

# **CRESTONE PEAK RESOURCES**

**ADAMS COUNTY  
SEC 28-T3S-R65W  
KING 3-65 28-29 1AH**

**OWB**

**Plan: PROPOSAL 1**

## **Standard Planning Report**

**24 August, 2023**

Project: ADAMS COUNTY  
Site: SEC 28-T3S-R65W  
Well: KING 3-65 28-29 1AH  
Wellbore: OWB  
Design: PROPOSAL 1



Azimuths to True North  
Magnetic North: 7.51°  
Magnetic Field  
Strength: 51392.0nT  
Dip Angle: 66.07°  
Date: 8/21/2023  
Model: IGRF2020

#### WELL DETAILS: KING 3-65 28-29 1AH

+N/-S	+E/-W	Northing	Easting	5585.00	Latitude	Longitude	Slot
0.00	0.00	1156371.27	3235875.22	39.759543°N	104.660996°W		

#### 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	Target
2	300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
3	1554.30	25.09	13.28	1514.61	263.00	62.08	2.00	13.28	21.46	
4	7743.10	25.09	13.28	7119.63	2816.75	664.84	0.00	0.00	229.88	
5	8697.19	90.00	270.43	7690.00	3081.38	96.42	10.00	-101.67	852.03	LP-KING 3-65 28-29 1AH
6	18602.87	90.00	270.43	7690.00	3156.17	-9808.97	0.00	0.00	10304.24	PBHL-KING 3-65 28-29 1AH

#### ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	Start Build 2.00
1554.30	25.09	13.28	1514.61	263.00	62.08	21.46	270.23	Start 6188.80 hold at 1554.30 MD
7743.10	25.09	13.28	7119.63	2816.75	664.84	229.88	2894.15	Start DLS 10.00 TFO -101.67
8697.19	90.00	270.43	7690.00	3081.38	96.42	852.03	3581.44	Start 9905.67 hold at 8697.19 MD
18602.87	90.00	270.43	7690.00	3156.17	-9808.97	10304.23	13487.11	TD at 18602.87

#### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
LP-KING 3-65 28-29 1AH	7690.00	3081.38	96.42	1159453.40	3235942.48	39.768002°N	104.660653°W	Point
- plan hits target center								
PBHL-KING 3-65 28-29 1AH	7690.00	3156.17	-9808.97	1159434.46	3226036.89	39.768202°N	104.695890°W	Point
- plan hits target center								

