

# **VERDAD RESOURCES**

**WATTENBERG FIELD  
9N-60W-25 PEGGY PAD  
PEGGY 2501-10H**

**Wellbore #1**

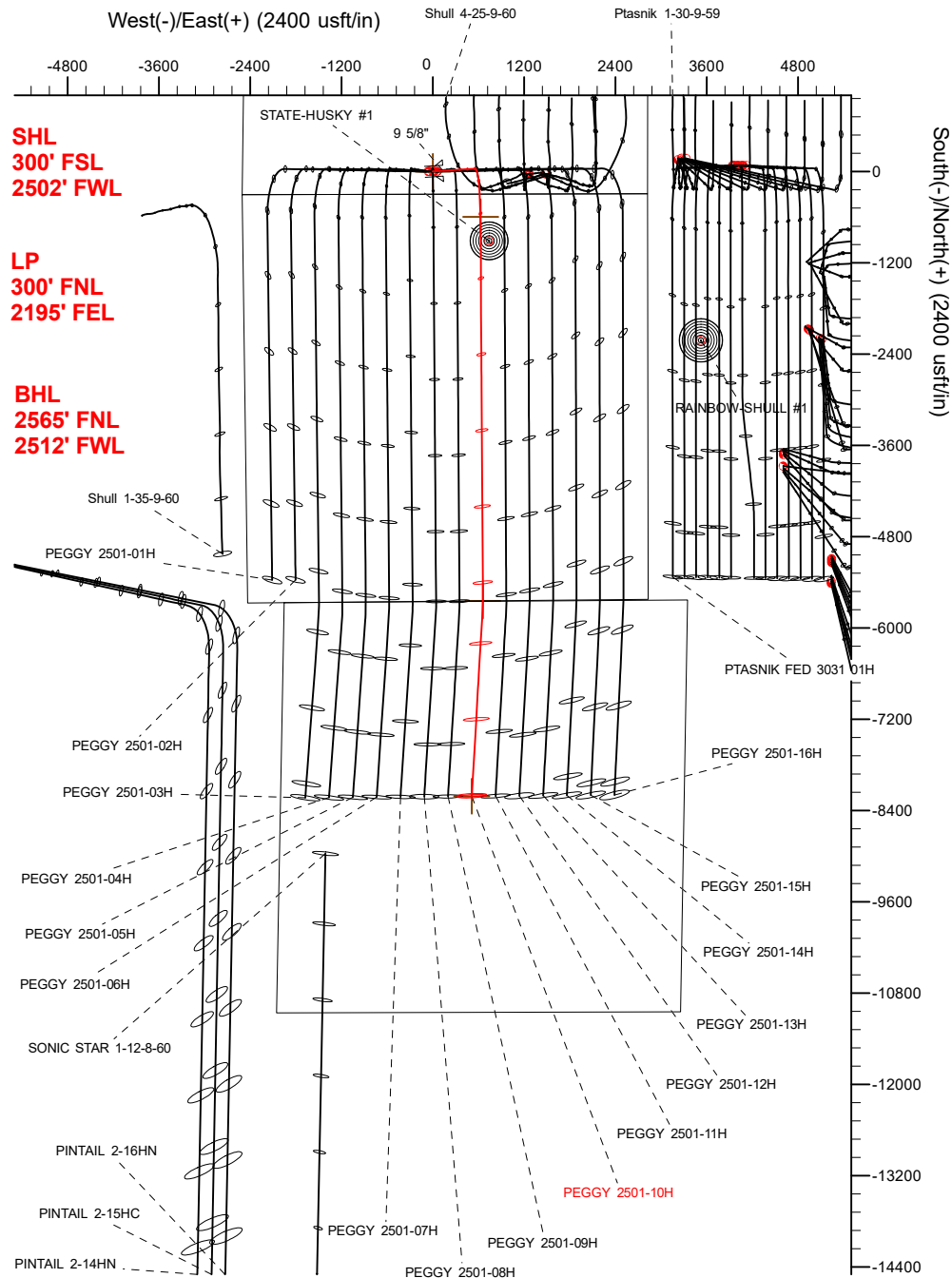
**Plan: Design #1**

## **Standard Planning Report**

**25 February, 2018**

Project: WATTENBERG FIELD  
Site: 9N-60W-25 PEGGY PAD  
Well: PEGGY 2501-10H  
Wellbore: Wellbore #1  
Design: Design #1

