

CRESTONE PEAK RESOURCES

**ADAMS COUNTY
SEC 28-T3S-R65W
KING 3-65 28-29 2BH**

OWB

Plan: PROPOSAL 1

Standard Planning Report

24 August, 2023

Project: ADAMS COUNTY
Site: SEC 28-T3S-R65W
Well: KING 3-65 28-29 2BH
Wellbore: OWB
Design: PROPOSAL 1



Azimuths to True North
Magnetic North: 7.51°
Magnetic Field
Strength: 51391.6nT
Dip Angle: 66.07°
Date: 8/22/2023
Model: IGRF2020

WELL DETAILS: KING 3-65 28-29 2BH

+N/-S	+E/-W	Northing	Easting	5585.00	Latitude	Longitude	Slot
0.00	0.00	1156311.53	3235875.78		39.759379°N	104.660996°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	Target
2	900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	
3	1558.24	13.16	29.39	1552.46	65.60	36.95	2.00	29.39	-27.35	
4	7221.39	13.16	29.39	7066.78	1189.36	669.97	0.00	0.00	-495.81	
5	8184.70	90.00	270.43	7690.00	1321.22	101.49	10.00	-118.32	85.57	LP-KING 3-65 28-29 2BH
6	18104.03	90.00	270.43	7690.00	1396.37	-9817.56	0.00	0.00	9916.37	PBHL-KING 3-65 28-29 2BH

ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	Start Build 2.00
1558.24	13.16	29.39	1552.46	65.60	36.95	-27.35	75.29	Start 5663.15 hold at 1558.24 MD
7221.39	13.16	29.39	7066.78	1189.36	669.97	-495.81	1365.08	Start DLS 10.00 TFO -118.32
8184.70	90.00	270.43	7690.00	1321.22	101.49	85.57	1980.84	Start 9919.33 hold at 8184.70 MD
18104.03	90.00	270.43	7690.00	1396.37	-9817.56	9916.37	11900.17	TD at 18104.03

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
LP-KING 3-65 28-29 2BH	7690.00	1321.22	101.49	1157633.65	3235964.76	39.763006°N	104.660635°W	Point
- plan hits target center								
PBHL-KING 3-65 28-29 2BH	7690.00	1396.37	-9817.56	1157614.95	3226045.52	39.763207°N	104.695918°W	Point
- plan hits target center								

PROJECT DETAILS: ADAMS COUNTY

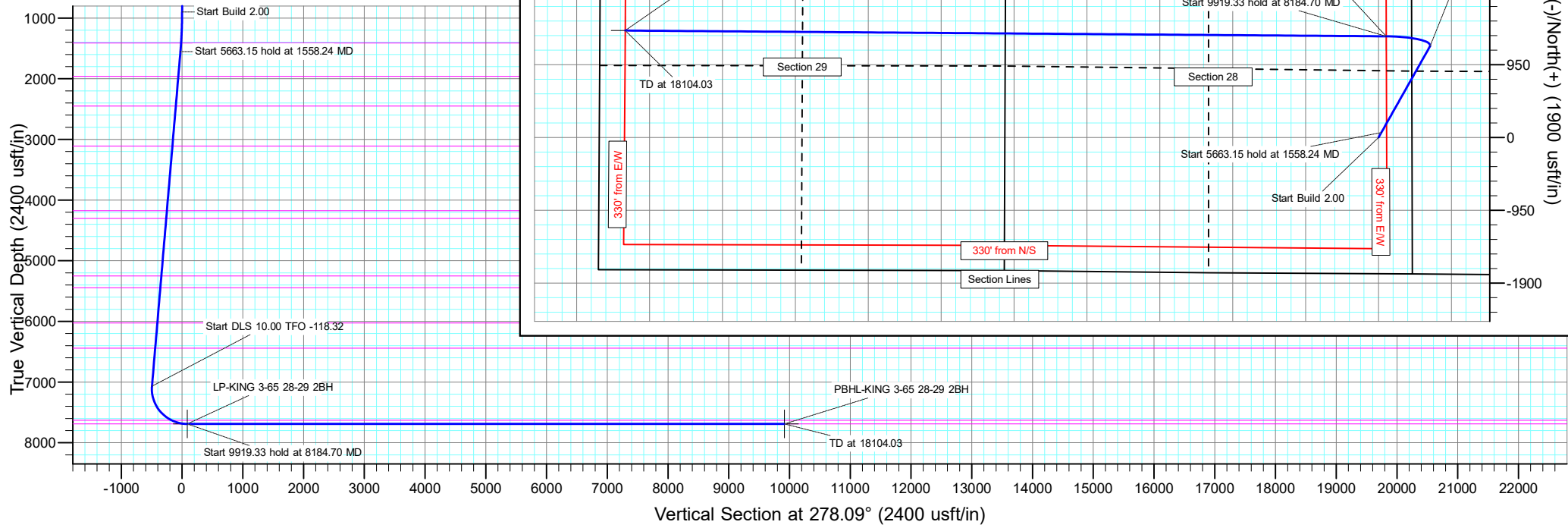
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone

