

VERDAD RESOURCES

**WATTENBERG FIELD
9N-60W-25 PEGGY PAD
PEGGY 2501-05H**

Wellbore #1

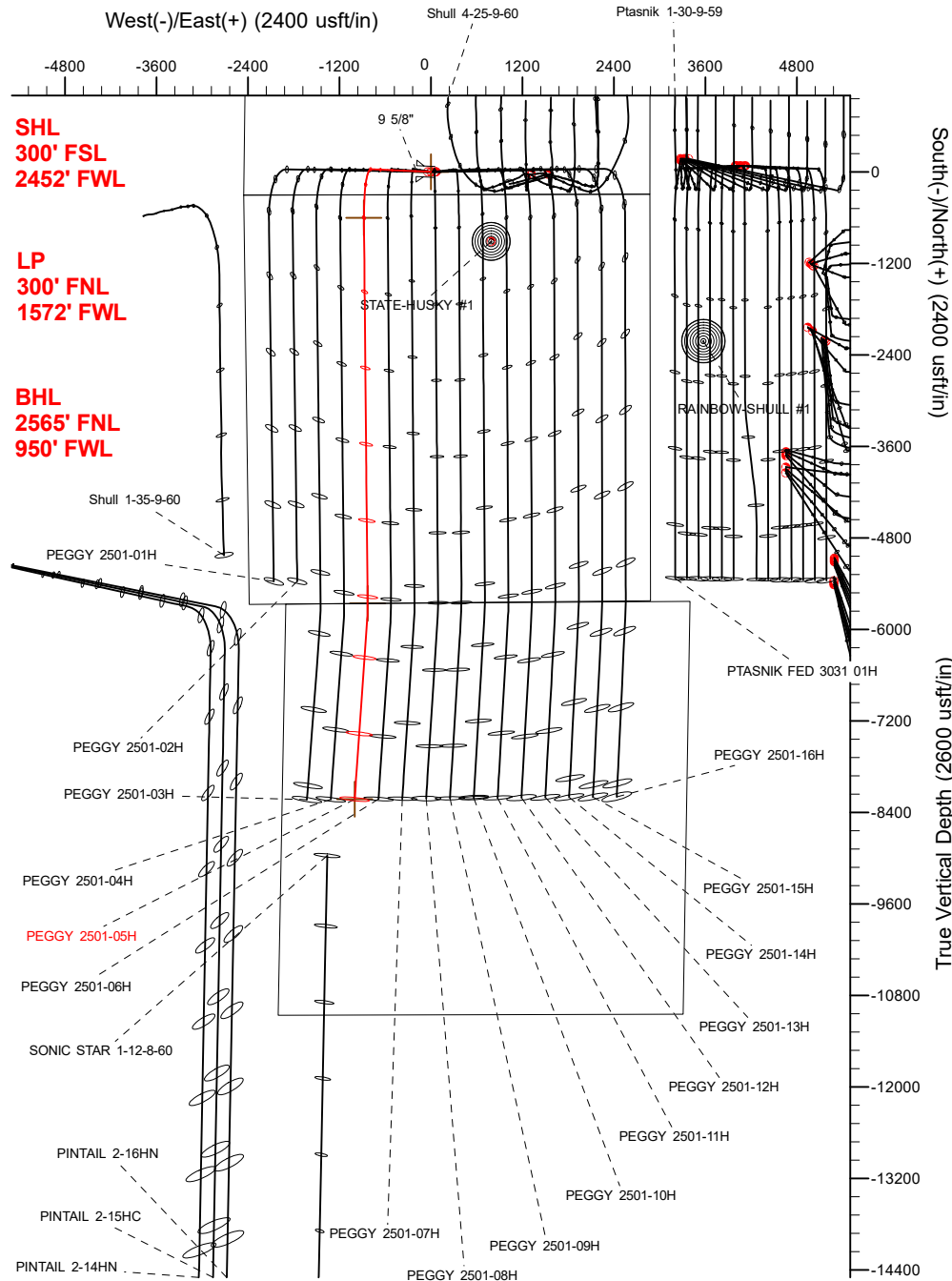
Plan: Design #1

Standard Planning Report

25 February, 2018

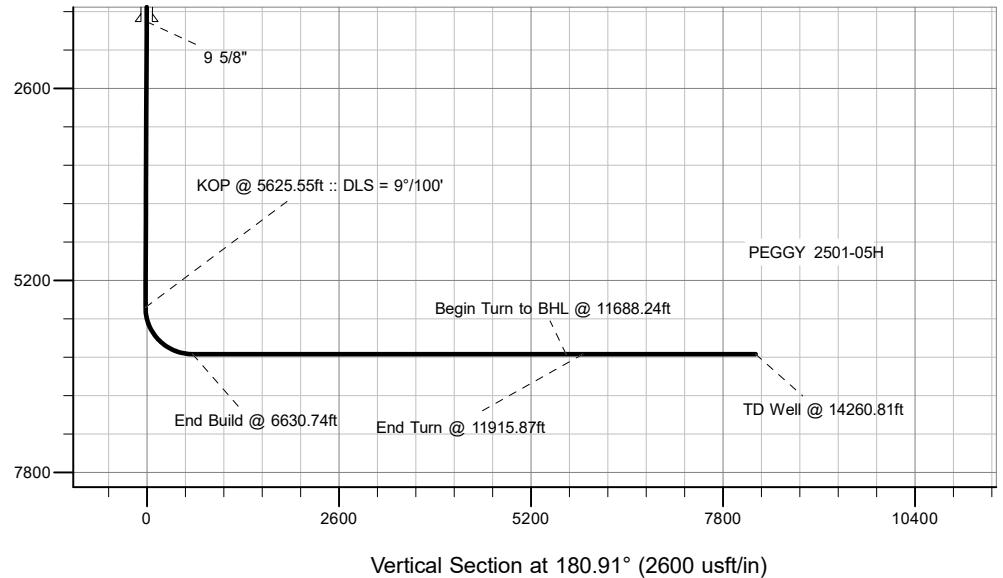
Project: WATTENBERG FIELD
Site: 9N-60W-25 PEGGY PAD
Well: PEGGY 2501-05H
Wellbore: Wellbore #1
Design: Design #1

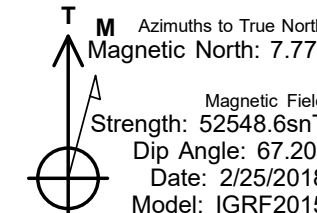
VERDAD RESOURCES



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	690.00	8.80	272.50	688.27	1.47	-33.69	2.00	272.50	-0.94	
4	5625.55	8.80	272.50	5565.72	34.41	-788.04	0.00	0.00	-21.89	
5	6630.74	90.00	179.45	6200.00	-603.11	-879.94	9.00	-93.02	617.01	
6	11688.24	90.00	179.45	6200.00	-5660.37	-831.09	0.00	0.00	5672.86	PEGGY 2501-05H_Deflection
7	11915.87	90.00	184.00	6200.00	-5887.84	-837.94	2.00	90.00	5900.40	
8	14260.81	90.00	184.00	6200.00	-8227.08	-1001.48	0.00	0.00	8241.94	PEGGY 2501-05H_BHL

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
PEGGY 2501-05H_SHL	0.00	0.00	0.00	40.714775	-104.040698
PEGGY 2501-05H_BHL	6200.00	-8227.08	-1001.48	40.692193	-104.044309



 <p>Azimuths to True North Magnetic North: 7.77°</p> <p>Magnetic Field Strength: 52548.6snT Dip Angle: 67.20° Date: 2/25/2018 Model: IGRF2015</p>	WELL DETAILS: PEGGY 2501-05H	
	GL = 4894'	
	RKB = 20' @ 4914.00usft (RIG)	
	Plan: Design #1 (PEGGY 2501-05H/Wellbore #1)	
Created By: _____		Date: 2/25/2018
Reviewed: _____		Date: _____

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Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well PEGGY 2501-05H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 4914.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 4914.00usft (RIG)
Site:	9N-60W-25 PEGGY PAD	North Reference:	True
Well:	PEGGY 2501-05H	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 2501-05H			
Well Position	+N/-S	0.06 usft	Northing:	1,506,565.10 usft
	+E/-W	40.00 usft	Easting:	3,404,525.26 usft
Position Uncertainty		3.28 usft	Wellhead Elevation:	Latitude: 40.714775
				Longitude: -104.040698
				Ground Level: 4,894.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	2/25/2018	7.77	67.20	52,548.62614832