# VERDAD RESOURCES

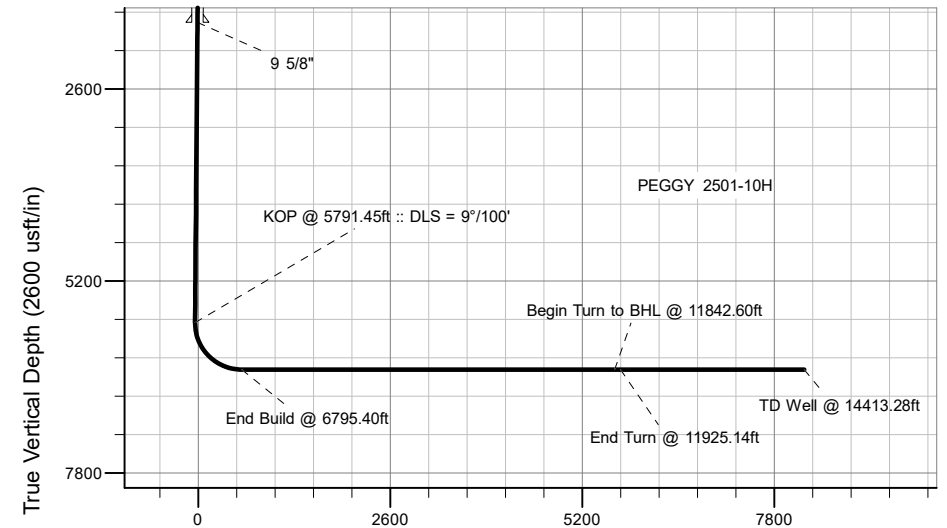


## SECTION DETAILS

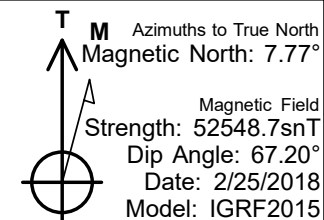
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	
3	546.50	5.93	86.20	545.97	1.02	15.30	2.00	86.20	-1.25	
4	5791.45	5.93	86.20	5762.85	36.93	555.98	0.00	0.00	-45.27	
5	6795.40	90.00	179.64	6400.00	-599.25	626.05	9.00	93.42	589.79	
6	11842.60	90.00	179.64	6400.00	-5646.35	657.82	0.00	0.00	5635.84	PEGGY 2501-10H_Deflection
7	11925.14	90.00	183.32	6400.00	-5728.85	655.69	4.46	90.00	5718.37	
8	14413.28	90.00	183.32	6400.00	-8212.81	511.47	0.00	0.00	8204.21	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	-104.040518
PEGGY 2501-10H_BHL	6400.00	-8212.81	511.47	40.692233	-104.038673



Vertical Section at 180.86° (2600 usft/in)



WELL DETAILS: PEGGY 2501-10H

GL = 4893'

RKB = 20' @ 4913.00usft (RIG)

Plan: Design #1 (PEGGY 2501-10H/Wellbore #1)

Created By: \_\_\_\_\_ Date: 2/25/2018  
Reviewed: \_\_\_\_\_ Date: \_\_\_\_\_

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## Planning Report

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well PEGGY 2501-10H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 20' @ 4913.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 20' @ 4913.00usft (RIG)
<b>Site:</b>	9N-60W-25 PEGGY PAD	<b>North Reference:</b>	True
<b>Well:</b>	PEGGY 2501-10H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<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		

