

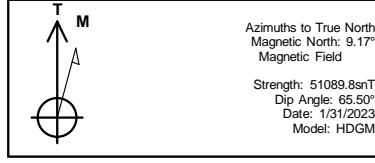


REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well WGV 12-27-697 - Slot WGV 12-27-697, True North
 Vertical (TVD) Reference: RKB @ 30' @ 8412.0ft
 Section (VS) Reference: Slot - WGV 12-27-697(0.0N, 0.0E)
 Measured Depth Reference: RKB @ 30' @ 8412.0ft
 Calculation Method: Minimum Curvature

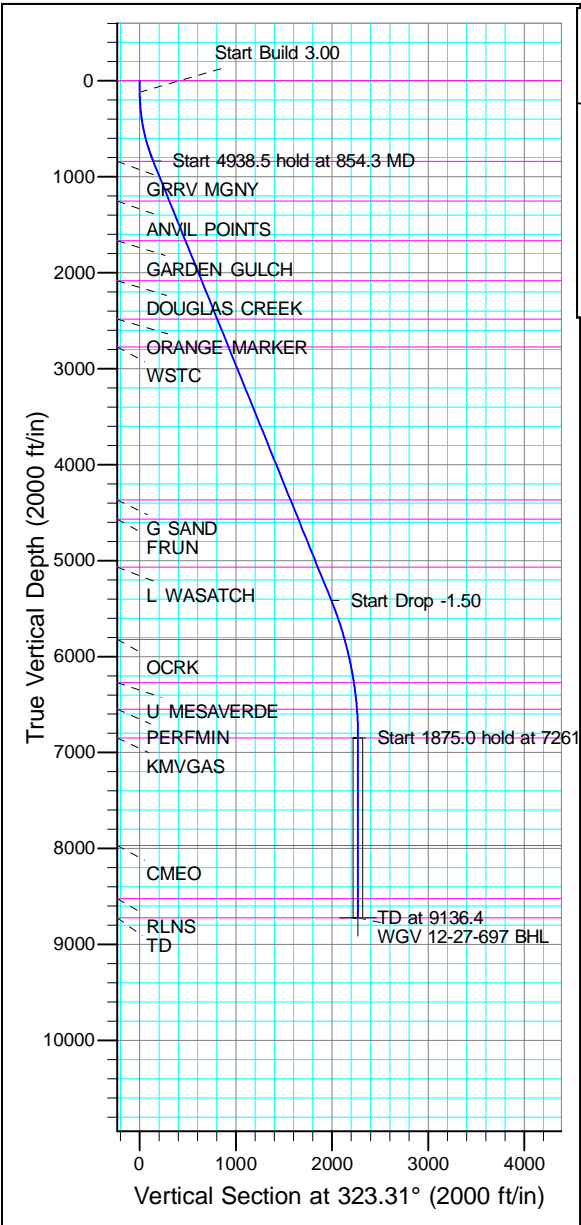


Project: Garfield County, CO (Nad 83)
 Site: Acro Deep 1-27
 Well: WGV 12-27-697
 Wellbore: OWB
 Design: Plan



WELL DETAILS: WGV 12-27-697

+N/-S	+E/-W	Northing	Ground Level:	8382.0	Longitude	SL
0.0	0.0	1615675.100	Easting	2235937.200	WG	
			Latitude	39.492542	12-27-69	
			Longitude	-108.207786		



SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Ddeg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
120.0	0.00	0.00	120.0	0.0	0.0	0.00	0.00	0.0	
854.3	22.03	323.31	836.4	111.8	-83.3	3.00	323.31	139.4	Start Build 3.00
5792.8	22.03	323.31	5414.3	1597.2	-1190.1	0.00	0.00	1991.8	Start 4938.5 hold at 854.3 MD
7261.4	0.00	0.00	6847.0	1820.8	-1356.8	1.50	180.00	2270.7	Start Drop -1.50
9136.4	0.00	0.00	8722.0	1820.8	-1356.8	0.00	0.00	2270.7	Start 1875.0 hold at 7261.4 MD TD at 9136.4

