



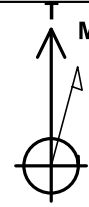
Company: TEP Rocky Mountain LLC
Project: Garfield County, CO NAD83
Site: RGU 23-7-297 Pad
Well: Federal RG 12-7-297

Plan: Plan #2 7April2020 SB-SDI

PROJECT DETAILS: Garfield County, CO NAD83

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

System Datum: Mean Sea Level



Azimuths to True North
Magnetic North: 9.28°

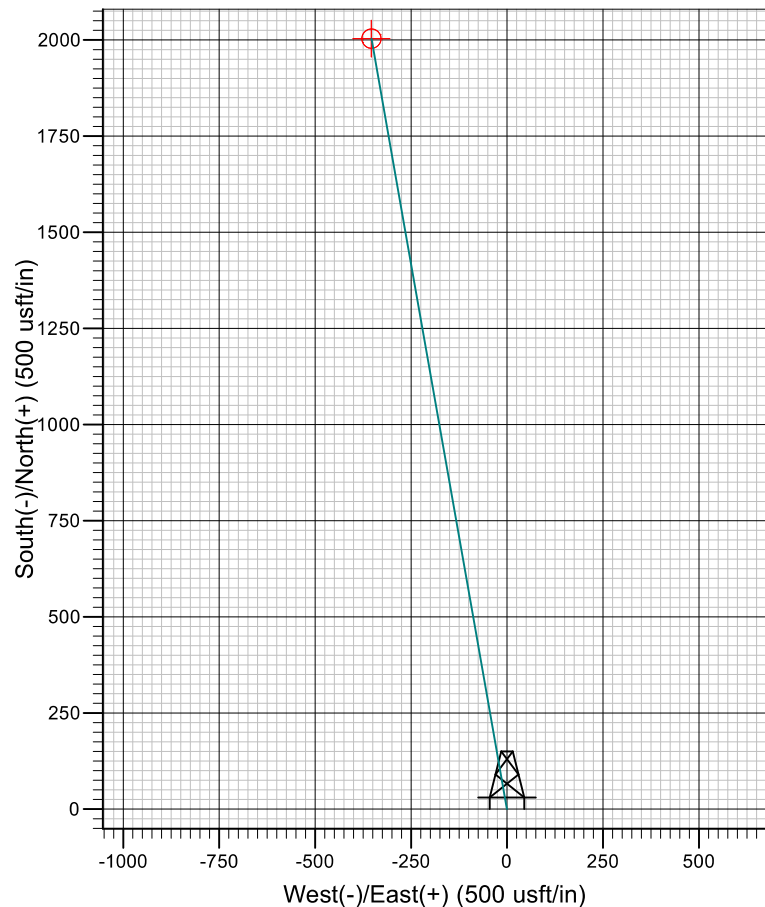
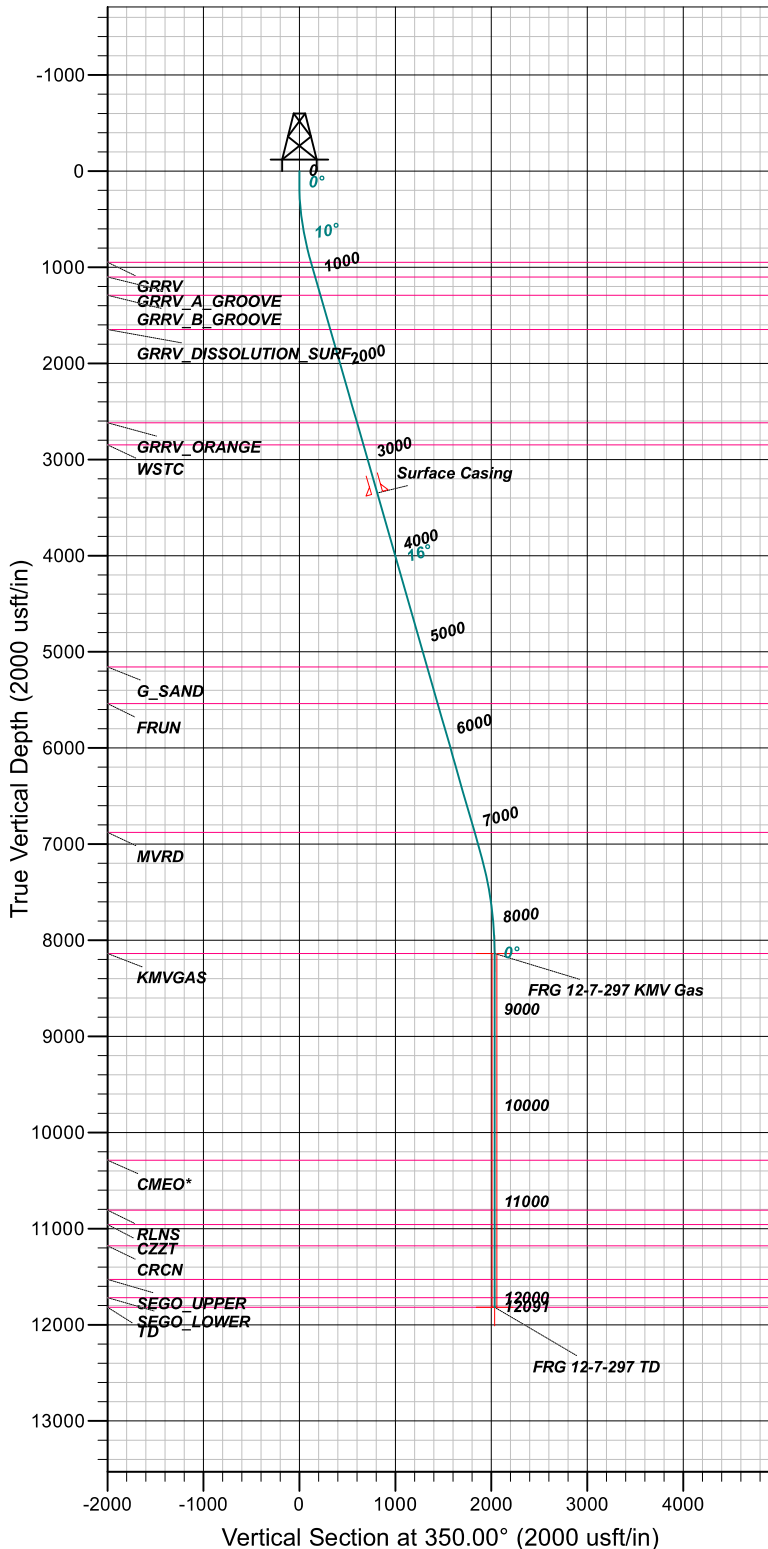
Magnetic Field
Strength: 51354.8nT
Dip Angle: 65.83°
Date: 4/7/2020
Model: HDGM_FILE