System Datum: Mean Sea Level

SHL:
1778' FSL, 435' FEL
Sec 28-T3S-R65W

LP:
2200' FNL, 330' FEL
Sec 28-T3S-R65W

BHL:
2200' FNL, 330' FWL
Sec 29-T3S-R65W



Civitas Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well KING 3-65 28-29 2BH
Company:	CRESTONE PEAK RESOURCES	TVD Reference:	KB 25' @ 5610.00usft
Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5610.00usft
Site:	SEC 28-T3S-R65W	North Reference:	True
Well:	KING 3-65 28-29 2BH	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 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 2BH					
Well Position	+N/-S	1,780.55 usft	Northing:	1,156,311.53 usft	Latitude:	39.759379°N
	+E/-W	-439.99 usft	Easting:	3,235,875.79 usft	Longitude:	104.660996°W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	5,585.00 usft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	8/22/2023	7.51	66.07	51,391.62373760

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	278.10

Plan Survey Tool Program	Date	8/24/2023		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	18,104.03	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	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,558.24	13.16	29.39	1,552.46	65.60	36.95	2.00	2.00	0.00	29.39	
7,221.39	13.16	29.39	7,066.78	1,189.36	669.97	0.00	0.00	0.00	0.00	
8,184.70	90.00	270.43	7,690.00	1,321.22	101.49	10.00	7.98	-12.35	-118.32	LP-KING 3-65 28-29 ;
18,104.03	90.00	270.43	7,690.00	1,396.37	-9,817.56	0.00	0.00	0.00	0.00	PBHL-KING 3-65 28-29 ;