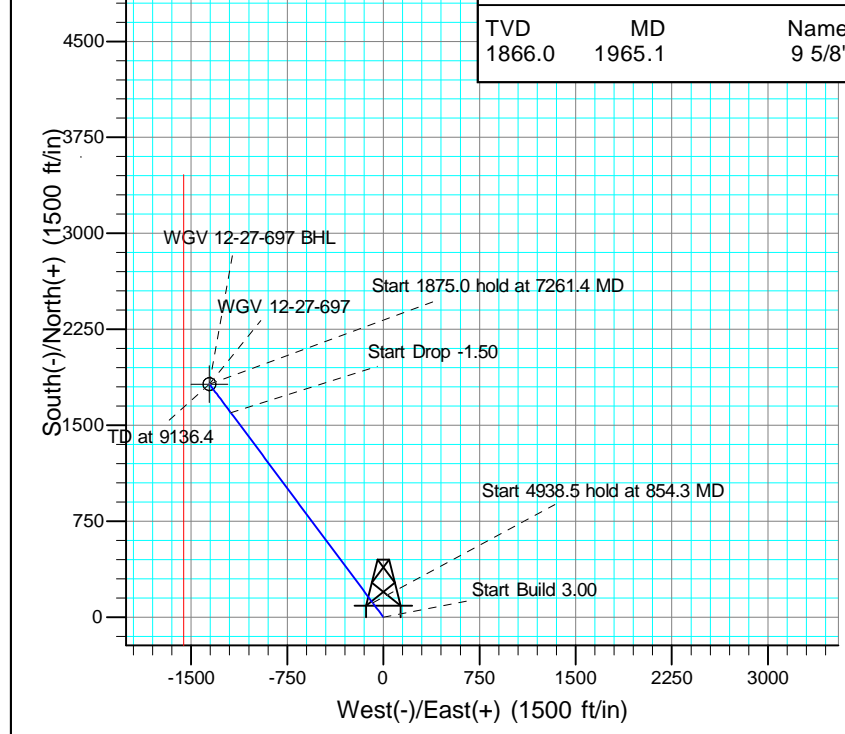
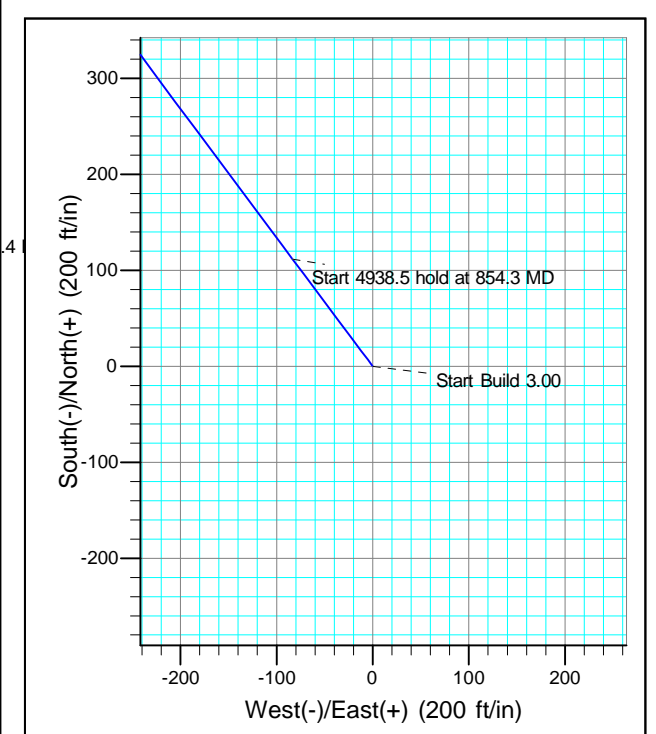
FORMATION TOP DETAILS

VDPPath	MDPath	Formation
0.0	0.0	GRRV
837.0	855.0	GRRV MGNV
1252.0	1302.7	ANVIL POINTS
1666.0	1749.3	GARDEN GULCH
2081.0	2197.0	DOUGLAS CREEK
2482.0	2629.6	ORANGE MARKER
2772.0	2942.4	WSTC
4367.0	4663.0	G SAND
4567.0	4878.8	FRUN
5067.0	5418.2	L WASATCH
5822.0	6223.7	OCRK
6272.0	6684.3	U MESAVERDE
6547.0	6961.1	PERFMIN
6847.0	7261.4	KMV GAS
7967.0	8381.4	CMEC
8522.0	8936.4	RLNS
8722.0	9136.4	TD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
BHL	8722.0	1820.8	-1356.8	1617535.500	2234635.300	39.497541	-108.212594	Circle (Radius: 50.0)