Well Details: Federal RG 12-7-297

+N/-S +E/-W Northing Easting Longitude
0.00 0.00 1760882.2000 2206249.6000 39.8885062 -108.3289498 RGU 12-7-297

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
FRG 12-7-297 KMV Gas	8137.00	2003.47	-353.25	1762895.7000	2205958.9000	39.8940059	-108.3302087	Circle (Radius: 25.00)
FRG 12-7-297 TD	11817.00	2003.47	-353.25	1762895.7000	2205958.9000	39.8940059	-108.3302087	Point



FORMATION TOP DETAILS

TVDPATH	MDPATH	FORMATION
947.00	958.87	GRRV
1102.00	1120.15	GRRV_A GROOVE
1292.00	1317.85	GRRV_B GROOVE
1647.00	1687.23	GRRV DISSOLUTION SURF
2617.00	2696.54	GRRV_ORANGE
2847.00	2935.86	WSTC
5157.00	5339.46	G_SAND
5537.00	5734.86	FRUN
6877.00	7129.15	MVRD
8137.00	8411.35	KMGAS
10287.00	10561.35	CMEO*
10807.00	11081.35	RLNS
10957.00	11231.35	CZZT
11177.00	11451.35	CRCN
11527.00	11801.35	SEGO_UPPER
11717.00	11991.35	SEGO_LOWER
11817.00	12091.35	TD

