

VERDAD RESOURCES

WATTENBERG FIELD

9N-60W-25 PEGGY 2501 PAD

PEGGY 2501-14H

Plan B

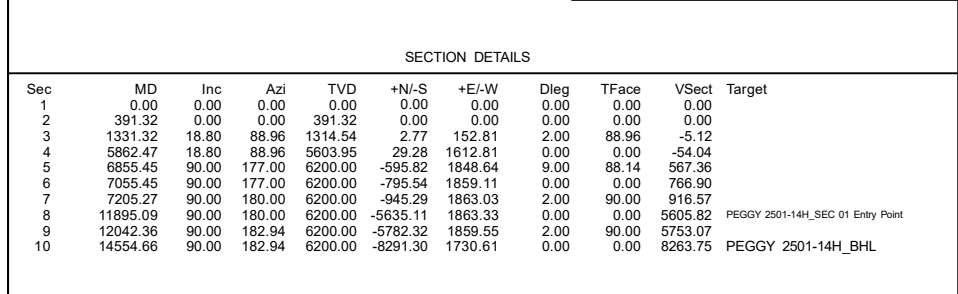
Plan: Design #1

Standard Planning Report

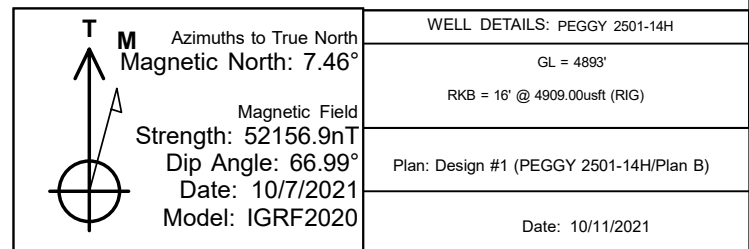
11 October, 2021

VERDAD RESOURCES

CASING DETAILS			
TVD	MD	Name	Size
1560.00	1590.61	9 5/8"	9-5/8



WELLBORE TARGET DETAILS (LAT/LONG)						
Name	MD	TVD	+N/-S	+E/-W	Latitude	Longitude
PEGGY 2501-14H_SHL	0.00	0.00	0.00	0.00	40.714775	-104.040423
PEGGY 2501-14H_KOP	5862.47	5603.95	29.28	1612.81	40.714856	-104.034605
PEGGY 2501-14H_TPZ	6855.45	6200.00	-595.82	1848.64	40.713140	-104.033755
PEGGY 2501-14H_SEC 01 Entry Point	11895.09	6200.00	-5635.11	1863.33	40.699308	-104.033703
PEGGY 2501-14H_BPZ	14464.63	6200.00	-8201.39	1735.10	40.692264	-104.034166
PEGGY 2501-14H_BHL	14554.66	6200.00	-8291.30	1730.61	40.692017	-104.034182



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well PEGGY 2501-14H
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 2501-14H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B		
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 "		

Well		PEGGY 2501-14H				
Well Position	+N-S	0.00 usft	Northing:	1,506,566.53 usft	Latitude:	40.714775
	+E-W	0.00 usft	Easting:	3,404,601.51 usft	Longitude:	-104.040423
Position Uncertainty		3.28 usft	Wellhead Elevation:	usft	Ground Level:	4,893.00 usft
Grid Convergence:		0.94 °				

Wellbore	Plan B				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF202013	10/7/2021	7.46	66.99	52,156.93265544

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	180.88	

Plan Survey Tool Program	Date	10/11/2021			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	1,560.00	Design #1 (Plan B)	ISCWSA MWD	
				Fixed:v2:standard declination	
2	1,560.00	14,554.66	Design #1 (Plan B)	ISCWSA MWD	
				Fixed:v2:standard declination	

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Site:	9N-60W-25 PEGGY 2501 PAD	North Reference:	True
Well:	PEGGY 2501-14H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B		
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	
391.32	0.00	0.00	391.32	0.00	0.00	0.00	0.00	0.00	0.00	
1,331.32	18.80	88.96	1,314.54	2.77	152.81	2.00	2.00	0.00	88.96	
5,862.47	18.80	88.96	5,603.95	29.28	1,612.81	0.00	0.00	0.00	0.00	
6,855.45	90.00	177.00	6,200.00	-595.82	1,848.64	9.00	7.17	8.87	88.14	
7,055.45	90.00	177.00	6,200.00	-795.54	1,859.11	0.00	0.00	0.00	0.00	
7,205.27	90.00	180.00	6,200.00	-945.29	1,863.03	2.00	0.00	2.00	90.00	
11,895.09	90.00	180.00	6,200.00	-5,635.11	1,863.33	0.00	0.00	0.00	0.00	PEGGY 2501-14H_SI
12,042.36	90.00	182.94	6,200.00	-5,782.32	1,859.55	2.00	0.00	2.00	90.00	
14,554.66	90.00	182.94	6,200.00	-8,291.30	1,730.61	0.00	0.00	0.00	0.00	PEGGY 2501-14H_BI

