

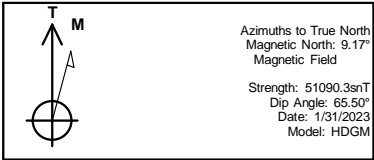


REFERENCE INFORMATION

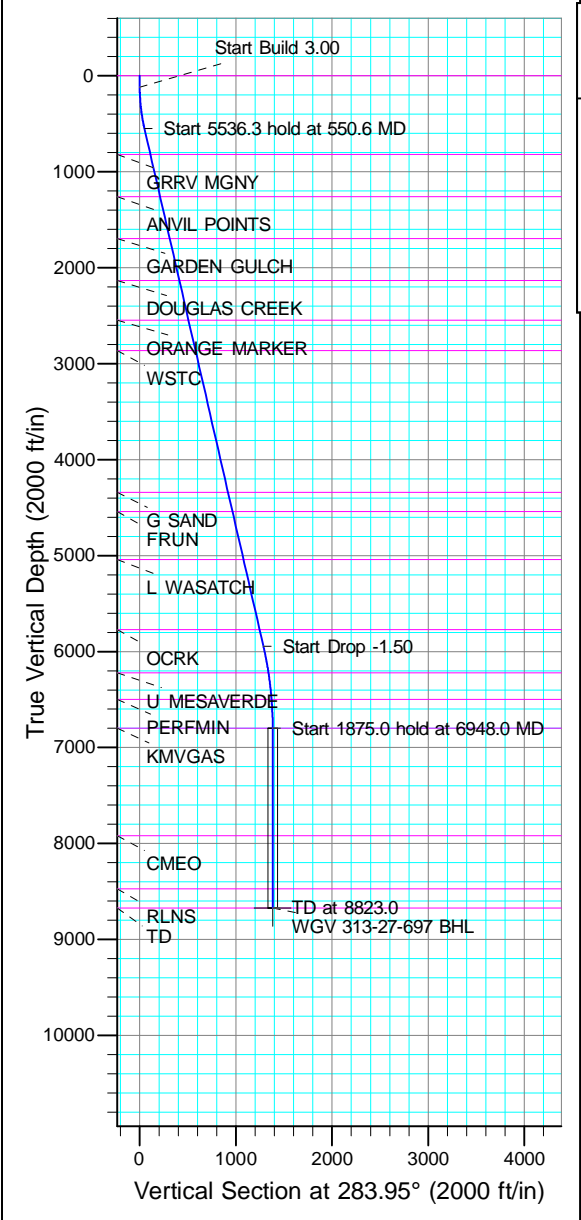
Co-ordinate (N/E) Reference: Well WGV 313-27-697 - Slot WGV 313-27-697, True North
Vertical (TVD) Reference: RKB @ 30' @ 8412.0ft
Section (VS) Reference: Slot - WGV 313-27-697(0.0N, 0.0E)
Measured Depth Reference: RKB @ 30' @ 8412.0ft
Calculation Method: Minimum Curvature



Project: Garfield County, CO (Nad 83)
Site: Acro Deep 1-27
Well: WGV 313-27-697
Wellbore: OWB
Design: Plan



WELL DETAILS: WGV 313-27-697						
	Ground Level:	8382.0				
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	SL
0/0	0.0	1615657.900	2235922.700	39.492494	-108.207835	WGV 313-27-697