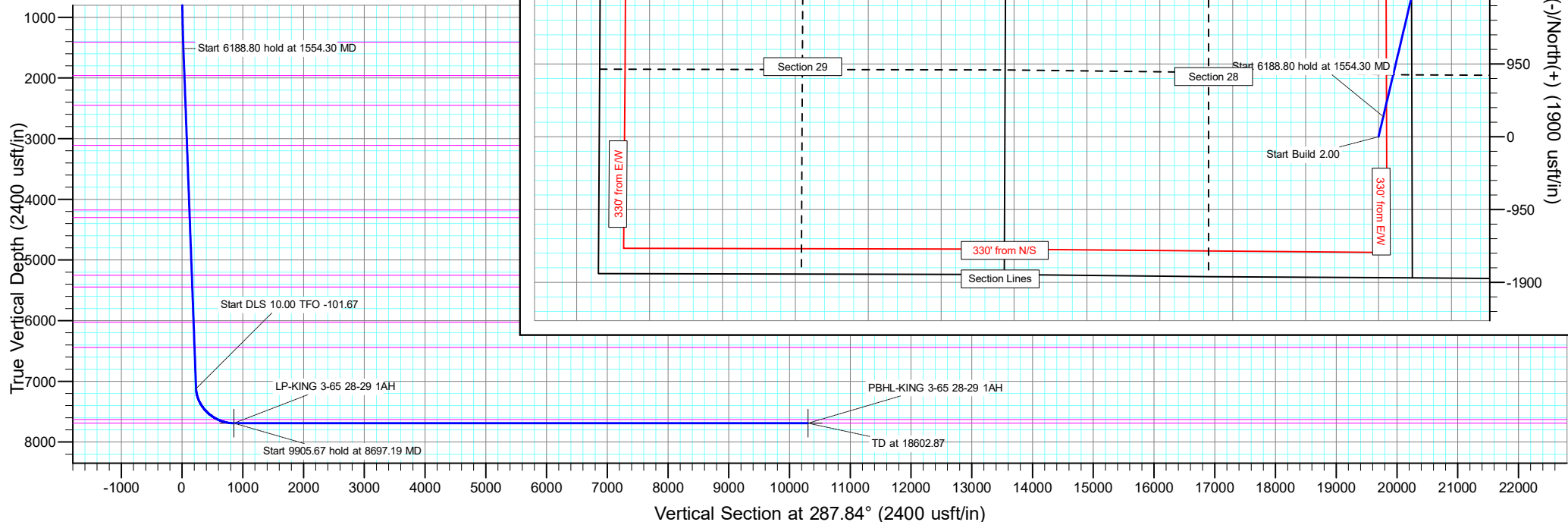
#### PROJECT DETAILS: ADAMS COUNTY

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

SHL:  
1838' FSL, 435' FEL  
Sec 28-T3S-R65W

LP:  
380' FNL, 330' FEL  
Sec 28-T3S-R65W

BHL:  
380' FNL, 330' FWL  
Sec 29-T3S-R65W



# Civitas Resources

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Well KING 3-65 28-29 1AH
<b>Company:</b>	CRESTONE PEAK RESOURCES	<b>TVD Reference:</b>	KB 25' @ 5610.00usft
<b>Project:</b>	ADAMS COUNTY	<b>MD Reference:</b>	KB 25' @ 5610.00usft
<b>Site:</b>	SEC 28-T3S-R65W	<b>North Reference:</b>	True
<b>Well:</b>	KING 3-65 28-29 1AH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PROPOSAL 1		

<b>Project</b>	ADAMS COUNTY		
<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		Using geodetic scale factor

Site		SEC 28-T3S-R65W			
Site Position:		Northing:	1,154,535.24 usft	Latitude:	39.754491°N
From:	Lat/Long	Easting:	3,236,332.63 usft	Longitude:	104.659431°W
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.54 °

Well	KING 3-65 28-29 1AH					
Well Position	+N/-S	1,840.29 usft	Northing:	1,156,371.27 usft	Latitude:	39.759543°N
	+E/-W	-439.99 usft	Easting:	3,235,875.22 usft	Longitude:	104.660996°W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	5,585.00 usft

<b>Wellbore</b>	OWB				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2020	8/21/2023	7.51	66.07	51,391.99991234

<b>Design</b>	PROPOSAL 1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<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	287.84

<b>Plan Survey Tool Program</b>	<b>Date</b>	8/24/2023		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	18,602.86	PROPOSAL 1 (OWB)	MWD OWSG
				OWSG MWD - Standard

<b>Plan Sections</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Turn Rate (°/100ft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.00	0.00	0.00	0.00	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	
1,554.30	25.09	13.28	1,514.61	263.00	62.08	2.00	2.00	0.00	13.28	
7,743.10	25.09	13.28	7,119.63	2,816.75	664.84	0.00	0.00	0.00	0.00	
8,697.19	90.00	270.43	7,690.00	3,081.38	96.42	10.00	6.80	-10.78	-101.67	LP-KING 3-65 28-29
18,602.87	90.00	270.43	7,690.00	3,156.16	-9,808.97	0.00	0.00	0.00	0.00	PBHL-KING 3-65 28-29

