

CRESTONE PEAK RESOURCES

ADAMS COUNTY

SEC 34-T3S-R65W

BLUE FED 3-65 33-32-31-36 3AH

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 FED 3-65 33-32-31-36 3AH
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 FED 3-65 33-32-31-36 3AH

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1151528.77	3236906.95	39.746223°N	104.657490°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	700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	
3	840.56	2.81	262.97	840.50	-0.42	-3.42	2.00	262.97	3.40	
4	7158.59	2.81	262.97	7150.93	-38.32	-310.96	0.00	0.00	309.20	
5	8030.70	90.00	270.24	7696.00	-39.31	-883.24	10.00	7.27	881.00	LP-BLUE 3-65 3AH
6	13526.19	90.00	270.24	7696.00	-16.29	-6378.69	0.00	0.00	6373.05	ENTRY PNT-BLUE 3-65 3AH
7	13526.24	90.00	270.24	7696.00	-16.29	-6378.73	2.00	90.00	6373.09	EXIT PNT-BLUE 3-65 3AH
8	16903.96	90.00	270.24	7696.00	-2.08	-9756.43	0.00	0.00	9748.70	EXIT PNT-BLUE 3-65 3AH
9	16904.28	90.00	270.23	7696.00	-2.08	-9756.74	2.00	-90.00	9749.02	- plan hits target center
10	18291.40	90.00	270.23	7696.00	3.60	-11143.85	0.00	0.00	11135.27	MID PNT-BLUE 3-65 3AH
11	18517.20	90.00	274.75	7696.00	13.42	-11369.39	2.00	90.00	11361.01	PBHL-BLUE 3-65 3AH
12	28591.23	90.00	274.75	7696.00	847.76	-21408.80	0.00	0.00	21425.58	PBHL-BLUE 3-65 3AH

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	Start Build 2.00
840.56	2.81	262.97	840.50	-0.42	-3.42	3.40	3.45	Start 6318.03 hold at 840.56 MD
7158.59	2.81	262.97	7150.93	-38.32	-310.96	309.20	313.31	Start DLS 10.00 TFO 7.27
8030.70	90.00	270.24	7696.00	-39.31	-883.24	881.00	885.62	Start 5495.49 hold at 8030.70 MD
13526.24	90.00	270.24	7696.00	-16.29	-6378.73	6373.09	6381.16	Start 3377.72 hold at 13526.24 MD
16904.28	90.00	270.23	7696.00	-2.08	-9756.74	9749.02	9759.20	Start 1387.12 hold at 16904.28 MD
18291.40	90.00	270.23	7696.00	3.60	-11143.85	11135.27	11146.32	Start Turn 2.00
18517.20	90.00	274.75	7696.00	13.42	-11369.39	11361.01	11372.12	Start 10074.03 hold at 18517.20 MD
28591.23	90.00	274.75	7696.00	847.76	-21408.80	21425.58	21446.15	TD at 28591.23

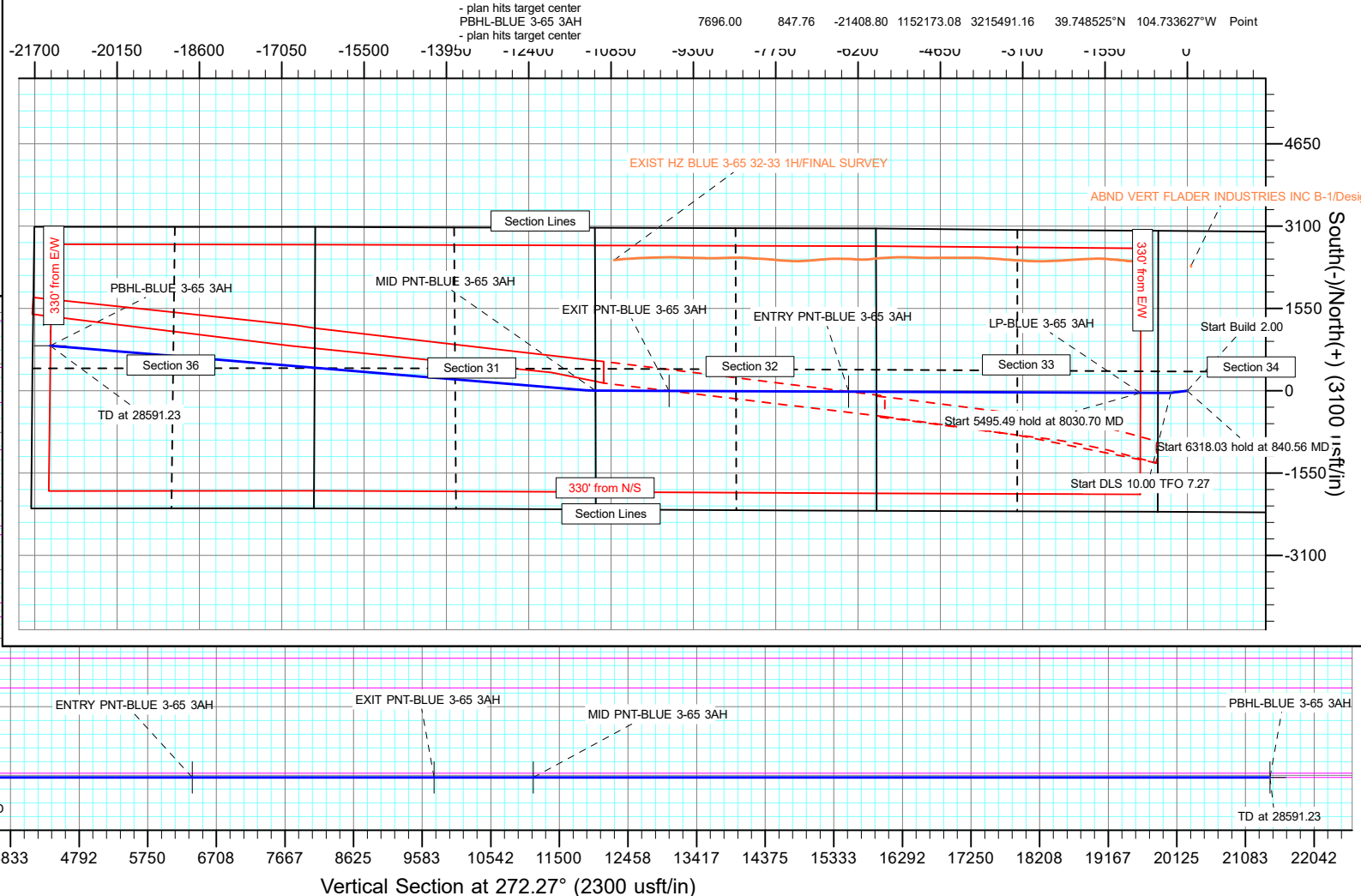
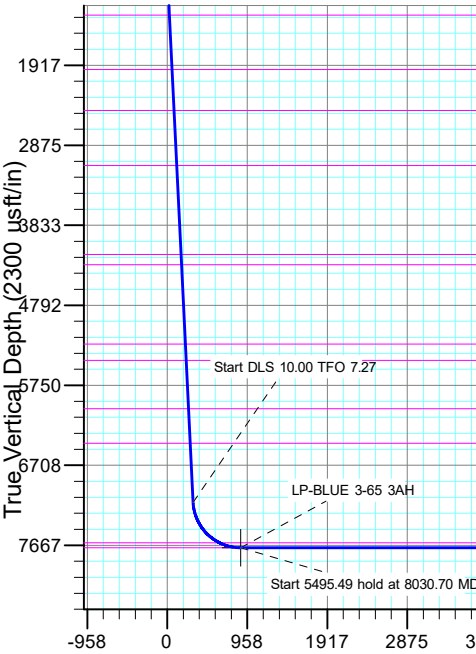
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	North	Easting	Latitude	Longitude	Shape
ENTRY PNT-BLUE 3-65 3AH	7696.00	-16.29	-6378.69	1151451.88	3230528.74	39.746176°N	104.680174°W	Point
- plan hits target center								
EXIT PNT-BLUE 3-65 3AH	7696.00	-2.08	-9756.43	1151433.99	3227151.03	39.746212°N	104.692186°W	Point
- plan hits target center								
LP-BLUE 3-65 3AH	7696.00	-39.31	-883.24	1151481.07	3236024.13	39.746115°N	104.660631°W	Point
- plan hits target center								
MID PNT-BLUE 3-65 3AH	7696.00	3.60	-11143.85	1151426.49	3225763.62	39.746226°N	104.697120°W	Point
- plan hits target center								
PBHL-BLUE 3-65 3AH	7696.00	847.76	-21408.80	1152173.08	3215491.16	39.748525°N	104.733627°W	Point
- plan hits target center								