CASING DETAILS

TVD	MD	NAME
3347.00	3456.12	Surface Casing

SECTION DETAILS

MD	INC	AZI	TVD	+N/-S	+E/-W	DLEG	TFACE	VSECT
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
922.11	16.04	350.00	911.67	109.86	-19.37	2.00	350.00	111.56
7341.87	16.04	350.00	7081.44	1856.99	-327.42	0.00	0.00	1885.63
8411.35	0.00	0.00	8137.00	2003.47	-353.25	1.50	180.00	2034.38
12091.35	0.00	0.00	11817.00	2003.47	-353.25	0.00	0.00	2034.38

TEP Rocky Mountain LLC

Garfield County, CO NAD83

RGU 23-7-297 Pad

Federal RG 12-7-297 - Slot RGU 12-7-297

OH

Plan: Plan #2 7April2020 SB-SDI

Standard Planning Report

07 April, 2020



Scientific Drilling, Intl

Planning Report

Database:	Grand Junction	Local Co-ordinate Reference:	Well Federal RG 12-7-297 - Slot RGU 12-7-297
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 6603' & KB 24' @ 6627.00usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 6603' & KB 24' @ 6627.00usft (H&P 318)
Site:	RGU 23-7-297 Pad	North Reference:	True
Well:	Federal RG 12-7-297	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2 7April2020 SB-SDI		

Project	Garfield County, CO NAD83		
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 Center : RGU 314-7-297			
Site Position:		Northing:	1,760,880.9000 usft	Latitude: 39.8884987
From: Map		Easting:	2,206,203.5000 usft	Longitude: -108.3291139
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence: -1.78 °

Well	Federal RG 12-7-297 - Slot RGU 12-7-297, 1805' FSL 1366' FWL Sec 7 T2S R97W			
Well Position	+N/-S	2.73 usft	Northing:	1,760,882.2000 usft
	+E/-W	46.04 usft	Easting:	2,206,249.6000 usft
Position Uncertainty	0.00 usft		Wellhead Elevation:	Ground Level: 6,603.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	4/7/2020	9.28	65.83	51,354.80000000

Design	Plan #2 7April2020 SB-SDI			
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	350.00

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	
922.11	16.04	350.00	911.67	109.86	-19.37	2.00	2.00	0.00	350.00	
7,341.87	16.04	350.00	7,081.44	1,856.99	-327.42	0.00	0.00	0.00	0.00	
8,411.35	0.00	0.00	8,137.00	2,003.47	-353.25	1.50	-1.50	0.00	180.00	FRG 12-7-297 KMV C
12,091.35	0.00	0.00	11,817.00	2,003.47	-353.25	0.00	0.00	0.00	0.00	FRG 12-7-297 TD

Scientific Drilling, Intl

Planning Report

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Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 6603' & KB 24' @ 6627.00usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 6603' & KB 24' @ 6627.00usft (H&P 318)
Site:	RGU 23-7-297 Pad	North Reference:	True
Well:	Federal RG 12-7-297	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2 7April2020 SB-SDI		