<b>Site</b>	9N-60W-25 PEGGY PAD			
<b>Site Position:</b>		<b>Northing:</b>	1,506,564.37 usft	<b>Latitude:</b> 40.714775
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,404,485.26 usft	<b>Longitude:</b> -104.040843
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b> 0.94 °

<b>Well</b>	PEGGY 2501-10H			
<b>Well Position</b>	<b>+N/-S</b>	0.17 usft	<b>Northing:</b>	1,506,566.03 usft
	<b>+E/-W</b>	90.01 usft	<b>Easting:</b>	3,404,575.26 usft
<b>Position Uncertainty</b>		3.28 usft	<b>Wellhead Elevation:</b>	<b>Ground Level:</b> 4,893.00 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	2/25/2018	7.77	67.20	52,548.65229504

<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	180.86

<b>Plan Survey Tool Program</b>	<b>Date</b>	2/25/2018		
<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 #1)	ISCWSA REV 2 MWD Fixed:v2:standard declination
2	1,700.00	14,413.28	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 2501-10H
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 2501-10H	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	
546.50	5.93	86.20	545.97	1.02	15.30	2.00	2.00	0.00	86.20	
5,791.45	5.93	86.20	5,762.85	36.93	555.98	0.00	0.00	0.00	0.00	
6,795.40	90.00	179.64	6,400.00	-599.25	626.05	9.00	8.37	9.31	93.42	
11,842.60	90.00	179.64	6,400.00	-5,646.35	657.82	0.00	0.00	0.00	0.00	PEGGY 2501-10H_D
11,925.14	90.00	183.32	6,400.00	-5,728.85	655.69	4.46	0.00	4.46	90.00	
14,413.28	90.00	183.32	6,400.00	-8,212.81	511.47	0.00	0.00	0.00	0.00	PEGGY 2501-10H_BI

