

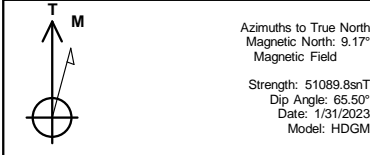


REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well WGV 312-27-697 - Slot WGV 312-27-697, True North
 Vertical (TVD) Reference: RKB @ 30' @ 8412.0ft
 Section (VS) Reference: Slot - WGV 312-27-697(0.0N, 0.0E)
 Measured Depth Reference: RKB @ 30' @ 8412.0ft
 Calculation Method: Minimum Curvature

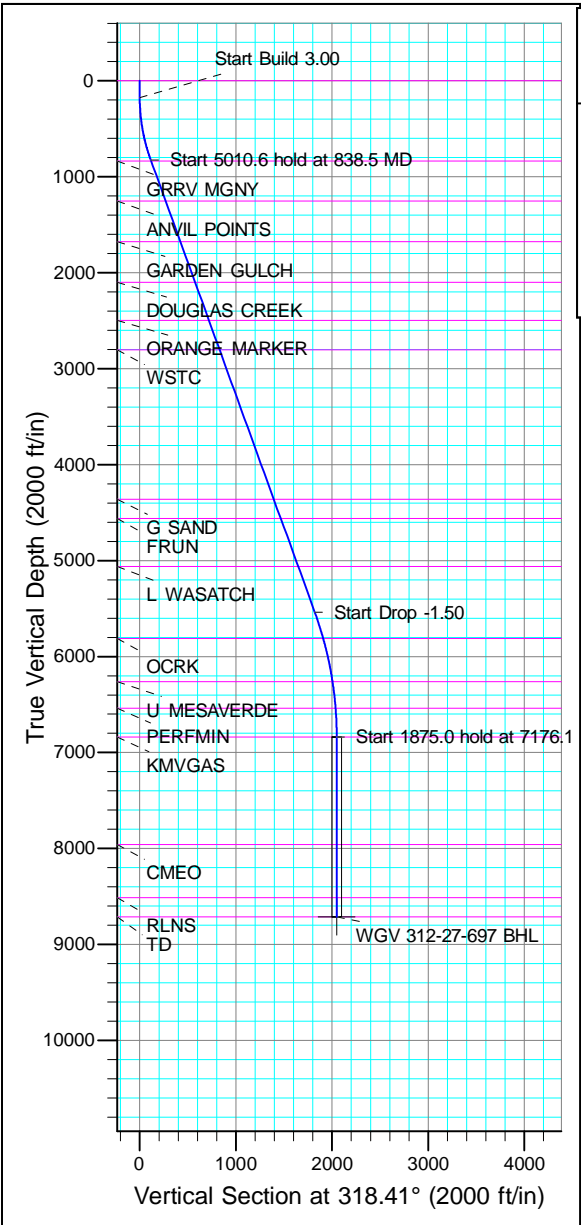


Project: Garfield County, CO (Nad 83)
 Site: Acro Deep 1-27
 Well: WGV 312-27-697
 Wellbore: OWB
 Design: Plan



WELL DETAILS: WGV 312-27-697

+N/-S	+E/-W	Northing	Ground Level:	8382.0	Longitude
0/0	0.0	1615662.900	Easting	2235940.000	-108.207775 WGV 312-27-697
			Latitude	39.492509	



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	
175.0	0.00	0.00	175.0	0.0	0.0	0.00	0.00	0.0	
838.5	19.91	318.41	825.2	85.3	-75.7	3.00	318.41	114.1	Start Build 3.00
5849.1	19.91	318.41	5536.5	1361.2	-1208.2	0.00	0.00	1820.0	Start 5010.6 hold at 838.5 MD
7176.1	0.00	0.00	6837.0	1531.9	-1359.7	1.50	180.00	2048.2	Start Drop -1.50
9051.1	0.00	0.00	8712.0	1531.9	-1359.7	0.00	0.00	2048.2	Start 1875.0 hold at 7176.1 MD TD at 9051.1

