

# **VERDAD RESOURCES**

**WATTENBERG FIELD**

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

**PEGGY 2501-16H**

**Wellbore #2**

**Plan: Design #1**

## **Standard Planning Report**

**30 October, 2019**

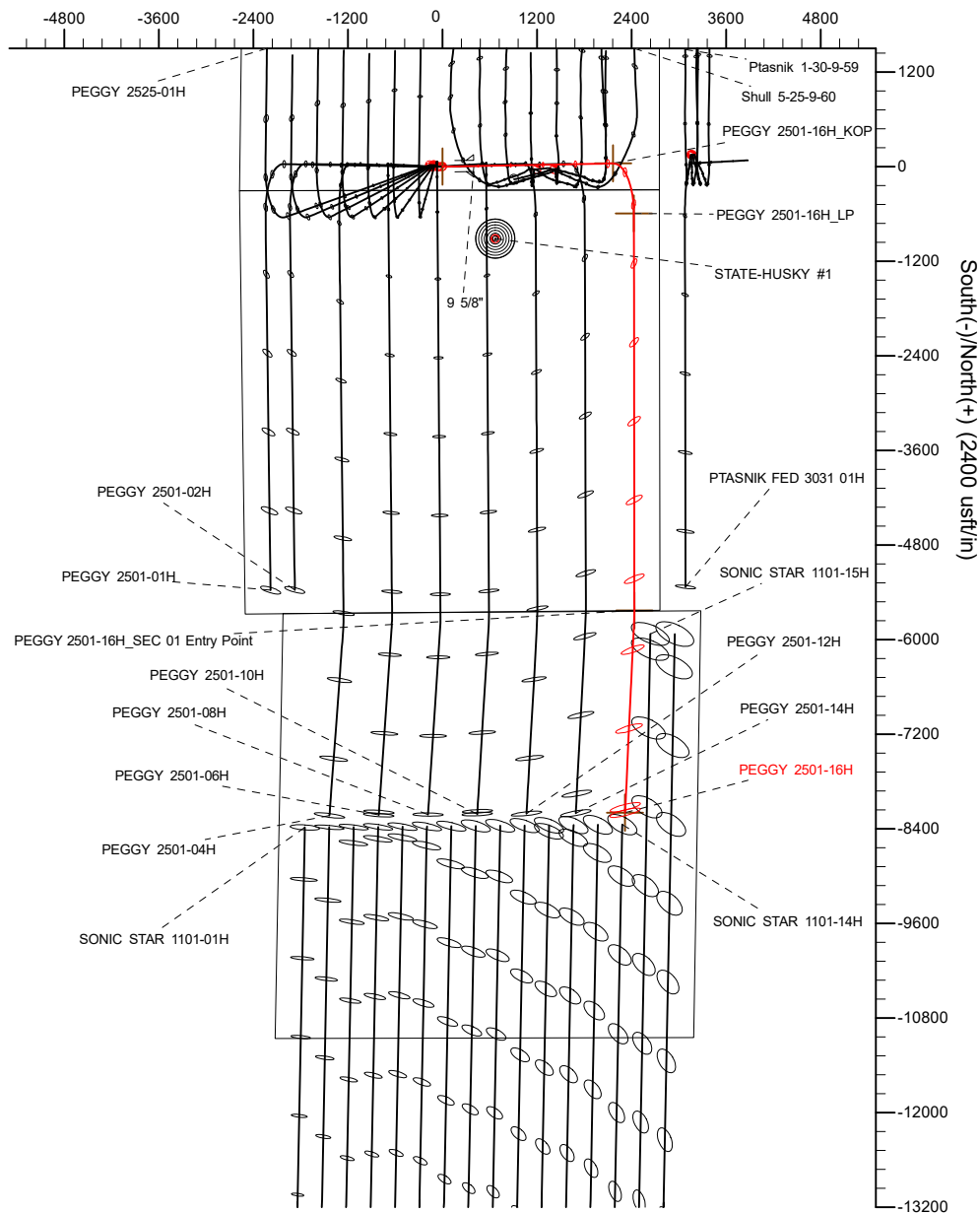
Project: WATTENBERG FIELD  
Site: 9N-60W-25 PEGGY 2501 PAD  
Well: PEGGY 2501-16H  
Wellbore: Wellbore #2  
Design: Design #1