SHL:
2283' FSL, 553' FWL
Sec 34-T3S-R65W

LP:
2240' FSL, 330' FEL
Sec 33-T3S-R65W

BHL:
2240' FNL, 330' FWL
Sec 36-T3S-R66W



Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well BLUE FED 3-65 33-32-31-36 3AH
Company:	CRESTONE PEAK RESOURCES	TVD Reference:	KB 25' @ 5618.00usft
Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5618.00usft
Site:	SEC 34-T3S-R65W	North Reference:	True
Well:	BLUE FED 3-65 33-32-31-36 3AH	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 FED 3-65 33-32-31-36 3AH					
Well Position	+N/-S	2,279.95 usft	Northing:	1,151,528.77 usft	Latitude:	39.746223°N
	+E/-W	558.46 usft	Easting:	3,236,906.96 usft	Longitude:	104.657490°W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	5,593.00 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	4/17/2023	7.54	66.07	51,421.06787472

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	272.27	

Plan Survey Tool Program	Date	4/17/2023			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	28,591.23	PROPOSAL 1 (OWB)	MWD OWSG	
				OWSG MWD - Standard	

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well BLUE FED 3-65 33-32-31-36 3AH
Company:	CRESTONE PEAK RESOURCES	TVD Reference:	KB 25' @ 5618.00usft
Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5618.00usft
Site:	SEC 34-T3S-R65W	North Reference:	True
Well:	BLUE FED 3-65 33-32-31-36 3AH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

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	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	
840.56	2.81	262.97	840.50	-0.42	-3.42	2.00	2.00	0.00	262.97	
7,158.59	2.81	262.97	7,150.93	-38.32	-310.96	0.00	0.00	0.00	0.00	
8,030.70	90.00	270.24	7,696.00	-39.31	-883.24	10.00	10.00	0.83	7.27	LP-BLUE 3-65 3AH
13,526.19	90.00	270.24	7,696.00	-16.29	-6,378.69	0.00	0.00	0.00	0.00	ENTRY PNT-BLUE 3-
13,526.24	90.00	270.24	7,696.00	-16.29	-6,378.73	2.00	0.00	2.00	90.00	EXIT PNT-BLUE 3-65
16,903.96	90.00	270.24	7,696.00	-2.08	-9,756.43	0.00	0.00	0.00	0.00	EXIT PNT-BLUE 3-65
16,904.28	90.00	270.23	7,696.00	-2.08	-9,756.74	2.00	0.00	-2.00	-90.00	MID PNT-BLUE 3-65
18,291.40	90.00	270.23	7,696.00	3.60	-11,143.85	0.00	0.00	0.00	0.00	MID PNT-BLUE 3-65
18,517.21	90.00	274.75	7,696.00	13.42	-11,369.39	2.00	0.00	2.00	90.00	PBHL-BLUE 3-65 3AH
28,591.23	90.00	274.75	7,696.00	847.76	-21,408.80	0.00	0.00	0.00	0.00	PBHL-BLUE 3-65 3AH

