

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 412-7-297 - Slot RG 412-7-297, True North
Vertical (TVD) Reference: KB=30' @ 6633.00usft (H&P #329)
Section (VS) Reference: Slot - RG 412-7-297(0.00N, 0.00E)
Measured Depth Reference: KB=30' @ 6633.00usft (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 412-7-297 - KMW Gas	8103.00	1281.84	-352.78	1762177.20	2205922.20	39.892031	-108.330260	Circle (Radius: 50.00)
RG 412-7-297 - PBHL	11763.00	1281.84	-352.78	1762177.20	2205922.20	39.892031	-108.330260	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
630.19	10.20	344.61	627.50	43.69	-12.02	45.31	45.31	Start 6908.10 hold at 630.19 MD
7538.29	10.20	344.61	7426.33	1223.59	-336.75	1269.08	1269.08	Start Drop -1.50
8218.54	0.00	0.00	8103.00	1281.84	-352.78	1329.50	1329.50	Start 3660.00 hold at 8218.54 MD
11878.54	0.00	0.00	11763.00	1281.84	-352.78	1329.50	1329.50	TD at 11878.54

WELL DETAILS: RG 412-7-297

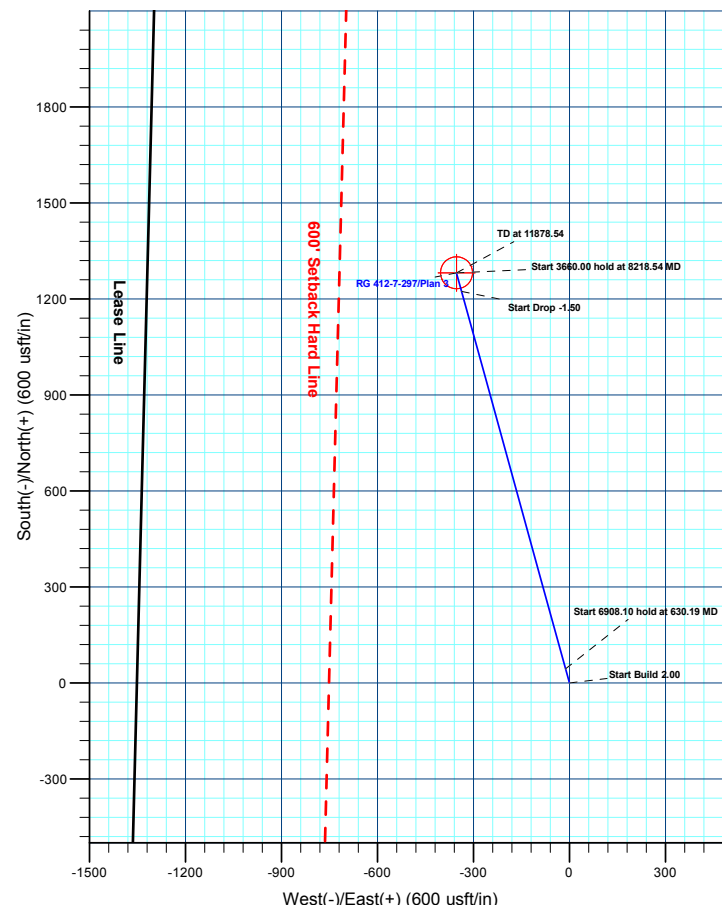
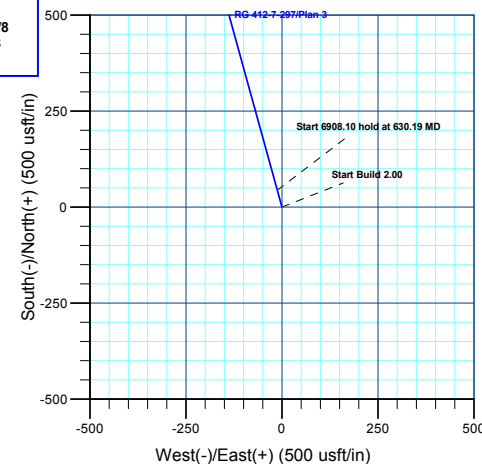
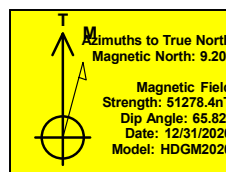
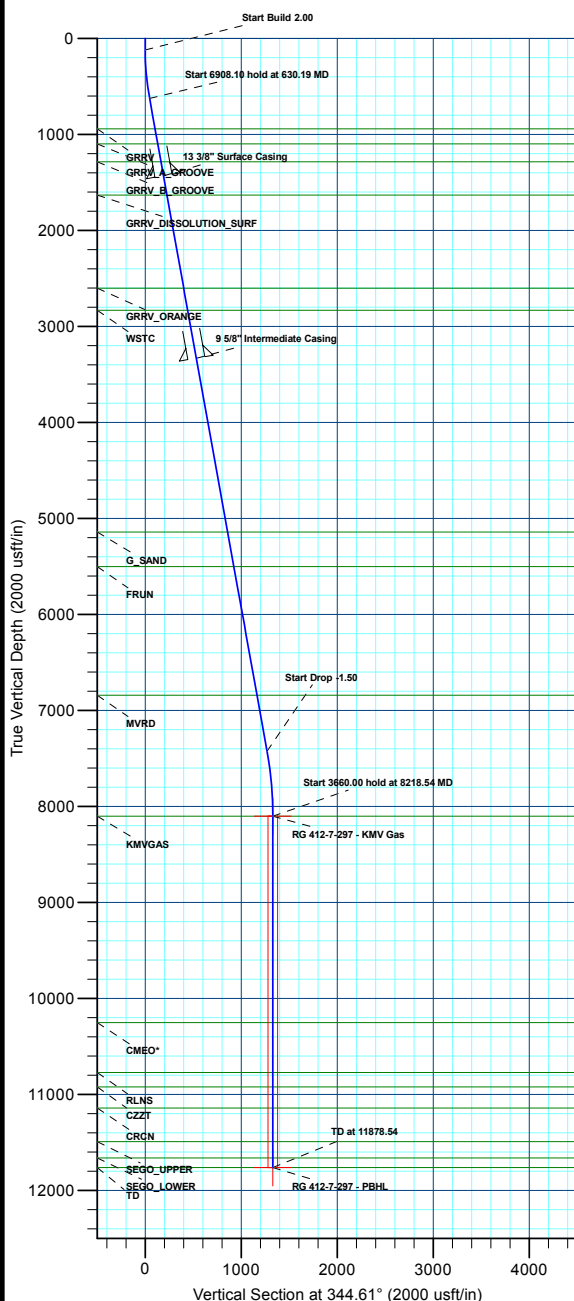
+N/-S	+E/-W	Northing	Ground Elev:	Latitude	Longitude	Slot
0.00	0.00	1760885.00	6603.00	39.888513	-108.329002	RG 412-7-297