# VERDAD RESOURCES

## CASING DETAILS

TVD	MD	Name	Size
1700.00	1767.26	9 5/8"	9-5/8

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



SHL  
300' FSL  
2572' FWL

KOP  
335' FSL  
588' FEL

LP  
300' FNL  
325' FEL

SEC 01 Entry  
0' FSL  
325' FEL

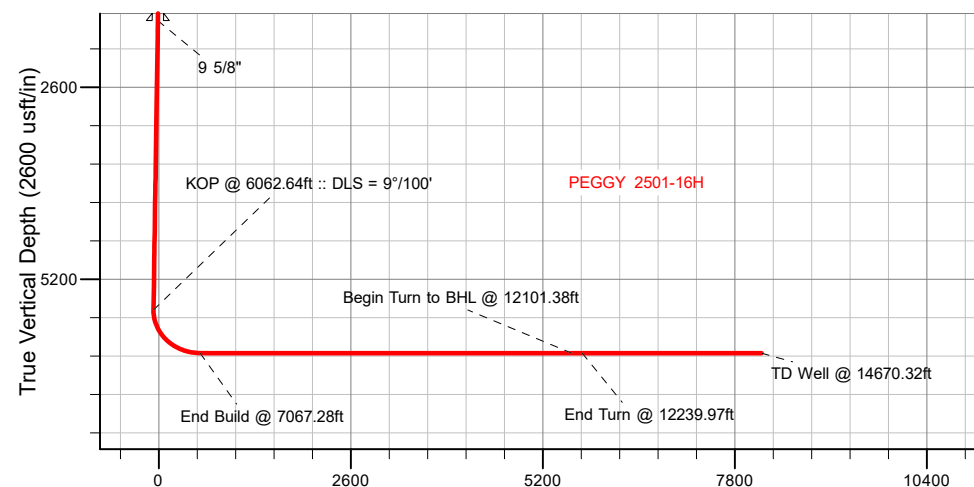
BHL  
2565' FNL  
918' FEL

## SECTION DETAILS

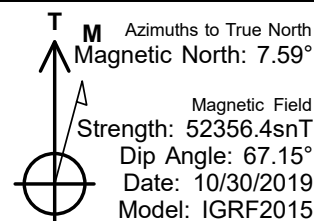
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
3	1414.00	24.28	88.92	1377.99	4.78	253.35	2.00	88.92	-8.53	
4	6062.64	24.28	88.92	5615.44	40.81	2164.52	0.00	0.00	-72.91	
5	7067.28	90.00	179.94	6200.00	-595.51	2428.87	9.00	90.93	559.41	
6	12101.38	90.00	179.94	6200.00	-5629.60	2434.44	0.00	0.00	5592.86	PEGGY 2501-16H_SEC 01 Entry Point
7	12239.97	90.00	182.71	6200.00	-5768.14	2431.24	2.00	90.00	5731.44	
8	14670.32	90.00	182.71	6200.00	-8195.77	2316.39	0.00	0.00	8160.50	PEGGY 2501-16H_BHL

## WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
PEGGY 2501-16H_SHL	0.00	0.00	0.00	40.714776	-104.040265
PEGGY 2501-16H_KOP	5615.44	40.81	2164.52	40.714887	-104.032457
PEGGY 2501-16H_SEC 01 Entry Point	6200.00	-5629.60	2434.44	40.699323	-104.031485
PEGGY 2501-16H_BHL	6200.00	-8195.77	2316.39	40.692280	-104.031912



Vertical Section at 180.85° (2600 usft/in)