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	
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	0.00	0.00	
Start Build 2.00										
200.00	1.60	350.00	199.99	1.10	-0.19	1.12	2.00	2.00	0.00	
300.00	3.60	350.00	299.88	5.57	-0.98	5.65	2.00	2.00	0.00	
400.00	5.60	350.00	399.55	13.46	-2.37	13.67	2.00	2.00	0.00	
500.00	7.60	350.00	498.89	24.78	-4.37	25.17	2.00	2.00	0.00	
600.00	9.60	350.00	597.76	39.51	-6.97	40.12	2.00	2.00	0.00	
700.00	11.60	350.00	696.05	57.62	-10.16	58.51	2.00	2.00	0.00	
800.00	13.60	350.00	793.63	79.11	-13.95	80.33	2.00	2.00	0.00	
900.00	15.60	350.00	890.40	103.93	-18.32	105.53	2.00	2.00	0.00	
922.11	16.04	350.00	911.67	109.86	-19.37	111.56	2.00	2.00	0.00	
Start 6419.76 hold at 922.11 MD										
958.87	16.04	350.00	947.00	119.87	-21.14	121.72	0.00	0.00	0.00	
GRRV										
1,000.00	16.04	350.00	986.53	131.06	-23.11	133.08	0.00	0.00	0.00	
1,100.00	16.04	350.00	1,082.63	158.28	-27.91	160.72	0.00	0.00	0.00	
1,120.15	16.04	350.00	1,102.00	163.76	-28.87	166.29	0.00	0.00	0.00	
GRRV_A_GROOVE										
1,200.00	16.04	350.00	1,178.74	185.49	-32.71	188.35	0.00	0.00	0.00	
1,300.00	16.04	350.00	1,274.85	212.71	-37.50	215.99	0.00	0.00	0.00	
1,317.85	16.04	350.00	1,292.00	217.56	-38.36	220.92	0.00	0.00	0.00	
GRRV_B_GROOVE										
1,400.00	16.04	350.00	1,370.95	239.92	-42.30	243.62	0.00	0.00	0.00	
1,500.00	16.04	350.00	1,467.06	267.14	-47.10	271.26	0.00	0.00	0.00	
1,600.00	16.04	350.00	1,563.16	294.35	-51.90	298.89	0.00	0.00	0.00	
1,687.23	16.04	350.00	1,647.00	318.09	-56.09	323.00	0.00	0.00	0.00	
GRRV DISSOLUTION_SURF										
1,700.00	16.04	350.00	1,659.27	321.57	-56.70	326.53	0.00	0.00	0.00	
1,800.00	16.04	350.00	1,755.37	348.78	-61.50	354.16	0.00	0.00	0.00	
1,900.00	16.04	350.00	1,851.48	375.99	-66.29	381.79	0.00	0.00	0.00	
2,000.00	16.04	350.00	1,947.59	403.21	-71.09	409.43	0.00	0.00	0.00	
2,100.00	16.04	350.00	2,043.69	430.42	-75.89	437.06	0.00	0.00	0.00	
2,200.00	16.04	350.00	2,139.80	457.64	-80.69	464.70	0.00	0.00	0.00	
2,300.00	16.04	350.00	2,235.90	484.85	-85.49	492.33	0.00	0.00	0.00	
2,400.00	16.04	350.00	2,332.01	512.07	-90.29	519.97	0.00	0.00	0.00	
2,500.00	16.04	350.00	2,428.12	539.28	-95.09	547.60	0.00	0.00	0.00	
2,600.00	16.04	350.00	2,524.22	566.50	-99.88	575.24	0.00	0.00	0.00	
2,696.54	16.04	350.00	2,617.00	592.77	-104.52	601.91	0.00	0.00	0.00	
GRRV_ORANGE										
2,700.00	16.04	350.00	2,620.33	593.71	-104.68	602.87	0.00	0.00	0.00	
2,800.00	16.04	350.00	2,716.43	620.93	-109.48	630.51	0.00	0.00	0.00	
2,900.00	16.04	350.00	2,812.54	648.14	-114.28	658.14	0.00	0.00	0.00	
2,935.86	16.04	350.00	2,847.00	657.90	-116.00	668.05	0.00	0.00	0.00	
WSTC										
3,000.00	16.04	350.00	2,908.64	675.36	-119.08	685.77	0.00	0.00	0.00	
3,100.00	16.04	350.00	3,004.75	702.57	-123.88	713.41	0.00	0.00	0.00	
3,200.00	16.04	350.00	3,100.86	729.79	-128.67	741.04	0.00	0.00	0.00	
3,300.00	16.04	350.00	3,196.96	757.00	-133.47	768.68	0.00	0.00	0.00	
3,400.00	16.04	350.00	3,293.07	784.22	-138.27	796.31	0.00	0.00	0.00	
3,456.12	16.04	350.00	3,347.00	799.49	-140.96	811.82	0.00	0.00	0.00	

Scientific Drilling, Intl

Planning Report

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Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 6603' & KB 24' @ 6627.00usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 6603' & KB 24' @ 6627.00usft (H&P 318)
Site:	RGU 23-7-297 Pad	North Reference:	True
Well:	Federal RG 12-7-297	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2 7April2020 SB-SDI		

