

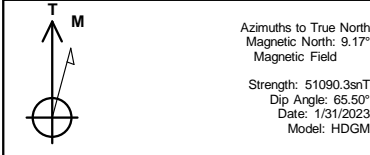


REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well WGV 513-27-697 - Slot WGV 513-27-697, True North
 Vertical (TVD) Reference: RKB @ 30' @ 8412.0ft
 Section (VS) Reference: Slot - WGV 513-27-697(0.0N, 0.0E)
 Measured Depth Reference: RKB @ 30' @ 8412.0ft
 Calculation Method: Minimum Curvature

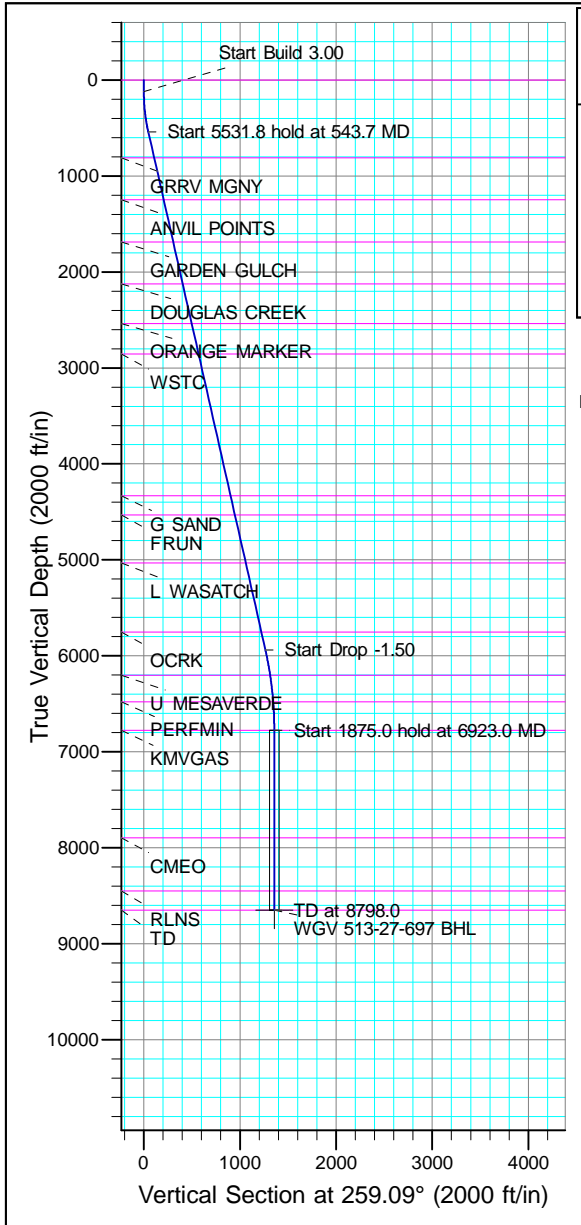


Project: Garfield County, CO (Nad 83)
 Site: Acro Deep 1-27
 Well: WGV 513-27-697
 Wellbore: OWB
 Design: Plan



WELL DETAILS: WGV 513-27-697

+N/-S	+E/-W	Northing	Ground Level:	8382.0	Longitude	SL
0/0	0.0	1615646.400	Easting	2235913.000	Latitude	39.492461
						-108.207868 WGV 513-27-697



SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	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	
543.7	12.71	259.09	540.2	-8.9	-46.0	3.00	259.09	46.8	Start Build 3.00
6075.6	12.71	259.09	5936.5	-239.1	-1241.2	0.00	0.00	1264.0	Start Drop -1.50
6923.0	0.00	0.00	6777.0	-256.8	-1333.1	1.50	180.00	1357.7	Start 1875.0 hold at 6923.0 MD
8798.0	0.00	0.00	8652.0	-256.8	-1333.1	0.00	0.00	1357.7	TD at 8798.0

