

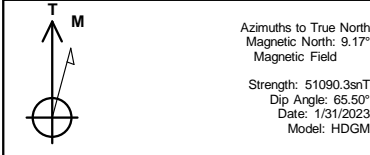


REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well WGV 314-27-697 - Slot WGV 314-27-697, True North
 Vertical (TVD) Reference: RKB @ 30' @ 8412.0ft
 Section (VS) Reference: Slot - WGV 314-27-697(0.0N, 0.0E)
 Measured Depth Reference: RKB @ 30' @ 8412.0ft
 Calculation Method: Minimum Curvature

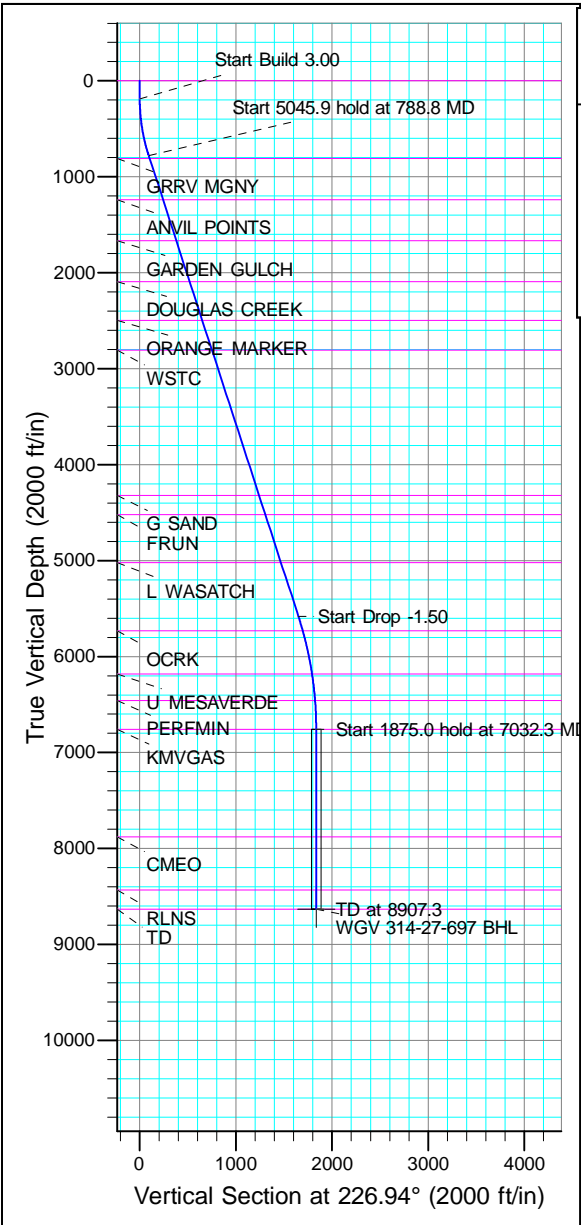


Project: Garfield County, CO (Nad 83)
 Site: Acro Deep 1-27
 Well: WGV 314-27-697
 Wellbore: OWB
 Design: Plan



WELL DETAILS: WGV 314-27-697

Ground Level:	8382.0
+N/-S	0.0
+E/-W	0.0
Northing	1615639.900
Easting	2235920.600
Latitude	39.492444
Longitude	-108.207841



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	
190.0	0.00	0.00	190.0	0.0	0.0	0.00	0.00	0.0	
788.8	17.96	226.94	779.0	-63.6	-68.0	3.00	226.94	93.1	Start Build 3.00
5834.7	17.96	226.94	5578.9	-1126.2	-1205.0	0.00	0.00	1649.3	Start 5045.9 hold at 788.8 MD
7032.3	0.00	0.00	6757.0	-1253.3	-1341.0	1.50	180.00	1835.5	Start Drop -1.50
8907.3	0.00	0.00	8632.0	-1253.3	-1341.0	0.00	0.00	1835.5	Start 1875.0 hold at 7032.3 MD TD at 8907.3

