481.88	9.00	8.77	-2.08
6,600.00	81.93	181.20	6,193.54	-511.24	-1,187.52	531.07	9.00	8.78	-2.01
6,650.00	86.32	180.22	6,198.66	-560.96	-1,188.13	580.79	9.00	8.78	-1.97
6,691.88	90.00	179.40	6,200.00	-602.81	-1,187.99	622.63	9.00	8.79	-1.95
TPZ @ 6691.87ft									
6,700.00	90.00	179.40	6,200.00	-610.93	-1,187.91	630.75	0.00	0.00	0.00
6,800.00	90.00	179.40	6,200.00	-710.93	-1,186.86	730.71	0.00	0.00	0.00
6,900.00	90.00	179.40	6,200.00	-810.92	-1,185.82	830.67	0.00	0.00	0.00
7,000.00	90.00	179.40	6,200.00	-910.92	-1,184.78	930.64	0.00	0.00	0.00
7,100.00	90.00	179.40	6,200.00	-1,010.91	-1,183.73	1,030.60	0.00	0.00	0.00
7,200.00	90.00	179.40	6,200.00	-1,110.90	-1,182.69	1,130.56	0.00	0.00	0.00
7,300.00	90.00	179.40	6,200.00	-1,210.90	-1,181.64	1,230.53	0.00	0.00	0.00
7,400.00	90.00	179.40	6,200.00	-1,310.89	-1,180.60	1,330.49	0.00	0.00	0.00
7,500.00	90.00	179.40	6,200.00	-1,410.89	-1,179.56	1,430.45	0.00	0.00	0.00
7,600.00	90.00	179.40	6,200.00	-1,510.88	-1,178.51	1,530.42	0.00	0.00	0.00
7,700.00	90.00	179.40	6,200.00	-1,610.88	-1,177.47	1,630.38	0.00	0.00	0.00
7,800.00	90.00	179.40	6,200.00	-1,710.87	-1,176.42	1,730.34	0.00	0.00	0.00
7,900.00	90.00	179.40	6,200.00	-1,810.87	-1,175.38	1,830.31	0.00	0.00	0.00
8,000.00	90.00	179.40	6,200.00	-1,910.86	-1,174.34	1,930.27	0.00	0.00	0.00
8,100.00	90.00	179.40	6,200.00	-2,010.86	-1,173.29	2,030.23	0.00	0.00	0.00
8,200.00	90.00	179.40	6,200.00	-2,110.85	-1,172.25	2,130.19	0.00	0.00	0.00
8,300.00	90.00	179.40	6,200.00	-2,210.84	-1,171.20	2,230.16	0.00	0.00	0.00
8,400.00	90.00	179.40	6,200.00	-2,310.84	-1,170.16	2,330.12	0.00	0.00	0.00
8,500.00	90.00	179.40	6,200.00	-2,410.83	-1,169.12	2,430.08	0.00	0.00	0.00
8,600.00	90.00	179.40	6,200.00	-2,510.83	-1,168.07	2,530.05	0.00	0.00	0.00

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well PEGGY 2501-04H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 16' @ 4910.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 16' @ 4910.00usft (RIG)
<b>Site:</b>	9N-60W-25 PEGGY 2501 PAD	<b>North Reference:</b>	True
<b>Well:</b>	PEGGY 2501-04H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan B		
<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)	
8,700.00	90.00	179.40	6,200.00	-2,610.82	-1,167.03	2,630.01	0.00	0.00	0.00	
8,800.00	90.00	179.40	6,200.00	-2,710.82	-1,165.98	2,729.97	0.00	0.00	0.00	
8,900.00	90.00	179.40	6,200.00	-2,810.81	-1,164.94	2,829.94	0.00	0.00	0.00	
9,000.00	90.00	179.40	6,200.00	-2,910.81	-1,163.90	2,929.90	0.00	0.00	0.00	
9,100.00	90.00	179.40	6,200.00	-3,010.80	-1,162.85	3,029.86	0.00	0.00	0.00	
9,200.00	90.00	179.40	6,200.00	-3,110.80	-1,161.81	3,129.82	0.00	0.00	0.00	
9,300.00	90.00	179.40	6,200.00	-3,210.79	-1,160.76	3,229.79	0.00	0.00	0.00	