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well BLUE FED 3-65 33-32-31-36 3AH
Company:	CRESTONE PEAK RESOURCES	TVD Reference:	KB 25' @ 5618.00usft
Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5618.00usft
Site:	SEC 34-T3S-R65W	North Reference:	True
Well:	BLUE FED 3-65 33-32-31-36 3AH	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
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
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
716.00	0.32	262.97	716.00	-0.01	-0.04	0.04	2.00	2.00	0.00
Arapahoe									
800.00	2.00	262.97	799.98	-0.21	-1.73	1.72	2.00	2.00	0.00
840.56	2.81	262.97	840.50	-0.42	-3.42	3.40	2.00	2.00	0.00
Start 6318.03 hold at 840.56 MD									
900.00	2.81	262.97	899.87	-0.78	-6.31	6.28	0.00	0.00	0.00
1,000.00	2.81	262.97	999.75	-1.38	-11.18	11.12	0.00	0.00	0.00
1,100.00	2.81	262.97	1,099.63	-1.98	-16.05	15.96	0.00	0.00	0.00
1,200.00	2.81	262.97	1,199.51	-2.58	-20.92	20.80	0.00	0.00	0.00
1,300.00	2.81	262.97	1,299.39	-3.18	-25.79	25.64	0.00	0.00	0.00
1,316.63	2.81	262.97	1,316.00	-3.28	-26.59	26.44	0.00	0.00	0.00
Laramie-Fox Hills Formation									
1,400.00	2.81	262.97	1,399.27	-3.78	-30.65	30.48	0.00	0.00	0.00
1,500.00	2.81	262.97	1,499.15	-4.38	-35.52	35.32	0.00	0.00	0.00
1,600.00	2.81	262.97	1,599.03	-4.98	-40.39	40.16	0.00	0.00	0.00
1,700.00	2.81	262.97	1,698.91	-5.58	-45.26	45.00	0.00	0.00	0.00
1,800.00	2.81	262.97	1,798.79	-6.18	-50.12	49.84	0.00	0.00	0.00
1,900.00	2.81	262.97	1,898.67	-6.78	-54.99	54.68	0.00	0.00	0.00
1,967.41	2.81	262.97	1,966.00	-7.18	-58.27	57.94	0.00	0.00	0.00
Pierre Formation									
2,000.00	2.81	262.97	1,998.55	-7.38	-59.86	59.52	0.00	0.00	0.00
2,100.00	2.81	262.97	2,098.43	-7.98	-64.73	64.36	0.00	0.00	0.00
2,200.00	2.81	262.97	2,198.31	-8.58	-69.59	69.20	0.00	0.00	0.00
2,300.00	2.81	262.97	2,298.19	-9.18	-74.46	74.04	0.00	0.00	0.00
2,400.00	2.81	262.97	2,398.07	-9.78	-79.33	78.88	0.00	0.00	0.00
2,458.00	2.81	262.97	2,456.00	-10.12	-82.15	81.69	0.00	0.00	0.00
Upper Pierre aquifer									
2,500.00	2.81	262.97	2,497.95	-10.38	-84.20	83.72	0.00	0.00	0.00
2,600.00	2.81	262.97	2,597.83	-10.98	-89.06	88.56	0.00	0.00	0.00
2,700.00	2.81	262.97	2,697.71	-11.58	-93.93	93.40	0.00	0.00	0.00
2,800.00	2.81	262.97	2,797.59	-12.18	-98.80	98.24	0.00	0.00	0.00
2,900.00	2.81	262.97	2,897.47	-12.78	-103.67	103.08	0.00	0.00	0.00
3,000.00	2.81	262.97	2,997.35	-13.38	-108.53	107.92	0.00	0.00	0.00
3,100.00	2.81	262.97	3,097.22	-13.98	-113.40	112.76	0.00	0.00	0.00
3,118.80	2.81	262.97	3,116.00	-14.09	-114.32	113.67	0.00	0.00	0.00
Base of Upper Pierre aquifer									
3,200.00	2.81	262.97	3,197.10	-14.57	-118.27	117.60	0.00	0.00	0.00
3,300.00	2.81	262.97	3,296.98	-15.17	-123.14	122.44	0.00	0.00	0.00
3,400.00	2.81	262.97	3,396.86	-15.77	-128.00	127.28	0.00	0.00	0.00
3,500.00	2.81	262.97	3,496.74	-16.37	-132.87	132.12	0.00	0.00	0.00
3,600.00	2.81	262.97	3,596.62	-16.97	-137.74	136.96	0.00	0.00	0.00
3,700.00	2.81	262.97	3,696.50	-17.57	-142.61	141.80	0.00	0.00	0.00

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well BLUE FED 3-65 33-32-31-36 3AH
Company:	CRESTONE PEAK RESOURCES	TVD Reference:	KB 25' @ 5618.00usft
Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5618.00usft
Site:	SEC 34-T3S-R65W	North Reference:	True
Well:	BLUE FED 3-65 33-32-31-36 3AH	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	2.81	262.97	3,796.38	-18.17	-147.47	146.64	0.00	0.00	0.00	
3,900.00	2.81	262.97	3,896.26	-18.77	-152.34	151.48	0.00	0.00	0.00	
4,000.00	2.81	262.97	3,996.14	-19.37	-157.21	156.32	0.00	0.00	0.00	
4,100.00	2.81	262.97	4,096.02	-19.97	-162.08	161.16	0.00	0.00	0.00	
4,185.08	2.81	262.97	4,181.00	-20.48	-166.22	165.28	0.00	0.00	0.00	
Larimer ("Parkman") sandstone										
4,200.00	2.81	262.97	4,195.90	-20.57	-166.94	166.00	0.00	0.00	0.00	
4,300.00	2.81	262.97	4,295.78	-21.17	-171.81	170.84	0.00	0.00	0.00	
4,310.23	2.81	262.97	4,306.00	-21.23	-172.31	171.33	0.00	0.00	0.00	
Pierre Formation										
4,400.00	2.81	262.97	4,395.66	-21.77	-176.68	175.68	0.00	0.00	0.00	
4,500.00	2.81	262.97	4,495.54	-22.37	-181.55	180.52	0.00	0.00	0.00	
4,600.00	2.81	262.97	4,595.42	-22.97	-186.41	185.36	0.00	0.00	0.00	
4,700.00	2.81	262.97	4,695.30	-23.57	-191.28	190.20	0.00	0.00	0.00	
4,800.00	2.81	262.97	4,795.18	-24.17	-196.15	195.04	0.00	0.00	0.00	
4,900.00	2.81	262.97	4,895.06	-24.77	-201.02	199.88	0.00	0.00	0.00	
5,000.00	2.81	262.97	4,994.94	-25.37	-205.88	204.72	0.00	0.00	0.00	
5,100.00	2.81	262.97	5,094.82	-25.97	-210.75	209.56	0.00	0.00	0.00	
5,200.00	2.81	262.97	5,194.70	-26.57	-215.62	214.40	0.00	0.00	0.00	
5,261.38	2.81	262.97	5,256.00	-26.94	-218.61	217.37	0.00	0.00	0.00	
Terry ("Sussex") sandstone										
5,300.00	2.81	262.97	5,294.58	-27.17	-220.49	219.24	0.00	0.00	0.00	
5,400.00	2.81	262.97	5,394.46	-27.77	-225.35	224.08	0.00	0.00	0.00	
5,456.61	2.81	262.97	5,451.00	-28.11	-228.11	226.82	0.00	0.00	0.00	
Pierre Formation										
5,500.00	2.81	262.97	5,494.34	-28.37	-230.22	228.92	0.00	0.00	0.00	
5,600.00	2.81	262.97	5,594.22	-28.97	-235.09	233.76	0.00	0.00	0.00	
5,700.00	2.81	262.97	5,694.10	-29.57	-239.96	238.60	0.00	0.00	0.00	
5,800.00	2.81	262.97	5,793.98	-30.17	-244.83	243.44	0.00	0.00	0.00	
5,900.00	2.81	262.97	5,893.86	-30.77	-249.69	248.28	0.00	0.00	0.00	
6,000.00	2.81	262.97	5,993.74	-31.37	-254.56	253.12	0.00	0.00	0.00	
6,037.31	2.81	262.97	6,031.00	-31.59	-256.38	254.93	0.00	0.00	0.00	
Hygiene ("Shannon") sandstone										
6,100.00	2.81	262.97	6,093.61	-31.97	-259.43	257.96	0.00	0.00	0.00	
6,200.00	2.81	262.97	6,193.49	-32.57	-264.30	262.80	0.00	0.00	0.00	
6,300.00	2.81	262.97	6,293.37	-33.17	-269.16	267.64	0.00	0.00	0.00	
6,400.00	2.81	262.97	6,393.25	-33.77	-274.03	272.48	0.00	0.00	0.00	
6,452.81	2.81	262.97	6,446.00	-34.09	-276.60	275.04	0.00	0.00	0.00	
Pierre Formation										
6,500.00	2.81	262.97	6,493.13	-34.37	-278.90	277.32	0.00	0.00	0.00	
6,600.00	2.81	262.97	6,593.01	-34.97	-283.77	282.16	0.00	0.00	0.00	
6,700.00	2.81	262.97	6,692.89	-35.57	-288.63	287.00	0.00	0.00	0.00	
6,800.00	2.81	262.97	6,792.77	-36.17	-293.50	291.84	0.00	0.00	0.00	
6,900.00	2.81	262.97	6,892.65	-36.77	-298.37	296.68	0.00	0.00	0.00	
7,000.00	2.81	262.97	6,992.53	-37.37	-303.24	301.52	0.00	0.00	0.00	
7,100.00	2.81	262.97	7,092.41	-37.97	-308.10	306.36	0.00	0.00	0.00	
7,158.59	2.81	262.97	7,150.93	-38.32	-310.96	309.20	0.00	0.00	0.00	
Start DLS 10.00 TFO 7.27										
7,200.00	6.94	267.32	7,192.18	-38.56	-314.46	312.69	10.00	9.97	10.48	
7,250.00	11.94	268.56	7,241.49	-38.83	-322.65	320.86	10.00	9.99	2.48	
7,300.00	16.93	269.07	7,289.90	-39.08	-335.11	333.30	10.00	10.00	1.03	
7,350.00	21.93	269.36	7,337.03	-39.31	-351.74	349.91	10.00	10.00	0.57	
7,400.00	26.93	269.54	7,382.54	-39.50	-372.41	370.56	10.00	10.00	0.37	