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	180.91

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	14,260.81	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 2501-05H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 4914.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 4914.00usft (RIG)
Site:	9N-60W-25 PEGGY PAD	North Reference:	True
Well:	PEGGY 2501-05H	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	
690.00	8.80	272.50	688.27	1.47	-33.69	2.00	2.00	0.00	272.50	
5,625.55	8.80	272.50	5,565.72	34.41	-788.04	0.00	0.00	0.00	0.00	
6,630.74	90.00	179.45	6,200.00	-603.11	-879.94	9.00	8.08	-9.26	-93.02	
11,688.24	90.00	179.45	6,200.00	-5,660.37	-831.09	0.00	0.00	0.00	0.00	PEGGY 2501-05H_D
11,915.87	90.00	184.00	6,200.00	-5,887.84	-837.94	2.00	0.00	2.00	90.00	
14,260.81	90.00	184.00	6,200.00	-8,227.08	-1,001.48	0.00	0.00	0.00	0.00	PEGGY 2501-05H_BI

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Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well PEGGY 2501-05H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 4914.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 4914.00usft (RIG)
Site:	9N-60W-25 PEGGY PAD	North Reference:	True
Well:	PEGGY 2501-05H	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	272.50	300.00	0.02	-0.44	-0.01	2.00	2.00	0.00
400.00	3.00	272.50	399.93	0.17	-3.92	-0.11	2.00	2.00	0.00
500.00	5.00	272.50	499.68	0.48	-10.89	-0.30	2.00	2.00	0.00
600.00	7.00	272.50	599.13	0.93	-21.33	-0.59	2.00	2.00	0.00
690.00	8.80	272.50	688.27	1.47	-33.69	-0.94	2.00	2.00	0.00
End Tangent @ 690.00ft									
700.00	8.80	272.50	698.15	1.54	-35.22	-0.98	0.00	0.00	0.00
800.00	8.80	272.50	796.98	2.21	-50.50	-1.40	0.00	0.00	0.00
900.00	8.80	272.50	895.80	2.87	-65.79	-1.83	0.00	0.00	0.00
1,000.00	8.80	272.50	994.62	3.54	-81.07	-2.25	0.00	0.00	0.00
1,100.00	8.80	272.50	1,093.45	4.21	-96.36	-2.68	0.00	0.00	0.00
1,200.00	8.80	272.50	1,192.27	4.87	-111.64	-3.10	0.00	0.00	0.00
1,300.00	8.80	272.50	1,291.09	5.54	-126.92	-3.53	0.00	0.00	0.00
1,400.00	8.80	272.50	1,389.91	6.21	-142.21	-3.95	0.00	0.00	0.00
1,500.00	8.80	272.50	1,488.74	6.88	-157.49	-4.37	0.00	0.00	0.00
1,600.00	8.80	272.50	1,587.56	7.54	-172.78	-4.80	0.00	0.00	0.00
1,700.00	8.80	272.50	1,686.38	8.21	-188.06	-5.22	0.00	0.00	0.00
1,713.78	8.80	272.50	1,700.00	8.30	-190.17	-5.28	0.00	0.00	0.00
9 5/8"									
1,800.00	8.80	272.50	1,785.21	8.88	-203.34	-5.65	0.00	0.00	0.00
1,900.00	8.80	272.50	1,884.03	9.55	-218.63	-6.07	0.00	0.00	0.00
2,000.00	8.80	272.50	1,982.85	10.21	-233.91	-6.50	0.00	0.00	0.00
2,100.00	8.80	272.50	2,081.67	10.88	-249.20	-6.92	0.00	0.00	0.00
2,200.00	8.80	272.50	2,180.50	11.55	-264.48	-7.35	0.00	0.00	0.00
2,300.00	8.80	272.50	2,279.32	12.21	-279.76	-7.77	0.00	0.00	0.00
