



Project: Rio Blanco County, CO  
Site: Fed 298-13-1 Pad  
Well: RG 512-18-297  
Wellbore: Wellbore #1  
Design: Plan 1  
Latitude: 39.871815  
Longitude: -108.337927  
Ground Level: 6667.00  
KB=30' @ 6697.00usft (H&P #329)



#### PROJECT DETAILS: Rio Blanco County, CO

Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: Colorado Central Zone  
System Datum: Mean Sea Level

#### REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well RG 512-18-297 - Slot (B6) RG 512-18-297, True North  
Vertical (TVD) Reference: KB=30' @ 6697.00usft (H&P #329)  
Section (VS) Reference: Slot - (B6) RG 512-18-297(0.00N, 0.00E)  
Measured Depth Reference: KB=30' @ 6697.00usft (H&P #329)  
Calculation Method: Minimum Curvature

#### WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
RG 512-18-297 - VP	8107.00	1637.18	2096.69	1756454.03	2205688.50	39.876308	-108.330457	Circle (Radius: 100.00)
RG 512-18-297 - PBHL	11887.00	1637.18	2096.69	1756454.03	2205688.50	39.876308	-108.330457	Point

#### ANNOTATIONS

MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
165.00	0.00	0.00	165.00	0.00	0.00	0.00	0.00	Start Build 2.00
1254.30	21.79	52.02	1228.24	125.93	161.27	204.61	204.61	Start 5881.17 hold at 1254.30 MD
7135.46	21.79	52.02	6689.35	1469.28	1881.66	2387.35	2387.35	Start Drop -1.50
8587.85	0.00	0.00	8107.00	1637.18	2096.69	2660.16	2660.16	Start 3780.00 hold at 8587.85 MD
12367.85	0.00	0.00	11887.00	1637.18	2096.69	2660.16	2660.16	TD at 12367.85

