

VERDAD RESOURCES

**WATTENBERG FIELD
9N-60W-25 PEGGY PAD
PEGGY 2501-06H**

Wellbore #1

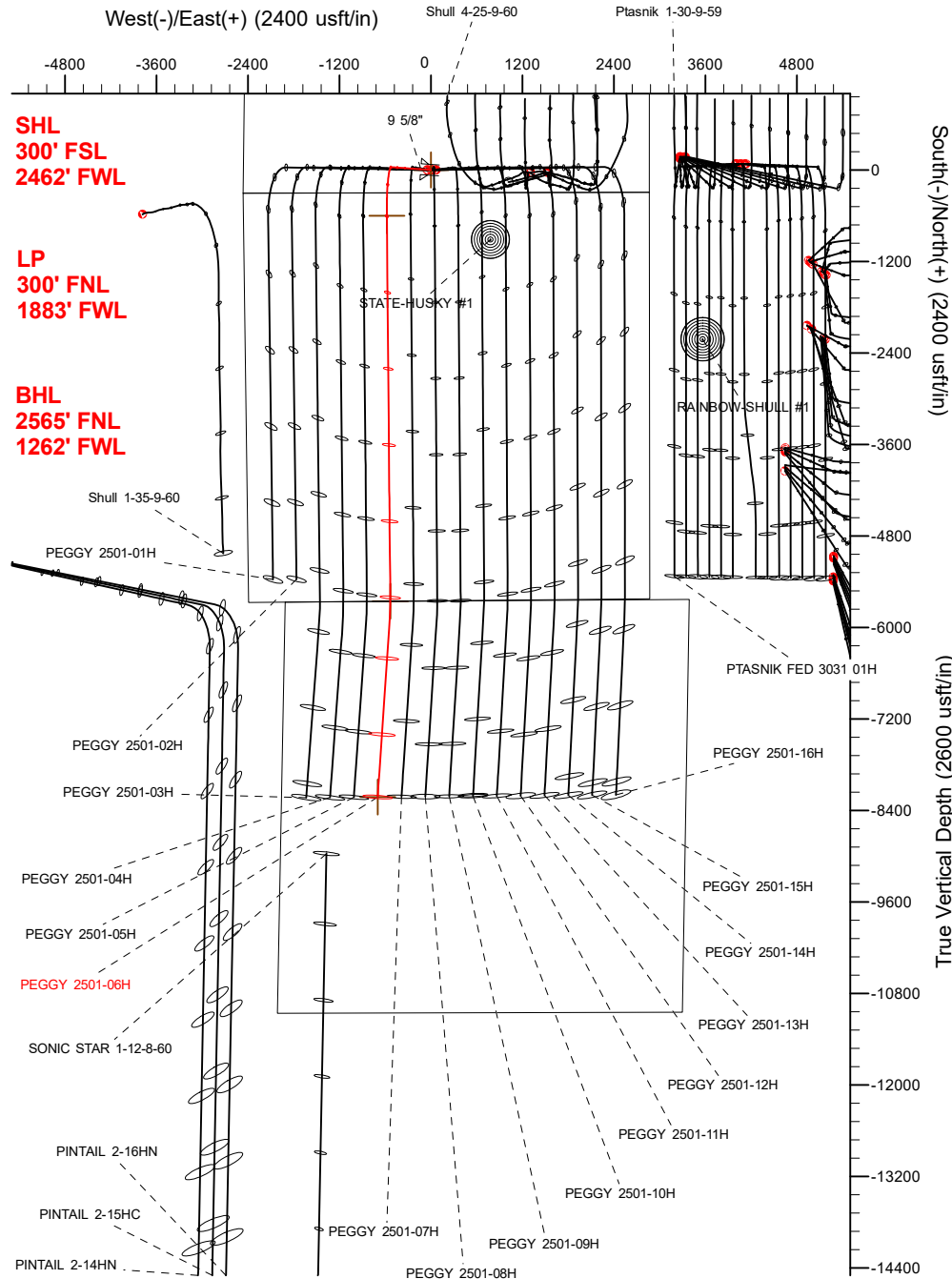
Plan: Design #1

Standard Planning Report

25 February, 2018

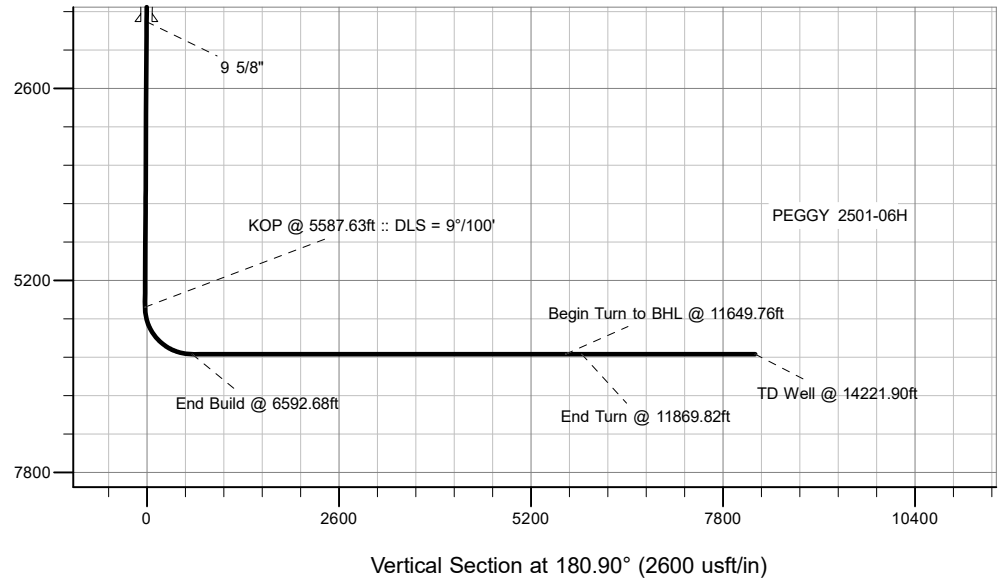
Project: WATTENBERG FIELD
Site: 9N-60W-25 PEGGY PAD
Well: PEGGY 2501-06H
Wellbore: Wellbore #1
Design: Design #1


VERDAD RESOURCES



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	
3	538.50	5.77	274.00	538.01	1.01	-14.48	2.00	274.00	-0.78	
4	5587.63	5.77	274.00	5561.56	36.42	-520.86	0.00	0.00	-28.24	
5	6592.68	90.00	179.48	6200.00	-600.74	-579.37	9.00	-94.50	609.76	
6	11649.76	90.00	179.48	6200.00	-5657.61	-533.32	0.00	0.00	5665.29	PEGGY 2501-06H_Deflection
7	11869.82	90.00	183.88	6200.00	-5877.53	-539.77	2.00	90.00	5885.28	
8	14221.90	90.00	183.88	6200.00	-8224.21	-698.90	0.00	0.00	8234.17	PEGGY 2501-06H_BHL

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
PEGGY 2501-06H_SHL	0.00	0.00	0.00	40.714775	-104.040662
PEGGY 2501-06H_BHL	6200.00	-8224.21	-698.90	40.692201	-104.043182



	Azimuths to True North		WELL DETAILS: PEGGY 2501-06H	
	Magnetic North: 7.77°		GL = 4893'	
	Magnetic Field Strength: 52548.6snT		RKB = 20' @ 4913.0usft (RIG)	
	Dip Angle: 67.20°		Plan: Design #1 (PEGGY 2501-06H/Wellbore #1)	
Date: 2/25/2018		Created By:		Date: 2/25/2018
Model: IGRF2015		Reviewed:		Date:

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Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well PEGGY 2501-06H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 4913.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 4913.00usft (RIG)
Site:	9N-60W-25 PEGGY PAD	North Reference:	True
Well:	PEGGY 2501-06H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
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 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 2501-06H			
Well Position	+N/-S	0.10 usft	Northing:	1,506,565.30 usft
	+E/-W	50.01 usft	Easting:	3,404,535.26 usft
Position Uncertainty		3.28 usft	Wellhead Elevation:	Latitude: 40.714775
				Longitude: -104.040662
				Ground Level: 4,893.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/25/2018	7.77	67.20	52,548.63788952

