

Sec 18, T2S, R97W  
RG 444-7-297  
Q210146 & RM-210060  
Plan 3

Company Name: Terra Energy Partners, LLP  
Rio Blanco County, CO  
Rig: KB=30' @ 6650.90usft (H&P #329)  
Created by: Chase Chambers  
Date: 15:39, July 18 2021

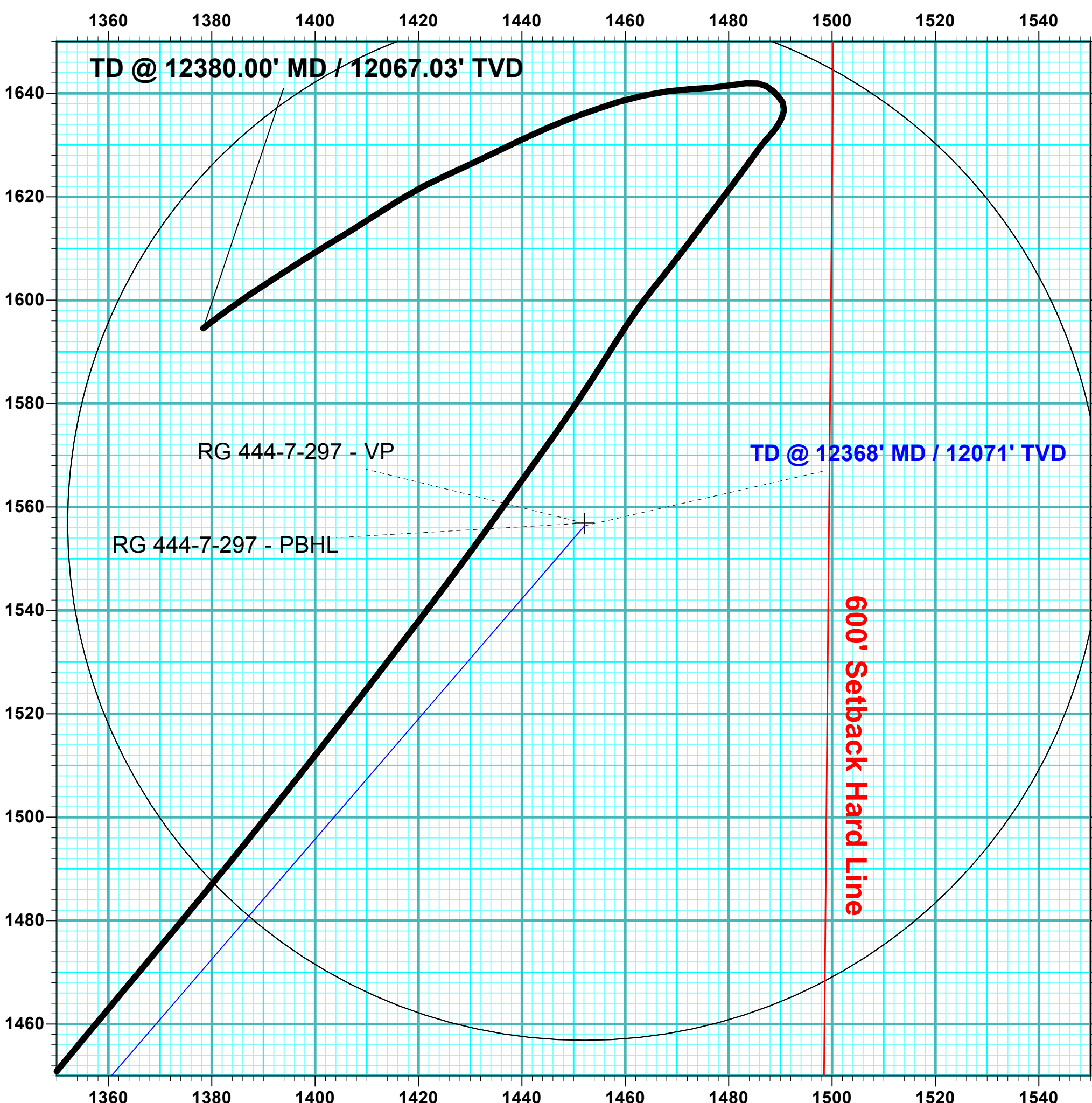