CASING DETAILS

TVD	MD	Name	Size
1433.00	1448.64	13 3/8" Surface Casing	13-3/8
3333.00	3379.17	5/8" Intermediate Casing	9-5/8

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
943.00	950.76	GRRV
1098.00	1108.25	GRRV_A_GROOVE
1288.00	1301.31	GRRV_B_GROOVE
1633.00	1651.85	GRRV DISSOLUTION_SURF
2603.00	2637.44	GRRV_ORANGE
2833.00	2871.14	WSTC
5143.00	5218.26	G_SAND
5503.00	5584.04	FRUN
6843.00	6945.58	MVRD
8103.00	8218.54	KMVGAS
10253.00	10368.54	CMEQ*
10773.00	10888.54	RLNS
10923.00	11038.54	CZT
11143.00	11258.54	CRCN
11493.00	11608.54	SEGO_UPPER
11663.00	11778.54	SEGO_LOWER
11763.00	11878.54	TD



Plan: Plan 3 (RG 412-7-297/Wellbore #1)

Created By: Chase Chambers Date: 15:08, April 06 2022



Terra Energy Partners, LLP

Rio Blanco County, CO

RGU 23-7-297 Pad

RG 412-7-297 - Slot RG 412-7-297

Wellbore #1

Plan: Plan 3

KLX Well Planning Report

22 March, 2022



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well RG 412-7-297 - Slot RG 412-7-297
Company:	Terra Energy Partners, LLP	TVD Reference:	KB=30' @ 6633.00usft (H&P #329)
Project:	Rio Blanco County, CO	MD Reference:	KB=30' @ 6633.00usft (H&P #329)
Site:	RGU 23-7-297 Pad	North Reference:	True
Well:	RG 412-7-297	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 3		

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		RGU 23-7-297 Pad			
Site Position:		Northing:	1,760,880.90 usft	Latitude:	39.888499
From:	Map	Easting:	2,206,203.50 usft	Longitude:	-108.329114
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-1.78 °