FORMATION TOP DETAILS

VDPPath	MDPath	Formation
0.0	0.0	GRRV MGNY
809.0	819.2	GRRV MGNY
1248.0	1269.2	ANVIL POINTS
1686.0	1718.3	GARDEN GULCH
2124.0	2167.3	DOUGLAS CREEK
2538.0	2591.7	ORANGE MARKER
2855.0	2916.6	WSTC
4332.0	4430.7	G SAND
4532.0	4635.8	FRUN
5032.0	5148.3	L WASATCH
5752.0	5886.4	OCRK
6202.0	6345.8	U MESAVERDE
6477.0	6622.7	PERFMIN
6777.0	6923.0	K MVGAS
7897.0	8043.0	CMEC
8452.0	8598.0	RLNS
8652.0	8798.0	TD

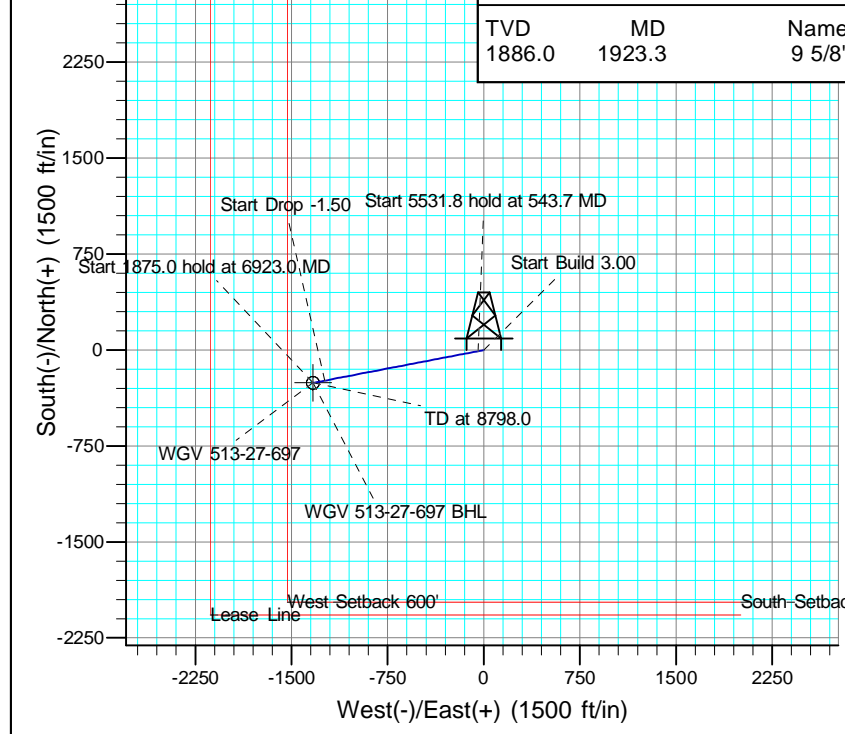
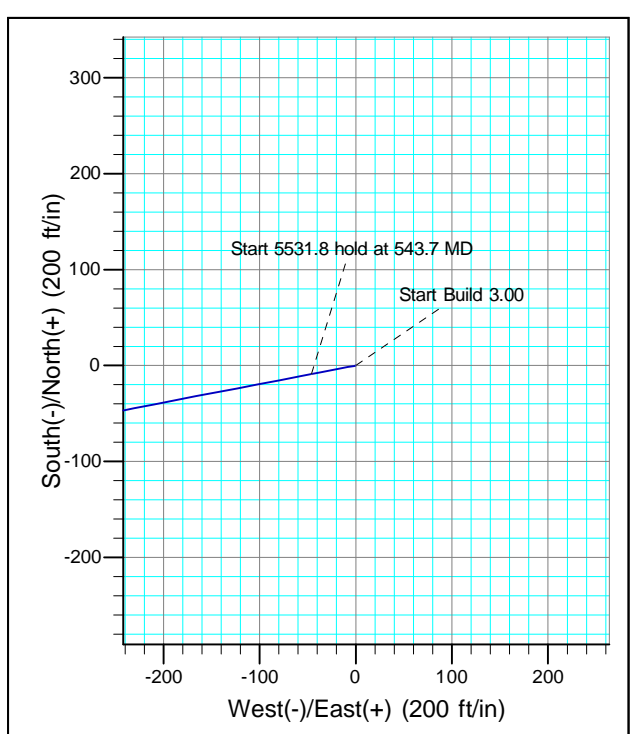
DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
BHL	8652.0	-256.8	-1333.1	1615429.400	2234572.800	39.491756	-108.212592	Circle (Radius: 50.0)