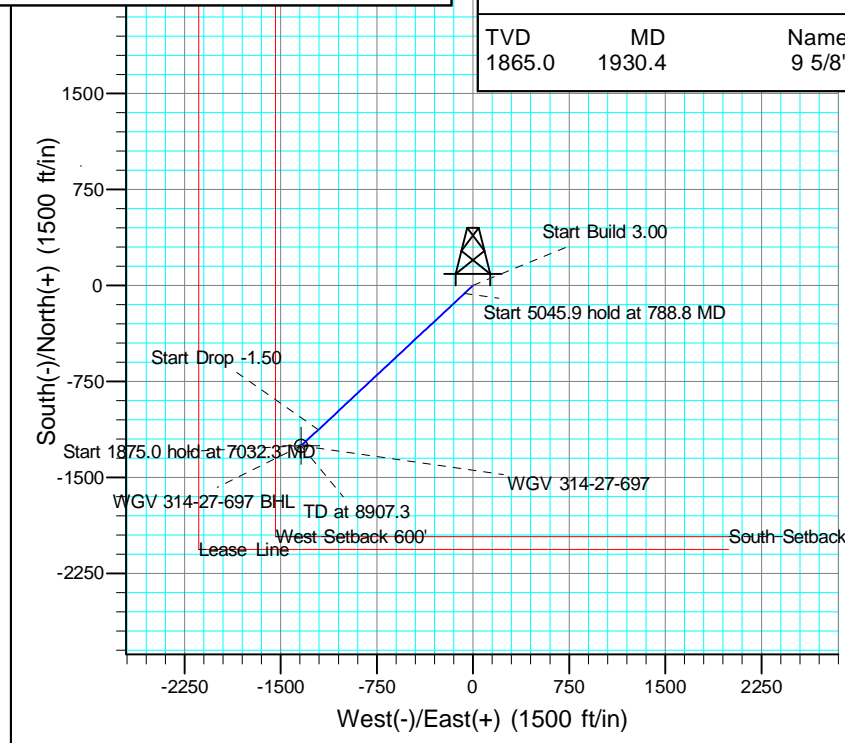
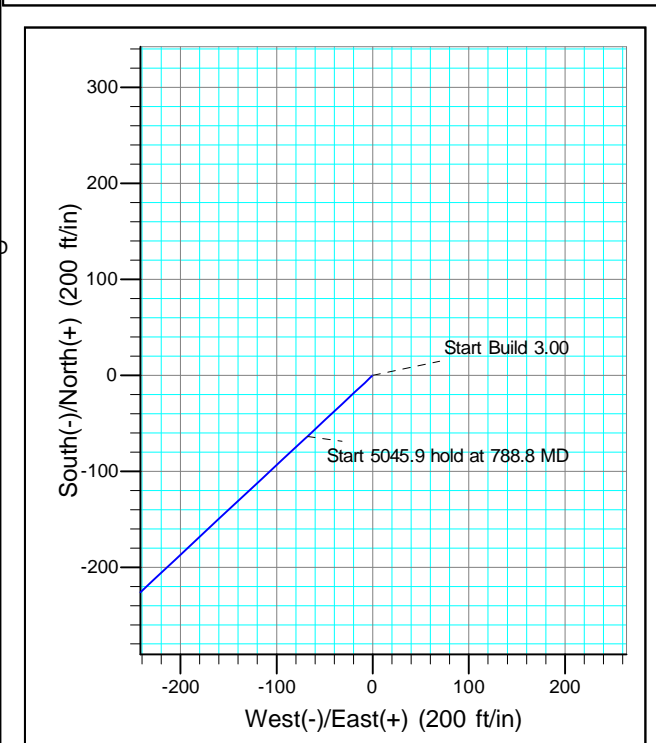
FORMATION TOP DETAILS

