

VERDAD RESOURCES

WATTENBERG FIELD

9N-60W-25 PEGGY 2501 PAD

PEGGY 2501-10H

Wellbore #2

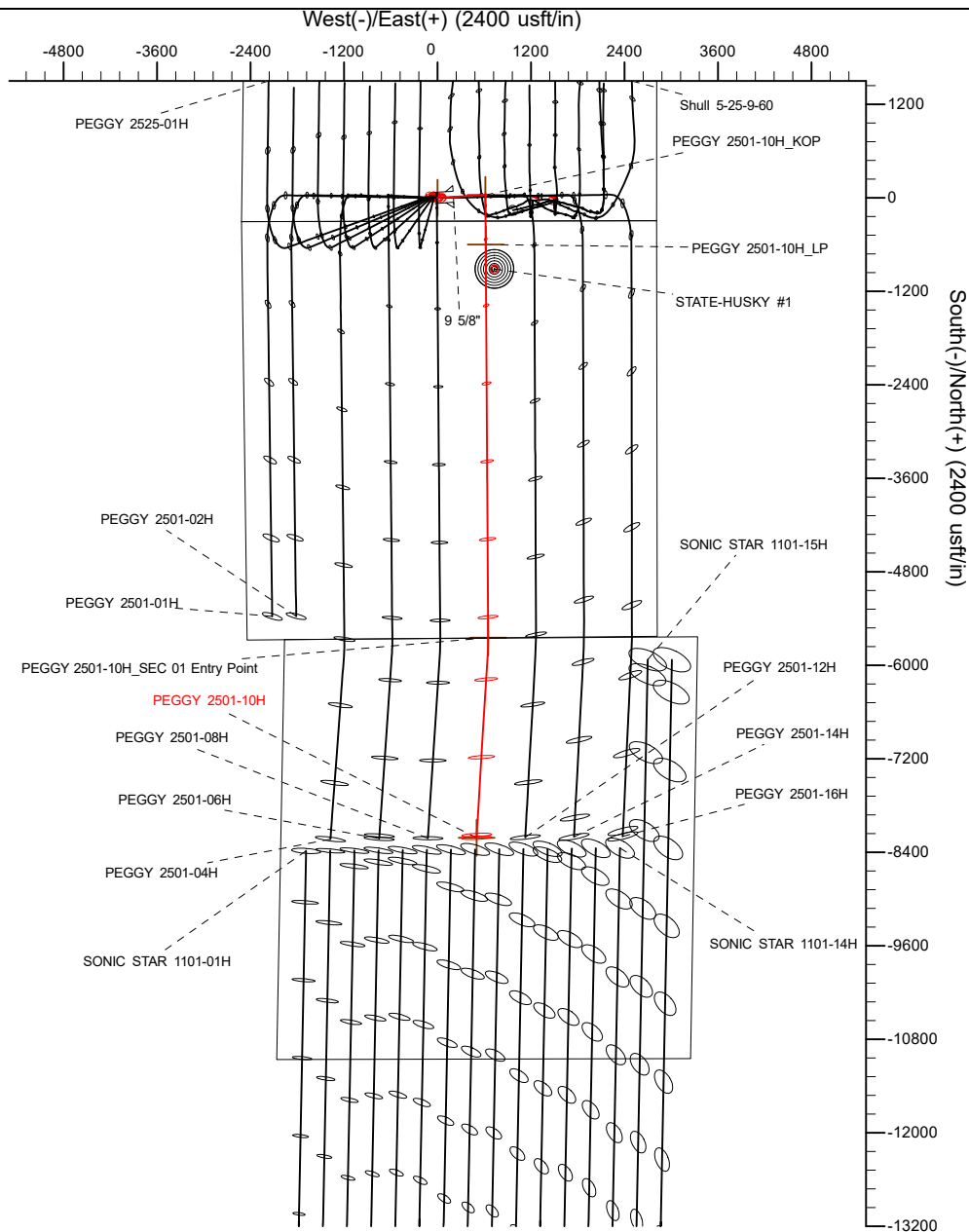
Plan: Design #1

Standard Planning Report

30 October, 2019

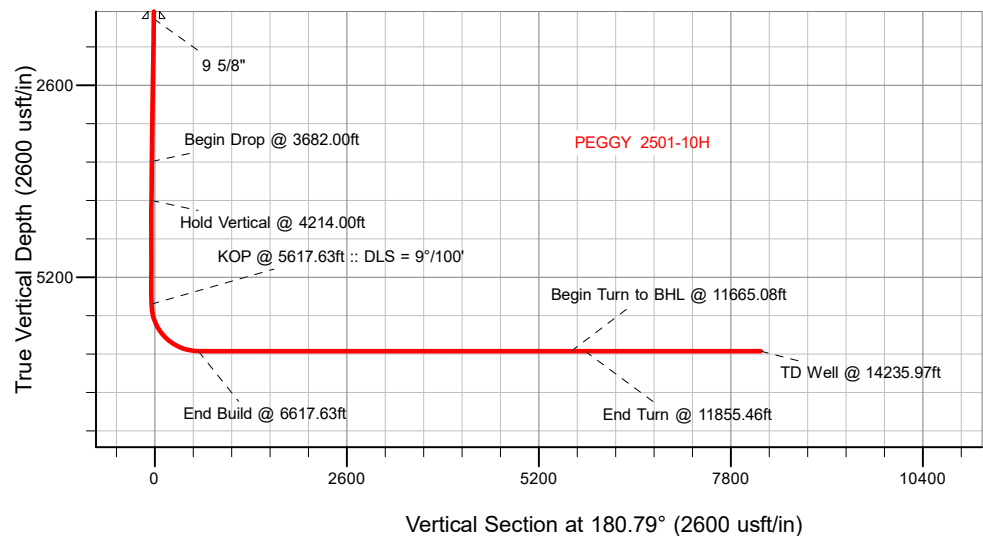
VERDAD RESOURCES

CASING DETAILS			
TVD	MD	Name	Size
1700.00	1717.42	9 5/8"	9-5/8




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	350.00	0.00	0.00	350.00	0.00	0.00	0.00	0.00	0.00	
3	882.00	10.64	86.50	878.95	3.01	49.16	2.00	86.50	-3.68	
4	3682.00	10.64	86.50	3630.81	34.57	565.18	0.00	0.00	-42.36	
5	4214.00	0.00	0.00	4159.75	37.58	614.35	2.00	180.00	-46.04	
6	5617.63	0.00	0.00	5563.38	37.58	614.35	0.00	0.00	-46.04	
7	6617.63	90.00	179.65	6200.00	-599.03	618.28	9.00	179.65	590.45	
8	11665.08	90.00	179.65	6200.00	-5646.39	649.47	0.00	0.00	5636.90	PEGGY 2501-10H_SEC 01 Entry Point
9	11855.46	90.00	183.45	6200.00	-5836.66	644.33	2.00	90.00	5827.22	
10	14235.97	90.00	183.45	6200.00	-8212.85	500.93	0.00	0.00	8205.16	PEGGY 2501-10H_BHL

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
PEGGY 2501-10H_SHL	0.00	0.00	0.00	40.714775	-104.040481
PEGGY 2501-10H_KOP	5563.38	37.58	614.35	40.714878	-104.038265
PEGGY 2501-10H_SEC 01 Entry Point	6200.00	-5646.39	649.47	40.699277	-104.038139
PEGGY 2501-10H_BHL	6200.00	-8212.85	500.93	40.692233	-104.038675



SHL	KOP	LP	SEC 01 Entry	BHL
300' FSL	340' FSL	300' FNL	0' FSL	2565' FNL
2512' FWL	2200' FEL	2195 FEL	2170' FEL	2512' FWL

 <p> M Azimuths to True North Magnetic North: 7.59° Magnetic Field Strength: 52356.3snT Dip Angle: 67.15° Date: 10/30/2019 Model: IGRF2015 </p>	WELL DETAILS: PEGGY 2501-10H
	GL = 4893'
	RKB = 16' @ 4909.00usft (RIG)
	Plan: Design #1 (PEGGY 2501-10H/Wellbore #2)
	SherrylEnergy.com Date: 10/30/2019

Hewlett-Packard

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well PEGGY 2501-10H
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 2501-10H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #2		
Design:	Design #1		

