

VERDAD RESOURCES

WATTENBERG FIELD

9N-60W-25 PEGGY 2501 PAD

PEGGY 2501-14H

Wellbore #2

Plan: Design #1

Standard Planning Report

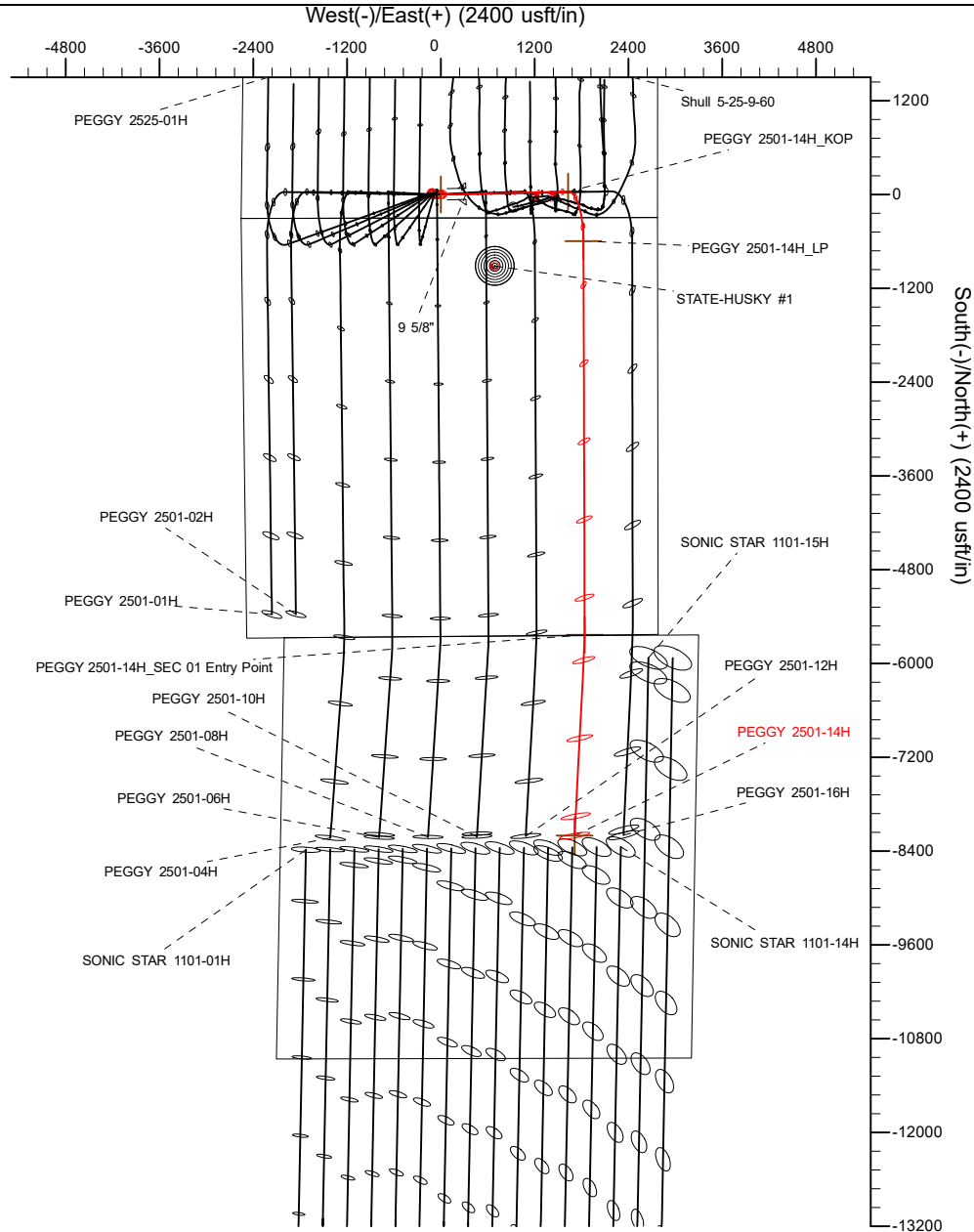
30 October, 2019

Project: WATTENBERG FIELD
Site: 9N-60W-25 PEGGY 2501 PAD
Well: PEGGY 2501-14H
Wellbore: Wellbore #2
Design: Design #1