#### WELL DETAILS: RG 512-18-297

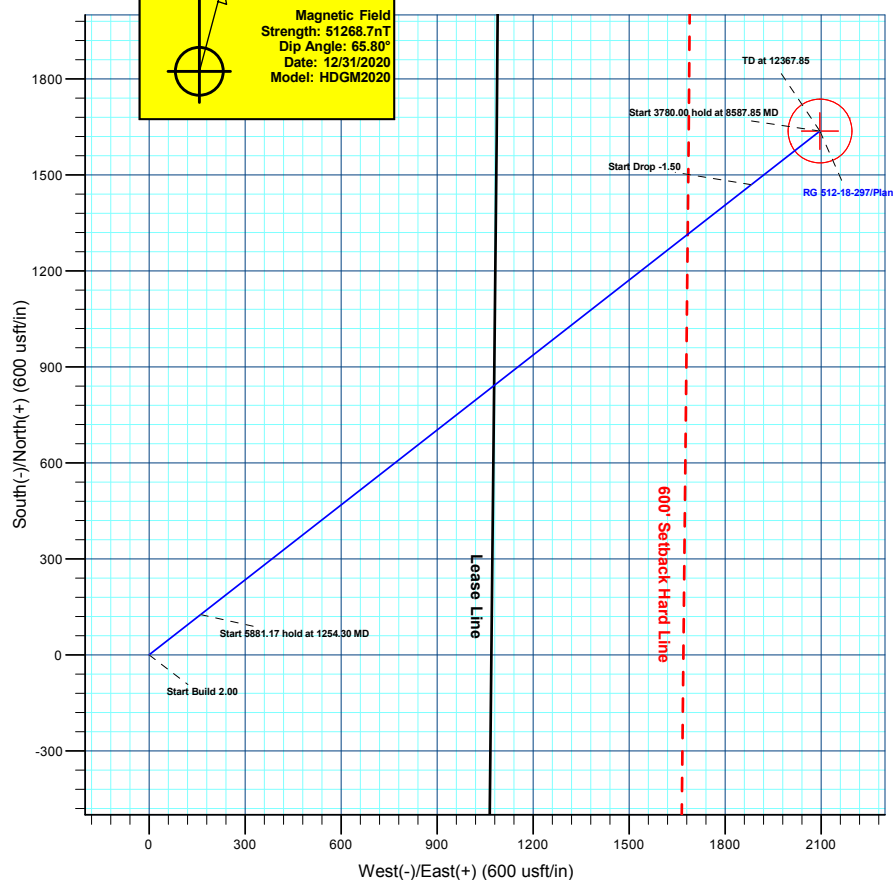
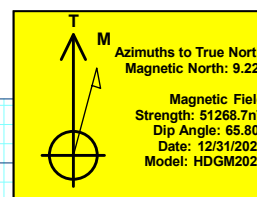
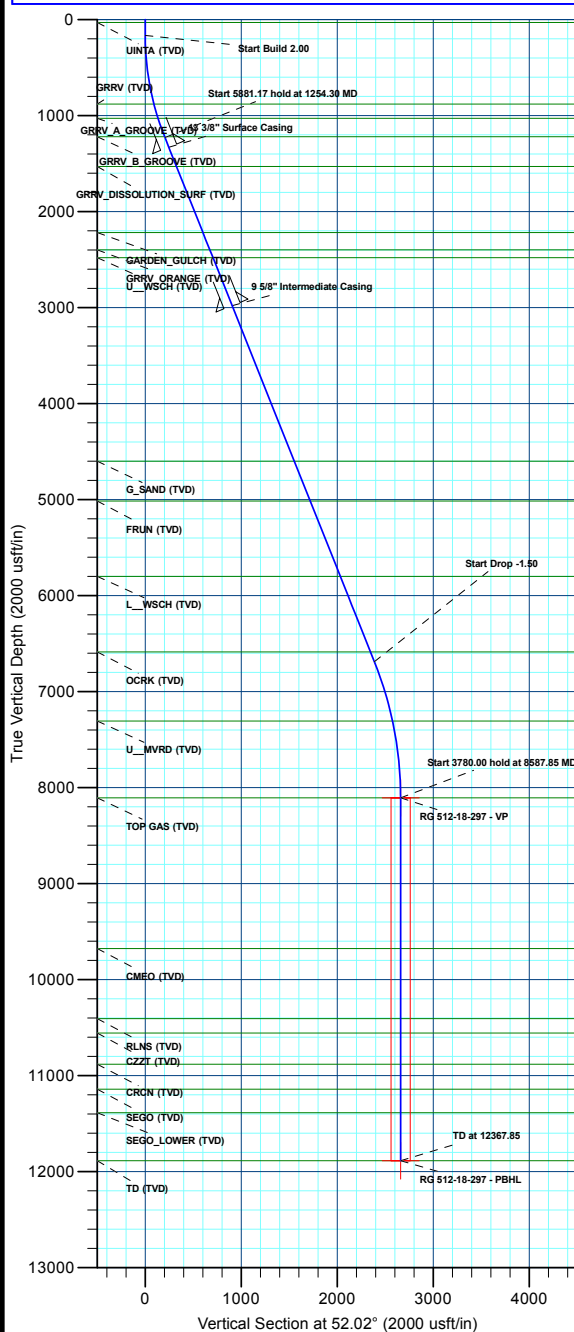
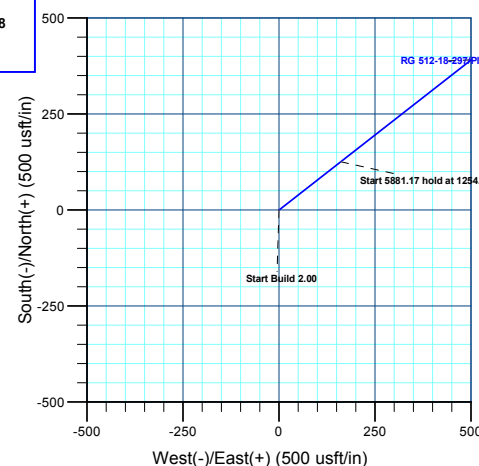
+N/-S	+E/-W	Northing	Ground Elev.	Latitude	Longitude	Slot
0.00	0.00	1754883.13	6667.00	39.871815	-108.337927	(B6) RG 512-18-297