VDPPath	MDPath	Formation
0.0	0.0	
810.0	821.3	GRRV MGNY
1237.0	1270.2	GRRV MGNY
1665.0	1720.2	ANVIL POINTS
2092.0	2169.0	ANVIL POINTS
2496.0	2593.8	GARDEN GULCH
2805.0	2918.6	DOUGLAS CREEK
4322.0	4513.3	ORANGE MARKER
4522.0	4723.6	WSTC
5022.0	5249.2	G SAND
5732.0	5994.5	FRUN
6182.0	6455.1	L WASATCH
6457.0	6732.0	OCRK
6757.0	7032.3	U MESAVERDE
7877.0	8152.3	PERFMIN
8432.0	8707.3	KMVGAS
8632.0	8907.3	CMEC
		RLNS
		TD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
BHL	8632.0	-1253.3	-1341.0	1614427.100	2234542.800	39.489003	-108.212592	Circle (Radius: 50.0)

- plan hits target center



CASING DETAILS

TVD	MD	Name
1865.0	1930.4	9 5/8"



Terra Energy Partners, LLP

Garfield County, CO (Nad 83)

Acro Deep 1-27

WGV 314-27-697 - Slot WGV 314-27-697

OWB

Plan: Plan

Standard Planning Report

07 March, 2023



Database:	NN	Local Co-ordinate Reference:	Well WGV 314-27-697 - Slot WGV 314-27-697
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 314-27-697	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 314-27-697 - Slot WGV 314-27-697					
Well Position	+N/-S	5.8 ft	Northing:	1,615,639.900 usft	Latitude:	39.492444
	+E/-W	4.6 ft	Easting:	2,235,920.600 usft	Longitude:	-108.207841
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	226.94

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	
190.0	0.00	0.00	190.0	0.0	0.0	0.00	0.00	0.00	0.00	
788.8	17.96	226.94	779.0	-63.6	-68.0	3.00	3.00	0.00	226.94	
5,834.7	17.96	226.94	5,578.9	-1,126.2	-1,205.0	0.00	0.00	0.00	0.00	
7,032.3	0.00	0.00	6,757.0	-1,253.3	-1,341.0	1.50	-1.50	0.00	180.00	
8,907.3	0.00	0.00	8,632.0	-1,253.3	-1,341.0	0.00	0.00	0.00	0.00	WGV 314-27-697 BHI