# Civitas Resources

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Well KING 3-65 28-29 1AH
<b>Company:</b>	CRESTONE PEAK RESOURCES	<b>TVD Reference:</b>	KB 25' @ 5610.00usft
<b>Project:</b>	ADAMS COUNTY	<b>MD Reference:</b>	KB 25' @ 5610.00usft
<b>Site:</b>	SEC 28-T3S-R65W	<b>North Reference:</b>	True
<b>Well:</b>	KING 3-65 28-29 1AH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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
<b>Denver</b>									
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
<b>Start Build 2.00</b>									
400.00	2.00	13.28	399.98	1.70	0.40	0.14	2.00	2.00	0.00
500.00	4.00	13.28	499.84	6.79	1.60	0.55	2.00	2.00	0.00
600.00	6.00	13.28	599.45	15.27	3.61	1.25	2.00	2.00	0.00
700.00	8.00	13.28	698.70	27.13	6.40	2.21	2.00	2.00	0.00
762.00	9.24	13.28	760.00	36.18	8.54	2.95	2.00	2.00	0.00
<b>Arapahoe</b>									
800.00	10.00	13.28	797.47	42.36	10.00	3.46	2.00	2.00	0.00
900.00	12.00	13.28	895.62	60.93	14.38	4.97	2.00	2.00	0.00
1,000.00	14.00	13.28	993.06	82.82	19.55	6.76	2.00	2.00	0.00
1,100.00	16.00	13.28	1,089.64	108.01	25.49	8.81	2.00	2.00	0.00
1,200.00	18.00	13.28	1,185.27	136.46	32.21	11.14	2.00	2.00	0.00
1,300.00	20.00	13.28	1,279.82	168.15	39.69	13.72	2.00	2.00	0.00
1,400.00	22.00	13.28	1,373.17	203.02	47.92	16.57	2.00	2.00	0.00
1,439.84	22.80	13.28	1,410.00	217.80	51.41	17.77	2.00	2.00	0.00
<b>Laramie-Fox Hills Formation</b>									
1,500.00	24.00	13.28	1,465.21	241.05	56.90	19.67	2.00	2.00	0.00
1,554.30	25.09	13.28	1,514.61	263.00	62.08	21.46	2.00	2.00	0.00
<b>Start 6188.80 hold at 1554.30 MD</b>									
1,600.00	25.09	13.28	1,556.00	281.86	66.53	23.00	0.00	0.00	0.00
1,700.00	25.09	13.28	1,646.56	323.12	76.27	26.37	0.00	0.00	0.00
1,800.00	25.09	13.28	1,737.13	364.39	86.01	29.74	0.00	0.00	0.00
1,900.00	25.09	13.28	1,827.70	405.65	95.75	33.11	0.00	0.00	0.00
2,000.00	25.09	13.28	1,918.27	446.92	105.49	36.47	0.00	0.00	0.00
2,046.08	25.09	13.28	1,960.00	465.93	109.97	38.02	0.00	0.00	0.00
<b>Pierre Formation</b>									
2,100.00	25.09	13.28	2,008.83	488.18	115.23	39.84	0.00	0.00	0.00
2,200.00	25.09	13.28	2,099.40	529.44	124.97	43.21	0.00	0.00	0.00
2,300.00	25.09	13.28	2,189.97	570.71	134.71	46.58	0.00	0.00	0.00
2,400.00	25.09	13.28	2,280.53	611.97	144.45	49.94	0.00	0.00	0.00
2,500.00	25.09	13.28	2,371.10	653.24	154.18	53.31	0.00	0.00	0.00
2,587.12	25.09	13.28	2,450.00	689.18	162.67	56.24	0.00	0.00	0.00
<b>Upper Pierre aquifer</b>									
2,600.00	25.09	13.28	2,461.67	694.50	163.92	56.68	0.00	0.00	0.00
2,700.00	25.09	13.28	2,552.24	735.76	173.66	60.05	0.00	0.00	0.00
2,800.00	25.09	13.28	2,642.80	777.03	183.40	63.41	0.00	0.00	0.00
2,900.00	25.09	13.28	2,733.37	818.29	193.14	66.78	0.00	0.00	0.00
3,000.00	25.09	13.28	2,823.94	859.56	202.88	70.15	0.00	0.00	0.00
3,100.00	25.09	13.28	2,914.50	900.82	212.62	73.52	0.00	0.00	0.00
3,200.00	25.09	13.28	3,005.07	942.08	222.36	76.88	0.00	0.00	0.00
3,300.00	25.09	13.28	3,095.64	983.35	232.10	80.25	0.00	0.00	0.00
3,315.86	25.09	13.28	3,110.00	989.89	233.65	80.79	0.00	0.00	0.00
<b>Base of Upper Pierre aquifer</b>									
3,400.00	25.09	13.28	3,186.21	1,024.61	241.84	83.62	0.00	0.00	0.00
3,500.00	25.09	13.28	3,276.77	1,065.88	251.58	86.99	0.00	0.00	0.00
3,600.00	25.09	13.28	3,367.34	1,107.14	261.32	90.35	0.00	0.00	0.00
3,700.00	25.09	13.28	3,457.91	1,148.41	271.06	93.72	0.00	0.00	0.00