#### CASING DETAILS

TVD	MD	Name	Size
1330.00	1363.89	13 3/8" Surface Casing	13-3/8
2980.00	3140.80	5/8" Intermediate Casing	9-5/8

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
30.00	30.00	UINTA (TVD)
880.00	887.64	GRRV (TVD)
1030.00	1043.71	GRRV_A_GROOVE (TVD)
1220.00	1245.43	GRRV_B_GROOVE (TVD)
1530.00	1579.27	GRRV_DISSOLUTION_SURF (TVD)
2220.00	2322.34	GARDEN_GULCH (TVD)
2400.00	2516.19	GRRV_ORANGE (TVD)
2480.00	2602.34	U_WSCH (TVD)
4600.00	4885.40	G_SAND (TVD)
5015.00	5332.32	FRUN (TVD)
5800.00	6177.70	L_WSCH (TVD)
6587.00	7025.24	OCRK (TVD)
7307.00	7781.89	U_MVRD (TVD)
8107.00	8587.86	TOP GAS (TVD)
9677.00	10157.86	CMEQ (TVD)
10407.00	10887.86	RLNS (TVD)
10557.00	11037.86	CZZT (TVD)
10882.00	11362.86	CRCN (TVD)
11142.00	11622.86	SEGO (TVD)
11387.00	11867.86	SEGO_LOWER (TVD)
11887.00	12367.86	TD (TVD)



Plan: Plan 1 (RG 512-18-297/Wellbore #1)

Created By: Chase Chambers Date: 9:34, March 15 2022



# **Terra Energy Partners, LLP**

**Rio Blanco County, CO**

**Fed 298-13-1 Pad**

**RG 512-18-297 - Slot (B6) RG 512-18-297**

**Wellbore #1**

**Plan: Plan 1**

## **KLX Well Planning Report**

**15 March, 2022**



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well RG 512-18-297 - Slot (B6) RG 512-18-297
<b>Company:</b>	Terra Energy Partners, LLP	<b>TVD Reference:</b>	KB=30' @ 6697.00usft (H&P #329)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	KB=30' @ 6697.00usft (H&P #329)
<b>Site:</b>	Fed 298-13-1 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RG 512-18-297	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan 1		

<b>Project</b>	Rio Blanco County, CO		
<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>	Fed 298-13-1 Pad			
<b>Site Position:</b>		<b>Northing:</b>	1,754,850.43 usft	<b>Latitude:</b> 39.871723
<b>From:</b> Map		<b>Easting:</b>	2,203,520.82 usft	<b>Longitude:</b> -108.337998
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b> -1.79 °

<b>Well</b>	RG 512-18-297 - Slot (B6) RG 512-18-297			
<b>Well Position</b>	<b>+N/-S</b>	33.34 usft	<b>Northing:</b>	1,754,883.13 usft
	<b>+E/-W</b>	19.85 usft	<b>Easting:</b>	2,203,541.70 usft
<b>Position Uncertainty</b>		0.00 usft	<b>Wellhead Elevation:</b>	<b>Latitude:</b> 39.871815
				<b>Longitude:</b> -108.337927
				<b>Ground Level:</b> 6,667.00 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	HDGM2020	12/31/2020	9.22	65.80	51,268.70000000

<b>Design</b>	Plan 1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	52.02

<b>Plan Sections</b>										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
165.00	0.00	0.00	165.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,254.30	21.79	52.02	1,228.24	125.93	161.27	2.00	2.00	0.00	52.02	
7,135.46	21.79	52.02	6,689.35	1,469.28	1,881.66	0.00	0.00	0.00	0.00	
8,587.86	0.00	0.00	8,107.00	1,637.18	2,096.69	1.50	-1.50	0.00	180.00	RG 512-18-297 - VP
12,367.86	0.00	0.00	11,887.00	1,637.18	2,096.69	0.00	0.00	0.00	0.00	RG 512-18-297 - PB+