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	180.90

Plan Survey Tool Program	Date	2/25/2018		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	1,700.00	Design #1 (Wellbore #1)	ISCWSA REV 2 MWD
				Fixed:v2:standard declination
2	1,700.00	14,221.90	Design #1 (Wellbore #1)	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 2501-06H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 4913.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 4913.00usft (RIG)
Site:	9N-60W-25 PEGGY PAD	North Reference:	True
Well:	PEGGY 2501-06H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
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	
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00	
538.50	5.77	274.00	538.01	1.01	-14.48	2.00	2.00	0.00	274.00	
5,587.63	5.77	274.00	5,561.56	36.42	-520.86	0.00	0.00	0.00	0.00	
6,592.68	90.00	179.48	6,200.00	-600.74	-579.37	9.00	8.38	-9.40	-94.50	
11,649.76	90.00	179.48	6,200.00	-5,657.61	-533.32	0.00	0.00	0.00	0.00	PEGGY 2501-06H_D
11,869.82	90.00	183.88	6,200.00	-5,877.53	-539.77	2.00	0.00	2.00	90.00	
14,221.90	90.00	183.88	6,200.00	-8,224.21	-698.90	0.00	0.00	0.00	0.00	PEGGY 2501-06H_BI

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Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well PEGGY 2501-06H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 4913.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 4913.00usft (RIG)
Site:	9N-60W-25 PEGGY PAD	North Reference:	True
Well:	PEGGY 2501-06H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
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
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Tangent @ 250.00ft									
300.00	1.00	274.00	300.00	0.03	-0.44	-0.02	2.00	2.00	0.00
400.00	3.00	274.00	399.93	0.27	-3.92	-0.21	2.00	2.00	0.00
500.00	5.00	274.00	499.68	0.76	-10.87	-0.59	2.00	2.00	0.00
538.50	5.77	274.00	538.01	1.01	-14.48	-0.78	2.00	2.00	0.00
End Tangent @ 538.50ft									
600.00	5.77	274.00	599.20	1.44	-20.65	-1.12	0.00	0.00	0.00
700.00	5.77	274.00	698.69	2.15	-30.68	-1.66	0.00	0.00	0.00
800.00	5.77	274.00	798.19	2.85	-40.71	-2.21	0.00	0.00	0.00
900.00	5.77	274.00	897.68	3.55	-50.73	-2.75	0.00	0.00	0.00
1,000.00	5.77	274.00	997.17	4.25	-60.76	-3.29	0.00	0.00	0.00
1,100.00	5.77	274.00	1,096.67	4.95	-70.79	-3.84	0.00	0.00	0.00
1,200.00	5.77	274.00	1,196.16	5.65	-80.82	-4.38	0.00	0.00	0.00
1,300.00	5.77	274.00	1,295.65	6.35	-90.85	-4.93	0.00	0.00	0.00
1,400.00	5.77	274.00	1,395.15	7.05	-100.88	-5.47	0.00	0.00	0.00
1,500.00	5.77	274.00	1,494.64	7.76	-110.91	-6.01	0.00	0.00	0.00
1,600.00	5.77	274.00	1,594.13	8.46	-120.94	-6.56	0.00	0.00	0.00
1,700.00	5.77	274.00	1,693.63	9.16	-130.97	-7.10	0.00	0.00	0.00
1,706.40	5.77	274.00	1,700.00	9.20	-131.61	-7.13	0.00	0.00	0.00
9 5/8"									
1,800.00	5.77	274.00	1,793.12	9.86	-141.00	-7.64	0.00	0.00	0.00
1,900.00	5.77	274.00	1,892.61	10.56	-151.02	-8.19	0.00	0.00	0.00
2,000.00	5.77	274.00	1,992.11	11.26	-161.05	-8.73	0.00	0.00	0.00
2,100.00	5.77	274.00	2,091.60	11.96	-171.08	-9.27	0.00	0.00	0.00
2,200.00	5.77	274.00	2,191.09	12.66	-181.11	-9.82	0.00	0.00	0.00
2,300.00	5.77	274.00	2,290.59	13.37	-191.14	-10.36	0.00	0.00	0.00
2,400.00	5.77	274.00	2,390.08	14.07	-201.17	-10.91	0.00	0.00	0.00
2,500.00	5.77	274.00	2,489.57	14.77	-211.20	-11.45	0.00	0.00	0.00
2,600.00	5.77	274.00	2,589.07	15.47	-221.23	-11.99	0.00	0.00	0.00
2,700.00	5.77	274.00	2,688.56	16.17	-231.26	-12.54	0.00	0.00	0.00
2,800.00	5.77	274.00	2,788.05	16.87	-241.29	-13.08	0.00	0.00	0.00
2,900.00	5.77	274.00	2,887.55	17.57	-251.32	-13.62	0.00	0.00	0.00
3,000.00	5.77	274.00	2,987.04	18.27	-261.34	-14.17	0.00	0.00	0.00
3,100.00	5.77	274.00	3,086.53	18.98	-271.37	-14.71	0.00	0.00	0.00
3,200.00	5.77	274.00	3,186.03	19.68	-281.40	-15.26	0.00	0.00	0.00
3,300.00	5.77	274.00	3,285.52	20.38	-291.43	-15.80	0.00	0.00	0.00
3,400.00	5.77	274.00	3,385.01	21.08	-301.46	-16.34	0.00	0.00	0.00
3,500.00	5.77	274.00	3,484.51	21.78	-311.49	-16.89	0.00	0.00	0.00
3,600.00	5.77	274.00	3,584.00	22.48	-321.52	-17.43	0.00	0.00	0.00
3,700.00	5.77	274.00	3,683.49	23.18	-331.55	-17.97	0.00	0.00	0.00
3,800.00	5.77	274.00	3,782.99	23.89	-341.58	-18.52	0.00	0.00	0.00
3,900.00	5.77	274.00	3,882.48	24.59	-351.61	-19.06	0.00	0.00	0.00
4,000.00	5.77	274.00	3,981.97	25.29	-361.63	-19.60	0.00	0.00	0.00
4,100.00	5.77	274.00	4,081.47	25.99	-371.66	-20.15	0.00	0.00	0.00
4,200.00	5.77	274.00	4,180.96	26.69	-381.69	-20.69	0.00	0.00	0.00
4,300.00	5.77	274.00	4,280.46	27.39	-391.72	-21.24	0.00	0.00	0.00
4,400.00	5.77	274.00	4,379.95	28.09	-401.75	-21.78	0.00	0.00	0.00
4,500.00	5.77	274.00	4,479.44	28.79	-411.78	-22.32	0.00	0.00	0.00
4,600.00	5.77	274.00	4,578.94	29.50	-421.81	-22.87	0.00	0.00	0.00