WELL DETAILS: PEGGY 2501-16H

GL = 4893'

RKB = 16' @ 4909.00usft (RIG)

Plan: Design #1 (PEGGY 2501-16H/Wellbore #2)

SherryEnergy.com

Date: 10/30/2019

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## Planning Report

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well PEGGY 2501-16H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 16' @ 4909.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 16' @ 4909.00usft (RIG)
<b>Site:</b>	9N-60W-25 PEGGY 2501 PAD	<b>North Reference:</b>	True
<b>Well:</b>	PEGGY 2501-16H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #2		
<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		9N-60W-25 PEGGY 2501 PAD			
Site Position:		Northing:	1,506,564.37 usft	Latitude:	40.714775
From:	Lat/Long	Easting:	3,404,485.26 usft	Longitude:	-104.040843
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.94 °

Well		PEGGY 2501-16H				
Well Position	+N/-S	0.36 usft	Northing:	1,506,567.37 usft	Latitude:	40.714776
	+E/-W	160.12 usft	Easting:	3,404,645.36 usft	Longitude:	-104.040265
Position Uncertainty		3.28 usft	Wellhead Elevation:		Ground Level:	4,893.00 usft

<b>Wellbore</b>	Wellbore #2				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	10/30/2019	7.59	67.15	52,356.35751641

<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	180.85	

<b>Plan Survey Tool Program</b>	<b>Date</b>	10/30/2019			
<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 #2)	ISCWSA REV 2 MWD	
				Fixed:v2:standard declination	
2	1,700.00	14,670.32	Design #1 (Wellbore #2)	ISCWSA REV 2 MWD	
				Fixed:v2:standard declination	

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Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well PEGGY 2501-16H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 16' @ 4909.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 16' @ 4909.00usft (RIG)
Site:	9N-60W-25 PEGGY 2501 PAD	North Reference:	True
Well:	PEGGY 2501-16H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #2		
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	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,414.00	24.28	88.92	1,377.99	4.78	253.35	2.00	2.00	0.00	88.92	
6,062.64	24.28	88.92	5,615.44	40.81	2,164.52	0.00	0.00	0.00	0.00	
7,067.29	90.00	179.94	6,200.00	-595.51	2,428.87	9.00	6.54	9.06	90.93	
12,101.38	90.00	179.94	6,200.00	-5,629.60	2,434.44	0.00	0.00	0.00	0.00	PEGGY 2501-16H_D
12,239.97	90.00	182.71	6,200.00	-5,768.14	2,431.24	2.00	0.00	2.00	90.00	
14,670.32	90.00	182.71	6,200.00	-8,195.77	2,316.39	0.00	0.00	0.00	0.00	PEGGY 2501-16H_BI