- plan hits target center



CASING DETAILS

TVD	MD	Name
1866.0	1965.1	9 5/8"



Terra Energy Partners, LLP

Garfield County, CO (Nad 83)

Acro Deep 1-27

WGV 12-27-697 - Slot WGV 12-27-697

OWB

Plan: Plan

Standard Planning Report

07 March, 2023



Database:	NN	Local Co-ordinate Reference:	Well WGV 12-27-697 - Slot WGV 12-27-697
Company:	Terra Energy Partners, LLP	TVD Reference:	RKB @ 30' @ 8412.0ft
Project:	Garfield County, CO (Nad 83)	MD Reference:	RKB @ 30' @ 8412.0ft
Site:	Acro Deep 1-27	North Reference:	True
Well:	WGV 12-27-697	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan		

Project	Garfield County, CO (Nad 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site	Acro Deep 1-27				
Site Position:		Northing:	1,615,634.200 usft	Latitude:	39.492428
From:	Map	Easting:	2,235,915.800 usft	Longitude:	-108.207857
Position Uncertainty:	0.0 ft	Slot Radius:	13-3/16 "	Grid Convergence:	-1.71 °

Well	WGV 12-27-697 - Slot WGV 12-27-697					
Well Position	+N/-S	41.5 ft	Northing:	1,615,675.100 usft	Latitude:	39.492542
	+E/-W	20.2 ft	Easting:	2,235,937.200 usft	Longitude:	-108.207786
Position Uncertainty		0.0 ft	Wellhead Elevation:	8,412.0 ft	Ground Level:	8,382.0 ft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	1/31/2023	9.17	65.50	51,090

Design	Plan			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	323.31

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
120.0	0.00	0.00	120.0	0.0	0.0	0.00	0.00	0.00	0.00	
854.3	22.03	323.31	836.4	111.8	-83.3	3.00	3.00	0.00	323.31	
5,792.8	22.03	323.31	5,414.3	1,597.2	-1,190.1	0.00	0.00	0.00	0.00	
7,261.4	0.00	0.00	6,847.0	1,820.8	-1,356.8	1.50	-1.50	0.00	180.00	
9,136.4	0.00	0.00	8,722.0	1,820.8	-1,356.8	0.00	0.00	0.00	0.00	WGV 12-27-697 BHL