# Civitas Resources

## Planning Report

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<b>Project:</b>	ADAMS COUNTY	<b>MD Reference:</b>	KB 25' @ 5610.00usft
<b>Site:</b>	SEC 28-T3S-R65W	<b>North Reference:</b>	True
<b>Well:</b>	KING 3-65 28-29 1AH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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	25.09	13.28	3,548.48	1,189.67	280.80	97.09	0.00	0.00	0.00	
3,900.00	25.09	13.28	3,639.04	1,230.93	290.54	100.46	0.00	0.00	0.00	
4,000.00	25.09	13.28	3,729.61	1,272.20	300.28	103.82	0.00	0.00	0.00	
4,100.00	25.09	13.28	3,820.18	1,313.46	310.02	107.19	0.00	0.00	0.00	
4,200.00	25.09	13.28	3,910.74	1,354.73	319.76	110.56	0.00	0.00	0.00	
4,300.00	25.09	13.28	4,001.31	1,395.99	329.50	113.93	0.00	0.00	0.00	
4,400.00	25.09	13.28	4,091.88	1,437.25	339.24	117.29	0.00	0.00	0.00	
4,491.78	25.09	13.28	4,175.00	1,475.13	348.18	120.39	0.00	0.00	0.00	
Larimer ("Parkman") sandstone										
4,500.00	25.09	13.28	4,182.45	1,478.52	348.98	120.66	0.00	0.00	0.00	
4,600.00	25.09	13.28	4,273.01	1,519.78	358.72	124.03	0.00	0.00	0.00	
4,629.80	25.09	13.28	4,300.00	1,532.08	361.62	125.03	0.00	0.00	0.00	
Pierre Formation										
4,700.00	25.09	13.28	4,363.58	1,561.05	368.46	127.40	0.00	0.00	0.00	
4,800.00	25.09	13.28	4,454.15	1,602.31	378.20	130.76	0.00	0.00	0.00	
4,900.00	25.09	13.28	4,544.71	1,643.57	387.94	134.13	0.00	0.00	0.00	
5,000.00	25.09	13.28	4,635.28	1,684.84	397.68	137.50	0.00	0.00	0.00	
5,100.00	25.09	13.28	4,725.85	1,726.10	407.42	140.87	0.00	0.00	0.00	
5,200.00	25.09	13.28	4,816.42	1,767.37	417.15	144.24	0.00	0.00	0.00	
5,300.00	25.09	13.28	4,906.98	1,808.63	426.89	147.60	0.00	0.00	0.00	
5,400.00	25.09	13.28	4,997.55	1,849.89	436.63	150.97	0.00	0.00	0.00	
5,500.00	25.09	13.28	5,088.12	1,891.16	446.37	154.34	0.00	0.00	0.00	
5,600.00	25.09	13.28	5,178.68	1,932.42	456.11	157.71	0.00	0.00	0.00	
5,678.74	25.09	13.28	5,250.00	1,964.91	463.78	160.36	0.00	0.00	0.00	
Terry ("Sussex") sandstone										
5,700.00	25.09	13.28	5,269.25	1,973.69	465.85	161.07	0.00	0.00	0.00	
5,800.00	25.09	13.28	5,359.82	2,014.95	475.59	164.44	0.00	0.00	0.00	
5,894.05	25.09	13.28	5,445.00	2,053.76	484.75	167.61	0.00	0.00	0.00	
Pierre Formation										
5,900.00	25.09	13.28	5,450.39	2,056.21	485.33	167.81	0.00	0.00	0.00	
6,000.00	25.09	13.28	5,540.95	2,097.48	495.07	171.18	0.00	0.00	0.00	
6,100.00	25.09	13.28	5,631.52	2,138.74	504.81	174.54	0.00	0.00	0.00	
6,200.00	25.09	13.28	5,722.09	2,180.01	514.55	177.91	0.00	0.00	0.00	
6,300.00	25.09	13.28	5,812.66	2,221.27	524.29	181.28	0.00	0.00	0.00	
6,400.00	25.09	13.28	5,903.22	2,262.53	534.03	184.65	0.00	0.00	0.00	
6,500.00	25.09	13.28	5,993.79	2,303.80	543.77	188.01	0.00	0.00	0.00	
6,534.46	25.09	13.28	6,025.00	2,318.02	547.13	189.17	0.00	0.00	0.00	
Hygiene ("Shannon") sandstone										
6,600.00	25.09	13.28	6,084.36	2,345.06	553.51	191.38	0.00	0.00	0.00	
6,700.00	25.09	13.28	6,174.92	2,386.33	563.25	194.75	0.00	0.00	0.00	
6,800.00	25.09	13.28	6,265.49	2,427.59	572.99	198.12	0.00	0.00	0.00	
6,900.00	25.09	13.28	6,356.06	2,468.85	582.73	201.48	0.00	0.00	0.00	
6,992.68	25.09	13.28	6,440.00	2,507.10	591.76	204.60	0.00	0.00	0.00	
Pierre Formation										
7,000.00	25.09	13.28	6,446.63	2,510.12	592.47	204.85	0.00	0.00	0.00	
7,100.00	25.09	13.28	6,537.19	2,551.38	602.21	208.22	0.00	0.00	0.00	
7,200.00	25.09	13.28	6,627.76	2,592.65	611.95	211.59	0.00	0.00	0.00	
7,300.00	25.09	13.28	6,718.33	2,633.91	621.69	214.95	0.00	0.00	0.00	
7,400.00	25.09	13.28	6,808.89	2,675.18	631.43	218.32	0.00	0.00	0.00	
7,500.00	25.09	13.28	6,899.46	2,716.44	641.17	221.69	0.00	0.00	0.00	
7,600.00	25.09	13.28	6,990.03	2,757.70	650.91	225.06	0.00	0.00	0.00	
7,700.00	25.09	13.28	7,080.60	2,798.97	660.65	228.42	0.00	0.00	0.00	
7,743.10	25.09	13.28	7,119.63	2,816.75	664.84	229.88	0.00	0.00	0.00	