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)
Surface Casing									
3,500.00	16.04	350.00	3,389.17	811.43	-143.07	823.95	0.00	0.00	0.00
3,600.00	16.04	350.00	3,485.28	838.65	-147.87	851.58	0.00	0.00	0.00
3,700.00	16.04	350.00	3,581.39	865.86	-152.67	879.22	0.00	0.00	0.00
3,800.00	16.04	350.00	3,677.49	893.07	-157.47	906.85	0.00	0.00	0.00
3,900.00	16.04	350.00	3,773.60	920.29	-162.26	934.49	0.00	0.00	0.00
4,000.00	16.04	350.00	3,869.70	947.50	-167.06	962.12	0.00	0.00	0.00
4,100.00	16.04	350.00	3,965.81	974.72	-171.86	989.75	0.00	0.00	0.00
4,200.00	16.04	350.00	4,061.91	1,001.93	-176.66	1,017.39	0.00	0.00	0.00
4,300.00	16.04	350.00	4,158.02	1,029.15	-181.46	1,045.02	0.00	0.00	0.00
4,400.00	16.04	350.00	4,254.13	1,056.36	-186.26	1,072.66	0.00	0.00	0.00
4,500.00	16.04	350.00	4,350.23	1,083.58	-191.05	1,100.29	0.00	0.00	0.00
4,600.00	16.04	350.00	4,446.34	1,110.79	-195.85	1,127.93	0.00	0.00	0.00
4,700.00	16.04	350.00	4,542.44	1,138.01	-200.65	1,155.56	0.00	0.00	0.00
4,800.00	16.04	350.00	4,638.55	1,165.22	-205.45	1,183.20	0.00	0.00	0.00
4,900.00	16.04	350.00	4,734.66	1,192.44	-210.25	1,210.83	0.00	0.00	0.00
5,000.00	16.04	350.00	4,830.76	1,219.65	-215.05	1,238.47	0.00	0.00	0.00
5,100.00	16.04	350.00	4,926.87	1,246.87	-219.85	1,266.10	0.00	0.00	0.00
5,200.00	16.04	350.00	5,022.97	1,274.08	-224.64	1,293.73	0.00	0.00	0.00
5,300.00	16.04	350.00	5,119.08	1,301.30	-229.44	1,321.37	0.00	0.00	0.00
5,339.46	16.04	350.00	5,157.00	1,312.03	-231.34	1,332.27	0.00	0.00	0.00
G_SAND									
5,400.00	16.04	350.00	5,215.18	1,328.51	-234.24	1,349.00	0.00	0.00	0.00
5,500.00	16.04	350.00	5,311.29	1,355.73	-239.04	1,376.64	0.00	0.00	0.00
5,600.00	16.04	350.00	5,407.40	1,382.94	-243.84	1,404.27	0.00	0.00	0.00
5,700.00	16.04	350.00	5,503.50	1,410.16	-248.64	1,431.91	0.00	0.00	0.00
5,734.86	16.04	350.00	5,537.00	1,419.64	-250.31	1,441.54	0.00	0.00	0.00
FRUN									
5,800.00	16.04	350.00	5,599.61	1,437.37	-253.43	1,459.54	0.00	0.00	0.00
5,900.00	16.04	350.00	5,695.71	1,464.58	-258.23	1,487.18	0.00	0.00	0.00
6,000.00	16.04	350.00	5,791.82	1,491.80	-263.03	1,514.81	0.00	0.00	0.00
6,100.00	16.04	350.00	5,887.93	1,519.01	-267.83	1,542.44	0.00	0.00	0.00
6,200.00	16.04	350.00	5,984.03	1,546.23	-272.63	1,570.08	0.00	0.00	0.00
6,300.00	16.04	350.00	6,080.14	1,573.44	-277.43	1,597.71	0.00	0.00	0.00
6,400.00	16.04	350.00	6,176.24	1,600.66	-282.23	1,625.35	0.00	0.00	0.00
6,500.00	16.04	350.00	6,272.35	1,627.87	-287.02	1,652.98	0.00	0.00	0.00
6,600.00	16.04	350.00	6,368.46	1,655.09	-291.82	1,680.62	0.00	0.00	0.00
6,700.00	16.04	350.00	6,464.56	1,682.30	-296.62	1,708.25	0.00	0.00	0.00
6,800.00	16.04	350.00	6,560.67	1,709.52	-301.42	1,735.89	0.00	0.00	0.00
6,900.00	16.04	350.00	6,656.77	1,736.73	-306.22	1,763.52	0.00	0.00	0.00
7,000.00	16.04	350.00	6,752.88	1,763.95	-311.02	1,791.16	0.00	0.00	0.00
7,100.00	16.04	350.00	6,848.98	1,791.16	-315.81	1,818.79	0.00	0.00	0.00
7,129.15	16.04	350.00	6,877.00	1,799.09	-317.21	1,826.85	0.00	0.00	0.00
MVRD									
7,200.00	16.04	350.00	6,945.09	1,818.38	-320.61	1,846.42	0.00	0.00	0.00
7,300.00	16.04	350.00	7,041.20	1,845.59	-325.41	1,874.06	0.00	0.00	0.00
7,341.87	16.04	350.00	7,081.44	1,856.99	-327.42	1,885.63	0.00	0.00	0.00
Start Drop -1.50									
7,400.00	15.17	350.00	7,137.42	1,872.39	-330.14	1,901.27	1.50	-1.50	0.00
7,500.00	13.67	350.00	7,234.27	1,896.91	-334.46	1,926.17	1.50	-1.50	0.00
7,600.00	12.17	350.00	7,331.73	1,918.93	-338.34	1,948.53	1.50	-1.50	0.00
7,700.00	10.67	350.00	7,429.75	1,938.43	-341.78	1,968.33	1.50	-1.50	0.00