Database:	NN	Local Co-ordinate Reference:	Well WGV 12-27-697 - Slot WGV 12-27-697
Company:	Terra Energy Partners, LLP	TVD Reference:	RKB @ 30' @ 8412.0ft
Project:	Garfield County, CO (Nad 83)	MD Reference:	RKB @ 30' @ 8412.0ft
Site:	Acro Deep 1-27	North Reference:	True
Well:	WGV 12-27-697	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00	
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	0.00	
Start Build 3.00										
200.0	2.40	323.31	200.0	1.3	-1.0	1.7	3.00	3.00	0.00	
300.0	5.40	323.31	299.7	6.8	-5.1	8.5	3.00	3.00	0.00	
400.0	8.40	323.31	399.0	16.4	-12.2	20.5	3.00	3.00	0.00	
500.0	11.40	323.31	497.5	30.2	-22.5	37.7	3.00	3.00	0.00	
600.0	14.40	323.31	595.0	48.1	-35.9	60.0	3.00	3.00	0.00	
700.0	17.40	323.31	691.1	70.1	-52.2	87.4	3.00	3.00	0.00	
800.0	20.40	323.31	785.7	96.0	-71.6	119.8	3.00	3.00	0.00	
854.3	22.03	323.31	836.4	111.8	-83.3	139.4	3.00	3.00	0.00	
Start 4938.5 hold at 854.3 MD										
900.0	22.03	323.31	878.7	125.5	-93.6	156.6	0.00	0.00	0.00	
1,000.0	22.03	323.31	971.4	155.6	-116.0	194.1	0.00	0.00	0.00	
1,100.0	22.03	323.31	1,064.1	185.7	-138.4	231.6	0.00	0.00	0.00	
1,200.0	22.03	323.31	1,156.8	215.8	-160.8	269.1	0.00	0.00	0.00	
1,300.0	22.03	323.31	1,249.5	245.9	-183.2	306.6	0.00	0.00	0.00	
1,400.0	22.03	323.31	1,342.2	275.9	-205.6	344.1	0.00	0.00	0.00	
1,500.0	22.03	323.31	1,434.9	306.0	-228.0	381.6	0.00	0.00	0.00	
1,600.0	22.03	323.31	1,527.6	336.1	-250.4	419.1	0.00	0.00	0.00	
1,700.0	22.03	323.31	1,620.3	366.2	-272.9	456.6	0.00	0.00	0.00	
1,800.0	22.03	323.31	1,713.0	396.2	-295.3	494.2	0.00	0.00	0.00	
1,900.0	22.03	323.31	1,805.7	426.3	-317.7	531.7	0.00	0.00	0.00	
2,000.0	22.03	323.31	1,898.4	456.4	-340.1	569.2	0.00	0.00	0.00	
2,100.0	22.03	323.31	1,991.1	486.5	-362.5	606.7	0.00	0.00	0.00	
2,200.0	22.03	323.31	2,083.8	516.6	-384.9	644.2	0.00	0.00	0.00	
2,300.0	22.03	323.31	2,176.5	546.6	-407.3	681.7	0.00	0.00	0.00	
2,400.0	22.03	323.31	2,269.2	576.7	-429.7	719.2	0.00	0.00	0.00	
2,500.0	22.03	323.31	2,361.9	606.8	-452.1	756.7	0.00	0.00	0.00	
2,600.0	22.03	323.31	2,454.6	636.9	-474.6	794.2	0.00	0.00	0.00	
2,700.0	22.03	323.31	2,547.3	666.9	-497.0	831.7	0.00	0.00	0.00	
2,800.0	22.03	323.31	2,640.0	697.0	-519.4	869.2	0.00	0.00	0.00	
2,900.0	22.03	323.31	2,732.7	727.1	-541.8	906.8	0.00	0.00	0.00	
3,000.0	22.03	323.31	2,825.4	757.2	-564.2	944.3	0.00	0.00	0.00	
3,100.0	22.03	323.31	2,918.1	787.2	-586.6	981.8	0.00	0.00	0.00	
3,200.0	22.03	323.31	3,010.8	817.3	-609.0	1,019.3	0.00	0.00	0.00	
3,300.0	22.03	323.31	3,103.5	847.4	-631.4	1,056.8	0.00	0.00	0.00	
3,400.0	22.03	323.31	3,196.2	877.5	-653.9	1,094.3	0.00	0.00	0.00	
3,500.0	22.03	323.31	3,288.9	907.6	-676.3	1,131.8	0.00	0.00	0.00	
3,600.0	22.03	323.31	3,381.6	937.6	-698.7	1,169.3	0.00	0.00	0.00	
3,700.0	22.03	323.31	3,474.3	967.7	-721.1	1,206.8	0.00	0.00	0.00	
3,800.0	22.03	323.31	3,567.0	997.8	-743.5	1,244.3	0.00	0.00	0.00	
3,900.0	22.03	323.31	3,659.7	1,027.9	-765.9	1,281.8	0.00	0.00	0.00	
4,000.0	22.03	323.31	3,752.4	1,057.9	-788.3	1,319.4	0.00	0.00	0.00	
4,100.0	22.03	323.31	3,845.1	1,088.0	-810.7	1,356.9	0.00	0.00	0.00	
4,200.0	22.03	323.31	3,937.8	1,118.1	-833.2	1,394.4	0.00	0.00	0.00	
4,300.0	22.03	323.31	4,030.5	1,148.2	-855.6	1,431.9	0.00	0.00	0.00	
4,400.0	22.03	323.31	4,123.2	1,178.2	-878.0	1,469.4	0.00	0.00	0.00	
4,500.0	22.03	323.31	4,215.9	1,208.3	-900.4	1,506.9	0.00	0.00	0.00	
4,600.0	22.03	323.31	4,308.6	1,238.4	-922.8	1,544.4	0.00	0.00	0.00	
4,700.0	22.03	323.31	4,401.3	1,268.5	-945.2	1,581.9	0.00	0.00	0.00	
4,800.0	22.03	323.31	4,494.0	1,298.6	-967.6	1,619.4	0.00	0.00	0.00	
4,900.0	22.03	323.31	4,586.7	1,328.6	-990.0	1,656.9	0.00	0.00	0.00	