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Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well PEGGY 2501-06H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 4913.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 4913.00usft (RIG)
Site:	9N-60W-25 PEGGY PAD	North Reference:	True
Well:	PEGGY 2501-06H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
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)
4,700.00	5.77	274.00	4,678.43	30.20	-431.84	-23.41	0.00	0.00	0.00
4,800.00	5.77	274.00	4,777.92	30.90	-441.87	-23.95	0.00	0.00	0.00
4,900.00	5.77	274.00	4,877.42	31.60	-451.90	-24.50	0.00	0.00	0.00
5,000.00	5.77	274.00	4,976.91	32.30	-461.93	-25.04	0.00	0.00	0.00
5,100.00	5.77	274.00	5,076.40	33.00	-471.95	-25.59	0.00	0.00	0.00
5,200.00	5.77	274.00	5,175.90	33.70	-481.98	-26.13	0.00	0.00	0.00
5,300.00	5.77	274.00	5,275.39	34.40	-492.01	-26.67	0.00	0.00	0.00
5,400.00	5.77	274.00	5,374.88	35.11	-502.04	-27.22	0.00	0.00	0.00
5,500.00	5.77	274.00	5,474.38	35.81	-512.07	-27.76	0.00	0.00	0.00
5,587.63	5.77	274.00	5,561.56	36.42	-520.86	-28.24	0.00	0.00	0.00
KOP @ 5587.63ft :: DLS = 9°/100'									
5,600.00	5.79	262.93	5,573.87	36.39	-522.10	-28.18	9.00	0.16	-89.49
5,650.00	7.72	227.46	5,623.54	33.81	-527.08	-25.52	9.00	3.86	-70.93
5,700.00	11.23	209.97	5,672.86	27.32	-531.99	-18.96	9.00	7.01	-34.99
5,750.00	15.26	201.15	5,721.53	16.96	-536.80	-8.52	9.00	8.07	-17.65
5,800.00	19.50	196.01	5,769.23	2.79	-541.47	5.71	9.00	8.47	-10.27
5,850.00	23.82	192.67	5,815.70	-15.09	-545.99	23.66	9.00	8.66	-6.69
5,900.00	28.20	190.30	5,860.62	-36.58	-550.32	45.22	9.00	8.76	-4.72
5,950.00	32.62	188.54	5,903.73	-61.54	-554.44	70.24	9.00	8.82	-3.54
6,000.00	37.05	187.15	5,944.76	-89.83	-558.31	98.59	9.00	8.86	-2.78
6,050.00	41.49	186.02	5,983.47	-121.26	-561.92	130.07	9.00	8.89	-2.26
6,100.00	45.94	185.07	6,019.60	-155.64	-565.25	164.50	9.00	8.90	-1.89
6,150.00	50.40	184.26	6,052.93	-192.76	-568.27	201.67	9.00	8.92	-1.63
6,200.00	54.86	183.54	6,083.27	-232.40	-570.97	241.34	9.00	8.93	-1.43
6,250.00	59.33	182.90	6,110.43	-274.30	-573.32	283.27	9.00	8.94	-1.28
6,300.00	63.80	182.32	6,134.23	-318.21	-575.32	327.21	9.00	8.94	-1.17
6,350.00	68.27	181.78	6,154.53	-363.86	-576.95	372.88	9.00	8.95	-1.08
6,400.00	72.75	181.27	6,171.21	-410.97	-578.20	420.00	9.00	8.95	-1.02
6,450.00	77.22	180.79	6,184.15	-459.24	-579.06	468.28	9.00	8.95	-0.97
6,500.00	81.70	180.32	6,193.30	-508.39	-579.54	517.43	9.00	8.95	-0.93
6,550.00	86.18	179.86	6,198.57	-558.09	-579.62	567.13	9.00	8.95	-0.91
6,592.68	90.00	179.48	6,200.00	-600.74	-579.37	609.76	9.00	8.95	-0.90
End Build @ 6592.68ft									
6,600.00	90.00	179.48	6,200.00	-608.06	-579.30	617.09	0.00	0.00	0.00
6,700.00	90.00	179.48	6,200.00	-708.06	-578.39	717.05	0.00	0.00	0.00
6,800.00	90.00	179.48	6,200.00	-808.05	-577.48	817.02	0.00	0.00	0.00
6,900.00	90.00	179.48	6,200.00	-908.05	-576.57	916.99	0.00	0.00	0.00
7,000.00	90.00	179.48	6,200.00	-1,008.04	-575.66	1,016.96	0.00	0.00	0.00
7,100.00	90.00	179.48	6,200.00	-1,108.04	-574.75	1,116.93	0.00	0.00	0.00
7,200.00	90.00	179.48	6,200.00	-1,208.04	-573.84	1,216.90	0.00	0.00	0.00
7,300.00	90.00	179.48	6,200.00	-1,308.03	-572.93	1,316.87	0.00	0.00	0.00
7,400.00	90.00	179.48	6,200.00	-1,408.03	-572.02	1,416.84	0.00	0.00	0.00
7,500.00	90.00	179.48	6,200.00	-1,508.02	-571.11	1,516.81	0.00	0.00	0.00
7,600.00	90.00	179.48	6,200.00	-1,608.02	-570.20	1,616.78	0.00	0.00	0.00
7,700.00	90.00	179.48	6,200.00	-1,708.02	-569.29	1,716.75	0.00	0.00	0.00
7,800.00	90.00	179.48	6,200.00	-1,808.01	-568.38	1,816.72	0.00	0.00	0.00
7,900.00	90.00	179.48	6,200.00	-1,908.01	-567.47	1,916.68	0.00	0.00	0.00
8,000.00	90.00	179.48	6,200.00	-2,008.00	-566.56	2,016.65	0.00	0.00	0.00
8,100.00	90.00	179.48	6,200.00	-2,108.00	-565.65	2,116.62	0.00	0.00	0.00
8,200.00	90.00	179.48	6,200.00	-2,207.99	-564.73	2,216.59	0.00	0.00	0.00
8,300.00	90.00	179.48	6,200.00	-2,307.99	-563.82	2,316.56	0.00	0.00	0.00
8,400.00	90.00	179.48	6,200.00	-2,407.99	-562.91	2,416.53	0.00	0.00	0.00
8,500.00	90.00	179.48	6,200.00	-2,507.98	-562.00	2,516.50	0.00	0.00	0.00
8,600.00	90.00	179.48	6,200.00	-2,607.98	-561.09	2,616.47	0.00	0.00	0.00