Civitas Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well KING 3-65 28-29 2BH
Company:	CRESTONE PEAK RESOURCES	TVD Reference:	KB 25' @ 5610.00usft
Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5610.00usft
Site:	SEC 28-T3S-R65W	North Reference:	True
Well:	KING 3-65 28-29 2BH	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
760.00	0.00	0.00	760.00	0.00	0.00	0.00	0.00	0.00	0.00
Arapahoe									
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
1,000.00	2.00	29.39	999.98	1.52	0.86	-0.63	2.00	2.00	0.00
1,100.00	4.00	29.39	1,099.84	6.08	3.42	-2.53	2.00	2.00	0.00
1,200.00	6.00	29.39	1,199.45	13.67	7.70	-5.70	2.00	2.00	0.00
1,300.00	8.00	29.39	1,298.70	24.29	13.68	-10.13	2.00	2.00	0.00
1,400.00	10.00	29.39	1,397.47	37.92	21.36	-15.81	2.00	2.00	0.00
1,412.73	10.25	29.39	1,410.00	39.87	22.46	-16.62	2.00	2.00	0.00
Laramie-Fox Hills Formation									
1,500.00	12.00	29.39	1,495.62	54.54	30.72	-22.74	2.00	2.00	0.00
1,558.24	13.16	29.39	1,552.46	65.60	36.95	-27.35	2.00	2.00	0.00
Start 5663.15 hold at 1558.24 MD									
1,600.00	13.16	29.39	1,593.13	73.88	41.62	-30.80	0.00	0.00	0.00
1,700.00	13.16	29.39	1,690.50	93.73	52.80	-39.07	0.00	0.00	0.00
1,800.00	13.16	29.39	1,787.87	113.57	63.97	-47.34	0.00	0.00	0.00
1,900.00	13.16	29.39	1,885.24	133.42	75.15	-55.62	0.00	0.00	0.00
1,976.78	13.16	29.39	1,960.00	148.65	83.73	-61.97	0.00	0.00	0.00
Pierre Formation									
2,000.00	13.16	29.39	1,982.61	153.26	86.33	-63.89	0.00	0.00	0.00
2,100.00	13.16	29.39	2,079.99	173.10	97.51	-72.16	0.00	0.00	0.00
2,200.00	13.16	29.39	2,177.36	192.95	108.69	-80.43	0.00	0.00	0.00
2,300.00	13.16	29.39	2,274.73	212.79	119.86	-88.71	0.00	0.00	0.00
2,400.00	13.16	29.39	2,372.10	232.63	131.04	-96.98	0.00	0.00	0.00
2,480.00	13.16	29.39	2,450.00	248.51	139.98	-103.60	0.00	0.00	0.00
Upper Pierre aquifer									
2,500.00	13.16	29.39	2,469.47	252.48	142.22	-105.25	0.00	0.00	0.00
2,600.00	13.16	29.39	2,566.85	272.32	153.40	-113.52	0.00	0.00	0.00
2,700.00	13.16	29.39	2,664.22	292.16	164.58	-121.79	0.00	0.00	0.00
2,800.00	13.16	29.39	2,761.59	312.01	175.75	-130.07	0.00	0.00	0.00
2,900.00	13.16	29.39	2,858.96	331.85	186.93	-138.34	0.00	0.00	0.00
3,000.00	13.16	29.39	2,956.33	351.69	198.11	-146.61	0.00	0.00	0.00
3,100.00	13.16	29.39	3,053.70	371.54	209.29	-154.88	0.00	0.00	0.00
3,157.81	13.16	29.39	3,110.00	383.01	215.75	-159.67	0.00	0.00	0.00
Base of Upper Pierre aquifer									
3,200.00	13.16	29.39	3,151.08	391.38	220.46	-163.16	0.00	0.00	0.00
3,300.00	13.16	29.39	3,248.45	411.22	231.64	-171.43	0.00	0.00	0.00
3,400.00	13.16	29.39	3,345.82	431.07	242.82	-179.70	0.00	0.00	0.00
3,500.00	13.16	29.39	3,443.19	450.91	254.00	-187.97	0.00	0.00	0.00
3,600.00	13.16	29.39	3,540.56	470.75	265.18	-196.24	0.00	0.00	0.00
3,700.00	13.16	29.39	3,637.94	490.60	276.35	-204.52	0.00	0.00	0.00

