

**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

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

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
RGU 443-6-297 - VP	8482.00	-470.47	2264.47	1766243.70	2209690.52	39.903510	-108.317286	Circle (Radius: 100.00)
RGU 443-6-297 - PBHL	12262.00	-470.47	2264.47	1766243.70	2209690.52	39.903510	-108.317286	Point

**REFERENCE INFORMATION**

Co-ordinate (N/E) Reference: Well RGU 443-6-297 - Slot RGU 443-6-297, True North  
 Vertical (TVD) Reference: KB=30' @ 6252.00usft (H&P #329)  
 Section (VS) Reference: Slot - RGU 443-6-297(0.00N, 0.00E)  
 Measured Depth Reference: KB=30' @ 6252.00usft (H&P #329)  
 Calculation Method: Minimum Curvature

**ANNOTATIONS**

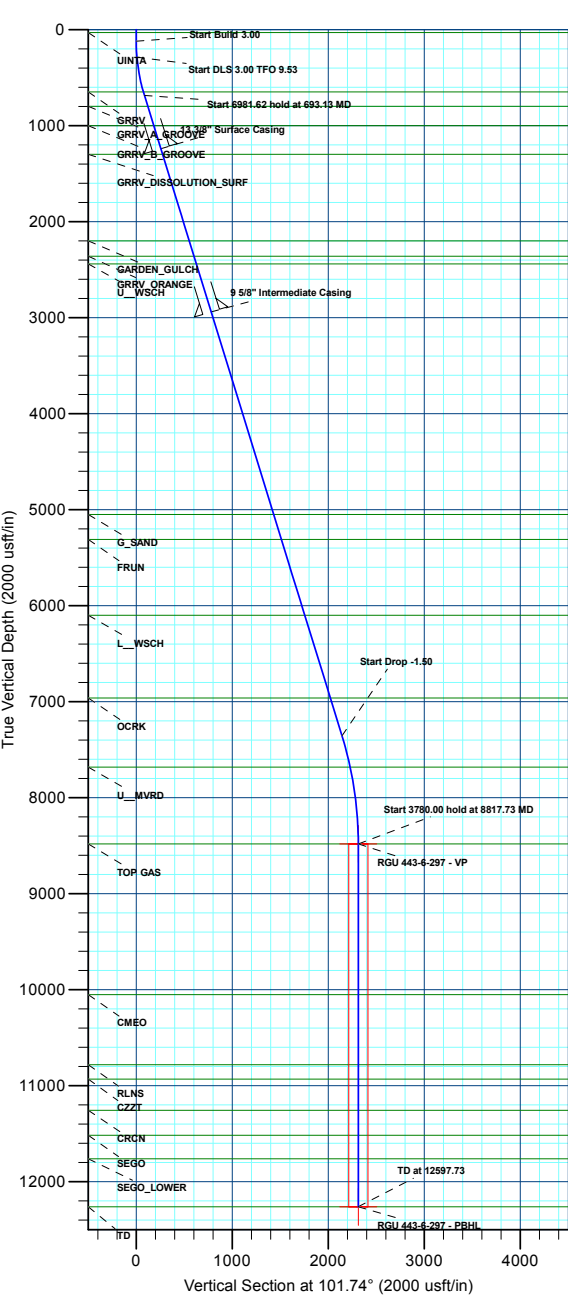
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	Start Build 3.00
286.67	5.00	95.00	286.46	-0.63	7.24	7.22	7.27	Start DLS 3.00 TFO 9.53
693.13	17.14	101.81	684.62	-14.49	83.82	85.01	85.12	Start 6981.62 hold at 693.13 MD
7674.75	17.14	101.81	7356.00	-435.73	2098.33	2143.10	2143.21	Start Drop -1.50
8817.73	0.00	0.00	8482.00	-470.47	2264.47	2312.83	2312.94	Start 3780.00 hold at 8817.73 MD
12597.73	0.00	0.00	12262.00	-470.47	2264.47	2312.83	2312.94	TD at 12597.73