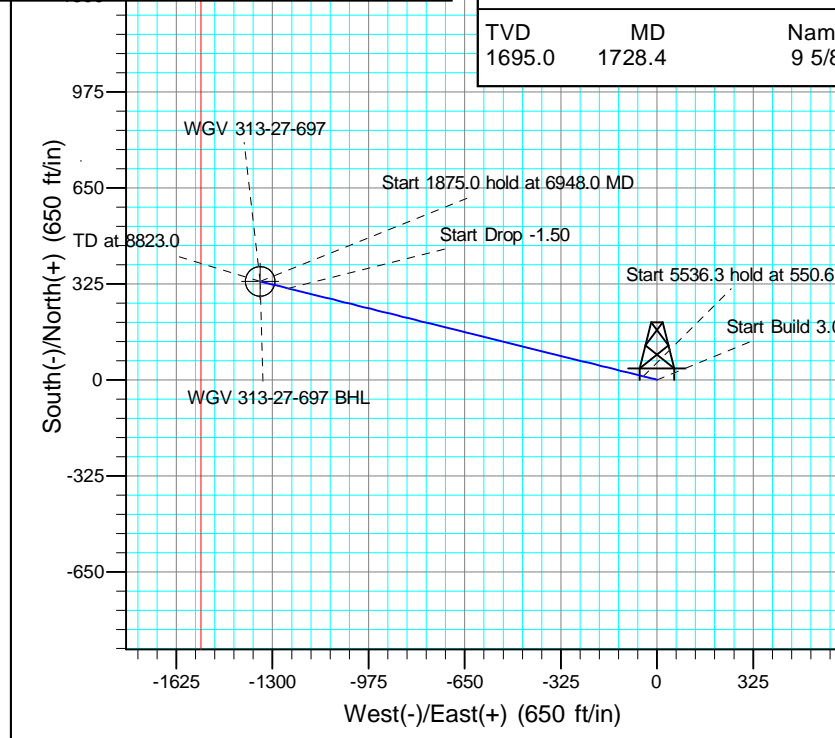
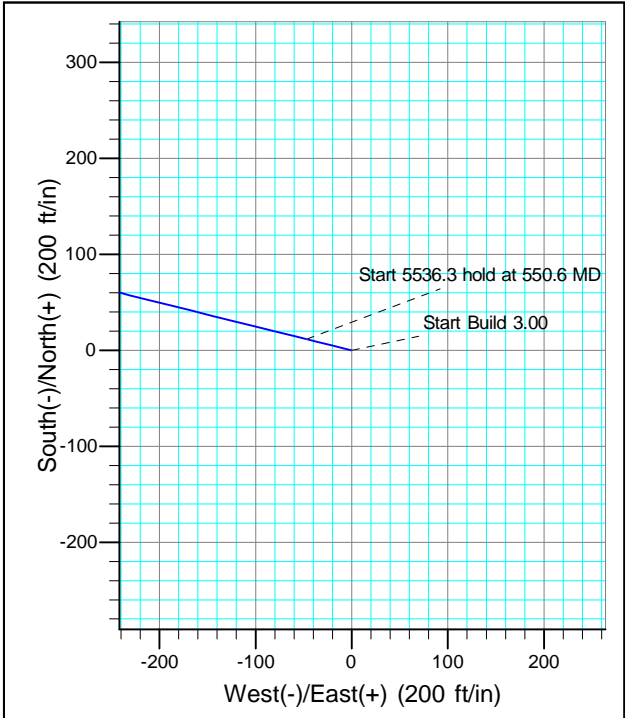


SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
120.0	0.00	0.00	120.0	0.0	0.0	0.00	0.00	0.0	
550.6	12.92	283.95	546.9	11.7	-46.9	3.00	283.95	48.3	Start Build 3.00
6086.9	12.92	283.95	5943.1	310.1	-1248.0	0.00	0.00	1286.0	Start 5536.3 hold at 550.6 MD
6948.0	0.00	0.00	6797.0	333.4	-1341.8	1.50	180.00	1382.6	Start Drop -1.50
8823.0	0.00	0.00	8672.0	333.4	-1341.8	0.00	0.00	1382.6	Start 1875.0 hold at 6948.0 MD
									TD at 8823.0

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
BHL	8672.0	333.4	-1341.8	1616031.100	2234591.400	39.493409	-108.212590
- plan hits target center							

FORMATION TOP DETAILS		
VDPath	MDPath	Formation
0.0	0.0	
819.0	829.7	GRRV MGNY
1257.0	1279.1	ANVIL POINTS
1695.0	1728.4	GARDEN GULCH
2133.0	2177.8	DOUGLAS CREEK
2546.0	2601.5	ORANGE MARKER
2862.0	2925.7	WSTC
4342.0	4444.2	G SAND
4542.0	4649.4	FRUN
5042.0	5162.3	L WASATCH
5772.0	5911.3	OCRK
6222.0	6370.8	U MESAVERDE
6497.0	6647.7	PERFMIN
6797.0	6948.0	KMGAS
7917.0	8068.0	CMEC
8472.0	8623.0	RLNS
8672.0	8823.0	TD

CASING DETAILS		
TVD	MD	Name
1695.0	1728.4	9 5/8"





Terra Energy Partners, LLP

Garfield County, CO (Nad 83)

Acro Deep 1-27

WGV 313-27-697 - Slot WGV 313-27-697

OWB

Plan: Plan

Standard Planning Report

07 March, 2023



Database:	NN	Local Co-ordinate Reference:	Well WGV 313-27-697 - Slot WGV 313-27-697
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 313-27-697	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 313-27-697 - Slot WGV 313-27-697				
Well Position	+N/-S	23.9 ft	Northing:	1,615,657.900 usft	Latitude:	39.492494
	+E/-W	6.2 ft	Easting:	2,235,922.700 usft	Longitude:	-108.207836
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	283.95