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## Planning Report

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well PEGGY 2501-16H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 16' @ 4909.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 16' @ 4909.00usft (RIG)
<b>Site:</b>	9N-60W-25 PEGGY 2501 PAD	<b>North Reference:</b>	True
<b>Well:</b>	PEGGY 2501-16H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #2		
<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
Begin Nudge @ 200.00ft									
300.00	2.00	88.92	299.98	0.03	1.74	-0.06	2.00	2.00	0.00
400.00	4.00	88.92	399.84	0.13	6.98	-0.24	2.00	2.00	0.00
500.00	6.00	88.92	499.45	0.30	15.69	-0.53	2.00	2.00	0.00
600.00	8.00	88.92	598.70	0.53	27.87	-0.94	2.00	2.00	0.00
700.00	10.00	88.92	697.47	0.82	43.51	-1.47	2.00	2.00	0.00
800.00	12.00	88.92	795.62	1.18	62.59	-2.11	2.00	2.00	0.00
900.00	14.00	88.92	893.06	1.60	85.08	-2.87	2.00	2.00	0.00
1,000.00	16.00	88.92	989.64	2.09	110.96	-3.74	2.00	2.00	0.00
1,100.00	18.00	88.92	1,085.27	2.64	140.19	-4.72	2.00	2.00	0.00
1,200.00	20.00	88.92	1,179.82	3.26	172.74	-5.82	2.00	2.00	0.00
1,300.00	22.00	88.92	1,273.17	3.93	208.57	-7.03	2.00	2.00	0.00
1,400.00	24.00	88.92	1,365.21	4.67	247.63	-8.34	2.00	2.00	0.00
1,414.00	24.28	88.92	1,377.99	4.78	253.35	-8.53	2.00	2.00	0.00
Hold Tangent @ 1414.00ft									
1,500.00	24.28	88.92	1,456.38	5.44	288.71	-9.73	0.00	0.00	0.00
1,600.00	24.28	88.92	1,547.54	6.22	329.82	-11.11	0.00	0.00	0.00
1,700.00	24.28	88.92	1,638.69	6.99	370.94	-12.49	0.00	0.00	0.00
1,767.26	24.28	88.92	1,700.00	7.51	398.59	-13.43	0.00	0.00	0.00
9 5/8"									
1,800.00	24.28	88.92	1,729.85	7.77	412.05	-13.88	0.00	0.00	0.00
1,900.00	24.28	88.92	1,821.00	8.54	453.16	-15.26	0.00	0.00	0.00
2,000.00	24.28	88.92	1,912.16	9.32	494.27	-16.65	0.00	0.00	0.00
2,100.00	24.28	88.92	2,003.31	10.09	535.39	-18.03	0.00	0.00	0.00
2,200.00	24.28	88.92	2,094.47	10.87	576.50	-19.42	0.00	0.00	0.00
2,300.00	24.28	88.92	2,185.62	11.64	617.61	-20.80	0.00	0.00	0.00
2,400.00	24.28	88.92	2,276.78	12.42	658.72	-22.19	0.00	0.00	0.00
2,500.00	24.28	88.92	2,367.93	13.19	699.83	-23.57	0.00	0.00	0.00
2,600.00	24.28	88.92	2,459.08	13.97	740.95	-24.96	0.00	0.00	0.00
2,700.00	24.28	88.92	2,550.24	14.74	782.06	-26.34	0.00	0.00	0.00
2,800.00	24.28	88.92	2,641.39	15.52	823.17	-27.73	0.00	0.00	0.00
2,900.00	24.28	88.92	2,732.55	16.29	864.28	-29.11	0.00	0.00	0.00
3,000.00	24.28	88.92	2,823.70	17.07	905.40	-30.50	0.00	0.00	0.00
3,100.00	24.28	88.92	2,914.86	17.84	946.51	-31.88	0.00	0.00	0.00
3,200.00	24.28	88.92	3,006.01	18.62	987.62	-33.27	0.00	0.00	0.00
3,300.00	24.28	88.92	3,097.17	19.39	1,028.73	-34.65	0.00	0.00	0.00
3,400.00	24.28	88.92	3,188.32	20.17	1,069.85	-36.04	0.00	0.00	0.00
3,500.00	24.28	88.92	3,279.48	20.94	1,110.96	-37.42	0.00	0.00	0.00
3,600.00	24.28	88.92	3,370.63	21.72	1,152.07	-38.81	0.00	0.00	0.00
3,700.00	24.28	88.92	3,461.79	22.49	1,193.18	-40.19	0.00	0.00	0.00
3,800.00	24.28	88.92	3,552.94	23.27	1,234.29	-41.58	0.00	0.00	0.00
3,900.00	24.28	88.92	3,644.10	24.04	1,275.41	-42.96	0.00	0.00	0.00
4,000.00	24.28	88.92	3,735.25	24.82	1,316.52	-44.35	0.00	0.00	0.00
4,100.00	24.28	88.92	3,826.41	25.59	1,357.63	-45.73	0.00	0.00	0.00
4,200.00	24.28	88.92	3,917.56	26.37	1,398.74	-47.12	0.00	0.00	0.00
4,300.00	24.28	88.92	4,008.71	27.14	1,439.86	-48.50	0.00	0.00	0.00
4,400.00	24.28	88.92	4,099.87	27.92	1,480.97	-49.89	0.00	0.00	0.00
4,500.00	24.28	88.92	4,191.02	28.69	1,522.08	-51.27	0.00	0.00	0.00
4,600.00	24.28	88.92	4,282.18	29.47	1,563.19	-52.66	0.00	0.00	0.00
4,700.00	24.28	88.92	4,373.33	30.24	1,604.31	-54.04	0.00	0.00	0.00