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well BLUE FED 3-65 33-32-31-36 3AH
Company:	CRESTONE PEAK RESOURCES	TVD Reference:	KB 25' @ 5618.00usft
Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5618.00usft
Site:	SEC 34-T3S-R65W	North Reference:	True
Well:	BLUE FED 3-65 33-32-31-36 3AH	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)	
7,450.00	31.93	269.67	7,426.07	-39.67	-396.97	395.09	10.00	10.00	0.26	
7,500.00	36.93	269.77	7,467.30	-39.81	-425.24	423.33	10.00	10.00	0.20	
7,550.00	41.93	269.84	7,505.91	-39.91	-456.98	455.05	10.00	10.00	0.15	
7,600.00	46.93	269.91	7,541.60	-39.99	-491.97	490.01	10.00	10.00	0.13	
7,650.00	51.93	269.96	7,574.11	-40.03	-529.94	527.94	10.00	10.00	0.11	
7,700.00	56.93	270.01	7,603.19	-40.04	-570.60	568.57	10.00	10.00	0.09	
7,750.00	61.93	270.05	7,628.61	-40.02	-613.64	611.57	10.00	10.00	0.08	
7,766.14	63.54	270.06	7,636.00	-40.00	-627.99	625.91	10.00	10.00	0.08	
Sharon Springs Member										
7,800.00	66.93	270.09	7,650.18	-39.96	-658.73	656.63	10.00	10.00	0.08	
7,850.00	71.93	270.12	7,667.74	-39.88	-705.52	703.39	10.00	10.00	0.07	
7,900.00	76.93	270.16	7,681.16	-39.76	-753.67	751.51	10.00	10.00	0.07	
7,950.00	81.93	270.19	7,690.33	-39.61	-802.81	800.61	10.00	10.00	0.06	
8,000.00	86.93	270.22	7,695.18	-39.43	-852.56	850.33	10.00	10.00	0.06	
8,030.70	90.00	270.24	7,696.00	-39.31	-883.24	881.00	10.00	10.00	0.06	
Start 5495.49 hold at 8030.70 MD - Niobrara Formation										
8,100.00	90.00	270.24	7,696.00	-39.02	-952.54	950.25	0.00	0.00	0.00	
8,200.00	90.00	270.24	7,696.00	-38.60	-1,052.54	1,050.19	0.00	0.00	0.00	
8,300.00	90.00	270.24	7,696.00	-38.18	-1,152.54	1,150.13	0.00	0.00	0.00	
8,400.00	90.00	270.24	7,696.00	-37.76	-1,252.54	1,250.06	0.00	0.00	0.00	
8,500.00	90.00	270.24	7,696.00	-37.34	-1,352.54	1,350.00	0.00	0.00	0.00	
8,600.00	90.00	270.24	7,696.00	-36.92	-1,452.54	1,449.94	0.00	0.00	0.00	
8,700.00	90.00	270.24	7,696.00	-36.50	-1,552.54	1,549.88	0.00	0.00	0.00	
8,800.00	90.00	270.24	7,696.00	-36.09	-1,652.54	1,649.81	0.00	0.00	0.00	
8,900.00	90.00	270.24	7,696.00	-35.67	-1,752.53	1,749.75	0.00	0.00	0.00	
9,000.00	90.00	270.24	7,696.00	-35.25	-1,852.53	1,849.69	0.00	0.00	0.00	
9,100.00	90.00	270.24	7,696.00	-34.83	-1,952.53	1,949.63	0.00	0.00	0.00	
9,200.00	90.00	270.24	7,696.00	-34.41	-2,052.53	2,049.56	0.00	0.00	0.00	
9,300.00	90.00	270.24	7,696.00	-33.99	-2,152.53	2,149.50	0.00	0.00	0.00	
9,400.00	90.00	270.24	7,696.00	-33.57	-2,252.53	2,249.44	0.00	0.00	0.00	
9,500.00	90.00	270.24	7,696.00	-33.15	-2,352.53	2,349.38	0.00	0.00	0.00	
9,600.00	90.00	270.24	7,696.00	-32.73	-2,452.53	2,449.31	0.00	0.00	0.00	
9,700.00	90.00	270.24	7,696.00	-32.32	-2,552.53	2,549.25	0.00	0.00	0.00	
9,800.00	90.00	270.24	7,696.00	-31.90	-2,652.53	2,649.19	0.00	0.00	0.00	
9,900.00	90.00	270.24	7,696.00	-31.48	-2,752.53	2,749.12	0.00	0.00	0.00	
10,000.00	90.00	270.24	7,696.00	-31.06	-2,852.52	2,849.06	0.00	0.00	0.00	
10,100.00	90.00	270.24	7,696.00	-30.64	-2,952.52	2,949.00	0.00	0.00	0.00	
10,200.00	90.00	270.24	7,696.00	-30.22	-3,052.52	3,048.94	0.00	0.00	0.00	
10,300.00	90.00	270.24	7,696.00	-29.80	-3,152.52	3,148.87	0.00	0.00	0.00	
10,400.00	90.00	270.24	7,696.00	-29.38	-3,252.52	3,248.81	0.00	0.00	0.00	
10,500.00	90.00	270.24	7,696.00	-28.96	-3,352.52	3,348.75	0.00	0.00	0.00	
10,600.00	90.00	270.24	7,696.00	-28.55	-3,452.52	3,448.69	0.00	0.00	0.00	
10,700.00	90.00	270.24	7,696.00	-28.13	-3,552.52	3,548.62	0.00	0.00	0.00	
10,800.00	90.00	270.24	7,696.00	-27.71	-3,652.52	3,648.56	0.00	0.00	0.00	
10,900.00	90.00	270.24	7,696.00	-27.29	-3,752.52	3,748.50	0.00	0.00	0.00	
11,000.00	90.00	270.24	7,696.00	-26.87	-3,852.52	3,848.44	0.00	0.00	0.00	
11,100.00	90.00	270.24	7,696.00	-26.45	-3,952.52	3,948.37	0.00	0.00	0.00	
11,200.00	90.00	270.24	7,696.00	-26.03	-4,052.51	4,048.31	0.00	0.00	0.00	
11,300.00	90.00	270.24	7,696.00	-25.61	-4,152.51	4,148.25	0.00	0.00	0.00	
11,400.00	90.00	270.24	7,696.00	-25.19	-4,252.51	4,248.19	0.00	0.00	0.00	
11,500.00	90.00	270.24	7,696.00	-24.78	-4,352.51	4,348.12	0.00	0.00	0.00	
11,600.00	90.00	270.24	7,696.00	-24.36	-4,452.51	4,448.06	0.00	0.00	0.00	
11,700.00	90.00	270.24	7,696.00	-23.94	-4,552.51	4,548.00	0.00	0.00	0.00	
11,800.00	90.00	270.24	7,696.00	-23.52	-4,652.51	4,647.93	0.00	0.00	0.00	