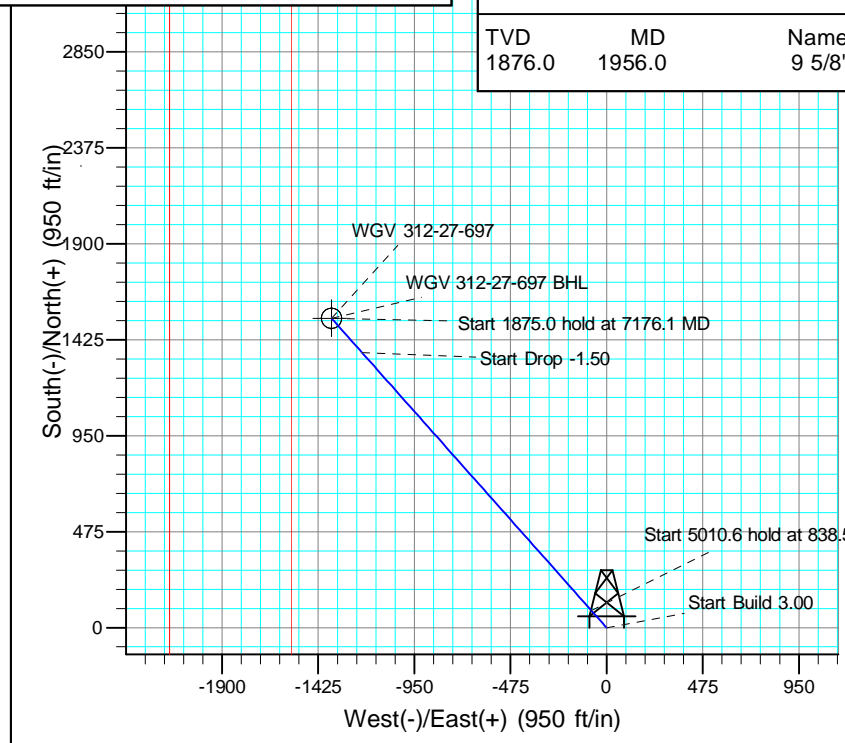
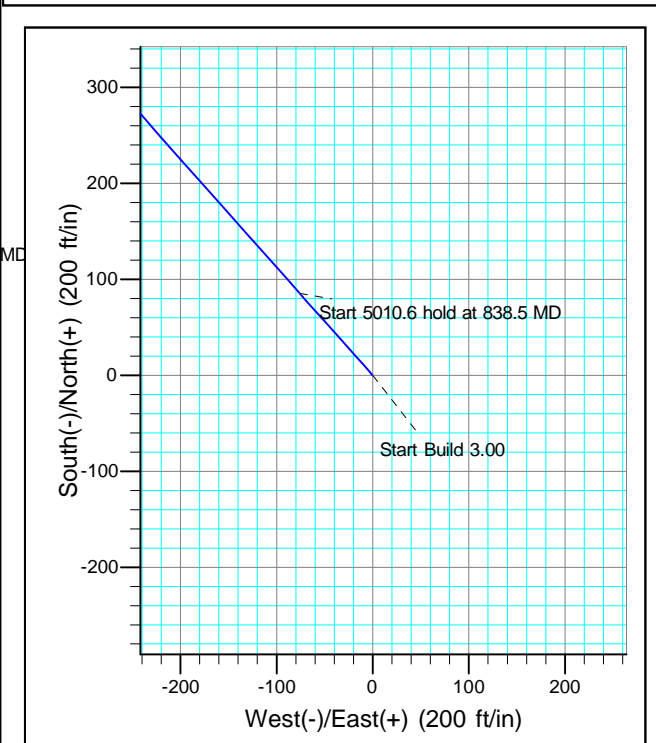
FORMATION TOP DETAILS

