

# **CRESTONE PEAK RESOURCES**

**ARAPAHOE COUNTY**

**SEC 26-T4S-R65W**

**GRIMM MOTOCROSS 4-65 23 2A3AUH**

**OWB**

**Plan: PROPOSAL 1**

## **Standard Planning Report**

**10 December, 2024**

Project: ARAPAHOE COUNTY

Site: SEC 26-T4S-R65W

Well: GRIMM MOTOCROSS 4-65 23 2A3AUH

Wellbore: OWB

Design: PROPOSAL 1

PROJECT DETAILS: ARAPAHOE COUNTY

Geodetic System: US State Plane 1983

Datum: North American Datum 1983

Ellipsoid: GRS 1980

Zone: Colorado Central Zone

System Datum: Mean Sea Level



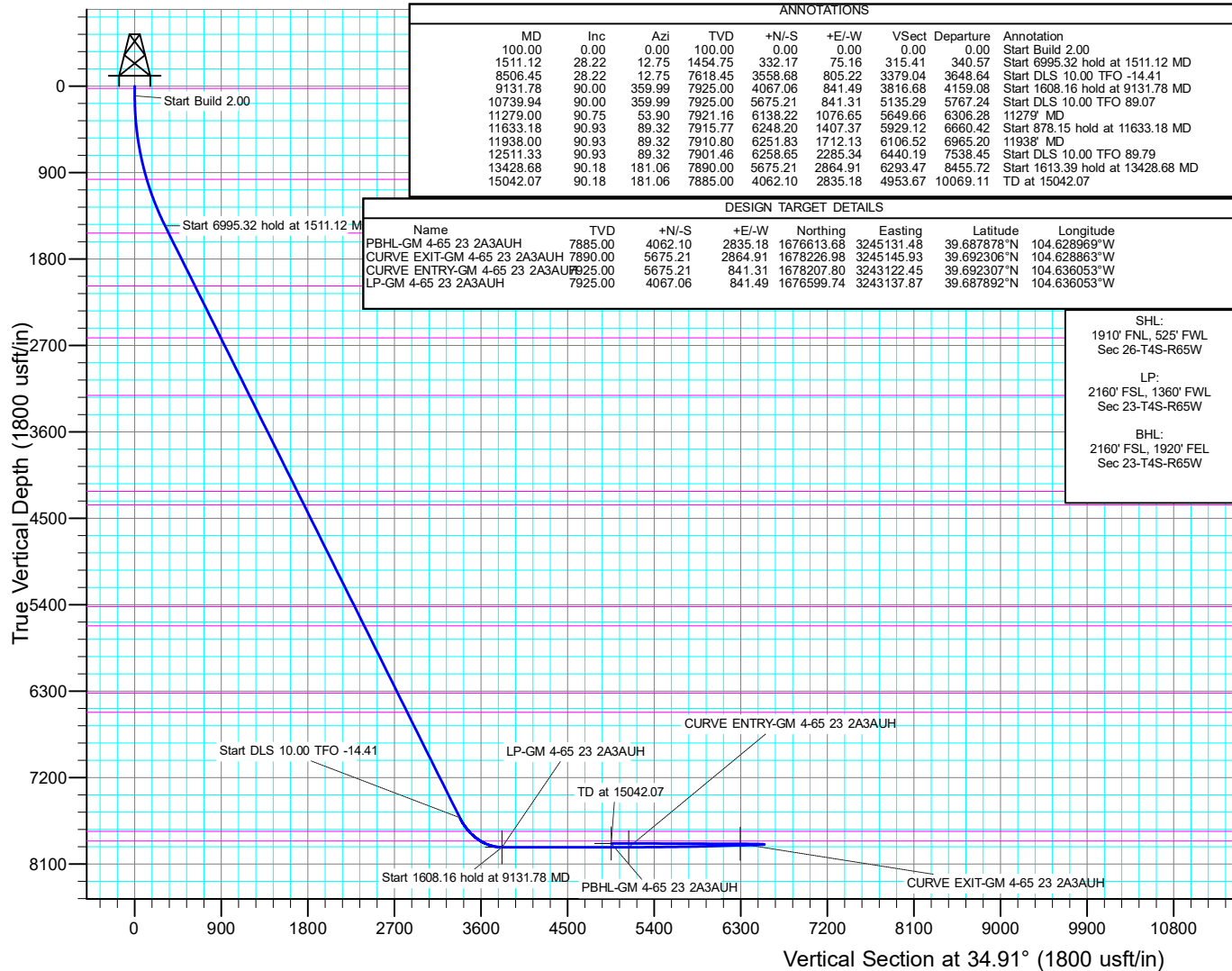
Azimuths to True North  
Magnetic North: 7.44°

Magnetic Field  
Strength: 51304.2nT  
Dip Angle: 65.99°  
Date: 1/22/2024  
Model: IGRF2020

WELL DETAILS: GRIMM MOTOCROSS 4-65 23 2A3AUH

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1672524.95	3242334.97	39.676727°N	104.639043°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	1511.12	28.22	12.75	1454.75	332.17	75.16	2.00	12.75	315.41	
4	8506.45	28.22	12.75	7618.45	3558.68	805.22	0.00	0.00	3379.04	
5	9131.78	90.00	359.99	7925.00	4067.06	841.49	10.00	-14.41	3816.68	LP-GM 4-65 23 2A3AUH
6	10739.94	90.00	359.99	7925.00	5675.21	841.31	0.00	0.00	5135.29	CURVE ENTRY-GM 4-65 23 2A3AUH
7	11633.18	90.93	89.32	7915.77	6248.20	1407.37	10.00	89.07	5929.12	
8	12511.33	90.93	89.32	7901.46	6258.65	2285.34	0.00	0.00	6440.19	
9	13428.68	90.18	181.06	7890.00	5675.21	2864.91	10.00	89.79	6293.47	CURVE EXIT-GM 4-65 23 2A3AUH
10	15042.07	90.18	181.06	7885.00	4062.10	2835.18	0.00	0.00	4953.67	PBHL-GM 4-65 23 2A3AUH