VERDAD RESOURCES

CASING DETAILS

TVD	MD	Name	Size
1700.00	1742.88	9 5/8"	9-5/8



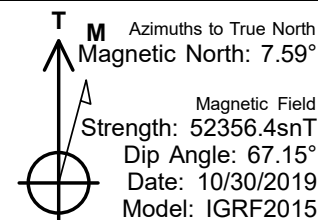
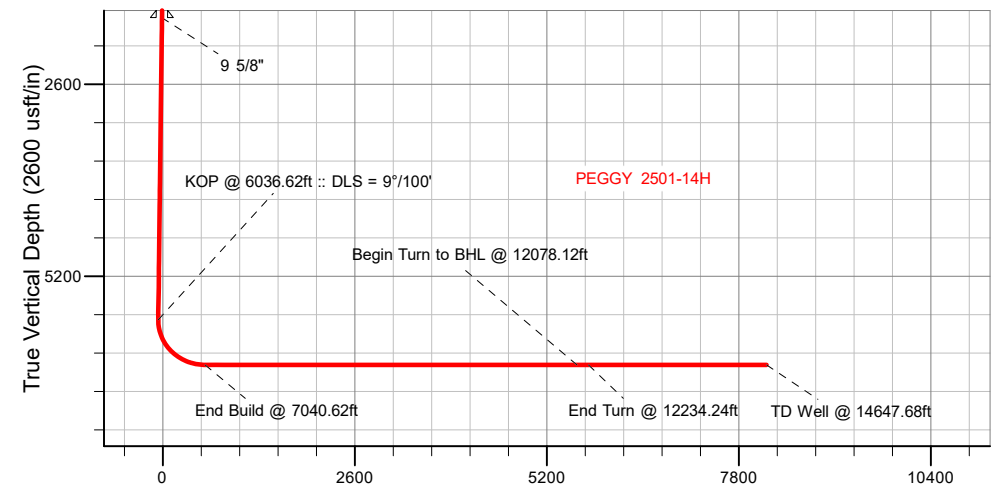
SHL	KOP	LP	SEC 01 Entry	BHL
300' FSL	335' FSL	300' FNL	0' FSL	2565' FNL
2552' FWL	1145' FEL	948 FEL	940' FEL	1543' FEL

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	250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	
3	1136.50	17.73	88.65	1122.42	3.21	136.03	2.00	88.65	-5.25	
4	6036.62	17.73	88.65	5789.79	38.36	1627.86	0.00	0.00	-62.79	
5	7040.62	90.00	179.83	6400.00	-597.67	1824.77	9.00	91.13	570.22	
6	12078.12	90.00	179.83	6400.00	-5635.15	1839.45	0.00	0.00	5606.91	PEGGY 2501-14H_SEC 01 Entry Point
7	12234.24	90.00	182.96	6400.00	-5791.20	1835.65	2.00	90.00	5763.00	
8	14647.68	90.00	182.96	6400.00	-8201.43	1711.22	0.00	0.00	8174.82	PEGGY 2501-14H_BHL

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
PEGGY 2501-14H_SHL	0.00	0.00	0.00	40.714775	-104.040337
PEGGY 2501-14H_KOP	5789.79	38.36	1627.86	40.714881	-104.034465
PEGGY 2501-14H_SEC 01 Entry Point	6400.00	-5635.15	1839.45	40.699308	-104.033703
PEGGY 2501-14H_BHL	6400.00	-8201.43	1711.22	40.692264	-104.034166



WELL DETAILS: PEGGY 2501-14H

GL = 4893'
RKB = 16' @ 4909.00usft (RIG)
Plan: Design #1 (PEGGY 2501-14H/Wellbore #2)
SherryEnergy.com Date: 10/30/2019

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Planning Report

Database:	EDM 5000.14 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:	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 2501-14H				
Well Position	+N/-S	0.29 usft	Northing:	1,506,566.97 usft	Latitude:	40.714776
	+E/-W	140.13 usft	Easting:	3,404,625.37 usft	Longitude:	-104.040337
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	52,356.35032015