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<b>Company:</b>	Terra Energy Partners, LLP	<b>TVD Reference:</b>	KB=30' @ 6697.00usft (H&P #329)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	KB=30' @ 6697.00usft (H&P #329)
<b>Site:</b>	Fed 298-13-1 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RG 512-18-297	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
<b>UINTA (TVD)</b>										
30.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
<b>Start Build 2.00</b>										
165.00	0.00	0.00	165.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.70	52.02	200.00	0.13	0.17	0.21	2.00	2.00	0.00	
300.00	2.70	52.02	299.95	1.96	2.51	3.18	2.00	2.00	0.00	
400.00	4.70	52.02	399.74	5.93	7.59	9.63	2.00	2.00	0.00	
500.00	6.70	52.02	499.24	12.04	15.42	19.56	2.00	2.00	0.00	
600.00	8.70	52.02	598.33	20.29	25.98	32.96	2.00	2.00	0.00	
700.00	10.70	52.02	696.90	30.66	39.26	49.81	2.00	2.00	0.00	
800.00	12.70	52.02	794.81	43.14	55.24	70.09	2.00	2.00	0.00	
<b>GRRV (TVD)</b>										
887.64	14.45	52.02	880.00	55.80	71.46	90.66	2.00	2.00	0.00	
900.00	14.70	52.02	891.96	57.71	73.91	93.77	2.00	2.00	0.00	
1,000.00	16.70	52.02	988.23	74.36	95.24	120.83	2.00	2.00	0.00	
<b>GRRV_A_GROOVE (TVD)</b>										
1,043.71	17.57	52.02	1,030.00	82.29	105.39	133.71	2.00	2.00	0.00	
1,100.00	18.70	52.02	1,083.49	93.07	119.20	151.23	2.00	2.00	0.00	
1,200.00	20.70	52.02	1,177.63	113.82	145.77	184.94	2.00	2.00	0.00	
<b>GRRV_B_GROOVE (TVD)</b>										
1,245.43	21.61	52.02	1,220.00	123.91	158.69	201.33	2.00	2.00	0.00	
<b>Start 5881.17 hold at 1254.30 MD</b>										
1,254.30	21.79	52.02	1,228.24	125.93	161.27	204.61	2.00	2.00	0.00	
1,300.00	21.79	52.02	1,270.68	136.37	174.64	221.57	0.00	0.00	0.00	
<b>13 3/8" Surface Casing</b>										
1,363.89	21.79	52.02	1,330.00	150.96	193.33	245.29	0.00	0.00	0.00	
1,400.00	21.79	52.02	1,363.53	159.21	203.89	258.69	0.00	0.00	0.00	
1,500.00	21.79	52.02	1,456.39	182.05	233.15	295.80	0.00	0.00	0.00	
<b>GRRV DISSOLUTION_SURF (TVD)</b>										
1,579.27	21.79	52.02	1,530.00	200.16	256.33	325.22	0.00	0.00	0.00	
1,600.00	21.79	52.02	1,549.25	204.89	262.40	332.92	0.00	0.00	0.00	
1,700.00	21.79	52.02	1,642.11	227.73	291.65	370.03	0.00	0.00	0.00	
1,800.00	21.79	52.02	1,734.96	250.57	320.90	407.14	0.00	0.00	0.00	
1,900.00	21.79	52.02	1,827.82	273.42	350.16	444.26	0.00	0.00	0.00	
2,000.00	21.79	52.02	1,920.68	296.26	379.41	481.37	0.00	0.00	0.00	
2,100.00	21.79	52.02	2,013.54	319.10	408.66	518.49	0.00	0.00	0.00	
2,200.00	21.79	52.02	2,106.40	341.94	437.91	555.60	0.00	0.00	0.00	
2,300.00	21.79	52.02	2,199.25	364.78	467.17	592.71	0.00	0.00	0.00	
<b>GARDEN_GULCH (TVD)</b>										
2,322.34	21.79	52.02	2,220.00	369.89	473.70	601.01	0.00	0.00	0.00	
2,400.00	21.79	52.02	2,292.11	387.62	496.42	629.83	0.00	0.00	0.00	
2,500.00	21.79	52.02	2,384.97	410.47	525.67	666.94	0.00	0.00	0.00	
<b>GRRV_ORANGE (TVD)</b>										
2,516.19	21.79	52.02	2,400.00	414.16	530.41	672.95	0.00	0.00	0.00	
2,600.00	21.79	52.02	2,477.83	433.31	554.92	704.06	0.00	0.00	0.00	
<b>U_WSCH (TVD)</b>										
2,602.34	21.79	52.02	2,480.00	433.84	555.61	704.93	0.00	0.00	0.00	
2,700.00	21.79	52.02	2,570.68	456.15	584.18	741.17	0.00	0.00	0.00	
2,800.00	21.79	52.02	2,663.54	478.99	613.43	778.28	0.00	0.00	0.00	
2,900.00	21.79	52.02	2,756.40	501.83	642.68	815.40	0.00	0.00	0.00	