Database:	NN	Local Co-ordinate Reference:	Well WGV 314-27-697 - Slot WGV 314-27-697
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 314-27-697	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
190.0	0.00	0.00	190.0	0.0	0.0	0.0	0.00	0.00	0.00	0.00
Start Build 3.00										
200.0	0.30	226.94	200.0	0.0	0.0	0.0	3.00	3.00	0.00	0.00
300.0	3.30	226.94	299.9	-2.2	-2.3	3.2	3.00	3.00	0.00	0.00
400.0	6.30	226.94	399.6	-7.9	-8.4	11.5	3.00	3.00	0.00	0.00
500.0	9.30	226.94	498.6	-17.1	-18.3	25.1	3.00	3.00	0.00	0.00
600.0	12.30	226.94	596.9	-29.9	-32.0	43.8	3.00	3.00	0.00	0.00
700.0	15.30	226.94	694.0	-46.2	-49.5	67.7	3.00	3.00	0.00	0.00
788.8	17.96	226.94	779.0	-63.6	-68.0	93.1	3.00	3.00	0.00	0.00
Start 5045.9 hold at 788.8 MD										
800.0	17.96	226.94	789.7	-65.9	-70.5	96.6	0.00	0.00	0.00	0.00
900.0	17.96	226.94	884.8	-87.0	-93.1	127.4	0.00	0.00	0.00	0.00
1,000.0	17.96	226.94	979.9	-108.0	-115.6	158.2	0.00	0.00	0.00	0.00
1,100.0	17.96	226.94	1,075.1	-129.1	-138.1	189.1	0.00	0.00	0.00	0.00
1,200.0	17.96	226.94	1,170.2	-150.2	-160.7	219.9	0.00	0.00	0.00	0.00
1,300.0	17.96	226.94	1,265.3	-171.2	-183.2	250.8	0.00	0.00	0.00	0.00
1,400.0	17.96	226.94	1,360.4	-192.3	-205.7	281.6	0.00	0.00	0.00	0.00
1,500.0	17.96	226.94	1,455.6	-213.3	-228.3	312.5	0.00	0.00	0.00	0.00
1,600.0	17.96	226.94	1,550.7	-234.4	-250.8	343.3	0.00	0.00	0.00	0.00
1,700.0	17.96	226.94	1,645.8	-255.5	-273.3	374.1	0.00	0.00	0.00	0.00
1,800.0	17.96	226.94	1,740.9	-276.5	-295.9	405.0	0.00	0.00	0.00	0.00
1,900.0	17.96	226.94	1,836.1	-297.6	-318.4	435.8	0.00	0.00	0.00	0.00
2,000.0	17.96	226.94	1,931.2	-318.6	-340.9	466.7	0.00	0.00	0.00	0.00
2,100.0	17.96	226.94	2,026.3	-339.7	-363.5	497.5	0.00	0.00	0.00	0.00
2,200.0	17.96	226.94	2,121.4	-360.8	-386.0	528.3	0.00	0.00	0.00	0.00
2,300.0	17.96	226.94	2,216.6	-381.8	-408.5	559.2	0.00	0.00	0.00	0.00
2,400.0	17.96	226.94	2,311.7	-402.9	-431.1	590.0	0.00	0.00	0.00	0.00
2,500.0	17.96	226.94	2,406.8	-423.9	-453.6	620.9	0.00	0.00	0.00	0.00
2,600.0	17.96	226.94	2,501.9	-445.0	-476.1	651.7	0.00	0.00	0.00	0.00
2,700.0	17.96	226.94	2,597.1	-466.1	-498.7	682.6	0.00	0.00	0.00	0.00
2,800.0	17.96	226.94	2,692.2	-487.1	-521.2	713.4	0.00	0.00	0.00	0.00
2,900.0	17.96	226.94	2,787.3	-508.2	-543.7	744.2	0.00	0.00	0.00	0.00
3,000.0	17.96	226.94	2,882.4	-529.2	-566.3	775.1	0.00	0.00	0.00	0.00
3,100.0	17.96	226.94	2,977.6	-550.3	-588.8	805.9	0.00	0.00	0.00	0.00
3,200.0	17.96	226.94	3,072.7	-571.3	-611.3	836.8	0.00	0.00	0.00	0.00
3,300.0	17.96	226.94	3,167.8	-592.4	-633.9	867.6	0.00	0.00	0.00	0.00
3,400.0	17.96	226.94	3,262.9	-613.5	-656.4	898.4	0.00	0.00	0.00	0.00
3,500.0	17.96	226.94	3,358.1	-634.5	-678.9	929.3	0.00	0.00	0.00	0.00
3,600.0	17.96	226.94	3,453.2	-655.6	-701.5	960.1	0.00	0.00	0.00	0.00
3,700.0	17.96	226.94	3,548.3	-676.6	-724.0	991.0	0.00	0.00	0.00	0.00
3,800.0	17.96	226.94	3,643.4	-697.7	-746.5	1,021.8	0.00	0.00	0.00	0.00
3,900.0	17.96	226.94	3,738.6	-718.8	-769.1	1,052.7	0.00	0.00	0.00	0.00
4,000.0	17.96	226.94	3,833.7	-739.8	-791.6	1,083.5	0.00	0.00	0.00	0.00
4,100.0	17.96	226.94	3,928.8	-760.9	-814.1	1,114.3	0.00	0.00	0.00	0.00
4,200.0	17.96	226.94	4,023.9	-781.9	-836.7	1,145.2	0.00	0.00	0.00	0.00
4,300.0	17.96	226.94	4,119.1	-803.0	-859.2	1,176.0	0.00	0.00	0.00	0.00
4,400.0	17.96	226.94	4,214.2	-824.1	-881.7	1,206.9	0.00	0.00	0.00	0.00
4,500.0	17.96	226.94	4,309.3	-845.1	-904.3	1,237.7	0.00	0.00	0.00	0.00
4,600.0	17.96	226.94	4,404.4	-866.2	-926.8	1,268.5	0.00	0.00	0.00	0.00
4,700.0	17.96	226.94	4,499.6	-887.2	-949.3	1,299.4	0.00	0.00	0.00	0.00
4,800.0	17.96	226.94	4,594.7	-908.3	-971.9	1,330.2	0.00	0.00	0.00	0.00