Hewlett-Packard

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well PEGGY 2501-06H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 4913.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 4913.00usft (RIG)
Site:	9N-60W-25 PEGGY PAD	North Reference:	True
Well:	PEGGY 2501-06H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
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)	
8,700.00	90.00	179.48	6,200.00	-2,707.97	-560.18	2,716.44	0.00	0.00	0.00	
8,800.00	90.00	179.48	6,200.00	-2,807.97	-559.27	2,816.41	0.00	0.00	0.00	
8,900.00	90.00	179.48	6,200.00	-2,907.97	-558.36	2,916.38	0.00	0.00	0.00	
9,000.00	90.00	179.48	6,200.00	-3,007.96	-557.45	3,016.35	0.00	0.00	0.00	
9,100.00	90.00	179.48	6,200.00	-3,107.96	-556.54	3,116.32	0.00	0.00	0.00	
9,200.00	90.00	179.48	6,200.00	-3,207.95	-555.63	3,216.28	0.00	0.00	0.00	
9,300.00	90.00	179.48	6,200.00	-3,307.95	-554.72	3,316.25	0.00	0.00	0.00	
9,400.00	90.00	179.48	6,200.00	-3,407.94	-553.81	3,416.22	0.00	0.00	0.00	
9,500.00	90.00	179.48	6,200.00	-3,507.94	-552.90	3,516.19	0.00	0.00	0.00	
9,600.00	90.00	179.48	6,200.00	-3,607.94	-551.99	3,616.16	0.00	0.00	0.00	
9,700.00	90.00	179.48	6,200.00	-3,707.93	-551.08	3,716.13	0.00	0.00	0.00	
9,800.00	90.00	179.48	6,200.00	-3,807.93	-550.17	3,816.10	0.00	0.00	0.00	
9,900.00	90.00	179.48	6,200.00	-3,907.92	-549.26	3,916.07	0.00	0.00	0.00	
10,000.00	90.00	179.48	6,200.00	-4,007.92	-548.34	4,016.04	0.00	0.00	0.00	
10,100.00	90.00	179.48	6,200.00	-4,107.92	-547.43	4,116.01	0.00	0.00	0.00	
10,200.00	90.00	179.48	6,200.00	-4,207.91	-546.52	4,215.98	0.00	0.00	0.00	
10,300.00	90.00	179.48	6,200.00	-4,307.91	-545.61	4,315.95	0.00	0.00	0.00	
10,400.00	90.00	179.48	6,200.00	-4,407.90	-544.70	4,415.92	0.00	0.00	0.00	
10,500.00	90.00	179.48	6,200.00	-4,507.90	-543.79	4,515.88	0.00	0.00	0.00	
10,600.00	90.00	179.48	6,200.00	-4,607.90	-542.88	4,615.85	0.00	0.00	0.00	
10,700.00	90.00	179.48	6,200.00	-4,707.89	-541.97	4,715.82	0.00	0.00	0.00	
10,800.00	90.00	179.48	6,200.00	-4,807.89	-541.06	4,815.79	0.00	0.00	0.00	
10,900.00	90.00	179.48	6,200.00	-4,907.88	-540.15	4,915.76	0.00	0.00	0.00	
11,000.00	90.00	179.48	6,200.00	-5,007.88	-539.24	5,015.73	0.00	0.00	0.00	
