

CRESTONE PEAK RESOURCES

ADAMS COUNTY

SEC 34-T3S-R65W

BLUE 3-65 33-32-31-36 4BH

OWB

Plan: PROPOSAL 1

Standard Planning Report

17 April, 2023

PROJECT DETAILS: ADAMS COUNTY

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone

System Datum: Mean Sea Level

Project: ADAMS COUNTY
Site: SEC 34-T3S-R65W
Well: BLUE 3-65 33-32-31-36 4BH
Wellbore: OWB
Design: PROPOSAL 1



Azimuths to True North
Magnetic North: 7.54°

Magnetic Field
Strength: 51421.1nT
Dip Angle: 66.07°
Date: 4/17/2023
Model: IGRF2020

WELL DETAILS: BLUE 3-65 33-32-31-36 4BH

				5591.00			
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot	
0.00	0.00	1151529.35	3236966.85	39.746223°N	104.657277°W		

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	100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	
3	845.78	14.92	192.13	837.38	-94.37	-20.29	2.00	192.13	28.17	
4	7400.38	14.92	192.13	7171.14	-1743.81	-374.88	0.00	0.00	520.47	
5	8269.80	90.00	270.17	7696.00	-1878.88	-947.43	10.00	78.43	1102.36	LP-BLUE 3-65 4BH
6	28816.52	90.00	270.17	7696.00	-1817.54	-21494.05	0.00	0.00	21570.76	PBHL-BLUE 3-65 4BH

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	Start Build 2.00
845.78	14.92	192.13	837.38	-94.37	-20.29	28.17	96.53	Start 6554.60 hold at 845.78 MD
7400.38	14.92	192.13	7171.14	-1743.81	-374.88	520.47	1783.65	Start DLS 10.00 TFO 78.43
8269.80	90.00	270.17	7696.00	-1878.88	-947.43	1102.36	2391.10	Start 20546.72 hold at 8269.80 MD
28816.52	90.00	270.17	7696.00	-1817.54	-21494.05	21570.76	22937.82	TD at 28816.52

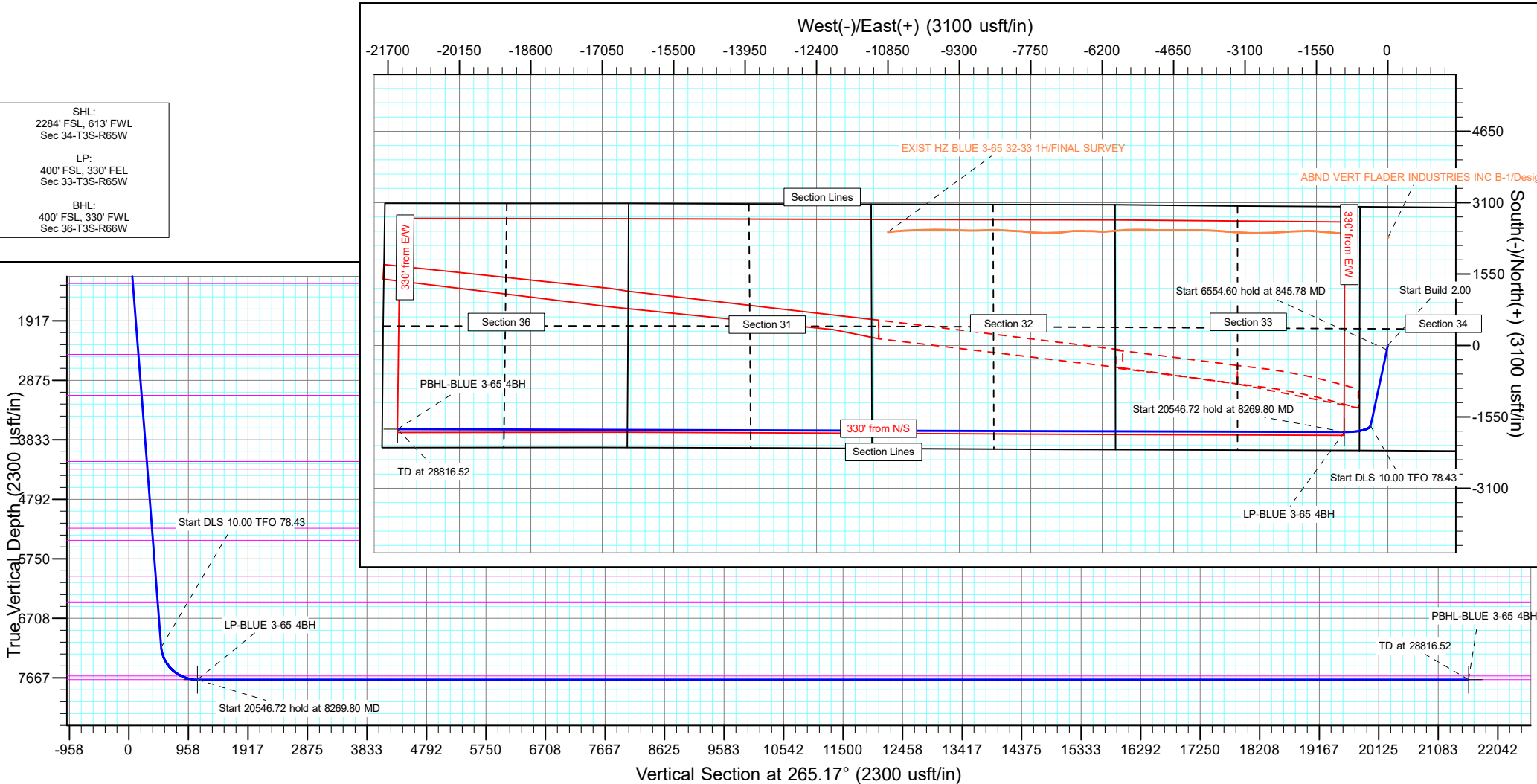
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
LP-BLUE 3-65 4BH	7696.00	-1878.88	-947.43	1149641.56	3236037.32	39.741065°N	104.660646°W	Point
PBHL-BLUE 3-65 4BH	7696.00	-1817.54	-21494.05	1149507.63	3215491.14	39.741208°N	104.733709°W	Point