Planning Report

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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 2501-14H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B		
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
391.32	0.00	0.00	391.32	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 391.32ft									
400.00	0.17	88.96	400.00	0.00	0.01	0.00	2.00	2.00	0.00
500.00	2.17	88.96	499.97	0.04	2.06	-0.07	2.00	2.00	0.00
600.00	4.17	88.96	599.82	0.14	7.60	-0.25	2.00	2.00	0.00
700.00	6.17	88.96	699.40	0.30	16.61	-0.56	2.00	2.00	0.00
800.00	8.17	88.96	798.62	0.53	29.10	-0.98	2.00	2.00	0.00
900.00	10.17	88.96	897.33	0.82	45.04	-1.51	2.00	2.00	0.00
1,000.00	12.17	88.96	995.43	1.17	64.41	-2.16	2.00	2.00	0.00
1,100.00	14.17	88.96	1,092.79	1.58	87.19	-2.92	2.00	2.00	0.00
1,200.00	16.17	88.96	1,189.30	2.06	113.36	-3.80	2.00	2.00	0.00
1,300.00	18.17	88.96	1,284.84	2.59	142.88	-4.79	2.00	2.00	0.00
1,331.32	18.80	88.96	1,314.54	2.77	152.81	-5.12	2.00	2.00	0.00
Hold Tangent @ 1331.32ft									
1,400.00	18.80	88.96	1,379.56	3.18	174.94	-5.86	0.00	0.00	0.00
1,500.00	18.80	88.96	1,474.22	3.76	207.16	-6.94	0.00	0.00	0.00
1,590.61	18.80	88.96	1,560.00	4.29	236.36	-7.92	0.00	0.00	0.00
9 5/8"									
1,600.00	18.80	88.96	1,568.89	4.35	239.39	-8.02	0.00	0.00	0.00
1,700.00	18.80	88.96	1,663.55	4.93	271.61	-9.10	0.00	0.00	0.00
1,800.00	18.80	88.96	1,758.22	5.52	303.83	-10.18	0.00	0.00	0.00
1,900.00	18.80	88.96	1,852.88	6.10	336.05	-11.26	0.00	0.00	0.00
2,000.00	18.80	88.96	1,947.55	6.69	368.27	-12.34	0.00	0.00	0.00
2,100.00	18.80	88.96	2,042.21	7.27	400.49	-13.42	0.00	0.00	0.00
2,200.00	18.80	88.96	2,136.88	7.86	432.71	-14.50	0.00	0.00	0.00
2,300.00	18.80	88.96	2,231.54	8.44	464.93	-15.58	0.00	0.00	0.00
2,400.00	18.80	88.96	2,326.21	9.03	497.16	-16.66	0.00	0.00	0.00
2,500.00	18.80	88.96	2,420.87	9.61	529.38	-17.74	0.00	0.00	0.00
2,600.00	18.80	88.96	2,515.54	10.19	561.60	-18.82	0.00	0.00	0.00
2,700.00	18.80	88.96	2,610.20	10.78	593.82	-19.90	0.00	0.00	0.00
2,800.00	18.80	88.96	2,704.87	11.36	626.04	-20.98	0.00	0.00	0.00
2,900.00	18.80	88.96	2,799.53	11.95	658.26	-22.06	0.00	0.00	0.00
3,000.00	18.80	88.96	2,894.20	12.53	690.48	-23.14	0.00	0.00	0.00
3,100.00	18.80	88.96	2,988.86	13.12	722.70	-24.22	0.00	0.00	0.00
3,200.00	18.80	88.96	3,083.53	13.70	754.93	-25.30	0.00	0.00	0.00
3,300.00	18.80	88.96	3,178.19	14.29	787.15	-26.38	0.00	0.00	0.00
3,400.00	18.80	88.96	3,272.86	14.87	819.37	-27.46	0.00	0.00	0.00
3,500.00	18.80	88.96	3,367.52	15.46	851.59	-28.54	0.00	0.00	0.00
3,600.00	18.80	88.96	3,462.19	16.04	883.81	-29.62	0.00	0.00	0.00
3,700.00	18.80	88.96	3,556.85	16.63	916.03	-30.70	0.00	0.00	0.00
3,800.00	18.80	88.96	3,651.52	17.21	948.25	-31.78	0.00	0.00	0.00
3,900.00	18.80	88.96	3,746.18	17.80	980.47	-32.86	0.00	0.00	0.00
4,000.00	18.80	88.96	3,840.85	18.38	1,012.70	-33.94	0.00	0.00	0.00
4,100.00	18.80	88.96	3,935.51	18.97	1,044.92	-35.01	0.00	0.00	0.00
4,200.00	18.80	88.96	4,030.18	19.55	1,077.14	-36.09	0.00	0.00	0.00
4,300.00	18.80	88.96	4,124.84	20.14	1,109.36	-37.17	0.00	0.00	0.00
4,400.00	18.80	88.96	4,219.51	20.72	1,141.58	-38.25	0.00	0.00	0.00
4,500.00	18.80	88.96	4,314.17	21.31	1,173.80	-39.33	0.00	0.00	0.00
4,600.00	18.80	88.96	4,408.84	21.89	1,206.02	-40.41	0.00	0.00	0.00