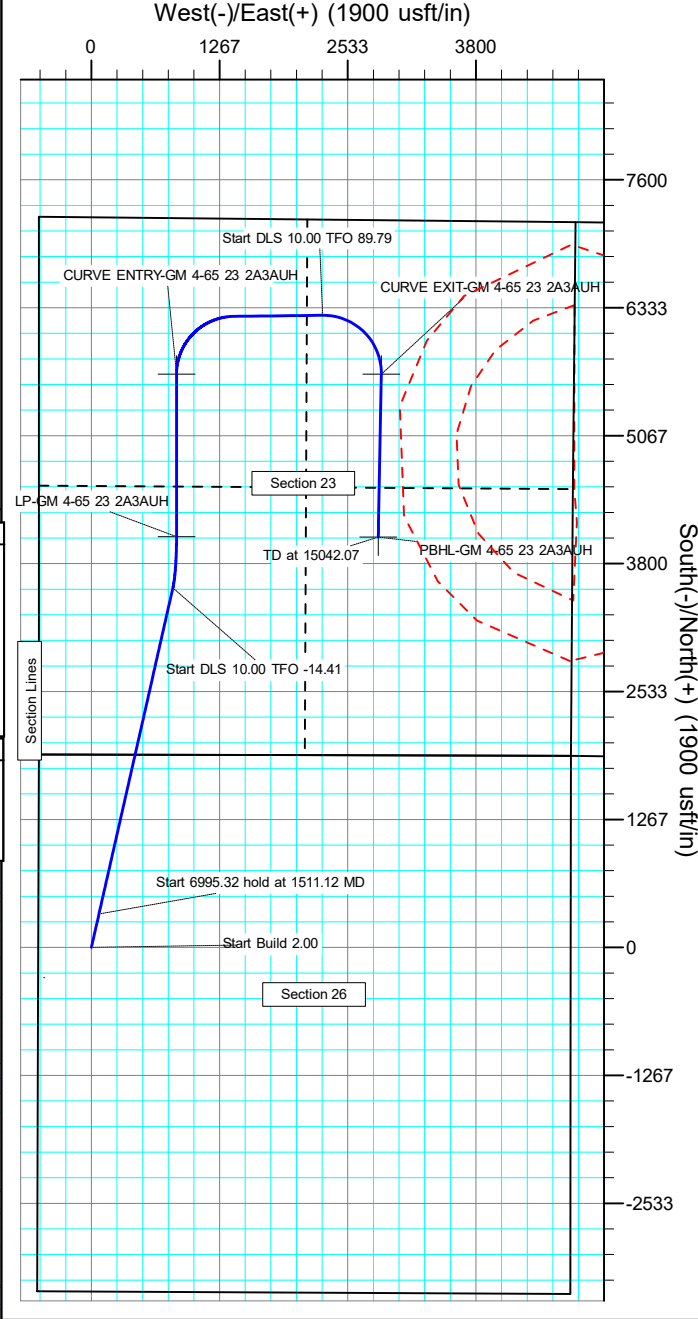
ANNOTATIONS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	VFace	Departure	Annotation	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	Start Build 2.00	
1511.12	28.22	12.75	1454.75	332.17	75.16	315.41	340.57	Start 6995.32 hold at 1511.12 MD	
8506.45	28.22	12.75	7618.45	3558.68	805.22	3379.04	3648.64	Start DLS 10.00 TFO -14.41	
9131.78	90.00	359.99	7925.00	4067.06	841.49	3816.68	4159.08	Start 1608.16 hold at 9131.78 MD	
10739.94	90.00	359.99	7925.00	5675.21	841.31	5135.29	5767.24	Start DLS 10.00 TFO 89.07	
11279.00	90.75	53.90	7921.16	6138.22	1076.65	5649.66	6306.28	11279' MD	
11633.18	90.93	89.32	7915.77	6248.20	1407.37	5929.12	6660.42	Start 878.15 hold at 11633.18 MD	
11938.00	90.93	89.32	7910.80	6251.83	1712.13	6106.52	6965.20	11938' MD	
12511.33	90.93	89.32	7901.46	6258.65	2285.34	6440.19	7538.45	Start DLS 10.00 TFO 89.79	
13428.68	90.18	181.06	7890.00	5675.21	2864.91	6293.47	8455.72	Start 1613.39 hold at 13428.68 MD	
15042.07	90.18	181.06	7885.00	4062.10	2835.18	4953.67	10069.11	TD at 15042.07	

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL-GM 4-65 23 2A3AUH	7885.00	4062.10	2835.18	1676613.68	3245131.48	39.687878°N	104.628969°W
CURVE EXIT-GM 4-65 23 2A3AUH	7890.00	5675.21	2864.91	1678226.98	3245145.93	39.692306°N	104.628863°W
CURVE ENTRY-GM 4-65 23 2A3AUH	7925.00	5675.21	841.31	1678207.80	3243122.45	39.692307°N	104.636053°W
LP-GM 4-65 23 2A3AUH	7925.00	4067.06	841.49	1676599.74	3243137.87	39.687892°N	104.636053°W