Civitas Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well KING 3-65 28-29 2BH
Company:	CRESTONE PEAK RESOURCES	TVD Reference:	KB 25' @ 5610.00usft
Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5610.00usft
Site:	SEC 28-T3S-R65W	North Reference:	True
Well:	KING 3-65 28-29 2BH	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	13.16	29.39	3,735.31	510.44	287.53	-212.79	0.00	0.00	0.00
3,900.00	13.16	29.39	3,832.68	530.29	298.71	-221.06	0.00	0.00	0.00
4,000.00	13.16	29.39	3,930.05	550.13	309.89	-229.33	0.00	0.00	0.00
4,100.00	13.16	29.39	4,027.42	569.97	321.06	-237.60	0.00	0.00	0.00
4,200.00	13.16	29.39	4,124.80	589.82	332.24	-245.88	0.00	0.00	0.00
4,251.56	13.16	29.39	4,175.00	600.05	338.01	-250.14	0.00	0.00	0.00
Larimer ("Parkman") sandstone									
4,300.00	13.16	29.39	4,222.17	609.66	343.42	-254.15	0.00	0.00	0.00
4,379.93	13.16	29.39	4,300.00	625.52	352.35	-260.76	0.00	0.00	0.00
Pierre Formation									
4,400.00	13.16	29.39	4,319.54	629.50	354.60	-262.42	0.00	0.00	0.00
4,500.00	13.16	29.39	4,416.91	649.35	365.78	-270.69	0.00	0.00	0.00
4,600.00	13.16	29.39	4,514.28	669.19	376.95	-278.97	0.00	0.00	0.00
4,700.00	13.16	29.39	4,611.66	689.03	388.13	-287.24	0.00	0.00	0.00
4,800.00	13.16	29.39	4,709.03	708.88	399.31	-295.51	0.00	0.00	0.00
4,900.00	13.16	29.39	4,806.40	728.72	410.49	-303.78	0.00	0.00	0.00
5,000.00	13.16	29.39	4,903.77	748.56	421.66	-312.05	0.00	0.00	0.00
5,100.00	13.16	29.39	5,001.14	768.41	432.84	-320.33	0.00	0.00	0.00
5,200.00	13.16	29.39	5,098.52	788.25	444.02	-328.60	0.00	0.00	0.00
5,300.00	13.16	29.39	5,195.89	808.09	455.20	-336.87	0.00	0.00	0.00
5,355.57	13.16	29.39	5,250.00	819.12	461.41	-341.47	0.00	0.00	0.00
Terry ("Sussex") sandstone									
5,400.00	13.16	29.39	5,293.26	827.94	466.38	-345.14	0.00	0.00	0.00
5,500.00	13.16	29.39	5,390.63	847.78	477.55	-353.42	0.00	0.00	0.00
5,555.84	13.16	29.39	5,445.00	858.86	483.80	-358.03	0.00	0.00	0.00
Pierre Formation									
5,600.00	13.16	29.39	5,488.00	867.62	488.73	-361.69	0.00	0.00	0.00
5,700.00	13.16	29.39	5,585.38	887.47	499.91	-369.96	0.00	0.00	0.00
5,800.00	13.16	29.39	5,682.75	907.31	511.09	-378.23	0.00	0.00	0.00
5,900.00	13.16	29.39	5,780.12	927.15	522.27	-386.50	0.00	0.00	0.00
6,000.00	13.16	29.39	5,877.49	947.00	533.44	-394.78	0.00	0.00	0.00
6,100.00	13.16	29.39	5,974.86	966.84	544.62	-403.05	0.00	0.00	0.00
6,151.49	13.16	29.39	6,025.00	977.06	550.38	-407.31	0.00	0.00	0.00
Hygiene ("Shannon") sandstone									
6,200.00	13.16	29.39	6,072.23	986.69	555.80	-411.32	0.00	0.00	0.00
6,300.00	13.16	29.39	6,169.61	1,006.53	566.98	-419.59	0.00	0.00	0.00
6,400.00	13.16	29.39	6,266.98	1,026.37	578.15	-427.87	0.00	0.00	0.00
6,500.00	13.16	29.39	6,364.35	1,046.22	589.33	-436.14	0.00	0.00	0.00
6,577.69	13.16	29.39	6,440.00	1,061.63	598.02	-442.56	0.00	0.00	0.00
Pierre Formation									
6,600.00	13.16	29.39	6,461.72	1,066.06	600.51	-444.41	0.00	0.00	0.00
6,700.00	13.16	29.39	6,559.09	1,085.90	611.69	-452.68	0.00	0.00	0.00
6,800.00	13.16	29.39	6,656.47	1,105.75	622.87	-460.95	0.00	0.00	0.00
6,900.00	13.16	29.39	6,753.84	1,125.59	634.04	-469.23	0.00	0.00	0.00
7,000.00	13.16	29.39	6,851.21	1,145.43	645.22	-477.50	0.00	0.00	0.00
7,100.00	13.16	29.39	6,948.58	1,165.28	656.40	-485.77	0.00	0.00	0.00
7,200.00	13.16	29.39	7,045.95	1,185.12	667.58	-494.04	0.00	0.00	0.00
7,221.39	13.16	29.39	7,066.78	1,189.36	669.97	-495.81	0.00	0.00	0.00
Start DLS 10.00 TFO -118.32									
7,250.00	12.07	17.26	7,094.71	1,195.06	672.45	-497.47	10.00	-3.83	-42.40
7,300.00	11.67	352.84	7,143.67	1,205.07	673.38	-496.97	10.00	-0.81	-48.83
7,350.00	13.26	330.71	7,192.52	1,215.10	669.94	-492.16	10.00	3.19	-44.27
7,400.00	16.28	314.94	7,240.88	1,225.05	662.17	-483.07	10.00	6.03	-31.55