**WELL DETAILS: RGU 443-6-297**

+N/-S	+E/-W	Northing	Ground Elev.	Latitude	Longitude	Slot
0.00	0.00	1766784.36	6222.00 2207441.77	39.904802	-108.325358	RGU 443-6-297

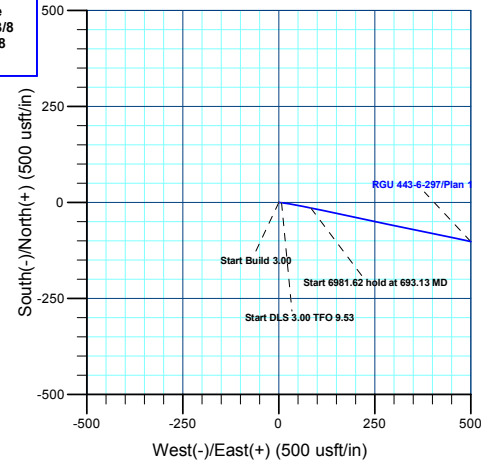
**CASING DETAILS**

TVD	MD	Name	Size
1240.00	1274.34	13 3/8" Surface Casing	13-3/8
2940.00	3053.39	9 5/8" Intermediate Casing	9-5/8



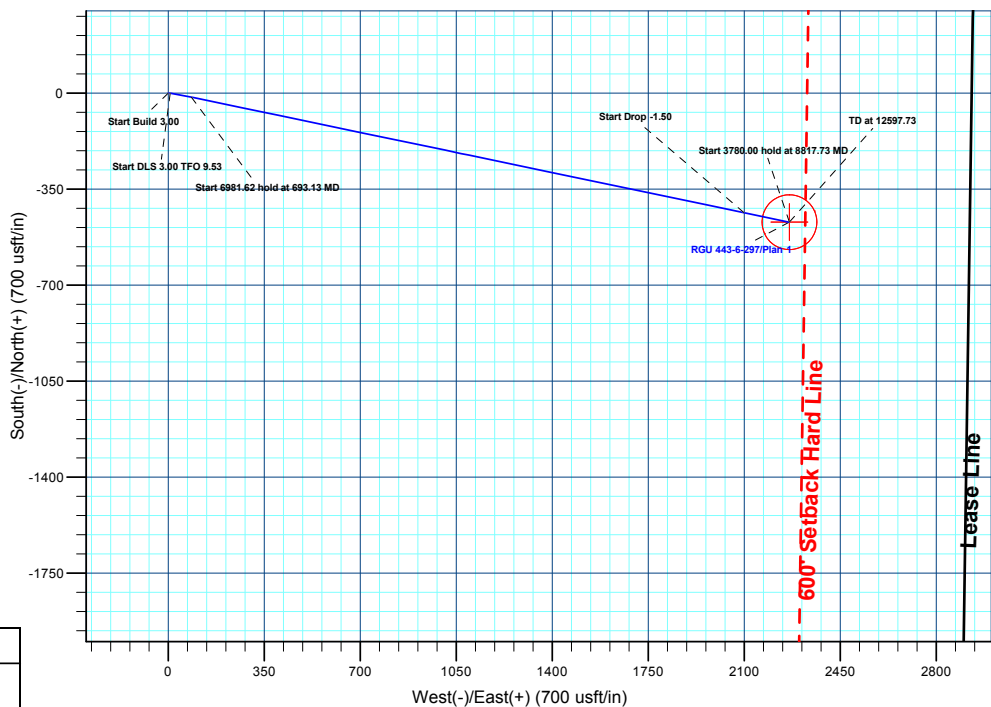
**FORMATION TOP DETAILS**

TVDPath	MDPath	Formation
30.00	30.00	UINTA
650.00	657.00	GRRV
800.00	813.88	GRRV_A_GROOVE
1000.00	1023.18	GRRV_B_GROOVE
1300.00	1337.13	GRRV_DISSOLUTION_SURF
2200.00	2278.98	GARDEN_GULCH
2360.00	2446.42	GRRV_ORANGE
2440.00	2530.14	U_WSCH
5050.00	5261.52	G_SAND
5310.00	5533.61	FRUN
6100.00	6360.34	L_WSCH
6962.00	7262.43	OCRK
7682.00	8011.77	U_MVRD
8482.00	8817.73	TOP GAS
10052.00	10387.73	CMEO
10782.00	11117.73	RLNS
10932.00	11267.73	CZTZ
11257.00	11592.73	CRCN
11517.00	11852.73	SEGO
11762.00	12097.73	SEGO_LOWER
12262.00	12597.73	TD



**Compass Diagram**

T: True North  
 M: Magnetic North  
 Azimuths to True North: 9.20°  
 Magnetic North: 9.20°  
 Magnetic Field Strength: 51294.5nT  
 Dip Angle: 65.83°  
 Date: 12/31/2020  
 Model: HDGM2020





## **Terra Energy Partners, LLP**

**Rio Blanco County, CO**

**RGU 23-6-297 Pad**

**RGU 443-6-297 - Slot RGU 443-6-297**

**Wellbore #1**

**Plan: Plan 1**

## **KLX Well Planning Report**

**10 May, 2022**



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well RGU 443-6-297 - Slot RGU 443-6-297