SHL:
2284' FSL, 613' FWL
Sec 34-T3S-R65W

LP:
400' FSL, 330' FEL
Sec 33-T3S-R65W

BHL:
400' FSL, 330' FWL
Sec 36-T3S-R66W



Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well BLUE 3-65 33-32-31-36 4BH
Company:	CRESTONE PEAK RESOURCES	TVD Reference:	KB 25' @ 5616.00usft
Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5616.00usft
Site:	SEC 34-T3S-R65W	North Reference:	True
Well:	BLUE 3-65 33-32-31-36 4BH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Project	ADAMS COUNTY		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site		SEC 34-T3S-R65W			
Site Position:		Northing:	1,149,243.63 usft	Latitude:	39.739964°N
From:	Lat/Long	Easting:	3,236,370.14 usft	Longitude:	104.659476°W
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.54 °

Well	BLUE 3-65 33-32-31-36 4BH					
Well Position	+N/-S	2,279.96 usft	Northing:	1,151,529.34 usft	Latitude:	39.746223°N
	+E/-W	618.35 usft	Easting:	3,236,966.85 usft	Longitude:	104.657277°W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	5,591.00 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	4/17/2023	7.54	66.07	51,421.10572736

Design	PROPOSAL 1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	265.17

Plan Survey Tool Program	Date	4/17/2023		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	28,816.52	PROPOSAL 1 (OWB)	MWD OWSG
				OWSG MWD - Standard

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
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	
845.78	14.92	192.13	837.38	-94.37	-20.29	2.00	2.00	0.00	192.13	
7,400.38	14.92	192.13	7,171.14	-1,743.81	-374.88	0.00	0.00	0.00	0.00	
8,269.80	90.00	270.17	7,696.00	-1,878.88	-947.43	10.00	8.64	8.98	78.43	LP-BLUE 3-65 4BH
28,816.52	90.00	270.17	7,696.00	-1,817.54	-21,494.05	0.00	0.00	0.00	0.00	PBHL-BLUE 3-65 4BH

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well BLUE 3-65 33-32-31-36 4BH
Company:	CRESTONE PEAK RESOURCES	TVD Reference:	KB 25' @ 5616.00usft
Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5616.00usft
Site:	SEC 34-T3S-R65W	North Reference:	True
Well:	BLUE 3-65 33-32-31-36 4BH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24.00	0.00	0.00	24.00	0.00	0.00	0.00	0.00	0.00	0.00
Denver									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
200.00	2.00	192.13	199.98	-1.71	-0.37	0.51	2.00	2.00	0.00
300.00	4.00	192.13	299.84	-6.82	-1.47	2.04	2.00	2.00	0.00
400.00	6.00	192.13	399.45	-15.34	-3.30	4.58	2.00	2.00	0.00
500.00	8.00	192.13	498.70	-27.26	-5.86	8.14	2.00	2.00	0.00
600.00	10.00	192.13	597.47	-42.55	-9.15	12.70	2.00	2.00	0.00
700.00	12.00	192.13	695.62	-61.20	-13.16	18.27	2.00	2.00	0.00
720.85	12.42	192.13	716.00	-65.51	-14.08	19.55	2.00	2.00	0.00
Arapahoe									
800.00	14.00	192.13	793.06	-83.20	-17.89	24.83	2.00	2.00	0.00
845.78	14.92	192.13	837.38	-94.37	-20.29	28.17	2.00	2.00	0.00
Start 6554.60 hold at 845.78 MD									
900.00	14.92	192.13	889.78	-108.01	-23.22	32.24	0.00	0.00	0.00
1,000.00	14.92	192.13	986.41	-133.18	-28.63	39.75	0.00	0.00	0.00
1,100.00	14.92	192.13	1,083.04	-158.34	-34.04	47.26	0.00	0.00	0.00
1,200.00	14.92	192.13	1,179.67	-183.51	-39.45	54.77	0.00	0.00	0.00
1,300.00	14.92	192.13	1,276.30	-208.67	-44.86	62.28	0.00	0.00	0.00
1,341.08	14.92	192.13	1,316.00	-219.01	-47.08	65.37	0.00	0.00	0.00
Laramie-Fox Hills Formation									
1,400.00	14.92	192.13	1,372.93	-233.84	-50.27	69.79	0.00	0.00	0.00
1,500.00	14.92	192.13	1,469.56	-259.00	-55.68	77.30	0.00	0.00	0.00
1,600.00	14.92	192.13	1,566.19	-284.17	-61.09	84.81	0.00	0.00	0.00
1,700.00	14.92	192.13	1,662.82	-309.33	-66.50	92.33	0.00	0.00	0.00
1,800.00	14.92	192.13	1,759.45	-334.50	-71.91	99.84	0.00	0.00	0.00
1,900.00	14.92	192.13	1,856.08	-359.66	-77.32	107.35	0.00	0.00	0.00
2,000.00	14.92	192.13	1,952.71	-384.83	-82.73	114.86	0.00	0.00	0.00
2,013.75	14.92	192.13	1,966.00	-388.29	-83.47	115.89	0.00	0.00	0.00
Pierre Formation									
2,100.00	14.92	192.13	2,049.35	-409.99	-88.14	122.37	0.00	0.00	0.00
2,200.00	14.92	192.13	2,145.98	-435.16	-93.55	129.88	0.00	0.00	0.00
2,300.00	14.92	192.13	2,242.61	-460.32	-98.96	137.39	0.00	0.00	0.00
2,400.00	14.92	192.13	2,339.24	-485.48	-104.37	144.90	0.00	0.00	0.00
2,500.00	14.92	192.13	2,435.87	-510.65	-109.78	152.41	0.00	0.00	0.00
2,520.83	14.92	192.13	2,456.00	-515.89	-110.90	153.98	0.00	0.00	0.00
Upper Pierre aquifer									
2,600.00	14.92	192.13	2,532.50	-535.81	-115.19	159.92	0.00	0.00	0.00
2,700.00	14.92	192.13	2,629.13	-560.98	-120.60	167.43	0.00	0.00	0.00
2,800.00	14.92	192.13	2,725.76	-586.14	-126.01	174.94	0.00	0.00	0.00
2,900.00	14.92	192.13	2,822.39	-611.31	-131.42	182.46	0.00	0.00	0.00
3,000.00	14.92	192.13	2,919.02	-636.47	-136.83	189.97	0.00	0.00	0.00
3,100.00	14.92	192.13	3,015.65	-661.64	-142.24	197.48	0.00	0.00	0.00
3,200.00	14.92	192.13	3,112.28	-686.80	-147.65	204.99	0.00	0.00	0.00
3,203.85	14.92	192.13	3,116.00	-687.77	-147.85	205.28	0.00	0.00	0.00
Base of Upper Pierre aquifer									
3,300.00	14.92	192.13	3,208.91	-711.97	-153.06	212.50	0.00	0.00	0.00
3,400.00	14.92	192.13	3,305.54	-737.13	-158.47	220.01	0.00	0.00	0.00
3,500.00	14.92	192.13	3,402.17	-762.30	-163.88	227.52	0.00	0.00	0.00
3,600.00	14.92	192.13	3,498.80	-787.46	-169.29	235.03	0.00	0.00	0.00
3,700.00	14.92	192.13	3,595.43	-812.63	-174.70	242.54	0.00	0.00	0.00