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## Planning Report

<b>Database:</b>	EDM 5000.14 Single User Db	<b>Local Co-ordinate Reference:</b>	Well PEGGY 2501-10H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 20' @ 4913.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 20' @ 4913.00usft (RIG)
<b>Site:</b>	9N-60W-25 PEGGY PAD	<b>North Reference:</b>	True
<b>Well:</b>	PEGGY 2501-10H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<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
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	86.20	300.00	0.03	0.44	-0.04	2.00	2.00	0.00
400.00	3.00	86.20	399.93	0.26	3.92	-0.32	2.00	2.00	0.00
500.00	5.00	86.20	499.68	0.72	10.88	-0.89	2.00	2.00	0.00
546.50	5.93	86.20	545.97	1.02	15.30	-1.25	2.00	2.00	0.00
End Tangent @ 546.50ft									
600.00	5.93	86.20	599.18	1.38	20.81	-1.69	0.00	0.00	0.00
700.00	5.93	86.20	698.65	2.07	31.12	-2.53	0.00	0.00	0.00
800.00	5.93	86.20	798.11	2.75	41.43	-3.37	0.00	0.00	0.00
900.00	5.93	86.20	897.58	3.44	51.74	-4.21	0.00	0.00	0.00
1,000.00	5.93	86.20	997.04	4.12	62.05	-5.05	0.00	0.00	0.00
1,100.00	5.93	86.20	1,096.51	4.81	72.35	-5.89	0.00	0.00	0.00
1,200.00	5.93	86.20	1,195.97	5.49	82.66	-6.73	0.00	0.00	0.00
1,300.00	5.93	86.20	1,295.44	6.18	92.97	-7.57	0.00	0.00	0.00
1,400.00	5.93	86.20	1,394.90	6.86	103.28	-8.41	0.00	0.00	0.00
1,500.00	5.93	86.20	1,494.37	7.54	113.59	-9.25	0.00	0.00	0.00
1,600.00	5.93	86.20	1,593.83	8.23	123.90	-10.09	0.00	0.00	0.00
1,700.00	5.93	86.20	1,693.30	8.91	134.21	-10.93	0.00	0.00	0.00
1,706.74	5.93	86.20	1,700.00	8.96	134.90	-10.98	0.00	0.00	0.00
9 5/8"									
1,800.00	5.93	86.20	1,792.76	9.60	144.51	-11.77	0.00	0.00	0.00
1,900.00	5.93	86.20	1,892.23	10.28	154.82	-12.61	0.00	0.00	0.00
2,000.00	5.93	86.20	1,991.69	10.97	165.13	-13.45	0.00	0.00	0.00
2,100.00	5.93	86.20	2,091.16	11.65	175.44	-14.28	0.00	0.00	0.00
2,200.00	5.93	86.20	2,190.62	12.34	185.75	-15.12	0.00	0.00	0.00
2,300.00	5.93	86.20	2,290.09	13.02	196.06	-15.96	0.00	0.00	0.00
2,400.00	5.93	86.20	2,389.55	13.71	206.37	-16.80	0.00	0.00	0.00
2,500.00	5.93	86.20	2,489.02	14.39	216.68	-17.64	0.00	0.00	0.00
2,600.00	5.93	86.20	2,588.48	15.08	226.98	-18.48	0.00	0.00	0.00
2,700.00	5.93	86.20	2,687.95	15.76	237.29	-19.32	0.00	0.00	0.00
2,800.00	5.93	86.20	2,787.41	16.45	247.60	-20.16	0.00	0.00	0.00
2,900.00	5.93	86.20	2,886.88	17.13	257.91	-21.00	0.00	0.00	0.00
3,000.00	5.93	86.20	2,986.34	17.82	268.22	-21.84	0.00	0.00	0.00
3,100.00	5.93	86.20	3,085.81	18.50	278.53	-22.68	0.00	0.00	0.00
3,200.00	5.93	86.20	3,185.27	19.18	288.84	-23.52	0.00	0.00	0.00
3,300.00	5.93	86.20	3,284.74	19.87	299.14	-24.36	0.00	0.00	0.00
3,400.00	5.93	86.20	3,384.20	20.55	309.45	-25.20	0.00	0.00	0.00