SHL:  
1910' FNL, 525' FWL  
Sec 26-T4S-R65W

LP:  
2160' FSL, 1360' FWL  
Sec 23-T4S-R65W

BHL:  
2160' FSL, 1920' FEL  
Sec 23-T4S-R65W



# Civitas Resources

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Well GRIMM MOTOCROSS 4-65 23 2A3AUH
<b>Company:</b>	CRESTONE PEAK RESOURCES	<b>TVD Reference:</b>	KB 25' @ 5825.00usft
<b>Project:</b>	ARAPAHOE COUNTY	<b>MD Reference:</b>	KB 25' @ 5825.00usft
<b>Site:</b>	SEC 26-T4S-R65W	<b>North Reference:</b>	True
<b>Well:</b>	GRIMM MOTOCROSS 4-65 23 2A3AUH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PROPOSAL 1		

<b>Project</b>	ARAPAHOE 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 Central Zone		Using geodetic scale factor

Site		SEC 26-T4S-R65W			
Site Position:		Northing:	1,674,430.51 usft	Latitude:	39.681972°N
From:	Lat/Long	Easting:	3,241,798.17 usft	Longitude:	104.640886°W
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.54 °

Well	GRIMM MOTOCROSS 4-65 23 2A3AUH					
Well Position	+N/-S	-1,910.58 usft	Northing:	1,672,524.95 usft	Latitude:	39.676727°N
	+E/-W	518.77 usft	Easting:	3,242,334.97 usft	Longitude:	104.639043°W
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	5,800.00 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	1/22/2024	7.44	65.99	51,304.23895066

<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	34.91	

<b>Plan Survey Tool Program</b>	<b>Date</b>	12/5/2024			
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>	
1	0.00	15,042.07	PROPOSAL 1 (OWB)	MWD OWSG	
				OWSG MWD - Standard	

# Civitas Resources

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Well GRIMM MOTOCROSS 4-65 23 2A3AUH
<b>Company:</b>	CRESTONE PEAK RESOURCES	<b>TVD Reference:</b>	KB 25' @ 5825.00usft
<b>Project:</b>	ARAPAHOE COUNTY	<b>MD Reference:</b>	KB 25' @ 5825.00usft
<b>Site:</b>	SEC 26-T4S-R65W	<b>North Reference:</b>	True
<b>Well:</b>	GRIMM MOTOCROSS 4-65 23 2A3AUH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,511.12	28.22	12.75	1,454.75	332.17	75.16	2.00	2.00	0.00	12.75	
8,506.45	28.22	12.75	7,618.45	3,558.68	805.22	0.00	0.00	0.00	0.00	
9,131.78	90.00	359.99	7,925.00	4,067.06	841.49	10.00	9.88	-2.04	-14.41	LP-GM 4-65 23 2A3A
10,739.94	90.00	359.99	7,925.00	5,675.21	841.31	0.00	0.00	0.00	0.00	CURVE ENTRY-GM 4
11,633.18	90.93	89.32	7,915.77	6,248.20	1,407.37	10.00	0.10	10.00	89.07	
12,511.33	90.93	89.32	7,901.46	6,258.65	2,285.34	0.00	0.00	0.00	0.00	
13,428.68	90.18	181.06	7,890.00	5,675.21	2,864.91	10.00	-0.08	10.00	89.79	CURVE EXIT-GM 4-6
15,042.07	90.18	181.06	7,885.00	4,062.10	2,835.18	0.00	0.00	0.00	0.00	PBHL-GM 4-65 23 2A