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	180.86	

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	14,647.68	Design #1 (Wellbore #2)	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 2501-14H
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:	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	
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,136.50	17.73	88.65	1,122.42	3.21	136.03	2.00	2.00	0.00	88.65	
6,036.62	17.73	88.65	5,789.79	38.36	1,627.86	0.00	0.00	0.00	0.00	
7,040.62	90.00	179.83	6,400.00	-597.67	1,824.77	9.00	7.20	9.08	91.13	
12,078.12	90.00	179.83	6,400.00	-5,635.15	1,839.45	0.00	0.00	0.00	0.00	PEGGY 2501-14H_D
12,234.24	90.00	182.96	6,400.00	-5,791.20	1,835.65	2.00	0.00	2.00	90.00	
14,647.68	90.00	182.96	6,400.00	-8,201.43	1,711.22	0.00	0.00	0.00	0.00	PEGGY 2501-14H_BI

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Planning Report

Database:	EDM 5000.14 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:	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
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 250.00ft									
300.00	1.00	88.65	300.00	0.01	0.44	-0.02	2.00	2.00	0.00
400.00	3.00	88.65	399.93	0.09	3.93	-0.15	2.00	2.00	0.00
500.00	5.00	88.65	499.68	0.26	10.90	-0.42	2.00	2.00	0.00
600.00	7.00	88.65	599.13	0.50	21.35	-0.82	2.00	2.00	0.00
700.00	9.00	88.65	698.15	0.83	35.26	-1.36	2.00	2.00	0.00
800.00	11.00	88.65	796.63	1.24	52.62	-2.03	2.00	2.00	0.00
900.00	13.00	88.65	894.44	1.73	73.40	-2.83	2.00	2.00	0.00
1,000.00	15.00	88.65	991.46	2.30	97.59	-3.76	2.00	2.00	0.00
1,100.00	17.00	88.65	1,087.58	2.95	125.14	-4.83	2.00	2.00	0.00
1,136.50	17.73	88.65	1,122.42	3.21	136.03	-5.25	2.00	2.00	0.00
Hold Tangent @ 1136.50ft									
1,200.00	17.73	88.65	1,182.90	3.66	155.37	-5.99	0.00	0.00	0.00
1,300.00	17.73	88.65	1,278.15	4.38	185.81	-7.17	0.00	0.00	0.00
1,400.00	17.73	88.65	1,373.40	5.10	216.26	-8.34	0.00	0.00	0.00
1,500.00	17.73	88.65	1,468.65	5.81	246.70	-9.52	0.00	0.00	0.00
1,600.00	17.73	88.65	1,563.90	6.53	277.14	-10.69	0.00	0.00	0.00
1,700.00	17.73	88.65	1,659.15	7.25	307.59	-11.86	0.00	0.00	0.00
1,742.88	17.73	88.65	1,700.00	7.56	320.65	-12.37	0.00	0.00	0.00
9 5/8"									
1,800.00	17.73	88.65	1,754.40	7.97	338.03	-13.04	0.00	0.00	0.00
1,900.00	17.73	88.65	1,849.65	8.68	368.48	-14.21	0.00	0.00	0.00
2,000.00	17.73	88.65	1,944.91	9.40	398.92	-15.39	0.00	0.00	0.00
2,100.00	17.73	88.65	2,040.16	10.12	429.37	-16.56	0.00	0.00	0.00
2,200.00	17.73	88.65	2,135.41	10.84	459.81	-17.74	0.00	0.00	0.00
2,300.00	17.73	88.65	2,230.66	11.55	490.26	-18.91	0.00	0.00	0.00
2,400.00	17.73	88.65	2,325.91	12.27	520.70	-20.09	0.00	0.00	0.00
2,500.00	17.73	88.65	2,421.16	12.99	551.15	-21.26	0.00	0.00	0.00
2,600.00	17.73	88.65	2,516.41	13.71	581.59	-22.43	0.00	0.00	0.00
2,700.00	17.73	88.65	2,611.66	14.42	612.04	-23.61	0.00	0.00	0.00
2,800.00	17.73	88.65	2,706.91	15.14	642.48	-24.78	0.00	0.00	0.00
2,900.00	17.73	88.65	2,802.16	15.86	672.93	-25.96	0.00	0.00	0.00
3,000.00	17.73	88.65	2,897.41	16.58	703.37	-27.13	0.00	0.00	0.00
3,100.00	17.73	88.65	2,992.66	17.29	733.82	-28.31	0.00	0.00	0.00
3,200.00	17.73	88.65	3,087.91	18.01	764.26	-29.48	0.00	0.00	0.00
3,300.00	17.73	88.65	3,183.16	18.73	794.71	-30.65	0.00	0.00	0.00
3,400.00	17.73	88.65	3,278.41	19.45	825.15	-31.83	0.00	0.00	0.00
3,500.00	17.73	88.65	3,373.66	20.16	855.59	-33.00	0.00	0.00	0.00
3,600.00	17.73	88.65	3,468.91	20.88	886.04	-34.18	0.00	0.00	0.00
3,700.00	17.73	88.65	3,564.16	21.60	916.48	-35.35	0.00	0.00	0.00
3,800.00	17.73	88.65	3,659.41	22.32	946.93	-36.53	0.00	0.00	0.00
3,900.00	17.73	88.65	3,754.66	23.03	977.37	-37.70	0.00	0.00	0.00
4,000.00	17.73	88.65	3,849.91	23.75	1,007.82	-38.87	0.00	0.00	0.00
4,100.00	17.73	88.65	3,945.16	24.47	1,038.26	-40.05	0.00	0.00	0.00
4,200.00	17.73	88.65	4,040.41	25.19	1,068.71	-41.22	0.00	0.00	0.00
4,300.00	17.73	88.65	4,135.66	25.90	1,099.15	-42.40	0.00	0.00	0.00
4,400.00	17.73	88.65	4,230.91	26.62	1,129.60	-43.57	0.00	0.00	0.00
4,500.00	17.73	88.65	4,326.16	27.34	1,160.04	-44.75	0.00	0.00	0.00
4,600.00	17.73	88.65	4,421.41	28.06	1,190.49	-45.92	0.00	0.00	0.00