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well BLUE FED 3-65 33-32-31-36 3AH
Company:	CRESTONE PEAK RESOURCES	TVD Reference:	KB 25' @ 5618.00usft
Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5618.00usft
Site:	SEC 34-T3S-R65W	North Reference:	True
Well:	BLUE FED 3-65 33-32-31-36 3AH	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	270.24	7,696.00	-23.10	-4,752.51	4,747.87	0.00	0.00	0.00
12,000.00	90.00	270.24	7,696.00	-22.68	-4,852.51	4,847.81	0.00	0.00	0.00
12,100.00	90.00	270.24	7,696.00	-22.26	-4,952.51	4,947.75	0.00	0.00	0.00
12,200.00	90.00	270.24	7,696.00	-21.84	-5,052.51	5,047.68	0.00	0.00	0.00
12,300.00	90.00	270.24	7,696.00	-21.42	-5,152.50	5,147.62	0.00	0.00	0.00
12,400.00	90.00	270.24	7,696.00	-21.01	-5,252.50	5,247.56	0.00	0.00	0.00
12,500.00	90.00	270.24	7,696.00	-20.59	-5,352.50	5,347.50	0.00	0.00	0.00
12,600.00	90.00	270.24	7,696.00	-20.17	-5,452.50	5,447.43	0.00	0.00	0.00
12,700.00	90.00	270.24	7,696.00	-19.75	-5,552.50	5,547.37	0.00	0.00	0.00
12,800.00	90.00	270.24	7,696.00	-19.33	-5,652.50	5,647.31	0.00	0.00	0.00
12,900.00	90.00	270.24	7,696.00	-18.91	-5,752.50	5,747.25	0.00	0.00	0.00
13,000.00	90.00	270.24	7,696.00	-18.49	-5,852.50	5,847.18	0.00	0.00	0.00
13,100.00	90.00	270.24	7,696.00	-18.07	-5,952.50	5,947.12	0.00	0.00	0.00
13,200.00	90.00	270.24	7,696.00	-17.65	-6,052.50	6,047.06	0.00	0.00	0.00
13,300.00	90.00	270.24	7,696.00	-17.24	-6,152.50	6,147.00	0.00	0.00	0.00
13,400.00	90.00	270.24	7,696.00	-16.82	-6,252.50	6,246.93	0.00	0.00	0.00
13,500.00	90.00	270.24	7,696.00	-16.40	-6,352.49	6,346.87	0.00	0.00	0.00
13,526.19	90.00	270.24	7,696.00	-16.29	-6,378.69	6,373.05	0.00	0.00	0.00
13,526.24	90.00	270.24	7,696.00	-16.29	-6,378.73	6,373.09	2.00	0.00	2.00
Start 3377.72 hold at 13526.24 MD									
13,600.00	90.00	270.24	7,696.00	-15.98	-6,452.49	6,446.81	0.00	0.00	0.00
13,700.00	90.00	270.24	7,696.00	-15.56	-6,552.49	6,546.75	0.00	0.00	0.00
13,800.00	90.00	270.24	7,696.00	-15.14	-6,652.49	6,646.68	0.00	0.00	0.00
13,900.00	90.00	270.24	7,696.00	-14.72	-6,752.49	6,746.62	0.00	0.00	0.00
14,000.00	90.00	270.24	7,696.00	-14.29	-6,852.49	6,846.56	0.00	0.00	0.00
14,100.00	90.00	270.24	7,696.00	-13.87	-6,952.49	6,946.50	0.00	0.00	0.00
14,200.00	90.00	270.24	7,696.00	-13.45	-7,052.49	7,046.43	0.00	0.00	0.00
14,300.00	90.00	270.24	7,696.00	-13.03	-7,152.49	7,146.37	0.00	0.00	0.00
14,400.00	90.00	270.24	7,696.00	-12.61	-7,252.49	7,246.31	0.00	0.00	0.00
14,500.00	90.00	270.24	7,696.00	-12.19	-7,352.49	7,346.24	0.00	0.00	0.00
14,600.00	90.00	270.24	7,696.00	-11.77	-7,452.48	7,446.18	0.00	0.00	0.00
14,700.00	90.00	270.24	7,696.00	-11.35	-7,552.48	7,546.12	0.00	0.00	0.00
14,800.00	90.00	270.24	7,696.00	-10.93	-7,652.48	7,646.06	0.00	0.00	0.00
14,900.00	90.00	270.24	7,696.00	-10.51	-7,752.48	7,745.99	0.00	0.00	0.00
15,000.00	90.00	270.24	7,696.00	-10.09	-7,852.48	7,845.93	0.00	0.00	0.00
15,100.00	90.00	270.24	7,696.00	-9.67	-7,952.48	7,945.87	0.00	0.00	0.00
15,200.00	90.00	270.24	7,696.00	-9.25	-8,052.48	8,045.81	0.00	0.00	0.00
15,300.00	90.00	270.24	7,696.00	-8.83	-8,152.48	8,145.74	0.00	0.00	0.00
15,400.00	90.00	270.24	7,696.00	-8.41	-8,252.48	8,245.68	0.00	0.00	0.00
15,500.00	90.00	270.24	7,696.00	-7.99	-8,352.48	8,345.62	0.00	0.00	0.00
15,600.00	90.00	270.24	7,696.00	-7.57	-8,452.48	8,445.56	0.00	0.00	0.00
15,700.00	90.00	270.24	7,696.00	-7.14	-8,552.47	8,545.49	0.00	0.00	0.00
15,800.00	90.00	270.24	7,696.00	-6.72	-8,652.47	8,645.43	0.00	0.00	0.00
15,900.00	90.00	270.24	7,696.00	-6.30	-8,752.47	8,745.37	0.00	0.00	0.00
16,000.00	90.00	270.24	7,696.00	-5.88	-8,852.47	8,845.31	0.00	0.00	0.00
16,100.00	90.00	270.24	7,696.00	-5.46	-8,952.47	8,945.24	0.00	0.00	0.00
16,200.00	90.00	270.24	7,696.00	-5.04	-9,052.47	9,045.18	0.00	0.00	0.00
16,300.00	90.00	270.24	7,696.00	-4.62	-9,152.47	9,145.12	0.00	0.00	0.00
16,400.00	90.00	270.24	7,696.00	-4.20	-9,252.47	9,245.06	0.00	0.00	0.00
16,500.00	90.00	270.24	7,696.00	-3.78	-9,352.47	9,344.99	0.00	0.00	0.00
16,600.00	90.00	270.24	7,696.00	-3.36	-9,452.47	9,444.93	0.00	0.00	0.00
16,700.00	90.00	270.24	7,696.00	-2.94	-9,552.47	9,544.87	0.00	0.00	0.00
16,800.00	90.00	270.24	7,696.00	-2.52	-9,652.47	9,644.81	0.00	0.00	0.00