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well BLUE 3-65 33-32-31-36 4BH
Company:	CRESTONE PEAK RESOURCES	TVD Reference:	KB 25' @ 5616.00usft
Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5616.00usft
Site:	SEC 34-T3S-R65W	North Reference:	True
Well:	BLUE 3-65 33-32-31-36 4BH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
3,800.00	14.92	192.13	3,692.07	-837.79	-180.11	250.05	0.00	0.00	0.00	
3,900.00	14.92	192.13	3,788.70	-862.95	-185.51	257.56	0.00	0.00	0.00	
4,000.00	14.92	192.13	3,885.33	-888.12	-190.92	265.07	0.00	0.00	0.00	
4,100.00	14.92	192.13	3,981.96	-913.28	-196.33	272.59	0.00	0.00	0.00	
4,200.00	14.92	192.13	4,078.59	-938.45	-201.74	280.10	0.00	0.00	0.00	
4,300.00	14.92	192.13	4,175.22	-963.61	-207.15	287.61	0.00	0.00	0.00	
4,305.98	14.92	192.13	4,181.00	-965.12	-207.48	288.06	0.00	0.00	0.00	
Larimer ("Parkman") sandstone										
4,400.00	14.92	192.13	4,271.85	-988.78	-212.56	295.12	0.00	0.00	0.00	
4,435.34	14.92	192.13	4,306.00	-997.67	-214.48	297.77	0.00	0.00	0.00	
Pierre Formation										
4,500.00	14.92	192.13	4,368.48	-1,013.94	-217.97	302.63	0.00	0.00	0.00	
4,600.00	14.92	192.13	4,465.11	-1,039.11	-223.38	310.14	0.00	0.00	0.00	
4,700.00	14.92	192.13	4,561.74	-1,064.27	-228.79	317.65	0.00	0.00	0.00	
4,800.00	14.92	192.13	4,658.37	-1,089.44	-234.20	325.16	0.00	0.00	0.00	
4,900.00	14.92	192.13	4,755.00	-1,114.60	-239.61	332.67	0.00	0.00	0.00	
5,000.00	14.92	192.13	4,851.63	-1,139.77	-245.02	340.18	0.00	0.00	0.00	
5,100.00	14.92	192.13	4,948.26	-1,164.93	-250.43	347.69	0.00	0.00	0.00	
5,200.00	14.92	192.13	5,044.89	-1,190.10	-255.84	355.20	0.00	0.00	0.00	
5,300.00	14.92	192.13	5,141.52	-1,215.26	-261.25	362.72	0.00	0.00	0.00	
5,400.00	14.92	192.13	5,238.16	-1,240.42	-266.66	370.23	0.00	0.00	0.00	
5,418.47	14.92	192.13	5,256.00	-1,245.07	-267.66	371.61	0.00	0.00	0.00	
Terry ("Sussex") sandstone										
5,500.00	14.92	192.13	5,334.79	-1,265.59	-272.07	377.74	0.00	0.00	0.00	
5,600.00	14.92	192.13	5,431.42	-1,290.75	-277.48	385.25	0.00	0.00	0.00	
5,620.27	14.92	192.13	5,451.00	-1,295.85	-278.58	386.77	0.00	0.00	0.00	
Pierre Formation										
5,700.00	14.92	192.13	5,528.05	-1,315.92	-282.89	392.76	0.00	0.00	0.00	
5,800.00	14.92	192.13	5,624.68	-1,341.08	-288.30	400.27	0.00	0.00	0.00	
5,900.00	14.92	192.13	5,721.31	-1,366.25	-293.71	407.78	0.00	0.00	0.00	
6,000.00	14.92	192.13	5,817.94	-1,391.41	-299.12	415.29	0.00	0.00	0.00	
6,100.00	14.92	192.13	5,914.57	-1,416.58	-304.53	422.80	0.00	0.00	0.00	
6,200.00	14.92	192.13	6,011.20	-1,441.74	-309.94	430.31	0.00	0.00	0.00	
6,220.49	14.92	192.13	6,031.00	-1,446.90	-311.05	431.85	0.00	0.00	0.00	
Hygiene ("Shannon") sandstone										
6,300.00	14.92	192.13	6,107.83	-1,466.91	-315.35	437.82	0.00	0.00	0.00	
6,400.00	14.92	192.13	6,204.46	-1,492.07	-320.76	445.33	0.00	0.00	0.00	
6,500.00	14.92	192.13	6,301.09	-1,517.24	-326.17	452.85	0.00	0.00	0.00	
6,600.00	14.92	192.13	6,397.72	-1,542.40	-331.58	460.36	0.00	0.00	0.00	
6,649.96	14.92	192.13	6,446.00	-1,554.97	-334.28	464.11	0.00	0.00	0.00	
Pierre Formation										
6,700.00	14.92	192.13	6,494.35	-1,567.57	-336.99	467.87	0.00	0.00	0.00	
6,800.00	14.92	192.13	6,590.98	-1,592.73	-342.40	475.38	0.00	0.00	0.00	
6,900.00	14.92	192.13	6,687.61	-1,617.89	-347.81	482.89	0.00	0.00	0.00	
7,000.00	14.92	192.13	6,784.24	-1,643.06	-353.22	490.40	0.00	0.00	0.00	
7,100.00	14.92	192.13	6,880.88	-1,668.22	-358.63	497.91	0.00	0.00	0.00	
7,200.00	14.92	192.13	6,977.51	-1,693.39	-364.04	505.42	0.00	0.00	0.00	
7,300.00	14.92	192.13	7,074.14	-1,718.55	-369.45	512.93	0.00	0.00	0.00	
7,400.38	14.92	192.13	7,171.14	-1,743.81	-374.88	520.47	0.00	0.00	0.00	
Start DLS 10.00 TFO 78.43										
7,450.00	16.62	209.36	7,218.91	-1,756.25	-379.70	526.33	10.00	3.44	34.73	
7,500.00	19.47	222.69	7,266.47	-1,768.61	-388.87	536.50	10.00	5.70	26.65	
7,550.00	23.04	232.39	7,313.07	-1,780.72	-402.28	550.88	10.00	7.14	19.40	