VDPPath	MDPath	Formation
0.0	0.0	GRRV
833.0	846.8	GRRV MGNV
1254.0	1294.5	ANVIL POINTS
1676.0	1743.3	GARDEN GULCH
2098.0	2192.1	DOUGLAS CREEK
2496.0	2615.4	ORANGE MARKER
2801.0	2939.8	WSTC
4362.0	4600.0	G SAND
4562.0	4812.7	FRUN
5062.0	5344.5	L WASATCH
5812.0	6138.4	OCRK
6262.0	6599.0	U MESAVERDE
6537.0	6875.8	PERFMIN
6837.0	7176.1	KMV GAS
7957.0	8296.1	CMEC
8512.0	8851.1	RLNS
8712.0	9051.1	TD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
BHL	8712.0	1531.9	-1359.7	1617234.600	2234626.600	39.496714	-108.212593	Circle (Radius: 50.0)

- plan hits target center



CASING DETAILS

TVD	MD	Name
1876.0	1956.0	9 5/8"



Terra Energy Partners, LLP

Garfield County, CO (Nad 83)

Acro Deep 1-27

WGV 312-27-697 - Slot WGV 312-27-697

OWB

Plan: Plan

Standard Planning Report

07 March, 2023



Database:	NN	Local Co-ordinate Reference:	Well WGV 312-27-697 - Slot WGV 312-27-697
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 312-27-697	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 312-27-697 - Slot WGV 312-27-697					
Well Position	+N/-S	29.4 ft	Northing:	1,615,662.900 usft	Latitude:	39.492509
	+E/-W	23.3 ft	Easting:	2,235,940.000 usft	Longitude:	-108.207775
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	318.41

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	
175.0	0.00	0.00	175.0	0.0	0.0	0.00	0.00	0.00	0.00	
838.5	19.91	318.41	825.2	85.3	-75.7	3.00	3.00	0.00	318.41	
5,849.1	19.91	318.41	5,536.5	1,361.2	-1,208.2	0.00	0.00	0.00	0.00	
7,176.1	0.00	0.00	6,837.0	1,531.9	-1,359.7	1.50	-1.50	0.00	180.00	
9,051.1	0.00	0.00	8,712.0	1,531.9	-1,359.7	0.00	0.00	0.00	0.00	WGV 312-27-697 BHI