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-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 2501-10H			
Well Position	+N/-S	0.21 usft	Northing:	1,506,566.23 usft
	+E/-W	100.13 usft	Easting:	3,404,585.38 usft
Position Uncertainty		3.28 usft	Wellhead Elevation:	Ground Level: 4,893.00 usft

Wellbore	Wellbore #2				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/30/2019	7.59	67.15	52,356.33600862

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	180.79

Plan Survey Tool Program	Date	10/30/2019		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	1,700.00	Design #1 (Wellbore #2)	ISCWSA REV 2 MWD Fixed:v2:standard declination
2	1,700.00	14,235.97	Design #1 (Wellbore #2)	ISCWSA REV 2 MWD Fixed:v2:standard declination

Hewlett-Packard
Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well PEGGY 2501-10H
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 2501-10H	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	
350.00	0.00	0.00	350.00	0.00	0.00	0.00	0.00	0.00	0.00	
882.00	10.64	86.50	878.95	3.01	49.16	2.00	2.00	0.00	86.50	
3,682.00	10.64	86.50	3,630.81	34.57	565.18	0.00	0.00	0.00	0.00	
4,214.00	0.00	0.00	4,159.75	37.58	614.35	2.00	-2.00	0.00	180.00	
5,617.63	0.00	0.00	5,563.38	37.58	614.35	0.00	0.00	0.00	0.00	
6,617.63	90.00	179.65	6,200.00	-599.03	618.28	9.00	9.00	17.96	179.65	
11,665.08	90.00	179.65	6,200.00	-5,646.39	649.47	0.00	0.00	0.00	0.00	PEGGY 2501-10H_D
11,855.46	90.00	183.45	6,200.00	-5,836.66	644.33	2.00	0.00	2.00	90.00	
14,235.97	90.00	183.45	6,200.00	-8,212.85	500.93	0.00	0.00	0.00	0.00	PEGGY 2501-10H_BI

