



REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well TR 11-28-597 - Slot TR 11-28-597, True North
Vertical (TVD) Reference: RKB @ 30' @ 8513.0ft
Section (VS) Reference: Slot - TR 11-28-597(0.0N, 0.0E)
Measured Depth Reference: RKB @ 30' @ 8513.0ft
Calculation Method: Minimum Curvature

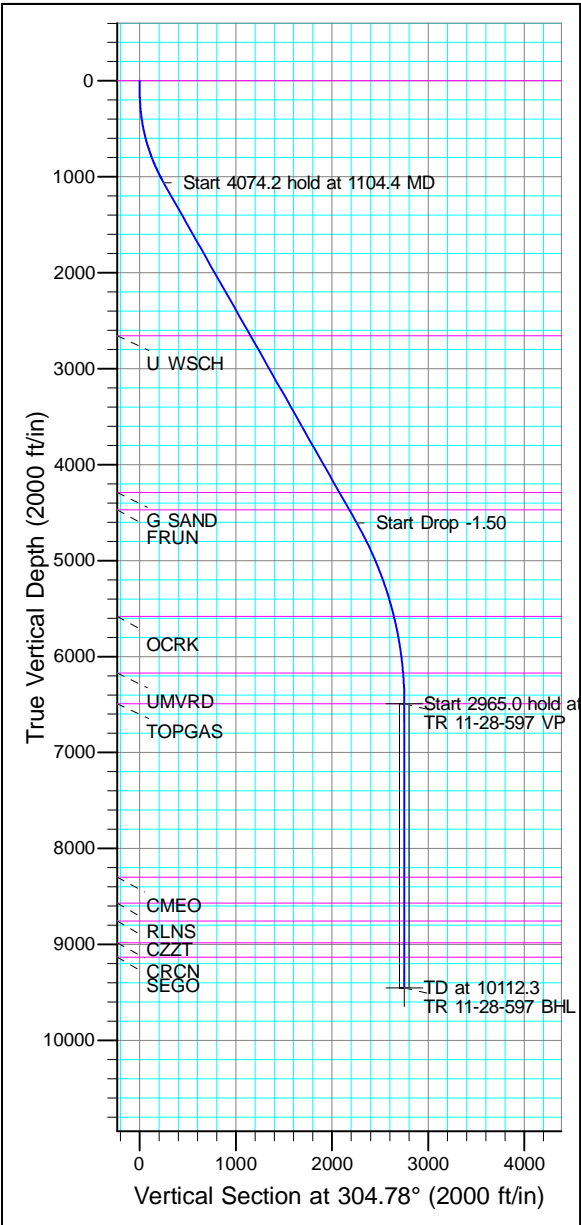


Project: Garfield County, CO (Nad 83)
Site: TR 32-28-597 Pad
Well: TR 11-28-597
Wellbore: OWB
Design: Plan

Azimuths to True North
Magnetic North: 9.23°
Magnetic Field

Strength: 51011.5nT
Dip Angle: 65.58°
Date: 6/5/2023
Model: HDGM

WELL DETAILS: TR 11-28-597						
	Ground Level:	8483.0				
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	SL
0/0	0.0	1650731.100	2216041.700	39.587091	-108.282054	TR 11-28-59