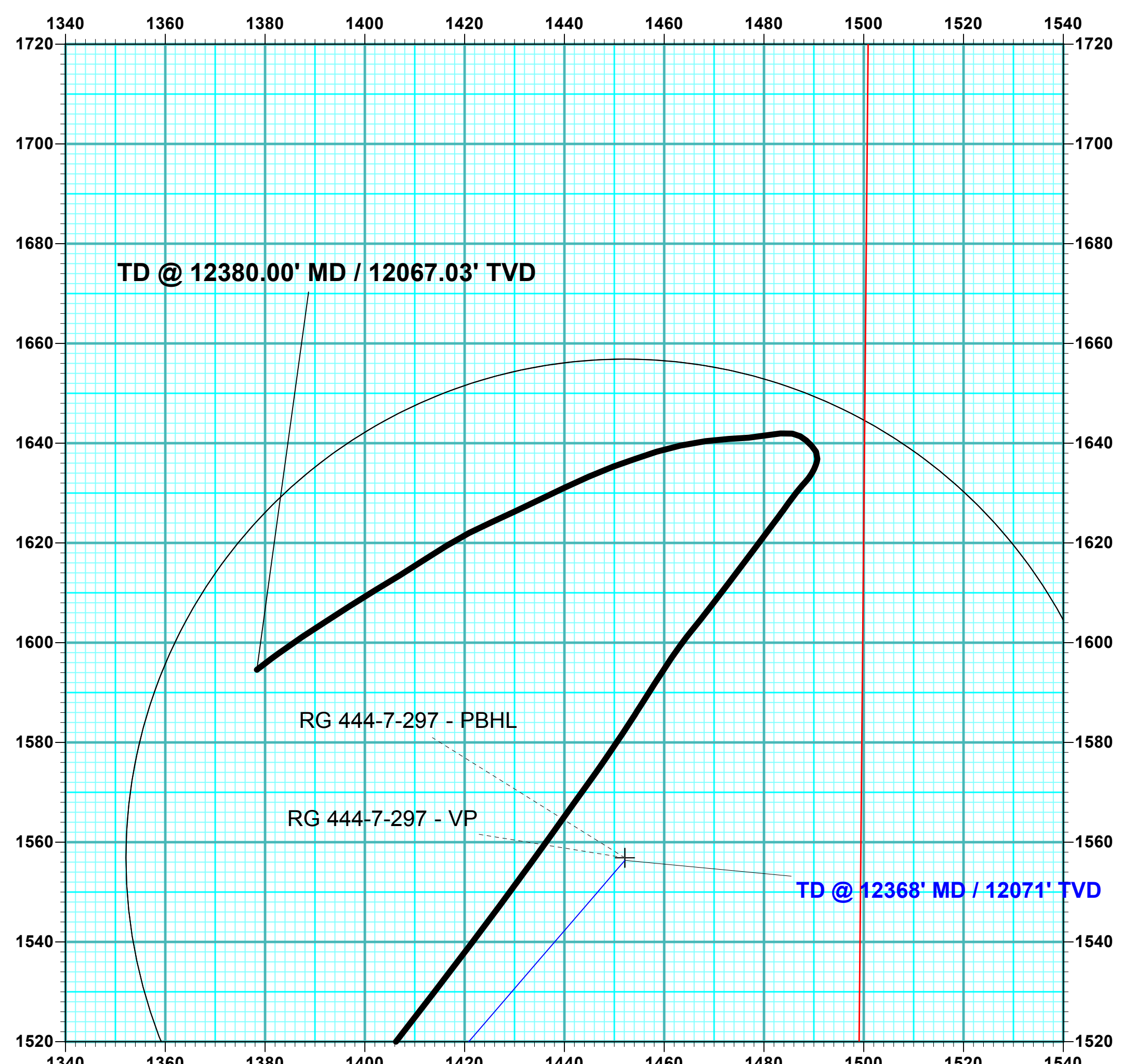
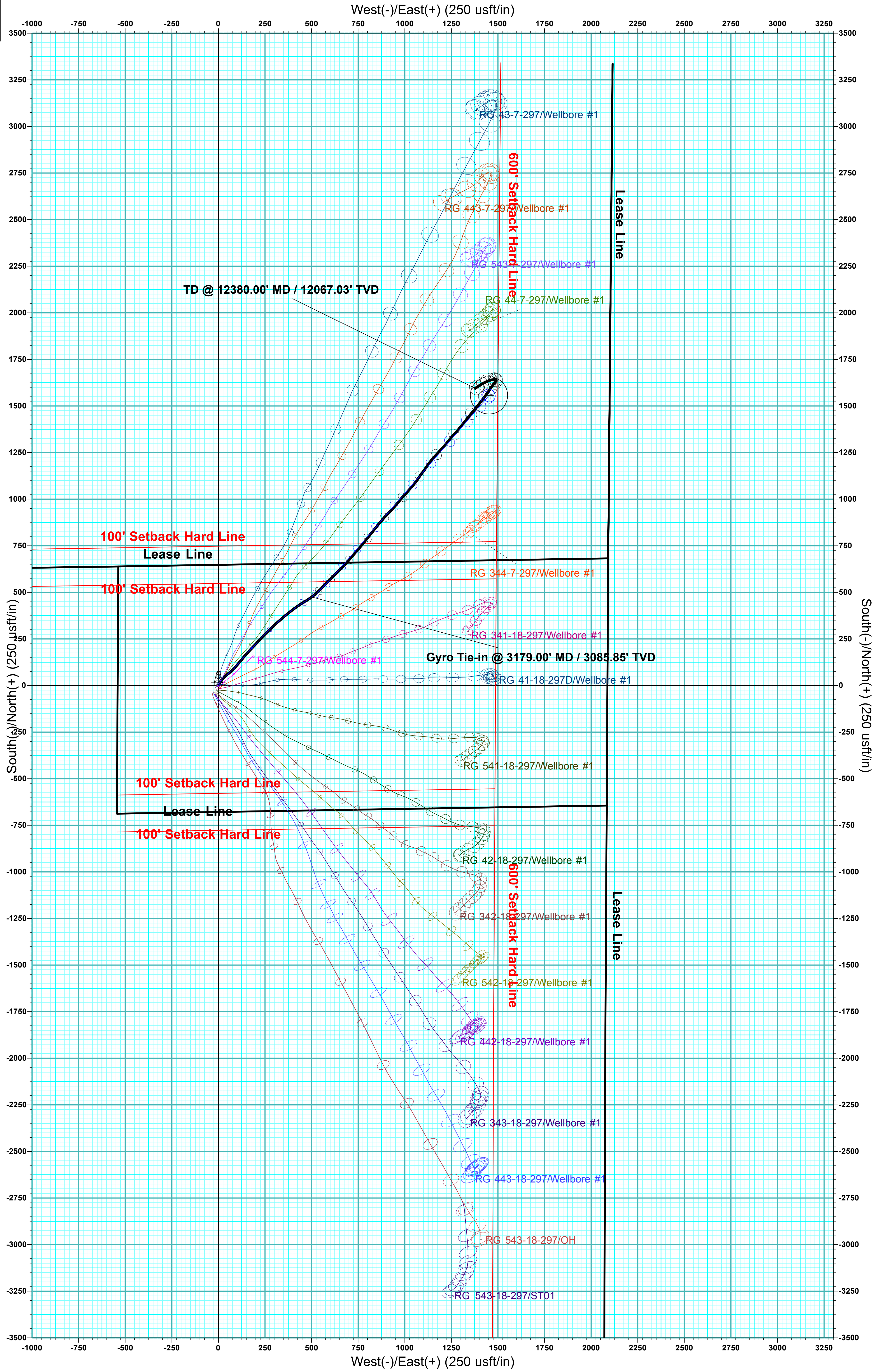
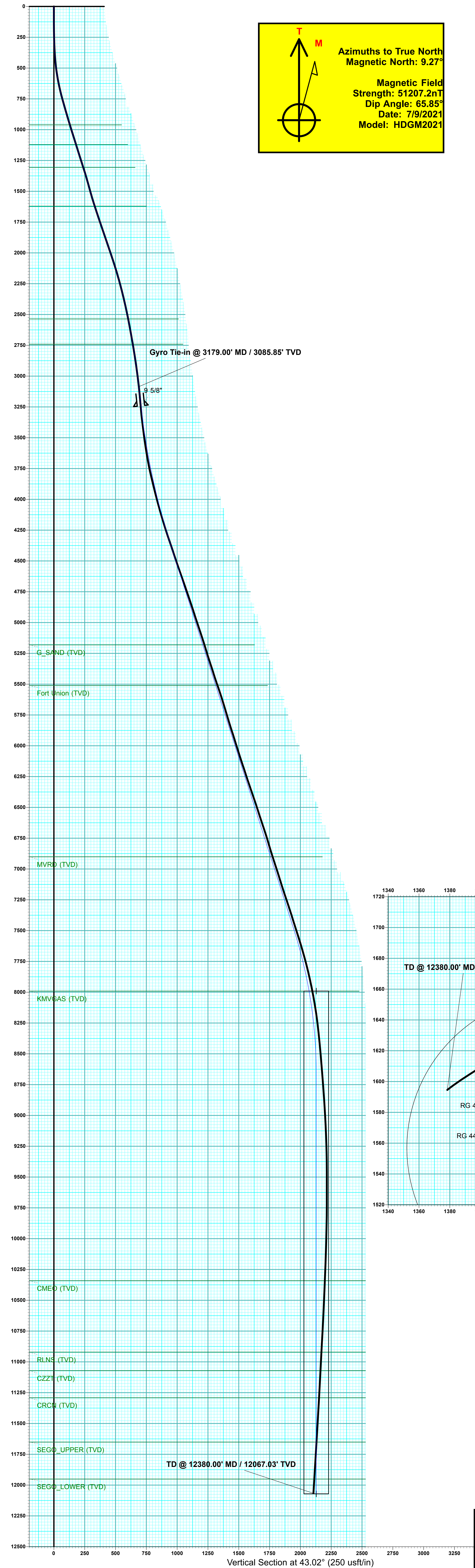
PROJECT DETAILS: Rio Blanco County, CO