Hewlett-Packard

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well PEGGY 2501-10H
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 2501-10H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #2		
Design:	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
350.00	0.00	0.00	350.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 350.00ft									
400.00	1.00	86.50	400.00	0.03	0.44	-0.03	2.00	2.00	0.00
500.00	3.00	86.50	499.93	0.24	3.92	-0.29	2.00	2.00	0.00
600.00	5.00	86.50	599.68	0.67	10.88	-0.82	2.00	2.00	0.00
700.00	7.00	86.50	699.13	1.30	21.31	-1.60	2.00	2.00	0.00
800.00	9.00	86.50	798.15	2.15	35.20	-2.64	2.00	2.00	0.00
882.00	10.64	86.50	878.95	3.01	49.16	-3.68	2.00	2.00	0.00
Hold Tangent @ 882.00ft									
900.00	10.64	86.50	896.64	3.21	52.48	-3.93	0.00	0.00	0.00
1,000.00	10.64	86.50	994.92	4.34	70.91	-5.31	0.00	0.00	0.00
1,100.00	10.64	86.50	1,093.20	5.46	89.34	-6.70	0.00	0.00	0.00
1,200.00	10.64	86.50	1,191.48	6.59	107.77	-8.08	0.00	0.00	0.00
1,300.00	10.64	86.50	1,289.76	7.72	126.20	-9.46	0.00	0.00	0.00
1,400.00	10.64	86.50	1,388.04	8.85	144.63	-10.84	0.00	0.00	0.00
1,500.00	10.64	86.50	1,486.32	9.97	163.06	-12.22	0.00	0.00	0.00
1,600.00	10.64	86.50	1,584.60	11.10	181.49	-13.60	0.00	0.00	0.00
1,700.00	10.64	86.50	1,682.88	12.23	199.92	-14.98	0.00	0.00	0.00
1,717.42	10.64	86.50	1,700.00	12.42	203.12	-15.22	0.00	0.00	0.00
9 5/8"									
1,800.00	10.64	86.50	1,781.16	13.35	218.34	-16.36	0.00	0.00	0.00
1,900.00	10.64	86.50	1,879.44	14.48	236.77	-17.74	0.00	0.00	0.00
2,000.00	10.64	86.50	1,977.73	15.61	255.20	-19.13	0.00	0.00	0.00
2,100.00	10.64	86.50	2,076.01	16.74	273.63	-20.51	0.00	0.00	0.00
2,200.00	10.64	86.50	2,174.29	17.86	292.06	-21.89	0.00	0.00	0.00
2,300.00	10.64	86.50	2,272.57	18.99	310.49	-23.27	0.00	0.00	0.00
2,400.00	10.64	86.50	2,370.85	20.12	328.92	-24.65	0.00	0.00	0.00
2,500.00	10.64	86.50	2,469.13	21.24	347.35	-26.03	0.00	0.00	0.00
2,600.00	10.64	86.50	2,567.41	22.37	365.78	-27.41	0.00	0.00	0.00
2,700.00	10.64	86.50	2,665.69	23.50	384.21	-28.79	0.00	0.00	0.00
2,800.00	10.64	86.50	2,763.97	24.63	402.64	-30.18	0.00	0.00	0.00
2,900.00	10.64	86.50	2,862.25	25.75	421.07	-31.56	0.00	0.00	0.00
3,000.00	10.64	86.50	2,960.53	26.88	439.50	-32.94	0.00	0.00	0.00
3,100.00	10.64	86.50	3,058.81	28.01	457.93	-34.32	0.00	0.00	0.00
3,200.00	10.64	86.50	3,157.09	29.14	476.35	-35.70	0.00	0.00	0.00
3,300.00	10.64	86.50	3,255.37	30.26	494.78	-37.08	0.00	0.00	0.00
3,400.00	10.64	86.50	3,353.65	31.39	513.21	-38.46	0.00	0.00	0.00
3,500.00	10.64	86.50	3,451.94	32.52	531.64	-39.84	0.00	0.00	0.00
3,600.00	10.64	86.50	3,550.22	33.64	550.07	-41.22	0.00	0.00	0.00
3,682.00	10.64	86.50	3,630.81	34.57	565.18	-42.36	0.00	0.00	0.00
Begin Drop @ 3682.00ft									
3,700.00	10.28	86.50	3,648.51	34.77	568.45	-42.60	2.00	-2.00	0.00
3,800.00	8.28	86.50	3,747.19	35.75	584.54	-43.81	2.00	-2.00	0.00
3,900.00	6.28	86.50	3,846.38	36.53	597.19	-44.76	2.00	-2.00	0.00
4,000.00	4.28	86.50	3,945.95	37.09	606.37	-45.44	2.00	-2.00	0.00
4,100.00	2.28	86.50	4,045.78	37.44	612.08	-45.87	2.00	-2.00	0.00
4,200.00	0.28	86.50	4,145.75	37.57	614.31	-46.04	2.00	-2.00	0.00
4,214.00	0.00	0.00	4,159.75	37.58	614.35	-46.04	2.00	-2.00	0.00
Hold Vertical @ 4214.00ft									
4,300.00	0.00	0.00	4,245.75	37.58	614.35	-46.04	0.00	0.00	0.00