<b>Company:</b>	Terra Energy Partners, LLP	<b>TVD Reference:</b>	KB=30' @ 6252.00usft (H&P #329)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	KB=30' @ 6252.00usft (H&P #329)
<b>Site:</b>	RGU 23-6-297 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RGU 443-6-297	<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>	RGU 23-6-297 Pad				
<b>Site Position:</b>	<b>Northing:</b>	1,766,844.82 usft	<b>Latitude:</b>	39.904967	
<b>From:</b> Map	<b>Easting:</b>	2,207,435.21 usft	<b>Longitude:</b>	-108.325388	
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b>	-1.78 °

<b>Well</b>	RGU 443-6-297 - Slot RGU 443-6-297					
<b>Well Position</b>	<b>+N/-S</b>	-60.23 usft	<b>Northing:</b>	1,766,784.36 usft	<b>Latitude:</b>	39.904802
	<b>+E/-W</b>	8.44 usft	<b>Easting:</b>	2,207,441.77 usft	<b>Longitude:</b>	-108.325358
<b>Position Uncertainty</b>		0.00 usft	<b>Wellhead Elevation:</b>		<b>Ground Level:</b>	6,222.00 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	9.20	65.83	51,291.50000000

<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	101.74

<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	
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	0.00	0.00	
286.67	5.00	95.00	286.46	-0.63	7.24	3.00	3.00	0.00	95.00	
693.13	17.14	101.81	684.62	-14.49	83.82	3.00	2.99	1.68	9.53	
7,674.75	17.14	101.81	7,356.00	-435.73	2,098.33	0.00	0.00	0.00	0.00	
8,817.73	0.00	0.00	8,482.00	-470.47	2,264.47	1.50	-1.50	0.00	180.00	RGU 443-6-297 - VP
12,597.73	0.00	0.00	12,262.00	-470.47	2,264.47	0.00	0.00	0.00	0.00	RGU 443-6-297 - PBI