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<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	KB=30' @ 6697.00usft (H&P #329)
<b>Site:</b>	Fed 298-13-1 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RG 512-18-297	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan 1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
3,000.00	21.79	52.02	2,849.26	524.67	671.93	852.51	0.00	0.00	0.00	
3,100.00	21.79	52.02	2,942.11	547.52	701.19	889.63	0.00	0.00	0.00	
<b>9 5/8" Intermediate Casing</b>										
3,140.80	21.79	52.02	2,980.00	556.84	713.12	904.77	0.00	0.00	0.00	
3,200.00	21.79	52.02	3,034.97	570.36	730.44	926.74	0.00	0.00	0.00	
3,300.00	21.79	52.02	3,127.83	593.20	759.69	963.85	0.00	0.00	0.00	
3,400.00	21.79	52.02	3,220.69	616.04	788.94	1,000.97	0.00	0.00	0.00	
3,500.00	21.79	52.02	3,313.55	638.88	818.20	1,038.08	0.00	0.00	0.00	
3,600.00	21.79	52.02	3,406.40	661.72	847.45	1,075.20	0.00	0.00	0.00	
3,700.00	21.79	52.02	3,499.26	684.57	876.70	1,112.31	0.00	0.00	0.00	
3,800.00	21.79	52.02	3,592.12	707.41	905.95	1,149.42	0.00	0.00	0.00	
3,900.00	21.79	52.02	3,684.98	730.25	935.21	1,186.54	0.00	0.00	0.00	
4,000.00	21.79	52.02	3,777.83	753.09	964.46	1,223.65	0.00	0.00	0.00	
4,100.00	21.79	52.02	3,870.69	775.93	993.71	1,260.77	0.00	0.00	0.00	
4,200.00	21.79	52.02	3,963.55	798.77	1,022.96	1,297.88	0.00	0.00	0.00	
4,300.00	21.79	52.02	4,056.41	821.62	1,052.22	1,334.99	0.00	0.00	0.00	
4,400.00	21.79	52.02	4,149.26	844.46	1,081.47	1,372.11	0.00	0.00	0.00	
4,500.00	21.79	52.02	4,242.12	867.30	1,110.72	1,409.22	0.00	0.00	0.00	
4,600.00	21.79	52.02	4,334.98	890.14	1,139.97	1,446.34	0.00	0.00	0.00	
4,700.00	21.79	52.02	4,427.84	912.98	1,169.23	1,483.45	0.00	0.00	0.00	
4,800.00	21.79	52.02	4,520.70	935.82	1,198.48	1,520.57	0.00	0.00	0.00	
<b>G_SAND (TVD)</b>										
4,885.40	21.79	52.02	4,600.00	955.33	1,223.46	1,552.26	0.00	0.00	0.00	
4,900.00	21.79	52.02	4,613.55	958.67	1,227.73	1,557.68	0.00	0.00	0.00	
5,000.00	21.79	52.02	4,706.41	981.51	1,256.98	1,594.79	0.00	0.00	0.00	
5,100.00	21.79	52.02	4,799.27	1,004.35	1,286.24	1,631.91	0.00	0.00	0.00	
5,200.00	21.79	52.02	4,892.13	1,027.19	1,315.49	1,669.02	0.00	0.00	0.00	
5,300.00	21.79	52.02	4,984.98	1,050.03	1,344.74	1,706.14	0.00	0.00	0.00	
<b>FRUN (TVD)</b>										
5,332.33	21.79	52.02	5,015.00	1,057.42	1,354.20	1,718.13	0.00	0.00	0.00	
5,400.00	21.79	52.02	5,077.84	1,072.87	1,373.99	1,743.25	0.00	0.00	0.00	
5,500.00	21.79	52.02	5,170.70	1,095.72	1,403.25	1,780.36	0.00	0.00	0.00	
5,600.00	21.79	52.02	5,263.56	1,118.56	1,432.50	1,817.48	0.00	0.00	0.00	
5,700.00	21.79	52.02	5,356.41	1,141.40	1,461.75	1,854.59	0.00	0.00	0.00	
5,800.00	21.79	52.02	5,449.27	1,164.24	1,491.00	1,891.71	0.00	0.00	0.00	
5,900.00	21.79	52.02	5,542.13	1,187.08	1,520.26	1,928.82	0.00	0.00	0.00	
6,000.00	21.79	52.02	5,634.99	1,209.92	1,549.51	1,965.93	0.00	0.00	0.00	
6,100.00	21.79	52.02	5,727.85	1,232.77	1,578.76	2,003.05	0.00	0.00	0.00	
<b>L_WSCH (TVD)</b>										
6,177.70	21.79	52.02	5,800.00	1,250.51	1,601.49	2,031.89	0.00	0.00	0.00	
6,200.00	21.79	52.02	5,820.70	1,255.61	1,608.01	2,040.16	0.00	0.00	0.00	
6,300.00	21.79	52.02	5,913.56	1,278.45	1,637.27	2,077.28	0.00	0.00	0.00	
6,400.00	21.79	52.02	6,006.42	1,301.29	1,666.52	2,114.39	0.00	0.00	0.00	
6,500.00	21.79	52.02	6,099.28	1,324.13	1,695.77	2,151.50	0.00	0.00	0.00	
6,600.00	21.79	52.02	6,192.13	1,346.97	1,725.02	2,188.62	0.00	0.00	0.00	
6,700.00	21.79	52.02	6,284.99	1,369.82	1,754.28	2,225.73	0.00	0.00	0.00	
6,800.00	21.79	52.02	6,377.85	1,392.66	1,783.53	2,262.85	0.00	0.00	0.00	
6,900.00	21.79	52.02	6,470.71	1,415.50	1,812.78	2,299.96	0.00	0.00	0.00	
7,000.00	21.79	52.02	6,563.56	1,438.34	1,842.03	2,337.07	0.00	0.00	0.00	
<b>OCRK (TVD)</b>										
7,025.24	21.79	52.02	6,587.00	1,444.11	1,849.42	2,346.44	0.00	0.00	0.00	
7,100.00	21.79	52.02	6,656.42	1,461.18	1,871.29	2,374.19	0.00	0.00	0.00	