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well BLUE FED 3-65 33-32-31-36 3AH
Company:	CRESTONE PEAK RESOURCES	TVD Reference:	KB 25' @ 5618.00usft
Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5618.00usft
Site:	SEC 34-T3S-R65W	North Reference:	True
Well:	BLUE FED 3-65 33-32-31-36 3AH	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)
16,903.96	90.00	270.24	7,696.00	-2.08	-9,756.43	9,748.70	0.00	0.00	0.00
16,904.28	90.00	270.23	7,696.00	-2.08	-9,756.74	9,749.02	2.00	0.00	-2.00
Start 1387.12 hold at 16904.28 MD									
17,000.00	90.00	270.23	7,696.00	-1.69	-9,852.46	9,844.68	0.00	0.00	0.00
17,100.00	90.00	270.23	7,696.00	-1.28	-9,952.46	9,944.62	0.00	0.00	0.00
17,200.00	90.00	270.23	7,696.00	-0.87	-10,052.46	10,044.55	0.00	0.00	0.00
17,300.00	90.00	270.23	7,696.00	-0.46	-10,152.46	10,144.49	0.00	0.00	0.00
17,400.00	90.00	270.23	7,696.00	-0.05	-10,252.46	10,244.43	0.00	0.00	0.00
17,500.00	90.00	270.23	7,696.00	0.36	-10,352.46	10,344.37	0.00	0.00	0.00
17,600.00	90.00	270.23	7,696.00	0.77	-10,452.46	10,444.30	0.00	0.00	0.00
17,700.00	90.00	270.23	7,696.00	1.18	-10,552.46	10,544.24	0.00	0.00	0.00
17,800.00	90.00	270.23	7,696.00	1.59	-10,652.46	10,644.18	0.00	0.00	0.00
17,900.00	90.00	270.23	7,696.00	2.00	-10,752.46	10,744.11	0.00	0.00	0.00
18,000.00	90.00	270.23	7,696.00	2.41	-10,852.46	10,844.05	0.00	0.00	0.00
18,100.00	90.00	270.23	7,696.00	2.82	-10,952.45	10,943.99	0.00	0.00	0.00
18,200.00	90.00	270.23	7,696.00	3.23	-11,052.45	11,043.93	0.00	0.00	0.00
18,291.40	90.00	270.23	7,696.00	3.60	-11,143.85	11,135.27	0.00	0.00	0.00
Start Turn 2.00									
18,300.00	90.00	270.41	7,696.00	3.65	-11,152.45	11,143.86	2.00	0.00	2.00
18,400.00	90.00	272.41	7,696.00	6.10	-11,252.42	11,243.85	2.00	0.00	2.00
18,500.00	90.00	274.41	7,696.00	12.04	-11,352.24	11,343.82	2.00	0.00	2.00
18,517.21	90.00	274.75	7,696.00	13.42	-11,369.39	11,361.01	2.00	0.00	2.00
Start 10074.03 hold at 18517.20 MD									
18,600.00	90.00	274.75	7,696.00	20.28	-11,451.90	11,443.73	0.00	0.00	0.00
18,700.00	90.00	274.75	7,696.00	28.56	-11,551.55	11,543.64	0.00	0.00	0.00
18,800.00	90.00	274.75	7,696.00	36.84	-11,651.21	11,643.54	0.00	0.00	0.00
18,900.00	90.00	274.75	7,696.00	45.12	-11,750.87	11,743.45	0.00	0.00	0.00
19,000.00	90.00	274.75	7,696.00	53.40	-11,850.52	11,843.35	0.00	0.00	0.00
19,100.00	90.00	274.75	7,696.00	61.69	-11,950.18	11,943.26	0.00	0.00	0.00
19,200.00	90.00	274.75	7,696.00	69.97	-12,049.83	12,043.17	0.00	0.00	0.00
19,300.00	90.00	274.75	7,696.00	78.25	-12,149.49	12,143.07	0.00	0.00	0.00
19,400.00	90.00	274.75	7,696.00	86.53	-12,249.15	12,242.98	0.00	0.00	0.00
19,500.00	90.00	274.75	7,696.00	94.81	-12,348.80	12,342.88	0.00	0.00	0.00
19,600.00	90.00	274.75	7,696.00	103.10	-12,448.46	12,442.79	0.00	0.00	0.00
19,700.00	90.00	274.75	7,696.00	111.38	-12,548.12	12,542.70	0.00	0.00	0.00
19,800.00	90.00	274.75	7,696.00	119.66	-12,647.77	12,642.60	0.00	0.00	0.00
19,900.00	90.00	274.75	7,696.00	127.94	-12,747.43	12,742.51	0.00	0.00	0.00
20,000.00	90.00	274.75	7,696.00	136.22	-12,847.09	12,842.42	0.00	0.00	0.00
20,100.00	90.00	274.75	7,696.00	144.51	-12,946.74	12,942.32	0.00	0.00	0.00
20,200.00	90.00	274.75	7,696.00	152.79	-13,046.40	13,042.23	0.00	0.00	0.00
20,300.00	90.00	274.75	7,696.00	161.07	-13,146.06	13,142.13	0.00	0.00	0.00
20,400.00	90.00	274.75	7,696.00	169.35	-13,245.71	13,242.04	0.00	0.00	0.00
20,500.00	90.00	274.75	7,696.00	177.64	-13,345.37	13,341.95	0.00	0.00	0.00
20,600.00	90.00	274.75	7,696.00	185.92	-13,445.03	13,441.85	0.00	0.00	0.00
20,700.00	90.00	274.75	7,696.00	194.20	-13,544.68	13,541.76	0.00	0.00	0.00
20,800.00	90.00	274.75	7,696.00	202.48	-13,644.34	13,641.66	0.00	0.00	0.00
20,900.00	90.00	274.75	7,696.00	210.76	-13,743.99	13,741.57	0.00	0.00	0.00
21,000.00	90.00	274.75	7,696.00	219.05	-13,843.65	13,841.48	0.00	0.00	0.00
21,100.00	90.00	274.75	7,696.00	227.33	-13,943.31	13,941.38	0.00	0.00	0.00
21,200.00	90.00	274.75	7,696.00	235.61	-14,042.96	14,041.29	0.00	0.00	0.00
21,300.00	90.00	274.75	7,696.00	243.89	-14,142.62	14,141.19	0.00	0.00	0.00
21,400.00	90.00	274.75	7,696.00	252.17	-14,242.28	14,241.10	0.00	0.00	0.00
21,500.00	90.00	274.75	7,696.00	260.46	-14,341.93	14,341.01	0.00	0.00	0.00