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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:	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)
4,700.00	17.73	88.65	4,516.66	28.77	1,220.93	-47.09	0.00	0.00	0.00
4,800.00	17.73	88.65	4,611.91	29.49	1,251.38	-48.27	0.00	0.00	0.00
4,900.00	17.73	88.65	4,707.16	30.21	1,281.82	-49.44	0.00	0.00	0.00
5,000.00	17.73	88.65	4,802.41	30.93	1,312.27	-50.62	0.00	0.00	0.00
5,100.00	17.73	88.65	4,897.66	31.64	1,342.71	-51.79	0.00	0.00	0.00
5,200.00	17.73	88.65	4,992.91	32.36	1,373.16	-52.97	0.00	0.00	0.00
5,300.00	17.73	88.65	5,088.16	33.08	1,403.60	-54.14	0.00	0.00	0.00
5,400.00	17.73	88.65	5,183.41	33.80	1,434.04	-55.32	0.00	0.00	0.00
5,500.00	17.73	88.65	5,278.66	34.51	1,464.49	-56.49	0.00	0.00	0.00
5,600.00	17.73	88.65	5,373.91	35.23	1,494.93	-57.66	0.00	0.00	0.00
5,700.00	17.73	88.65	5,469.16	35.95	1,525.38	-58.84	0.00	0.00	0.00
5,800.00	17.73	88.65	5,564.41	36.67	1,555.82	-60.01	0.00	0.00	0.00
5,900.00	17.73	88.65	5,659.66	37.38	1,586.27	-61.19	0.00	0.00	0.00
6,000.00	17.73	88.65	5,754.91	38.10	1,616.71	-62.36	0.00	0.00	0.00
6,036.62	17.73	88.65	5,789.79	38.36	1,627.86	-62.79	0.00	0.00	0.00
KOP @ 6036.62ft :: DLS = 9°/100'									
6,100.00	18.49	106.91	5,850.08	35.66	1,647.14	-60.38	9.00	1.20	28.81
6,200.00	22.66	129.86	5,943.84	18.67	1,677.16	-43.84	9.00	4.17	22.95
6,300.00	29.01	144.63	6,033.89	-13.51	1,706.04	-12.10	9.00	6.35	14.77
6,400.00	36.41	154.15	6,118.03	-60.09	1,733.07	34.07	9.00	7.41	9.52
6,500.00	44.35	160.75	6,194.18	-119.92	1,757.58	93.53	9.00	7.93	6.59
6,600.00	52.56	165.67	6,260.46	-191.53	1,778.98	164.81	9.00	8.22	4.92
6,700.00	60.94	169.60	6,315.25	-273.15	1,796.73	246.15	9.00	8.38	3.93
6,800.00	69.42	172.94	6,357.20	-362.78	1,810.40	335.57	9.00	8.48	3.34
6,900.00	77.95	175.92	6,385.27	-458.21	1,819.65	430.84	9.00	8.53	2.98
7,000.00	86.52	178.72	6,398.77	-557.08	1,824.26	529.64	9.00	8.56	2.80
7,040.62	90.00	179.83	6,400.00	-597.67	1,824.77	570.22	9.00	8.57	2.74