Planning Report

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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 2501-14H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B		
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	18.80	88.96	4,503.50	22.48	1,238.24	-41.49	0.00	0.00	0.00
4,800.00	18.80	88.96	4,598.17	23.06	1,270.47	-42.57	0.00	0.00	0.00
4,900.00	18.80	88.96	4,692.83	23.65	1,302.69	-43.65	0.00	0.00	0.00
5,000.00	18.80	88.96	4,787.50	24.23	1,334.91	-44.73	0.00	0.00	0.00
5,100.00	18.80	88.96	4,882.16	24.82	1,367.13	-45.81	0.00	0.00	0.00
5,200.00	18.80	88.96	4,976.83	25.40	1,399.35	-46.89	0.00	0.00	0.00
5,300.00	18.80	88.96	5,071.49	25.99	1,431.57	-47.97	0.00	0.00	0.00
5,400.00	18.80	88.96	5,166.16	26.57	1,463.79	-49.05	0.00	0.00	0.00
5,500.00	18.80	88.96	5,260.82	27.16	1,496.01	-50.13	0.00	0.00	0.00
5,600.00	18.80	88.96	5,355.49	27.74	1,528.24	-51.21	0.00	0.00	0.00
5,700.00	18.80	88.96	5,450.15	28.33	1,560.46	-52.29	0.00	0.00	0.00
5,800.00	18.80	88.96	5,544.82	28.91	1,592.68	-53.37	0.00	0.00	0.00
5,862.47	18.80	88.96	5,603.95	29.28	1,612.81	-54.04	0.00	0.00	0.00
KOP @ 5862.47ft :: DLS = 9°/100'									
5,900.00	19.20	99.28	5,639.45	28.39	1,624.95	-53.35	9.00	1.06	27.49
5,950.00	20.56	111.92	5,686.49	23.79	1,641.21	-48.99	9.00	2.73	25.28
6,000.00	22.72	122.65	5,732.98	15.30	1,657.50	-40.75	9.00	4.31	21.47
6,050.00	25.47	131.41	5,778.64	2.97	1,673.70	-28.68	9.00	5.49	17.51
6,100.00	28.63	138.45	5,823.17	-13.11	1,689.72	-12.84	9.00	6.33	14.09
6,150.00	32.09	144.15	5,866.32	-32.85	1,705.45	6.66	9.00	6.92	11.39
6,200.00	35.77	148.81	5,907.80	-56.13	1,720.80	29.70	9.00	7.34	9.34
6,250.00	39.59	152.71	5,947.37	-82.80	1,735.68	56.14	9.00	7.64	7.78
6,300.00	43.52	156.01	5,984.79	-112.70	1,750.00	85.81	9.00	7.86	6.60
6,350.00	47.54	158.86	6,019.81	-145.65	1,763.66	118.55	9.00	8.03	5.70
6,400.00	51.61	161.36	6,052.23	-181.44	1,776.58	154.13	9.00	8.15	5.01
6,450.00	55.74	163.60	6,081.85	-219.85	1,788.68	192.35	9.00	8.25	4.47
6,500.00	59.90	165.62	6,108.47	-260.64	1,799.89	232.97	9.00	8.32	4.05
6,550.00	64.09	167.49	6,131.95	-303.56	1,810.14	275.73	9.00	8.38	3.72
6,600.00	68.30	169.22	6,152.13	-348.36	1,819.36	320.37	9.00	8.42	3.47
6,650.00	72.53	170.85	6,168.89	-394.74	1,827.50	366.63	9.00	8.46	3.27
6,700.00	76.77	172.41	6,182.12	-442.43	1,834.51	414.21	9.00	8.48	3.12
6,750.00	81.02	173.92	6,191.75	-491.14	1,840.34	462.81	9.00	8.50	3.01
6,800.00	85.28	175.39	6,197.72	-540.55	1,844.96	512.15	9.00	8.51	2.94
6,850.00	89.54	176.84	6,199.98	-590.37	1,848.35	561.92	9.00	8.52	2.91