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<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	KB=30' @ 6252.00usft (H&P #329)
<b>Site:</b>	RGU 23-6-297 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RGU 443-6-297	<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	0.00
<b>UINTA</b>										
30.00	0.00	0.00	30.00	0.00	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	0.00
<b>Start Build 3.00</b>										
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	2.40	95.00	199.98	-0.15	1.67	1.66	3.00	3.00	0.00	0.00
<b>Start DLS 3.00 TFO 9.53</b>										
286.67	5.00	95.00	286.46	-0.63	7.24	7.22	3.00	3.00	0.00	0.00
300.00	5.39	95.70	299.73	-0.75	8.44	8.42	3.00	2.96	5.28	0.00
400.00	8.37	98.87	399.00	-2.34	20.32	20.37	3.00	2.98	3.16	0.00
500.00	11.36	100.37	497.51	-5.23	37.20	37.49	3.00	2.99	1.51	0.00
600.00	14.35	101.26	594.99	-9.43	59.05	59.74	3.00	2.99	0.89	0.00
<b>GRRV</b>										
657.00	16.06	101.62	650.00	-12.40	73.71	74.69	3.00	3.00	0.63	0.00
<b>Start 6981.62 hold at 693.13 MD</b>										
693.13	17.14	101.81	684.62	-14.49	83.82	85.01	3.00	3.00	0.53	0.00
700.00	17.14	101.81	691.18	-14.91	85.80	87.04	0.00	0.00	0.00	0.00
800.00	17.14	101.81	786.74	-20.94	114.65	116.52	0.00	0.00	0.00	0.00
<b>GRRV_A_GROOVE</b>										
813.88	17.14	101.81	800.00	-21.78	118.66	120.61	0.00	0.00	0.00	0.00
900.00	17.14	101.81	882.30	-26.97	143.51	145.99	0.00	0.00	0.00	0.00
1,000.00	17.14	101.81	977.85	-33.01	172.36	175.47	0.00	0.00	0.00	0.00
<b>GRRV_B_GROOVE</b>										
1,023.18	17.14	101.81	1,000.00	-34.41	179.05	182.30	0.00	0.00	0.00	0.00
1,100.00	17.14	101.81	1,073.41	-39.04	201.22	204.95	0.00	0.00	0.00	0.00
1,200.00	17.14	101.81	1,168.96	-45.07	230.07	234.43	0.00	0.00	0.00	0.00
<b>13 3/8" Surface Casing</b>										
1,274.34	17.14	101.81	1,240.00	-49.56	251.52	256.34	0.00	0.00	0.00	0.00
1,300.00	17.14	101.81	1,264.52	-51.11	258.93	263.91	0.00	0.00	0.00	0.00
<b>GRRV DISSOLUTION SURF</b>										
1,337.13	17.14	101.81	1,300.00	-53.35	269.64	274.85	0.00	0.00	0.00	0.00
1,400.00	17.14	101.81	1,360.08	-57.14	287.78	293.39	0.00	0.00	0.00	0.00
1,500.00	17.14	101.81	1,455.63	-63.17	316.63	322.87	0.00	0.00	0.00	0.00
1,600.00	17.14	101.81	1,551.19	-69.21	345.49	352.34	0.00	0.00	0.00	0.00
1,700.00	17.14	101.81	1,646.75	-75.24	374.34	381.82	0.00	0.00	0.00	0.00
1,800.00	17.14	101.81	1,742.30	-81.28	403.20	411.30	0.00	0.00	0.00	0.00
1,900.00	17.14	101.81	1,837.86	-87.31	432.05	440.78	0.00	0.00	0.00	0.00
2,000.00	17.14	101.81	1,933.42	-93.34	460.91	470.26	0.00	0.00	0.00	0.00
2,100.00	17.14	101.81	2,028.97	-99.38	489.76	499.74	0.00	0.00	0.00	0.00
2,200.00	17.14	101.81	2,124.53	-105.41	518.62	529.22	0.00	0.00	0.00	0.00
<b>GARDEN_GULCH</b>										
2,278.98	17.14	101.81	2,200.00	-110.17	541.41	552.50	0.00	0.00	0.00	0.00
2,300.00	17.14	101.81	2,220.08	-111.44	547.47	558.69	0.00	0.00	0.00	0.00
2,400.00	17.14	101.81	2,315.64	-117.48	576.33	588.17	0.00	0.00	0.00	0.00
<b>GRRV_ORANGE</b>										
2,446.42	17.14	101.81	2,360.00	-120.28	589.72	601.86	0.00	0.00	0.00	0.00
2,500.00	17.14	101.81	2,411.20	-123.51	605.18	617.65	0.00	0.00	0.00	0.00
<b>U_WSCH</b>										
2,530.14	17.14	101.81	2,440.00	-125.33	613.88	626.54	0.00	0.00	0.00	0.00
2,600.00	17.14	101.81	2,506.75	-129.54	634.03	647.13	0.00	0.00	0.00	0.00
2,700.00	17.14	101.81	2,602.31	-135.58	662.89	676.61	0.00	0.00	0.00	0.00