End Build @ 7040.62ft									
7,100.00	90.00	179.83	6,400.00	-657.05	1,824.94	629.59	0.00	0.00	0.00
7,200.00	90.00	179.83	6,400.00	-757.05	1,825.23	729.57	0.00	0.00	0.00
7,300.00	90.00	179.83	6,400.00	-857.05	1,825.52	829.55	0.00	0.00	0.00
7,400.00	90.00	179.83	6,400.00	-957.05	1,825.82	929.54	0.00	0.00	0.00
7,500.00	90.00	179.83	6,400.00	-1,057.05	1,826.11	1,029.52	0.00	0.00	0.00
7,600.00	90.00	179.83	6,400.00	-1,157.05	1,826.40	1,129.51	0.00	0.00	0.00
7,700.00	90.00	179.83	6,400.00	-1,257.05	1,826.69	1,229.49	0.00	0.00	0.00
7,800.00	90.00	179.83	6,400.00	-1,357.05	1,826.98	1,329.47	0.00	0.00	0.00
7,900.00	90.00	179.83	6,400.00	-1,457.05	1,827.27	1,429.46	0.00	0.00	0.00
8,000.00	90.00	179.83	6,400.00	-1,557.05	1,827.57	1,529.44	0.00	0.00	0.00
8,100.00	90.00	179.83	6,400.00	-1,657.05	1,827.86	1,629.42	0.00	0.00	0.00
8,200.00	90.00	179.83	6,400.00	-1,757.05	1,828.15	1,729.41	0.00	0.00	0.00
8,300.00	90.00	179.83	6,400.00	-1,857.05	1,828.44	1,829.39	0.00	0.00	0.00
8,400.00	90.00	179.83	6,400.00	-1,957.04	1,828.73	1,929.38	0.00	0.00	0.00
8,500.00	90.00	179.83	6,400.00	-2,057.04	1,829.02	2,029.36	0.00	0.00	0.00
8,600.00	90.00	179.83	6,400.00	-2,157.04	1,829.31	2,129.34	0.00	0.00	0.00
8,700.00	90.00	179.83	6,400.00	-2,257.04	1,829.61	2,229.33	0.00	0.00	0.00
8,800.00	90.00	179.83	6,400.00	-2,357.04	1,829.90	2,329.31	0.00	0.00	0.00
8,900.00	90.00	179.83	6,400.00	-2,457.04	1,830.19	2,429.30	0.00	0.00	0.00
9,000.00	90.00	179.83	6,400.00	-2,557.04	1,830.48	2,529.28	0.00	0.00	0.00
9,100.00	90.00	179.83	6,400.00	-2,657.04	1,830.77	2,629.26	0.00	0.00	0.00
9,200.00	90.00	179.83	6,400.00	-2,757.04	1,831.06	2,729.25	0.00	0.00	0.00
9,300.00	90.00	179.83	6,400.00	-2,857.04	1,831.35	2,829.23	0.00	0.00	0.00
9,400.00	90.00	179.83	6,400.00	-2,957.04	1,831.65	2,929.22	0.00	0.00	0.00
9,500.00	90.00	179.83	6,400.00	-3,057.04	1,831.94	3,029.20	0.00	0.00	0.00
9,600.00	90.00	179.83	6,400.00	-3,157.04	1,832.23	3,129.18	0.00	0.00	0.00