Well	RG 412-7-297 - Slot RG 412-7-297					
Well Position	+N/-S	5.08 usft	Northing:	1,760,885.00 usft	Latitude:	39.888513
	+E/-W	31.26 usft	Easting:	2,206,234.90 usft	Longitude:	-108.329003
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	6,603.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2020	12/31/2020	9.20	65.82	51,278.40000000

Design	Plan 3			
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	344.61

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	
630.19	10.20	344.61	627.50	43.69	-12.02	2.00	2.00	0.00	344.61	
7,538.29	10.20	344.61	7,426.33	1,223.59	-336.75	0.00	0.00	0.00	0.00	
8,218.54	0.00	0.00	8,103.00	1,281.84	-352.78	1.50	-1.50	0.00	180.00	RG 412-7-297 - KMV
11,878.54	0.00	0.00	11,763.00	1,281.84	-352.78	0.00	0.00	0.00	0.00	RG 412-7-297 - PBHL

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Project:	Rio Blanco County, CO	MD Reference:	KB=30' @ 6633.00usft (H&P #329)
Site:	RGU 23-7-297 Pad	North Reference:	True
Well:	RG 412-7-297	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 3		

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
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	344.61	199.99	1.08	-0.30	1.12	2.00	2.00	0.00
300.00	3.60	344.61	299.88	5.45	-1.50	5.65	2.00	2.00	0.00
400.00	5.60	344.61	399.55	13.18	-3.63	13.67	2.00	2.00	0.00
500.00	7.60	344.61	498.89	24.26	-6.68	25.17	2.00	2.00	0.00
600.00	9.60	344.61	597.76	38.68	-10.65	40.12	2.00	2.00	0.00
Start 6908.10 hold at 630.19 MD									
630.19	10.20	344.61	627.50	43.69	-12.02	45.31	2.00	2.00	0.00
700.00	10.20	344.61	696.20	55.61	-15.30	57.68	0.00	0.00	0.00
800.00	10.20	344.61	794.62	72.69	-20.01	75.39	0.00	0.00	0.00
900.00	10.20	344.61	893.04	89.77	-24.71	93.11	0.00	0.00	0.00
GRRV									
950.76	10.20	344.61	943.00	98.44	-27.09	102.10	0.00	0.00	0.00
1,000.00	10.20	344.61	991.46	106.85	-29.41	110.82	0.00	0.00	0.00
1,100.00	10.20	344.61	1,089.88	123.93	-34.11	128.54	0.00	0.00	0.00
GRRV_A_GROOVE									
1,108.25	10.20	344.61	1,098.00	125.34	-34.50	130.00	0.00	0.00	0.00
1,200.00	10.20	344.61	1,188.30	141.01	-38.81	146.25	0.00	0.00	0.00
1,300.00	10.20	344.61	1,286.71	158.09	-43.51	163.97	0.00	0.00	0.00
GRRV_B_GROOVE									
1,301.31	10.20	344.61	1,288.00	158.31	-43.57	164.20	0.00	0.00	0.00
1,400.00	10.20	344.61	1,385.13	175.17	-48.21	181.68	0.00	0.00	0.00
13 3/8" Surface Casing									
1,448.64	10.20	344.61	1,433.00	183.48	-50.50	190.30	0.00	0.00	0.00
1,500.00	10.20	344.61	1,483.55	192.25	-52.91	199.40	0.00	0.00	0.00
1,600.00	10.20	344.61	1,581.97	209.33	-57.61	217.11	0.00	0.00	0.00
GRRV DISSOLUTION_SURF									
1,651.85	10.20	344.61	1,633.00	218.19	-60.05	226.30	0.00	0.00	0.00
1,700.00	10.20	344.61	1,680.39	226.41	-62.31	234.83	0.00	0.00	0.00
1,800.00	10.20	344.61	1,778.81	243.49	-67.01	252.54	0.00	0.00	0.00
1,900.00	10.20	344.61	1,877.22	260.57	-71.71	270.26	0.00	0.00	0.00
2,000.00	10.20	344.61	1,975.64	277.65	-76.41	287.97	0.00	0.00	0.00
2,100.00	10.20	344.61	2,074.06	294.73	-81.11	305.69	0.00	0.00	0.00
2,200.00	10.20	344.61	2,172.48	311.81	-85.81	323.40	0.00	0.00	0.00
2,300.00	10.20	344.61	2,270.90	328.89	-90.52	341.12	0.00	0.00	0.00
2,400.00	10.20	344.61	2,369.32	345.97	-95.22	358.83	0.00	0.00	0.00
2,500.00	10.20	344.61	2,467.73	363.05	-99.92	376.55	0.00	0.00	0.00
2,600.00	10.20	344.61	2,566.15	380.13	-104.62	394.26	0.00	0.00	0.00
GRRV_ORANGE									
2,637.44	10.20	344.61	2,603.00	386.52	-106.38	400.90	0.00	0.00	0.00
2,700.00	10.20	344.61	2,664.57	397.21	-109.32	411.98	0.00	0.00	0.00
2,800.00	10.20	344.61	2,762.99	414.29	-114.02	429.69	0.00	0.00	0.00
WSTC									
2,871.14	10.20	344.61	2,833.00	426.44	-117.36	442.29	0.00	0.00	0.00
2,900.00	10.20	344.61	2,861.41	431.37	-118.72	447.41	0.00	0.00	0.00
3,000.00	10.20	344.61	2,959.83	448.45	-123.42	465.12	0.00	0.00	0.00
3,100.00	10.20	344.61	3,058.24	465.53	-128.12	482.84	0.00	0.00	0.00
3,200.00	10.20	344.61	3,156.66	482.61	-132.82	500.55	0.00	0.00	0.00
3,300.00	10.20	344.61	3,255.08	499.69	-137.52	518.27	0.00	0.00	0.00
9 5/8" Intermediate Casing									