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



DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
RG 444-7-297 - VP	7991.00	1556.86	1452.14	1759913.80	2209433.30	39.886121	-108.317503
RG 444-7-297 - PBHL	12071.00	1556.86	1452.14	1759913.80	2209433.30	39.886121	-108.317503

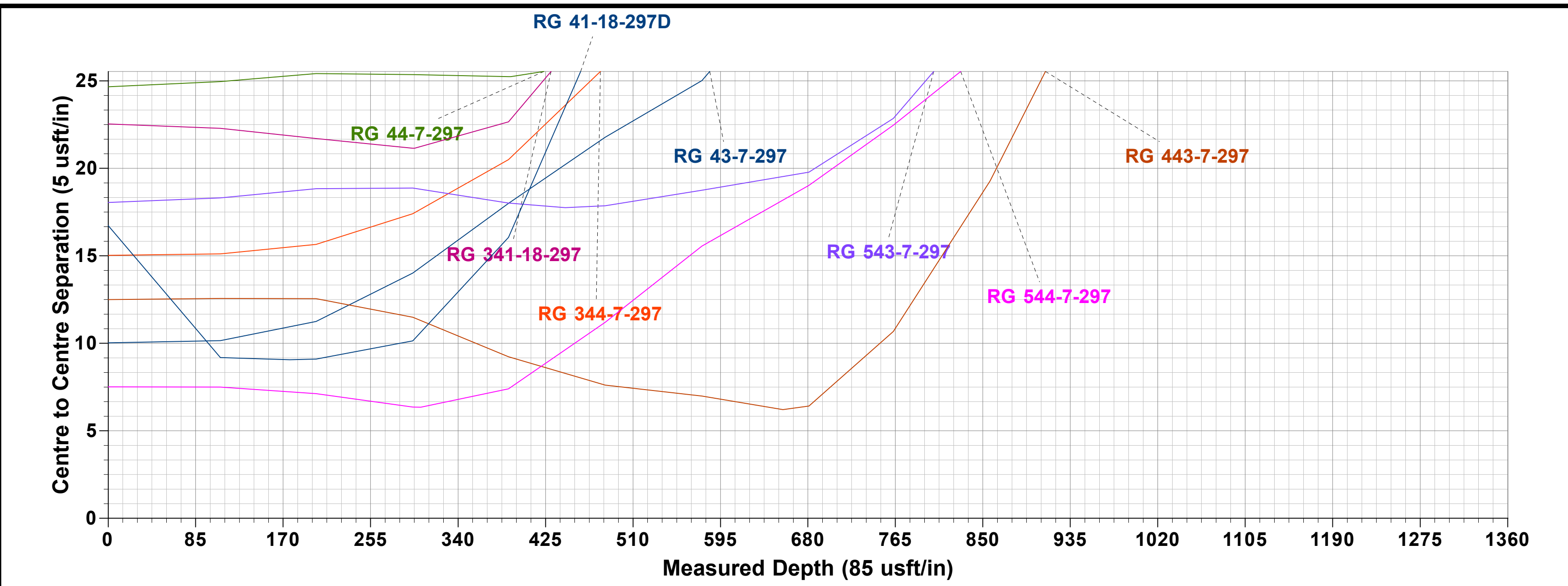
WELL DETAILS: RG 444-7-297					
Ground Elevation:		6620.90			
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	1758402.80	2207933.50	39.881847	-108.322678



ANNOTATIONS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure	Annotation	
3179.00	6.38	52.08	3085.85	475.39	500.87	689.27	695.31	Gyro Tie-in @ 3179.00' MD / 3085.85' TVD	
12380.00	3.38	232.78	12067.03	1594.58	1378.37	2106.23	2351.45	TD @ 12380.00' MD / 12067.03' TVD	

FORMATION TOP DETAILS		
TVDP	MDPath	Formation
961.00	975.93	GRRV (TVD)
1121.00	1143.34	GRRV_A GROOVE (TVD)
1306.00	1337.57	GRRV_B GROOVE (TVD)
1621.00	1666.05	GRRV_DISSOLUTION_SURF (TVD)
2536.00	2621.78	GRRV_ORANGE (TVD)
2741.00	2830.41	WSTC (TVD)
5181.00	5343.24	G_SAND (TVD)
5511.00	5689.77	Fort Union (TVD)
6901.00	7149.41	MVRD (TVD)
7991.00	8284.37	KMGAS (TVD)
10341.00	10637.75	CMEQ (TVD)
10921.00	11217.75	RLNS (TVD)
11071.00	11367.75	CZZT (TVD)
11291.00	11587.75	CRCN (TVD)
11651.00	11947.75	SEGO_UPPER (TVD)
11951.00	12247.75	SEGO_LOWER (TVD)