- plan hits target center

CASING DETAILS

TVD	MD	Name
1886.0	1923.3	9 5/8"





Terra Energy Partners, LLP

Garfield County, CO (Nad 83)

Acro Deep 1-27

WGV 513-27-697 - Slot WGV 513-27-697

OWB

Plan: Plan

Standard Planning Report

07 March, 2023



Database:	NN	Local Co-ordinate Reference:	Well WGV 513-27-697 - Slot WGV 513-27-697
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 513-27-697	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 513-27-697 - Slot WGV 513-27-697					
Well Position	+N/-S	12.1 ft	Northing:	1,615,646.400 usft	Latitude:	39.492461
	+E/-W	-3.2 ft	Easting:	2,235,913.000 usft	Longitude:	-108.207869
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	259.09

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	
543.7	12.71	259.09	540.2	-8.9	-46.0	3.00	3.00	0.00	259.09	
6,075.6	12.71	259.09	5,936.5	-239.1	-1,241.2	0.00	0.00	0.00	0.00	
6,923.0	0.00	0.00	6,777.0	-256.8	-1,333.1	1.50	-1.50	0.00	180.00	
8,798.0	0.00	0.00	8,652.0	-256.8	-1,333.1	0.00	0.00	0.00	0.00	WGV 513-27-697 BHI