3,500.00	5.93	86.20	3,483.67	21.24	319.76	-26.04	0.00	0.00	0.00
3,600.00	5.93	86.20	3,583.13	21.92	330.07	-26.87	0.00	0.00	0.00
3,700.00	5.93	86.20	3,682.60	22.61	340.38	-27.71	0.00	0.00	0.00
3,800.00	5.93	86.20	3,782.06	23.29	350.69	-28.55	0.00	0.00	0.00
3,900.00	5.93	86.20	3,881.53	23.98	361.00	-29.39	0.00	0.00	0.00
4,000.00	5.93	86.20	3,980.99	24.66	371.30	-30.23	0.00	0.00	0.00
4,100.00	5.93	86.20	4,080.46	25.35	381.61	-31.07	0.00	0.00	0.00
4,200.00	5.93	86.20	4,179.92	26.03	391.92	-31.91	0.00	0.00	0.00
4,300.00	5.93	86.20	4,279.39	26.72	402.23	-32.75	0.00	0.00	0.00
4,400.00	5.93	86.20	4,378.85	27.40	412.54	-33.59	0.00	0.00	0.00
4,500.00	5.93	86.20	4,478.32	28.09	422.85	-34.43	0.00	0.00	0.00
4,600.00	5.93	86.20	4,577.78	28.77	433.16	-35.27	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 2501-10H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 20' @ 4913.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 20' @ 4913.00usft (RIG)
<b>Site:</b>	9N-60W-25 PEGGY PAD	<b>North Reference:</b>	True
<b>Well:</b>	PEGGY 2501-10H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<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)	
4,700.00	5.93	86.20	4,677.25	29.45	443.46	-36.11	0.00	0.00	0.00	
4,800.00	5.93	86.20	4,776.71	30.14	453.77	-36.95	0.00	0.00	0.00	
4,900.00	5.93	86.20	4,876.17	30.82	464.08	-37.79	0.00	0.00	0.00	
5,000.00	5.93	86.20	4,975.64	31.51	474.39	-38.63	0.00	0.00	0.00	
5,100.00	5.93	86.20	5,075.10	32.19	484.70	-39.47	0.00	0.00	0.00	
5,200.00	5.93	86.20	5,174.57	32.88	495.01	-40.30	0.00	0.00	0.00	
5,300.00	5.93	86.20	5,274.03	33.56	505.32	-41.14	0.00	0.00	0.00	
5,400.00	5.93	86.20	5,373.50	34.25	515.63	-41.98	0.00	0.00	0.00	
5,500.00	5.93	86.20	5,472.96	34.93	525.93	-42.82	0.00	0.00	0.00	
5,600.00	5.93	86.20	5,572.43	35.62	536.24	-43.66	0.00	0.00	0.00	
5,700.00	5.93	86.20	5,671.89	36.30	546.55	-44.50	0.00	0.00	0.00	
5,791.45	5.93	86.20	5,762.85	36.93	555.98	-45.27	0.00	0.00	0.00	
KOP @ 5791.45ft :: DLS = 9°/100'										
5,800.00	5.93	93.65	5,771.36	36.93	556.86	-45.28	9.00	0.04	87.15	
5,850.00	7.69	129.46	5,821.03	34.64	562.02	-43.07	9.00	3.51	71.62	
5,900.00	11.11	147.76	5,870.36	28.44	567.18	-36.95	9.00	6.84	36.60	
5,950.00	15.10	157.04	5,919.05	18.36	572.29	-26.95	9.00	7.98	18.56	
6,000.00	19.31	162.43	5,966.81	4.48	577.33	-13.14	9.00	8.43	10.78	
6,050.00	23.63	165.93	6,013.33	-13.13	582.26	4.39	9.00	8.63	7.00	
6,100.00	28.00	168.39	6,058.33	-34.36	587.06	25.54	9.00	8.74	4.93	
6,150.00	32.40	170.24	6,101.53	-59.07	591.70	50.18	9.00	8.81	3.69	
6,200.00	36.83	171.68	6,142.68	-87.11	596.14	78.16	9.00	8.85	2.89	
6,250.00	41.27	172.85	6,181.50	-118.32	600.36	109.29	9.00	8.88	2.35	
6,300.00	45.71	173.84	6,217.76	-152.49	604.34	143.40	9.00	8.90	1.96	
