

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 22-13-298 - Slot RG 22-13-298, True North
 Vertical (TVD) Reference: KB=30' @ 6648.00usft (H&P #329)
 Section (VS) Reference: Slot - RG 22-13-298(0.00N, 0.00E)
 Measured Depth Reference: KB=30' @ 6648.00usft (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 22-13-298 - VP	7958.00	-552.32	622.48	1758163.89	2201853.80	39.880671	-108.344303	Circle (Radius: 100.00)
RG 22-13-298 - PBHL	11738.00	-552.32	622.48	1758163.89	2201853.80	39.880671	-108.344303	Point

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 2.00
437.98	6.36	131.58	437.33	-11.70	13.19	17.63	17.63	Start 7141.52 hold at 437.98 MD
7579.50	6.36	131.58	7534.90	-536.72	604.90	808.68	808.68	Start Drop -1.50
8003.47	0.00	0.00	7958.00	-552.32	622.48	832.19	832.19	Start 3780.00 hold at 8003.47 MD
11783.47	0.00	0.00	11738.00	-552.32	622.48	832.19	832.19	TD at 11783.47

WELL DETAILS: RG 22-13-298

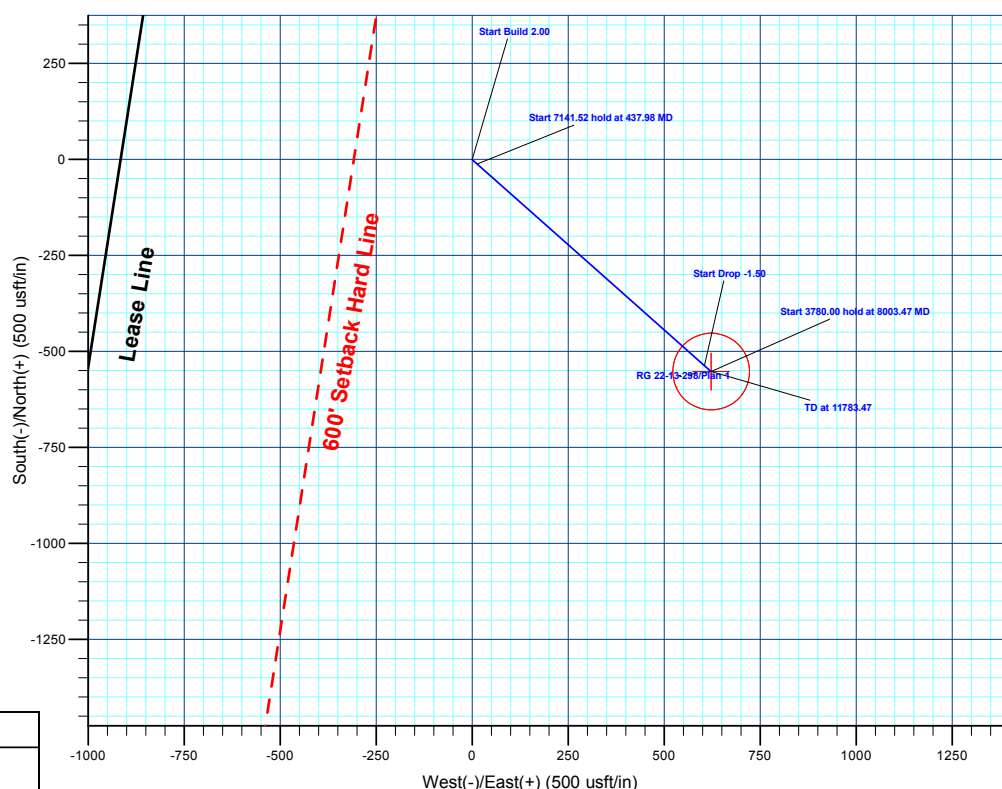
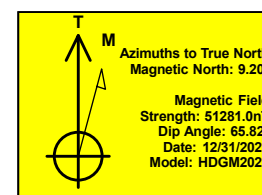
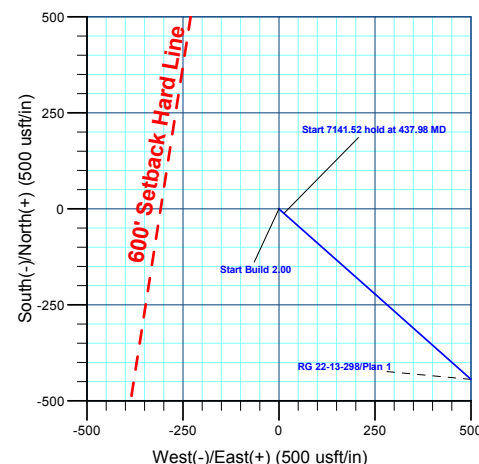
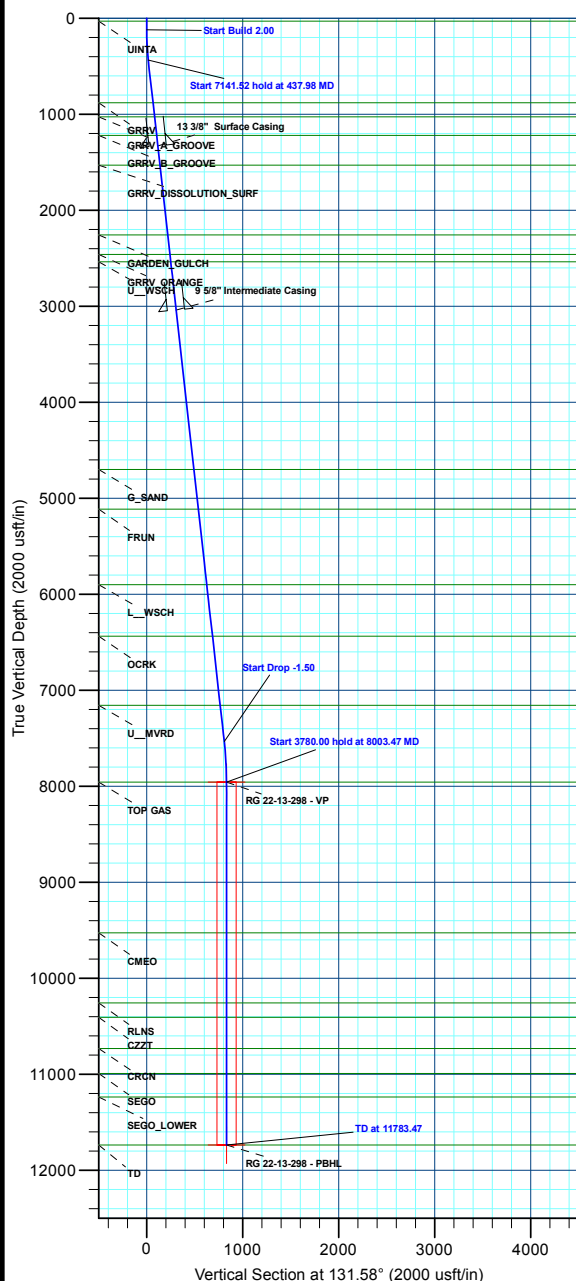
		Ground Elev: 6618.00				
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1758735.44	2201248.93	39.882187	-108.346521	RG 22-13-298