Database:	NN	Local Co-ordinate Reference:	Well WGV 513-27-697 - Slot WGV 513-27-697
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 513-27-697	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	0.00
100.0	0.00	0.00	100.0	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	0.0	0.00	0.00	0.00	0.00
Start Build 3.00										
200.0	2.40	259.09	200.0	-0.3	-1.6	1.7	3.00	3.00	0.00	0.00
300.0	5.40	259.09	299.7	-1.6	-8.3	8.5	3.00	3.00	0.00	0.00
400.0	8.40	259.09	399.0	-3.9	-20.1	20.5	3.00	3.00	0.00	0.00
500.0	11.40	259.09	497.5	-7.1	-37.0	37.7	3.00	3.00	0.00	0.00
543.7	12.71	259.09	540.2	-8.9	-46.0	46.8	3.00	3.00	0.00	0.00
Start 5531.8 hold at 543.7 MD										
600.0	12.71	259.09	595.2	-11.2	-58.1	59.2	0.00	0.00	0.00	0.00
700.0	12.71	259.09	692.7	-15.4	-79.7	81.2	0.00	0.00	0.00	0.00
800.0	12.71	259.09	790.3	-19.5	-101.3	103.2	0.00	0.00	0.00	0.00
900.0	12.71	259.09	887.8	-23.7	-122.9	125.2	0.00	0.00	0.00	0.00
1,000.0	12.71	259.09	985.3	-27.8	-144.6	147.2	0.00	0.00	0.00	0.00
1,100.0	12.71	259.09	1,082.9	-32.0	-166.2	169.2	0.00	0.00	0.00	0.00
1,200.0	12.71	259.09	1,180.4	-36.2	-187.8	191.2	0.00	0.00	0.00	0.00
1,300.0	12.71	259.09	1,278.0	-40.3	-209.4	213.2	0.00	0.00	0.00	0.00
1,400.0	12.71	259.09	1,375.5	-44.5	-231.0	235.2	0.00	0.00	0.00	0.00
1,500.0	12.71	259.09	1,473.1	-48.7	-252.6	257.2	0.00	0.00	0.00	0.00
1,600.0	12.71	259.09	1,570.6	-52.8	-274.2	279.2	0.00	0.00	0.00	0.00
1,700.0	12.71	259.09	1,668.2	-57.0	-295.8	301.2	0.00	0.00	0.00	0.00
1,800.0	12.71	259.09	1,765.7	-61.2	-317.4	323.2	0.00	0.00	0.00	0.00
1,900.0	12.71	259.09	1,863.3	-65.3	-339.0	345.2	0.00	0.00	0.00	0.00
2,000.0	12.71	259.09	1,960.8	-69.5	-360.6	367.3	0.00	0.00	0.00	0.00
2,100.0	12.71	259.09	2,058.4	-73.6	-382.2	389.3	0.00	0.00	0.00	0.00
2,200.0	12.71	259.09	2,155.9	-77.8	-403.8	411.3	0.00	0.00	0.00	0.00
2,300.0	12.71	259.09	2,253.5	-82.0	-425.4	433.3	0.00	0.00	0.00	0.00
2,400.0	12.71	259.09	2,351.0	-86.1	-447.0	455.3	0.00	0.00	0.00	0.00
2,500.0	12.71	259.09	2,448.6	-90.3	-468.7	477.3	0.00	0.00	0.00	0.00
2,600.0	12.71	259.09	2,546.1	-94.5	-490.3	499.3	0.00	0.00	0.00	0.00
2,700.0	12.71	259.09	2,643.7	-98.6	-511.9	521.3	0.00	0.00	0.00	0.00
2,800.0	12.71	259.09	2,741.2	-102.8	-533.5	543.3	0.00	0.00	0.00	0.00
2,900.0	12.71	259.09	2,838.8	-106.9	-555.1	565.3	0.00	0.00	0.00	0.00
3,000.0	12.71	259.09	2,936.3	-111.1	-576.7	587.3	0.00	0.00	0.00	0.00
3,100.0	12.71	259.09	3,033.9	-115.3	-598.3	609.3	0.00	0.00	0.00	0.00
3,200.0	12.71	259.09	3,131.4	-119.4	-619.9	631.3	0.00	0.00	0.00	0.00
3,300.0	12.71	259.09	3,229.0	-123.6	-641.5	653.3	0.00	0.00	0.00	0.00
3,400.0	12.71	259.09	3,326.5	-127.8	-663.1	675.3	0.00	0.00	0.00	0.00
3,500.0	12.71	259.09	3,424.1	-131.9	-684.7	697.3	0.00	0.00	0.00	0.00
3,600.0	12.71	259.09	3,521.6	-136.1	-706.3	719.3	0.00	0.00	0.00	0.00
3,700.0	12.71	259.09	3,619.2	-140.2	-727.9	741.3	0.00	0.00	0.00	0.00
3,800.0	12.71	259.09	3,716.7	-144.4	-749.5	763.3	0.00	0.00	0.00	0.00
3,900.0	12.71	259.09	3,814.3	-148.6	-771.1	785.3	0.00	0.00	0.00	0.00
4,000.0	12.71	259.09	3,911.8	-152.7	-792.8	807.3	0.00	0.00	0.00	0.00
4,100.0	12.71	259.09	4,009.4	-156.9	-814.4	829.3	0.00	0.00	0.00	0.00
4,200.0	12.71	259.09	4,106.9	-161.1	-836.0	851.3	0.00	0.00	0.00	0.00
4,300.0	12.71	259.09	4,204.5	-165.2	-857.6	873.3	0.00	0.00	0.00	0.00
4,400.0	12.71	259.09	4,302.0	-169.4	-879.2	895.3	0.00	0.00	0.00	0.00
4,500.0	12.71	259.09	4,399.6	-173.5	-900.8	917.4	0.00	0.00	0.00	0.00
4,600.0	12.71	259.09	4,497.1	-177.7	-922.4	939.4	0.00	0.00	0.00	0.00
4,700.0	12.71	259.09	4,594.7	-181.9	-944.0	961.4	0.00	0.00	0.00	0.00
4,800.0	12.71	259.09	4,692.2	-186.0	-965.6	983.4	0.00	0.00	0.00	0.00