# Civitas Resources

## Planning Report

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<b>Company:</b>	CRESTONE PEAK RESOURCES	<b>TVD Reference:</b>	KB 25' @ 5610.00usft
<b>Project:</b>	ADAMS COUNTY	<b>MD Reference:</b>	KB 25' @ 5610.00usft
<b>Site:</b>	SEC 28-T3S-R65W	<b>North Reference:</b>	True
<b>Well:</b>	KING 3-65 28-29 1AH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
Start DLS 10.00 TFO -101.67										
7,750.00	24.95	11.68	7,125.88	2,819.60	665.47	230.15	10.00	-1.90	-23.21	
7,800.00	24.53	359.76	7,171.32	2,840.32	667.57	234.50	10.00	-0.84	-23.84	
7,850.00	25.06	347.88	7,216.74	2,861.07	665.30	243.02	10.00	1.05	-23.75	
7,900.00	26.48	336.83	7,261.79	2,881.69	658.69	255.63	10.00	2.83	-22.10	
7,950.00	28.65	327.09	7,306.14	2,902.01	647.78	272.23	10.00	4.35	-19.49	
8,000.00	31.42	318.76	7,349.44	2,921.89	632.67	292.71	10.00	5.55	-16.65	
8,050.00	34.65	311.75	7,391.36	2,941.17	613.46	316.90	10.00	6.46	-14.02	
8,100.00	38.22	305.85	7,431.59	2,959.70	590.30	344.62	10.00	7.14	-11.81	
8,150.00	42.04	300.84	7,469.82	2,977.36	563.37	375.66	10.00	7.64	-10.02	
8,200.00	46.05	296.53	7,505.76	2,993.99	532.87	409.79	10.00	8.02	-8.61	
8,250.00	50.20	292.78	7,539.14	3,009.48	499.04	446.74	10.00	8.30	-7.50	
8,300.00	54.46	289.46	7,569.69	3,023.70	462.13	486.24	10.00	8.51	-6.64	
8,350.00	58.79	286.48	7,597.20	3,036.56	422.42	527.97	10.00	8.67	-5.96	
8,400.00	63.19	283.77	7,621.44	3,047.94	380.22	571.63	10.00	8.80	-5.43	
8,419.57	64.93	282.76	7,630.00	3,051.98	363.09	589.17	10.00	8.87	-5.14	
Sharon Springs Member										
8,450.00	67.64	281.25	7,642.24	3,057.77	335.84	616.89	10.00	8.91	-4.95	
8,500.00	72.12	278.90	7,659.43	3,065.97	289.63	663.39	10.00	8.97	-4.71	
8,550.00	76.64	276.66	7,672.89	3,072.47	241.94	710.78	10.00	9.02	-4.48	
8,600.00	81.17	274.50	7,682.52	3,077.23	193.12	758.71	10.00	9.06	-4.31	
8,650.00	85.71	272.40	7,688.23	3,080.22	143.55	806.81	10.00	9.08	-4.21	
8,697.19	90.00	270.43	7,690.00	3,081.38	96.42	852.03	10.00	9.10	-4.16	
Start 9905.67 hold at 8697.19 MD - Niobrara Formation										
8,700.00	90.00	270.43	7,690.00	3,081.40	93.61	854.71	0.00	0.00	0.00	
8,800.00	90.00	270.43	7,690.00	3,082.15	-6.39	950.13	0.00	0.00	0.00	
8,900.00	90.00	270.43	7,690.00	3,082.91	-106.38	1,045.56	0.00	0.00	0.00	
9,000.00	90.00	270.43	7,690.00	3,083.66	-206.38	1,140.98	0.00	0.00	0.00	
9,100.00	90.00	270.43	7,690.00	3,084.42	-306.38	1,236.40	0.00	0.00	0.00	
9,200.00	90.00	270.43	7,690.00	3,085.17	-406.37	1,331.82	0.00	0.00	0.00	
9,300.00	90.00	270.43	7,690.00	3,085.93	-506.37	1,427.24	0.00	0.00	0.00	
9,400.00	90.00	270.43	7,690.00	3,086.68	-606.37	1,522.67	0.00	0.00	0.00	
9,500.00	90.00	270.43	7,690.00	3,087.44	-706.37	1,618.09	0.00	0.00	0.00	
9,600.00	90.00	270.43	7,690.00	3,088.19	-806.36	1,713.51	0.00	0.00	0.00	
9,700.00	90.00	270.43	7,690.00	3,088.95	-906.36	1,808.93	0.00	0.00	0.00	
9,800.00	90.00	270.43	7,690.00	3,089.70	-1,006.36	1,904.36	0.00	0.00	0.00	
9,900.00	90.00	270.43	7,690.00	3,090.46	-1,106.35	1,999.78	0.00	0.00	0.00	
10,000.00	90.00	270.43	7,690.00	3,091.21	-1,206.35	2,095.20	0.00	0.00	0.00	
10,100.00	90.00	270.43	7,690.00	3,091.97	-1,306.35	2,190.62	0.00	0.00	0.00	
10,200.00	90.00	270.43	7,690.00	3,092.72	-1,406.35	2,286.04	0.00	0.00	0.00	
10,300.00	90.00	270.43	7,690.00	3,093.48	-1,506.34	2,381.47	0.00	0.00	0.00	
10,400.00	90.00	270.43	7,690.00	3,094.23	-1,606.34	2,476.89	0.00	0.00	0.00	
10,500.00	90.00	270.43	7,690.00	3,094.99	-1,706.34	2,572.31	0.00	0.00	0.00	
10,600.00	90.00	270.43	7,690.00	3,095.74	-1,806.33	2,667.73	0.00	0.00	0.00	
10,700.00	90.00	270.43	7,690.00	3,096.50	-1,906.33	2,763.15	0.00	0.00	0.00	
10,800.00	90.00	270.43	7,690.00	3,097.25	-2,006.33	2,858.58	0.00	0.00	0.00	
10,900.00	90.00	270.43	7,690.00	3,098.01	-2,106.33	2,954.00	0.00	0.00	0.00	
11,000.00	90.00	270.43	7,690.00	3,098.76	-2,206.32	3,049.42	0.00	0.00	0.00	
11,100.00	90.00	270.43	7,690.00	3,099.52	-2,306.32	3,144.84	0.00	0.00	0.00	
11,200.00	90.00	270.43	7,690.00	3,100.27	-2,406.32	3,240.26	0.00	0.00	0.00	
11,300.00	90.00	270.43	7,690.00	3,101.03	-2,506.31	3,335.69	0.00	0.00	0.00	
11,400.00	90.00	270.43	7,690.00	3,101.78	-2,606.31	3,431.11	0.00	0.00	0.00	
11,500.00	90.00	270.43	7,690.00	3,102.54	-2,706.31	3,526.53	0.00	0.00	0.00	