CASING DETAILS

TVD	MD	Name	Size
1330.00	1336.18	13 3/8" Surface Casing	13-3/8
3040.00	3056.77	9 5/8" Intermediate Casing	9-5/8

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
30.00	30.00	UINTA
880.00	883.39	GRRV
1030.00	1034.32	GRRV_A_GROOVE
1220.00	1225.50	GRRV_B_GROOVE
1530.00	1537.42	GRRV DISSOLUTION_SURF
2260.00	2271.94	GARDEN_GULCH
2460.00	2473.18	GRRV_ORANGE
2540.00	2553.67	U_WSCH
4700.00	4727.05	G_SAND
5115.00	5144.62	FRUN
5900.00	5934.48	L_WSCH
6438.00	6475.81	OCRK
7158.00	7200.27	U_MVRD
7958.00	8003.47	TOP GAS
9528.00	9573.47	CMEO
10258.00	10303.47	RLNS
10408.00	10453.47	CZZT
10733.00	10778.47	CRCN
10983.00	11038.47	SEGO
11238.00	11283.47	SEGO_LOWER
11738.00	11783.47	TD



Plan: Plan 1 (RG 22-13-298/Wellbore #1)

Created By: Chase Chambers Date: 8:28, May 04 2022



Terra Energy Partners, LLP

Rio Blanco County, CO

RG 11-13-298

RG 22-13-298 - Slot RG 22-13-298

Wellbore #1

Plan: Plan 1

KLX Well Planning Report

03 May, 2022



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well RG 22-13-298 - Slot RG 22-13-298
Company:	Terra Energy Partners, LLP	TVD Reference:	KB=30' @ 6648.00usft (H&P #329)
Project:	Rio Blanco County, CO	MD Reference:	KB=30' @ 6648.00usft (H&P #329)
Site:	RG 11-13-298	North Reference:	True
Well:	RG 22-13-298	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1		

Project	Rio Blanco County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site		RG 11-13-298			
Site Position:		Northing:	1,758,713.60 usft	Latitude:	39.882127
From:	Map	Easting:	2,201,243.58 usft	Longitude:	-108.346538
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-1.80 °

Well	RG 22-13-298 - Slot RG 22-13-298					
Well Position	+N/-S	22.00 usft	Northing:	1,758,735.44 usft	Latitude:	39.882187
	+E/-W	4.66 usft	Easting:	2,201,248.93 usft	Longitude:	-108.346521
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	6,618.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2020	12/31/2020	9.20	65.82	51,281.00000000

Design	Plan 1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	131.58

Plan Sections										
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	
437.98	6.36	131.58	437.33	-11.70	13.19	2.00	2.00	0.00	131.58	
7,579.50	6.36	131.58	7,534.90	-536.72	604.90	0.00	0.00	0.00	0.00	
8,003.47	0.00	0.00	7,958.00	-552.32	622.48	1.50	-1.50	0.00	180.00	RG 22-13-298 - VP
11,783.47	0.00	0.00	11,738.00	-552.32	622.48	0.00	0.00	0.00	0.00	RG 22-13-298 - PBHL

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well RG 22-13-298 - Slot RG 22-13-298
Company:	Terra Energy Partners, LLP	TVD Reference:	KB=30' @ 6648.00usft (H&P #329)
Project:	Rio Blanco County, CO	MD Reference:	KB=30' @ 6648.00usft (H&P #329)
Site:	RG 11-13-298	North Reference:	True
Well:	RG 22-13-298	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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