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	
550.6	12.92	283.95	546.9	11.7	-46.9	3.00	3.00	0.00	283.95	
6,086.9	12.92	283.95	5,943.1	310.1	-1,248.0	0.00	0.00	0.00	0.00	
6,948.0	0.00	0.00	6,797.0	333.4	-1,341.8	1.50	-1.50	0.00	180.00	
8,823.0	0.00	0.00	8,672.0	333.4	-1,341.8	0.00	0.00	0.00	0.00	WGV 313-27-697 BHI

Database:	NN	Local Co-ordinate Reference:	Well WGV 313-27-697 - Slot WGV 313-27-697
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 313-27-697	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	283.95	200.0	0.4	-1.6	1.7	3.00	3.00	0.00
300.0	5.40	283.95	299.7	2.0	-8.2	8.5	3.00	3.00	0.00
400.0	8.40	283.95	399.0	4.9	-19.9	20.5	3.00	3.00	0.00
500.0	11.40	283.95	497.5	9.1	-36.6	37.7	3.00	3.00	0.00
550.6	12.92	283.95	546.9	11.7	-46.9	48.3	3.00	3.00	0.00
Start 5536.3 hold at 550.6 MD									
600.0	12.92	283.95	595.1	14.3	-57.6	59.4	0.00	0.00	0.00
700.0	12.92	283.95	692.6	19.7	-79.3	81.7	0.00	0.00	0.00
800.0	12.92	283.95	790.0	25.1	-101.0	104.1	0.00	0.00	0.00
900.0	12.92	283.95	887.5	30.5	-122.7	126.4	0.00	0.00	0.00
1,000.0	12.92	283.95	985.0	35.9	-144.4	148.8	0.00	0.00	0.00
1,100.0	12.92	283.95	1,082.5	41.3	-166.1	171.2	0.00	0.00	0.00
1,200.0	12.92	283.95	1,179.9	46.7	-187.8	193.5	0.00	0.00	0.00
1,300.0	12.92	283.95	1,277.4	52.0	-209.5	215.9	0.00	0.00	0.00
1,400.0	12.92	283.95	1,374.9	57.4	-231.2	238.2	0.00	0.00	0.00
1,500.0	12.92	283.95	1,472.3	62.8	-252.9	260.6	0.00	0.00	0.00
1,600.0	12.92	283.95	1,569.8	68.2	-274.6	282.9	0.00	0.00	0.00
1,700.0	12.92	283.95	1,667.3	73.6	-296.3	305.3	0.00	0.00	0.00
1,800.0	12.92	283.95	1,764.7	79.0	-318.0	327.6	0.00	0.00	0.00
1,900.0	12.92	283.95	1,862.2	84.4	-339.7	350.0	0.00	0.00	0.00
2,000.0	12.92	283.95	1,959.7	89.8	-361.4	372.3	0.00	0.00	0.00
2,100.0	12.92	283.95	2,057.2	95.2	-383.1	394.7	0.00	0.00	0.00
2,200.0	12.92	283.95	2,154.6	100.6	-404.8	417.1	0.00	0.00	0.00
2,300.0	12.92	283.95	2,252.1	105.9	-426.4	439.4	0.00	0.00	0.00
2,400.0	12.92	283.95	2,349.6	111.3	-448.1	461.8	0.00	0.00	0.00
2,500.0	12.92	283.95	2,447.0	116.7	-469.8	484.1	0.00	0.00	0.00
2,600.0	12.92	283.95	2,544.5	122.1	-491.5	506.5	0.00	0.00	0.00
2,700.0	12.92	283.95	2,642.0	127.5	-513.2	528.8	0.00	0.00	0.00
2,800.0	12.92	283.95	2,739.4	132.9	-534.9	551.2	0.00	0.00	0.00
2,900.0	12.92	283.95	2,836.9	138.3	-556.6	573.5	0.00	0.00	0.00
3,000.0	12.92	283.95	2,934.4	143.7	-578.3	595.9	0.00	0.00	0.00
3,100.0	12.92	283.95	3,031.8	149.1	-600.0	618.3	0.00	0.00	0.00
3,200.0	12.92	283.95	3,129.3	154.5	-621.7	640.6	0.00	0.00	0.00
3,300.0	12.92	283.95	3,226.8	159.8	-643.4	663.0	0.00	0.00	0.00
3,400.0	12.92	283.95	3,324.3	165.2	-665.1	685.3	0.00	0.00	0.00
3,500.0	12.92	283.95	3,421.7	170.6	-686.8	707.7	0.00	0.00	0.00
3,600.0	12.92	283.95	3,519.2	176.0	-708.5	730.0	0.00	0.00	0.00
3,700.0	12.92	283.95	3,616.7	181.4	-730.2	752.4	0.00	0.00	0.00
3,800.0	12.92	283.95	3,714.1	186.8	-751.9	774.7	0.00	0.00	0.00
3,900.0	12.92	283.95	3,811.6	192.2	-773.6	797.1	0.00	0.00	0.00
4,000.0	12.92	283.95	3,909.1	197.6	-795.3	819.4	0.00	0.00	0.00
4,100.0	12.92	283.95	4,006.5	203.0	-817.0	841.8	0.00	0.00	0.00
4,200.0	12.92	283.95	4,104.0	208.4	-838.7	864.2	0.00	0.00	0.00
4,300.0	12.92	283.95	4,201.5	213.7	-860.4	886.5	0.00	0.00	0.00
4,400.0	12.92	283.95	4,298.9	219.1	-882.1	908.9	0.00	0.00	0.00
4,500.0	12.92	283.95	4,396.4	224.5	-903.7	931.2	0.00	0.00	0.00
4,600.0	12.92	283.95	4,493.9	229.9	-925.4	953.6	0.00	0.00	0.00
4,700.0	12.92	283.95	4,591.4	235.3	-947.1	975.9	0.00	0.00	0.00
4,800.0	12.92	283.95	4,688.8	240.7	-968.8	998.3	0.00	0.00	0.00

