

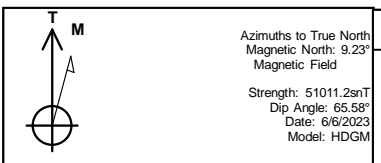


REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well TR 532-28-597 - Slot TR 532-28-597, True North  
 Vertical (TVD) Reference: RKB @ 30' @ 8513.0ft  
 Section (VS) Reference: Slot - TR 532-28-597(0.0N, 0.0E)  
 Measured Depth Reference: RKB @ 30' @ 8513.0ft  
 Calculation Method: Minimum Curvature



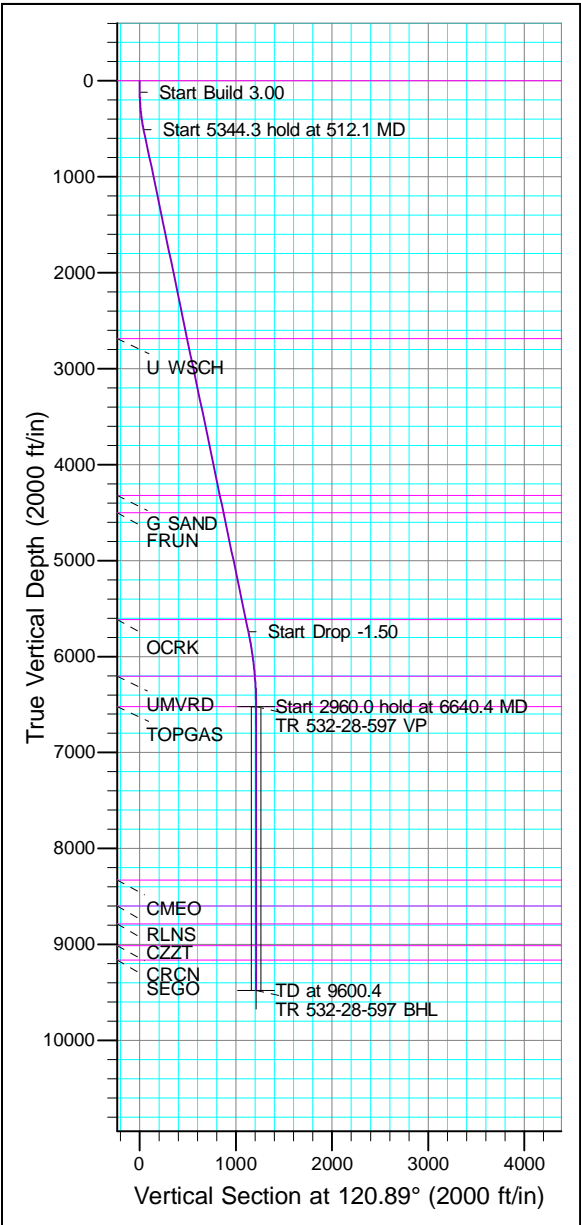
Project: Garfield County, CO (Nad 83)  
 Site: TR 32-28-597 Pad  
 Well: TR 532-28-597  
 Wellbore: OWB  
 Design: Plan



Azimuths to True North  
 Magnetic North: 9.23°  
 Magnetic Field  
 Strength: 51011.2nT  
 Dip Angle: 65.58°  
 Date: 6/6/2023  
 Model: HDGM