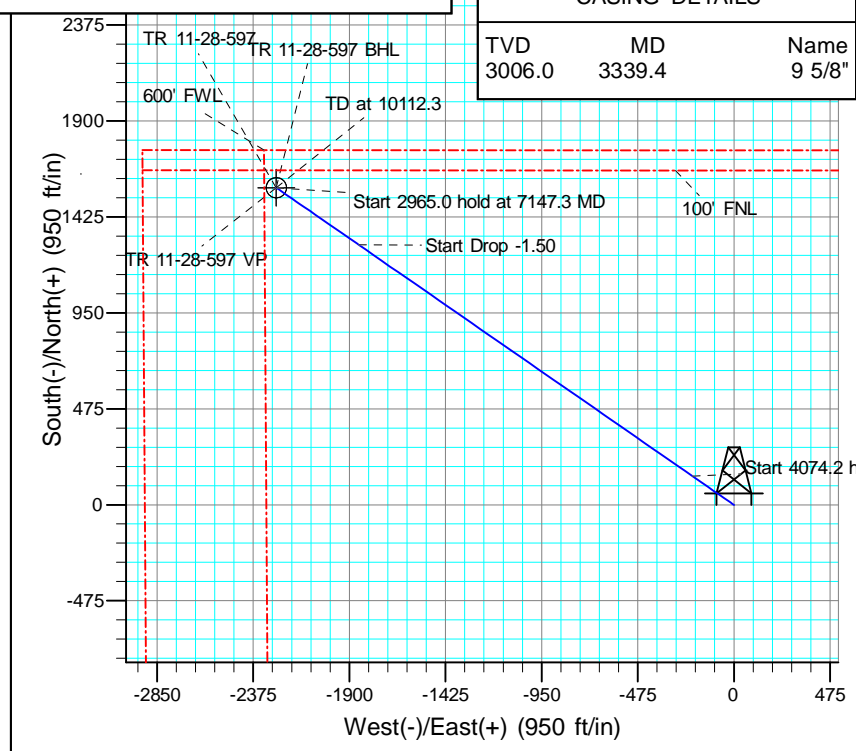
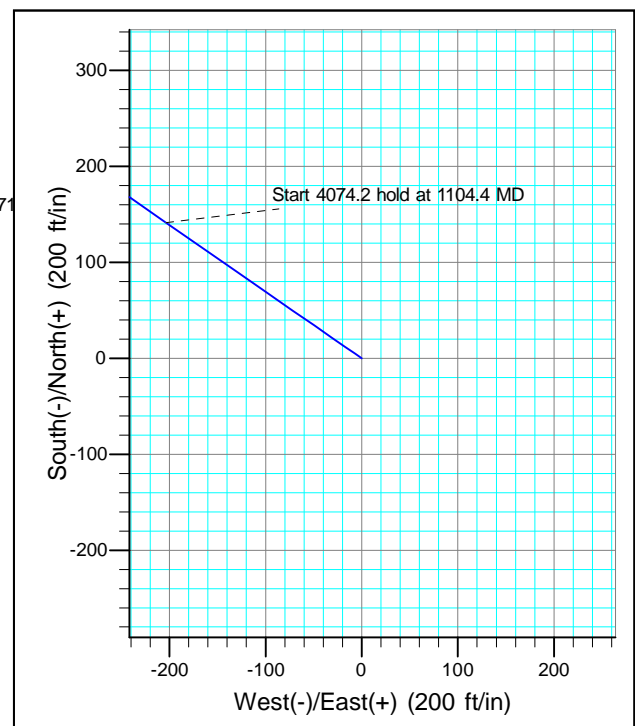


ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation	
120.0	120.0	0.00	0.00	0.0	0.0	0.0	0.0	Start Build 3.00	
1061.4	1104.4	29.53	304.78	141.5	-203.8	248.1	248.1	Start 4074.2 hold at 1104.4 MD	
4606.3	5178.6	29.53	304.78	1287.1	-1853.2	2256.3	2256.3	Start Drop -1.50	
6489.0	7147.3	0.00	0.00	1570.1	-2260.7	2752.5	2752.5	Start 2965.0 hold at 7147.3 MD	
9454.0	10112.3	0.00	0.00	1570.1	-2260.7	2752.5	2752.5	TD at 10112.3	

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
0.0	0.0	GRRV
2656.0	2937.1	U WSCH
4290.0	4815.1	G SAND
4469.0	5020.8	FRUN
5582.0	6231.6	OCRK
6172.0	6829.9	UMVRD
6489.0	7147.3	TOPGAS
8298.0	8956.3	CMEO
8568.0	9226.3	RLNS
8755.0	9413.3	CZZT
8983.0	9641.3	CRCN
9133.0	9791.3	SEGO