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well BLUE FED 3-65 33-32-31-36 3AH
Company:	CRESTONE PEAK RESOURCES	TVD Reference:	KB 25' @ 5618.00usft
Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5618.00usft
Site:	SEC 34-T3S-R65W	North Reference:	True
Well:	BLUE FED 3-65 33-32-31-36 3AH	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)	
21,600.00	90.00	274.75	7,696.00	268.74	-14,441.59	14,440.91	0.00	0.00	0.00	
21,700.00	90.00	274.75	7,696.00	277.02	-14,541.25	14,540.82	0.00	0.00	0.00	
21,800.00	90.00	274.75	7,696.00	285.30	-14,640.90	14,640.73	0.00	0.00	0.00	
21,900.00	90.00	274.75	7,696.00	293.58	-14,740.56	14,740.63	0.00	0.00	0.00	
22,000.00	90.00	274.75	7,696.00	301.87	-14,840.22	14,840.54	0.00	0.00	0.00	
22,100.00	90.00	274.75	7,696.00	310.15	-14,939.87	14,940.44	0.00	0.00	0.00	
22,200.00	90.00	274.75	7,696.00	318.43	-15,039.53	15,040.35	0.00	0.00	0.00	
22,300.00	90.00	274.75	7,696.00	326.71	-15,139.18	15,140.26	0.00	0.00	0.00	
22,400.00	90.00	274.75	7,696.00	334.99	-15,238.84	15,240.16	0.00	0.00	0.00	
22,500.00	90.00	274.75	7,696.00	343.28	-15,338.50	15,340.07	0.00	0.00	0.00	
22,600.00	90.00	274.75	7,696.00	351.56	-15,438.15	15,439.97	0.00	0.00	0.00	
22,700.00	90.00	274.75	7,696.00	359.84	-15,537.81	15,539.88	0.00	0.00	0.00	
22,800.00	90.00	274.75	7,696.00	368.12	-15,637.47	15,639.79	0.00	0.00	0.00	
22,900.00	90.00	274.75	7,696.00	376.41	-15,737.12	15,739.69	0.00	0.00	0.00	
23,000.00	90.00	274.75	7,696.00	384.69	-15,836.78	15,839.60	0.00	0.00	0.00	
23,100.00	90.00	274.75	7,696.00	392.97	-15,936.44	15,939.50	0.00	0.00	0.00	
23,200.00	90.00	274.75	7,696.00	401.25	-16,036.09	16,039.41	0.00	0.00	0.00	
23,300.00	90.00	274.75	7,696.00	409.53	-16,135.75	16,139.32	0.00	0.00	0.00	
23,400.00	90.00	274.75	7,696.00	417.82	-16,235.41	16,239.22	0.00	0.00	0.00	
23,500.00	90.00	274.75	7,696.00	426.10	-16,335.06	16,339.13	0.00	0.00	0.00	
23,600.00	90.00	274.75	7,696.00	434.38	-16,434.72	16,439.04	0.00	0.00	0.00	
23,700.00	90.00	274.75	7,696.00	442.66	-16,534.37	16,538.94	0.00	0.00	0.00	
23,800.00	90.00	274.75	7,696.00	450.94	-16,634.03	16,638.85	0.00	0.00	0.00	
23,900.00	90.00	274.75	7,696.00	459.23	-16,733.69	16,738.75	0.00	0.00	0.00	
24,000.00	90.00	274.75	7,696.00	467.51	-16,833.34	16,838.66	0.00	0.00	0.00	
24,100.00	90.00	274.75	7,696.00	475.79	-16,933.00	16,938.57	0.00	0.00	0.00	
24,200.00	90.00	274.75	7,696.00	484.07	-17,032.66	17,038.47	0.00	0.00	0.00	
24,300.00	90.00	274.75	7,696.00	492.35	-17,132.31	17,138.38	0.00	0.00	0.00	
24,400.00	90.00	274.75	7,696.00	500.64	-17,231.97	17,238.28	0.00	0.00	0.00	
24,500.00	90.00	274.75	7,696.00	508.92	-17,331.63	17,338.19	0.00	0.00	0.00	
24,600.00	90.00	274.75	7,696.00	517.20	-17,431.28	17,438.10	0.00	0.00	0.00	
24,700.00	90.00	274.75	7,696.00	525.48	-17,530.94	17,538.00	0.00	0.00	0.00	
24,800.00	90.00	274.75	7,696.00	533.76	-17,630.60	17,637.91	0.00	0.00	0.00	
24,900.00	90.00	274.75	7,696.00	542.05	-17,730.25	17,737.81	0.00	0.00	0.00	
25,000.00	90.00	274.75	7,696.00	550.33	-17,829.91	17,837.72	0.00	0.00	0.00	
25,100.00	90.00	274.75	7,696.00	558.61	-17,929.57	17,937.63	0.00	0.00	0.00	
25,200.00	90.00	274.75	7,696.00	566.89	-18,029.22	18,037.53	0.00	0.00	0.00	
25,300.00	90.00	274.75	7,696.00	575.18	-18,128.88	18,137.44	0.00	0.00	0.00	
25,400.00	90.00	274.75	7,696.00	583.46	-18,228.53	18,237.35	0.00	0.00	0.00	
25,500.00	90.00	274.75	7,696.00	591.74	-18,328.19	18,337.25	0.00	0.00	0.00	
25,600.00	90.00	274.75	7,696.00	600.02	-18,427.85	18,437.16	0.00	0.00	0.00	
25,700.00	90.00	274.75	7,696.00	608.30	-18,527.50	18,537.06	0.00	0.00	0.00	
25,800.00	90.00	274.75	7,696.00	616.59	-18,627.16	18,636.97	0.00	0.00	0.00	
25,900.00	90.00	274.75	7,696.00	624.87	-18,726.82	18,736.88	0.00	0.00	0.00	
26,000.00	90.00	274.75	7,696.00	633.15	-18,826.47	18,836.78	0.00	0.00	0.00	
26,100.00	90.00	274.75	7,696.00	641.43	-18,926.13	18,936.69	0.00	0.00	0.00	
26,200.00	90.00	274.75	7,696.00	649.71	-19,025.79	19,036.59	0.00	0.00	0.00	
26,300.00	90.00	274.75	7,696.00	658.00	-19,125.44	19,136.50	0.00	0.00	0.00	
26,400.00	90.00	274.75	7,696.00	666.28	-19,225.10	19,236.41	0.00	0.00	0.00	
26,500.00	90.00	274.75	7,696.00	674.56	-19,324.76	19,336.31	0.00	0.00	0.00	
26,600.00	90.00	274.75	7,696.00	682.84	-19,424.41	19,436.22	0.00	0.00	0.00	
26,700.00	90.00	274.75	7,696.00	691.12	-19,524.07	19,536.13	0.00	0.00	0.00	
26,800.00	90.00	274.75	7,696.00	699.41	-19,623.72	19,636.03	0.00	0.00	0.00	
26,900.00	90.00	274.75	7,696.00	707.69	-19,723.38	19,735.94	0.00	0.00	0.00	