Database:	NN	Local Co-ordinate Reference:	Well WGV 312-27-697 - Slot WGV 312-27-697
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 312-27-697	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	
175.0	0.00	0.00	175.0	0.0	0.0	0.0	0.00	0.00	0.00	
Start Build 3.00										
200.0	0.75	318.41	200.0	0.1	-0.1	0.2	3.00	3.00	0.00	
300.0	3.75	318.41	299.9	3.1	-2.7	4.1	3.00	3.00	0.00	
400.0	6.75	318.41	399.5	9.9	-8.8	13.2	3.00	3.00	0.00	
500.0	9.75	318.41	498.4	20.6	-18.3	27.6	3.00	3.00	0.00	
600.0	12.75	318.41	596.5	35.2	-31.3	47.1	3.00	3.00	0.00	
700.0	15.75	318.41	693.4	53.6	-47.6	71.7	3.00	3.00	0.00	
800.0	18.75	318.41	788.9	75.8	-67.3	101.4	3.00	3.00	0.00	
838.5	19.91	318.41	825.2	85.3	-75.7	114.1	3.00	3.00	0.00	
Start 5010.6 hold at 838.5 MD										
900.0	19.91	318.41	883.1	101.0	-89.6	135.0	0.00	0.00	0.00	
1,000.0	19.91	318.41	977.1	126.5	-112.2	169.1	0.00	0.00	0.00	
1,100.0	19.91	318.41	1,071.1	151.9	-134.8	203.1	0.00	0.00	0.00	
1,200.0	19.91	318.41	1,165.1	177.4	-157.4	237.2	0.00	0.00	0.00	
1,300.0	19.91	318.41	1,259.2	202.8	-180.0	271.2	0.00	0.00	0.00	
1,400.0	19.91	318.41	1,353.2	228.3	-202.6	305.3	0.00	0.00	0.00	
1,500.0	19.91	318.41	1,447.2	253.8	-225.2	339.3	0.00	0.00	0.00	
1,600.0	19.91	318.41	1,541.2	279.2	-247.8	373.4	0.00	0.00	0.00	
1,700.0	19.91	318.41	1,635.3	304.7	-270.4	407.4	0.00	0.00	0.00	
1,800.0	19.91	318.41	1,729.3	330.2	-293.0	441.5	0.00	0.00	0.00	
1,900.0	19.91	318.41	1,823.3	355.6	-315.6	475.5	0.00	0.00	0.00	
2,000.0	19.91	318.41	1,917.3	381.1	-338.2	509.5	0.00	0.00	0.00	
2,100.0	19.91	318.41	2,011.4	406.5	-360.8	543.6	0.00	0.00	0.00	
2,200.0	19.91	318.41	2,105.4	432.0	-383.4	577.6	0.00	0.00	0.00	
2,300.0	19.91	318.41	2,199.4	457.5	-406.0	611.7	0.00	0.00	0.00	
2,400.0	19.91	318.41	2,293.4	482.9	-428.6	645.7	0.00	0.00	0.00	
2,500.0	19.91	318.41	2,387.5	508.4	-451.2	679.8	0.00	0.00	0.00	
2,600.0	19.91	318.41	2,481.5	533.9	-473.9	713.8	0.00	0.00	0.00	
2,700.0	19.91	318.41	2,575.5	559.3	-496.5	747.9	0.00	0.00	0.00	
2,800.0	19.91	318.41	2,669.5	584.8	-519.1	781.9	0.00	0.00	0.00	
2,900.0	19.91	318.41	2,763.6	610.3	-541.7	816.0	0.00	0.00	0.00	
3,000.0	19.91	318.41	2,857.6	635.7	-564.3	850.0	0.00	0.00	0.00	
3,100.0	19.91	318.41	2,951.6	661.2	-586.9	884.1	0.00	0.00	0.00	
3,200.0	19.91	318.41	3,045.7	686.6	-609.5	918.1	0.00	0.00	0.00	
3,300.0	19.91	318.41	3,139.7	712.1	-632.1	952.1	0.00	0.00	0.00	
3,400.0	19.91	318.41	3,233.7	737.6	-654.7	986.2	0.00	0.00	0.00	
3,500.0	19.91	318.41	3,327.7	763.0	-677.3	1,020.2	0.00	0.00	0.00	
3,600.0	19.91	318.41	3,421.8	788.5	-699.9	1,054.3	0.00	0.00	0.00	
3,700.0	19.91	318.41	3,515.8	814.0	-722.5	1,088.3	0.00	0.00	0.00	
3,800.0	19.91	318.41	3,609.8	839.4	-745.1	1,122.4	0.00	0.00	0.00	
3,900.0	19.91	318.41	3,703.8	864.9	-767.7	1,156.4	0.00	0.00	0.00	
4,000.0	19.91	318.41	3,797.9	890.3	-790.3	1,190.5	0.00	0.00	0.00	
4,100.0	19.91	318.41	3,891.9	915.8	-812.9	1,224.5	0.00	0.00	0.00	
4,200.0	19.91	318.41	3,985.9	941.3	-835.5	1,258.6	0.00	0.00	0.00	
4,300.0	19.91	318.41	4,079.9	966.7	-858.1	1,292.6	0.00	0.00	0.00	
4,400.0	19.91	318.41	4,174.0	992.2	-880.7	1,326.7	0.00	0.00	0.00	
4,500.0	19.91	318.41	4,268.0	1,017.7	-903.3	1,360.7	0.00	0.00	0.00	
4,600.0	19.91	318.41	4,362.0	1,043.1	-925.9	1,394.8	0.00	0.00	0.00	
4,700.0	19.91	318.41	4,456.0	1,068.6	-948.5	1,428.8	0.00	0.00	0.00	
4,800.0	19.91	318.41	4,550.1	1,094.1	-971.1	1,462.8	0.00	0.00	0.00	