SLOTS				
Slot Name	+N/-S	+E/-W	Northing	Easting
(A1) RG 443-18	-47.61	-22.23	1758355.90	2207909.80
(A2) RG 442-18	-40.81	-19.04	1758362.60	2207913.20
(A3) RG 342-18	-34.01	-15.85	1758369.30	2207916.60
(A4) RG 42-18	-27.21	-12.76	1758376.00	2207919.90
(A5) RG 341-18	-20.41	-9.57	1758382.70	2207923.30
(A6) RG 344-7	-13.60	-6.38	1758389.40	2207926.70
(A7) RG 544-7	-6.80	-3.19	1758396.10	2207930.10
(A8) RG 444-7	0.00	0.00	1758402.80	2207933.50
(A9) RG 41-18	7.43	5.56	1758410.05	2207939.29
(B1) RG 543-18	-43.39	-31.27	1758360.40	2207900.90
(B2) RG 343-18	-36.59	-28.18	1758367.10	2207904.20
(B3) RG 542-18	-29.79	-24.99	1758373.80	2207907.60
(B4) RG 541-18	-22.99	-21.80	1758380.50	2207911.00
(B5) RG 44-7	-16.19	-18.61	1758387.20	2207914.40
(B6) RG 543-7	-9.38	-15.42	1758393.90	2207917.80
(B7) RG 443-7	-2.58	-12.23	1758400.60	2207921.20
(B8) RG 43-7	4.28	-9.07	1758407.36	2207924.57



DESIGN ANNOTATIONS							
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSec	Departure
3179.00	6.38	52.08	3085.85	475.39	500.87	689.28	0.00
3330.00	6.38	52.08	3235.92	485.70	514.10	705.85	16.78
4488.15	17.77	40.71	4366.71	659.80	680.70	946.80	258.04
7766.37	17.77	40.71	7488.52	1418.21	1333.26	1946.49	1258.54
8284.37	10.00	40.71	7991.00	1512.36	1414.28	2070.61	1382.75
8951.04	0.00	0.00	8654.29	1556.35	1452.13	2128.59	1440.78
12367.75	0.00	0.00	12071.00	1556.35	1452.13	2128.59	1440.78





## **Terra Energy Partners, LLP**

**Rio Blanco County, CO**

**Sec 18, T2S, R97W**

**RG 444-7-297**

**Wellbore #1**

**Design: Wellbore #1**

## **KLX Survey Report**

**18 July, 2021**



<b>Company:</b>	Terra Energy Partners, LLP	<b>Local Co-ordinate Reference:</b>	Well RG 444-7-297
<b>Project:</b>	Rio Blanco County, CO	<b>TVD Reference:</b>	KB=30' @ 6650.90usft (H&P #329)
<b>Site:</b>	Sec 18, T2S, R97W	<b>MD Reference:</b>	KB=30' @ 6650.90usft (H&P #329)
<b>Well:</b>	RG 444-7-297	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db

<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		

Site		Sec 18, T2S, R97W			
Site Position:		Northing:	1,758,376.00 usft	Latitude:	39.881773
From:	Map	Easting:	2,207,919.90 usft	Longitude:	-108.322723
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-1.78 °

Well	RG 444-7-297					
Well Position	+N/-S	0.00 usft	Northing:	1,758,402.80 usft	Latitude:	39.881847
	+E/-W	0.00 usft	Easting:	2,207,933.50 usft	Longitude:	-108.322678
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	6,620.90 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>
	HDGM2021	7/9/2021	9.27	65.85	51,207.20000000

<b>Design</b>	Wellbore #1				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<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	43.01	

<b>Survey Program</b>	<b>Date</b>	7/18/2021			
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
109.00	3,179.00	Gyrodata Surveys (Wellbore #1)	GYRO-NS	OWSG Gyrocompass Gyro	
3,344.00	12,380.00	KLX MWD Surveys (Wellbore #1)	OWSG (REV5) MWD HDGM	OWSG MWD - Standard	

<b>Survey</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Vertical Section (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
109.00	0.13	39.39	109.00	0.10	0.08	0.12	0.12	0.12	0.00	
202.00	0.70	48.28	202.00	0.56	0.57	0.79	0.61	0.61	9.56	
296.00	2.07	43.44	295.97	2.17	2.17	3.06	1.46	1.46	-5.15	
389.00	3.68	30.78	388.85	5.95	4.85	7.66	1.85	1.73	-13.61	
483.00	6.93	23.04	482.43	13.77	8.61	15.94	3.53	3.46	-8.23	
577.00	9.97	33.41	575.41	25.78	15.31	29.30	3.60	3.23	11.03	
681.00	13.06	44.60	677.32	41.67	28.53	49.93	3.65	2.97	10.76	
763.00	15.56	49.95	756.77	55.35	43.45	70.11	3.45	3.05	6.52	
857.00	16.42	48.89	847.13	72.19	63.12	95.84	0.97	0.91	-1.13	

<b>Company:</b>	Terra Energy Partners, LLP	<b>Local Co-ordinate Reference:</b>	Well RG 444-7-297
<b>Project:</b>	Rio Blanco County, CO	<b>TVD Reference:</b>	KB=30' @ 6650.90usft (H&P #329)
<b>Site:</b>	Sec 18, T2S, R97W	<b>MD Reference:</b>	KB=30' @ 6650.90usft (H&P #329)
<b>Well:</b>	RG 444-7-297	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db