DESIGN TARGET DETAILS									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape	
VP	6489.0	1570.1	-2260.7	1652369.700	2213830.100	39.591401	-108.290076	Point	
- plan hits target center									
BHL	9454.0	1570.1	-2260.7	1652369.700	2213830.100	39.591401	-108.290076	Circle (Radius: 50.0)	
- plan hits target center									

CASING DETAILS		
TVD	MD	Name
3006.0	3339.4	9 5/8"





Terra Energy Partners, LLP

Garfield County, CO (Nad 83)

TR 32-28-597 Pad

TR 11-28-597 - Slot TR 11-28-597

OWB

Plan: Plan

Standard Planning Report

13 June, 2023



Database:	NN	Local Co-ordinate Reference:	Well TR 11-28-597 - Slot TR 11-28-597
Company:	Terra Energy Partners, LLP	TVD Reference:	RKB @ 30' @ 8513.0ft
Project:	Garfield County, CO (Nad 83)	MD Reference:	RKB @ 30' @ 8513.0ft
Site:	TR 32-28-597 Pad	North Reference:	True
Well:	TR 11-28-597	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	TR 32-28-597 Pad, Sec 28, T5S, R97W			
Site Position:		Northing:	1,650,709.300 usft	Latitude: 39.587032
From:	Map	Easting:	2,216,053.200 usft	Longitude: -108.282011
Position Uncertainty:	0.0 ft	Slot Radius:	13-3/16 "	Grid Convergence: -1.75 °

Well	TR 11-28-597 - Slot TR 11-28-597					
Well Position	+N/-S	21.4 ft	Northing:	1,650,731.100 usft	Latitude:	39.587091
	+E/-W	-12.2 ft	Easting:	2,216,041.700 usft	Longitude:	-108.282054
Position Uncertainty		0.0 ft	Wellhead Elevation:	8,513.0 ft	Ground Level:	8,483.0 ft

Wellbore	OWB				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	6/5/2023	9.23	65.58	51,012

Design	Plan			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	304.78

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	
1,104.4	29.53	304.78	1,061.4	141.5	-203.8	3.00	3.00	0.00	304.78	
5,178.6	29.53	304.78	4,606.3	1,287.1	-1,853.2	0.00	0.00	0.00	0.00	
7,147.3	0.00	0.00	6,489.0	1,570.1	-2,260.7	1.50	-1.50	0.00	180.00	
10,112.3	0.00	0.00	9,454.0	1,570.1	-2,260.7	0.00	0.00	0.00	0.00	TR 11-28-597 BHL