# Civitas Resources

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Well KING 3-65 28-29 1AH
<b>Company:</b>	CRESTONE PEAK RESOURCES	<b>TVD Reference:</b>	KB 25' @ 5610.00usft
<b>Project:</b>	ADAMS COUNTY	<b>MD Reference:</b>	KB 25' @ 5610.00usft
<b>Site:</b>	SEC 28-T3S-R65W	<b>North Reference:</b>	True
<b>Well:</b>	KING 3-65 28-29 1AH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
11,600.00	90.00	270.43	7,690.00	3,103.29	-2,806.31	3,621.95	0.00	0.00	0.00	
11,700.00	90.00	270.43	7,690.00	3,104.05	-2,906.30	3,717.38	0.00	0.00	0.00	
11,800.00	90.00	270.43	7,690.00	3,104.80	-3,006.30	3,812.80	0.00	0.00	0.00	
11,900.00	90.00	270.43	7,690.00	3,105.56	-3,106.30	3,908.22	0.00	0.00	0.00	
12,000.00	90.00	270.43	7,690.00	3,106.31	-3,206.29	4,003.64	0.00	0.00	0.00	
12,100.00	90.00	270.43	7,690.00	3,107.07	-3,306.29	4,099.06	0.00	0.00	0.00	
12,200.00	90.00	270.43	7,690.00	3,107.82	-3,406.29	4,194.49	0.00	0.00	0.00	
12,300.00	90.00	270.43	7,690.00	3,108.58	-3,506.29	4,289.91	0.00	0.00	0.00	
12,400.00	90.00	270.43	7,690.00	3,109.33	-3,606.28	4,385.33	0.00	0.00	0.00	
12,500.00	90.00	270.43	7,690.00	3,110.09	-3,706.28	4,480.75	0.00	0.00	0.00	
12,600.00	90.00	270.43	7,690.00	3,110.84	-3,806.28	4,576.17	0.00	0.00	0.00	
12,700.00	90.00	270.43	7,690.00	3,111.60	-3,906.27	4,671.60	0.00	0.00	0.00	
12,800.00	90.00	270.43	7,690.00	3,112.35	-4,006.27	4,767.02	0.00	0.00	0.00	
12,900.00	90.00	270.43	7,690.00	3,113.11	-4,106.27	4,862.44	0.00	0.00	0.00	
13,000.00	90.00	270.43	7,690.00	3,113.86	-4,206.27	4,957.86	0.00	0.00	0.00	
13,100.00	90.00	270.43	7,690.00	3,114.62	-4,306.26	5,053.29	0.00	0.00	0.00	
13,200.00	90.00	270.43	7,690.00	3,115.37	-4,406.26	5,148.71	0.00	0.00	0.00	
13,300.00	90.00	270.43	7,690.00	3,116.13	-4,506.26	5,244.13	0.00	0.00	0.00	
13,400.00	90.00	270.43	7,690.00	3,116.88	-4,606.25	5,339.55	0.00	0.00	0.00	
13,500.00	90.00	270.43	7,690.00	3,117.64	-4,706.25	5,434.97	0.00	0.00	0.00	
13,600.00	90.00	270.43	7,690.00	3,118.39	-4,806.25	5,530.40	0.00	0.00	0.00	
13,700.00	90.00	270.43	7,690.00	3,119.15	-4,906.25	5,625.82	0.00	0.00	0.00	
13,800.00	90.00	270.43	7,690.00	3,119.90	-5,006.24	5,721.24	0.00	0.00	0.00	
13,900.00	90.00	270.43	7,690.00	3,120.66	-5,106.24	5,816.66	0.00	0.00	0.00	