Database:	NN	Local Co-ordinate Reference:	Well WGV 313-27-697 - Slot WGV 313-27-697
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 313-27-697	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	12.92	283.95	4,786.3	246.1	-990.5	1,020.6	0.00	0.00	0.00
5,000.0	12.92	283.95	4,883.8	251.5	-1,012.2	1,043.0	0.00	0.00	0.00
5,100.0	12.92	283.95	4,981.2	256.9	-1,033.9	1,065.3	0.00	0.00	0.00
5,200.0	12.92	283.95	5,078.7	262.3	-1,055.6	1,087.7	0.00	0.00	0.00
5,300.0	12.92	283.95	5,176.2	267.6	-1,077.3	1,110.1	0.00	0.00	0.00
5,400.0	12.92	283.95	5,273.6	273.0	-1,099.0	1,132.4	0.00	0.00	0.00
5,500.0	12.92	283.95	5,371.1	278.4	-1,120.7	1,154.8	0.00	0.00	0.00
5,600.0	12.92	283.95	5,468.6	283.8	-1,142.4	1,177.1	0.00	0.00	0.00
5,700.0	12.92	283.95	5,566.0	289.2	-1,164.1	1,199.5	0.00	0.00	0.00
5,800.0	12.92	283.95	5,663.5	294.6	-1,185.8	1,221.8	0.00	0.00	0.00
5,900.0	12.92	283.95	5,761.0	300.0	-1,207.5	1,244.2	0.00	0.00	0.00
6,000.0	12.92	283.95	5,858.5	305.4	-1,229.2	1,266.5	0.00	0.00	0.00
6,086.9	12.92	283.95	5,943.1	310.1	-1,248.0	1,286.0	0.00	0.00	0.00
Start Drop -1.50									
6,100.0	12.72	283.95	5,955.9	310.8	-1,250.9	1,288.9	1.50	-1.50	0.00
6,200.0	11.22	283.95	6,053.7	315.8	-1,271.0	1,309.6	1.50	-1.50	0.00
6,300.0	9.72	283.95	6,152.1	320.1	-1,288.6	1,327.8	1.50	-1.50	0.00
6,400.0	8.22	283.95	6,250.9	323.9	-1,303.7	1,343.4	1.50	-1.50	0.00
6,500.0	6.72	283.95	6,350.0	327.0	-1,316.4	1,356.4	1.50	-1.50	0.00
6,600.0	5.22	283.95	6,449.5	329.5	-1,326.5	1,366.8	1.50	-1.50	0.00
6,700.0	3.72	283.95	6,549.2	331.4	-1,334.0	1,374.6	1.50	-1.50	0.00
6,800.0	2.22	283.95	6,649.0	332.7	-1,339.1	1,379.8	1.50	-1.50	0.00
6,900.0	0.72	283.95	6,749.0	333.3	-1,341.5	1,382.3	1.50	-1.50	0.00
6,948.0	0.00	0.00	6,797.0	333.4	-1,341.8	1,382.6	1.50	-1.50	0.00
Start 1875.0 hold at 6948.0 MD									
7,000.0	0.00	0.00	6,849.0	333.4	-1,341.8	1,382.6	0.00	0.00	0.00
7,100.0	0.00	0.00	6,949.0	333.4	-1,341.8	1,382.6	0.00	0.00	0.00
7,200.0	0.00	0.00	7,049.0	333.4	-1,341.8	1,382.6	0.00	0.00	0.00
7,300.0	0.00	0.00	7,149.0	333.4	-1,341.8	1,382.6	0.00	0.00	0.00
7,400.0	0.00	0.00	7,249.0	333.4	-1,341.8	1,382.6	0.00	0.00	0.00
7,500.0	0.00	0.00	7,349.0	333.4	-1,341.8	1,382.6	0.00	0.00	0.00
7,600.0	0.00	0.00	7,449.0	333.4	-1,341.8	1,382.6	0.00	0.00	0.00
7,700.0	0.00	0.00	7,549.0	333.4	-1,341.8	1,382.6	0.00	0.00	0.00
7,800.0	0.00	0.00	7,649.0	333.4	-1,341.8	1,382.6	0.00	0.00	0.00
7,900.0	0.00	0.00	7,749.0	333.4	-1,341.8	1,382.6	0.00	0.00	0.00
8,000.0	0.00	0.00	7,849.0	333.4	-1,341.8	1,382.6	0.00	0.00	0.00
8,100.0	0.00	0.00	7,949.0	333.4	-1,341.8	1,382.6	0.00	0.00	0.00
8,200.0	0.00	0.00	8,049.0	333.4	-1,341.8	1,382.6	0.00	0.00	0.00
8,300.0	0.00	0.00	8,149.0	333.4	-1,341.8	1,382.6	0.00	0.00	0.00
8,400.0	0.00	0.00	8,249.0	333.4	-1,341.8	1,382.6	0.00	0.00	0.00
8,500.0	0.00	0.00	8,349.0	333.4	-1,341.8	1,382.6	0.00	0.00	0.00
8,600.0	0.00	0.00	8,449.0	333.4	-1,341.8	1,382.6	0.00	0.00	0.00
8,700.0	0.00	0.00	8,549.0	333.4	-1,341.8	1,382.6	0.00	0.00	0.00
8,800.0	0.00	0.00	8,649.0	333.4	-1,341.8	1,382.6	0.00	0.00	0.00
8,823.0	0.00	0.00	8,672.0	333.4	-1,341.8	1,382.6	0.00	0.00	0.00
TD at 8823.0									