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<b>Site:</b>	RGU 23-6-297 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RGU 443-6-297	<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)	
2,800.00	17.14	101.81	2,697.87	-141.61	691.74	706.09	0.00	0.00	0.00	
2,900.00	17.14	101.81	2,793.42	-147.64	720.60	735.57	0.00	0.00	0.00	
3,000.00	17.14	101.81	2,888.98	-153.68	749.45	765.04	0.00	0.00	0.00	
<b>9 5/8" Intermediate Casing</b>										
3,053.39	17.14	101.81	2,940.00	-156.90	764.86	780.78	0.00	0.00	0.00	
3,100.00	17.14	101.81	2,984.53	-159.71	778.31	794.52	0.00	0.00	0.00	
3,200.00	17.14	101.81	3,080.09	-165.75	807.16	824.00	0.00	0.00	0.00	
3,300.00	17.14	101.81	3,175.65	-171.78	836.02	853.48	0.00	0.00	0.00	
3,400.00	17.14	101.81	3,271.20	-177.81	864.87	882.96	0.00	0.00	0.00	
3,500.00	17.14	101.81	3,366.76	-183.85	893.73	912.44	0.00	0.00	0.00	
3,600.00	17.14	101.81	3,462.32	-189.88	922.58	941.92	0.00	0.00	0.00	
3,700.00	17.14	101.81	3,557.87	-195.91	951.43	971.39	0.00	0.00	0.00	
3,800.00	17.14	101.81	3,653.43	-201.95	980.29	1,000.87	0.00	0.00	0.00	
3,900.00	17.14	101.81	3,748.99	-207.98	1,009.14	1,030.35	0.00	0.00	0.00	
4,000.00	17.14	101.81	3,844.54	-214.01	1,038.00	1,059.83	0.00	0.00	0.00	
4,100.00	17.14	101.81	3,940.10	-220.05	1,066.85	1,089.31	0.00	0.00	0.00	
4,200.00	17.14	101.81	4,035.65	-226.08	1,095.71	1,118.79	0.00	0.00	0.00	
4,300.00	17.14	101.81	4,131.21	-232.11	1,124.56	1,148.27	0.00	0.00	0.00	
4,400.00	17.14	101.81	4,226.77	-238.15	1,153.42	1,177.74	0.00	0.00	0.00	
4,500.00	17.14	101.81	4,322.32	-244.18	1,182.27	1,207.22	0.00	0.00	0.00	
4,600.00	17.14	101.81	4,417.88	-250.21	1,211.13	1,236.70	0.00	0.00	0.00	
4,700.00	17.14	101.81	4,513.44	-256.25	1,239.98	1,266.18	0.00	0.00	0.00	
4,800.00	17.14	101.81	4,608.99	-262.28	1,268.84	1,295.66	0.00	0.00	0.00	
4,900.00	17.14	101.81	4,704.55	-268.32	1,297.69	1,325.14	0.00	0.00	0.00	
5,000.00	17.14	101.81	4,800.11	-274.35	1,326.54	1,354.62	0.00	0.00	0.00	
5,100.00	17.14	101.81	4,895.66	-280.38	1,355.40	1,384.09	0.00	0.00	0.00	
5,200.00	17.14	101.81	4,991.22	-286.42	1,384.25	1,413.57	0.00	0.00	0.00	
<b>G_SAND</b>										
5,261.52	17.14	101.81	5,050.00	-290.13	1,402.00	1,431.71	0.00	0.00	0.00	
5,300.00	17.14	101.81	5,086.77	-292.45	1,413.11	1,443.05	0.00	0.00	0.00	
5,400.00	17.14	101.81	5,182.33	-298.48	1,441.96	1,472.53	0.00	0.00	0.00	
5,500.00	17.14	101.81	5,277.89	-304.52	1,470.82	1,502.01	0.00	0.00	0.00	
<b>FRUN</b>										
5,533.61	17.14	101.81	5,310.00	-306.54	1,480.51	1,511.92	0.00	0.00	0.00	
5,600.00	17.14	101.81	5,373.44	-310.55	1,499.67	1,531.49	0.00	0.00	0.00	
5,700.00	17.14	101.81	5,469.00	-316.58	1,528.53	1,560.97	0.00	0.00	0.00	
5,800.00	17.14	101.81	5,564.56	-322.62	1,557.38	1,590.45	0.00	0.00	0.00	
5,900.00	17.14	101.81	5,660.11	-328.65	1,586.24	1,619.92	0.00	0.00	0.00	
6,000.00	17.14	101.81	5,755.67	-334.68	1,615.09	1,649.40	0.00	0.00	0.00	
6,100.00	17.14	101.81	5,851.22	-340.72	1,643.94	1,678.88	0.00	0.00	0.00	
6,200.00	17.14	101.81	5,946.78	-346.75	1,672.80	1,708.36	0.00	0.00	0.00	
6,300.00	17.14	101.81	6,042.34	-352.79	1,701.65	1,737.84	0.00	0.00	0.00	
<b>L_WSCH</b>										
6,360.34	17.14	101.81	6,100.00	-356.43	1,719.07	1,755.63	0.00	0.00	0.00	
6,400.00	17.14	101.81	6,137.89	-358.82	1,730.51	1,767.32	0.00	0.00	0.00	
6,500.00	17.14	101.81	6,233.45	-364.85	1,759.36	1,796.80	0.00	0.00	0.00	
6,600.00	17.14	101.81	6,329.01	-370.89	1,788.22	1,826.27	0.00	0.00	0.00	
6,700.00	17.14	101.81	6,424.56	-376.92	1,817.07	1,855.75	0.00	0.00	0.00	
6,800.00	17.14	101.81	6,520.12	-382.95	1,845.93	1,885.23	0.00	0.00	0.00	
6,900.00	17.14	101.81	6,615.68	-388.99	1,874.78	1,914.71	0.00	0.00	0.00	
7,000.00	17.14	101.81	6,711.23	-395.02	1,903.64	1,944.19	0.00	0.00	0.00	
7,100.00	17.14	101.81	6,806.79	-401.05	1,932.49	1,973.67	0.00	0.00	0.00	
7,200.00	17.14	101.81	6,902.34	-407.09	1,961.34	2,003.15	0.00	0.00	0.00	
<b>OCRK</b>										