6,855.45	90.00	177.00	6,200.00	-595.82	1,848.64	567.36	9.00	8.52	2.90
TPZ @ 6855.45ft									
6,900.00	90.00	177.00	6,200.00	-640.30	1,850.97	611.80	0.00	0.00	0.00
7,000.00	90.00	177.00	6,200.00	-740.17	1,856.20	711.57	0.00	0.00	0.00
7,055.45	90.00	177.00	6,200.00	-795.54	1,859.11	766.90	0.00	0.00	0.00
Begin Turn to Deflection Point @ 7055.45ft									
7,100.00	90.00	177.89	6,200.00	-840.05	1,861.09	811.36	2.00	0.00	2.00
7,205.27	90.00	180.00	6,200.00	-945.29	1,863.03	916.57	2.00	0.00	2.00
End Turn @ 7205.27ft									
7,300.00	90.00	180.00	6,200.00	-1,040.02	1,863.04	1,011.29	0.00	0.00	0.00
7,400.00	90.00	180.00	6,200.00	-1,140.02	1,863.04	1,111.27	0.00	0.00	0.00
7,500.00	90.00	180.00	6,200.00	-1,240.02	1,863.05	1,211.26	0.00	0.00	0.00
7,600.00	90.00	180.00	6,200.00	-1,340.02	1,863.06	1,311.25	0.00	0.00	0.00
7,700.00	90.00	180.00	6,200.00	-1,440.02	1,863.06	1,411.24	0.00	0.00	0.00
7,800.00	90.00	180.00	6,200.00	-1,540.02	1,863.07	1,511.23	0.00	0.00	0.00
7,900.00	90.00	180.00	6,200.00	-1,640.02	1,863.08	1,611.21	0.00	0.00	0.00
8,000.00	90.00	180.00	6,200.00	-1,740.02	1,863.08	1,711.20	0.00	0.00	0.00
8,100.00	90.00	180.00	6,200.00	-1,840.02	1,863.09	1,811.19	0.00	0.00	0.00
8,200.00	90.00	180.00	6,200.00	-1,940.02	1,863.09	1,911.18	0.00	0.00	0.00
8,300.00	90.00	180.00	6,200.00	-2,040.02	1,863.10	2,011.17	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well PEGGY 2501-14H
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 2501-14H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B		
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)
8,400.00	90.00	180.00	6,200.00	-2,140.02	1,863.11	2,111.16	0.00	0.00	0.00
8,500.00	90.00	180.00	6,200.00	-2,240.02	1,863.11	2,211.14	0.00	0.00	0.00
8,600.00	90.00	180.00	6,200.00	-2,340.02	1,863.12	2,311.13	0.00	0.00	0.00
8,700.00	90.00	180.00	6,200.00	-2,440.02	1,863.13	2,411.12	0.00	0.00	0.00
8,800.00	90.00	180.00	6,200.00	-2,540.02	1,863.13	2,511.11	0.00	0.00	0.00
8,900.00	90.00	180.00	6,200.00	-2,640.02	1,863.14	2,611.10	0.00	0.00	0.00
9,000.00	90.00	180.00	6,200.00	-2,740.02	1,863.14	2,711.08	0.00	0.00	0.00
9,100.00	90.00	180.00	6,200.00	-2,840.02	1,863.15	2,811.07	0.00	0.00	0.00
9,200.00	90.00	180.00	6,200.00	-2,940.02	1,863.16	2,911.06	0.00	0.00	0.00
9,300.00	90.00	180.00	6,200.00	-3,040.02	1,863.16	3,011.05	0.00	0.00	0.00
9,400.00	90.00	180.00	6,200.00	-3,140.02	1,863.17	3,111.04	0.00	0.00	0.00
9,500.00	90.00	180.00	6,200.00	-3,240.02	1,863.18	3,211.02	0.00	0.00	0.00
9,600.00	90.00	180.00	6,200.00	-3,340.02	1,863.18	3,311.01	0.00	0.00	0.00