UINTA									
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
Start Build 2.00									
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	1.60	131.58	199.99	-0.74	0.84	1.12	2.00	2.00	0.00
300.00	3.60	131.58	299.88	-3.75	4.23	5.65	2.00	2.00	0.00
400.00	5.60	131.58	399.55	-9.07	10.23	13.67	2.00	2.00	0.00
Start 7141.52 hold at 437.98 MD									
437.98	6.36	131.58	437.33	-11.70	13.19	17.63	2.00	2.00	0.00
500.00	6.36	131.58	498.97	-16.26	18.33	24.50	0.00	0.00	0.00
600.00	6.36	131.58	598.35	-23.61	26.61	35.58	0.00	0.00	0.00
700.00	6.36	131.58	697.74	-30.96	34.90	46.65	0.00	0.00	0.00
800.00	6.36	131.58	797.12	-38.31	43.18	57.73	0.00	0.00	0.00
GRRV									
883.39	6.36	131.58	880.00	-44.45	50.09	66.97	0.00	0.00	0.00
900.00	6.36	131.58	896.50	-45.67	51.47	68.81	0.00	0.00	0.00
1,000.00	6.36	131.58	995.89	-53.02	59.75	79.88	0.00	0.00	0.00
GRRV_A_GROOVE									
1,034.32	6.36	131.58	1,030.00	-55.54	62.60	83.68	0.00	0.00	0.00
1,100.00	6.36	131.58	1,095.27	-60.37	68.04	90.96	0.00	0.00	0.00
1,200.00	6.36	131.58	1,194.66	-67.72	76.32	102.04	0.00	0.00	0.00
GRRV_B_GROOVE									
1,225.50	6.36	131.58	1,220.00	-69.60	78.44	104.86	0.00	0.00	0.00
1,300.00	6.36	131.58	1,294.04	-75.07	84.61	113.11	0.00	0.00	0.00
13 3/8" Surface Casing									
1,336.18	6.36	131.58	1,330.00	-77.73	87.61	117.12	0.00	0.00	0.00
1,400.00	6.36	131.58	1,393.43	-82.42	92.89	124.19	0.00	0.00	0.00
1,500.00	6.36	131.58	1,492.81	-89.78	101.18	135.27	0.00	0.00	0.00
GRRV DISSOLUTION_SURF									
1,537.42	6.36	131.58	1,530.00	-92.53	104.28	139.41	0.00	0.00	0.00
1,600.00	6.36	131.58	1,592.20	-97.13	109.47	146.34	0.00	0.00	0.00
1,700.00	6.36	131.58	1,691.58	-104.48	117.75	157.42	0.00	0.00	0.00
1,800.00	6.36	131.58	1,790.97	-111.83	126.04	168.50	0.00	0.00	0.00
1,900.00	6.36	131.58	1,890.35	-119.18	134.32	179.57	0.00	0.00	0.00
2,000.00	6.36	131.58	1,989.74	-126.53	142.61	190.65	0.00	0.00	0.00
2,100.00	6.36	131.58	2,089.12	-133.89	150.89	201.73	0.00	0.00	0.00
2,200.00	6.36	131.58	2,188.50	-141.24	159.18	212.81	0.00	0.00	0.00
GARDEN_GULCH									
2,271.94	6.36	131.58	2,260.00	-146.53	165.14	220.77	0.00	0.00	0.00
2,300.00	6.36	131.58	2,287.89	-148.59	167.46	223.88	0.00	0.00	0.00
2,400.00	6.36	131.58	2,387.27	-155.94	175.75	234.96	0.00	0.00	0.00
GRRV_ORANGE									
2,473.18	6.36	131.58	2,460.00	-161.32	181.81	243.06	0.00	0.00	0.00
2,500.00	6.36	131.58	2,486.66	-163.29	184.04	246.04	0.00	0.00	0.00
U_WSCH									
2,553.67	6.36	131.58	2,540.00	-167.24	188.48	251.98	0.00	0.00	0.00
2,600.00	6.36	131.58	2,586.04	-170.64	192.32	257.11	0.00	0.00	0.00
2,700.00	6.36	131.58	2,685.43	-178.00	200.61	268.19	0.00	0.00	0.00
2,800.00	6.36	131.58	2,784.81	-185.35	208.89	279.27	0.00	0.00	0.00
2,900.00	6.36	131.58	2,884.20	-192.70	217.18	290.34	0.00	0.00	0.00
3,000.00	6.36	131.58	2,983.58	-200.05	225.46	301.42	0.00	0.00	0.00