6,350.00	50.17	174.68	6,251.25	-189.42	608.04	180.27	9.00	8.91	1.69	
6,400.00	54.63	175.42	6,281.75	-228.87	611.45	219.67	9.00	8.92	1.48	
6,450.00	59.10	176.08	6,309.07	-270.62	614.55	261.36	9.00	8.93	1.33	
6,500.00	63.57	176.68	6,333.05	-314.39	617.31	305.09	9.00	8.94	1.21	
6,550.00	68.04	177.24	6,353.54	-359.92	619.72	350.58	9.00	8.94	1.12	
6,600.00	72.51	177.77	6,370.41	-406.93	621.77	397.55	9.00	8.95	1.05	
6,650.00	76.99	178.27	6,383.56	-455.13	623.43	445.72	9.00	8.95	1.00	
6,700.00	81.46	178.75	6,392.91	-504.22	624.71	494.79	9.00	8.95	0.96	
6,750.00	85.94	179.22	6,398.40	-553.90	625.59	544.44	9.00	8.95	0.94	
6,795.40	90.00	179.64	6,400.00	-599.25	626.05	589.79	9.00	8.95	0.93	
End Build @ 6795.40ft										
6,800.00	90.00	179.64	6,400.00	-603.86	626.07	594.39	0.00	0.00	0.00	
6,900.00	90.00	179.64	6,400.00	-703.85	626.70	694.37	0.00	0.00	0.00	
7,000.00	90.00	179.64	6,400.00	-803.85	627.33	794.34	0.00	0.00	0.00	
7,100.00	90.00	179.64	6,400.00	-903.85	627.96	894.32	0.00	0.00	0.00	
7,200.00	90.00	179.64	6,400.00	-1,003.85	628.59	994.30	0.00	0.00	0.00	
7,300.00	90.00	179.64	6,400.00	-1,103.85	629.22	1,094.28	0.00	0.00	0.00	
7,400.00	90.00	179.64	6,400.00	-1,203.84	629.85	1,194.25	0.00	0.00	0.00	
7,500.00	90.00	179.64	6,400.00	-1,303.84	630.48	1,294.23	0.00	0.00	0.00	
7,600.00	90.00	179.64	6,400.00	-1,403.84	631.11	1,394.21	0.00	0.00	0.00	
7,700.00	90.00	179.64	6,400.00	-1,503.84	631.74	1,494.19	0.00	0.00	0.00	
7,800.00	90.00	179.64	6,400.00	-1,603.84	632.37	1,594.16	0.00	0.00	0.00	
7,900.00	90.00	179.64	6,400.00	-1,703.83	633.00	1,694.14	0.00	0.00	0.00	
8,000.00	90.00	179.64	6,400.00	-1,803.83	633.63	1,794.12	0.00	0.00	0.00	
8,100.00	90.00	179.64	6,400.00	-1,903.83	634.26	1,894.10	0.00	0.00	0.00	
8,200.00	90.00	179.64	6,400.00	-2,003.83	634.89	1,994.07	0.00	0.00	0.00	
8,300.00	90.00	179.64	6,400.00	-2,103.83	635.52	2,094.05	0.00	0.00	0.00	
8,400.00	90.00	179.64	6,400.00	-2,203.82	636.15	2,194.03	0.00	0.00	0.00	
8,500.00	90.00	179.64	6,400.00	-2,303.82	636.78	2,294.00	0.00	0.00	0.00	
8,600.00	90.00	179.64	6,400.00	-2,403.82	637.41	2,393.98	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 2501-10H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 20' @ 4913.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 20' @ 4913.00usft (RIG)
<b>Site:</b>	9N-60W-25 PEGGY PAD	<b>North Reference:</b>	True
<b>Well:</b>	PEGGY 2501-10H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<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)	
8,700.00	90.00	179.64	6,400.00	-2,503.82	638.04	2,493.96	0.00	0.00	0.00	
8,800.00	90.00	179.64	6,400.00	-2,603.82	638.67	2,593.94	0.00	0.00	0.00	
8,900.00	90.00	179.64	6,400.00	-2,703.81	639.30	2,693.91	0.00	0.00	0.00	