Hewlett-Packard

Planning Report

Database:	EDM 5000.14 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:	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)	
9,700.00	90.00	179.83	6,400.00	-3,257.04	1,832.52	3,229.17	0.00	0.00	0.00	
9,800.00	90.00	179.83	6,400.00	-3,357.04	1,832.81	3,329.15	0.00	0.00	0.00	
9,900.00	90.00	179.83	6,400.00	-3,457.04	1,833.10	3,429.14	0.00	0.00	0.00	
10,000.00	90.00	179.83	6,400.00	-3,557.04	1,833.39	3,529.12	0.00	0.00	0.00	
10,100.00	90.00	179.83	6,400.00	-3,657.04	1,833.69	3,629.10	0.00	0.00	0.00	
10,200.00	90.00	179.83	6,400.00	-3,757.04	1,833.98	3,729.09	0.00	0.00	0.00	
10,300.00	90.00	179.83	6,400.00	-3,857.04	1,834.27	3,829.07	0.00	0.00	0.00	
10,400.00	90.00	179.83	6,400.00	-3,957.04	1,834.56	3,929.06	0.00	0.00	0.00	
10,500.00	90.00	179.83	6,400.00	-4,057.04	1,834.85	4,029.04	0.00	0.00	0.00	
10,600.00	90.00	179.83	6,400.00	-4,157.04	1,835.14	4,129.02	0.00	0.00	0.00	
10,700.00	90.00	179.83	6,400.00	-4,257.04	1,835.44	4,229.01	0.00	0.00	0.00	
10,800.00	90.00	179.83	6,400.00	-4,357.03	1,835.73	4,328.99	0.00	0.00	0.00	
10,900.00	90.00	179.83	6,400.00	-4,457.03	1,836.02	4,428.97	0.00	0.00	0.00	
11,000.00	90.00	179.83	6,400.00	-4,557.03	1,836.31	4,528.96	0.00	0.00	0.00	
11,100.00	90.00	179.83	6,400.00	-4,657.03	1,836.60	4,628.94	0.00	0.00	0.00	
11,200.00	90.00	179.83	6,400.00	-4,757.03	1,836.89	4,728.93	0.00	0.00	0.00	
11,300.00	90.00	179.83	6,400.00	-4,857.03	1,837.18	4,828.91	0.00	0.00	0.00	
11,400.00	90.00	179.83	6,400.00	-4,957.03	1,837.48	4,928.89	0.00	0.00	0.00	
11,500.00	90.00	179.83	6,400.00	-5,057.03	1,837.77	5,028.88	0.00	0.00	0.00	
11,600.00	90.00	179.83	6,400.00	-5,157.03	1,838.06	5,128.86	0.00	0.00	0.00	
11,700.00	90.00	179.83	6,400.00	-5,257.03	1,838.35	5,228.85	0.00	0.00	0.00	
11,800.00	90.00	179.83	6,400.00	-5,357.03	1,838.64	5,328.83	0.00	0.00	0.00	
11,900.00	90.00	179.83	6,400.00	-5,457.03	1,838.93	5,428.81	0.00	0.00	0.00	
12,000.00	90.00	179.83	6,400.00	-5,557.03	1,839.22	5,528.80	0.00	0.00	0.00	
12,078.12	90.00	179.83	6,400.00	-5,635.15	1,839.45	5,606.91	0.00	0.00	0.00	
Begin Turn to BHL @ 12078.12ft										
12,100.00	90.00	180.27	6,400.00	-5,657.03	1,839.43	5,628.78	2.00	0.00	2.00	
12,200.00	90.00	182.27	6,400.00	-5,757.00	1,837.22	5,728.78	2.00	0.00	2.00	
12,234.24	90.00	182.96	6,400.00	-5,791.20	1,835.65	5,763.00	2.00	0.00	2.00	
End Turn @ 12234.24ft										
12,300.00	90.00	182.96	6,400.00	-5,856.88	1,832.26	5,828.72	0.00	0.00	0.00	