Civitas Resources

Planning Report

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Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5610.00usft
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Well:	KING 3-65 28-29 2BH	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	20.08	304.48	7,288.39	1,234.87	650.13	-469.76	10.00	7.61	-20.92	
7,500.00	24.31	297.37	7,334.68	1,244.47	633.90	-452.34	10.00	8.46	-14.20	
7,550.00	28.77	292.31	7,379.40	1,253.77	613.61	-430.95	10.00	8.93	-10.12	
7,600.00	33.38	288.53	7,422.22	1,262.72	589.43	-405.74	10.00	9.21	-7.57	
7,650.00	38.07	285.58	7,462.80	1,271.24	561.52	-376.91	10.00	9.39	-5.90	
7,700.00	42.83	283.19	7,500.84	1,279.26	530.10	-344.68	10.00	9.51	-4.78	
7,750.00	47.62	281.20	7,536.05	1,286.73	495.41	-309.29	10.00	9.59	-3.99	
7,800.00	52.45	279.49	7,568.16	1,293.58	457.72	-271.01	10.00	9.65	-3.42	
7,850.00	57.30	277.98	7,596.92	1,299.78	417.32	-230.13	10.00	9.69	-3.00	
7,900.00	62.16	276.64	7,622.12	1,305.26	374.50	-186.97	10.00	9.73	-2.69	
7,917.36	63.85	276.20	7,630.00	1,306.99	359.13	-171.50	10.00	9.74	-2.53	
Sharon Springs Member										
7,950.00	67.03	275.41	7,643.56	1,309.99	329.60	-141.85	10.00	9.75	-2.42	
8,000.00	71.92	274.27	7,661.09	1,313.93	282.95	-95.11	10.00	9.77	-2.29	
8,050.00	76.81	273.18	7,674.56	1,317.05	234.92	-47.12	10.00	9.78	-2.16	
8,100.00	81.70	272.14	7,683.88	1,319.33	185.86	1.77	10.00	9.79	-2.08	
8,150.00	86.60	271.13	7,688.97	1,320.75	136.16	51.18	10.00	9.79	-2.03	
8,184.70	90.00	270.43	7,690.00	1,321.22	101.49	85.57	10.00	9.80	-2.01	
Start 9919.33 hold at 8184.70 MD - Niobrara Formation										
8,200.00	90.00	270.43	7,690.00	1,321.34	86.18	100.74	0.00	0.00	0.00	
8,300.00	90.00	270.43	7,690.00	1,322.09	-13.81	199.85	0.00	0.00	0.00	
8,400.00	90.00	270.43	7,690.00	1,322.85	-113.81	298.95	0.00	0.00	0.00	
8,500.00	90.00	270.43	7,690.00	1,323.61	-213.81	398.06	0.00	0.00	0.00	
8,600.00	90.00	270.43	7,690.00	1,324.37	-313.80	497.17	0.00	0.00	0.00	
8,700.00	90.00	270.43	7,690.00	1,325.12	-413.80	596.28	0.00	0.00	0.00	
8,800.00	90.00	270.43	7,690.00	1,325.88	-513.80	695.38	0.00	0.00	0.00	
8,900.00	90.00	270.43	7,690.00	1,326.64	-613.80	794.49	0.00	0.00	0.00	
9,000.00	90.00	270.43	7,690.00	1,327.40	-713.79	893.60	0.00	0.00	0.00	
9,100.00	90.00	270.43	7,690.00	1,328.15	-813.79	992.71	0.00	0.00	0.00	
9,200.00	90.00	270.43	7,690.00	1,328.91	-913.79	1,091.81	0.00	0.00	0.00	
9,300.00	90.00	270.43	7,690.00	1,329.67	-1,013.78	1,190.92	0.00	0.00	0.00	
9,400.00	90.00	270.43	7,690.00	1,330.43	-1,113.78	1,290.03	0.00	0.00	0.00	
9,500.00	90.00	270.43	7,690.00	1,331.18	-1,213.78	1,389.14	0.00	0.00	0.00	
9,600.00	90.00	270.43	7,690.00	1,331.94	-1,313.78	1,488.24	0.00	0.00	0.00	
9,700.00	90.00	270.43	7,690.00	1,332.70	-1,413.77	1,587.35	0.00	0.00	0.00	
9,800.00	90.00	270.43	7,690.00	1,333.46	-1,513.77	1,686.46	0.00	0.00	0.00	
9,900.00	90.00	270.43	7,690.00	1,334.22	-1,613.77	1,785.56	0.00	0.00	0.00	
10,000.00	90.00	270.43	7,690.00	1,334.97	-1,713.76	1,884.67	0.00	0.00	0.00	
10,100.00	90.00	270.43	7,690.00	1,335.73	-1,813.76	1,983.78	0.00	0.00	0.00	
10,200.00	90.00	270.43	7,690.00	1,336.49	-1,913.76	2,082.89	0.00	0.00	0.00	
10,300.00	90.00	270.43	7,690.00	1,337.25	-2,013.76	2,181.99	0.00	0.00	0.00	
10,400.00	90.00	270.43	7,690.00	1,338.00	-2,113.75	2,281.10	0.00	0.00	0.00	
10,500.00	90.00	270.43	7,690.00	1,338.76	-2,213.75	2,380.21	0.00	0.00	0.00	
10,600.00	90.00	270.43	7,690.00	1,339.52	-2,313.75	2,479.32	0.00	0.00	0.00	
10,700.00	90.00	270.43	7,690.00	1,340.28	-2,413.74	2,578.42	0.00	0.00	0.00	
10,800.00	90.00	270.43	7,690.00	1,341.03	-2,513.74	2,677.53	0.00	0.00	0.00	
10,900.00	90.00	270.43	7,690.00	1,341.79	-2,613.74	2,776.64	0.00	0.00	0.00	
11,000.00	90.00	270.43	7,690.00	1,342.55	-2,713.74	2,875.75	0.00	0.00	0.00	
11,100.00	90.00	270.43	7,690.00	1,343.31	-2,813.73	2,974.85	0.00	0.00	0.00	
11,200.00	90.00	270.43	7,690.00	1,344.06	-2,913.73	3,073.96	0.00	0.00	0.00	
11,300.00	90.00	270.43	7,690.00	1,344.82	-3,013.73	3,173.07	0.00	0.00	0.00	
11,400.00	90.00	270.43	7,690.00	1,345.58	-3,113.72	3,272.18	0.00	0.00	0.00	
11,500.00	90.00	270.43	7,690.00	1,346.34	-3,213.72	3,371.28	0.00	0.00	0.00	
11,600.00	90.00	270.43	7,690.00	1,347.09	-3,313.72	3,470.39	0.00	0.00	0.00	