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well RGU 443-6-297 - Slot RGU 443-6-297
<b>Company:</b>	Terra Energy Partners, LLP	<b>TVD Reference:</b>	KB=30' @ 6252.00usft (H&P #329)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	KB=30' @ 6252.00usft (H&P #329)
<b>Site:</b>	RGU 23-6-297 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RGU 443-6-297	<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)
7,262.43	17.14	101.81	6,962.00	-410.85	1,979.36	2,021.55	0.00	0.00	0.00
7,300.00	17.14	101.81	6,997.90	-413.12	1,990.20	2,032.62	0.00	0.00	0.00
7,400.00	17.14	101.81	7,093.46	-419.15	2,019.05	2,062.10	0.00	0.00	0.00
7,500.00	17.14	101.81	7,189.01	-425.19	2,047.91	2,091.58	0.00	0.00	0.00
7,600.00	17.14	101.81	7,284.57	-431.22	2,076.76	2,121.06	0.00	0.00	0.00
<b>Start Drop -1.50</b>									
7,674.75	17.14	101.81	7,356.00	-435.73	2,098.33	2,143.10	0.00	0.00	0.00
7,700.00	16.77	101.81	7,380.15	-437.24	2,105.54	2,150.46	1.50	-1.50	0.00
7,800.00	15.27	101.81	7,476.27	-442.89	2,132.54	2,178.05	1.50	-1.50	0.00
7,900.00	13.77	101.81	7,573.07	-448.02	2,157.08	2,203.11	1.50	-1.50	0.00
8,000.00	12.27	101.81	7,670.50	-452.63	2,179.12	2,225.63	1.50	-1.50	0.00
<b>U_MVRD</b>									
8,011.77	12.09	101.81	7,682.00	-453.13	2,181.55	2,228.12	1.50	-1.50	0.00
8,100.00	10.77	101.81	7,768.48	-456.71	2,198.66	2,245.60	1.50	-1.50	0.00
8,200.00	9.27	101.81	7,866.96	-460.27	2,215.69	2,262.99	1.50	-1.50	0.00
8,300.00	7.77	101.81	7,965.85	-463.30	2,230.18	2,277.80	1.50	-1.50	0.00
8,400.00	6.27	101.81	8,065.10	-465.80	2,242.14	2,290.01	1.50	-1.50	0.00
8,500.00	4.77	101.81	8,164.63	-467.77	2,251.55	2,299.62	1.50	-1.50	0.00
8,600.00	3.27	101.81	8,264.38	-469.20	2,258.40	2,306.63	1.50	-1.50	0.00
8,700.00	1.77	101.81	8,364.29	-470.10	2,262.70	2,311.02	1.50	-1.50	0.00
8,800.00	0.27	101.81	8,464.27	-470.46	2,264.43	2,312.79	1.50	-1.50	0.00
<b>Start 3780.00 hold at 8817.73 MD - TOP GAS</b>									
8,817.73	0.00	0.00	8,482.00	-470.47	2,264.47	2,312.83	1.50	-1.50	0.00
8,900.00	0.00	0.00	8,564.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
9,000.00	0.00	0.00	8,664.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
9,100.00	0.00	0.00	8,764.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
9,200.00	0.00	0.00	8,864.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
9,300.00	0.00	0.00	8,964.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
9,400.00	0.00	0.00	9,064.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
9,500.00	0.00	0.00	9,164.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
9,600.00	0.00	0.00	9,264.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
9,700.00	0.00	0.00	9,364.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
9,800.00	0.00	0.00	9,464.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
9,900.00	0.00	0.00	9,564.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
10,000.00	0.00	0.00	9,664.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
10,100.00	0.00	0.00	9,764.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