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well RG 512-18-297 - Slot (B6) RG 512-18-297
<b>Company:</b>	Terra Energy Partners, LLP	<b>TVD Reference:</b>	KB=30' @ 6697.00usft (H&P #329)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	KB=30' @ 6697.00usft (H&P #329)
<b>Site:</b>	Fed 298-13-1 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RG 512-18-297	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan 1		

**Planned Survey**

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
<b>Start Drop -1.50</b>									
7,135.46	21.79	52.02	6,689.35	1,469.28	1,881.66	2,387.35	0.00	0.00	0.00
7,200.00	20.82	52.02	6,749.48	1,483.71	1,900.14	2,410.79	1.50	-1.50	0.00
7,300.00	19.32	52.02	6,843.41	1,504.83	1,927.18	2,445.11	1.50	-1.50	0.00
7,400.00	17.82	52.02	6,938.20	1,524.43	1,952.28	2,476.95	1.50	-1.50	0.00
7,500.00	16.32	52.02	7,033.79	1,542.49	1,975.41	2,506.30	1.50	-1.50	0.00
7,600.00	14.82	52.02	7,130.12	1,559.01	1,996.57	2,533.13	1.50	-1.50	0.00
7,700.00	13.32	52.02	7,227.12	1,573.96	2,015.72	2,557.44	1.50	-1.50	0.00
<b>U_MVRD (TVD)</b>									
7,781.89	12.09	52.02	7,307.00	1,585.05	2,029.92	2,575.45	1.50	-1.50	0.00
7,800.00	11.82	52.02	7,324.72	1,587.36	2,032.87	2,579.20	1.50	-1.50	0.00
7,900.00	10.32	52.02	7,422.86	1,599.17	2,048.00	2,598.40	1.50	-1.50	0.00
8,000.00	8.82	52.02	7,521.46	1,609.40	2,061.10	2,615.02	1.50	-1.50	0.00
8,100.00	7.32	52.02	7,620.47	1,618.04	2,072.17	2,629.05	1.50	-1.50	0.00
8,200.00	5.82	52.02	7,719.81	1,625.08	2,081.18	2,640.49	1.50	-1.50	0.00
8,300.00	4.32	52.02	7,819.42	1,630.51	2,088.14	2,649.32	1.50	-1.50	0.00
8,400.00	2.82	52.02	7,919.22	1,634.34	2,093.05	2,655.55	1.50	-1.50	0.00
8,500.00	1.32	52.02	8,019.15	1,636.56	2,095.89	2,659.15	1.50	-1.50	0.00
<b>Start 3780.00 hold at 8587.85 MD - TOP GAS (TVD)</b>									
8,587.86	0.00	0.00	8,107.00	1,637.18	2,096.69	2,660.16	1.50	-1.50	0.00
8,600.00	0.00	0.00	8,119.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
8,700.00	0.00	0.00	8,219.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
8,800.00	0.00	0.00	8,319.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
8,900.00	0.00	0.00	8,419.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
9,000.00	0.00	0.00	8,519.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
9,100.00	0.00	0.00	8,619.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
9,200.00	0.00	0.00	8,719.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
9,300.00	0.00	0.00	8,819.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
9,400.00	0.00	0.00	8,919.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
9,500.00	0.00	0.00	9,019.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
9,600.00	0.00	0.00	9,119.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
9,700.00	0.00	0.00	9,219.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
9,800.00	0.00	0.00	9,319.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
9,900.00	0.00	0.00	9,419.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
10,000.00	0.00	0.00	9,519.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
10,100.00	0.00	0.00	9,619.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
<b>CMEQ (TVD)</b>									
10,157.86	0.00	0.00	9,677.00	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
10,200.00	0.00	0.00	9,719.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
10,300.00	0.00	0.00	9,819.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
10,400.00	0.00	0.00	9,919.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
10,500.00	0.00	0.00	10,019.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
10,600.00	0.00	0.00	10,119.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
10,700.00	0.00	0.00	10,219.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
10,800.00	0.00	0.00	10,319.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
<b>RLNS (TVD)</b>									
10,887.86	0.00	0.00	10,407.00	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
10,900.00	0.00	0.00	10,419.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
11,000.00	0.00	0.00	10,519.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
<b>CZZT (TVD)</b>									
11,037.86	0.00	0.00	10,557.00	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
11,100.00	0.00	0.00	10,619.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well RG 512-18-297 - Slot (B6) RG 512-18-297
<b>Company:</b>	Terra Energy Partners, LLP	<b>TVD Reference:</b>	KB=30' @ 6697.00usft (H&P #329)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	KB=30' @ 6697.00usft (H&P #329)
<b>Site:</b>	Fed 298-13-1 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RG 512-18-297	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan 1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,200.00	0.00	0.00	10,719.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
11,300.00	0.00	0.00	10,819.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
<b>CRCN (TVD)</b>									
11,362.86	0.00	0.00	10,882.00	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
11,400.00	0.00	0.00	10,919.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
11,500.00	0.00	0.00	11,019.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
11,600.00	0.00	0.00	11,119.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
<b>SEGO (TVD)</b>									
11,622.86	0.00	0.00	11,142.00	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
11,700.00	0.00	0.00	11,219.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
11,800.00	0.00	0.00	11,319.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
<b>SEGO_LOWER (TVD)</b>									
11,867.86	0.00	0.00	11,387.00	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
11,900.00	0.00	0.00	11,419.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
12,000.00	0.00	0.00	11,519.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
12,100.00	0.00	0.00	11,619.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
12,200.00	0.00	0.00	11,719.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
12,300.00	0.00	0.00	11,819.14	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00
<b>TD at 12367.85</b>									
12,367.85	0.00	0.00	11,887.00	1,637.18	2,096.69	2,660.16	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
RG 512-18-297 - VP - plan hits target center - Circle (radius 100.00)	0.00	0.00	8,107.00	1,637.18	2,096.69	1,756,454.03	2,205,688.50	39.876309	-108.330457
RG 512-18-297 - PBHL - plan hits target center - Point	0.00	0.00	11,887.00	1,637.18	2,096.69	1,756,454.03	2,205,688.50	39.876309	-108.330457