12,400.00	90.00	182.96	6,400.00	-5,956.74	1,827.11	5,928.65	0.00	0.00	0.00	
12,500.00	90.00	182.96	6,400.00	-6,056.61	1,821.95	6,028.58	0.00	0.00	0.00	
12,600.00	90.00	182.96	6,400.00	-6,156.48	1,816.80	6,128.52	0.00	0.00	0.00	
12,700.00	90.00	182.96	6,400.00	-6,256.34	1,811.64	6,228.45	0.00	0.00	0.00	
12,800.00	90.00	182.96	6,400.00	-6,356.21	1,806.48	6,328.38	0.00	0.00	0.00	
12,900.00	90.00	182.96	6,400.00	-6,456.08	1,801.33	6,428.31	0.00	0.00	0.00	
13,000.00	90.00	182.96	6,400.00	-6,555.95	1,796.17	6,528.25	0.00	0.00	0.00	
13,100.00	90.00	182.96	6,400.00	-6,655.81	1,791.02	6,628.18	0.00	0.00	0.00	
13,200.00	90.00	182.96	6,400.00	-6,755.68	1,785.86	6,728.11	0.00	0.00	0.00	
13,300.00	90.00	182.96	6,400.00	-6,855.55	1,780.71	6,828.05	0.00	0.00	0.00	
13,400.00	90.00	182.96	6,400.00	-6,955.41	1,775.55	6,927.98	0.00	0.00	0.00	
13,500.00	90.00	182.96	6,400.00	-7,055.28	1,770.39	7,027.91	0.00	0.00	0.00	
13,600.00	90.00	182.96	6,400.00	-7,155.15	1,765.24	7,127.85	0.00	0.00	0.00	
13,700.00	90.00	182.96	6,400.00	-7,255.01	1,760.08	7,227.78	0.00	0.00	0.00	
13,800.00	90.00	182.96	6,400.00	-7,354.88	1,754.93	7,327.71	0.00	0.00	0.00	
13,900.00	90.00	182.96	6,400.00	-7,454.75	1,749.77	7,427.65	0.00	0.00	0.00	
14,000.00	90.00	182.96	6,400.00	-7,554.62	1,744.62	7,527.58	0.00	0.00	0.00	
14,100.00	90.00	182.96	6,400.00	-7,654.48	1,739.46	7,627.51	0.00	0.00	0.00	
14,200.00	90.00	182.96	6,400.00	-7,754.35	1,734.30	7,727.45	0.00	0.00	0.00	
14,300.00	90.00	182.96	6,400.00	-7,854.22	1,729.15	7,827.38	0.00	0.00	0.00	
14,400.00	90.00	182.96	6,400.00	-7,954.08	1,723.99	7,927.31	0.00	0.00	0.00	
14,500.00	90.00	182.96	6,400.00	-8,053.95	1,718.84	8,027.24	0.00	0.00	0.00	
14,600.00	90.00	182.96	6,400.00	-8,153.82	1,713.68	8,127.18	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 2501-14H
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:	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)
14,647.68	90.00	182.96	6,400.00	-8,201.43	1,711.22	8,174.82	0.00	0.00	0.00
TD Well @ 14647.68ft									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,742.88	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 Nudge @ 250.00ft
1,136.50	1,122.42	3.21	136.03	Hold Tangent @ 1136.50ft
6,036.62	5,789.79	38.36	1,627.86	KOP @ 6036.62ft :: DLS = 9°/100'
7,040.62	6,400.00	-597.67	1,824.77	End Build @ 7040.62ft
12,078.12	6,400.00	-5,635.15	1,839.45	Begin Turn to BHL @ 12078.12ft
12,234.24	6,400.00	-5,791.20	1,835.65	End Turn @ 12234.24ft
14,647.68	6,400.00	-8,201.43	1,711.22	TD Well @ 14647.68ft