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Project:	Rio Blanco County, CO	MD Reference:	KB=30' @ 6648.00usft (H&P #329)
Site:	RG 11-13-298	North Reference:	True
Well:	RG 22-13-298	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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)	
9 5/8" Intermediate Casing										
3,056.77	6.36	131.58	3,040.00	-204.22	230.17	307.71	0.00	0.00	0.00	
3,100.00	6.36	131.58	3,082.97	-207.40	233.75	312.50	0.00	0.00	0.00	
3,200.00	6.36	131.58	3,182.35	-214.75	242.03	323.57	0.00	0.00	0.00	
3,300.00	6.36	131.58	3,281.74	-222.11	250.32	334.65	0.00	0.00	0.00	
3,400.00	6.36	131.58	3,381.12	-229.46	258.60	345.73	0.00	0.00	0.00	
3,500.00	6.36	131.58	3,480.50	-236.81	266.89	356.80	0.00	0.00	0.00	
3,600.00	6.36	131.58	3,579.89	-244.16	275.18	367.88	0.00	0.00	0.00	
3,700.00	6.36	131.58	3,679.27	-251.51	283.46	378.96	0.00	0.00	0.00	
3,800.00	6.36	131.58	3,778.66	-258.86	291.75	390.03	0.00	0.00	0.00	
3,900.00	6.36	131.58	3,878.04	-266.22	300.03	401.11	0.00	0.00	0.00	
4,000.00	6.36	131.58	3,977.43	-273.57	308.32	412.19	0.00	0.00	0.00	
4,100.00	6.36	131.58	4,076.81	-280.92	316.60	423.26	0.00	0.00	0.00	
4,200.00	6.36	131.58	4,176.20	-288.27	324.89	434.34	0.00	0.00	0.00	
4,300.00	6.36	131.58	4,275.58	-295.62	333.17	445.42	0.00	0.00	0.00	
4,400.00	6.36	131.58	4,374.97	-302.97	341.46	456.50	0.00	0.00	0.00	
4,500.00	6.36	131.58	4,474.35	-310.33	349.75	467.57	0.00	0.00	0.00	
4,600.00	6.36	131.58	4,573.74	-317.68	358.03	478.65	0.00	0.00	0.00	
4,700.00	6.36	131.58	4,673.12	-325.03	366.32	489.73	0.00	0.00	0.00	
G_SAND										
4,727.05	6.36	131.58	4,700.00	-327.02	368.56	492.72	0.00	0.00	0.00	
4,800.00	6.36	131.58	4,772.50	-332.38	374.60	500.80	0.00	0.00	0.00	
4,900.00	6.36	131.58	4,871.89	-339.73	382.89	511.88	0.00	0.00	0.00	
5,000.00	6.36	131.58	4,971.27	-347.08	391.17	522.96	0.00	0.00	0.00	
5,100.00	6.36	131.58	5,070.66	-354.44	399.46	534.03	0.00	0.00	0.00	
FRUN										
5,144.62	6.36	131.58	5,115.00	-357.72	403.15	538.98	0.00	0.00	0.00	
5,200.00	6.36	131.58	5,170.04	-361.79	407.74	545.11	0.00	0.00	0.00	
5,300.00	6.36	131.58	5,269.43	-369.14	416.03	556.19	0.00	0.00	0.00	
5,400.00	6.36	131.58	5,368.81	-376.49	424.31	567.26	0.00	0.00	0.00	
5,500.00	6.36	131.58	5,468.20	-383.84	432.60	578.34	0.00	0.00	0.00	
5,600.00	6.36	131.58	5,567.58	-391.19	440.89	589.42	0.00	0.00	0.00	
5,700.00	6.36	131.58	5,666.97	-398.55	449.17	600.49	0.00	0.00	0.00	
5,800.00	6.36	131.58	5,766.35	-405.90	457.46	611.57	0.00	0.00	0.00	
5,900.00	6.36	131.58	5,865.74	-413.25	465.74	622.65	0.00	0.00	0.00	
L_WSCH										
5,934.48	6.36	131.58	5,900.00	-415.78	468.60	626.47	0.00	0.00	0.00	
6,000.00	6.36	131.58	5,965.12	-420.60	474.03	633.72	0.00	0.00	0.00	
6,100.00	6.36	131.58	6,064.51	-427.95	482.31	644.80	0.00	0.00	0.00	
6,200.00	6.36	131.58	6,163.89	-435.30	490.60	655.88	0.00	0.00	0.00	
6,300.00	6.36	131.58	6,263.27	-442.66	498.88	666.96	0.00	0.00	0.00	
6,400.00	6.36	131.58	6,362.66	-450.01	507.17	678.03	0.00	0.00	0.00	
OCRK										
6,475.81	6.36	131.58	6,438.00	-455.58	513.45	686.43	0.00	0.00	0.00	
6,500.00	6.36	131.58	6,462.04	-457.36	515.45	689.11	0.00	0.00	0.00	
6,600.00	6.36	131.58	6,561.43	-464.71	523.74	700.19	0.00	0.00	0.00	
6,700.00	6.36	131.58	6,660.81	-472.06	532.03	711.26	0.00	0.00	0.00	
6,800.00	6.36	131.58	6,760.20	-479.41	540.31	722.34	0.00	0.00	0.00	
6,900.00	6.36	131.58	6,859.58	-486.77	548.60	733.42	0.00	0.00	0.00	
7,000.00	6.36	131.58	6,958.97	-494.12	556.88	744.49	0.00	0.00	0.00	
7,100.00	6.36	131.58	7,058.35	-501.47	565.17	755.57	0.00	0.00	0.00	
7,200.00	6.36	131.58	7,157.74	-508.82	573.45	766.65	0.00	0.00	0.00	
U_MVRD										