9,000.00	90.00	179.64	6,400.00	-2,803.81	639.93	2,793.89	0.00	0.00	0.00	
9,100.00	90.00	179.64	6,400.00	-2,903.81	640.55	2,893.87	0.00	0.00	0.00	
9,200.00	90.00	179.64	6,400.00	-3,003.81	641.18	2,993.85	0.00	0.00	0.00	
9,300.00	90.00	179.64	6,400.00	-3,103.81	641.81	3,093.82	0.00	0.00	0.00	
9,400.00	90.00	179.64	6,400.00	-3,203.80	642.44	3,193.80	0.00	0.00	0.00	
9,500.00	90.00	179.64	6,400.00	-3,303.80	643.07	3,293.78	0.00	0.00	0.00	
9,600.00	90.00	179.64	6,400.00	-3,403.80	643.70	3,393.75	0.00	0.00	0.00	
9,700.00	90.00	179.64	6,400.00	-3,503.80	644.33	3,493.73	0.00	0.00	0.00	
9,800.00	90.00	179.64	6,400.00	-3,603.80	644.96	3,593.71	0.00	0.00	0.00	
9,900.00	90.00	179.64	6,400.00	-3,703.79	645.59	3,693.69	0.00	0.00	0.00	
10,000.00	90.00	179.64	6,400.00	-3,803.79	646.22	3,793.66	0.00	0.00	0.00	
10,100.00	90.00	179.64	6,400.00	-3,903.79	646.85	3,893.64	0.00	0.00	0.00	
10,200.00	90.00	179.64	6,400.00	-4,003.79	647.48	3,993.62	0.00	0.00	0.00	
10,300.00	90.00	179.64	6,400.00	-4,103.79	648.11	4,093.60	0.00	0.00	0.00	
10,400.00	90.00	179.64	6,400.00	-4,203.78	648.74	4,193.57	0.00	0.00	0.00	
10,500.00	90.00	179.64	6,400.00	-4,303.78	649.37	4,293.55	0.00	0.00	0.00	
10,600.00	90.00	179.64	6,400.00	-4,403.78	650.00	4,393.53	0.00	0.00	0.00	
10,700.00	90.00	179.64	6,400.00	-4,503.78	650.63	4,493.51	0.00	0.00	0.00	
10,800.00	90.00	179.64	6,400.00	-4,603.78	651.26	4,593.48	0.00	0.00	0.00	
10,900.00	90.00	179.64	6,400.00	-4,703.77	651.89	4,693.46	0.00	0.00	0.00	
11,000.00	90.00	179.64	6,400.00	-4,803.77	652.52	4,793.44	0.00	0.00	0.00	
11,100.00	90.00	179.64	6,400.00	-4,903.77	653.15	4,893.41	0.00	0.00	0.00	
11,200.00	90.00	179.64	6,400.00	-5,003.77	653.78	4,993.39	0.00	0.00	0.00	
11,300.00	90.00	179.64	6,400.00	-5,103.77	654.41	5,093.37	0.00	0.00	0.00	
11,400.00	90.00	179.64	6,400.00	-5,203.76	655.03	5,193.35	0.00	0.00	0.00	
11,500.00	90.00	179.64	6,400.00	-5,303.76	655.66	5,293.32	0.00	0.00	0.00	
11,600.00	90.00	179.64	6,400.00	-5,403.76	656.29	5,393.30	0.00	0.00	0.00	
11,700.00	90.00	179.64	6,400.00	-5,503.76	656.92	5,493.28	0.00	0.00	0.00	
11,800.00	90.00	179.64	6,400.00	-5,603.76	657.55	5,593.26	0.00	0.00	0.00	
11,842.60	90.00	179.64	6,400.00	-5,646.35	657.82	5,635.84	0.00	0.00	0.00	
Begin Turn to BHL @ 11842.60ft										
11,900.00	90.00	182.20	6,400.00	-5,703.74	656.90	5,693.24	4.46	0.00	4.46	
11,925.14	90.00	183.32	6,400.00	-5,728.85	655.69	5,718.37	4.46	0.00	4.46	
End Turn @ 11925.14ft										
12,000.00	90.00	183.32	6,400.00	-5,803.59	651.35	5,793.16	0.00	0.00	0.00	
12,100.00	90.00	183.32	6,400.00	-5,903.42	645.55	5,893.07	0.00	0.00	0.00	
12,200.00	90.00	183.32	6,400.00	-6,003.25	639.76	5,992.97	0.00	0.00	0.00	