Database:	NN	Local Co-ordinate Reference:	Well WGV 314-27-697 - Slot WGV 314-27-697
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 314-27-697	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	17.96	226.94	4,689.8	-929.3	-994.4	1,361.1	0.00	0.00	0.00	
5,000.0	17.96	226.94	4,784.9	-950.4	-1,016.9	1,391.9	0.00	0.00	0.00	
5,100.0	17.96	226.94	4,880.1	-971.5	-1,039.5	1,422.8	0.00	0.00	0.00	
5,200.0	17.96	226.94	4,975.2	-992.5	-1,062.0	1,453.6	0.00	0.00	0.00	
5,300.0	17.96	226.94	5,070.3	-1,013.6	-1,084.5	1,484.4	0.00	0.00	0.00	
5,400.0	17.96	226.94	5,165.4	-1,034.6	-1,107.1	1,515.3	0.00	0.00	0.00	
5,500.0	17.96	226.94	5,260.6	-1,055.7	-1,129.6	1,546.1	0.00	0.00	0.00	
5,600.0	17.96	226.94	5,355.7	-1,076.8	-1,152.1	1,577.0	0.00	0.00	0.00	
5,700.0	17.96	226.94	5,450.8	-1,097.8	-1,174.7	1,607.8	0.00	0.00	0.00	
5,800.0	17.96	226.94	5,545.9	-1,118.9	-1,197.2	1,638.6	0.00	0.00	0.00	
5,834.7	17.96	226.94	5,578.9	-1,126.2	-1,205.0	1,649.3	0.00	0.00	0.00	
Start Drop -1.50										
5,900.0	16.98	226.94	5,641.2	-1,139.6	-1,219.3	1,669.0	1.50	-1.50	0.00	
6,000.0	15.48	226.94	5,737.3	-1,158.7	-1,239.8	1,696.9	1.50	-1.50	0.00	
6,100.0	13.98	226.94	5,834.0	-1,176.0	-1,258.3	1,722.3	1.50	-1.50	0.00	
6,200.0	12.48	226.94	5,931.3	-1,191.7	-1,275.1	1,745.2	1.50	-1.50	0.00	
6,300.0	10.98	226.94	6,029.2	-1,205.5	-1,289.9	1,765.6	1.50	-1.50	0.00	
6,400.0	9.48	226.94	6,127.6	-1,217.7	-1,302.9	1,783.3	1.50	-1.50	0.00	
6,500.0	7.98	226.94	6,226.5	-1,228.0	-1,314.0	1,798.5	1.50	-1.50	0.00	
6,600.0	6.48	226.94	6,325.7	-1,236.6	-1,323.2	1,811.1	1.50	-1.50	0.00	
6,700.0	4.98	226.94	6,425.2	-1,243.5	-1,330.5	1,821.1	1.50	-1.50	0.00	
6,800.0	3.48	226.94	6,524.9	-1,248.5	-1,335.9	1,828.5	1.50	-1.50	0.00	
6,900.0	1.98	226.94	6,624.8	-1,251.8	-1,339.4	1,833.3	1.50	-1.50	0.00	
7,000.0	0.48	226.94	6,724.7	-1,253.2	-1,340.9	1,835.4	1.50	-1.50	0.00	
7,032.3	0.00	0.00	6,757.0	-1,253.3	-1,341.0	1,835.5	1.50	-1.50	0.00	
Start 1875.0 hold at 7032.3 MD										
7,100.0	0.00	0.00	6,824.7	-1,253.3	-1,341.0	1,835.5	0.00	0.00	0.00	
7,200.0	0.00	0.00	6,924.7	-1,253.3	-1,341.0	1,835.5	0.00	0.00	0.00	
7,300.0	0.00	0.00	7,024.7	-1,253.3	-1,341.0	1,835.5	0.00	0.00	0.00	
7,400.0	0.00	0.00	7,124.7	-1,253.3	-1,341.0	1,835.5	0.00	0.00	0.00	
7,500.0	0.00	0.00	7,224.7	-1,253.3	-1,341.0	1,835.5	0.00	0.00	0.00	
7,600.0	0.00	0.00	7,324.7	-1,253.3	-1,341.0	1,835.5	0.00	0.00	0.00	
7,700.0	0.00	0.00	7,424.7	-1,253.3	-1,341.0	1,835.5	0.00	0.00	0.00	
7,800.0	0.00	0.00	7,524.7	-1,253.3	-1,341.0	1,835.5	0.00	0.00	0.00	
7,900.0	0.00	0.00	7,624.7	-1,253.3	-1,341.0	1,835.5	0.00	0.00	0.00	
8,000.0	0.00	0.00	7,724.7	-1,253.3	-1,341.0	1,835.5	0.00	0.00	0.00	
8,100.0	0.00	0.00	7,824.7	-1,253.3	-1,341.0	1,835.5	0.00	0.00	0.00	
8,200.0	0.00	0.00	7,924.7	-1,253.3	-1,341.0	1,835.5	0.00	0.00	0.00	
8,300.0	0.00	0.00	8,024.7	-1,253.3	-1,341.0	1,835.5	0.00	0.00	0.00	
8,400.0	0.00	0.00	8,124.7	-1,253.3	-1,341.0	1,835.5	0.00	0.00	0.00	
8,500.0	0.00	0.00	8,224.7	-1,253.3	-1,341.0	1,835.5	0.00	0.00	0.00	
8,600.0	0.00	0.00	8,324.7	-1,253.3	-1,341.0	1,835.5	0.00	0.00	0.00	
8,700.0	0.00	0.00	8,424.7	-1,253.3	-1,341.0	1,835.5	0.00	0.00	0.00	
8,800.0	0.00	0.00	8,524.7	-1,253.3	-1,341.0	1,835.5	0.00	0.00	0.00	
8,900.0	0.00	0.00	8,624.7	-1,253.3	-1,341.0	1,835.5	0.00	0.00	0.00	
8,907.3	0.00	0.00	8,632.0	-1,253.3	-1,341.0	1,835.5	0.00	0.00	0.00	
TD at 8907.3										