Database:	NN	Local Co-ordinate Reference:	Well WGV 313-27-697 - Slot WGV 313-27-697
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 313-27-697	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
- hit/miss target									
- Shape									
WGV 313-27-697 BHL	0.00	0.00	8,672.0	333.4	-1,341.8	1,616,031.100	2,234,591.400	39.493409	-108.212590
- plan hits target center									
- Circle (radius 50.0)									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
1,728.4	1,695.0	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		
829.7	819.0	GRRV MGNY		0.00		
1,279.1	1,257.0	ANVIL POINTS		0.00		
1,728.4	1,695.0	GARDEN GULCH		0.00		
2,177.8	2,133.0	DOUGLAS CREEK		0.00		
2,601.5	2,546.0	ORANGE MARKER		0.00		
2,925.7	2,862.0	WSTC		0.00		
4,444.2	4,342.0	G SAND		0.00		
4,649.4	4,542.0	FRUN		0.00		
5,162.3	5,042.0	L WASATCH		0.00		
5,911.3	5,772.0	OCRK		0.00		
6,370.8	6,222.0	U MESAVERDE		0.00		
6,647.7	6,497.0	PERFMIN		0.00		
6,948.0	6,797.0	KMVGAS		0.00		
8,068.0	7,917.0	CME0		0.00		
8,623.0	8,472.0	RLNS		0.00		
8,823.0	8,672.0	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	
550.6	546.9	11.7	-46.9	Start 5536.3 hold at 550.6 MD	
6,086.9	5,943.1	310.1	-1,248.0	Start Drop -1.50	
6,948.0	6,797.0	333.4	-1,341.8	Start 1875.0 hold at 6948.0 MD	
8,823.0	8,672.0	333.4	-1,341.8	TD at 8823.0	