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)
951.00	17.01	43.97	937.16	90.83	82.67	122.81	1.63	0.63	-5.23
1,055.00	16.90	41.19	1,036.64	113.15	103.19	153.13	0.79	-0.11	-2.67
1,149.00	17.68	39.50	1,126.40	134.45	121.27	181.03	0.99	0.83	-1.80
1,243.00	17.73	39.61	1,215.94	156.49	139.47	209.57	0.06	0.05	0.12
1,338.00	17.84	43.35	1,306.41	178.21	158.68	238.56	1.21	0.12	3.94
1,432.00	16.05	43.39	1,396.32	198.13	177.50	265.95	1.90	-1.90	0.04
1,526.00	15.30	43.96	1,486.83	216.50	195.03	291.35	0.81	-0.80	0.61
1,621.00	17.22	41.14	1,578.02	236.11	212.99	317.94	2.18	2.02	-2.97
1,715.00	18.26	43.28	1,667.55	257.31	232.24	346.57	1.31	1.11	2.28
1,809.00	18.83	45.54	1,756.67	278.66	253.16	376.45	0.98	0.61	2.40
1,903.00	18.88	45.91	1,845.63	299.87	274.91	406.80	0.14	0.05	0.39
1,997.00	18.86	46.88	1,934.58	320.83	296.92	437.15	0.33	-0.02	1.03
2,091.00	18.70	48.76	2,023.57	341.15	319.35	467.30	0.67	-0.17	2.00
2,544.00	12.30	54.17	2,459.89	417.35	413.17	587.02	1.45	-1.41	1.19
2,726.00	10.41	57.61	2,638.32	437.51	442.78	621.96	1.10	-1.04	1.89
2,805.00	10.56	59.18	2,716.01	445.04	455.02	635.81	0.41	0.19	1.99
Gyro Tie-in @ 3179.00' MD / 3085.85' TVD									
3,179.00	6.38	52.08	3,085.85	475.39	500.87	689.27	1.15	-1.12	-1.90
3,344.00	4.53	52.86	3,250.10	484.96	513.30	704.75	1.12	-1.12	0.47
3,438.00	6.42	43.02	3,343.67	491.04	519.84	713.66	2.24	2.01	-10.47
3,533.00	7.34	49.61	3,437.99	498.86	528.09	725.00	1.27	0.97	6.94
3,627.00	8.35	51.19	3,531.10	507.02	537.98	737.72	1.10	1.07	1.68
3,722.00	9.01	44.07	3,625.02	516.69	548.53	751.99	1.33	0.69	-7.49
3,816.00	11.21	39.94	3,717.55	528.99	559.52	768.47	2.46	2.34	-4.39
3,910.00	13.05	43.64	3,809.45	543.68	572.71	788.21	2.12	1.96	3.94
4,004.00	14.11	47.15	3,900.83	559.15	588.43	810.25	1.43	1.13	3.73
4,098.00	14.59	44.69	3,991.89	575.36	605.16	833.52	0.83	0.51	-2.62
4,192.00	15.60	44.60	4,082.65	592.78	622.36	857.99	1.07	1.07	-0.10
4,286.00	17.01	46.62	4,172.87	611.22	641.23	884.34	1.62	1.50	2.15
4,380.00	18.06	45.22	4,262.50	630.93	661.56	912.63	1.20	1.12	-1.49
4,474.00	18.94	42.14	4,351.64	652.50	682.14	942.44	1.40	0.94	-3.28
4,568.00	18.19	41.00	4,440.75	674.89	702.00	972.36	0.89	-0.80	-1.21
4,662.00	18.98	40.21	4,529.85	697.64	721.50	1,002.29	0.88	0.84	-0.84
4,756.00	19.73	40.56	4,618.53	721.36	741.69	1,033.41	0.81	0.80	0.37
4,850.00	18.94	41.17	4,707.23	744.90	762.05	1,064.51	0.87	-0.84	0.65
4,944.00	18.90	38.45	4,796.15	768.31	781.56	1,094.93	0.94	-0.04	-2.89
5,039.00	18.33	38.36	4,886.18	792.07	800.39	1,125.16	0.60	-0.60	-0.09
5,133.00	17.84	38.80	4,975.54	814.88	818.59	1,154.25	0.54	-0.52	0.47
5,227.00	18.90	39.42	5,064.75	837.87	837.28	1,183.81	1.15	1.13	0.66
5,321.00	17.53	38.98	5,154.04	860.63	855.85	1,213.12	1.46	-1.46	-0.47
5,415.00	16.79	39.50	5,243.85	882.12	873.39	1,240.80	0.80	-0.79	0.55
5,509.00	18.72	43.55	5,333.37	903.53	892.43	1,269.44	2.44	2.05	4.31
5,603.00	17.23	44.69	5,422.78	924.36	912.61	1,298.44	1.63	-1.59	1.21

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<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db