Database:	NN	Local Co-ordinate Reference:	Well TR 11-28-597 - Slot TR 11-28-597
Company:	Terra Energy Partners, LLP	TVD Reference:	RKB @ 30' @ 8513.0ft
Project:	Garfield County, CO (Nad 83)	MD Reference:	RKB @ 30' @ 8513.0ft
Site:	TR 32-28-597 Pad	North Reference:	True
Well:	TR 11-28-597	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
200.0	2.40	304.78	200.0	1.0	-1.4	1.7	3.00	3.00	0.00
300.0	5.40	304.78	299.7	4.8	-7.0	8.5	3.00	3.00	0.00
400.0	8.40	304.78	399.0	11.7	-16.8	20.5	3.00	3.00	0.00
500.0	11.40	304.78	497.5	21.5	-30.9	37.7	3.00	3.00	0.00
600.0	14.40	304.78	595.0	34.2	-49.3	60.0	3.00	3.00	0.00
700.0	17.40	304.78	691.1	49.9	-71.8	87.4	3.00	3.00	0.00
800.0	20.40	304.78	785.7	68.3	-98.4	119.8	3.00	3.00	0.00
900.0	23.40	304.78	878.5	89.6	-129.0	157.1	3.00	3.00	0.00
1,000.0	26.40	304.78	969.2	113.6	-163.6	199.2	3.00	3.00	0.00
1,100.0	29.40	304.78	1,057.6	140.3	-202.0	246.0	3.00	3.00	0.00
1,104.4	29.53	304.78	1,061.4	141.5	-203.8	248.1	3.00	3.00	0.00
1,200.0	29.53	304.78	1,144.6	168.4	-242.5	295.2	0.00	0.00	0.00
1,300.0	29.53	304.78	1,231.6	196.5	-283.0	344.5	0.00	0.00	0.00
1,400.0	29.53	304.78	1,318.6	224.7	-323.5	393.8	0.00	0.00	0.00
1,500.0	29.53	304.78	1,405.6	252.8	-364.0	443.1	0.00	0.00	0.00
1,600.0	29.53	304.78	1,492.6	280.9	-404.4	492.4	0.00	0.00	0.00
1,700.0	29.53	304.78	1,579.6	309.0	-444.9	541.7	0.00	0.00	0.00
1,800.0	29.53	304.78	1,666.6	337.1	-485.4	591.0	0.00	0.00	0.00
1,900.0	29.53	304.78	1,753.6	365.2	-525.9	640.3	0.00	0.00	0.00
2,000.0	29.53	304.78	1,840.6	393.4	-566.4	689.6	0.00	0.00	0.00
2,100.0	29.53	304.78	1,927.6	421.5	-606.9	738.9	0.00	0.00	0.00
2,200.0	29.53	304.78	2,014.7	449.6	-647.3	788.1	0.00	0.00	0.00
2,300.0	29.53	304.78	2,101.7	477.7	-687.8	837.4	0.00	0.00	0.00
2,400.0	29.53	304.78	2,188.7	505.8	-728.3	886.7	0.00	0.00	0.00
2,500.0	29.53	304.78	2,275.7	533.9	-768.8	936.0	0.00	0.00	0.00
2,600.0	29.53	304.78	2,362.7	562.1	-809.3	985.3	0.00	0.00	0.00
2,700.0	29.53	304.78	2,449.7	590.2	-849.8	1,034.6	0.00	0.00	0.00
2,800.0	29.53	304.78	2,536.7	618.3	-890.2	1,083.9	0.00	0.00	0.00
2,900.0	29.53	304.78	2,623.7	646.4	-930.7	1,133.2	0.00	0.00	0.00
3,000.0	29.53	304.78	2,710.7	674.5	-971.2	1,182.5	0.00	0.00	0.00
3,100.0	29.53	304.78	2,797.7	702.6	-1,011.7	1,231.7	0.00	0.00	0.00
3,200.0	29.53	304.78	2,884.7	730.7	-1,052.2	1,281.0	0.00	0.00	0.00
3,300.0	29.53	304.78	2,971.8	758.9	-1,092.7	1,330.3	0.00	0.00	0.00
3,400.0	29.53	304.78	3,058.8	787.0	-1,133.1	1,379.6	0.00	0.00	0.00
3,500.0	29.53	304.78	3,145.8	815.1	-1,173.6	1,428.9	0.00	0.00	0.00
3,600.0	29.53	304.78	3,232.8	843.2	-1,214.1	1,478.2	0.00	0.00	0.00
3,700.0	29.53	304.78	3,319.8	871.3	-1,254.6	1,527.5	0.00	0.00	0.00
3,800.0	29.53	304.78	3,406.8	899.4	-1,295.1	1,576.8	0.00	0.00	0.00
3,900.0	29.53	304.78	3,493.8	927.6	-1,335.6	1,626.1	0.00	0.00	0.00
4,000.0	29.53	304.78	3,580.8	955.7	-1,376.0	1,675.4	0.00	0.00	0.00
4,100.0	29.53	304.78	3,667.8	983.8	-1,416.5	1,724.6	0.00	0.00	0.00
4,200.0	29.53	304.78	3,754.8	1,011.9	-1,457.0	1,773.9	0.00	0.00	0.00
4,300.0	29.53	304.78	3,841.8	1,040.0	-1,497.5	1,823.2	0.00	0.00	0.00
4,400.0	29.53	304.78	3,928.9	1,068.1	-1,538.0	1,872.5	0.00	0.00	0.00
4,500.0	29.53	304.78	4,015.9	1,096.3	-1,578.5	1,921.8	0.00	0.00	0.00
4,600.0	29.53	304.78	4,102.9	1,124.4	-1,618.9	1,971.1	0.00	0.00	0.00
4,700.0	29.53	304.78	4,189.9	1,152.5	-1,659.4	2,020.4	0.00	0.00	0.00
4,800.0	29.53	304.78	4,276.9	1,180.6	-1,699.9	2,069.7	0.00	0.00	0.00
4,900.0	29.53	304.78	4,363.9	1,208.7	-1,740.4	2,119.0	0.00	0.00	0.00
5,000.0	29.53	304.78	4,450.9	1,236.8	-1,780.9	2,168.3	0.00	0.00	0.00
5,100.0	29.53	304.78	4,537.9	1,265.0	-1,821.4	2,217.5	0.00	0.00	0.00