# Civitas Resources

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Well GRIMM MOTOCROSS 4-65 23 2A3AUH
<b>Company:</b>	CRESTONE PEAK RESOURCES	<b>TVD Reference:</b>	KB 25' @ 5825.00usft
<b>Project:</b>	ARAPAHOE COUNTY	<b>MD Reference:</b>	KB 25' @ 5825.00usft
<b>Site:</b>	SEC 26-T4S-R65W	<b>North Reference:</b>	True
<b>Well:</b>	GRIMM MOTOCROSS 4-65 23 2A3AUH	<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
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	12.75	199.98	1.70	0.39	1.62	2.00	2.00	0.00
300.00	4.00	12.75	299.84	6.81	1.54	6.46	2.00	2.00	0.00
400.00	6.00	12.75	399.45	15.31	3.46	14.53	2.00	2.00	0.00
500.00	8.00	12.75	498.70	27.19	6.15	25.82	2.00	2.00	0.00
600.00	10.00	12.75	597.47	42.45	9.61	40.31	2.00	2.00	0.00
700.00	12.00	12.75	695.62	61.06	13.82	57.98	2.00	2.00	0.00
800.00	14.00	12.75	793.06	83.00	18.78	78.81	2.00	2.00	0.00
900.00	16.00	12.75	889.64	108.24	24.49	102.78	2.00	2.00	0.00
983.96	17.68	12.75	970.00	131.96	29.86	125.30	2.00	2.00	0.00
Arapahoe									
1,000.00	18.00	12.75	985.27	136.76	30.94	129.85	2.00	2.00	0.00
1,100.00	20.00	12.75	1,079.82	168.51	38.13	160.00	2.00	2.00	0.00
1,200.00	22.00	12.75	1,173.17	203.46	46.04	193.19	2.00	2.00	0.00
1,300.00	24.00	12.75	1,265.21	241.57	54.66	229.37	2.00	2.00	0.00
1,400.00	26.00	12.75	1,355.84	282.79	63.99	268.51	2.00	2.00	0.00
1,500.00	28.00	12.75	1,444.94	327.06	74.00	310.55	2.00	2.00	0.00
1,511.12	28.22	12.75	1,454.75	332.17	75.16	315.41	2.00	2.00	0.00
Start 6995.32 hold at 1511.12 MD									
1,596.53	28.22	12.75	1,530.00	371.57	84.07	352.81	0.00	0.00	0.00
Laramie-Fox Hills Formation									
1,600.00	28.22	12.75	1,533.06	373.17	84.44	354.33	0.00	0.00	0.00
1,700.00	28.22	12.75	1,621.17	419.29	94.87	398.13	0.00	0.00	0.00
1,800.00	28.22	12.75	1,709.28	465.42	105.31	441.92	0.00	0.00	0.00
1,900.00	28.22	12.75	1,797.39	511.54	115.75	485.72	0.00	0.00	0.00
2,000.00	28.22	12.75	1,885.51	557.66	126.18	529.51	0.00	0.00	0.00
2,100.00	28.22	12.75	1,973.62	603.79	136.62	573.31	0.00	0.00	0.00
2,200.00	28.22	12.75	2,061.73	649.91	147.05	617.10	0.00	0.00	0.00
2,220.74	28.22	12.75	2,080.00	659.47	149.22	626.18	0.00	0.00	0.00
Pierre Formation									
2,300.00	28.22	12.75	2,149.84	696.03	157.49	660.90	0.00	0.00	0.00
2,400.00	28.22	12.75	2,237.95	742.16	167.93	704.69	0.00	0.00	0.00
2,500.00	28.22	12.75	2,326.06	788.28	178.36	748.49	0.00	0.00	0.00
2,600.00	28.22	12.75	2,414.18	834.41	188.80	792.29	0.00	0.00	0.00
2,700.00	28.22	12.75	2,502.29	880.53	199.24	836.08	0.00	0.00	0.00
2,800.00	28.22	12.75	2,590.40	926.65	209.67	879.88	0.00	0.00	0.00
2,833.59	28.22	12.75	2,620.00	942.15	213.18	894.59	0.00	0.00	0.00
Upper Pierre aquifer									
2,900.00	28.22	12.75	2,678.51	972.78	220.11	923.67	0.00	0.00	0.00
3,000.00	28.22	12.75	2,766.62	1,018.90	230.55	967.47	0.00	0.00	0.00
3,100.00	28.22	12.75	2,854.74	1,065.02	240.98	1,011.26	0.00	0.00	0.00
3,200.00	28.22	12.75	2,942.85	1,111.15	251.42	1,055.06	0.00	0.00	0.00
3,300.00	28.22	12.75	3,030.96	1,157.27	261.86	1,098.85	0.00	0.00	0.00
3,400.00	28.22	12.75	3,119.07	1,203.40	272.29	1,142.65	0.00	0.00	0.00
3,500.00	28.22	12.75	3,207.18	1,249.52	282.73	1,186.44	0.00	0.00	0.00
3,514.55	28.22	12.75	3,220.00	1,256.23	284.25	1,192.81	0.00	0.00	0.00
Base of Upper Pierre aquifer									
3,600.00	28.22	12.75	3,295.29	1,295.64	293.16	1,230.24	0.00	0.00	0.00
3,700.00	28.22	12.75	3,383.41	1,341.77	303.60	1,274.03	0.00	0.00	0.00