Planning Report

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Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5616.00usft
Site:	SEC 34-T3S-R65W	North Reference:	True
Well:	BLUE 3-65 33-32-31-36 4BH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
7,600.00	27.05	239.48	7,358.37	-1,792.47	-419.83	569.37	10.00	8.01	14.19
7,650.00	31.32	244.82	7,402.02	-1,803.78	-441.40	591.81	10.00	8.55	10.67
7,700.00	35.77	248.96	7,443.69	-1,814.56	-466.82	618.04	10.00	8.89	8.30
7,750.00	40.33	252.30	7,483.06	-1,824.74	-495.89	647.87	10.00	9.12	6.66
7,800.00	44.97	255.05	7,519.83	-1,834.22	-528.39	681.06	10.00	9.28	5.51
7,850.00	49.66	257.39	7,553.72	-1,842.95	-564.08	717.35	10.00	9.39	4.68
7,900.00	54.40	259.42	7,584.47	-1,850.84	-602.68	756.49	10.00	9.47	4.06
7,950.00	59.17	261.22	7,611.85	-1,857.86	-643.91	798.15	10.00	9.53	3.61
8,000.00	63.96	262.86	7,635.66	-1,863.93	-687.44	842.04	10.00	9.58	3.26
8,000.78	64.03	262.88	7,636.00	-1,864.02	-688.14	842.74	10.00	9.60	3.12
Sharon Springs Member									
8,050.00	68.77	264.36	7,655.70	-1,869.02	-732.95	887.82	10.00	9.61	3.01
8,100.00	73.58	265.77	7,671.83	-1,873.08	-780.08	935.12	10.00	9.64	2.82
8,150.00	78.41	267.11	7,683.92	-1,876.09	-828.49	983.61	10.00	9.66	2.68
8,200.00	83.25	268.40	7,691.89	-1,878.02	-877.79	1,032.91	10.00	9.67	2.59
8,250.00	88.08	269.67	7,695.67	-1,878.85	-927.63	1,082.63	10.00	9.67	2.54
8,269.80	90.00	270.17	7,696.00	-1,878.88	-947.43	1,102.36	10.00	9.68	2.52
Start 20546.72 hold at 8269.80 MD - Niobrara Formation									
8,300.00	90.00	270.17	7,696.00	-1,878.79	-977.62	1,132.45	0.00	0.00	0.00
8,400.00	90.00	270.17	7,696.00	-1,878.49	-1,077.62	1,232.07	0.00	0.00	0.00
8,500.00	90.00	270.17	7,696.00	-1,878.19	-1,177.62	1,331.68	0.00	0.00	0.00
8,600.00	90.00	270.17	7,696.00	-1,877.89	-1,277.62	1,431.30	0.00	0.00	0.00
8,700.00	90.00	270.17	7,696.00	-1,877.59	-1,377.62	1,530.92	0.00	0.00	0.00
8,800.00	90.00	270.17	7,696.00	-1,877.30	-1,477.62	1,630.54	0.00	0.00	0.00
8,900.00	90.00	270.17	7,696.00	-1,877.00	-1,577.62	1,730.16	0.00	0.00	0.00
9,000.00	90.00	270.17	7,696.00	-1,876.70	-1,677.62	1,829.78	0.00	0.00	0.00
9,100.00	90.00	270.17	7,696.00	-1,876.40	-1,777.62	1,929.40	0.00	0.00	0.00
9,200.00	90.00	270.17	7,696.00	-1,876.10	-1,877.62	2,029.02	0.00	0.00	0.00
9,300.00	90.00	270.17	7,696.00	-1,875.80	-1,977.62	2,128.64	0.00	0.00	0.00
9,400.00	90.00	270.17	7,696.00	-1,875.50	-2,077.62	2,228.25	0.00	0.00	0.00
9,500.00	90.00	270.17	7,696.00	-1,875.21	-2,177.62	2,327.87	0.00	0.00	0.00
9,600.00	90.00	270.17	7,696.00	-1,874.91	-2,277.62	2,427.49	0.00	0.00	0.00
9,700.00	90.00	270.17	7,696.00	-1,874.61	-2,377.62	2,527.11	0.00	0.00	0.00
9,800.00	90.00	270.17	7,696.00	-1,874.31	-2,477.62	2,626.73	0.00	0.00	0.00
9,900.00	90.00	270.17	7,696.00	-1,874.01	-2,577.62	2,726.35	0.00	0.00	0.00
10,000.00	90.00	270.17	7,696.00	-1,873.71	-2,677.62	2,825.97	0.00	0.00	0.00
10,100.00	90.00	270.17	7,696.00	-1,873.42	-2,777.62	2,925.59	0.00	0.00	0.00
10,200.00	90.00	270.17	7,696.00	-1,873.12	-2,877.62	3,025.20	0.00	0.00	0.00
10,300.00	90.00	270.17	7,696.00	-1,872.82	-2,977.62	3,124.82	0.00	0.00	0.00
10,400.00	90.00	270.17	7,696.00	-1,872.52	-3,077.62	3,224.44	0.00	0.00	0.00
10,500.00	90.00	270.17	7,696.00	-1,872.22	-3,177.61	3,324.06	0.00	0.00	0.00
10,600.00	90.00	270.17	7,696.00	-1,871.92	-3,277.61	3,423.68	0.00	0.00	0.00
10,700.00	90.00	270.17	7,696.00	-1,871.62	-3,377.61	3,523.30	0.00	0.00	0.00
10,800.00	90.00	270.17	7,696.00	-1,871.33	-3,477.61	3,622.92	0.00	0.00	0.00
10,900.00	90.00	270.17	7,696.00	-1,871.03	-3,577.61	3,722.54	0.00	0.00	0.00
11,000.00	90.00	270.17	7,696.00	-1,870.73	-3,677.61	3,822.16	0.00	0.00	0.00
11,100.00	90.00	270.17	7,696.00	-1,870.43	-3,777.61	3,921.77	0.00	0.00	0.00
11,200.00	90.00	270.17	7,696.00	-1,870.13	-3,877.61	4,021.39	0.00	0.00	0.00
11,300.00	90.00	270.17	7,696.00	-1,869.83	-3,977.61	4,121.01	0.00	0.00	0.00
11,400.00	90.00	270.17	7,696.00	-1,869.53	-4,077.61	4,220.63	0.00	0.00	0.00
11,500.00	90.00	270.17	7,696.00	-1,869.24	-4,177.61	4,320.25	0.00	0.00	0.00
11,600.00	90.00	270.17	7,696.00	-1,868.94	-4,277.61	4,419.87	0.00	0.00	0.00
11,700.00	90.00	270.17	7,696.00	-1,868.64	-4,377.61	4,519.49	0.00	0.00	0.00
11,800.00	90.00	270.17	7,696.00	-1,868.34	-4,477.61	4,619.11	0.00	0.00	0.00