9,400.00	90.00	179.40	6,200.00	-3,310.78	-1,159.72	3,329.75	0.00	0.00	0.00	
9,500.00	90.00	179.40	6,200.00	-3,410.78	-1,158.68	3,429.71	0.00	0.00	0.00	
9,600.00	90.00	179.40	6,200.00	-3,510.77	-1,157.63	3,529.68	0.00	0.00	0.00	
9,700.00	90.00	179.40	6,200.00	-3,610.77	-1,156.59	3,629.64	0.00	0.00	0.00	
9,800.00	90.00	179.40	6,200.00	-3,710.76	-1,155.54	3,729.60	0.00	0.00	0.00	
9,900.00	90.00	179.40	6,200.00	-3,810.76	-1,154.50	3,829.57	0.00	0.00	0.00	
10,000.00	90.00	179.40	6,200.00	-3,910.75	-1,153.46	3,929.53	0.00	0.00	0.00	
10,100.00	90.00	179.40	6,200.00	-4,010.75	-1,152.41	4,029.49	0.00	0.00	0.00	
10,200.00	90.00	179.40	6,200.00	-4,110.74	-1,151.37	4,129.45	0.00	0.00	0.00	
10,300.00	90.00	179.40	6,200.00	-4,210.74	-1,150.32	4,229.42	0.00	0.00	0.00	
10,400.00	90.00	179.40	6,200.00	-4,310.73	-1,149.28	4,329.38	0.00	0.00	0.00	
10,500.00	90.00	179.40	6,200.00	-4,410.72	-1,148.24	4,429.34	0.00	0.00	0.00	
10,600.00	90.00	179.40	6,200.00	-4,510.72	-1,147.19	4,529.31	0.00	0.00	0.00	
10,700.00	90.00	179.40	6,200.00	-4,610.71	-1,146.15	4,629.27	0.00	0.00	0.00	
10,800.00	90.00	179.40	6,200.00	-4,710.71	-1,145.10	4,729.23	0.00	0.00	0.00	
10,900.00	90.00	179.40	6,200.00	-4,810.70	-1,144.06	4,829.20	0.00	0.00	0.00	
11,000.00	90.00	179.40	6,200.00	-4,910.70	-1,143.02	4,929.16	0.00	0.00	0.00	
11,100.00	90.00	179.40	6,200.00	-5,010.69	-1,141.97	5,029.12	0.00	0.00	0.00	
11,200.00	90.00	179.40	6,200.00	-5,110.69	-1,140.93	5,129.09	0.00	0.00	0.00	
11,300.00	90.00	179.40	6,200.00	-5,210.68	-1,139.88	5,229.05	0.00	0.00	0.00	
11,400.00	90.00	179.40	6,200.00	-5,310.68	-1,138.84	5,329.01	0.00	0.00	0.00	
11,500.00	90.00	179.40	6,200.00	-5,410.67	-1,137.80	5,428.97	0.00	0.00	0.00	
11,600.00	90.00	179.40	6,200.00	-5,510.67	-1,136.75	5,528.94	0.00	0.00	0.00	
11,700.00	90.00	179.40	6,200.00	-5,610.66	-1,135.71	5,628.90	0.00	0.00	0.00	
11,752.52	90.00	179.40	6,200.00	-5,663.18	-1,135.16	5,681.40	0.00	0.00	0.00	
Begin Turn to BHL @ 11752.52ft										
11,800.00	90.00	180.35	6,200.00	-5,710.66	-1,135.06	5,728.87	2.00	0.00	2.00	
11,900.00	90.00	182.35	6,200.00	-5,810.62	-1,137.42	5,828.86	2.00	0.00	2.00	
11,988.79	90.00	184.13	6,200.00	-5,899.27	-1,142.43	5,917.58	2.00	0.00	2.00	
End Turn @ 11988.79ft										
12,000.00	90.00	184.13	6,200.00	-5,910.45	-1,143.24	5,928.77	0.00	0.00	0.00	
12,100.00	90.00	184.13	6,200.00	-6,010.19	-1,150.44	6,028.62	0.00	0.00	0.00	
12,200.00	90.00	184.13	6,200.00	-6,109.93	-1,157.63	6,128.47	0.00	0.00	0.00	
12,300.00	90.00	184.13	6,200.00	-6,209.67	-1,164.83	6,228.32	0.00	0.00	0.00	
12,400.00	90.00	184.13	6,200.00	-6,309.41	-1,172.03	6,328.16	0.00	0.00	0.00	
12,500.00	90.00	184.13	6,200.00	-6,409.15	-1,179.23	6,428.01	0.00	0.00	0.00	
12,600.00	90.00	184.13	6,200.00	-6,508.89	-1,186.42	6,527.86	0.00	0.00	0.00	