2,400.00	8.80	272.50	2,378.14	12.88	-295.05	-8.19	0.00	0.00	0.00
2,500.00	8.80	272.50	2,476.97	13.55	-310.33	-8.62	0.00	0.00	0.00
2,600.00	8.80	272.50	2,575.79	14.22	-325.62	-9.04	0.00	0.00	0.00
2,700.00	8.80	272.50	2,674.61	14.88	-340.90	-9.47	0.00	0.00	0.00
2,800.00	8.80	272.50	2,773.43	15.55	-356.18	-9.89	0.00	0.00	0.00
2,900.00	8.80	272.50	2,872.26	16.22	-371.47	-10.32	0.00	0.00	0.00
3,000.00	8.80	272.50	2,971.08	16.89	-386.75	-10.74	0.00	0.00	0.00
3,100.00	8.80	272.50	3,069.90	17.55	-402.04	-11.17	0.00	0.00	0.00
3,200.00	8.80	272.50	3,168.73	18.22	-417.32	-11.59	0.00	0.00	0.00
3,300.00	8.80	272.50	3,267.55	18.89	-432.60	-12.01	0.00	0.00	0.00
3,400.00	8.80	272.50	3,366.37	19.56	-447.89	-12.44	0.00	0.00	0.00
3,500.00	8.80	272.50	3,465.19	20.22	-463.17	-12.86	0.00	0.00	0.00
3,600.00	8.80	272.50	3,564.02	20.89	-478.46	-13.29	0.00	0.00	0.00
3,700.00	8.80	272.50	3,662.84	21.56	-493.74	-13.71	0.00	0.00	0.00
3,800.00	8.80	272.50	3,761.66	22.22	-509.02	-14.14	0.00	0.00	0.00
3,900.00	8.80	272.50	3,860.49	22.89	-524.31	-14.56	0.00	0.00	0.00
4,000.00	8.80	272.50	3,959.31	23.56	-539.59	-14.99	0.00	0.00	0.00
4,100.00	8.80	272.50	4,058.13	24.23	-554.88	-15.41	0.00	0.00	0.00
4,200.00	8.80	272.50	4,156.95	24.89	-570.16	-15.84	0.00	0.00	0.00
4,300.00	8.80	272.50	4,255.78	25.56	-585.44	-16.26	0.00	0.00	0.00
4,400.00	8.80	272.50	4,354.60	26.23	-600.73	-16.68	0.00	0.00	0.00
4,500.00	8.80	272.50	4,453.42	26.90	-616.01	-17.11	0.00	0.00	0.00
4,600.00	8.80	272.50	4,552.25	27.56	-631.30	-17.53	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 2501-05H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 4914.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 4914.00usft (RIG)
Site:	9N-60W-25 PEGGY PAD	North Reference:	True
Well:	PEGGY 2501-05H	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	8.80	272.50	4,651.07	28.23	-646.58	-17.96	0.00	0.00	0.00
4,800.00	8.80	272.50	4,749.89	28.90	-661.86	-18.38	0.00	0.00	0.00
4,900.00	8.80	272.50	4,848.71	29.56	-677.15	-18.81	0.00	0.00	0.00
5,000.00	8.80	272.50	4,947.54	30.23	-692.43	-19.23	0.00	0.00	0.00
5,100.00	8.80	272.50	5,046.36	30.90	-707.72	-19.66	0.00	0.00	0.00
5,200.00	8.80	272.50	5,145.18	31.57	-723.00	-20.08	0.00	0.00	0.00
5,300.00	8.80	272.50	5,244.01	32.23	-738.28	-20.50	0.00	0.00	0.00
5,400.00	8.80	272.50	5,342.83	32.90	-753.57	-20.93	0.00	0.00	0.00
5,500.00	8.80	272.50	5,441.65	33.57	-768.85	-21.35	0.00	0.00	0.00
5,600.00	8.80	272.50	5,540.47	34.24	-784.14	-21.78	0.00	0.00	0.00
5,625.55	8.80	272.50	5,565.72	34.41	-788.04	-21.89	0.00	0.00	0.00
KOP @ 5625.55ft :: DLS = 9°/100'									
5,650.00	8.96	258.24	5,589.88	34.10	-791.77	-21.52	9.00	0.64	-58.32
5,700.00	10.76	233.88	5,639.16	30.55	-799.36	-17.86	9.00	3.61	-48.72
5,750.00	13.84	218.31	5,688.02	23.11	-806.84	-10.29	9.00	6.16	-31.14