Database:	NN	Local Co-ordinate Reference:	Well WGV 12-27-697 - Slot WGV 12-27-697
Company:	Terra Energy Partners, LLP	TVD Reference:	RKB @ 30' @ 8412.0ft
Project:	Garfield County, CO (Nad 83)	MD Reference:	RKB @ 30' @ 8412.0ft
Site:	Acro Deep 1-27	North Reference:	True
Well:	WGV 12-27-697	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,000.0	22.03	323.31	4,679.4	1,358.7	-1,012.5	1,694.4	0.00	0.00	0.00	
5,100.0	22.03	323.31	4,772.1	1,388.8	-1,034.9	1,732.0	0.00	0.00	0.00	
5,200.0	22.03	323.31	4,864.8	1,418.9	-1,057.3	1,769.5	0.00	0.00	0.00	
5,300.0	22.03	323.31	4,957.5	1,448.9	-1,079.7	1,807.0	0.00	0.00	0.00	
5,400.0	22.03	323.31	5,050.2	1,479.0	-1,102.1	1,844.5	0.00	0.00	0.00	
5,500.0	22.03	323.31	5,142.9	1,509.1	-1,124.5	1,882.0	0.00	0.00	0.00	
5,600.0	22.03	323.31	5,235.5	1,539.2	-1,146.9	1,919.5	0.00	0.00	0.00	
5,700.0	22.03	323.31	5,328.2	1,569.2	-1,169.3	1,957.0	0.00	0.00	0.00	
5,792.8	22.03	323.31	5,414.3	1,597.2	-1,190.1	1,991.8	0.00	0.00	0.00	
Start Drop -1.50										
5,800.0	21.92	323.31	5,420.9	1,599.3	-1,191.7	1,994.5	1.50	-1.50	0.00	
5,900.0	20.42	323.31	5,514.2	1,628.3	-1,213.3	2,030.6	1.50	-1.50	0.00	
6,000.0	18.92	323.31	5,608.4	1,655.3	-1,233.4	2,064.3	1.50	-1.50	0.00	
6,100.0	17.42	323.31	5,703.4	1,680.3	-1,252.1	2,095.5	1.50	-1.50	0.00	
6,200.0	15.92	323.31	5,799.2	1,703.3	-1,269.2	2,124.2	1.50	-1.50	0.00	
6,300.0	14.42	323.31	5,895.7	1,724.3	-1,284.8	2,150.3	1.50	-1.50	0.00	
6,400.0	12.92	323.31	5,992.8	1,743.2	-1,299.0	2,174.0	1.50	-1.50	0.00	
6,500.0	11.42	323.31	6,090.6	1,760.1	-1,311.6	2,195.0	1.50	-1.50	0.00	
6,600.0	9.92	323.31	6,188.9	1,775.0	-1,322.6	2,213.6	1.50	-1.50	0.00	
6,700.0	8.42	323.31	6,287.6	1,787.8	-1,332.2	2,229.5	1.50	-1.50	0.00	
6,800.0	6.92	323.31	6,386.7	1,798.5	-1,340.1	2,242.9	1.50	-1.50	0.00	
6,900.0	5.42	323.31	6,486.1	1,807.1	-1,346.6	2,253.6	1.50	-1.50	0.00	
7,000.0	3.92	323.31	6,585.8	1,813.6	-1,351.4	2,261.8	1.50	-1.50	0.00	
7,100.0	2.42	323.31	6,685.6	1,818.0	-1,354.7	2,267.3	1.50	-1.50	0.00	
7,200.0	0.92	323.31	6,785.6	1,820.4	-1,356.5	2,270.2	1.50	-1.50	0.00	
7,261.4	0.00	0.00	6,847.0	1,820.8	-1,356.8	2,270.7	1.50	-1.50	0.00	
Start 1875.0 hold at 7261.4 MD										
7,300.0	0.00	0.00	6,885.6	1,820.8	-1,356.8	2,270.7	0.00	0.00	0.00	
7,400.0	0.00	0.00	6,985.6	1,820.8	-1,356.8	2,270.7	0.00	0.00	0.00	
7,500.0	0.00	0.00	7,085.6	1,820.8	-1,356.8	2,270.7	0.00	0.00	0.00	
7,600.0	0.00	0.00	7,185.6	1,820.8	-1,356.8	2,270.7	0.00	0.00	0.00	
7,700.0	0.00	0.00	7,285.6	1,820.8	-1,356.8	2,270.7	0.00	0.00	0.00	
7,800.0	0.00	0.00	7,385.6	1,820.8	-1,356.8	2,270.7	0.00	0.00	0.00	
7,900.0	0.00	0.00	7,485.6	1,820.8	-1,356.8	2,270.7	0.00	0.00	0.00	
8,000.0	0.00	0.00	7,585.6	1,820.8	-1,356.8	2,270.7	0.00	0.00	0.00	
8,100.0	0.00	0.00	7,685.6	1,820.8	-1,356.8	2,270.7	0.00	0.00	0.00	
8,200.0	0.00	0.00	7,785.6	1,820.8	-1,356.8	2,270.7	0.00	0.00	0.00	
8,300.0	0.00	0.00	7,885.6	1,820.8	-1,356.8	2,270.7	0.00	0.00	0.00	
8,400.0	0.00	0.00	7,985.6	1,820.8	-1,356.8	2,270.7	0.00	0.00	0.00	
8,500.0	0.00	0.00	8,085.6	1,820.8	-1,356.8	2,270.7	0.00	0.00	0.00	
8,600.0	0.00	0.00	8,185.6	1,820.8	-1,356.8	2,270.7	0.00	0.00	0.00	
8,700.0	0.00	0.00	8,285.6	1,820.8	-1,356.8	2,270.7	0.00	0.00	0.00	
8,800.0	0.00	0.00	8,385.6	1,820.8	-1,356.8	2,270.7	0.00	0.00	0.00	
8,900.0	0.00	0.00	8,485.6	1,820.8	-1,356.8	2,270.7	0.00	0.00	0.00	
9,000.0	0.00	0.00	8,585.6	1,820.8	-1,356.8	2,270.7	0.00	0.00	0.00	
9,100.0	0.00	0.00	8,685.6	1,820.8	-1,356.8	2,270.7	0.00	0.00	0.00	
9,136.4	0.00	0.00	8,722.0	1,820.8	-1,356.8	2,270.7	0.00	0.00	0.00	
TD at 9136.4										