Scientific Drilling, Intl

Planning Report

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Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 6603' & KB 24' @ 6627.00usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 6603' & KB 24' @ 6627.00usft (H&P 318)
Site:	RGU 23-7-297 Pad	North Reference:	True
Well:	Federal RG 12-7-297	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2 7April2020 SB-SDI		

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)
7,800.00	9.17	350.00	7,528.25	1,955.39	-344.77	1,985.56	1.50	-1.50	0.00
7,900.00	7.67	350.00	7,627.17	1,969.82	-347.31	2,000.20	1.50	-1.50	0.00
8,000.00	6.17	350.00	7,726.44	1,981.68	-349.41	2,012.25	1.50	-1.50	0.00
8,100.00	4.67	350.00	7,825.99	1,990.98	-351.05	2,021.69	1.50	-1.50	0.00
8,200.00	3.17	350.00	7,925.75	1,997.72	-352.23	2,028.53	1.50	-1.50	0.00
8,300.00	1.67	350.00	8,025.66	2,001.87	-352.97	2,032.75	1.50	-1.50	0.00
8,400.00	0.17	350.00	8,125.65	2,003.46	-353.25	2,034.36	1.50	-1.50	0.00
8,411.35	0.00	0.00	8,137.00	2,003.47	-353.25	2,034.38	1.50	-1.50	0.00
Start 3680.00 hold at 8411.35 MD - KMGAS									
8,500.00	0.00	0.00	8,225.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
8,600.00	0.00	0.00	8,325.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
8,700.00	0.00	0.00	8,425.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
8,800.00	0.00	0.00	8,525.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
8,900.00	0.00	0.00	8,625.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
9,000.00	0.00	0.00	8,725.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
9,100.00	0.00	0.00	8,825.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
9,200.00	0.00	0.00	8,925.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
9,300.00	0.00	0.00	9,025.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
9,400.00	0.00	0.00	9,125.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
9,500.00	0.00	0.00	9,225.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
9,600.00	0.00	0.00	9,325.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
9,700.00	0.00	0.00	9,425.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
9,800.00	0.00	0.00	9,525.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
9,900.00	0.00	0.00	9,625.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
10,000.00	0.00	0.00	9,725.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
10,100.00	0.00	0.00	9,825.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
10,200.00	0.00	0.00	9,925.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
10,300.00	0.00	0.00	10,025.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
10,400.00	0.00	0.00	10,125.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
10,500.00	0.00	0.00	10,225.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
10,561.35	0.00	0.00	10,287.00	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
CMEO*									
10,600.00	0.00	0.00	10,325.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
10,700.00	0.00	0.00	10,425.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
10,800.00	0.00	0.00	10,525.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
10,900.00	0.00	0.00	10,625.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
11,000.00	0.00	0.00	10,725.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
11,081.35	0.00	0.00	10,807.00	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
RLNS									
11,100.00	0.00	0.00	10,825.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
11,200.00	0.00	0.00	10,925.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
11,231.35	0.00	0.00	10,957.00	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
CZZT									
11,300.00	0.00	0.00	11,025.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
11,400.00	0.00	0.00	11,125.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
11,451.35	0.00	0.00	11,177.00	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
CRCN									
11,500.00	0.00	0.00	11,225.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
11,600.00	0.00	0.00	11,325.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
11,700.00	0.00	0.00	11,425.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
11,800.00	0.00	0.00	11,525.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
11,801.35	0.00	0.00	11,527.00	2,003.47	-353.25	2,034.38	0.00	0.00	0.00