5,800.00	17.53	208.74	5,736.16	11.81	-814.17	1.13	9.00	7.39	-19.15
5,850.00	21.53	202.52	5,783.28	-3.28	-821.31	16.33	9.00	7.99	-12.45
5,900.00	25.69	198.19	5,829.09	-22.06	-828.21	35.21	9.00	8.31	-8.64
5,950.00	29.94	195.02	5,873.30	-44.42	-834.83	57.67	9.00	8.50	-6.35
6,000.00	34.25	192.57	5,915.66	-70.21	-841.13	83.56	9.00	8.62	-4.89
6,050.00	38.59	190.61	5,955.88	-99.29	-847.07	112.73	9.00	8.70	-3.91
6,100.00	42.97	189.00	5,993.73	-131.46	-852.61	144.99	9.00	8.75	-3.23
6,150.00	47.36	187.63	6,028.98	-166.54	-857.72	180.14	9.00	8.79	-2.74
6,200.00	51.77	186.44	6,061.40	-204.30	-862.37	217.97	9.00	8.82	-2.38
6,250.00	56.19	185.39	6,090.79	-244.52	-866.52	258.25	9.00	8.84	-2.10
6,300.00	60.62	184.44	6,116.98	-286.94	-870.16	300.72	9.00	8.85	-1.90
6,350.00	65.05	183.57	6,139.81	-331.31	-873.26	345.13	9.00	8.87	-1.74
6,400.00	69.49	182.76	6,159.12	-377.34	-875.80	391.20	9.00	8.88	-1.62
6,450.00	73.93	182.00	6,174.81	-424.76	-877.77	438.65	9.00	8.88	-1.53
6,500.00	78.37	181.27	6,186.78	-473.27	-879.15	487.18	9.00	8.89	-1.46
6,550.00	82.82	180.56	6,194.94	-522.58	-879.94	536.49	9.00	8.89	-1.41
6,600.00	87.27	179.87	6,199.26	-572.38	-880.12	586.29	9.00	8.89	-1.39
6,630.74	90.00	179.45	6,200.00	-603.11	-879.94	617.01	9.00	8.89	-1.38
End Build @ 6630.74ft									
6,700.00	90.00	179.45	6,200.00	-672.37	-879.27	686.25	0.00	0.00	0.00
6,800.00	90.00	179.45	6,200.00	-772.36	-878.31	786.22	0.00	0.00	0.00
6,900.00	90.00	179.45	6,200.00	-872.36	-877.34	886.18	0.00	0.00	0.00
7,000.00	90.00	179.45	6,200.00	-972.35	-876.37	986.15	0.00	0.00	0.00
7,100.00	90.00	179.45	6,200.00	-1,072.35	-875.41	1,086.12	0.00	0.00	0.00
7,200.00	90.00	179.45	6,200.00	-1,172.34	-874.44	1,186.08	0.00	0.00	0.00
7,300.00	90.00	179.45	6,200.00	-1,272.34	-873.48	1,286.05	0.00	0.00	0.00
7,400.00	90.00	179.45	6,200.00	-1,372.34	-872.51	1,386.02	0.00	0.00	0.00
7,500.00	90.00	179.45	6,200.00	-1,472.33	-871.54	1,485.99	0.00	0.00	0.00
7,600.00	90.00	179.45	6,200.00	-1,572.33	-870.58	1,585.95	0.00	0.00	0.00
7,700.00	90.00	179.45	6,200.00	-1,672.32	-869.61	1,685.92	0.00	0.00	0.00
7,800.00	90.00	179.45	6,200.00	-1,772.32	-868.65	1,785.89	0.00	0.00	0.00
7,900.00	90.00	179.45	6,200.00	-1,872.31	-867.68	1,885.86	0.00	0.00	0.00
8,000.00	90.00	179.45	6,200.00	-1,972.31	-866.72	1,985.82	0.00	0.00	0.00
8,100.00	90.00	179.45	6,200.00	-2,072.30	-865.75	2,085.79	0.00	0.00	0.00
8,200.00	90.00	179.45	6,200.00	-2,172.30	-864.78	2,185.76	0.00	0.00	0.00
8,300.00	90.00	179.45	6,200.00	-2,272.29	-863.82	2,285.73	0.00	0.00	0.00
8,400.00	90.00	179.45	6,200.00	-2,372.29	-862.85	2,385.69	0.00	0.00	0.00
8,500.00	90.00	179.45	6,200.00	-2,472.28	-861.89	2,485.66	0.00	0.00	0.00
8,600.00	90.00	179.45	6,200.00	-2,572.28	-860.92	2,585.63	0.00	0.00	0.00