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Project:	Rio Blanco County, CO	MD Reference:	KB=30' @ 6648.00usft (H&P #329)
Site:	RG 11-13-298	North Reference:	True
Well:	RG 22-13-298	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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)
7,200.27	6.36	131.58	7,158.00	-508.84	573.48	766.68	0.00	0.00	0.00
7,300.00	6.36	131.58	7,257.12	-516.17	581.74	777.72	0.00	0.00	0.00
7,400.00	6.36	131.58	7,356.51	-523.52	590.02	788.80	0.00	0.00	0.00
7,500.00	6.36	131.58	7,455.89	-530.88	598.31	799.88	0.00	0.00	0.00
Start Drop -1.50									
7,579.50	6.36	131.58	7,534.90	-536.72	604.90	808.68	0.00	0.00	0.00
7,600.00	6.05	131.58	7,555.28	-538.19	606.55	810.90	1.50	-1.50	0.00
7,700.00	4.55	131.58	7,654.85	-544.32	613.47	820.14	1.50	-1.50	0.00
7,800.00	3.05	131.58	7,754.63	-548.72	618.43	826.77	1.50	-1.50	0.00
7,900.00	1.55	131.58	7,854.54	-551.39	621.43	830.79	1.50	-1.50	0.00
Start 3780.00 hold at 8003.47 MD - TOP GAS									
8,003.47	0.00	0.00	7,958.00	-552.32	622.48	832.19	1.50	-1.50	0.00
8,100.00	0.00	0.00	8,054.53	-552.32	622.48	832.19	0.00	0.00	0.00
8,200.00	0.00	0.00	8,154.53	-552.32	622.48	832.19	0.00	0.00	0.00
8,300.00	0.00	0.00	8,254.53	-552.32	622.48	832.19	0.00	0.00	0.00
8,400.00	0.00	0.00	8,354.53	-552.32	622.48	832.19	0.00	0.00	0.00
8,500.00	0.00	0.00	8,454.53	-552.32	622.48	832.19	0.00	0.00	0.00
8,600.00	0.00	0.00	8,554.53	-552.32	622.48	832.19	0.00	0.00	0.00
8,700.00	0.00	0.00	8,654.53	-552.32	622.48	832.19	0.00	0.00	0.00
8,800.00	0.00	0.00	8,754.53	-552.32	622.48	832.19	0.00	0.00	0.00
8,900.00	0.00	0.00	8,854.53	-552.32	622.48	832.19	0.00	0.00	0.00
9,000.00	0.00	0.00	8,954.53	-552.32	622.48	832.19	0.00	0.00	0.00
9,100.00	0.00	0.00	9,054.53	-552.32	622.48	832.19	0.00	0.00	0.00
9,200.00	0.00	0.00	9,154.53	-552.32	622.48	832.19	0.00	0.00	0.00
9,300.00	0.00	0.00	9,254.53	-552.32	622.48	832.19	0.00	0.00	0.00
9,400.00	0.00	0.00	9,354.53	-552.32	622.48	832.19	0.00	0.00	0.00
9,500.00	0.00	0.00	9,454.53	-552.32	622.48	832.19	0.00	0.00	0.00
CME0									
9,573.47	0.00	0.00	9,528.00	-552.32	622.48	832.19	0.00	0.00	0.00
9,600.00	0.00	0.00	9,554.53	-552.32	622.48	832.19	0.00	0.00	0.00
9,700.00	0.00	0.00	9,654.53	-552.32	622.48	832.19	0.00	0.00	0.00
9,800.00	0.00	0.00	9,754.53	-552.32	622.48	832.19	0.00	0.00	0.00
9,900.00	0.00	0.00	9,854.53	-552.32	622.48	832.19	0.00	0.00	0.00
10,000.00	0.00	0.00	9,954.53	-552.32	622.48	832.19	0.00	0.00	0.00
10,100.00	0.00	0.00	10,054.53	-552.32	622.48	832.19	0.00	0.00	0.00
10,200.00	0.00	0.00	10,154.53	-552.32	622.48	832.19	0.00	0.00	0.00
10,300.00	0.00	0.00	10,254.53	-552.32	622.48	832.19	0.00	0.00	0.00
RLNS									
10,303.47	0.00	0.00	10,258.00	-552.32	622.48	832.19	0.00	0.00	0.00
10,400.00	0.00	0.00	10,354.53	-552.32	622.48	832.19	0.00	0.00	0.00
CZZT									
10,453.47	0.00	0.00	10,408.00	-552.32	622.48	832.19	0.00	0.00	0.00
10,500.00	0.00	0.00	10,454.53	-552.32	622.48	832.19	0.00	0.00	0.00
10,600.00	0.00	0.00	10,554.53	-552.32	622.48	832.19	0.00	0.00	0.00
10,700.00	0.00	0.00	10,654.53	-552.32	622.48	832.19	0.00	0.00	0.00
CRCN									
10,778.47	0.00	0.00	10,733.00	-552.32	622.48	832.19	0.00	0.00	0.00
10,800.00	0.00	0.00	10,754.53	-552.32	622.48	832.19	0.00	0.00	0.00
10,900.00	0.00	0.00	10,854.53	-552.32	622.48	832.19	0.00	0.00	0.00
11,000.00	0.00	0.00	10,954.53	-552.32	622.48	832.19	0.00	0.00	0.00
SEGO									
11,038.47	0.00	0.00	10,993.00	-552.32	622.48	832.19	0.00	0.00	0.00
11,100.00	0.00	0.00	11,054.53	-552.32	622.48	832.19	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well RG 22-13-298 - Slot RG 22-13-298
Company:	Terra Energy Partners, LLP	TVD Reference:	KB=30' @ 6648.00usft (H&P #329)
Project:	Rio Blanco County, CO	MD Reference:	KB=30' @ 6648.00usft (H&P #329)
Site:	RG 11-13-298	North Reference:	True
Well:	RG 22-13-298	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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	11,154.53	-552.32	622.48	832.19	0.00	0.00	0.00
SEGO_LOWER									
11,283.47	0.00	0.00	11,238.00	-552.32	622.48	832.19	0.00	0.00	0.00
11,300.00	0.00	0.00	11,254.53	-552.32	622.48	832.19	0.00	0.00	0.00
11,400.00	0.00	0.00	11,354.53	-552.32	622.48	832.19	0.00	0.00	0.00
11,500.00	0.00	0.00	11,454.53	-552.32	622.48	832.19	0.00	0.00	0.00
11,600.00	0.00	0.00	11,554.53	-552.32	622.48	832.19	0.00	0.00	0.00
11,700.00	0.00	0.00	11,654.53	-552.32	622.48	832.19	0.00	0.00	0.00
TD at 11783.47 - TD									
11,783.47	0.00	0.00	11,738.00	-552.32	622.48	832.19	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 22-13-298 - VP - plan hits target center - Circle (radius 100.00)	0.00	0.00	7,958.00	-552.32	622.48	1,758,163.89	2,201,853.80	39.880671	-108.344303
RG 22-13-298 - PBHL - plan hits target center - Point	0.00	0.00	11,738.00	-552.32	622.48	1,758,163.89	2,201,853.80	39.880671	-108.344303