Civitas Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well KING 3-65 28-29 2BH
Company:	CRESTONE PEAK RESOURCES	TVD Reference:	KB 25' @ 5610.00usft
Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5610.00usft
Site:	SEC 28-T3S-R65W	North Reference:	True
Well:	KING 3-65 28-29 2BH	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)	
11,700.00	90.00	270.43	7,690.00	1,347.85	-3,413.72	3,569.50	0.00	0.00	0.00	
11,800.00	90.00	270.43	7,690.00	1,348.61	-3,513.71	3,668.61	0.00	0.00	0.00	
11,900.00	90.00	270.43	7,690.00	1,349.37	-3,613.71	3,767.71	0.00	0.00	0.00	
12,000.00	90.00	270.43	7,690.00	1,350.13	-3,713.71	3,866.82	0.00	0.00	0.00	
12,100.00	90.00	270.43	7,690.00	1,350.88	-3,813.70	3,965.93	0.00	0.00	0.00	
12,200.00	90.00	270.43	7,690.00	1,351.64	-3,913.70	4,065.04	0.00	0.00	0.00	
12,300.00	90.00	270.43	7,690.00	1,352.40	-4,013.70	4,164.14	0.00	0.00	0.00	
12,400.00	90.00	270.43	7,690.00	1,353.16	-4,113.70	4,263.25	0.00	0.00	0.00	
12,500.00	90.00	270.43	7,690.00	1,353.91	-4,213.69	4,362.36	0.00	0.00	0.00	
12,600.00	90.00	270.43	7,690.00	1,354.67	-4,313.69	4,461.47	0.00	0.00	0.00	
12,700.00	90.00	270.43	7,690.00	1,355.43	-4,413.69	4,560.57	0.00	0.00	0.00	
12,800.00	90.00	270.43	7,690.00	1,356.19	-4,513.68	4,659.68	0.00	0.00	0.00	
12,900.00	90.00	270.43	7,690.00	1,356.94	-4,613.68	4,758.79	0.00	0.00	0.00	
13,000.00	90.00	270.43	7,690.00	1,357.70	-4,713.68	4,857.90	0.00	0.00	0.00	
13,100.00	90.00	270.43	7,690.00	1,358.46	-4,813.68	4,957.00	0.00	0.00	0.00	
13,200.00	90.00	270.43	7,690.00	1,359.22	-4,913.67	5,056.11	0.00	0.00	0.00	
13,300.00	90.00	270.43	7,690.00	1,359.97	-5,013.67	5,155.22	0.00	0.00	0.00	
13,400.00	90.00	270.43	7,690.00	1,360.73	-5,113.67	5,254.33	0.00	0.00	0.00	
13,500.00	90.00	270.43	7,690.00	1,361.49	-5,213.66	5,353.43	0.00	0.00	0.00	
13,600.00	90.00	270.43	7,690.00	1,362.25	-5,313.66	5,452.54	0.00	0.00	0.00	
13,700.00	90.00	270.43	7,690.00	1,363.01	-5,413.66	5,551.65	0.00	0.00	0.00	
13,800.00	90.00	270.43	7,690.00	1,363.76	-5,513.66	5,650.76	0.00	0.00	0.00	
13,900.00	90.00	270.43	7,690.00	1,364.52	-5,613.65	5,749.86	0.00	0.00	0.00	
14,000.00	90.00	270.43	7,690.00	1,365.28	-5,713.65	5,848.97	0.00	0.00	0.00	
14,100.00	90.00	270.43	7,690.00	1,366.04	-5,813.65	5,948.08	0.00	0.00	0.00	
14,200.00	90.00	270.43	7,690.00	1,366.79	-5,913.64	6,047.18	0.00	0.00	0.00	
14,300.00	90.00	270.43	7,690.00	1,367.55	-6,013.64	6,146.29	0.00	0.00	0.00	
14,400.00	90.00	270.43	7,690.00	1,368.31	-6,113.64	6,245.40	0.00	0.00	0.00	
14,500.00	90.00	270.43	7,690.00	1,369.07	-6,213.64	6,344.51	0.00	0.00	0.00	
14,600.00	90.00	270.43	7,690.00	1,369.82	-6,313.63	6,443.61	0.00	0.00	0.00	
14,700.00	90.00	270.43	7,690.00	1,370.58	-6,413.63	6,542.72	0.00	0.00	0.00	
14,800.00	90.00	270.43	7,690.00	1,371.34	-6,513.63	6,641.83	0.00	0.00	0.00	
14,900.00	90.00	270.43	7,690.00	1,372.10	-6,613.62	6,740.94	0.00	0.00	0.00	
15,000.00	90.00	270.43	7,690.00	1,372.85	-6,713.62	6,840.04	0.00	0.00	0.00	
15,100.00	90.00	270.43	7,690.00	1,373.61	-6,813.62	6,939.15	0.00	0.00	0.00	
15,200.00	90.00	270.43	7,690.00	1,374.37	-6,913.62	7,038.26	0.00	0.00	0.00	
15,300.00	90.00	270.43	7,690.00	1,375.13	-7,013.61	7,137.37	0.00	0.00	0.00	
15,400.00	90.00	270.43	7,690.00	1,375.88	-7,113.61	7,236.47	0.00	0.00	0.00	
15,500.00	90.00	270.43	7,690.00	1,376.64	-7,213.61	7,335.58	0.00	0.00	0.00	
15,600.00	90.00	270.43	7,690.00	1,377.40	-7,313.60	7,434.69	0.00	0.00	0.00	
15,700.00	90.00	270.43	7,690.00	1,378.16	-7,413.60	7,533.80	0.00	0.00	0.00	
15,800.00	90.00	270.43	7,690.00	1,378.92	-7,513.60	7,632.90	0.00	0.00	0.00	
15,900.00	90.00	270.43	7,690.00	1,379.67	-7,613.60	7,732.01	0.00	0.00	0.00	
16,000.00	90.00	270.43	7,690.00	1,380.43	-7,713.59	7,831.12	0.00	0.00	0.00	
16,100.00	90.00	270.43	7,690.00	1,381.19	-7,813.59	7,930.23	0.00	0.00	0.00	
16,200.00	90.00	270.43	7,690.00	1,381.95	-7,913.59	8,029.33	0.00	0.00	0.00	
16,300.00	90.00	270.43	7,690.00	1,382.70	-8,013.58	8,128.44	0.00	0.00	0.00	
16,400.00	90.00	270.43	7,690.00	1,383.46	-8,113.58	8,227.55	0.00	0.00	0.00	
16,500.00	90.00	270.43	7,690.00	1,384.22	-8,213.58	8,326.66	0.00	0.00	0.00	
16,600.00	90.00	270.43	7,690.00	1,384.98	-8,313.58	8,425.76	0.00	0.00	0.00	
16,700.00	90.00	270.43	7,690.00	1,385.73	-8,413.57	8,524.87	0.00	0.00	0.00	
16,800.00	90.00	270.43	7,690.00	1,386.49	-8,513.57	8,623.98	0.00	0.00	0.00	
16,900.00	90.00	270.43	7,690.00	1,387.25	-8,613.57	8,723.09	0.00	0.00	0.00	
17,000.00	90.00	270.43	7,690.00	1,388.01	-8,713.56	8,822.19	0.00	0.00	0.00	