Hewlett-Packard

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well PEGGY 2501-05H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 4914.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 4914.00usft (RIG)
Site:	9N-60W-25 PEGGY PAD	North Reference:	True
Well:	PEGGY 2501-05H	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	179.45	6,200.00	-2,672.27	-859.95	2,685.60	0.00	0.00	0.00
8,800.00	90.00	179.45	6,200.00	-2,772.27	-858.99	2,785.56	0.00	0.00	0.00
8,900.00	90.00	179.45	6,200.00	-2,872.27	-858.02	2,885.53	0.00	0.00	0.00
9,000.00	90.00	179.45	6,200.00	-2,972.26	-857.06	2,985.50	0.00	0.00	0.00
9,100.00	90.00	179.45	6,200.00	-3,072.26	-856.09	3,085.47	0.00	0.00	0.00
9,200.00	90.00	179.45	6,200.00	-3,172.25	-855.13	3,185.43	0.00	0.00	0.00
9,300.00	90.00	179.45	6,200.00	-3,272.25	-854.16	3,285.40	0.00	0.00	0.00
9,400.00	90.00	179.45	6,200.00	-3,372.24	-853.19	3,385.37	0.00	0.00	0.00
9,500.00	90.00	179.45	6,200.00	-3,472.24	-852.23	3,485.33	0.00	0.00	0.00
9,600.00	90.00	179.45	6,200.00	-3,572.23	-851.26	3,585.30	0.00	0.00	0.00
9,700.00	90.00	179.45	6,200.00	-3,672.23	-850.30	3,685.27	0.00	0.00	0.00
9,800.00	90.00	179.45	6,200.00	-3,772.22	-849.33	3,785.24	0.00	0.00	0.00
9,900.00	90.00	179.45	6,200.00	-3,872.22	-848.37	3,885.20	0.00	0.00	0.00
10,000.00	90.00	179.45	6,200.00	-3,972.21	-847.40	3,985.17	0.00	0.00	0.00
10,100.00	90.00	179.45	6,200.00	-4,072.21	-846.43	4,085.14	0.00	0.00	0.00
10,200.00	90.00	179.45	6,200.00	-4,172.21	-845.47	4,185.11	0.00	0.00	0.00
10,300.00	90.00	179.45	6,200.00	-4,272.20	-844.50	4,285.07	0.00	0.00	0.00
10,400.00	90.00	179.45	6,200.00	-4,372.20	-843.54	4,385.04	0.00	0.00	0.00
10,500.00	90.00	179.45	6,200.00	-4,472.19	-842.57	4,485.01	0.00	0.00	0.00
10,600.00	90.00	179.45	6,200.00	-4,572.19	-841.60	4,584.98	0.00	0.00	0.00
10,700.00	90.00	179.45	6,200.00	-4,672.18	-840.64	4,684.94	0.00	0.00	0.00
10,800.00	90.00	179.45	6,200.00	-4,772.18	-839.67	4,784.91	0.00	0.00	0.00
10,900.00	90.00	179.45	6,200.00	-4,872.17	-838.71	4,884.88	0.00	0.00	0.00
11,000.00	90.00	179.45	6,200.00	-4,972.17	-837.74	4,984.85	0.00	0.00	0.00
11,100.00	90.00	179.45	6,200.00	-5,072.16	-836.78	5,084.81	0.00	0.00	0.00
11,200.00	90.00	179.45	6,200.00	-5,172.16	-835.81	5,184.78	0.00	0.00	0.00
11,300.00	90.00	179.45	6,200.00	-5,272.15	-834.84	5,284.75	0.00	0.00	0.00
11,400.00	90.00	179.45	6,200.00	-5,372.15	-833.88	5,384.72	0.00	0.00	0.00
11,500.00	90.00	179.45	6,200.00	-5,472.14	-832.91	5,484.68	0.00	0.00	0.00
11,600.00	90.00	179.45	6,200.00	-5,572.14	-831.95	5,584.65	0.00	0.00	0.00
11,688.24	90.00	179.45	6,200.00	-5,660.37	-831.09	5,672.86	0.00	0.00	0.00
Begin Turn to BHL @ 11688.24ft									
11,700.00	90.00	179.68	6,200.00	-5,672.14	-831.00	5,684.62	2.00	0.00	2.00
11,800.00	90.00	181.68	6,200.00	-5,772.12	-832.19	5,784.61	2.00	0.00	2.00
11,900.00	90.00	183.68	6,200.00	-5,872.01	-836.87	5,884.56	2.00	0.00	2.00
11,915.87	90.00	184.00	6,200.00	-5,887.84	-837.94	5,900.40	2.00	0.00	2.00
End Turn @ 11915.87ft									
12,000.00	90.00	184.00	6,200.00	-5,971.77	-843.80	5,984.42	0.00	0.00	0.00
12,100.00	90.00	184.00	6,200.00	-6,071.52	-850.78	6,084.27	0.00	0.00	0.00
12,200.00	90.00	184.00	6,200.00	-6,171.28	-857.75	6,184.13	0.00	0.00	0.00
12,300.00	90.00	184.00	6,200.00	-6,271.04	-864.73	6,283.98	0.00	0.00	0.00
12,400.00	90.00	184.00	6,200.00	-6,370.79	-871.70	6,383.83	0.00	0.00	0.00
12,500.00	90.00	184.00	6,200.00	-6,470.55	-878.67	6,483.69	0.00	0.00	0.00
12,600.00	90.00	184.00	6,200.00	-6,570.31	-885.65	6,583.54	0.00	0.00	0.00
12,700.00	90.00	184.00	6,200.00	-6,670.06	-892.62	6,683.40	0.00	0.00	0.00
12,800.00	90.00	184.00	6,200.00	-6,769.82	-899.60	6,783.25	0.00	0.00	0.00
12,900.00	90.00	184.00	6,200.00	-6,869.58	-906.57	6,883.11	0.00	0.00	0.00
13,000.00	90.00	184.00	6,200.00	-6,969.33	-913.55	6,982.96	0.00	0.00	0.00
13,100.00	90.00	184.00	6,200.00	-7,069.09	-920.52	7,082.82	0.00	0.00	0.00
13,200.00	90.00	184.00	6,200.00	-7,168.85	-927.49	7,182.67	0.00	0.00	0.00
13,300.00	90.00	184.00	6,200.00	-7,268.60	-934.47	7,282.53	0.00	0.00	0.00
13,400.00	90.00	184.00	6,200.00	-7,368.36	-941.44	7,382.38	0.00	0.00	0.00
13,500.00	90.00	184.00	6,200.00	-7,468.12	-948.42	7,482.24	0.00	0.00	0.00
13,600.00	90.00	184.00	6,200.00	-7,567.87	-955.39	7,582.09	0.00	0.00	0.00