# Civitas Resources

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Well GRIMM MOTOCROSS 4-65 23 2A3AUH
<b>Company:</b>	CRESTONE PEAK RESOURCES	<b>TVD Reference:</b>	KB 25' @ 5825.00usft
<b>Project:</b>	ARAPAHOE COUNTY	<b>MD Reference:</b>	KB 25' @ 5825.00usft
<b>Site:</b>	SEC 26-T4S-R65W	<b>North Reference:</b>	True
<b>Well:</b>	GRIMM MOTOCROSS 4-65 23 2A3AUH	<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	28.22	12.75	3,471.52	1,387.89	314.04	1,317.83	0.00	0.00	0.00	
3,900.00	28.22	12.75	3,559.63	1,434.01	324.47	1,361.63	0.00	0.00	0.00	
4,000.00	28.22	12.75	3,647.74	1,480.14	334.91	1,405.42	0.00	0.00	0.00	
4,100.00	28.22	12.75	3,735.85	1,526.26	345.35	1,449.22	0.00	0.00	0.00	
4,200.00	28.22	12.75	3,823.96	1,572.39	355.78	1,493.01	0.00	0.00	0.00	
4,300.00	28.22	12.75	3,912.08	1,618.51	366.22	1,536.81	0.00	0.00	0.00	
4,400.00	28.22	12.75	4,000.19	1,664.63	376.66	1,580.60	0.00	0.00	0.00	
4,500.00	28.22	12.75	4,088.30	1,710.76	387.09	1,624.40	0.00	0.00	0.00	
4,600.00	28.22	12.75	4,176.41	1,756.88	397.53	1,668.19	0.00	0.00	0.00	
4,649.47	28.22	12.75	4,220.00	1,779.70	402.69	1,689.86	0.00	0.00	0.00	
Larimer ("Parkman") sandstone										
4,700.00	28.22	12.75	4,264.52	1,803.00	407.96	1,711.99	0.00	0.00	0.00	
4,800.00	28.22	12.75	4,352.64	1,849.13	418.40	1,755.78	0.00	0.00	0.00	
4,808.36	28.22	12.75	4,360.00	1,852.98	419.27	1,759.45	0.00	0.00	0.00	
Pierre Formation										
4,900.00	28.22	12.75	4,440.75	1,895.25	428.84	1,799.58	0.00	0.00	0.00	
5,000.00	28.22	12.75	4,528.86	1,941.38	439.27	1,843.38	0.00	0.00	0.00	
5,100.00	28.22	12.75	4,616.97	1,987.50	449.71	1,887.17	0.00	0.00	0.00	
5,200.00	28.22	12.75	4,705.08	2,033.62	460.15	1,930.97	0.00	0.00	0.00	
5,300.00	28.22	12.75	4,793.19	2,079.75	470.58	1,974.76	0.00	0.00	0.00	
5,400.00	28.22	12.75	4,881.31	2,125.87	481.02	2,018.56	0.00	0.00	0.00	
5,500.00	28.22	12.75	4,969.42	2,171.99	491.46	2,062.35	0.00	0.00	0.00	
5,600.00	28.22	12.75	5,057.53	2,218.12	501.89	2,106.15	0.00	0.00	0.00	
5,700.00	28.22	12.75	5,145.64	2,264.24	512.33	2,149.94	0.00	0.00	0.00	
5,800.00	28.22	12.75	5,233.75	2,310.37	522.76	2,193.74	0.00	0.00	0.00	
5,900.00	28.22	12.75	5,321.86	2,356.49	533.20	2,237.53	0.00	0.00	0.00	
6,000.00	28.22	12.75	5,409.98	2,402.61	543.64	2,281.33	0.00	0.00	0.00	
6,011.38	28.22	12.75	5,420.00	2,407.86	544.82	2,286.31	0.00	0.00	0.00	
Terry ("Sussex") sandstone										
6,100.00	28.22	12.75	5,498.09	2,448.74	554.07	2,325.13	0.00	0.00	0.00	
6,200.00	28.22	12.75	5,586.20	2,494.86	564.51	2,368.92	0.00	0.00	0.00	
6,238.36	28.22	12.75	5,620.00	2,512.55	568.51	2,385.72	0.00	0.00	0.00	
Pierre Formation										
6,300.00	28.22	12.75	5,674.31	2,540.98	574.95	2,412.72	0.00	0.00	0.00	
6,400.00	28.22	12.75	5,762.42	2,587.11	585.38	2,456.51	0.00	0.00	0.00	
6,500.00	28.22	12.75	5,850.54	2,633.23	595.82	2,500.31	0.00	0.00	0.00	
6,600.00	28.22	12.75	5,938.65	2,679.35	606.26	2,544.10	0.00	0.00	0.00	
6,700.00	28.22	12.75	6,026.76	2,725.48	616.69	2,587.90	0.00	0.00	0.00	
6,800.00	28.22	12.75	6,114.87	2,771.60	627.13	2,631.69	0.00	0.00	0.00	
6,900.00	28.22	12.75	6,202.98	2,817.73	637.57	2,675.49	0.00	0.00	0.00	
7,000.00	28.22	12.75	6,291.09	2,863.85	648.00	2,719.28	0.00	0.00	0.00	
7,032.81	28.22	12.75	6,320.00	2,878.98	651.43	2,733.65	0.00	0.00	0.00	
Hygiene ("Shannon") sandstone										
7,100.00	28.22	12.75	6,379.21	2,909.97	658.44	2,763.08	0.00	0.00	0.00	
7,200.00	28.22	12.75	6,467.32	2,956.10	668.87	2,806.87	0.00	0.00	0.00	
7,259.79	28.22	12.75	6,520.00	2,983.67	675.11	2,833.06	0.00	0.00	0.00	
Pierre Formation										
7,300.00	28.22	12.75	6,555.43	3,002.22	679.31	2,850.67	0.00	0.00	0.00	
7,400.00	28.22	12.75	6,643.54	3,048.34	689.75	2,894.47	0.00	0.00	0.00	
7,500.00	28.22	12.75	6,731.65	3,094.47	700.18	2,938.26	0.00	0.00	0.00	
7,600.00	28.22	12.75	6,819.76	3,140.59	710.62	2,982.06	0.00	0.00	0.00	
7,700.00	28.22	12.75	6,907.88	3,186.72	721.06	3,025.85	0.00	0.00	0.00	
7,800.00	28.22	12.75	6,995.99	3,232.84	731.49	3,069.65	0.00	0.00	0.00	