Hewlett-Packard

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well PEGGY 2501-10H
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 2501-10H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #2		
Design:	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)
4,400.00	0.00	0.00	4,345.75	37.58	614.35	-46.04	0.00	0.00	0.00
4,500.00	0.00	0.00	4,445.75	37.58	614.35	-46.04	0.00	0.00	0.00
4,600.00	0.00	0.00	4,545.75	37.58	614.35	-46.04	0.00	0.00	0.00
4,700.00	0.00	0.00	4,645.75	37.58	614.35	-46.04	0.00	0.00	0.00
4,800.00	0.00	0.00	4,745.75	37.58	614.35	-46.04	0.00	0.00	0.00
4,900.00	0.00	0.00	4,845.75	37.58	614.35	-46.04	0.00	0.00	0.00
5,000.00	0.00	0.00	4,945.75	37.58	614.35	-46.04	0.00	0.00	0.00
5,100.00	0.00	0.00	5,045.75	37.58	614.35	-46.04	0.00	0.00	0.00
5,200.00	0.00	0.00	5,145.75	37.58	614.35	-46.04	0.00	0.00	0.00
5,300.00	0.00	0.00	5,245.75	37.58	614.35	-46.04	0.00	0.00	0.00
5,400.00	0.00	0.00	5,345.75	37.58	614.35	-46.04	0.00	0.00	0.00
5,500.00	0.00	0.00	5,445.75	37.58	614.35	-46.04	0.00	0.00	0.00
5,600.00	0.00	0.00	5,545.75	37.58	614.35	-46.04	0.00	0.00	0.00
5,617.63	0.00	0.00	5,563.38	37.58	614.35	-46.04	0.00	0.00	0.00
KOP @ 5617.63ft :: DLS = 9°/100'									
5,700.00	7.41	179.65	5,645.52	32.25	614.38	-40.72	9.00	9.00	0.00
5,800.00	16.41	179.65	5,743.27	11.63	614.51	-20.10	9.00	9.00	0.00
5,900.00	25.41	179.65	5,836.59	-24.03	614.73	15.55	9.00	9.00	0.00
6,000.00	34.41	179.65	5,923.18	-73.84	615.04	65.36	9.00	9.00	0.00
6,100.00	43.41	179.65	6,000.90	-136.59	615.42	128.09	9.00	9.00	0.00
6,200.00	52.41	179.65	6,067.86	-210.73	615.88	202.21	9.00	9.00	0.00
6,300.00	61.41	179.65	6,122.40	-294.42	616.40	285.90	9.00	9.00	0.00
6,400.00	70.41	179.65	6,163.17	-385.62	616.96	377.08	9.00	9.00	0.00
6,500.00	79.41	179.65	6,189.17	-482.07	617.56	473.51	9.00	9.00	0.00
6,600.00	88.41	179.65	6,199.76	-581.41	618.17	572.83	9.00	9.00	0.00
6,617.63	90.00	179.65	6,200.00	-599.03	618.28	590.45	9.00	9.00	0.00
End Build @ 6617.63ft									
6,700.00	90.00	179.65	6,200.00	-681.40	618.79	672.80	0.00	0.00	0.00
6,800.00	90.00	179.65	6,200.00	-781.40	619.41	772.78	0.00	0.00	0.00
6,900.00	90.00	179.65	6,200.00	-881.40	620.03	872.76	0.00	0.00	0.00
7,000.00	90.00	179.65	6,200.00	-981.40	620.64	972.74	0.00	0.00	0.00
7,100.00	90.00	179.65	6,200.00	-1,081.39	621.26	1,072.72	0.00	0.00	0.00
7,200.00	90.00	179.65	6,200.00	-1,181.39	621.88	1,172.70	0.00	0.00	0.00
7,300.00	90.00	179.65	6,200.00	-1,281.39	622.50	1,272.68	0.00	0.00	0.00
7,400.00	90.00	179.65	6,200.00	-1,381.39	623.12	1,372.66	0.00	0.00	0.00
7,500.00	90.00	179.65	6,200.00	-1,481.39	623.73	1,472.65	0.00	0.00	0.00
7,600.00	90.00	179.65	6,200.00	-1,581.38	624.35	1,572.63	0.00	0.00	0.00
7,700.00	90.00	179.65	6,200.00	-1,681.38	624.97	1,672.61	0.00	0.00	0.00
7,800.00	90.00	179.65	6,200.00	-1,781.38	625.59	1,772.59	0.00	0.00	0.00
7,900.00	90.00	179.65	6,200.00	-1,881.38	626.21	1,872.57	0.00	0.00	0.00
8,000.00	90.00	179.65	6,200.00	-1,981.38	626.82	1,972.55	0.00	0.00	0.00
8,100.00	90.00	179.65	6,200.00	-2,081.37	627.44	2,072.53	0.00	0.00	0.00
8,200.00	90.00	179.65	6,200.00	-2,181.37	628.06	2,172.51	0.00	0.00	0.00
8,300.00	90.00	179.65	6,200.00	-2,281.37	628.68	2,272.49	0.00	0.00	0.00
8,400.00	90.00	179.65	6,200.00	-2,381.37	629.30	2,372.47	0.00	0.00	0.00
8,500.00	90.00	179.65	6,200.00	-2,481.37	629.91	2,472.45	0.00	0.00	0.00
8,600.00	90.00	179.65	6,200.00	-2,581.36	630.53	2,572.43	0.00	0.00	0.00
8,700.00	90.00	179.65	6,200.00	-2,681.36	631.15	2,672.41	0.00	0.00	0.00
8,800.00	90.00	179.65	6,200.00	-2,781.36	631.77	2,772.39	0.00	0.00	0.00
8,900.00	90.00	179.65	6,200.00	-2,881.36	632.39	2,872.37	0.00	0.00	0.00
9,000.00	90.00	179.65	6,200.00	-2,981.36	633.00	2,972.35	0.00	0.00	0.00
9,100.00	90.00	179.65	6,200.00	-3,081.36	633.62	3,072.33	0.00	0.00	0.00
9,200.00	90.00	179.65	6,200.00	-3,181.35	634.24	3,172.31	0.00	0.00	0.00