Database:	NN	Local Co-ordinate Reference:	Well WGV 314-27-697 - Slot WGV 314-27-697
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 314-27-697	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 314-27-697 BHL - plan hits target center - Circle (radius 50.0)	0.00	0.00	8,632.0	-1,253.3	-1,341.0	1,614,427.100	2,234,542.800	39.489003	-108.212593

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
1,930.4	1,865.0	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		
821.3	810.0	GRRV MGNV		0.00		
1,270.2	1,237.0	ANVIL POINTS		0.00		
1,720.2	1,665.0	GARDEN GULCH		0.00		
2,169.0	2,092.0	DOUGLAS CREEK		0.00		
2,593.8	2,496.0	ORANGE MARKER		0.00		
2,918.6	2,805.0	WSTC		0.00		
4,513.3	4,322.0	G SAND		0.00		
4,723.6	4,522.0	FRUN		0.00		
5,249.2	5,022.0	L WASATCH		0.00		
5,994.5	5,732.0	OCRK		0.00		
6,455.1	6,182.0	U MESAVERDE		0.00		
6,732.0	6,457.0	PERFMIN		0.00		
7,032.3	6,757.0	KMVGAS		0.00		
8,152.3	7,877.0	CMEO		0.00		
8,707.3	8,432.0	RLNS		0.00		
8,907.3	8,632.0	TD		0.00		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
190.0	190.0	0.0	0.0	Start Build 3.00	
788.8	779.0	-63.6	-68.0	Start 5045.9 hold at 788.8 MD	
5,834.7	5,578.9	-1,126.2	-1,205.0	Start Drop -1.50	
7,032.3	6,757.0	-1,253.3	-1,341.0	Start 1875.0 hold at 7032.3 MD	
8,907.3	8,632.0	-1,253.3	-1,341.0	TD at 8907.3	