14,000.00	90.00	270.43	7,690.00	3,121.41	-5,206.24	5,912.08	0.00	0.00	0.00	
14,100.00	90.00	270.43	7,690.00	3,122.17	-5,306.23	6,007.51	0.00	0.00	0.00	
14,200.00	90.00	270.43	7,690.00	3,122.92	-5,406.23	6,102.93	0.00	0.00	0.00	
14,300.00	90.00	270.43	7,690.00	3,123.68	-5,506.23	6,198.35	0.00	0.00	0.00	
14,400.00	90.00	270.43	7,690.00	3,124.43	-5,606.23	6,293.77	0.00	0.00	0.00	
14,500.00	90.00	270.43	7,690.00	3,125.19	-5,706.22	6,389.19	0.00	0.00	0.00	
14,600.00	90.00	270.43	7,690.00	3,125.94	-5,806.22	6,484.62	0.00	0.00	0.00	
14,700.00	90.00	270.43	7,690.00	3,126.70	-5,906.22	6,580.04	0.00	0.00	0.00	
14,800.00	90.00	270.43	7,690.00	3,127.45	-6,006.21	6,675.46	0.00	0.00	0.00	
14,900.00	90.00	270.43	7,690.00	3,128.21	-6,106.21	6,770.88	0.00	0.00	0.00	
15,000.00	90.00	270.43	7,690.00	3,128.96	-6,206.21	6,866.31	0.00	0.00	0.00	
15,100.00	90.00	270.43	7,690.00	3,129.72	-6,306.21	6,961.73	0.00	0.00	0.00	
15,200.00	90.00	270.43	7,690.00	3,130.47	-6,406.20	7,057.15	0.00	0.00	0.00	
15,300.00	90.00	270.43	7,690.00	3,131.23	-6,506.20	7,152.57	0.00	0.00	0.00	
15,400.00	90.00	270.43	7,690.00	3,131.98	-6,606.20	7,247.99	0.00	0.00	0.00	
15,500.00	90.00	270.43	7,690.00	3,132.74	-6,706.19	7,343.42	0.00	0.00	0.00	
15,600.00	90.00	270.43	7,690.00	3,133.49	-6,806.19	7,438.84	0.00	0.00	0.00	
15,700.00	90.00	270.43	7,690.00	3,134.25	-6,906.19	7,534.26	0.00	0.00	0.00	
15,800.00	90.00	270.43	7,690.00	3,135.00	-7,006.19	7,629.68	0.00	0.00	0.00	
15,900.00	90.00	270.43	7,690.00	3,135.76	-7,106.18	7,725.10	0.00	0.00	0.00	
16,000.00	90.00	270.43	7,690.00	3,136.51	-7,206.18	7,820.53	0.00	0.00	0.00	
16,100.00	90.00	270.43	7,690.00	3,137.27	-7,306.18	7,915.95	0.00	0.00	0.00	
16,200.00	90.00	270.43	7,690.00	3,138.02	-7,406.17	8,011.37	0.00	0.00	0.00	
16,300.00	90.00	270.43	7,690.00	3,138.78	-7,506.17	8,106.79	0.00	0.00	0.00	
16,400.00	90.00	270.43	7,690.00	3,139.53	-7,606.17	8,202.21	0.00	0.00	0.00	
16,500.00	90.00	270.43	7,690.00	3,140.29	-7,706.17	8,297.64	0.00	0.00	0.00	
16,600.00	90.00	270.43	7,690.00	3,141.04	-7,806.16	8,393.06	0.00	0.00	0.00	
16,700.00	90.00	270.43	7,690.00	3,141.80	-7,906.16	8,488.48	0.00	0.00	0.00	
16,800.00	90.00	270.43	7,690.00	3,142.55	-8,006.16	8,583.90	0.00	0.00	0.00	
16,900.00	90.00	270.43	7,690.00	3,143.31	-8,106.15	8,679.33	0.00	0.00	0.00	