WELL DETAILS: TR 532-28-597

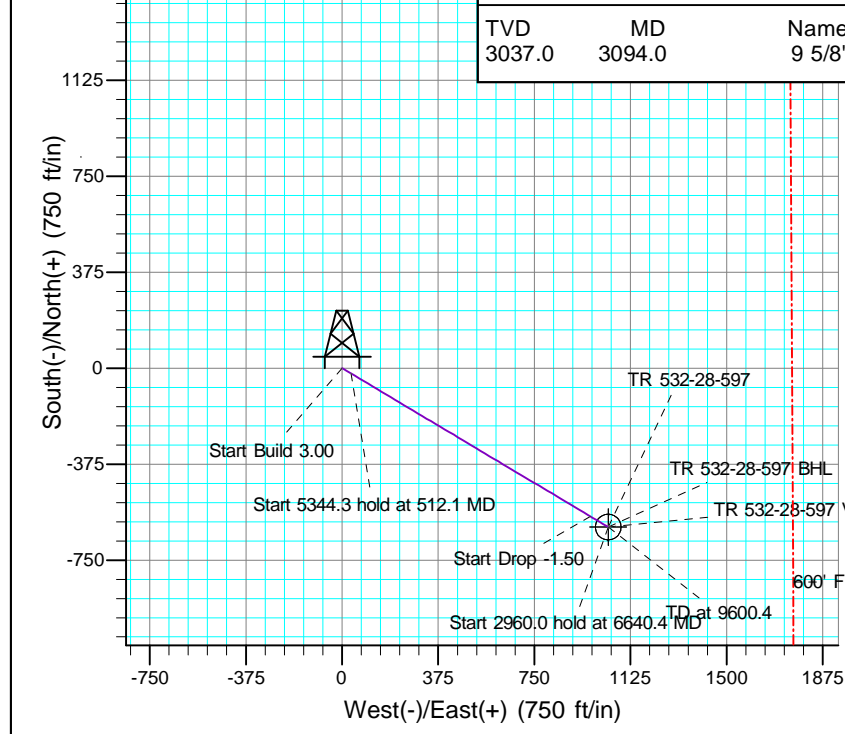
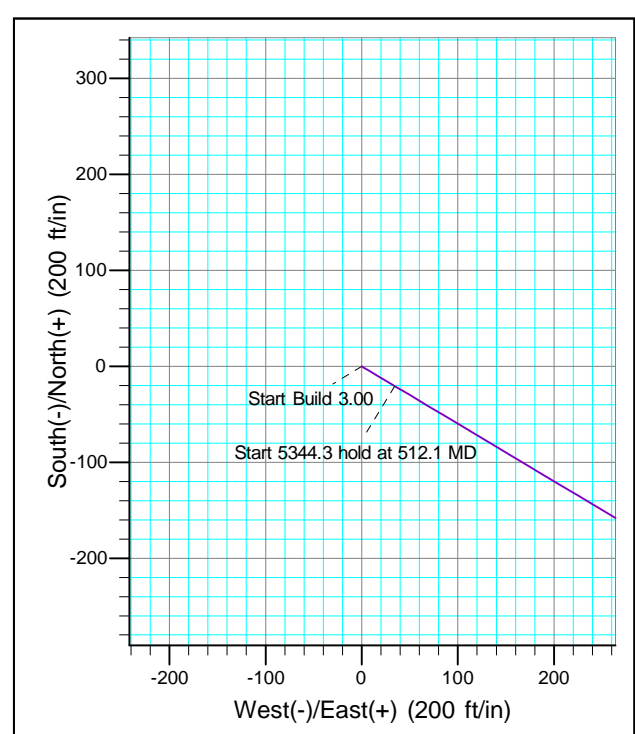
+N/-S	+E/-W	Northing	Ground Level:	8483.0	Latitude	Longitude	Slot
0.0	0.0	1650686.800	Easting	2216054.600	39.586971	-108.282003	TR 532-28-597



ANNOTATIONS								FORMATION TOP DETAILS			
TVD	MD	Inc	Azi	+N/-S	+E/-W	V Sect	Departure	Annotation	TVDPPath	MDPath	Formation
120.0	120.0	0.00	0.00	0.0	0.0	0.0	0.0	Start Build 3.00	0.0	0.0	GRRV
509.3	512.1	11.76	120.89	-20.6	34.4	40.1	40.1	Start 5344.3 hold at 512.1	2687.0	2736.5	U WSCH
5741.4	5856.3	11.76	120.89	-579.8	969.3	1129.5	1129.5	Start Drop -1.50	4321.0	4405.5	G SAND
6520.0	6640.4	0.00	0.00	-621.0	1038.1	1209.7	1209.7	Start 2960.0 hold at 6640.4	4500.0	4588.3	FRUN
9480.0	9600.4	0.00	0.00	-621.0	1038.1	1209.7	1209.7	TD at 9600.4	5613.0	5725.2	OCRK
									6203.0	6323.1	UMVRD
									6520.0	6640.4	TOPGAS
									8329.0	8449.4	CMEO
									8599.0	8719.4	RLNS
									8786.0	8906.4	CZZT
									9014.0	9134.4	CRCN
									9164.0	9284.4	SEGO