# Civitas Resources

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Well GRIMM MOTOCROSS 4-65 23 2A3AUH
<b>Company:</b>	CRESTONE PEAK RESOURCES	<b>TVD Reference:</b>	KB 25' @ 5825.00usft
<b>Project:</b>	ARAPAHOE COUNTY	<b>MD Reference:</b>	KB 25' @ 5825.00usft
<b>Site:</b>	SEC 26-T4S-R65W	<b>North Reference:</b>	True
<b>Well:</b>	GRIMM MOTOCROSS 4-65 23 2A3AUH	<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)	
7,900.00	28.22	12.75	7,084.10	3,278.96	741.93	3,113.44	0.00	0.00	0.00	
8,000.00	28.22	12.75	7,172.21	3,325.09	752.37	3,157.24	0.00	0.00	0.00	
8,100.00	28.22	12.75	7,260.32	3,371.21	762.80	3,201.03	0.00	0.00	0.00	
8,200.00	28.22	12.75	7,348.44	3,417.33	773.24	3,244.83	0.00	0.00	0.00	
8,300.00	28.22	12.75	7,436.55	3,463.46	783.67	3,288.62	0.00	0.00	0.00	
8,400.00	28.22	12.75	7,524.66	3,509.58	794.11	3,332.42	0.00	0.00	0.00	
8,506.45	28.22	12.75	7,618.45	3,558.68	805.22	3,379.04	0.00	0.00	0.00	
Start DLS 10.00 TFO -14.41										
8,550.00	32.46	10.73	7,656.03	3,580.22	809.67	3,399.25	10.00	9.72	-4.63	
8,600.00	37.35	8.93	7,697.03	3,608.40	814.53	3,425.14	10.00	9.79	-3.61	
8,650.00	42.26	7.49	7,735.43	3,640.07	819.07	3,453.71	10.00	9.83	-2.88	
8,684.14	45.63	6.65	7,760.00	3,663.58	821.98	3,474.65	10.00	9.85	-2.45	
Sharon Springs Member										
8,700.00	47.19	6.29	7,770.94	3,675.00	823.28	3,484.76	10.00	9.87	-2.24	
8,750.00	52.13	5.28	7,803.29	3,712.90	827.11	3,518.03	10.00	9.88	-2.03	
8,800.00	57.08	4.39	7,832.24	3,753.51	830.53	3,553.29	10.00	9.90	-1.77	
8,850.00	62.03	3.60	7,857.57	3,796.50	833.53	3,590.26	10.00	9.91	-1.59	
8,855.24	62.55	3.52	7,860.00	3,801.12	833.82	3,594.21	10.00	9.91	-1.50	
Niobrara Formation										
8,900.00	66.99	2.88	7,879.07	3,841.54	836.07	3,628.65	10.00	9.91	-1.44	
8,950.00	71.95	2.21	7,896.60	3,888.31	838.15	3,668.18	10.00	9.92	-1.34	
9,000.00	76.91	1.57	7,910.02	3,936.43	839.73	3,708.55	10.00	9.93	-1.27	
9,050.00	81.88	0.96	7,919.21	3,985.55	840.81	3,749.45	10.00	9.93	-1.22	
9,100.00	86.84	0.37	7,924.12	4,035.29	841.39	3,790.57	10.00	9.93	-1.19	
9,131.78	90.00	359.99	7,925.00	4,067.06	841.49	3,816.68	10.00	9.93	-1.18	
Start 1608.16 hold at 9131.78 MD										
9,200.00	90.00	359.99	7,925.00	4,135.27	841.48	3,872.61	0.00	0.00	0.00	
9,300.00	90.00	359.99	7,925.00	4,235.27	841.47	3,954.61	0.00	0.00	0.00	
9,400.00	90.00	359.99	7,925.00	4,335.27	841.46	4,036.60	0.00	0.00	0.00	
9,500.00	90.00	359.99	7,925.00	4,435.27	841.45	4,118.60	0.00	0.00	0.00	
9,600.00	90.00	359.99	7,925.00	4,535.27	841.44	4,200.59	0.00	0.00	0.00	
9,700.00	90.00	359.99	7,925.00	4,635.27	841.43	4,282.59	0.00	0.00	0.00	
9,800.00	90.00	359.99	7,925.00	4,735.27	841.42	4,364.58	0.00	0.00	0.00	
9,900.00	90.00	359.99	7,925.00	4,835.27	841.40	4,446.58	0.00	0.00	0.00	
10,000.00	90.00	359.99	7,925.00	4,935.27	841.39	4,528.57	0.00	0.00	0.00	
10,100.00	90.00	359.99	7,925.00	5,035.27	841.38	4,610.57	0.00	0.00	0.00	
10,200.00	90.00	359.99	7,925.00	5,135.27	841.37	4,692.57	0.00	0.00	0.00	
10,300.00	90.00	359.99	7,925.00	5,235.27	841.36	4,774.56	0.00	0.00	0.00	
10,400.00	90.00	359.99	7,925.00	5,335.27	841.35	4,856.56	0.00	0.00	0.00	
10,500.00	90.00	359.99	7,925.00	5,435.27	841.34	4,938.55	0.00	0.00	0.00	
10,600.00	90.00	359.99	7,925.00	5,535.27	841.33	5,020.55	0.00	0.00	0.00	
10,700.00	90.00	359.99	7,925.00	5,635.27	841.31	5,102.54	0.00	0.00	0.00	
10,739.94	90.00	359.99	7,925.00	5,675.21	841.31	5,135.29	0.00	0.00	0.00	
Start DLS 10.00 TFO 89.07										
10,750.00	90.02	1.00	7,925.00	5,685.27	841.40	5,143.59	10.00	0.16	10.00	
10,800.00	90.10	6.00	7,924.95	5,735.17	844.45	5,186.25	10.00	0.16	10.00	
10,850.00	90.18	11.00	7,924.83	5,784.60	851.83	5,231.01	10.00	0.16	10.00	
10,900.00	90.26	16.00	7,924.64	5,833.20	863.50	5,277.55	10.00	0.16	10.00	
10,950.00	90.33	21.00	7,924.38	5,880.60	879.36	5,325.49	10.00	0.15	10.00	
11,000.00	90.41	26.00	7,924.05	5,926.44	899.29	5,374.49	10.00	0.15	10.00	
11,050.00	90.48	31.00	7,923.67	5,970.37	923.13	5,424.16	10.00	0.14	10.00	
11,100.00	90.55	36.00	7,923.22	6,012.05	950.72	5,474.12	10.00	0.14	10.00	
11,150.00	90.61	41.00	7,922.71	6,051.17	981.83	5,524.01	10.00	0.13	10.00	