Database:	NN	Local Co-ordinate Reference:	Well WGV 312-27-697 - Slot WGV 312-27-697
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 312-27-697	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)	
4,900.0	19.91	318.41	4,644.1	1,119.5	-993.7	1,496.9	0.00	0.00	0.00	
5,000.0	19.91	318.41	4,738.1	1,145.0	-1,016.3	1,530.9	0.00	0.00	0.00	
5,100.0	19.91	318.41	4,832.1	1,170.4	-1,038.9	1,565.0	0.00	0.00	0.00	
5,200.0	19.91	318.41	4,926.2	1,195.9	-1,061.5	1,599.0	0.00	0.00	0.00	
5,300.0	19.91	318.41	5,020.2	1,221.4	-1,084.1	1,633.1	0.00	0.00	0.00	
5,400.0	19.91	318.41	5,114.2	1,246.8	-1,106.7	1,667.1	0.00	0.00	0.00	
5,500.0	19.91	318.41	5,208.2	1,272.3	-1,129.3	1,701.2	0.00	0.00	0.00	
5,600.0	19.91	318.41	5,302.3	1,297.8	-1,151.9	1,735.2	0.00	0.00	0.00	
5,700.0	19.91	318.41	5,396.3	1,323.2	-1,174.5	1,769.3	0.00	0.00	0.00	
5,800.0	19.91	318.41	5,490.3	1,348.7	-1,197.1	1,803.3	0.00	0.00	0.00	
5,849.1	19.91	318.41	5,536.5	1,361.2	-1,208.2	1,820.0	0.00	0.00	0.00	
Start Drop -1.50										
5,900.0	19.14	318.41	5,584.5	1,373.9	-1,219.5	1,837.0	1.50	-1.50	0.00	
6,000.0	17.64	318.41	5,679.4	1,397.5	-1,240.4	1,868.6	1.50	-1.50	0.00	
6,100.0	16.14	318.41	5,775.0	1,419.2	-1,259.7	1,897.6	1.50	-1.50	0.00	
6,200.0	14.64	318.41	5,871.4	1,439.1	-1,277.3	1,924.2	1.50	-1.50	0.00	
6,300.0	13.14	318.41	5,968.5	1,457.0	-1,293.2	1,948.2	1.50	-1.50	0.00	
6,400.0	11.64	318.41	6,066.2	1,473.1	-1,307.5	1,969.7	1.50	-1.50	0.00	
6,500.0	10.14	318.41	6,164.4	1,487.2	-1,320.0	1,988.5	1.50	-1.50	0.00	
6,600.0	8.64	318.41	6,263.0	1,499.4	-1,330.9	2,004.9	1.50	-1.50	0.00	
6,700.0	7.14	318.41	6,362.1	1,509.7	-1,340.0	2,018.6	1.50	-1.50	0.00	
6,800.0	5.64	318.41	6,461.5	1,518.0	-1,347.4	2,029.7	1.50	-1.50	0.00	
6,900.0	4.14	318.41	6,561.1	1,524.4	-1,353.0	2,038.3	1.50	-1.50	0.00	
7,000.0	2.64	318.41	6,660.9	1,528.8	-1,357.0	2,044.2	1.50	-1.50	0.00	
7,100.0	1.14	318.41	6,760.9	1,531.3	-1,359.2	2,047.5	1.50	-1.50	0.00	
7,176.1	0.00	0.00	6,837.0	1,531.9	-1,359.7	2,048.2	1.50	-1.50	0.00	
Start 1875.0 hold at 7176.1 MD										
7,200.0	0.00	0.00	6,860.9	1,531.9	-1,359.7	2,048.2	0.00	0.00	0.00	
7,300.0	0.00	0.00	6,960.9	1,531.9	-1,359.7	2,048.2	0.00	0.00	0.00	
7,400.0	0.00	0.00	7,060.9	1,531.9	-1,359.7	2,048.2	0.00	0.00	0.00	
7,500.0	0.00	0.00	7,160.9	1,531.9	-1,359.7	2,048.2	0.00	0.00	0.00	
7,600.0	0.00	0.00	7,260.9	1,531.9	-1,359.7	2,048.2	0.00	0.00	0.00	
7,700.0	0.00	0.00	7,360.9	1,531.9	-1,359.7	2,048.2	0.00	0.00	0.00	
7,800.0	0.00	0.00	7,460.9	1,531.9	-1,359.7	2,048.2	0.00	0.00	0.00	
7,900.0	0.00	0.00	7,560.9	1,531.9	-1,359.7	2,048.2	0.00	0.00	0.00	
8,000.0	0.00	0.00	7,660.9	1,531.9	-1,359.7	2,048.2	0.00	0.00	0.00	
8,100.0	0.00	0.00	7,760.9	1,531.9	-1,359.7	2,048.2	0.00	0.00	0.00	
8,200.0	0.00	0.00	7,860.9	1,531.9	-1,359.7	2,048.2	0.00	0.00	0.00	
8,300.0	0.00	0.00	7,960.9	1,531.9	-1,359.7	2,048.2	0.00	0.00	0.00	
8,400.0	0.00	0.00	8,060.9	1,531.9	-1,359.7	2,048.2	0.00	0.00	0.00	
8,500.0	0.00	0.00	8,160.9	1,531.9	-1,359.7	2,048.2	0.00	0.00	0.00	
8,600.0	0.00	0.00	8,260.9	1,531.9	-1,359.7	2,048.2	0.00	0.00	0.00	
8,700.0	0.00	0.00	8,360.9	1,531.9	-1,359.7	2,048.2	0.00	0.00	0.00	
8,800.0	0.00	0.00	8,460.9	1,531.9	-1,359.7	2,048.2	0.00	0.00	0.00	
8,900.0	0.00	0.00	8,560.9	1,531.9	-1,359.7	2,048.2	0.00	0.00	0.00	
9,000.0	0.00	0.00	8,660.9	1,531.9	-1,359.7	2,048.2	0.00	0.00	0.00	
9,051.1	0.00	0.00	8,712.0	1,531.9	-1,359.7	2,048.2	0.00	0.00	0.00	
TD at 9051.1										