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## Planning Report

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well PEGGY 2501-16H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 16' @ 4909.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 16' @ 4909.00usft (RIG)
<b>Site:</b>	9N-60W-25 PEGGY 2501 PAD	<b>North Reference:</b>	True
<b>Well:</b>	PEGGY 2501-16H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #2		
<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	24.28	88.92	4,464.49	31.02	1,645.42	-55.43	0.00	0.00	0.00
4,900.00	24.28	88.92	4,555.64	31.79	1,686.53	-56.81	0.00	0.00	0.00
5,000.00	24.28	88.92	4,646.80	32.57	1,727.64	-58.19	0.00	0.00	0.00
5,100.00	24.28	88.92	4,737.95	33.34	1,768.75	-59.58	0.00	0.00	0.00
5,200.00	24.28	88.92	4,829.11	34.12	1,809.87	-60.96	0.00	0.00	0.00
5,300.00	24.28	88.92	4,920.26	34.89	1,850.98	-62.35	0.00	0.00	0.00
5,400.00	24.28	88.92	5,011.42	35.67	1,892.09	-63.73	0.00	0.00	0.00
5,500.00	24.28	88.92	5,102.57	36.44	1,933.20	-65.12	0.00	0.00	0.00
5,600.00	24.28	88.92	5,193.73	37.22	1,974.32	-66.50	0.00	0.00	0.00
5,700.00	24.28	88.92	5,284.88	37.99	2,015.43	-67.89	0.00	0.00	0.00
5,800.00	24.28	88.92	5,376.04	38.77	2,056.54	-69.27	0.00	0.00	0.00
5,900.00	24.28	88.92	5,467.19	39.54	2,097.65	-70.66	0.00	0.00	0.00
6,000.00	24.28	88.92	5,558.34	40.32	2,138.77	-72.04	0.00	0.00	0.00
6,062.64	24.28	88.92	5,615.44	40.81	2,164.52	-72.91	0.00	0.00	0.00
KOP @ 6062.64ft :: DLS = 9°/100'									
6,100.00	24.44	97.07	5,649.49	40.00	2,179.87	-72.33	9.00	0.44	21.81
6,200.00	26.90	117.16	5,739.78	27.10	2,220.61	-60.04	9.00	2.45	20.10
6,300.00	31.64	132.89	5,827.12	-1.14	2,260.04	-32.39	9.00	4.75	15.72
6,400.00	37.83	144.42	5,909.35	-44.01	2,297.17	9.93	9.00	6.18	11.53
6,500.00	44.85	152.97	5,984.45	-100.48	2,331.11	65.89	9.00	7.02	8.55
6,600.00	52.37	159.59	6,050.57	-169.14	2,361.00	134.10	9.00	7.52	6.61
6,700.00	60.18	164.96	6,106.07	-248.31	2,386.12	212.88	9.00	7.82	5.37
6,800.00	68.19	169.54	6,149.60	-336.03	2,405.85	300.30	9.00	8.00	4.58
6,900.00	76.30	173.63	6,180.08	-430.15	2,419.71	394.21	9.00	8.12	4.09