# Civitas Resources

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Well GRIMM MOTOCROSS 4-65 23 2A3AUH
<b>Company:</b>	CRESTONE PEAK RESOURCES	<b>TVD Reference:</b>	KB 25' @ 5825.00usft
<b>Project:</b>	ARAPAHOE COUNTY	<b>MD Reference:</b>	KB 25' @ 5825.00usft
<b>Site:</b>	SEC 26-T4S-R65W	<b>North Reference:</b>	True
<b>Well:</b>	GRIMM MOTOCROSS 4-65 23 2A3AUH	<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)
11,200.00	90.67	46.00	7,922.15	6,087.43	1,016.23	5,573.43	10.00	0.12	10.00
11,250.00	90.73	51.00	7,921.54	6,120.55	1,053.66	5,622.01	10.00	0.11	10.00
11,279.00	90.75	53.90	7,921.16	6,138.22	1,076.65	5,649.66	10.00	0.10	10.00
11279' MD									
11,300.00	90.77	56.00	7,920.88	6,150.28	1,093.84	5,669.38	10.00	0.09	10.00
11,350.00	90.82	61.00	7,920.19	6,176.40	1,136.45	5,715.19	10.00	0.09	10.00
11,400.00	90.85	66.00	7,919.46	6,198.70	1,181.18	5,759.08	10.00	0.07	10.00
11,450.00	90.88	71.00	7,918.70	6,217.02	1,227.68	5,800.71	10.00	0.06	10.00
11,500.00	90.91	76.00	7,917.92	6,231.22	1,275.60	5,839.78	10.00	0.05	10.00
11,550.00	90.92	81.00	7,917.12	6,241.18	1,324.57	5,875.98	10.00	0.03	10.00
11,600.00	90.93	86.00	7,916.31	6,246.84	1,374.23	5,909.04	10.00	0.02	10.00
11,633.18	90.93	89.32	7,915.77	6,248.20	1,407.37	5,929.12	10.00	0.01	10.00
Start 878.15 hold at 11633.18 MD									
11,700.00	90.93	89.32	7,914.68	6,248.99	1,474.18	5,968.01	0.00	0.00	0.00
11,800.00	90.93	89.32	7,913.05	6,250.18	1,574.16	6,026.21	0.00	0.00	0.00
11,900.00	90.93	89.32	7,911.42	6,251.37	1,674.14	6,084.41	0.00	0.00	0.00
11,938.00	90.93	89.32	7,910.80	6,251.83	1,712.13	6,106.52	0.00	0.00	0.00
11938' MD									
12,000.00	90.93	89.32	7,909.79	6,252.56	1,774.11	6,142.61	0.00	0.00	0.00
12,100.00	90.93	89.32	7,908.16	6,253.76	1,874.09	6,200.81	0.00	0.00	0.00
12,200.00	90.93	89.32	7,906.53	6,254.95	1,974.07	6,259.01	0.00	0.00	0.00
12,300.00	90.93	89.32	7,904.90	6,256.14	2,074.05	6,317.20	0.00	0.00	0.00
12,400.00	90.93	89.32	7,903.27	6,257.33	2,174.03	6,375.40	0.00	0.00	0.00
12,500.00	90.93	89.32	7,901.64	6,258.52	2,274.01	6,433.60	0.00	0.00	0.00
12,511.33	90.93	89.32	7,901.46	6,258.65	2,285.34	6,440.19	0.00	0.00	0.00
Start DLS 10.00 TFO 89.79									
12,550.00	90.95	93.19	7,900.82	6,257.81	2,323.99	6,461.62	10.00	0.03	10.00
12,600.00	90.95	98.19	7,899.99	6,252.86	2,373.72	6,486.03	10.00	0.02	10.00
12,650.00	90.96	103.19	7,899.16	6,243.59	2,422.83	6,506.53	10.00	0.00	10.00
12,700.00	90.95	108.19	7,898.33	6,230.08	2,470.95	6,522.99	10.00	-0.01	10.00
12,750.00	90.94	113.19	7,897.50	6,212.42	2,517.70	6,535.27	10.00	-0.03	10.00
12,800.00	90.92	118.19	7,896.69	6,190.76	2,562.74	6,543.29	10.00	-0.04	10.00
12,850.00	90.89	123.19	7,895.90	6,165.25	2,605.72	6,546.97	10.00	-0.05	10.00
12,900.00	90.86	128.19	7,895.14	6,136.09	2,646.31	6,546.29	10.00	-0.07	10.00
12,950.00	90.82	133.19	7,894.41	6,103.51	2,684.21	6,541.26	10.00	-0.08	10.00
13,000.00	90.77	138.19	7,893.72	6,067.75	2,719.12	6,531.91	10.00	-0.09	10.00
13,050.00	90.72	143.19	7,893.07	6,029.07	2,750.78	6,518.32	10.00	-0.10	10.00
13,100.00	90.66	148.19	7,892.47	5,987.79	2,778.95	6,500.60	10.00	-0.12	10.00
13,150.00	90.60	153.19	7,891.92	5,944.21	2,803.42	6,478.86	10.00	-0.13	10.00
13,200.00	90.53	158.19	7,891.43	5,898.66	2,824.00	6,453.28	10.00	-0.13	10.00
13,250.00	90.46	163.19	7,891.00	5,851.49	2,840.52	6,424.06	10.00	-0.14	10.00
13,300.00	90.38	168.19	7,890.63	5,803.05	2,852.88	6,391.42	10.00	-0.15	10.00
13,350.00	90.30	173.19	7,890.33	5,753.73	2,860.96	6,355.60	10.00	-0.16	10.00
13,400.00	90.22	178.19	7,890.10	5,703.89	2,864.72	6,316.88	10.00	-0.16	10.00
13,428.68	90.18	181.06	7,890.00	5,675.21	2,864.91	6,293.47	10.00	-0.16	10.00
Start 1613.39 hold at 13428.68 MD									
13,500.00	90.18	181.06	7,889.78	5,603.90	2,863.60	6,234.25	0.00	0.00	0.00
13,600.00	90.18	181.06	7,889.47	5,503.92	2,861.75	6,151.20	0.00	0.00	0.00
13,700.00	90.18	181.06	7,889.16	5,403.94	2,859.91	6,068.16	0.00	0.00	0.00
13,800.00	90.18	181.06	7,888.85	5,303.96	2,858.07	5,985.12	0.00	0.00	0.00
13,900.00	90.18	181.06	7,888.54	5,203.97	2,856.22	5,902.08	0.00	0.00	0.00
14,000.00	90.18	181.06	7,888.23	5,103.99	2,854.38	5,819.03	0.00	0.00	0.00
14,100.00	90.18	181.06	7,887.92	5,004.01	2,852.54	5,735.99	0.00	0.00	0.00
14,200.00	90.18	181.06	7,887.61	4,904.03	2,850.69	5,652.95	0.00	0.00	0.00