11,100.00	90.00	179.48	6,200.00	-5,107.87	-538.33	5,115.70	0.00	0.00	0.00	
11,200.00	90.00	179.48	6,200.00	-5,207.87	-537.42	5,215.67	0.00	0.00	0.00	
11,300.00	90.00	179.48	6,200.00	-5,307.87	-536.51	5,315.64	0.00	0.00	0.00	
11,400.00	90.00	179.48	6,200.00	-5,407.86	-535.60	5,415.61	0.00	0.00	0.00	
11,500.00	90.00	179.48	6,200.00	-5,507.86	-534.69	5,515.58	0.00	0.00	0.00	
11,600.00	90.00	179.48	6,200.00	-5,607.85	-533.78	5,615.55	0.00	0.00	0.00	
11,649.76	90.00	179.48	6,200.00	-5,657.61	-533.32	5,665.29	0.00	0.00	0.00	
Begin Turn to BHL @ 11649.76ft										
11,700.00	90.00	180.48	6,200.00	-5,707.85	-533.31	5,715.52	2.00	0.00	2.00	
11,800.00	90.00	182.48	6,200.00	-5,807.81	-535.89	5,815.51	2.00	0.00	2.00	
11,869.82	90.00	183.88	6,200.00	-5,877.53	-539.77	5,885.28	2.00	0.00	2.00	
End Turn @ 11869.82ft										
11,900.00	90.00	183.88	6,200.00	-5,907.63	-541.81	5,915.42	0.00	0.00	0.00	
12,000.00	90.00	183.88	6,200.00	-6,007.40	-548.58	6,015.28	0.00	0.00	0.00	
12,100.00	90.00	183.88	6,200.00	-6,107.18	-555.34	6,115.15	0.00	0.00	0.00	
12,200.00	90.00	183.88	6,200.00	-6,206.95	-562.11	6,215.01	0.00	0.00	0.00	
12,300.00	90.00	183.88	6,200.00	-6,306.72	-568.87	6,314.87	0.00	0.00	0.00	
12,400.00	90.00	183.88	6,200.00	-6,406.49	-575.64	6,414.74	0.00	0.00	0.00	
12,500.00	90.00	183.88	6,200.00	-6,506.26	-582.40	6,514.60	0.00	0.00	0.00	
12,600.00	90.00	183.88	6,200.00	-6,606.03	-589.17	6,614.47	0.00	0.00	0.00	
12,700.00	90.00	183.88	6,200.00	-6,705.80	-595.94	6,714.33	0.00	0.00	0.00	
12,800.00	90.00	183.88	6,200.00	-6,805.57	-602.70	6,814.20	0.00	0.00	0.00	
12,900.00	90.00	183.88	6,200.00	-6,905.34	-609.47	6,914.06	0.00	0.00	0.00	
13,000.00	90.00	183.88	6,200.00	-7,005.11	-616.23	7,013.93	0.00	0.00	0.00	
13,100.00	90.00	183.88	6,200.00	-7,104.88	-623.00	7,113.79	0.00	0.00	0.00	
13,200.00	90.00	183.88	6,200.00	-7,204.66	-629.76	7,213.66	0.00	0.00	0.00	
13,300.00	90.00	183.88	6,200.00	-7,304.43	-636.53	7,313.52	0.00	0.00	0.00	
13,400.00	90.00	183.88	6,200.00	-7,404.20	-643.30	7,413.39	0.00	0.00	0.00	
13,500.00	90.00	183.88	6,200.00	-7,503.97	-650.06	7,513.25	0.00	0.00	0.00	
13,600.00	90.00	183.88	6,200.00	-7,603.74	-656.83	7,613.12	0.00	0.00	0.00	