DESIGN TARGET DETAILS								
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
VP	6520.0	-621.0	1038.1	1650034.300	2217073.200	39.585266	-108.278320	Point
BHL	9480.0	-621.0	1038.1	1650034.300	2217073.200	39.585266	-108.278320	Circle (Radius: 50.0)

CASING DETAILS		
TVD	MD	Name
3037.0	3094.0	9 5/8"





# **Terra Energy Partners, LLP**

**Garfield County, CO (Nad 83)**

**TR 32-28-597 Pad**

**TR 532-28-597 - Slot TR 532-28-597**

**OWB**

**Plan: Plan**

## **Standard Planning Report**

**13 June, 2023**



<b>Database:</b>	NN	<b>Local Co-ordinate Reference:</b>	Well TR 532-28-597 - Slot TR 532-28-597
<b>Company:</b>	Terra Energy Partners, LLP	<b>TVD Reference:</b>	RKB @ 30' @ 8513.0ft
<b>Project:</b>	Garfield County, CO (Nad 83)	<b>MD Reference:</b>	RKB @ 30' @ 8513.0ft
<b>Site:</b>	TR 32-28-597 Pad	<b>North Reference:</b>	True
<b>Well:</b>	TR 532-28-597	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	Plan		

<b>Project</b>	Garfield County, CO (Nad 83)		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Central Zone		

<b>Site</b>	TR 32-28-597 Pad, Sec 28, T5S, R97W				
<b>Site Position:</b>	<b>Northing:</b>	1,650,709.300 usft	<b>Latitude:</b>	39.587032	
<b>From:</b> Map	<b>Easting:</b>	2,216,053.200 usft	<b>Longitude:</b>	-108.282011	
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b>	-1.75 °

<b>Well</b>	TR 532-28-597 - Slot TR 532-28-597					
<b>Well Position</b>	<b>+N/-S</b>	-22.4 ft	<b>Northing:</b>	1,650,686.800 usft	<b>Latitude:</b>	39.586971
	<b>+E/-W</b>	2.1 ft	<b>Easting:</b>	2,216,054.600 usft	<b>Longitude:</b>	-108.282004
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>	8,513.0 ft	<b>Ground Level:</b>	8,483.0 ft

<b>Wellbore</b>	OWB				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	HDGM	6/6/2023	9.23	65.58	51,011

<b>Design</b>	Plan			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	120.89

<b>Plan Sections</b>										
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	
512.1	11.76	120.89	509.3	-20.6	34.4	3.00	3.00	0.00	120.89	
5,856.3	11.76	120.89	5,741.4	-579.8	969.3	0.00	0.00	0.00	0.00	
6,640.4	0.00	0.00	6,520.0	-621.0	1,038.1	1.50	-1.50	0.00	180.00	
9,600.4	0.00	0.00	9,480.0	-621.0	1,038.1	0.00	0.00	0.00	0.00	TR 532-28-597 BHL