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5,178.6	29.53	304.78	4,606.3	1,287.1	-1,853.2	2,256.3	0.00	0.00	0.00	
5,200.0	29.21	304.78	4,625.0	1,293.0	-1,861.8	2,266.8	1.50	-1.50	0.00	
5,300.0	27.71	304.78	4,712.9	1,320.2	-1,900.9	2,314.4	1.50	-1.50	0.00	
5,400.0	26.21	304.78	4,802.0	1,346.1	-1,938.2	2,359.8	1.50	-1.50	0.00	
5,500.0	24.71	304.78	4,892.3	1,370.6	-1,973.5	2,402.8	1.50	-1.50	0.00	
5,600.0	23.21	304.78	4,983.7	1,393.8	-2,006.8	2,443.4	1.50	-1.50	0.00	
5,700.0	21.71	304.78	5,076.1	1,415.6	-2,038.2	2,481.6	1.50	-1.50	0.00	
5,800.0	20.21	304.78	5,169.5	1,436.0	-2,067.6	2,517.3	1.50	-1.50	0.00	
5,900.0	18.71	304.78	5,263.7	1,455.0	-2,095.0	2,550.6	1.50	-1.50	0.00	
6,000.0	17.21	304.78	5,358.9	1,472.6	-2,120.3	2,581.5	1.50	-1.50	0.00	
6,100.0	15.71	304.78	5,454.8	1,488.7	-2,143.6	2,609.8	1.50	-1.50	0.00	
6,200.0	14.21	304.78	5,551.4	1,503.5	-2,164.8	2,635.6	1.50	-1.50	0.00	
6,300.0	12.71	304.78	5,648.6	1,516.7	-2,183.9	2,658.9	1.50	-1.50	0.00	
6,400.0	11.21	304.78	5,746.4	1,528.5	-2,200.9	2,679.6	1.50	-1.50	0.00	
6,500.0	9.71	304.78	5,844.8	1,538.9	-2,215.8	2,697.8	1.50	-1.50	0.00	
6,600.0	8.21	304.78	5,943.6	1,547.8	-2,228.6	2,713.3	1.50	-1.50	0.00	
6,700.0	6.71	304.78	6,042.7	1,555.2	-2,239.3	2,726.3	1.50	-1.50	0.00	
6,800.0	5.21	304.78	6,142.2	1,561.1	-2,247.8	2,736.7	1.50	-1.50	0.00	
6,900.0	3.71	304.78	6,241.9	1,565.6	-2,254.2	2,744.5	1.50	-1.50	0.00	
7,000.0	2.21	304.78	6,341.7	1,568.5	-2,258.4	2,749.7	1.50	-1.50	0.00	
7,100.0	0.71	304.78	6,441.7	1,570.0	-2,260.5	2,752.2	1.50	-1.50	0.00	
7,147.3	0.00	0.00	6,489.0	1,570.1	-2,260.7	2,752.5	1.50	-1.50	0.00	
7,200.0	0.00	0.00	6,541.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
7,300.0	0.00	0.00	6,641.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
7,400.0	0.00	0.00	6,741.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
7,500.0	0.00	0.00	6,841.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
7,600.0	0.00	0.00	6,941.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
7,700.0	0.00	0.00	7,041.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
7,800.0	0.00	0.00	7,141.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
7,900.0	0.00	0.00	7,241.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
8,000.0	0.00	0.00	7,341.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
8,100.0	0.00	0.00	7,441.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
8,200.0	0.00	0.00	7,541.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
8,300.0	0.00	0.00	7,641.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
8,400.0	0.00	0.00	7,741.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
8,500.0	0.00	0.00	7,841.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
8,600.0	0.00	0.00	7,941.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
8,700.0	0.00	0.00	8,041.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
8,800.0	0.00	0.00	8,141.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
8,900.0	0.00	0.00	8,241.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
9,000.0	0.00	0.00	8,341.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
9,100.0	0.00	0.00	8,441.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
9,200.0	0.00	0.00	8,541.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
9,300.0	0.00	0.00	8,641.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
9,400.0	0.00	0.00	8,741.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
9,500.0	0.00	0.00	8,841.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
9,600.0	0.00	0.00	8,941.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
9,700.0	0.00	0.00	9,041.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
9,800.0	0.00	0.00	9,141.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
9,900.0	0.00	0.00	9,241.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
10,000.0	0.00	0.00	9,341.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
10,100.0	0.00	0.00	9,441.7	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	
10,112.3	0.00	0.00	9,454.0	1,570.1	-2,260.7	2,752.5	0.00	0.00	0.00	