12,700.00	90.00	184.13	6,200.00	-6,608.63	-1,193.62	6,627.70	0.00	0.00	0.00	
12,800.00	90.00	184.13	6,200.00	-6,708.37	-1,200.82	6,727.55	0.00	0.00	0.00	
12,900.00	90.00	184.13	6,200.00	-6,808.11	-1,208.01	6,827.40	0.00	0.00	0.00	
13,000.00	90.00	184.13	6,200.00	-6,907.86	-1,215.21	6,927.25	0.00	0.00	0.00	
13,100.00	90.00	184.13	6,200.00	-7,007.60	-1,222.41	7,027.09	0.00	0.00	0.00	
13,200.00	90.00	184.13	6,200.00	-7,107.34	-1,229.61	7,126.94	0.00	0.00	0.00	
13,300.00	90.00	184.13	6,200.00	-7,207.08	-1,236.80	7,226.79	0.00	0.00	0.00	
13,400.00	90.00	184.13	6,200.00	-7,306.82	-1,244.00	7,326.63	0.00	0.00	0.00	
13,500.00	90.00	184.13	6,200.00	-7,406.56	-1,251.20	7,426.48	0.00	0.00	0.00	
13,600.00	90.00	184.13	6,200.00	-7,506.30	-1,258.39	7,526.33	0.00	0.00	0.00	

## Planning Report

<b>Database:</b>	EDM 5000.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well PEGGY 2501-04H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 16' @ 4910.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 16' @ 4910.00usft (RIG)
<b>Site:</b>	9N-60W-25 PEGGY 2501 PAD	<b>North Reference:</b>	True
<b>Well:</b>	PEGGY 2501-04H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan B		
<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)	
13,700.00	90.00	184.13	6,200.00	-7,606.04	-1,265.59	7,626.18	0.00	0.00	0.00	
13,800.00	90.00	184.13	6,200.00	-7,705.78	-1,272.79	7,726.02	0.00	0.00	0.00	
13,900.00	90.00	184.13	6,200.00	-7,805.52	-1,279.99	7,825.87	0.00	0.00	0.00	
14,000.00	90.00	184.13	6,200.00	-7,905.26	-1,287.18	7,925.72	0.00	0.00	0.00	
14,100.00	90.00	184.13	6,200.00	-8,005.00	-1,294.38	8,025.57	0.00	0.00	0.00	
14,200.00	90.00	184.13	6,200.00	-8,104.74	-1,301.58	8,125.41	0.00	0.00	0.00	
14,300.00	90.00	184.13	6,200.00	-8,204.48	-1,308.77	8,225.26	0.00	0.00	0.00	
14,325.52	90.00	184.13	6,200.00	-8,229.94	-1,310.61	8,250.74	0.00	0.00	0.00	
BPZ @ 14325.52ft										
14,400.00	90.00	184.13	6,200.00	-8,304.22	-1,315.97	8,325.11	0.00	0.00	0.00	
14,415.53	90.00	184.13	6,200.00	-8,319.71	-1,317.09	8,340.61	0.00	0.00	0.00	
TD Well @ 14415.53ft										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (")	Hole Diameter (")
1,575.68	1,560.00	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)		
498.50	498.50	0.00	0.00	Begin Nudge @ 498.50ft	
1,124.00	1,119.04	2.27	-67.98	Hold Tangent @ 1124.00ft	
5,685.84	5,572.58	35.20	-1,055.57	KOP @ 5685.84ft :: DLS = 9°/100'	
6,691.88	6,200.00	-602.81	-1,187.99	TPZ @ 6691.87ft	
11,752.52	6,200.00	-5,663.18	-1,135.16	Begin Turn to BHL @ 11752.52ft	
11,988.79	6,200.00	-5,899.27	-1,142.43	End Turn @ 11988.79ft	
14,325.52	6,200.00	-8,229.94	-1,310.61	BPZ @ 14325.52ft	
14,415.53	6,200.00	-8,319.71	-1,317.09	TD Well @ 14415.53ft	