Database:	NN	Local Co-ordinate Reference:	Well WGV 12-27-697 - Slot WGV 12-27-697
Company:	Terra Energy Partners, LLP	TVD Reference:	RKB @ 30' @ 8412.0ft
Project:	Garfield County, CO (Nad 83)	MD Reference:	RKB @ 30' @ 8412.0ft
Site:	Acro Deep 1-27	North Reference:	True
Well:	WGV 12-27-697	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
- Shape									
WGV 12-27-697 BHL - plan hits target center - Circle (radius 50.0)	0.00	0.00	8,722.0	1,820.8	-1,356.8	1,617,535.500	2,234,635.300	39.497541	-108.212594

Casing Points				
Measured Depth	Vertical Depth	Name	Casing Diameter	Hole Diameter
(ft)	(ft)		(")	(")
1,965.1	1,866.0	9 5/8"	9-5/8	12-1/4

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(ft)	(ft)			(°)	(°)
0.0	0.0	GRRV		0.00	
855.0	837.0	GRRV MGNV		0.00	
1,302.7	1,252.0	ANVIL POINTS		0.00	
1,749.3	1,666.0	GARDEN GULCH		0.00	
2,197.0	2,081.0	DOUGLAS CREEK		0.00	
2,629.6	2,482.0	ORANGE MARKER		0.00	
2,942.4	2,772.0	WSTC		0.00	
4,663.0	4,367.0	G SAND		0.00	
4,878.8	4,567.0	FRUN		0.00	
5,418.2	5,067.0	L WASATCH		0.00	
6,223.7	5,822.0	OCRK		0.00	
6,684.3	6,272.0	U MESAVERDE		0.00	
6,961.1	6,547.0	PERFMIN		0.00	
7,261.4	6,847.0	KMVGAS		0.00	
8,381.4	7,967.0	CMEO		0.00	
8,936.4	8,522.0	RLNS		0.00	
9,136.4	8,722.0	TD		0.00	

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S	+E/-W	
		(ft)	(ft)	
120.0	120.0	0.0	0.0	Start Build 3.00
854.3	836.4	111.8	-83.3	Start 4938.5 hold at 854.3 MD
5,792.8	5,414.3	1,597.2	-1,190.1	Start Drop -1.50
7,261.4	6,847.0	1,820.8	-1,356.8	Start 1875.0 hold at 7261.4 MD
9,136.4	8,722.0	1,820.8	-1,356.8	TD at 9136.4