10,200.00	0.00	0.00	9,864.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
10,300.00	0.00	0.00	9,964.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
<b>CMEO</b>									
10,387.73	0.00	0.00	10,052.00	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
10,400.00	0.00	0.00	10,064.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
10,500.00	0.00	0.00	10,164.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
10,600.00	0.00	0.00	10,264.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
10,700.00	0.00	0.00	10,364.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
10,800.00	0.00	0.00	10,464.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
10,900.00	0.00	0.00	10,564.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
11,000.00	0.00	0.00	10,664.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
11,100.00	0.00	0.00	10,764.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
<b>RLNS</b>									
11,117.73	0.00	0.00	10,782.00	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
11,200.00	0.00	0.00	10,864.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00
<b>CZZT</b>									
11,267.73	0.00	0.00	10,932.00	-470.47	2,264.47	2,312.83	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well RGU 443-6-297 - Slot RGU 443-6-297
<b>Company:</b>	Terra Energy Partners, LLP	<b>TVD Reference:</b>	KB=30' @ 6252.00usft (H&P #329)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	KB=30' @ 6252.00usft (H&P #329)
<b>Site:</b>	RGU 23-6-297 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RGU 443-6-297	<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)	
11,300.00	0.00	0.00	10,964.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00	
11,400.00	0.00	0.00	11,064.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00	
11,500.00	0.00	0.00	11,164.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00	
<b>CRCN</b>										
11,592.73	0.00	0.00	11,257.00	-470.47	2,264.47	2,312.83	0.00	0.00	0.00	
11,600.00	0.00	0.00	11,264.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00	
11,700.00	0.00	0.00	11,364.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00	
11,800.00	0.00	0.00	11,464.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00	
<b>SEGO</b>										
11,852.73	0.00	0.00	11,517.00	-470.47	2,264.47	2,312.83	0.00	0.00	0.00	
11,900.00	0.00	0.00	11,564.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00	
12,000.00	0.00	0.00	11,664.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00	
<b>SEGO_LOWER</b>										
12,097.73	0.00	0.00	11,762.00	-470.47	2,264.47	2,312.83	0.00	0.00	0.00	
12,100.00	0.00	0.00	11,764.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00	
12,200.00	0.00	0.00	11,864.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00	
12,300.00	0.00	0.00	11,964.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00	
12,400.00	0.00	0.00	12,064.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00	
12,500.00	0.00	0.00	12,164.27	-470.47	2,264.47	2,312.83	0.00	0.00	0.00	
<b>TD at 12597.73 - TD</b>										
12,597.73	0.00	0.00	12,262.00	-470.47	2,264.47	2,312.83	0.00	0.00	0.00	