7,000.00	84.48	177.44	6,196.76	-528.35	2,427.34	492.28	9.00	8.18	3.81
7,067.29	90.00	179.94	6,200.00	-595.51	2,428.87	559.41	9.00	8.20	3.71
End Build @ 7067.28ft									
7,100.00	90.00	179.94	6,200.00	-628.22	2,428.91	592.12	0.00	0.00	0.00
7,200.00	90.00	179.94	6,200.00	-728.22	2,429.02	692.11	0.00	0.00	0.00
7,300.00	90.00	179.94	6,200.00	-828.22	2,429.13	792.09	0.00	0.00	0.00
7,400.00	90.00	179.94	6,200.00	-928.22	2,429.24	892.08	0.00	0.00	0.00
7,500.00	90.00	179.94	6,200.00	-1,028.22	2,429.35	992.07	0.00	0.00	0.00
7,600.00	90.00	179.94	6,200.00	-1,128.22	2,429.46	1,092.06	0.00	0.00	0.00
7,700.00	90.00	179.94	6,200.00	-1,228.22	2,429.57	1,192.04	0.00	0.00	0.00
7,800.00	90.00	179.94	6,200.00	-1,328.22	2,429.68	1,292.03	0.00	0.00	0.00
7,900.00	90.00	179.94	6,200.00	-1,428.22	2,429.79	1,392.02	0.00	0.00	0.00
8,000.00	90.00	179.94	6,200.00	-1,528.22	2,429.90	1,492.01	0.00	0.00	0.00
8,100.00	90.00	179.94	6,200.00	-1,628.22	2,430.02	1,591.99	0.00	0.00	0.00
8,200.00	90.00	179.94	6,200.00	-1,728.22	2,430.13	1,691.98	0.00	0.00	0.00
8,300.00	90.00	179.94	6,200.00	-1,828.22	2,430.24	1,791.97	0.00	0.00	0.00
8,400.00	90.00	179.94	6,200.00	-1,928.22	2,430.35	1,891.95	0.00	0.00	0.00
8,500.00	90.00	179.94	6,200.00	-2,028.22	2,430.46	1,991.94	0.00	0.00	0.00
8,600.00	90.00	179.94	6,200.00	-2,128.22	2,430.57	2,091.93	0.00	0.00	0.00
8,700.00	90.00	179.94	6,200.00	-2,228.22	2,430.68	2,191.92	0.00	0.00	0.00
8,800.00	90.00	179.94	6,200.00	-2,328.22	2,430.79	2,291.90	0.00	0.00	0.00
8,900.00	90.00	179.94	6,200.00	-2,428.22	2,430.90	2,391.89	0.00	0.00	0.00
9,000.00	90.00	179.94	6,200.00	-2,528.22	2,431.01	2,491.88	0.00	0.00	0.00
9,100.00	90.00	179.94	6,200.00	-2,628.22	2,431.12	2,591.87	0.00	0.00	0.00
9,200.00	90.00	179.94	6,200.00	-2,728.22	2,431.23	2,691.85	0.00	0.00	0.00
9,300.00	90.00	179.94	6,200.00	-2,828.22	2,431.34	2,791.84	0.00	0.00	0.00
9,400.00	90.00	179.94	6,200.00	-2,928.22	2,431.45	2,891.83	0.00	0.00	0.00
9,500.00	90.00	179.94	6,200.00	-3,028.22	2,431.56	2,991.81	0.00	0.00	0.00
9,600.00	90.00	179.94	6,200.00	-3,128.22	2,431.67	3,091.80	0.00	0.00	0.00
9,700.00	90.00	179.94	6,200.00	-3,228.22	2,431.78	3,191.79	0.00	0.00	0.00