Civitas Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well KING 3-65 28-29 2BH
Company:	CRESTONE PEAK RESOURCES	TVD Reference:	KB 25' @ 5610.00usft
Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5610.00usft
Site:	SEC 28-T3S-R65W	North Reference:	True
Well:	KING 3-65 28-29 2BH	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)	
17,100.00	90.00	270.43	7,690.00	1,388.76	-8,813.56	8,921.30	0.00	0.00	0.00	
17,200.00	90.00	270.43	7,690.00	1,389.52	-8,913.56	9,020.41	0.00	0.00	0.00	
17,300.00	90.00	270.43	7,690.00	1,390.28	-9,013.56	9,119.52	0.00	0.00	0.00	
17,400.00	90.00	270.43	7,690.00	1,391.04	-9,113.55	9,218.62	0.00	0.00	0.00	
17,500.00	90.00	270.43	7,690.00	1,391.79	-9,213.55	9,317.73	0.00	0.00	0.00	
17,600.00	90.00	270.43	7,690.00	1,392.55	-9,313.55	9,416.84	0.00	0.00	0.00	
17,700.00	90.00	270.43	7,690.00	1,393.31	-9,413.54	9,515.95	0.00	0.00	0.00	
17,800.00	90.00	270.43	7,690.00	1,394.07	-9,513.54	9,615.05	0.00	0.00	0.00	
17,900.00	90.00	270.43	7,690.00	1,394.83	-9,613.54	9,714.16	0.00	0.00	0.00	
18,000.00	90.00	270.43	7,690.00	1,395.58	-9,713.54	9,813.27	0.00	0.00	0.00	
18,104.03	90.00	270.43	7,690.00	1,396.37	-9,817.56	9,916.37	0.00	0.00	0.00	
TD at 18104.03										