Scientific Drilling, Intl

Planning Report

Database:	Grand Junction	Local Co-ordinate Reference:	Well Federal RG 12-7-297 - Slot RGU 12-7-297
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 6603' & KB 24' @ 6627.00usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 6603' & KB 24' @ 6627.00usft (H&P 318)
Site:	RGU 23-7-297 Pad	North Reference:	True
Well:	Federal RG 12-7-297	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2 7April2020 SB-SDI		

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)
SEGO_UPPER									
11,900.00	0.00	0.00	11,625.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
11,991.35	0.00	0.00	11,717.00	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
SEGO_LOWER									
12,000.00	0.00	0.00	11,725.65	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
12,091.35	0.00	0.00	11,817.00	2,003.47	-353.25	2,034.38	0.00	0.00	0.00
TD at 12091.35 - TD									

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									
FRG 12-7-297 KMV Gas	0.00	0.00	8,137.00	2,003.47	-353.25	1,762,895.7000	2,205,958.9000	39.8940059	-108.3302087
- plan hits target center									
- Circle (radius 25.00)									
FRG 12-7-297 TD	0.00	0.00	11,817.00	2,003.47	-353.25	1,762,895.7000	2,205,958.9000	39.8940059	-108.3302087
- plan hits target center									
- Point									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
3,456.12	3,347.00	Surface Casing	0.00	0.00	

Scientific Drilling, Intl

Planning Report

Database:	Grand Junction	Local Co-ordinate Reference:	Well Federal RG 12-7-297 - Slot RGU 12-7-297
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 6603' & KB 24' @ 6627.00usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 6603' & KB 24' @ 6627.00usft (H&P 318)
Site:	RGU 23-7-297 Pad	North Reference:	True
Well:	Federal RG 12-7-297	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2 7April2020 SB-SDI		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
958.87	947.00	GRRV		0.00		
1,120.15	1,102.00	GRRV_A_GROOVE		0.00		
1,317.85	1,292.00	GRRV_B_GROOVE		0.00		
1,687.23	1,647.00	GRRV DISSOLUTION_SURF		0.00		
2,696.54	2,617.00	GRRV_ORANGE		0.00		
2,935.86	2,847.00	WSTC		0.00		
5,339.46	5,157.00	G_SAND		0.00		
5,734.86	5,537.00	FRUN		0.00		
7,129.15	6,877.00	MVRD		0.00		
8,411.35	8,137.00	KMVGAS		0.00		
10,561.35	10,287.00	CMEO*		0.00		
11,081.35	10,807.00	RLNS		0.00		
11,231.35	10,957.00	CZZT		0.00		
11,451.35	11,177.00	CRCN		0.00		
11,801.35	11,527.00	SEGO_UPPER		0.00		
11,991.35	11,717.00	SEGO_LOWER		0.00		
12,091.35	11,817.00	TD		0.00		

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	
922.11	911.67	109.86	-19.37	Start 6419.76 hold at 922.11 MD	
7,341.87	7,081.44	1,856.99	-327.42	Start Drop -1.50	
8,411.35	8,137.00	2,003.47	-353.25	Start 3680.00 hold at 8411.35 MD	
12,091.35	11,817.00	2,003.47	-353.25	TD at 12091.35	