# Hewlett-Packard

## Planning Report

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well PEGGY 2501-16H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 16' @ 4909.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 16' @ 4909.00usft (RIG)
<b>Site:</b>	9N-60W-25 PEGGY 2501 PAD	<b>North Reference:</b>	True
<b>Well:</b>	PEGGY 2501-16H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #2		
<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)
9,800.00	90.00	179.94	6,200.00	-3,328.22	2,431.90	3,291.78	0.00	0.00	0.00
9,900.00	90.00	179.94	6,200.00	-3,428.22	2,432.01	3,391.76	0.00	0.00	0.00
10,000.00	90.00	179.94	6,200.00	-3,528.22	2,432.12	3,491.75	0.00	0.00	0.00
10,100.00	90.00	179.94	6,200.00	-3,628.22	2,432.23	3,591.74	0.00	0.00	0.00
10,200.00	90.00	179.94	6,200.00	-3,728.22	2,432.34	3,691.73	0.00	0.00	0.00
10,300.00	90.00	179.94	6,200.00	-3,828.22	2,432.45	3,791.71	0.00	0.00	0.00
10,400.00	90.00	179.94	6,200.00	-3,928.22	2,432.56	3,891.70	0.00	0.00	0.00
10,500.00	90.00	179.94	6,200.00	-4,028.22	2,432.67	3,991.69	0.00	0.00	0.00
10,600.00	90.00	179.94	6,200.00	-4,128.22	2,432.78	4,091.68	0.00	0.00	0.00
10,700.00	90.00	179.94	6,200.00	-4,228.22	2,432.89	4,191.66	0.00	0.00	0.00
10,800.00	90.00	179.94	6,200.00	-4,328.22	2,433.00	4,291.65	0.00	0.00	0.00
10,900.00	90.00	179.94	6,200.00	-4,428.22	2,433.11	4,391.64	0.00	0.00	0.00
11,000.00	90.00	179.94	6,200.00	-4,528.22	2,433.22	4,491.62	0.00	0.00	0.00
11,100.00	90.00	179.94	6,200.00	-4,628.22	2,433.33	4,591.61	0.00	0.00	0.00
11,200.00	90.00	179.94	6,200.00	-4,728.22	2,433.44	4,691.60	0.00	0.00	0.00
11,300.00	90.00	179.94	6,200.00	-4,828.22	2,433.55	4,791.59	0.00	0.00	0.00
11,400.00	90.00	179.94	6,200.00	-4,928.22	2,433.66	4,891.57	0.00	0.00	0.00
11,500.00	90.00	179.94	6,200.00	-5,028.22	2,433.78	4,991.56	0.00	0.00	0.00
11,600.00	90.00	179.94	6,200.00	-5,128.22	2,433.89	5,091.55	0.00	0.00	0.00
11,700.00	90.00	179.94	6,200.00	-5,228.22	2,434.00	5,191.54	0.00	0.00	0.00
11,800.00	90.00	179.94	6,200.00	-5,328.22	2,434.11	5,291.52	0.00	0.00	0.00
11,900.00	90.00	179.94	6,200.00	-5,428.22	2,434.22	5,391.51	0.00	0.00	0.00
12,000.00	90.00	179.94	6,200.00	-5,528.22	2,434.33	5,491.50	0.00	0.00	0.00
12,100.00	90.00	179.94	6,200.00	-5,628.22	2,434.44	5,591.48	0.00	0.00	0.00
12,101.38	90.00	179.94	6,200.00	-5,629.60	2,434.44	5,592.86	0.00	0.00	0.00
Begin Turn to BHL @ 12101.38ft									
12,200.00	90.00	181.91	6,200.00	-5,728.20	2,432.85	5,691.48	2.00	0.00	2.00
12,239.97	90.00	182.71	6,200.00	-5,768.14	2,431.24	5,731.44	2.00	0.00	2.00
End Turn @ 12239.97ft									
12,300.00	90.00	182.71	6,200.00	-5,828.10	2,428.41	5,791.43	0.00	0.00	0.00
12,400.00	90.00	182.71	6,200.00	-5,927.99	2,423.68	5,891.38	0.00	0.00	0.00