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	1,396.37	-9,817.56	1,157,614.94	3,226,045.52	39.763207°N	104.695918°W	
- plan hits target center										
- Point										
LP-KING 3-65 28-29 2BI	0.00	0.00	7,690.00	1,321.22	101.49	1,157,633.64	3,235,964.77	39.763006°N	104.660635°W	
- plan hits target center										
- Point										

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
24.00	24.00	Denver				
760.00	760.00	Arapahoe				
1,412.73	1,410.00	Laramie-Fox Hills Formation				
1,976.78	1,960.00	Pierre Formation				
2,480.00	2,450.00	Upper Pierre aquifer				
3,157.81	3,110.00	Base of Upper Pierre aquifer				
4,251.56	4,175.00	Larimer ("Parkman") sandstone				
4,379.93	4,300.00	Pierre Formation				
5,355.57	5,250.00	Terry ("Sussex") sandstone				
5,555.84	5,445.00	Pierre Formation				
6,151.49	6,025.00	Hygiene ("Shannon") sandstone				
6,577.69	6,440.00	Pierre Formation				
7,917.36	7,630.00	Sharon Springs Member				
8,184.70	7,690.00	Niobrara Formation				

Civitas Resources

Planning Report

Database:	EDM	Local Co-ordinate Reference:	Well KING 3-65 28-29 2BH
Company:	CRESTONE PEAK RESOURCES	TVD Reference:	KB 25' @ 5610.00usft
Project:	ADAMS COUNTY	MD Reference:	KB 25' @ 5610.00usft
Site:	SEC 28-T3S-R65W	North Reference:	True
Well:	KING 3-65 28-29 2BH	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)	
900.00	900.00	0.00	0.00	Start Build 2.00
1,558.24	1,552.46	65.60	36.95	Start 5663.15 hold at 1558.24 MD
7,221.39	7,066.78	1,189.36	669.97	Start DLS 10.00 TFO -118.32
8,184.70	7,690.00	1,321.22	101.49	Start 9919.33 hold at 8184.70 MD
18,104.03	7,690.00	1,396.37	-9,817.56	TD at 18104.03