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)
5,697.00	19.47	41.44	5,512.00	946.00	932.77	1,328.02	2.62	2.38	-3.46
5,792.00	17.89	40.56	5,601.99	968.96	952.74	1,358.42	1.69	-1.66	-0.93
5,886.00	16.44	40.03	5,691.80	990.11	970.68	1,386.13	1.55	-1.54	-0.56
5,980.00	16.83	41.26	5,781.87	1,010.53	988.21	1,413.02	0.56	0.41	1.31
6,074.00	18.11	42.05	5,871.53	1,031.61	1,006.97	1,441.23	1.38	1.36	0.84
6,169.00	17.18	41.88	5,962.06	1,053.02	1,026.23	1,470.02	0.98	-0.98	-0.18
6,263.00	17.45	39.59	6,051.80	1,074.22	1,044.48	1,497.97	0.78	0.29	-2.44
6,357.00	18.81	35.46	6,141.14	1,097.42	1,062.26	1,527.07	1.99	1.45	-4.39
6,452.00	17.89	35.29	6,231.31	1,121.81	1,079.57	1,556.71	0.97	-0.97	-0.18
6,546.00	19.20	37.40	6,320.42	1,145.87	1,097.30	1,586.40	1.57	1.39	2.24
6,639.00	19.16	33.35	6,408.27	1,170.77	1,114.98	1,616.66	1.43	-0.04	-4.35
6,733.00	18.24	37.83	6,497.31	1,195.28	1,132.48	1,646.52	1.81	-0.98	4.77
6,828.00	17.89	40.73	6,587.63	1,218.08	1,151.12	1,675.91	1.02	-0.37	3.05
6,922.00	18.76	42.84	6,676.86	1,240.10	1,170.82	1,705.46	1.16	0.93	2.24
7,017.00	16.48	42.84	6,767.40	1,261.19	1,190.37	1,734.21	2.40	-2.40	0.00
7,111.00	16.92	41.26	6,857.43	1,281.25	1,208.46	1,761.22	0.67	0.47	-1.68
7,205.00	18.41	39.24	6,947.00	1,303.03	1,226.87	1,789.70	1.71	1.59	-2.15
7,300.00	17.40	39.50	7,037.40	1,325.61	1,245.40	1,818.85	1.07	-1.06	0.27
7,394.00	17.58	43.02	7,127.05	1,346.83	1,264.02	1,847.07	1.14	0.19	3.74
7,488.00	18.24	41.44	7,216.50	1,368.24	1,283.45	1,875.97	0.87	0.70	-1.68
7,582.00	18.81	38.19	7,305.63	1,391.18	1,302.55	1,905.78	1.25	0.61	-3.46
7,677.00	17.01	37.75	7,396.02	1,414.20	1,320.53	1,934.88	1.90	-1.89	-0.46
7,771.00	18.02	39.15	7,485.66	1,436.35	1,338.13	1,963.08	1.16	1.07	1.49
7,865.00	17.18	39.68	7,575.26	1,458.31	1,356.17	1,991.45	0.91	-0.89	0.56
7,960.00	16.17	39.86	7,666.27	1,479.26	1,373.61	2,018.66	1.06	-1.06	0.19
8,054.00	14.81	38.63	7,756.85	1,498.70	1,389.50	2,043.71	1.49	-1.45	-1.31
8,148.00	13.18	37.83	7,848.06	1,516.55	1,403.57	2,066.37	1.75	-1.73	-0.85
8,242.00	11.95	37.48	7,939.80	1,532.74	1,416.07	2,086.73	1.31	-1.31	-0.37
8,337.00	10.50	36.52	8,032.98	1,547.50	1,427.20	2,105.12	1.54	-1.53	-1.01
8,431.00	9.14	35.64	8,125.60	1,560.45	1,436.65	2,121.03	1.46	-1.45	-0.94
8,525.00	7.43	35.64	8,218.62	1,571.46	1,444.54	2,134.46	1.82	-1.82	0.00
8,620.00	6.46	33.62	8,312.92	1,580.90	1,451.08	2,145.83	1.05	-1.02	-2.13
8,714.00	5.41	32.12	8,406.42	1,589.06	1,456.37	2,155.40	1.13	-1.12	-1.60
8,808.00	5.10	33.70	8,500.02	1,596.29	1,461.04	2,163.87	0.36	-0.33	1.68
8,902.00	4.66	39.15	8,593.68	1,602.72	1,465.77	2,171.81	0.68	-0.47	5.80
8,996.00	4.44	37.22	8,687.39	1,608.58	1,470.38	2,179.23	0.29	-0.23	-2.05
9,090.00	4.22	36.96	8,781.12	1,614.24	1,474.66	2,186.29	0.23	-0.23	-0.28
9,184.00	3.96	36.96	8,874.88	1,619.60	1,478.69	2,192.96	0.28	-0.28	0.00
9,278.00	3.52	36.69	8,968.68	1,624.51	1,482.37	2,199.06	0.47	-0.47	-0.29
9,373.00	2.64	35.55	9,063.54	1,628.63	1,485.38	2,204.12	0.93	-0.93	-1.20
9,467.00	2.33	42.58	9,157.45	1,631.79	1,487.93	2,208.18	0.46	-0.33	7.48
9,560.00	1.85	27.38	9,250.39	1,634.52	1,489.90	2,211.52	0.78	-0.52	-16.34
9,655.00	1.14	6.11	9,345.36	1,636.82	1,490.71	2,213.75	0.94	-0.75	-22.39