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Project:	Rio Blanco County, CO	MD Reference:	KB=30' @ 6633.00usft (H&P #329)
Site:	RGU 23-7-297 Pad	North Reference:	True
Well:	RG 412-7-297	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 3		

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)
3,379.17	10.20	344.61	3,333.00	513.21	-141.24	532.29	0.00	0.00	0.00
3,400.00	10.20	344.61	3,353.50	516.77	-142.22	535.98	0.00	0.00	0.00
3,500.00	10.20	344.61	3,451.92	533.85	-146.92	553.70	0.00	0.00	0.00
3,600.00	10.20	344.61	3,550.34	550.93	-151.62	571.41	0.00	0.00	0.00
3,700.00	10.20	344.61	3,648.75	568.01	-156.33	589.13	0.00	0.00	0.00
3,800.00	10.20	344.61	3,747.17	585.09	-161.03	606.84	0.00	0.00	0.00
3,900.00	10.20	344.61	3,845.59	602.17	-165.73	624.56	0.00	0.00	0.00
4,000.00	10.20	344.61	3,944.01	619.25	-170.43	642.27	0.00	0.00	0.00
4,100.00	10.20	344.61	4,042.43	636.33	-175.13	659.99	0.00	0.00	0.00
4,200.00	10.20	344.61	4,140.85	653.41	-179.83	677.70	0.00	0.00	0.00
4,300.00	10.20	344.61	4,239.26	670.49	-184.53	695.42	0.00	0.00	0.00
4,400.00	10.20	344.61	4,337.68	687.57	-189.23	713.13	0.00	0.00	0.00
4,500.00	10.20	344.61	4,436.10	704.65	-193.93	730.85	0.00	0.00	0.00
4,600.00	10.20	344.61	4,534.52	721.73	-198.63	748.56	0.00	0.00	0.00
4,700.00	10.20	344.61	4,632.94	738.81	-203.33	766.28	0.00	0.00	0.00
4,800.00	10.20	344.61	4,731.36	755.89	-208.03	783.99	0.00	0.00	0.00
4,900.00	10.20	344.61	4,829.78	772.97	-212.73	801.71	0.00	0.00	0.00
5,000.00	10.20	344.61	4,928.19	790.05	-217.43	819.42	0.00	0.00	0.00
5,100.00	10.20	344.61	5,026.61	807.13	-222.13	837.14	0.00	0.00	0.00
5,200.00	10.20	344.61	5,125.03	824.21	-226.84	854.85	0.00	0.00	0.00
G_SAND									
5,218.26	10.20	344.61	5,143.00	827.33	-227.69	858.09	0.00	0.00	0.00
5,300.00	10.20	344.61	5,223.45	841.29	-231.54	872.57	0.00	0.00	0.00
5,400.00	10.20	344.61	5,321.87	858.37	-236.24	890.28	0.00	0.00	0.00
5,500.00	10.20	344.61	5,420.29	875.45	-240.94	908.00	0.00	0.00	0.00
FRUN									
5,584.04	10.20	344.61	5,503.00	889.80	-244.89	922.89	0.00	0.00	0.00
5,600.00	10.20	344.61	5,518.70	892.53	-245.64	925.71	0.00	0.00	0.00
5,700.00	10.20	344.61	5,617.12	909.61	-250.34	943.43	0.00	0.00	0.00
5,800.00	10.20	344.61	5,715.54	926.69	-255.04	961.14	0.00	0.00	0.00
5,900.00	10.20	344.61	5,813.96	943.77	-259.74	978.86	0.00	0.00	0.00
6,000.00	10.20	344.61	5,912.38	960.85	-264.44	996.57	0.00	0.00	0.00
6,100.00	10.20	344.61	6,010.80	977.93	-269.14	1,014.29	0.00	0.00	0.00
6,200.00	10.20	344.61	6,109.21	995.01	-273.84	1,032.00	0.00	0.00	0.00
6,300.00	10.20	344.61	6,207.63	1,012.09	-278.54	1,049.72	0.00	0.00	0.00
6,400.00	10.20	344.61	6,306.05	1,029.17	-283.24	1,067.44	0.00	0.00	0.00
6,500.00	10.20	344.61	6,404.47	1,046.25	-287.94	1,085.15	0.00	0.00	0.00
6,600.00	10.20	344.61	6,502.89	1,063.33	-292.65	1,102.87	0.00	0.00	0.00
6,700.00	10.20	344.61	6,601.31	1,080.41	-297.35	1,120.58	0.00	0.00	0.00
6,800.00	10.20	344.61	6,699.72	1,097.49	-302.05	1,138.30	0.00	0.00	0.00
6,900.00	10.20	344.61	6,798.14	1,114.57	-306.75	1,156.01	0.00	0.00	0.00
MVRD									
6,945.58	10.20	344.61	6,843.00	1,122.35	-308.89	1,164.08	0.00	0.00	0.00
7,000.00	10.20	344.61	6,896.56	1,131.65	-311.45	1,173.73	0.00	0.00	0.00
7,100.00	10.20	344.61	6,994.98	1,148.73	-316.15	1,191.44	0.00	0.00	0.00
7,200.00	10.20	344.61	7,093.40	1,165.81	-320.85	1,209.16	0.00	0.00	0.00
7,300.00	10.20	344.61	7,191.82	1,182.89	-325.55	1,226.87	0.00	0.00	0.00
7,400.00	10.20	344.61	7,290.23	1,199.97	-330.25	1,244.59	0.00	0.00	0.00
7,500.00	10.20	344.61	7,388.65	1,217.05	-334.95	1,262.30	0.00	0.00	0.00
Start Drop -1.50									
7,538.29	10.20	344.61	7,426.33	1,223.59	-336.75	1,269.08	0.00	0.00	0.00
7,600.00	9.28	344.61	7,487.16	1,233.66	-339.52	1,279.52	1.50	-1.50	0.00
7,700.00	7.78	344.61	7,586.05	1,247.95	-343.46	1,294.35	1.50	-1.50	0.00