Database:	NN	Local Co-ordinate Reference:	Well WGV 513-27-697 - Slot WGV 513-27-697
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 513-27-697	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	12.71	259.09	4,789.8	-190.2	-987.2	1,005.4	0.00	0.00	0.00	
5,000.0	12.71	259.09	4,887.3	-194.4	-1,008.8	1,027.4	0.00	0.00	0.00	
5,100.0	12.71	259.09	4,984.9	-198.5	-1,030.4	1,049.4	0.00	0.00	0.00	
5,200.0	12.71	259.09	5,082.4	-202.7	-1,052.0	1,071.4	0.00	0.00	0.00	
5,300.0	12.71	259.09	5,180.0	-206.8	-1,073.6	1,093.4	0.00	0.00	0.00	
5,400.0	12.71	259.09	5,277.5	-211.0	-1,095.2	1,115.4	0.00	0.00	0.00	
5,500.0	12.71	259.09	5,375.1	-215.2	-1,116.9	1,137.4	0.00	0.00	0.00	
5,600.0	12.71	259.09	5,472.6	-219.3	-1,138.5	1,159.4	0.00	0.00	0.00	
5,700.0	12.71	259.09	5,570.2	-223.5	-1,160.1	1,181.4	0.00	0.00	0.00	
5,800.0	12.71	259.09	5,667.7	-227.7	-1,181.7	1,203.4	0.00	0.00	0.00	
5,900.0	12.71	259.09	5,765.3	-231.8	-1,203.3	1,225.4	0.00	0.00	0.00	
6,000.0	12.71	259.09	5,862.8	-236.0	-1,224.9	1,247.4	0.00	0.00	0.00	
6,075.6	12.71	259.09	5,936.5	-239.1	-1,241.2	1,264.0	0.00	0.00	0.00	
Start Drop -1.50										
6,100.0	12.34	259.09	5,960.4	-240.1	-1,246.4	1,269.3	1.50	-1.50	0.00	
6,200.0	10.84	259.09	6,058.3	-243.9	-1,266.2	1,289.4	1.50	-1.50	0.00	
6,300.0	9.34	259.09	6,156.8	-247.3	-1,283.4	1,307.0	1.50	-1.50	0.00	
6,400.0	7.84	259.09	6,255.6	-250.1	-1,298.0	1,321.9	1.50	-1.50	0.00	
6,500.0	6.34	259.09	6,354.9	-252.4	-1,310.2	1,334.3	1.50	-1.50	0.00	
6,600.0	4.84	259.09	6,454.4	-254.3	-1,319.7	1,344.0	1.50	-1.50	0.00	
6,700.0	3.34	259.09	6,554.1	-255.6	-1,326.8	1,351.2	1.50	-1.50	0.00	
6,800.0	1.84	259.09	6,654.0	-256.5	-1,331.2	1,355.7	1.50	-1.50	0.00	
6,900.0	0.34	259.09	6,754.0	-256.8	-1,333.1	1,357.6	1.50	-1.50	0.00	
6,923.0	0.00	0.00	6,777.0	-256.8	-1,333.1	1,357.7	1.50	-1.50	0.00	
Start 1875.0 hold at 6923.0 MD										
7,000.0	0.00	0.00	6,854.0	-256.8	-1,333.1	1,357.7	0.00	0.00	0.00	
7,100.0	0.00	0.00	6,954.0	-256.8	-1,333.1	1,357.7	0.00	0.00	0.00	
7,200.0	0.00	0.00	7,054.0	-256.8	-1,333.1	1,357.7	0.00	0.00	0.00	
7,300.0	0.00	0.00	7,154.0	-256.8	-1,333.1	1,357.7	0.00	0.00	0.00	
7,400.0	0.00	0.00	7,254.0	-256.8	-1,333.1	1,357.7	0.00	0.00	0.00	
7,500.0	0.00	0.00	7,354.0	-256.8	-1,333.1	1,357.7	0.00	0.00	0.00	
7,600.0	0.00	0.00	7,454.0	-256.8	-1,333.1	1,357.7	0.00	0.00	0.00	
7,700.0	0.00	0.00	7,554.0	-256.8	-1,333.1	1,357.7	0.00	0.00	0.00	
7,800.0	0.00	0.00	7,654.0	-256.8	-1,333.1	1,357.7	0.00	0.00	0.00	
7,900.0	0.00	0.00	7,754.0	-256.8	-1,333.1	1,357.7	0.00	0.00	0.00	
8,000.0	0.00	0.00	7,854.0	-256.8	-1,333.1	1,357.7	0.00	0.00	0.00	
8,100.0	0.00	0.00	7,954.0	-256.8	-1,333.1	1,357.7	0.00	0.00	0.00	
8,200.0	0.00	0.00	8,054.0	-256.8	-1,333.1	1,357.7	0.00	0.00	0.00	
8,300.0	0.00	0.00	8,154.0	-256.8	-1,333.1	1,357.7	0.00	0.00	0.00	
8,400.0	0.00	0.00	8,254.0	-256.8	-1,333.1	1,357.7	0.00	0.00	0.00	
8,500.0	0.00	0.00	8,354.0	-256.8	-1,333.1	1,357.7	0.00	0.00	0.00	
8,600.0	0.00	0.00	8,454.0	-256.8	-1,333.1	1,357.7	0.00	0.00	0.00	
8,700.0	0.00	0.00	8,554.0	-256.8	-1,333.1	1,357.7	0.00	0.00	0.00	
8,798.0	0.00	0.00	8,652.0	-256.8	-1,333.1	1,357.7	0.00	0.00	0.00	
TD at 8798.0										