Hewlett-Packard

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well PEGGY 2501-10H
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 2501-10H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #2		
Design:	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)	
9,300.00	90.00	179.65	6,200.00	-3,281.35	634.86	3,272.29	0.00	0.00	0.00	
9,400.00	90.00	179.65	6,200.00	-3,381.35	635.48	3,372.27	0.00	0.00	0.00	
9,500.00	90.00	179.65	6,200.00	-3,481.35	636.09	3,472.25	0.00	0.00	0.00	
9,600.00	90.00	179.65	6,200.00	-3,581.35	636.71	3,572.23	0.00	0.00	0.00	
9,700.00	90.00	179.65	6,200.00	-3,681.34	637.33	3,672.21	0.00	0.00	0.00	
9,800.00	90.00	179.65	6,200.00	-3,781.34	637.95	3,772.19	0.00	0.00	0.00	
9,900.00	90.00	179.65	6,200.00	-3,881.34	638.57	3,872.17	0.00	0.00	0.00	
10,000.00	90.00	179.65	6,200.00	-3,981.34	639.18	3,972.15	0.00	0.00	0.00	
10,100.00	90.00	179.65	6,200.00	-4,081.34	639.80	4,072.13	0.00	0.00	0.00	
10,200.00	90.00	179.65	6,200.00	-4,181.33	640.42	4,172.11	0.00	0.00	0.00	
10,300.00	90.00	179.65	6,200.00	-4,281.33	641.04	4,272.09	0.00	0.00	0.00	
10,400.00	90.00	179.65	6,200.00	-4,381.33	641.66	4,372.07	0.00	0.00	0.00	
10,500.00	90.00	179.65	6,200.00	-4,481.33	642.27	4,472.05	0.00	0.00	0.00	
10,600.00	90.00	179.65	6,200.00	-4,581.33	642.89	4,572.03	0.00	0.00	0.00	
10,700.00	90.00	179.65	6,200.00	-4,681.32	643.51	4,672.01	0.00	0.00	0.00	
10,800.00	90.00	179.65	6,200.00	-4,781.32	644.13	4,771.99	0.00	0.00	0.00	
10,900.00	90.00	179.65	6,200.00	-4,881.32	644.75	4,871.97	0.00	0.00	0.00	
11,000.00	90.00	179.65	6,200.00	-4,981.32	645.36	4,971.95	0.00	0.00	0.00	
11,100.00	90.00	179.65	6,200.00	-5,081.32	645.98	5,071.93	0.00	0.00	0.00	
11,200.00	90.00	179.65	6,200.00	-5,181.32	646.60	5,171.91	0.00	0.00	0.00	
11,300.00	90.00	179.65	6,200.00	-5,281.31	647.22	5,271.89	0.00	0.00	0.00	
11,400.00	90.00	179.65	6,200.00	-5,381.31	647.84	5,371.87	0.00	0.00	0.00	
11,500.00	90.00	179.65	6,200.00	-5,481.31	648.45	5,471.85	0.00	0.00	0.00	
11,600.00	90.00	179.65	6,200.00	-5,581.31	649.07	5,571.83	0.00	0.00	0.00	
11,665.08	90.00	179.65	6,200.00	-5,646.39	649.47	5,636.90	0.00	0.00	0.00	
Begin Turn to BHL @ 11665.08ft										
11,700.00	90.00	180.34	6,200.00	-5,681.31	649.48	5,671.81	2.00	0.00	2.00	
11,800.00	90.00	182.34	6,200.00	-5,781.27	647.13	5,771.80	2.00	0.00	2.00	
11,855.46	90.00	183.45	6,200.00	-5,836.66	644.33	5,827.22	2.00	0.00	2.00	
End Turn @ 11855.46ft										
11,900.00	90.00	183.45	6,200.00	-5,881.12	641.64	5,871.71	0.00	0.00	0.00	
12,000.00	90.00	183.45	6,200.00	-5,980.94	635.62	5,971.61	0.00	0.00	0.00	