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Wellbore:	Wellbore #1		
Design:	Plan 3		

Planned Survey									
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7,800.00	6.28	344.61	7,685.29	1,259.75	-346.70	1,306.59	1.50	-1.50	0.00
7,900.00	4.78	344.61	7,784.83	1,269.04	-349.26	1,316.22	1.50	-1.50	0.00
8,000.00	3.28	344.61	7,884.58	1,275.81	-351.12	1,323.25	1.50	-1.50	0.00
8,100.00	1.78	344.61	7,984.48	1,280.06	-352.29	1,327.66	1.50	-1.50	0.00
8,200.00	0.28	344.61	8,084.46	1,281.79	-352.77	1,329.45	1.50	-1.50	0.00
Start 3660.00 hold at 8218.54 MD - KMGAS									
8,218.54	0.00	0.00	8,103.00	1,281.84	-352.78	1,329.50	1.50	-1.50	0.00
8,300.00	0.00	0.00	8,184.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
8,400.00	0.00	0.00	8,284.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
8,500.00	0.00	0.00	8,384.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
8,600.00	0.00	0.00	8,484.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
8,700.00	0.00	0.00	8,584.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
8,800.00	0.00	0.00	8,684.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
8,900.00	0.00	0.00	8,784.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
9,000.00	0.00	0.00	8,884.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
9,100.00	0.00	0.00	8,984.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
9,200.00	0.00	0.00	9,084.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
9,300.00	0.00	0.00	9,184.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
9,400.00	0.00	0.00	9,284.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
9,500.00	0.00	0.00	9,384.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
9,600.00	0.00	0.00	9,484.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
9,700.00	0.00	0.00	9,584.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
9,800.00	0.00	0.00	9,684.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
9,900.00	0.00	0.00	9,784.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
10,000.00	0.00	0.00	9,884.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
10,100.00	0.00	0.00	9,984.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
10,200.00	0.00	0.00	10,084.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
10,300.00	0.00	0.00	10,184.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
CMEQ*									
10,368.54	0.00	0.00	10,253.00	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
10,400.00	0.00	0.00	10,284.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
10,500.00	0.00	0.00	10,384.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
10,600.00	0.00	0.00	10,484.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
10,700.00	0.00	0.00	10,584.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
10,800.00	0.00	0.00	10,684.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
RLNS									
10,888.54	0.00	0.00	10,773.00	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
10,900.00	0.00	0.00	10,784.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
11,000.00	0.00	0.00	10,884.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
CZZT									
11,038.54	0.00	0.00	10,923.00	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
11,100.00	0.00	0.00	10,984.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
11,200.00	0.00	0.00	11,084.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
CRCN									
11,258.54	0.00	0.00	11,143.00	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
11,300.00	0.00	0.00	11,184.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
11,400.00	0.00	0.00	11,284.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
11,500.00	0.00	0.00	11,384.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
11,600.00	0.00	0.00	11,484.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
SEGO_UPPER									
11,608.54	0.00	0.00	11,493.00	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
11,700.00	0.00	0.00	11,584.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
SEGO_LOWER									