<b>Database:</b>	NN	<b>Local Co-ordinate Reference:</b>	Well TR 532-28-597 - Slot TR 532-28-597
<b>Company:</b>	Terra Energy Partners, LLP	<b>TVD Reference:</b>	RKB @ 30' @ 8513.0ft
<b>Project:</b>	Garfield County, CO (Nad 83)	<b>MD Reference:</b>	RKB @ 30' @ 8513.0ft
<b>Site:</b>	TR 32-28-597 Pad	<b>North Reference:</b>	True
<b>Well:</b>	TR 532-28-597	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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	
<b>Start Build 3.00</b>										
200.0	2.40	120.89	200.0	-0.9	1.4	1.7	3.00	3.00	0.00	
300.0	5.40	120.89	299.7	-4.4	7.3	8.5	3.00	3.00	0.00	
400.0	8.40	120.89	399.0	-10.5	17.6	20.5	3.00	3.00	0.00	
500.0	11.40	120.89	497.5	-19.3	32.3	37.7	3.00	3.00	0.00	
512.1	11.76	120.89	509.3	-20.6	34.4	40.1	3.00	3.00	0.00	
<b>Start 5344.3 hold at 512.1 MD</b>										
600.0	11.76	120.89	595.4	-29.8	49.8	58.0	0.00	0.00	0.00	
700.0	11.76	120.89	693.3	-40.3	67.3	78.4	0.00	0.00	0.00	
800.0	11.76	120.89	791.2	-50.7	84.8	98.8	0.00	0.00	0.00	
900.0	11.76	120.89	889.1	-61.2	102.3	119.2	0.00	0.00	0.00	
1,000.0	11.76	120.89	987.0	-71.6	119.8	139.6	0.00	0.00	0.00	
1,100.0	11.76	120.89	1,084.9	-82.1	137.3	159.9	0.00	0.00	0.00	
1,200.0	11.76	120.89	1,182.8	-92.6	154.8	180.3	0.00	0.00	0.00	
1,300.0	11.76	120.89	1,280.7	-103.0	172.2	200.7	0.00	0.00	0.00	
1,400.0	11.76	120.89	1,378.6	-113.5	189.7	221.1	0.00	0.00	0.00	
1,500.0	11.76	120.89	1,476.5	-124.0	207.2	241.5	0.00	0.00	0.00	
1,600.0	11.76	120.89	1,574.4	-134.4	224.7	261.9	0.00	0.00	0.00	
1,700.0	11.76	120.89	1,672.3	-144.9	242.2	282.2	0.00	0.00	0.00	
1,800.0	11.76	120.89	1,770.2	-155.4	259.7	302.6	0.00	0.00	0.00	
1,900.0	11.76	120.89	1,868.1	-165.8	277.2	323.0	0.00	0.00	0.00	
2,000.0	11.76	120.89	1,966.0	-176.3	294.7	343.4	0.00	0.00	0.00	
2,100.0	11.76	120.89	2,063.9	-186.8	312.2	363.8	0.00	0.00	0.00	
2,200.0	11.76	120.89	2,161.8	-197.2	329.7	384.2	0.00	0.00	0.00	
2,300.0	11.76	120.89	2,259.7	-207.7	347.2	404.6	0.00	0.00	0.00	
2,400.0	11.76	120.89	2,357.6	-218.1	364.7	424.9	0.00	0.00	0.00	
2,500.0	11.76	120.89	2,455.5	-228.6	382.2	445.3	0.00	0.00	0.00	
2,600.0	11.76	120.89	2,553.4	-239.1	399.7	465.7	0.00	0.00	0.00	
2,700.0	11.76	120.89	2,651.3	-249.5	417.1	486.1	0.00	0.00	0.00	
2,800.0	11.76	120.89	2,749.2	-260.0	434.6	506.5	0.00	0.00	0.00	
2,900.0	11.76	120.89	2,847.1	-270.5	452.1	526.9	0.00	0.00	0.00	
3,000.0	11.76	120.89	2,945.0	-280.9	469.6	547.2	0.00	0.00	0.00	
3,100.0	11.76	120.89	3,042.9	-291.4	487.1	567.6	0.00	0.00	0.00	
3,200.0	11.76	120.89	3,140.8	-301.9	504.6	588.0	0.00	0.00	0.00	
3,300.0	11.76	120.89	3,238.7	-312.3	522.1	608.4	0.00	0.00	0.00	
3,400.0	11.76	120.89	3,336.6	-322.8	539.6	628.8	0.00	0.00	0.00	
3,500.0	11.76	120.89	3,434.5	-333.3	557.1	649.2	0.00	0.00	0.00	
3,600.0	11.76	120.89	3,532.4	-343.7	574.6	669.5	0.00	0.00	0.00	
3,700.0	11.76	120.89	3,630.3	-354.2	592.1	689.9	0.00	0.00	0.00	
3,800.0	11.76	120.89	3,728.2	-364.7	609.6	710.3	0.00	0.00	0.00	
3,900.0	11.76	120.89	3,826.1	-375.1	627.1	730.7	0.00	0.00	0.00	
4,000.0	11.76	120.89	3,924.0	-385.6	644.6	751.1	0.00	0.00	0.00	
4,100.0	11.76	120.89	4,021.9	-396.0	662.0	771.5	0.00	0.00	0.00	
4,200.0	11.76	120.89	4,119.8	-406.5	679.5	791.8	0.00	0.00	0.00	
4,300.0	11.76	120.89	4,217.7	-417.0	697.0	812.2	0.00	0.00	0.00	
4,400.0	11.76	120.89	4,315.6	-427.4	714.5	832.6	0.00	0.00	0.00	
4,500.0	11.76	120.89	4,413.5	-437.9	732.0	853.0	0.00	0.00	0.00	
4,600.0	11.76	120.89	4,511.4	-448.4	749.5	873.4	0.00	0.00	0.00	
4,700.0	11.76	120.89	4,609.3	-458.8	767.0	893.8	0.00	0.00	0.00	
4,800.0	11.76	120.89	4,707.2	-469.3	784.5	914.2	0.00	0.00	0.00	
4,900.0	11.76	120.89	4,805.1	-479.8	802.0	934.5	0.00	0.00	0.00	