# Civitas Resources

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Well KING 3-65 28-29 1AH
<b>Company:</b>	CRESTONE PEAK RESOURCES	<b>TVD Reference:</b>	KB 25' @ 5610.00usft
<b>Project:</b>	ADAMS COUNTY	<b>MD Reference:</b>	KB 25' @ 5610.00usft
<b>Site:</b>	SEC 28-T3S-R65W	<b>North Reference:</b>	True
<b>Well:</b>	KING 3-65 28-29 1AH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
17,000.00	90.00	270.43	7,690.00	3,144.06	-8,206.15	8,774.75	0.00	0.00	0.00	
17,100.00	90.00	270.43	7,690.00	3,144.82	-8,306.15	8,870.17	0.00	0.00	0.00	
17,200.00	90.00	270.43	7,690.00	3,145.57	-8,406.15	8,965.59	0.00	0.00	0.00	
17,300.00	90.00	270.43	7,690.00	3,146.33	-8,506.14	9,061.01	0.00	0.00	0.00	
17,400.00	90.00	270.43	7,690.00	3,147.08	-8,606.14	9,156.44	0.00	0.00	0.00	
17,500.00	90.00	270.43	7,690.00	3,147.84	-8,706.14	9,251.86	0.00	0.00	0.00	
17,600.00	90.00	270.43	7,690.00	3,148.59	-8,806.13	9,347.28	0.00	0.00	0.00	
17,700.00	90.00	270.43	7,690.00	3,149.34	-8,906.13	9,442.70	0.00	0.00	0.00	
17,800.00	90.00	270.43	7,690.00	3,150.10	-9,006.13	9,538.12	0.00	0.00	0.00	
17,900.00	90.00	270.43	7,690.00	3,150.85	-9,106.13	9,633.55	0.00	0.00	0.00	
18,000.00	90.00	270.43	7,690.00	3,151.61	-9,206.12	9,728.97	0.00	0.00	0.00	
18,100.00	90.00	270.43	7,690.00	3,152.36	-9,306.12	9,824.39	0.00	0.00	0.00	
18,200.00	90.00	270.43	7,690.00	3,153.12	-9,406.12	9,919.81	0.00	0.00	0.00	
18,300.00	90.00	270.43	7,690.00	3,153.87	-9,506.11	10,015.24	0.00	0.00	0.00	
18,400.00	90.00	270.43	7,690.00	3,154.63	-9,606.11	10,110.66	0.00	0.00	0.00	
18,500.00	90.00	270.43	7,690.00	3,155.38	-9,706.11	10,206.08	0.00	0.00	0.00	
18,602.87	90.00	270.43	7,690.00	3,156.16	-9,808.97	10,304.24	0.00	0.00	0.00	
TD at 18602.87										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
- hit/miss target										
- Shape										
PBHL-KING 3-65 28-29	0.00	0.00	7,690.00	3,156.16	-9,808.97	1,159,434.46	3,226,036.89	39.768202°N	104.695890°W	
- plan hits target center										
- Point										
LP-KING 3-65 28-29 1AI	0.00	0.00	7,690.00	3,081.38	96.42	1,159,453.40	3,235,942.48	39.768002°N	104.660653°W	
- plan hits target center										
- Point										



# Civitas Resources

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Well KING 3-65 28-29 1AH
<b>Company:</b>	CRESTONE PEAK RESOURCES	<b>TVD Reference:</b>	KB 25' @ 5610.00usft
<b>Project:</b>	ADAMS COUNTY	<b>MD Reference:</b>	KB 25' @ 5610.00usft
<b>Site:</b>	SEC 28-T3S-R65W	<b>North Reference:</b>	True
<b>Well:</b>	KING 3-65 28-29 1AH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PROPOSAL 1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
24.00	24.00	Denver				
762.00	760.00	Arapahoe				
1,439.84	1,410.00	Laramie-Fox Hills Formation				
2,046.08	1,960.00	Pierre Formation				
2,587.12	2,450.00	Upper Pierre aquifer				
3,315.86	3,110.00	Base of Upper Pierre aquifer				
4,491.78	4,175.00	Larimer ("Parkman") sandstone				
4,629.80	4,300.00	Pierre Formation				
5,678.74	5,250.00	Terry ("Sussex") sandstone				
5,894.05	5,445.00	Pierre Formation				
6,534.46	6,025.00	Hygiene ("Shannon") sandstone				
6,992.68	6,440.00	Pierre Formation				
8,419.57	7,630.00	Sharon Springs Member				
8,697.19	7,690.00	Niobrara Formation				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
300.00	300.00	0.00	0.00	Start Build 2.00	
1,554.30	1,514.61	263.00	62.08	Start 6188.80 hold at 1554.30 MD	
7,743.10	7,119.63	2,816.75	664.84	Start DLS 10.00 TFO -101.67	
8,697.19	7,690.00	3,081.38	96.42	Start 9905.67 hold at 8697.19 MD	
18,602.87	7,690.00	3,156.16	-9,808.97	TD at 18602.87	