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well RG 412-7-297 - Slot RG 412-7-297
Company:	Terra Energy Partners, LLP	TVD Reference:	KB=30' @ 6633.00usft (H&P #329)
Project:	Rio Blanco County, CO	MD Reference:	KB=30' @ 6633.00usft (H&P #329)
Site:	RGU 23-7-297 Pad	North Reference:	True
Well:	RG 412-7-297	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 3		

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)
11,778.54	0.00	0.00	11,663.00	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
11,800.00	0.00	0.00	11,684.46	1,281.84	-352.78	1,329.50	0.00	0.00	0.00
TD at 11878.54 - TD									
11,878.54	0.00	0.00	11,763.00	1,281.84	-352.78	1,329.50	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
- hit/miss target									
- Shape									
RG 412-7-297 - KMV G&S	0.00	0.00	8,103.00	1,281.84	-352.78	1,762,177.20	2,205,922.20	39.892031	-108.330260
- plan hits target center									
- Circle (radius 50.00)									
RG 412-7-297 - PBHL	0.00	0.00	11,763.00	1,281.84	-352.78	1,762,177.20	2,205,922.20	39.892031	-108.330260
- plan hits target center									
- Point									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,448.64	1,433.00	13 3/8" Surface Casing	13-3/8	17-1/2	
3,379.17	3,333.00	9 5/8" Intermediate Casing	9-5/8	12-1/4	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
950.76	943.00	GRRV				
1,108.25	1,098.00	GRRV_A_GROOVE				
1,301.31	1,288.00	GRRV_B_GROOVE				
1,651.85	1,633.00	GRRV DISSOLUTION_SURF				
2,637.44	2,603.00	GRRV_ORANGE				
2,871.14	2,833.00	WSTC				
5,218.26	5,143.00	G_SAND				
5,584.04	5,503.00	FRUN				
6,945.58	6,843.00	MVRD				
8,218.54	8,103.00	KMVGAS				
10,368.54	10,253.00	CMEO*				
10,888.54	10,773.00	RLNS				
11,038.54	10,923.00	CZZT				
11,258.54	11,143.00	CRCN				
11,608.54	11,493.00	SEGO_UPPER				
11,778.54	11,663.00	SEGO_LOWER				
11,878.54	11,763.00	TD				

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well RG 412-7-297 - Slot RG 412-7-297
Company:	Terra Energy Partners, LLP	TVD Reference:	KB=30' @ 6633.00usft (H&P #329)
Project:	Rio Blanco County, CO	MD Reference:	KB=30' @ 6633.00usft (H&P #329)
Site:	RGU 23-7-297 Pad	North Reference:	True
Well:	RG 412-7-297	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 3		

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 2.00
630.19	627.50	43.69	-12.02	Start 6908.10 hold at 630.19 MD
7,538.29	7,426.33	1,223.59	-336.75	Start Drop -1.50
8,218.54	8,103.00	1,281.84	-352.78	Start 3660.00 hold at 8218.54 MD
11,878.54	11,763.00	1,281.84	-352.78	TD at 11878.54