<b>Database:</b>	NN	<b>Local Co-ordinate Reference:</b>	Well TR 532-28-597 - Slot TR 532-28-597
<b>Company:</b>	Terra Energy Partners, LLP	<b>TVD Reference:</b>	RKB @ 30' @ 8513.0ft
<b>Project:</b>	Garfield County, CO (Nad 83)	<b>MD Reference:</b>	RKB @ 30' @ 8513.0ft
<b>Site:</b>	TR 32-28-597 Pad	<b>North Reference:</b>	True
<b>Well:</b>	TR 532-28-597	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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)	
5,000.0	11.76	120.89	4,903.0	-490.2	819.5	954.9	0.00	0.00	0.00	
5,100.0	11.76	120.89	5,000.9	-500.7	837.0	975.3	0.00	0.00	0.00	
5,200.0	11.76	120.89	5,098.8	-511.2	854.5	995.7	0.00	0.00	0.00	
5,300.0	11.76	120.89	5,196.7	-521.6	872.0	1,016.1	0.00	0.00	0.00	
5,400.0	11.76	120.89	5,294.6	-532.1	889.5	1,036.5	0.00	0.00	0.00	
5,500.0	11.76	120.89	5,392.5	-542.5	906.9	1,056.8	0.00	0.00	0.00	
5,600.0	11.76	120.89	5,490.4	-553.0	924.4	1,077.2	0.00	0.00	0.00	
5,700.0	11.76	120.89	5,588.3	-563.5	941.9	1,097.6	0.00	0.00	0.00	
5,800.0	11.76	120.89	5,686.2	-573.9	959.4	1,118.0	0.00	0.00	0.00	
5,856.3	11.76	120.89	5,741.4	-579.8	969.3	1,129.5	0.00	0.00	0.00	
<b>Start Drop -1.50</b>										
5,900.0	11.11	120.89	5,784.2	-584.3	976.7	1,138.1	1.50	-1.50	0.00	
6,000.0	9.61	120.89	5,882.5	-593.5	992.1	1,156.1	1.50	-1.50	0.00	
6,100.0	8.11	120.89	5,981.4	-601.4	1,005.3	1,171.5	1.50	-1.50	0.00	
6,200.0	6.61	120.89	6,080.5	-608.0	1,016.3	1,184.3	1.50	-1.50	0.00	
6,300.0	5.11	120.89	6,180.0	-613.2	1,025.1	1,194.5	1.50	-1.50	0.00	
6,400.0	3.61	120.89	6,279.7	-617.1	1,031.6	1,202.1	1.50	-1.50	0.00	
6,500.0	2.11	120.89	6,379.6	-619.7	1,035.9	1,207.1	1.50	-1.50	0.00	
6,600.0	0.61	120.89	6,479.6	-620.9	1,037.9	1,209.5	1.50	-1.50	0.00	
6,640.4	0.00	0.00	6,520.0	-621.0	1,038.1	1,209.7	1.50	-1.50	0.00	
<b>Start 2960.0 hold at 6640.4 MD</b>										
6,700.0	0.00	0.00	6,579.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
6,800.0	0.00	0.00	6,679.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
6,900.0	0.00	0.00	6,779.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
7,000.0	0.00	0.00	6,879.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
7,100.0	0.00	0.00	6,979.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
7,200.0	0.00	0.00	7,079.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
7,300.0	0.00	0.00	7,179.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
7,400.0	0.00	0.00	7,279.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
7,500.0	0.00	0.00	7,379.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
7,600.0	0.00	0.00	7,479.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
7,700.0	0.00	0.00	7,579.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
7,800.0	0.00	0.00	7,679.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
7,900.0	0.00	0.00	7,779.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
8,000.0	0.00	0.00	7,879.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
8,100.0	0.00	0.00	7,979.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
8,200.0	0.00	0.00	8,079.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
8,300.0	0.00	0.00	8,179.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
8,400.0	0.00	0.00	8,279.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
8,500.0	0.00	0.00	8,379.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
8,600.0	0.00	0.00	8,479.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
8,700.0	0.00	0.00	8,579.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
8,800.0	0.00	0.00	8,679.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
8,900.0	0.00	0.00	8,779.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
9,000.0	0.00	0.00	8,879.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
9,100.0	0.00	0.00	8,979.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
9,200.0	0.00	0.00	9,079.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
9,300.0	0.00	0.00	9,179.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
9,400.0	0.00	0.00	9,279.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
9,500.0	0.00	0.00	9,379.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
9,600.0	0.00	0.00	9,479.6	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
9,600.4	0.00	0.00	9,480.0	-621.0	1,038.1	1,209.7	0.00	0.00	0.00	
<b>TD at 9600.4</b>										