# Civitas Resources

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Well GRIMM MOTOCROSS 4-65 23 2A3AUH
<b>Company:</b>	CRESTONE PEAK RESOURCES	<b>TVD Reference:</b>	KB 25' @ 5825.00usft
<b>Project:</b>	ARAPAHOE COUNTY	<b>MD Reference:</b>	KB 25' @ 5825.00usft
<b>Site:</b>	SEC 26-T4S-R65W	<b>North Reference:</b>	True
<b>Well:</b>	GRIMM MOTOCROSS 4-65 23 2A3AUH	<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)	
14,300.00	90.18	181.06	7,887.30	4,804.04	2,848.85	5,569.91	0.00	0.00	0.00	
14,400.00	90.18	181.06	7,886.99	4,704.06	2,847.01	5,486.87	0.00	0.00	0.00	
14,500.00	90.18	181.06	7,886.68	4,604.08	2,845.17	5,403.82	0.00	0.00	0.00	
14,600.00	90.18	181.06	7,886.37	4,504.10	2,843.32	5,320.78	0.00	0.00	0.00	
14,700.00	90.18	181.06	7,886.06	4,404.11	2,841.48	5,237.74	0.00	0.00	0.00	
14,800.00	90.18	181.06	7,885.75	4,304.13	2,839.64	5,154.70	0.00	0.00	0.00	
14,900.00	90.18	181.06	7,885.44	4,204.15	2,837.79	5,071.65	0.00	0.00	0.00	
15,000.00	90.18	181.06	7,885.13	4,104.17	2,835.95	4,988.61	0.00	0.00	0.00	
15,042.07	90.18	181.06	7,885.00	4,062.10	2,835.18	4,953.67	0.00	0.00	0.00	
TD at 15042.07										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
PBHL-GM 4-65 23 2A3A - hit/miss target - Shape - Point	0.00	0.00	7,885.00	4,062.10	2,835.18	1,676,613.68	3,245,131.49	39.687878°N	104.628969°W	
CURVE EXIT-GM 4-65 2 - plan hits target center - Point	0.00	0.00	7,890.00	5,675.21	2,864.91	1,678,226.98	3,245,145.93	39.692306°N	104.628863°W	
LP-GM 4-65 23 2A3AUH - plan hits target center - Point	0.00	0.00	7,925.00	4,067.06	841.49	1,676,599.74	3,243,137.87	39.687892°N	104.636053°W	
CURVE ENTRY-GM 4-6 - plan hits target center - Point	0.00	0.00	7,925.00	5,675.21	841.31	1,678,207.80	3,243,122.45	39.692307°N	104.636054°W	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
24.00	24.00	Denver				
983.96	970.00	Arapahoe				
1,596.53	1,530.00	Laramie-Fox Hills Formation				
2,220.74	2,080.00	Pierre Formation				
2,833.59	2,620.00	Upper Pierre aquifer				
3,514.55	3,220.00	Base of Upper Pierre aquifer				
4,649.47	4,220.00	Larimer ("Parkman") sandstone				
4,808.36	4,360.00	Pierre Formation				
6,011.38	5,420.00	Terry ("Sussex") sandstone				
6,238.36	5,620.00	Pierre Formation				
7,032.81	6,320.00	Hygiene ("Shannon") sandstone				
7,259.79	6,520.00	Pierre Formation				
8,684.14	7,760.00	Sharon Springs Member				
8,855.24	7,860.00	Niobrara Formation				

# Civitas Resources

## Planning Report

<b>Database:</b>	EDM	<b>Local Co-ordinate Reference:</b>	Well GRIMM MOTOCROSS 4-65 23 2A3AUH
<b>Company:</b>	CRESTONE PEAK RESOURCES	<b>TVD Reference:</b>	KB 25' @ 5825.00usft
<b>Project:</b>	ARAPAHOE COUNTY	<b>MD Reference:</b>	KB 25' @ 5825.00usft
<b>Site:</b>	SEC 26-T4S-R65W	<b>North Reference:</b>	True
<b>Well:</b>	GRIMM MOTOCROSS 4-65 23 2A3AUH	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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
1,511.12	1,454.75	332.17	75.16	Start 6995.32 hold at 1511.12 MD
8,506.45	7,618.45	3,558.68	805.22	Start DLS 10.00 TFO -14.41
9,131.78	7,925.00	4,067.06	841.49	Start 1608.16 hold at 9131.78 MD
10,739.94	7,925.00	5,675.21	841.31	Start DLS 10.00 TFO 89.07
11,279.00	7,921.16	6,138.22	1,076.65	11279' MD
11,633.18	7,915.77	6,248.20	1,407.37	Start 878.15 hold at 11633.18 MD
11,938.00	7,910.80	6,251.83	1,712.13	11938' MD
12,511.33	7,901.46	6,258.65	2,285.34	Start DLS 10.00 TFO 89.79
13,428.68	7,890.00	5,675.21	2,864.91	Start 1613.39 hold at 13428.68 MD
15,042.07	7,885.00	4,062.10	2,835.18	TD at 15042.07