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well BLUE 3-65 33-32-31-36 4BH
Company:	CRESTONE PEAK RESOURCES	TVD Reference:	KB 25' @ 5616.00usft
Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5616.00usft
Site:	SEC 34-T3S-R65W	North Reference:	True
Well:	BLUE 3-65 33-32-31-36 4BH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
11,900.00	90.00	270.17	7,696.00	-1,868.04	-4,577.61	4,718.72	0.00	0.00	0.00	
12,000.00	90.00	270.17	7,696.00	-1,867.74	-4,677.61	4,818.34	0.00	0.00	0.00	
12,100.00	90.00	270.17	7,696.00	-1,867.44	-4,777.61	4,917.96	0.00	0.00	0.00	
12,200.00	90.00	270.17	7,696.00	-1,867.15	-4,877.61	5,017.58	0.00	0.00	0.00	
12,300.00	90.00	270.17	7,696.00	-1,866.85	-4,977.61	5,117.20	0.00	0.00	0.00	
12,400.00	90.00	270.17	7,696.00	-1,866.55	-5,077.61	5,216.82	0.00	0.00	0.00	
12,500.00	90.00	270.17	7,696.00	-1,866.25	-5,177.61	5,316.44	0.00	0.00	0.00	
12,600.00	90.00	270.17	7,696.00	-1,865.95	-5,277.61	5,416.06	0.00	0.00	0.00	
12,700.00	90.00	270.17	7,696.00	-1,865.65	-5,377.61	5,515.68	0.00	0.00	0.00	
12,800.00	90.00	270.17	7,696.00	-1,865.36	-5,477.60	5,615.29	0.00	0.00	0.00	
12,900.00	90.00	270.17	7,696.00	-1,865.06	-5,577.60	5,714.91	0.00	0.00	0.00	
13,000.00	90.00	270.17	7,696.00	-1,864.76	-5,677.60	5,814.53	0.00	0.00	0.00	
13,100.00	90.00	270.17	7,696.00	-1,864.46	-5,777.60	5,914.15	0.00	0.00	0.00	
13,200.00	90.00	270.17	7,696.00	-1,864.16	-5,877.60	6,013.77	0.00	0.00	0.00	
13,300.00	90.00	270.17	7,696.00	-1,863.86	-5,977.60	6,113.39	0.00	0.00	0.00	
13,400.00	90.00	270.17	7,696.00	-1,863.56	-6,077.60	6,213.01	0.00	0.00	0.00	
13,500.00	90.00	270.17	7,696.00	-1,863.27	-6,177.60	6,312.63	0.00	0.00	0.00	
13,600.00	90.00	270.17	7,696.00	-1,862.97	-6,277.60	6,412.24	0.00	0.00	0.00	
13,700.00	90.00	270.17	7,696.00	-1,862.67	-6,377.60	6,511.86	0.00	0.00	0.00	
13,800.00	90.00	270.17	7,696.00	-1,862.37	-6,477.60	6,611.48	0.00	0.00	0.00	
13,900.00	90.00	270.17	7,696.00	-1,862.07	-6,577.60	6,711.10	0.00	0.00	0.00	
14,000.00	90.00	270.17	7,696.00	-1,861.77	-6,677.60	6,810.72	0.00	0.00	0.00	
14,100.00	90.00	270.17	7,696.00	-1,861.47	-6,777.60	6,910.34	0.00	0.00	0.00	
14,200.00	90.00	270.17	7,696.00	-1,861.18	-6,877.60	7,009.96	0.00	0.00	0.00	
14,300.00	90.00	270.17	7,696.00	-1,860.88	-6,977.60	7,109.58	0.00	0.00	0.00	
14,400.00	90.00	270.17	7,696.00	-1,860.58	-7,077.60	7,209.20	0.00	0.00	0.00	
14,500.00	90.00	270.17	7,696.00	-1,860.28	-7,177.60	7,308.81	0.00	0.00	0.00	
14,600.00	90.00	270.17	7,696.00	-1,859.98	-7,277.60	7,408.43	0.00	0.00	0.00	
14,700.00	90.00	270.17	7,696.00	-1,859.68	-7,377.60	7,508.05	0.00	0.00	0.00	
14,800.00	90.00	270.17	7,696.00	-1,859.38	-7,477.60	7,607.67	0.00	0.00	0.00	
14,900.00	90.00	270.17	7,696.00	-1,859.09	-7,577.60	7,707.29	0.00	0.00	0.00	
15,000.00	90.00	270.17	7,696.00	-1,858.79	-7,677.59	7,806.91	0.00	0.00	0.00	
15,100.00	90.00	270.17	7,696.00	-1,858.49	-7,777.59	7,906.53	0.00	0.00	0.00	
15,200.00	90.00	270.17	7,696.00	-1,858.19	-7,877.59	8,006.15	0.00	0.00	0.00	
15,300.00	90.00	270.17	7,696.00	-1,857.89	-7,977.59	8,105.76	0.00	0.00	0.00	
15,400.00	90.00	270.17	7,696.00	-1,857.59	-8,077.59	8,205.38	0.00	0.00	0.00	
15,500.00	90.00	270.17	7,696.00	-1,857.30	-8,177.59	8,305.00	0.00	0.00	0.00	
15,600.00	90.00	270.17	7,696.00	-1,857.00	-8,277.59	8,404.62	0.00	0.00	0.00	
15,700.00	90.00	270.17	7,696.00	-1,856.70	-8,377.59	8,504.24	0.00	0.00	0.00	
15,800.00	90.00	270.17	7,696.00	-1,856.40	-8,477.59	8,603.86	0.00	0.00	0.00	
15,900.00	90.00	270.17	7,696.00	-1,856.10	-8,577.59	8,703.48	0.00	0.00	0.00	
16,000.00	90.00	270.17	7,696.00	-1,855.80	-8,677.59	8,803.10	0.00	0.00	0.00	
16,100.00	90.00	270.17	7,696.00	-1,855.50	-8,777.59	8,902.72	0.00	0.00	0.00	
16,200.00	90.00	270.17	7,696.00	-1,855.21	-8,877.59	9,002.33	0.00	0.00	0.00	
16,300.00	90.00	270.17	7,696.00	-1,854.91	-8,977.59	9,101.95	0.00	0.00	0.00	
16,400.00	90.00	270.17	7,696.00	-1,854.61	-9,077.59	9,201.57	0.00	0.00	0.00	
16,500.00	90.00	270.17	7,696.00	-1,854.31	-9,177.59	9,301.19	0.00	0.00	0.00	
16,600.00	90.00	270.17	7,696.00	-1,854.01	-9,277.59	9,400.81	0.00	0.00	0.00	
16,700.00	90.00	270.17	7,696.00	-1,853.71	-9,377.59	9,500.43	0.00	0.00	0.00	
16,800.00	90.00	270.17	7,696.00	-1,853.41	-9,477.59	9,600.05	0.00	0.00	0.00	
16,900.00	90.00	270.17	7,696.00	-1,853.12	-9,577.59	9,699.67	0.00	0.00	0.00	
17,000.00	90.00	270.17	7,696.00	-1,852.82	-9,677.59	9,799.28	0.00	0.00	0.00	
17,100.00	90.00	270.17	7,696.00	-1,852.52	-9,777.59	9,898.90	0.00	0.00	0.00	
17,200.00	90.00	270.17	7,696.00	-1,852.22	-9,877.59	9,998.52	0.00	0.00	0.00	