Database:	NN	Local Co-ordinate Reference:	Well WGV 513-27-697 - Slot WGV 513-27-697
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 513-27-697	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 513-27-697 BHL - plan hits target center - Circle (radius 50.0)	0.00	0.00	8,652.0	-256.8	-1,333.1	1,615,429.400	2,234,572.800	39.491756	-108.212592

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
1,923.3	1,886.0	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		
819.2	809.0	GRRV MGNV		0.00		
1,269.2	1,248.0	ANVIL POINTS		0.00		
1,718.3	1,686.0	GARDEN GULCH		0.00		
2,167.3	2,124.0	DOUGLAS CREEK		0.00		
2,591.7	2,538.0	ORANGE MARKER		0.00		
2,916.6	2,855.0	WSTC		0.00		
4,430.7	4,332.0	G SAND		0.00		
4,635.8	4,532.0	FRUN		0.00		
5,148.3	5,032.0	L WASATCH		0.00		
5,886.4	5,752.0	OCRK		0.00		
6,345.8	6,202.0	U MESAVERDE		0.00		
6,622.7	6,477.0	PERFMIN		0.00		
6,923.0	6,777.0	KMVGAS		0.00		
8,043.0	7,897.0	CMEO		0.00		
8,598.0	8,452.0	RLNS		0.00		
8,798.0	8,652.0	TD		0.00		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
120.0	120.0	0.0	0.0	Start Build 3.00	
543.7	540.2	-8.9	-46.0	Start 5531.8 hold at 543.7 MD	
6,075.6	5,936.5	-239.1	-1,241.2	Start Drop -1.50	
6,923.0	6,777.0	-256.8	-1,333.1	Start 1875.0 hold at 6923.0 MD	
8,798.0	8,652.0	-256.8	-1,333.1	TD at 8798.0	