Database:	NN	Local Co-ordinate Reference:	Well TR 11-28-597 - Slot TR 11-28-597
Company:	Terra Energy Partners, LLP	TVD Reference:	RKB @ 30' @ 8513.0ft
Project:	Garfield County, CO (Nad 83)	MD Reference:	RKB @ 30' @ 8513.0ft
Site:	TR 32-28-597 Pad	North Reference:	True
Well:	TR 11-28-597	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									
TR 11-28-597 VP	0.00	0.00	6,489.0	1,570.1	-2,260.7	1,652,369.700	2,213,830.100	39.591401	-108.290076
- plan hits target center									
- Point									
TR 11-28-597 BHL	0.00	0.00	9,454.0	1,570.1	-2,260.7	1,652,369.700	2,213,830.100	39.591401	-108.290076
- plan hits target center									
- Circle (radius 50.0)									

Casing Points					
Measured Depth	Vertical Depth	Name		Casing Diameter	Hole Diameter
(ft)	(ft)			(")	(")
3,339.4	3,006.0	9 5/8"		9-5/8	12-1/4

Formations						
Measured Depth	Vertical Depth	Name		Lithology	Dip	Dip Direction
(ft)	(ft)				(°)	(°)
0.0	-476.0	GRRV			0.00	
2,937.1	2,180.0	U WSCH			0.00	
4,815.1	3,814.0	G SAND			0.00	
5,020.8	3,993.0	FRUN			0.00	
6,231.6	5,106.0	OCRK			0.00	
6,829.9	5,696.0	UMVRD			0.00	
7,147.3	6,013.0	TOPGAS			0.00	
8,956.3	7,822.0	CMEO			0.00	
9,226.3	8,092.0	RLNS			0.00	
9,413.3	8,279.0	CZZT			0.00	
9,641.3	8,507.0	CRCN			0.00	
9,791.3	8,657.0	SEGO			0.00	