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well BLUE FED 3-65 33-32-31-36 3AH
Company:	CRESTONE PEAK RESOURCES	TVD Reference:	KB 25' @ 5618.00usft
Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5618.00usft
Site:	SEC 34-T3S-R65W	North Reference:	True
Well:	BLUE FED 3-65 33-32-31-36 3AH	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)	
27,000.00	90.00	274.75	7,696.00	715.97	-19,823.04	19,835.84	0.00	0.00	0.00	
27,100.00	90.00	274.75	7,696.00	724.25	-19,922.69	19,935.75	0.00	0.00	0.00	
27,200.00	90.00	274.75	7,696.00	732.53	-20,022.35	20,035.66	0.00	0.00	0.00	
27,300.00	90.00	274.75	7,696.00	740.82	-20,122.01	20,135.56	0.00	0.00	0.00	
27,400.00	90.00	274.75	7,696.00	749.10	-20,221.66	20,235.47	0.00	0.00	0.00	
27,500.00	90.00	274.75	7,696.00	757.38	-20,321.32	20,335.37	0.00	0.00	0.00	
27,600.00	90.00	274.75	7,696.00	765.66	-20,420.98	20,435.28	0.00	0.00	0.00	
27,700.00	90.00	274.75	7,696.00	773.95	-20,520.63	20,535.19	0.00	0.00	0.00	
27,800.00	90.00	274.75	7,696.00	782.23	-20,620.29	20,635.09	0.00	0.00	0.00	
27,900.00	90.00	274.75	7,696.00	790.51	-20,719.95	20,735.00	0.00	0.00	0.00	
28,000.00	90.00	274.75	7,696.00	798.79	-20,819.60	20,834.90	0.00	0.00	0.00	
28,100.00	90.00	274.75	7,696.00	807.07	-20,919.26	20,934.81	0.00	0.00	0.00	
28,200.00	90.00	274.75	7,696.00	815.36	-21,018.92	21,034.72	0.00	0.00	0.00	
28,300.00	90.00	274.75	7,696.00	823.64	-21,118.57	21,134.62	0.00	0.00	0.00	
28,400.00	90.00	274.75	7,696.00	831.92	-21,218.23	21,234.53	0.00	0.00	0.00	
28,500.00	90.00	274.75	7,696.00	840.20	-21,317.88	21,334.44	0.00	0.00	0.00	
28,591.23	90.00	274.75	7,696.00	847.76	-21,408.80	21,425.58	0.00	0.00	0.00	
TD at 28591.23										

Design Targets										
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
ENTRY PNT-BLUE 3-65 - plan hits target center - Point	0.00	0.00	7,696.00	-16.29	-6,378.69	1,151,451.88	3,230,528.74	39.746176°N	104.680174°W	
MID PNT-BLUE 3-65 3A - plan hits target center - Point	0.00	0.00	7,696.00	3.60	-11,143.85	1,151,426.49	3,225,763.63	39.746226°N	104.697120°W	
LP-BLUE 3-65 3AH - plan hits target center - Point	0.00	0.00	7,696.00	-39.31	-883.24	1,151,481.07	3,236,024.13	39.746115°N	104.660631°W	
EXIT PNT-BLUE 3-65 3A - plan hits target center - Point	0.00	0.00	7,696.00	-2.08	-9,756.43	1,151,433.99	3,227,151.04	39.746212°N	104.692186°W	
PBHL-BLUE 3-65 3AH - plan hits target center - Point	0.00	0.00	7,696.00	847.76	-21,408.80	1,152,173.08	3,215,491.16	39.748525°N	104.733627°W	

Planning Report

Database:	EDT_32Bit_ODBC	Local Co-ordinate Reference:	Well BLUE FED 3-65 33-32-31-36 3AH
Company:	CRESTONE PEAK RESOURCES	TVD Reference:	KB 25' @ 5618.00usft
Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5618.00usft
Site:	SEC 34-T3S-R65W	North Reference:	True
Well:	BLUE FED 3-65 33-32-31-36 3AH	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	PROPOSAL 1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
24.00	24.00	Denver				
716.00	716.00	Arapahoe				
1,316.63	1,316.00	Laramie-Fox Hills Formation				
1,967.41	1,966.00	Pierre Formation				
2,458.00	2,456.00	Upper Pierre aquifer				
3,118.80	3,116.00	Base of Upper Pierre aquifer				
4,185.08	4,181.00	Larimer ("Parkman") sandstone				
4,310.23	4,306.00	Pierre Formation				
5,261.38	5,256.00	Terry ("Sussex") sandstone				
5,456.61	5,451.00	Pierre Formation				
6,037.31	6,031.00	Hygiene ("Shannon") sandstone				
6,452.81	6,446.00	Pierre Formation				
7,766.14	7,636.00	Sharon Springs Member				
8,030.70	7,696.00	Niobrara Formation				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
700.00	700.00	0.00	0.00	Start Build 2.00	
840.56	840.50	-0.42	-3.42	Start 6318.03 hold at 840.56 MD	
7,158.59	7,150.93	-38.32	-310.96	Start DLS 10.00 TFO 7.27	
8,030.70	7,696.00	-39.31	-883.24	Start 5495.49 hold at 8030.70 MD	
13,526.24	7,696.00	-16.29	-6,378.73	Start 3377.72 hold at 13526.24 MD	
16,904.28	7,696.00	-2.08	-9,756.74	Start 1387.12 hold at 16904.28 MD	
18,291.40	7,696.00	3.60	-11,143.85	Start Turn 2.00	
18,517.21	7,696.00	13.42	-11,369.39	Start 10074.03 hold at 18517.20 MD	
28,591.23	7,696.00	847.76	-21,408.80	TD at 28591.23	