12,300.00	90.00	183.32	6,400.00	-6,103.08	633.96	6,092.88	0.00	0.00	0.00	
12,400.00	90.00	183.32	6,400.00	-6,202.92	628.16	6,192.79	0.00	0.00	0.00	
12,500.00	90.00	183.32	6,400.00	-6,302.75	622.37	6,292.70	0.00	0.00	0.00	
12,600.00	90.00	183.32	6,400.00	-6,402.58	616.57	6,392.60	0.00	0.00	0.00	
12,700.00	90.00	183.32	6,400.00	-6,502.41	610.78	6,492.51	0.00	0.00	0.00	
12,800.00	90.00	183.32	6,400.00	-6,602.24	604.98	6,592.42	0.00	0.00	0.00	
12,900.00	90.00	183.32	6,400.00	-6,702.07	599.18	6,692.33	0.00	0.00	0.00	
13,000.00	90.00	183.32	6,400.00	-6,801.91	593.39	6,792.23	0.00	0.00	0.00	
13,100.00	90.00	183.32	6,400.00	-6,901.74	587.59	6,892.14	0.00	0.00	0.00	
13,200.00	90.00	183.32	6,400.00	-7,001.57	581.79	6,992.05	0.00	0.00	0.00	
13,300.00	90.00	183.32	6,400.00	-7,101.40	576.00	7,091.96	0.00	0.00	0.00	
13,400.00	90.00	183.32	6,400.00	-7,201.23	570.20	7,191.86	0.00	0.00	0.00	
13,500.00	90.00	183.32	6,400.00	-7,301.07	564.41	7,291.77	0.00	0.00	0.00	
13,600.00	90.00	183.32	6,400.00	-7,400.90	558.61	7,391.68	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 2501-10H
<b>Company:</b>	VERDAD RESOURCES	<b>TVD Reference:</b>	RKB = 20' @ 4913.00usft (RIG)
<b>Project:</b>	WATTENBERG FIELD	<b>MD Reference:</b>	RKB = 20' @ 4913.00usft (RIG)
<b>Site:</b>	9N-60W-25 PEGGY PAD	<b>North Reference:</b>	True
<b>Well:</b>	PEGGY 2501-10H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<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)	
13,700.00	90.00	183.32	6,400.00	-7,500.73	552.81	7,491.59	0.00	0.00	0.00	
13,800.00	90.00	183.32	6,400.00	-7,600.56	547.02	7,591.50	0.00	0.00	0.00	
13,900.00	90.00	183.32	6,400.00	-7,700.39	541.22	7,691.40	0.00	0.00	0.00	
14,000.00	90.00	183.32	6,400.00	-7,800.23	535.42	7,791.31	0.00	0.00	0.00	
14,100.00	90.00	183.32	6,400.00	-7,900.06	529.63	7,891.22	0.00	0.00	0.00	
14,200.00	90.00	183.32	6,400.00	-7,999.89	523.83	7,991.13	0.00	0.00	0.00	
14,300.00	90.00	183.32	6,400.00	-8,099.72	518.04	8,091.03	0.00	0.00	0.00	
14,400.00	90.00	183.32	6,400.00	-8,199.55	512.24	8,190.94	0.00	0.00	0.00	
14,413.28	90.00	183.32	6,400.00	-8,212.81	511.47	8,204.21	0.00	0.00	0.00	
TD Well @ 14413.28ft										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (")	Hole Diameter (")
1,706.74	1,700.00	9 5/8"		9-5/8	13-1/2

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
250.00	250.00	+N/-S (usft)	+E/-W (usft)	Begin Tangent @ 250.00ft	
546.50	545.97	1.02	15.30	End Tangent @ 546.50ft	
5,791.45	5,762.85	36.93	555.98	KOP @ 5791.45ft :: DLS = 9°/100'	
6,795.40	6,400.00	-599.25	626.05	End Build @ 6795.40ft	
11,842.60	6,400.00	-5,646.35	657.82	Begin Turn to BHL @ 11842.60ft	
11,925.14	6,400.00	-5,728.85	655.69	End Turn @ 11925.14ft	
14,413.28	6,400.00	-8,212.81	511.47	TD Well @ 14413.28ft	