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,363.89	1,330.00	13 3/8" Surface Casing	13-3/8	17-1/2	
3,140.80	2,980.00	9 5/8" Intermediate Casing	9-5/8	12-1/4	

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well RG 512-18-297 - Slot (B6) RG 512-18-297
<b>Company:</b>	Terra Energy Partners, LLP	<b>TVD Reference:</b>	KB=30' @ 6697.00usft (H&P #329)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	KB=30' @ 6697.00usft (H&P #329)
<b>Site:</b>	Fed 298-13-1 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RG 512-18-297	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan 1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
30.00	30.00	UINTA (TVD)				
887.64	880.00	GRRV (TVD)				
1,043.71	1,030.00	GRRV_A_GROOVE (TVD)				
1,245.43	1,220.00	GRRV_B_GROOVE (TVD)				
1,579.27	1,530.00	GRRV DISSOLUTION_SURF (TVD)				
2,322.34	2,220.00	GARDEN_GULCH (TVD)				
2,516.19	2,400.00	GRRV_ORANGE (TVD)				
2,602.34	2,480.00	U_WSCH (TVD)				
4,885.40	4,600.00	G_SAND (TVD)				
5,332.33	5,015.00	FRUN (TVD)				
6,177.70	5,800.00	L_WSCH (TVD)				
7,025.24	6,587.00	OCRK (TVD)				
7,781.89	7,307.00	U_MVRD (TVD)				
8,587.86	8,107.00	TOP GAS (TVD)				
10,157.86	9,677.00	CME0 (TVD)				
10,887.86	10,407.00	RLNS (TVD)				
11,037.86	10,557.00	CZZT (TVD)				
11,362.86	10,882.00	CRCN (TVD)				
11,622.86	11,142.00	SEGO (TVD)				
11,867.86	11,387.00	SEGO_LOWER (TVD)				
12,367.86	11,887.00	TD (TVD)				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
165.00	165.00	0.00	0.00	Start Build 2.00	
1,254.30	1,228.24	125.93	161.27	Start 5881.17 hold at 1254.30 MD	
7,135.46	6,689.35	1,469.28	1,881.66	Start Drop -1.50	
8,587.85	8,107.00	1,637.18	2,096.69	Start 3780.00 hold at 8587.85 MD	
12,367.85	11,887.00	1,637.18	2,096.69	TD at 12367.85	