Hewlett-Packard

Planning Report

Database:	EDM 5000.14 Single User Db	Local Co-ordinate Reference:	Well PEGGY 2501-05H
Company:	VERDAD RESOURCES	TVD Reference:	RKB = 20' @ 4914.00usft (RIG)
Project:	WATTENBERG FIELD	MD Reference:	RKB = 20' @ 4914.00usft (RIG)
Site:	9N-60W-25 PEGGY PAD	North Reference:	True
Well:	PEGGY 2501-05H	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	184.00	6,200.00	-7,667.63	-962.36	7,681.95	0.00	0.00	0.00	
13,800.00	90.00	184.00	6,200.00	-7,767.39	-969.34	7,781.80	0.00	0.00	0.00	
13,900.00	90.00	184.00	6,200.00	-7,867.14	-976.31	7,881.66	0.00	0.00	0.00	
14,000.00	90.00	184.00	6,200.00	-7,966.90	-983.29	7,981.51	0.00	0.00	0.00	
14,100.00	90.00	184.00	6,200.00	-8,066.65	-990.26	8,081.36	0.00	0.00	0.00	
14,200.00	90.00	184.00	6,200.00	-8,166.41	-997.24	8,181.22	0.00	0.00	0.00	
14,260.81	90.00	184.00	6,200.00	-8,227.08	-1,001.48	8,241.94	0.00	0.00	0.00	
TD Well @ 14260.81ft										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (")	Hole Diameter (")
1,713.78	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	
690.00	688.27	1.47	-33.69	End Tangent @ 690.00ft	
5,625.55	5,565.72	34.41	-788.04	KOP @ 5625.55ft :: DLS = 9°/100'	
6,630.74	6,200.00	-603.11	-879.94	End Build @ 6630.74ft	
11,688.24	6,200.00	-5,660.37	-831.09	Begin Turn to BHL @ 11688.24ft	
11,915.87	6,200.00	-5,887.84	-837.94	End Turn @ 11915.87ft	
14,260.81	6,200.00	-8,227.08	-1,001.48	TD Well @ 14260.81ft	