12,500.00	90.00	182.71	6,200.00	-6,027.88	2,418.95	5,991.33	0.00	0.00	0.00
12,600.00	90.00	182.71	6,200.00	-6,127.77	2,414.23	6,091.28	0.00	0.00	0.00
12,700.00	90.00	182.71	6,200.00	-6,227.65	2,409.50	6,191.22	0.00	0.00	0.00
12,800.00	90.00	182.71	6,200.00	-6,327.54	2,404.78	6,291.17	0.00	0.00	0.00
12,900.00	90.00	182.71	6,200.00	-6,427.43	2,400.05	6,391.12	0.00	0.00	0.00
13,000.00	90.00	182.71	6,200.00	-6,527.32	2,395.33	6,491.07	0.00	0.00	0.00
13,100.00	90.00	182.71	6,200.00	-6,627.21	2,390.60	6,591.01	0.00	0.00	0.00
13,200.00	90.00	182.71	6,200.00	-6,727.10	2,385.88	6,690.96	0.00	0.00	0.00
13,300.00	90.00	182.71	6,200.00	-6,826.98	2,381.15	6,790.91	0.00	0.00	0.00
13,400.00	90.00	182.71	6,200.00	-6,926.87	2,376.42	6,890.86	0.00	0.00	0.00
13,500.00	90.00	182.71	6,200.00	-7,026.76	2,371.70	6,990.80	0.00	0.00	0.00
13,600.00	90.00	182.71	6,200.00	-7,126.65	2,366.97	7,090.75	0.00	0.00	0.00
13,700.00	90.00	182.71	6,200.00	-7,226.54	2,362.25	7,190.70	0.00	0.00	0.00
13,800.00	90.00	182.71	6,200.00	-7,326.42	2,357.52	7,290.65	0.00	0.00	0.00
13,900.00	90.00	182.71	6,200.00	-7,426.31	2,352.80	7,390.59	0.00	0.00	0.00
14,000.00	90.00	182.71	6,200.00	-7,526.20	2,348.07	7,490.54	0.00	0.00	0.00
14,100.00	90.00	182.71	6,200.00	-7,626.09	2,343.35	7,590.49	0.00	0.00	0.00
14,200.00	90.00	182.71	6,200.00	-7,725.98	2,338.62	7,690.44	0.00	0.00	0.00
14,300.00	90.00	182.71	6,200.00	-7,825.87	2,333.89	7,790.38	0.00	0.00	0.00
14,400.00	90.00	182.71	6,200.00	-7,925.75	2,329.17	7,890.33	0.00	0.00	0.00
14,500.00	90.00	182.71	6,200.00	-8,025.64	2,324.44	7,990.28	0.00	0.00	0.00
14,600.00	90.00	182.71	6,200.00	-8,125.53	2,319.72	8,090.22	0.00	0.00	0.00
14,670.32	90.00	182.71	6,200.00	-8,195.77	2,316.39	8,160.50	0.00	0.00	0.00

# Hewlett-Packard

## Planning Report

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well PEGGY 2501-16H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 16' @ 4909.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 16' @ 4909.00usft (RIG)
<b>Site:</b>	9N-60W-25 PEGGY 2501 PAD	<b>North Reference:</b>	True
<b>Well:</b>	PEGGY 2501-16H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #2		
<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)
TD Well @ 14670.32ft									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (")	Hole Diameter (")
1,767.26	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)	
200.00	200.00	0.00	0.00	Begin Nudge @ 200.00ft
1,414.00	1,377.99	4.78	253.35	Hold Tangent @ 1414.00ft
6,062.64	5,615.44	40.81	2,164.52	KOP @ 6062.64ft :: DLS = 9°/100'
7,067.29	6,200.00	-595.51	2,428.87	End Build @ 7067.28ft
12,101.38	6,200.00	-5,629.60	2,434.44	Begin Turn to BHL @ 12101.38ft
12,239.97	6,200.00	-5,768.14	2,431.24	End Turn @ 12239.97ft
14,670.32	6,200.00	-8,195.77	2,316.39	TD Well @ 14670.32ft