Database:	NN	Local Co-ordinate Reference:	Well WGV 312-27-697 - Slot WGV 312-27-697
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 312-27-697	Survey Calculation Method:	Minimum Curvature
Wellbore:	OWB		
Design:	Plan		

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
WGV 312-27-697 BHL - plan hits target center - Circle (radius 50.0)	0.00	0.00	8,712.0	1,531.9	-1,359.7	1,617,234.600	2,234,626.600	39.496714	-108.212593

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
1,956.0	1,876.0	9 5/8"	9-5/8	12-1/4	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
0.0	0.0	GRRV		0.00		
846.8	833.0	GRRV MGNV		0.00		
1,294.5	1,254.0	ANVIL POINTS		0.00		
1,743.3	1,676.0	GARDEN GULCH		0.00		
2,192.1	2,098.0	DOUGLAS CREEK		0.00		
2,615.4	2,496.0	ORANGE MARKER		0.00		
2,939.8	2,801.0	WSTC		0.00		
4,600.0	4,362.0	G SAND		0.00		
4,812.7	4,562.0	FRUN		0.00		
5,344.5	5,062.0	L WASATCH		0.00		
6,138.4	5,812.0	OCRK		0.00		
6,599.0	6,262.0	U MESAVERDE		0.00		
6,875.8	6,537.0	PERFMIN		0.00		
7,176.1	6,837.0	KMVGAS		0.00		
8,296.1	7,957.0	CMEO		0.00		
8,851.1	8,512.0	RLNS		0.00		
9,051.1	8,712.0	TD		0.00		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
175.0	175.0	0.0	0.0	Start Build 3.00	
838.5	825.2	85.3	-75.7	Start 5010.6 hold at 838.5 MD	
5,849.1	5,536.5	1,361.2	-1,208.2	Start Drop -1.50	
7,176.1	6,837.0	1,531.9	-1,359.7	Start 1875.0 hold at 7176.1 MD	
9,051.1	8,712.0	1,531.9	-1,359.7	TD at 9051.1	