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (")	Hole Diameter (")
1,336.18	1,330.00	13 3/8" Surface Casing		13-3/8	17-1/2
3,056.77	3,040.00	9 5/8" Intermediate Casing		9-5/8	12-1/4

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well RG 22-13-298 - Slot RG 22-13-298
Company:	Terra Energy Partners, LLP	TVD Reference:	KB=30' @ 6648.00usft (H&P #329)
Project:	Rio Blanco County, CO	MD Reference:	KB=30' @ 6648.00usft (H&P #329)
Site:	RG 11-13-298	North Reference:	True
Well:	RG 22-13-298	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
30.00	30.00	UINTA				
883.39	880.00	GRRV				
1,034.32	1,030.00	GRRV_A_GROOVE				
1,225.50	1,220.00	GRRV_B_GROOVE				
1,537.42	1,530.00	GRRV DISSOLUTION_SURF				
2,271.94	2,260.00	GARDEN_GULCH				
2,473.18	2,460.00	GRRV_ORANGE				
2,553.67	2,540.00	U__WSCH				
4,727.05	4,700.00	G_SAND				
5,144.62	5,115.00	FRUN				
5,934.48	5,900.00	L__WSCH				
6,475.81	6,438.00	OCRK				
7,200.27	7,158.00	U__MVRD				
8,003.47	7,958.00	TOP GAS				
9,573.47	9,528.00	CMEO				
10,303.47	10,258.00	RLNS				
10,453.47	10,408.00	CZZT				
10,778.47	10,733.00	CRCN				
11,038.47	10,993.00	SEGO				
11,283.47	11,238.00	SEGO_LOWER				
11,783.47	11,738.00	TD				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
120.00	120.00	0.00	0.00	Start Build 2.00	
437.98	437.33	-11.70	13.19	Start 7141.52 hold at 437.98 MD	
7,579.50	7,534.90	-536.72	604.90	Start Drop -1.50	
8,003.47	7,958.00	-552.32	622.48	Start 3780.00 hold at 8003.47 MD	
11,783.47	11,738.00	-552.32	622.48	TD at 11783.47	