<b>Database:</b>	NN	<b>Local Co-ordinate Reference:</b>	Well TR 532-28-597 - Slot TR 532-28-597
<b>Company:</b>	Terra Energy Partners, LLP	<b>TVD Reference:</b>	RKB @ 30' @ 8513.0ft
<b>Project:</b>	Garfield County, CO (Nad 83)	<b>MD Reference:</b>	RKB @ 30' @ 8513.0ft
<b>Site:</b>	TR 32-28-597 Pad	<b>North Reference:</b>	True
<b>Well:</b>	TR 532-28-597	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	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 532-28-597 VP - plan hits target center - Point	0.00	0.00	6,520.0	-621.0	1,038.1	1,650,034.300	2,217,073.200	39.585266	-108.278320
TR 532-28-597 BHL - plan hits target center - Circle (radius 50.0)	0.00	0.00	9,480.0	-621.0	1,038.1	1,650,034.300	2,217,073.200	39.585266	-108.278320

Casing Points					
Measured Depth	Vertical Depth	Name	Casing Diameter	Hole Diameter	
(ft)	(ft)		(")	(")	
3,094.0	3,037.0	9 5/8"	9-5/8	12-1/4	

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(ft)	(ft)			(°)	(°)
0.0	0.0	GRRV		0.00	
2,736.5	2,687.0	U WSCH		0.00	
4,405.5	4,321.0	G SAND		0.00	
4,588.3	4,500.0	FRUN		0.00	
5,725.2	5,613.0	OCRK		0.00	
6,323.1	6,203.0	UMVRD		0.00	
6,640.4	6,520.0	TOPGAS		0.00	
8,449.4	8,329.0	CMEO		0.00	
8,719.4	8,599.0	RLNS		0.00	
8,906.4	8,786.0	CZZT		0.00	
9,134.4	9,014.0	CRCN		0.00	
9,284.4	9,164.0	SEGO		0.00	

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(ft)	(ft)	+N/-S	+E/-W		
		(ft)	(ft)		
120.0	120.0	0.0	0.0	Start Build 3.00	
512.1	509.3	-20.6	34.4	Start 5344.3 hold at 512.1 MD	
5,856.3	5,741.4	-579.8	969.3	Start Drop -1.50	
6,640.4	6,520.0	-621.0	1,038.1	Start 2960.0 hold at 6640.4 MD	
9,600.4	9,480.0	-621.0	1,038.1	TD at 9600.4	