12,100.00	90.00	183.45	6,200.00	-6,080.76	629.60	6,071.50	0.00	0.00	0.00	
12,200.00	90.00	183.45	6,200.00	-6,180.58	623.57	6,171.39	0.00	0.00	0.00	
12,300.00	90.00	183.45	6,200.00	-6,280.39	617.55	6,271.28	0.00	0.00	0.00	
12,400.00	90.00	183.45	6,200.00	-6,380.21	611.53	6,371.17	0.00	0.00	0.00	
12,500.00	90.00	183.45	6,200.00	-6,480.03	605.50	6,471.07	0.00	0.00	0.00	
12,600.00	90.00	183.45	6,200.00	-6,579.85	599.48	6,570.96	0.00	0.00	0.00	
12,700.00	90.00	183.45	6,200.00	-6,679.67	593.45	6,670.85	0.00	0.00	0.00	
12,800.00	90.00	183.45	6,200.00	-6,779.49	587.43	6,770.74	0.00	0.00	0.00	
12,900.00	90.00	183.45	6,200.00	-6,879.30	581.41	6,870.63	0.00	0.00	0.00	
13,000.00	90.00	183.45	6,200.00	-6,979.12	575.38	6,970.53	0.00	0.00	0.00	
13,100.00	90.00	183.45	6,200.00	-7,078.94	569.36	7,070.42	0.00	0.00	0.00	
13,200.00	90.00	183.45	6,200.00	-7,178.76	563.34	7,170.31	0.00	0.00	0.00	
13,300.00	90.00	183.45	6,200.00	-7,278.58	557.31	7,270.20	0.00	0.00	0.00	
13,400.00	90.00	183.45	6,200.00	-7,378.40	551.29	7,370.09	0.00	0.00	0.00	
13,500.00	90.00	183.45	6,200.00	-7,478.22	545.26	7,469.99	0.00	0.00	0.00	
13,600.00	90.00	183.45	6,200.00	-7,578.03	539.24	7,569.88	0.00	0.00	0.00	
13,700.00	90.00	183.45	6,200.00	-7,677.85	533.22	7,669.77	0.00	0.00	0.00	
13,800.00	90.00	183.45	6,200.00	-7,777.67	527.19	7,769.66	0.00	0.00	0.00	
13,900.00	90.00	183.45	6,200.00	-7,877.49	521.17	7,869.55	0.00	0.00	0.00	
14,000.00	90.00	183.45	6,200.00	-7,977.31	515.15	7,969.45	0.00	0.00	0.00	
14,100.00	90.00	183.45	6,200.00	-8,077.13	509.12	8,069.34	0.00	0.00	0.00	
14,200.00	90.00	183.45	6,200.00	-8,176.94	503.10	8,169.23	0.00	0.00	0.00	

Hewlett-Packard

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well PEGGY 2501-10H
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 2501-10H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #2		
Design:	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)
14,235.97	90.00	183.45	6,200.00	-8,212.85	500.93	8,205.16	0.00	0.00	0.00
TD Well @ 14235.97ft									

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
1,717.42	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)	
350.00	350.00	0.00	0.00	Begin Nudge @ 350.00ft
882.00	878.95	3.01	49.16	Hold Tangent @ 882.00ft
3,682.00	3,630.81	34.57	565.18	Begin Drop @ 3682.00ft
4,214.00	4,159.75	37.58	614.35	Hold Vertical @ 4214.00ft
5,617.63	5,563.38	37.58	614.35	KOP @ 5617.63ft :: DLS = 9°/100'
6,617.63	6,200.00	-599.03	618.28	End Build @ 6617.63ft
11,665.08	6,200.00	-5,646.39	649.47	Begin Turn to BHL @ 11665.08ft
11,855.46	6,200.00	-5,836.66	644.33	End Turn @ 11855.46ft
14,235.97	6,200.00	-8,212.85	500.93	TD Well @ 14235.97ft