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well BLUE 3-65 33-32-31-36 4BH
Company:	CRESTONE PEAK RESOURCES	TVD Reference:	KB 25' @ 5616.00usft
Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5616.00usft
Site:	SEC 34-T3S-R65W	North Reference:	True
Well:	BLUE 3-65 33-32-31-36 4BH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
17,300.00	90.00	270.17	7,696.00	-1,851.92	-9,977.58	10,098.14	0.00	0.00	0.00	
17,400.00	90.00	270.17	7,696.00	-1,851.62	-10,077.58	10,197.76	0.00	0.00	0.00	
17,500.00	90.00	270.17	7,696.00	-1,851.32	-10,177.58	10,297.38	0.00	0.00	0.00	
17,600.00	90.00	270.17	7,696.00	-1,851.03	-10,277.58	10,397.00	0.00	0.00	0.00	
17,700.00	90.00	270.17	7,696.00	-1,850.73	-10,377.58	10,496.62	0.00	0.00	0.00	
17,800.00	90.00	270.17	7,696.00	-1,850.43	-10,477.58	10,596.24	0.00	0.00	0.00	
17,900.00	90.00	270.17	7,696.00	-1,850.13	-10,577.58	10,695.85	0.00	0.00	0.00	
18,000.00	90.00	270.17	7,696.00	-1,849.83	-10,677.58	10,795.47	0.00	0.00	0.00	
18,100.00	90.00	270.17	7,696.00	-1,849.53	-10,777.58	10,895.09	0.00	0.00	0.00	
18,200.00	90.00	270.17	7,696.00	-1,849.24	-10,877.58	10,994.71	0.00	0.00	0.00	
18,300.00	90.00	270.17	7,696.00	-1,848.94	-10,977.58	11,094.33	0.00	0.00	0.00	
18,400.00	90.00	270.17	7,696.00	-1,848.64	-11,077.58	11,193.95	0.00	0.00	0.00	
18,500.00	90.00	270.17	7,696.00	-1,848.34	-11,177.58	11,293.57	0.00	0.00	0.00	
18,600.00	90.00	270.17	7,696.00	-1,848.04	-11,277.58	11,393.19	0.00	0.00	0.00	
18,700.00	90.00	270.17	7,696.00	-1,847.74	-11,377.58	11,492.80	0.00	0.00	0.00	
18,800.00	90.00	270.17	7,696.00	-1,847.44	-11,477.58	11,592.42	0.00	0.00	0.00	
18,900.00	90.00	270.17	7,696.00	-1,847.15	-11,577.58	11,692.04	0.00	0.00	0.00	
19,000.00	90.00	270.17	7,696.00	-1,846.85	-11,677.58	11,791.66	0.00	0.00	0.00	
19,100.00	90.00	270.17	7,696.00	-1,846.55	-11,777.58	11,891.28	0.00	0.00	0.00	
19,200.00	90.00	270.17	7,696.00	-1,846.25	-11,877.58	11,990.90	0.00	0.00	0.00	
19,300.00	90.00	270.17	7,696.00	-1,845.95	-11,977.58	12,090.52	0.00	0.00	0.00	
19,400.00	90.00	270.17	7,696.00	-1,845.65	-12,077.58	12,190.14	0.00	0.00	0.00	
19,500.00	90.00	270.17	7,696.00	-1,845.35	-12,177.57	12,289.76	0.00	0.00	0.00	
19,600.00	90.00	270.17	7,696.00	-1,845.06	-12,277.57	12,389.37	0.00	0.00	0.00	
19,700.00	90.00	270.17	7,696.00	-1,844.76	-12,377.57	12,488.99	0.00	0.00	0.00	
19,800.00	90.00	270.17	7,696.00	-1,844.46	-12,477.57	12,588.61	0.00	0.00	0.00	
19,900.00	90.00	270.17	7,696.00	-1,844.16	-12,577.57	12,688.23	0.00	0.00	0.00	
20,000.00	90.00	270.17	7,696.00	-1,843.86	-12,677.57	12,787.85	0.00	0.00	0.00	
20,100.00	90.00	270.17	7,696.00	-1,843.56	-12,777.57	12,887.47	0.00	0.00	0.00	
20,200.00	90.00	270.17	7,696.00	-1,843.26	-12,877.57	12,987.09	0.00	0.00	0.00	
20,300.00	90.00	270.17	7,696.00	-1,842.97	-12,977.57	13,086.71	0.00	0.00	0.00	
20,400.00	90.00	270.17	7,696.00	-1,842.67	-13,077.57	13,186.32	0.00	0.00	0.00	
20,500.00	90.00	270.17	7,696.00	-1,842.37	-13,177.57	13,285.94	0.00	0.00	0.00	
20,600.00	90.00	270.17	7,696.00	-1,842.07	-13,277.57	13,385.56	0.00	0.00	0.00	
20,700.00	90.00	270.17	7,696.00	-1,841.77	-13,377.57	13,485.18	0.00	0.00	0.00	
20,800.00	90.00	270.17	7,696.00	-1,841.47	-13,477.57	13,584.80	0.00	0.00	0.00	
20,900.00	90.00	270.17	7,696.00	-1,841.18	-13,577.57	13,684.42	0.00	0.00	0.00	
21,000.00	90.00	270.17	7,696.00	-1,840.88	-13,677.57	13,784.04	0.00	0.00	0.00	
21,100.00	90.00	270.17	7,696.00	-1,840.58	-13,777.57	13,883.66	0.00	0.00	0.00	
21,200.00	90.00	270.17	7,696.00	-1,840.28	-13,877.57	13,983.28	0.00	0.00	0.00	
21,300.00	90.00	270.17	7,696.00	-1,839.98	-13,977.57	14,082.89	0.00	0.00	0.00	
21,400.00	90.00	270.17	7,696.00	-1,839.68	-14,077.57	14,182.51	0.00	0.00	0.00	
21,500.00	90.00	270.17	7,696.00	-1,839.38	-14,177.57	14,282.13	0.00	0.00	0.00	
21,600.00	90.00	270.17	7,696.00	-1,839.09	-14,277.57	14,381.75	0.00	0.00	0.00	
21,700.00	90.00	270.17	7,696.00	-1,838.79	-14,377.57	14,481.37	0.00	0.00	0.00	
21,800.00	90.00	270.17	7,696.00	-1,838.49	-14,477.56	14,580.99	0.00	0.00	0.00	
21,900.00	90.00	270.17	7,696.00	-1,838.19	-14,577.56	14,680.61	0.00	0.00	0.00	
22,000.00	90.00	270.17	7,696.00	-1,837.89	-14,677.56	14,780.23	0.00	0.00	0.00	
22,100.00	90.00	270.17	7,696.00	-1,837.59	-14,777.56	14,879.84	0.00	0.00	0.00	
22,200.00	90.00	270.17	7,696.00	-1,837.29	-14,877.56	14,979.46	0.00	0.00	0.00	
22,300.00	90.00	270.17	7,696.00	-1,837.00	-14,977.56	15,079.08	0.00	0.00	0.00	
22,400.00	90.00	270.17	7,696.00	-1,836.70	-15,077.56	15,178.70	0.00	0.00	0.00	
22,500.00	90.00	270.17	7,696.00	-1,836.40	-15,177.56	15,278.32	0.00	0.00	0.00	
22,600.00	90.00	270.17	7,696.00	-1,836.10	-15,277.56	15,377.94	0.00	0.00	0.00	