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
RGU 443-6-297 - VP - hit/miss target - Shape - Circle (radius 100.00)	0.00	0.00	8,482.00	-470.47	2,264.47	1,766,243.70	2,209,690.52	39.903510	-108.317287
RGU 443-6-297 - PBHL - plan hits target center - Point	0.00	0.00	12,262.00	-470.47	2,264.47	1,766,243.70	2,209,690.52	39.903510	-108.317287

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,274.34	1,240.00	13 3/8" Surface Casing	13-3/8	17-1/2	
3,053.39	2,940.00	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 RGU 443-6-297 - Slot RGU 443-6-297
<b>Company:</b>	Terra Energy Partners, LLP	<b>TVD Reference:</b>	KB=30' @ 6252.00usft (H&P #329)
<b>Project:</b>	Rio Blanco County, CO	<b>MD Reference:</b>	KB=30' @ 6252.00usft (H&P #329)
<b>Site:</b>	RGU 23-6-297 Pad	<b>North Reference:</b>	True
<b>Well:</b>	RGU 443-6-297	<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				
657.00	650.00	GRRV				
813.88	800.00	GRRV_A_GROOVE				
1,023.18	1,000.00	GRRV_B_GROOVE				
1,337.13	1,300.00	GRRV DISSOLUTION_SURF				
2,278.98	2,200.00	GARDEN_GULCH				
2,446.42	2,360.00	GRRV_ORANGE				
2,530.14	2,440.00	U_WSCH				
5,261.52	5,050.00	G_SAND				
5,533.61	5,310.00	FRUN				
6,360.34	6,100.00	L_WSCH				
7,262.43	6,962.00	OCRK				
8,011.77	7,682.00	U_MVRD				
8,817.73	8,482.00	TOP GAS				
10,387.73	10,052.00	CMEQ				
11,117.73	10,782.00	RLNS				
11,267.73	10,932.00	CZZT				
11,592.73	11,257.00	CRCN				
11,852.73	11,517.00	SEGO				
12,097.73	11,762.00	SEGO_LOWER				
12,597.73	12,262.00	TD				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
120.00	120.00	0.00	0.00	Start Build 3.00	
286.67	286.46	-0.63	7.24	Start DLS 3.00 TFO 9.53	
693.13	684.62	-14.49	83.82	Start 6981.62 hold at 693.13 MD	
7,674.75	7,356.00	-435.73	2,098.33	Start Drop -1.50	
8,817.73	8,482.00	-470.47	2,264.47	Start 3780.00 hold at 8817.73 MD	
12,597.73	12,262.00	-470.47	2,264.47	TD at 12597.73	