<b>Company:</b>	Terra Energy Partners, LLP	<b>Local Co-ordinate Reference:</b>	Well RG 444-7-297
<b>Project:</b>	Rio Blanco County, CO	<b>TVD Reference:</b>	KB=30' @ 6650.90usft (H&P #329)
<b>Site:</b>	Sec 18, T2S, R97W	<b>MD Reference:</b>	KB=30' @ 6650.90usft (H&P #329)
<b>Well:</b>	RG 444-7-297	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	EDM 5000.1 Single User Db

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)
9,749.00	0.79	325.68	9,439.34	1,638.29	1,490.44	2,214.64	0.79	-0.37	-43.01
9,843.00	0.97	323.13	9,533.33	1,639.46	1,489.60	2,214.92	0.20	0.19	-2.71
9,937.00	0.92	305.55	9,627.32	1,640.53	1,488.51	2,214.96	0.31	-0.05	-18.70
10,032.00	0.88	304.41	9,722.31	1,641.39	1,487.29	2,214.76	0.05	-0.04	-1.20
10,126.00	1.23	277.78	9,816.29	1,641.93	1,485.69	2,214.07	0.63	0.37	-28.33
10,220.00	1.67	264.94	9,910.26	1,641.95	1,483.33	2,212.47	0.58	0.47	-13.66
10,314.00	1.89	260.64	10,004.22	1,641.58	1,480.43	2,210.22	0.27	0.23	-4.57
10,408.00	2.42	263.63	10,098.15	1,641.10	1,476.93	2,207.48	0.58	0.56	3.18
10,502.00	2.50	268.81	10,192.06	1,640.84	1,472.91	2,204.55	0.25	0.09	5.51
10,597.00	3.12	261.25	10,286.95	1,640.40	1,468.28	2,201.07	0.76	0.65	-7.96
10,691.00	3.08	258.88	10,380.81	1,639.53	1,463.28	2,197.02	0.14	-0.04	-2.52
10,786.00	2.90	251.76	10,475.68	1,638.28	1,458.49	2,192.84	0.43	-0.19	-7.49
10,880.00	2.72	251.67	10,569.57	1,636.84	1,454.11	2,188.80	0.19	-0.19	-0.10
10,974.00	2.94	249.39	10,663.46	1,635.29	1,449.74	2,184.68	0.26	0.23	-2.43
11,068.00	3.52	245.96	10,757.31	1,633.26	1,444.85	2,179.87	0.65	0.62	-3.65
11,161.00	3.25	244.99	10,850.14	1,630.99	1,439.85	2,174.79	0.30	-0.29	-1.04
11,255.00	3.30	244.03	10,943.99	1,628.67	1,435.01	2,169.80	0.08	0.05	-1.02
11,349.00	3.25	244.55	11,037.84	1,626.34	1,430.17	2,164.79	0.06	-0.05	0.55
11,443.00	3.08	245.96	11,131.69	1,624.17	1,425.45	2,159.99	0.20	-0.18	1.50
11,538.00	3.03	243.06	11,226.56	1,621.99	1,420.89	2,155.28	0.17	-0.05	-3.05
11,631.00	3.38	238.05	11,319.41	1,619.43	1,416.37	2,150.32	0.48	0.38	-5.39
11,725.00	3.52	237.61	11,413.24	1,616.42	1,411.58	2,144.86	0.15	0.15	-0.47
11,819.00	3.30	237.52	11,507.08	1,613.42	1,406.86	2,139.44	0.23	-0.23	-0.10
11,913.00	3.65	239.54	11,600.90	1,610.45	1,402.00	2,133.96	0.39	0.37	2.15
12,007.00	3.43	236.64	11,694.72	1,607.39	1,397.07	2,128.36	0.30	-0.23	-3.09
12,102.00	3.52	237.61	11,789.55	1,604.26	1,392.24	2,122.77	0.11	0.09	1.02
12,195.00	3.52	236.47	11,882.37	1,601.15	1,387.45	2,117.23	0.08	0.00	-1.23
12,289.00	3.56	233.83	11,976.19	1,597.84	1,382.68	2,111.56	0.18	0.04	-2.81
12,318.00	3.38	232.78	12,005.14	1,596.79	1,381.28	2,109.83	0.66	-0.62	-3.62
TD @ 12380.00' MD / 12067.03' TVD									
12,380.00	3.38	232.78	12,067.03	1,594.58	1,378.37	2,106.23	0.00	0.00	0.00

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
3,179.00	3,085.85	475.39	500.87	Gyro Tie-in @ 3179.00' MD / 3085.85' TVD
12,380.00	12,067.03	1,594.58	1,378.37	TD @ 12380.00' MD / 12067.03' TVD

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_