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well BLUE 3-65 33-32-31-36 4BH
Company:	CRESTONE PEAK RESOURCES	TVD Reference:	KB 25' @ 5616.00usft
Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5616.00usft
Site:	SEC 34-T3S-R65W	North Reference:	True
Well:	BLUE 3-65 33-32-31-36 4BH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
22,700.00	90.00	270.17	7,696.00	-1,835.80	-15,377.56	15,477.56	0.00	0.00	0.00	
22,800.00	90.00	270.17	7,696.00	-1,835.50	-15,477.56	15,577.18	0.00	0.00	0.00	
22,900.00	90.00	270.17	7,696.00	-1,835.20	-15,577.56	15,676.80	0.00	0.00	0.00	
23,000.00	90.00	270.17	7,696.00	-1,834.91	-15,677.56	15,776.41	0.00	0.00	0.00	
23,100.00	90.00	270.17	7,696.00	-1,834.61	-15,777.56	15,876.03	0.00	0.00	0.00	
23,200.00	90.00	270.17	7,696.00	-1,834.31	-15,877.56	15,975.65	0.00	0.00	0.00	
23,300.00	90.00	270.17	7,696.00	-1,834.01	-15,977.56	16,075.27	0.00	0.00	0.00	
23,400.00	90.00	270.17	7,696.00	-1,833.71	-16,077.56	16,174.89	0.00	0.00	0.00	
23,500.00	90.00	270.17	7,696.00	-1,833.41	-16,177.56	16,274.51	0.00	0.00	0.00	
23,600.00	90.00	270.17	7,696.00	-1,833.12	-16,277.56	16,374.13	0.00	0.00	0.00	
23,700.00	90.00	270.17	7,696.00	-1,832.82	-16,377.56	16,473.75	0.00	0.00	0.00	
23,800.00	90.00	270.17	7,696.00	-1,832.52	-16,477.56	16,573.36	0.00	0.00	0.00	
23,900.00	90.00	270.17	7,696.00	-1,832.22	-16,577.56	16,672.98	0.00	0.00	0.00	
24,000.00	90.00	270.17	7,696.00	-1,831.92	-16,677.55	16,772.60	0.00	0.00	0.00	
24,100.00	90.00	270.17	7,696.00	-1,831.62	-16,777.55	16,872.22	0.00	0.00	0.00	
24,200.00	90.00	270.17	7,696.00	-1,831.32	-16,877.55	16,971.84	0.00	0.00	0.00	
24,300.00	90.00	270.17	7,696.00	-1,831.03	-16,977.55	17,071.46	0.00	0.00	0.00	
24,400.00	90.00	270.17	7,696.00	-1,830.73	-17,077.55	17,171.08	0.00	0.00	0.00	
24,500.00	90.00	270.17	7,696.00	-1,830.43	-17,177.55	17,270.70	0.00	0.00	0.00	
24,600.00	90.00	270.17	7,696.00	-1,830.13	-17,277.55	17,370.32	0.00	0.00	0.00	
24,700.00	90.00	270.17	7,696.00	-1,829.83	-17,377.55	17,469.93	0.00	0.00	0.00	
24,800.00	90.00	270.17	7,696.00	-1,829.53	-17,477.55	17,569.55	0.00	0.00	0.00	
24,900.00	90.00	270.17	7,696.00	-1,829.23	-17,577.55	17,669.17	0.00	0.00	0.00	
25,000.00	90.00	270.17	7,696.00	-1,828.94	-17,677.55	17,768.79	0.00	0.00	0.00	
25,100.00	90.00	270.17	7,696.00	-1,828.64	-17,777.55	17,868.41	0.00	0.00	0.00	
25,200.00	90.00	270.17	7,696.00	-1,828.34	-17,877.55	17,968.03	0.00	0.00	0.00	
25,300.00	90.00	270.17	7,696.00	-1,828.04	-17,977.55	18,067.65	0.00	0.00	0.00	
25,400.00	90.00	270.17	7,696.00	-1,827.74	-18,077.55	18,167.27	0.00	0.00	0.00	
25,500.00	90.00	270.17	7,696.00	-1,827.44	-18,177.55	18,266.88	0.00	0.00	0.00	
25,600.00	90.00	270.17	7,696.00	-1,827.14	-18,277.55	18,366.50	0.00	0.00	0.00	
25,700.00	90.00	270.17	7,696.00	-1,826.85	-18,377.55	18,466.12	0.00	0.00	0.00	
25,800.00	90.00	270.17	7,696.00	-1,826.55	-18,477.55	18,565.74	0.00	0.00	0.00	
25,900.00	90.00	270.17	7,696.00	-1,826.25	-18,577.55	18,665.36	0.00	0.00	0.00	
26,000.00	90.00	270.17	7,696.00	-1,825.95	-18,677.55	18,764.98	0.00	0.00	0.00	
26,100.00	90.00	270.17	7,696.00	-1,825.65	-18,777.55	18,864.60	0.00	0.00	0.00	
26,200.00	90.00	270.17	7,696.00	-1,825.35	-18,877.55	18,964.22	0.00	0.00	0.00	
26,300.00	90.00	270.17	7,696.00	-1,825.06	-18,977.54	19,063.84	0.00	0.00	0.00	
26,400.00	90.00	270.17	7,696.00	-1,824.76	-19,077.54	19,163.45	0.00	0.00	0.00	
26,500.00	90.00	270.17	7,696.00	-1,824.46	-19,177.54	19,263.07	0.00	0.00	0.00	
26,600.00	90.00	270.17	7,696.00	-1,824.16	-19,277.54	19,362.69	0.00	0.00	0.00	
26,700.00	90.00	270.17	7,696.00	-1,823.86	-19,377.54	19,462.31	0.00	0.00	0.00	
26,800.00	90.00	270.17	7,696.00	-1,823.56	-19,477.54	19,561.93	0.00	0.00	0.00	
26,900.00	90.00	270.17	7,696.00	-1,823.26	-19,577.54	19,661.55	0.00	0.00	0.00	
27,000.00	90.00	270.17	7,696.00	-1,822.97	-19,677.54	19,761.17	0.00	0.00	0.00	
27,100.00	90.00	270.17	7,696.00	-1,822.67	-19,777.54	19,860.79	0.00	0.00	0.00	
27,200.00	90.00	270.17	7,696.00	-1,822.37	-19,877.54	19,960.40	0.00	0.00	0.00	
27,300.00	90.00	270.17	7,696.00	-1,822.07	-19,977.54	20,060.02	0.00	0.00	0.00	
27,400.00	90.00	270.17	7,696.00	-1,821.77	-20,077.54	20,159.64	0.00	0.00	0.00	
27,500.00	90.00	270.17	7,696.00	-1,821.47	-20,177.54	20,259.26	0.00	0.00	0.00	
27,600.00	90.00	270.17	7,696.00	-1,821.17	-20,277.54	20,358.88	0.00	0.00	0.00	
27,700.00	90.00	270.17	7,696.00	-1,820.88	-20,377.54	20,458.50	0.00	0.00	0.00	
27,800.00	90.00	270.17	7,696.00	-1,820.58	-20,477.54	20,558.12	0.00	0.00	0.00	
27,900.00	90.00	270.17	7,696.00	-1,820.28	-20,577.54	20,657.74	0.00	0.00	0.00	
28,000.00	90.00	270.17	7,696.00	-1,819.98	-20,677.54	20,757.36	0.00	0.00	0.00	