Hewlett-Packard

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well PEGGY 2501-06H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 4913.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 4913.00usft (RIG)
Site:	9N-60W-25 PEGGY PAD	North Reference:	True
Well:	PEGGY 2501-06H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
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)	
13,700.00	90.00	183.88	6,200.00	-7,703.51	-663.59	7,712.98	0.00	0.00	0.00	
13,800.00	90.00	183.88	6,200.00	-7,803.28	-670.36	7,812.85	0.00	0.00	0.00	
13,900.00	90.00	183.88	6,200.00	-7,903.05	-677.13	7,912.71	0.00	0.00	0.00	
14,000.00	90.00	183.88	6,200.00	-8,002.82	-683.89	8,012.58	0.00	0.00	0.00	
14,100.00	90.00	183.88	6,200.00	-8,102.59	-690.66	8,112.44	0.00	0.00	0.00	
14,200.00	90.00	183.88	6,200.00	-8,202.36	-697.42	8,212.31	0.00	0.00	0.00	
14,221.90	90.00	183.88	6,200.00	-8,224.21	-698.90	8,234.17	0.00	0.00	0.00	
TD Well @ 14221.90ft										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (")	Hole Diameter (")
1,706.40	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)		
250.00	250.00	0.00	0.00	Begin Tangent @ 250.00ft	
538.50	538.01	1.01	-14.48	End Tangent @ 538.50ft	
5,587.63	5,561.56	36.42	-520.86	KOP @ 5587.63ft :: DLS = 9°/100'	
6,592.68	6,200.00	-600.74	-579.37	End Build @ 6592.68ft	
11,649.76	6,200.00	-5,657.61	-533.32	Begin Turn to BHL @ 11649.76ft	
11,869.82	6,200.00	-5,877.53	-539.77	End Turn @ 11869.82ft	
14,221.90	6,200.00	-8,224.21	-698.90	TD Well @ 14221.90ft	