9,700.00	90.00	180.00	6,200.00	-3,440.02	1,863.19	3,411.00	0.00	0.00	0.00
9,800.00	90.00	180.00	6,200.00	-3,540.02	1,863.19	3,510.99	0.00	0.00	0.00
9,900.00	90.00	180.00	6,200.00	-3,640.02	1,863.20	3,610.98	0.00	0.00	0.00
10,000.00	90.00	180.00	6,200.00	-3,740.02	1,863.21	3,710.97	0.00	0.00	0.00
10,100.00	90.00	180.00	6,200.00	-3,840.02	1,863.21	3,810.95	0.00	0.00	0.00
10,200.00	90.00	180.00	6,200.00	-3,940.02	1,863.22	3,910.94	0.00	0.00	0.00
10,300.00	90.00	180.00	6,200.00	-4,040.02	1,863.23	4,010.93	0.00	0.00	0.00
10,400.00	90.00	180.00	6,200.00	-4,140.02	1,863.23	4,110.92	0.00	0.00	0.00
10,500.00	90.00	180.00	6,200.00	-4,240.02	1,863.24	4,210.91	0.00	0.00	0.00
10,600.00	90.00	180.00	6,200.00	-4,340.02	1,863.24	4,310.89	0.00	0.00	0.00
10,700.00	90.00	180.00	6,200.00	-4,440.02	1,863.25	4,410.88	0.00	0.00	0.00
10,800.00	90.00	180.00	6,200.00	-4,540.02	1,863.26	4,510.87	0.00	0.00	0.00
10,900.00	90.00	180.00	6,200.00	-4,640.02	1,863.26	4,610.86	0.00	0.00	0.00
11,000.00	90.00	180.00	6,200.00	-4,740.02	1,863.27	4,710.85	0.00	0.00	0.00
11,100.00	90.00	180.00	6,200.00	-4,840.02	1,863.28	4,810.83	0.00	0.00	0.00
11,200.00	90.00	180.00	6,200.00	-4,940.02	1,863.28	4,910.82	0.00	0.00	0.00
11,300.00	90.00	180.00	6,200.00	-5,040.02	1,863.29	5,010.81	0.00	0.00	0.00
11,400.00	90.00	180.00	6,200.00	-5,140.02	1,863.30	5,110.80	0.00	0.00	0.00
11,500.00	90.00	180.00	6,200.00	-5,240.02	1,863.30	5,210.79	0.00	0.00	0.00
11,600.00	90.00	180.00	6,200.00	-5,340.02	1,863.31	5,310.77	0.00	0.00	0.00
11,700.00	90.00	180.00	6,200.00	-5,440.02	1,863.31	5,410.76	0.00	0.00	0.00
11,800.00	90.00	180.00	6,200.00	-5,540.02	1,863.32	5,510.75	0.00	0.00	0.00
11,895.09	90.00	180.00	6,200.00	-5,635.11	1,863.33	5,605.82	0.00	0.00	0.00
Begin Turn to BHL @ 11895.09ft									
11,900.00	90.00	180.09	6,200.00	-5,640.02	1,863.32	5,610.74	2.00	0.00	2.00
12,000.00	90.00	182.09	6,200.00	-5,740.00	1,861.41	5,710.73	2.00	0.00	2.00
12,042.36	90.00	182.94	6,200.00	-5,782.32	1,859.55	5,753.07	2.00	0.00	2.00
End Turn @ 12042.36ft									
12,100.00	90.00	182.94	6,200.00	-5,839.88	1,856.59	5,810.68	0.00	0.00	0.00
12,200.00	90.00	182.94	6,200.00	-5,939.75	1,851.46	5,910.61	0.00	0.00	0.00
12,300.00	90.00	182.94	6,200.00	-6,039.62	1,846.33	6,010.55	0.00	0.00	0.00
12,400.00	90.00	182.94	6,200.00	-6,139.49	1,841.20	6,110.48	0.00	0.00	0.00
12,500.00	90.00	182.94	6,200.00	-6,239.35	1,836.06	6,210.42	0.00	0.00	0.00
12,600.00	90.00	182.94	6,200.00	-6,339.22	1,830.93	6,310.35	0.00	0.00	0.00
12,700.00	90.00	182.94	6,200.00	-6,439.09	1,825.80	6,410.29	0.00	0.00	0.00