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well BLUE 3-65 33-32-31-36 4BH
Company:	CRESTONE PEAK RESOURCES	TVD Reference:	KB 25' @ 5616.00usft
Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5616.00usft
Site:	SEC 34-T3S-R65W	North Reference:	True
Well:	BLUE 3-65 33-32-31-36 4BH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
28,100.00	90.00	270.17	7,696.00	-1,819.68	-20,777.54	20,856.97	0.00	0.00	0.00	
28,200.00	90.00	270.17	7,696.00	-1,819.38	-20,877.54	20,956.59	0.00	0.00	0.00	
28,300.00	90.00	270.17	7,696.00	-1,819.08	-20,977.54	21,056.21	0.00	0.00	0.00	
28,400.00	90.00	270.17	7,696.00	-1,818.79	-21,077.54	21,155.83	0.00	0.00	0.00	
28,500.00	90.00	270.17	7,696.00	-1,818.49	-21,177.54	21,255.45	0.00	0.00	0.00	
28,600.00	90.00	270.17	7,696.00	-1,818.19	-21,277.53	21,355.07	0.00	0.00	0.00	
28,700.00	90.00	270.17	7,696.00	-1,817.89	-21,377.53	21,454.69	0.00	0.00	0.00	
28,800.00	90.00	270.17	7,696.00	-1,817.59	-21,477.53	21,554.31	0.00	0.00	0.00	
28,816.52	90.00	270.17	7,696.00	-1,817.54	-21,494.05	21,570.76	0.00	0.00	0.00	
TD at 28816.52										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
PBHL-BLUE 3-65 4BH - hit/miss target - Shape	0.00	0.00	7,696.00	-1,817.54	-21,494.05	1,149,507.63	3,215,491.14	39.741208°N	104.733709°W	
LP-BLUE 3-65 4BH - plan hits target center - Point	0.00	0.00	7,696.00	-1,878.88	-947.43	1,149,641.56	3,236,037.33	39.741065°N	104.660646°W	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
24.00	24.00	Denver				
720.85	716.00	Arapahoe				
1,341.08	1,316.00	Laramie-Fox Hills Formation				
2,013.75	1,966.00	Pierre Formation				
2,520.83	2,456.00	Upper Pierre aquifer				
3,203.85	3,116.00	Base of Upper Pierre aquifer				
4,305.98	4,181.00	Larimer ("Parkman") sandstone				
4,435.34	4,306.00	Pierre Formation				
5,418.47	5,256.00	Terry ("Sussex") sandstone				
5,620.27	5,451.00	Pierre Formation				
6,220.49	6,031.00	Hygiene ("Shannon") sandstone				
6,649.96	6,446.00	Pierre Formation				
8,000.78	7,636.00	Sharon Springs Member				
8,269.80	7,696.00	Niobrara Formation				

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well BLUE 3-65 33-32-31-36 4BH
Company:	CRESTONE PEAK RESOURCES	TVD Reference:	KB 25' @ 5616.00usft
Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5616.00usft
Site:	SEC 34-T3S-R65W	North Reference:	True
Well:	BLUE 3-65 33-32-31-36 4BH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
100.00	100.00	0.00	0.00	Start Build 2.00
845.78	837.38	-94.37	-20.29	Start 6554.60 hold at 845.78 MD
7,400.38	7,171.14	-1,743.81	-374.88	Start DLS 10.00 TFO 78.43
8,269.80	7,696.00	-1,878.88	-947.43	Start 20546.72 hold at 8269.80 MD
28,816.52	7,696.00	-1,817.54	-21,494.05	TD at 28816.52