12,800.00	90.00	182.94	6,200.00	-6,538.96	1,820.67	6,510.23	0.00	0.00	0.00
12,900.00	90.00	182.94	6,200.00	-6,638.83	1,815.53	6,610.16	0.00	0.00	0.00
13,000.00	90.00	182.94	6,200.00	-6,738.70	1,810.40	6,710.10	0.00	0.00	0.00
13,100.00	90.00	182.94	6,200.00	-6,838.56	1,805.27	6,810.03	0.00	0.00	0.00
13,200.00	90.00	182.94	6,200.00	-6,938.43	1,800.14	6,909.97	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well PEGGY 2501-14H
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 2501-14H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B		
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)	
13,300.00	90.00	182.94	6,200.00	-7,038.30	1,795.01	7,009.90	0.00	0.00	0.00	
13,400.00	90.00	182.94	6,200.00	-7,138.17	1,789.87	7,109.84	0.00	0.00	0.00	
13,500.00	90.00	182.94	6,200.00	-7,238.04	1,784.74	7,209.77	0.00	0.00	0.00	
13,600.00	90.00	182.94	6,200.00	-7,337.90	1,779.61	7,309.71	0.00	0.00	0.00	
13,700.00	90.00	182.94	6,200.00	-7,437.77	1,774.48	7,409.64	0.00	0.00	0.00	
13,800.00	90.00	182.94	6,200.00	-7,537.64	1,769.34	7,509.58	0.00	0.00	0.00	
13,900.00	90.00	182.94	6,200.00	-7,637.51	1,764.21	7,609.51	0.00	0.00	0.00	
14,000.00	90.00	182.94	6,200.00	-7,737.38	1,759.08	7,709.45	0.00	0.00	0.00	
14,100.00	90.00	182.94	6,200.00	-7,837.25	1,753.95	7,809.38	0.00	0.00	0.00	
14,200.00	90.00	182.94	6,200.00	-7,937.11	1,748.81	7,909.32	0.00	0.00	0.00	
14,300.00	90.00	182.94	6,200.00	-8,036.98	1,743.68	8,009.25	0.00	0.00	0.00	
14,400.00	90.00	182.94	6,200.00	-8,136.85	1,738.55	8,109.19	0.00	0.00	0.00	
14,464.63	90.00	182.94	6,200.00	-8,201.40	1,735.23	8,173.78	0.00	0.00	0.00	
BPZ @ 14464.63ft										
14,500.00	90.00	182.94	6,200.00	-8,236.72	1,733.42	8,209.12	0.00	0.00	0.00	
14,554.66	90.00	182.94	6,200.00	-8,291.30	1,730.61	8,263.75	0.00	0.00	0.00	
TD Well @ 14554.66ft										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (")	Hole Diameter (")
1,590.61	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)		
391.32	391.32	0.00	0.00	Begin Nudge @ 391.32ft	
1,331.32	1,314.54	2.77	152.81	Hold Tangent @ 1331.32ft	
5,862.47	5,603.95	29.28	1,612.81	KOP @ 5862.47ft :: DLS = 9°/100'	
6,855.45	6,200.00	-595.82	1,848.64	TPZ @ 6855.45ft	
7,055.45	6,200.00	-795.54	1,859.11	Begin Turn to Deflection Point @ 7055.45ft	
7,205.27	6,200.00	-945.29	1,863.03	End Turn @ 7205.27ft	
11,895.09	6,200.00	-5,635.11	1,863.33	Begin Turn to BHL @ 11895.09ft	
12,042.36	6,200.00	-5,782.32	1,859.55	End Turn @ 12042.36ft	
14,464.63	6,200.00	-8,201.40	1,735.23	BPZ @ 14464.63ft	
14,554.66	6,200.00	-8,291.30	1,730.61	TD Well @ 14554.66ft	