



Company: TEP Rocky Mountain LLC  
Project: Garfield County, CO NAD83  
Site: RGU 23-7-297 Pad  
Well: Federal RG 514-7-297

PROJECT DETAILS: Garfield County, CO NAD83

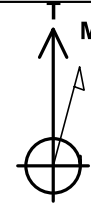
Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: Colorado Central Zone

System Datum: Mean Sea Level

Plan: Plan #2 7April2020 SB-SDI

Well Details: Federal RG 514-7-297

+N/-S +E/-W Northing Easting Longitude  
0.00 0.00 1760878.0000 2206218.2000 39.8884920 -108.3290611 RGU 514-7-297

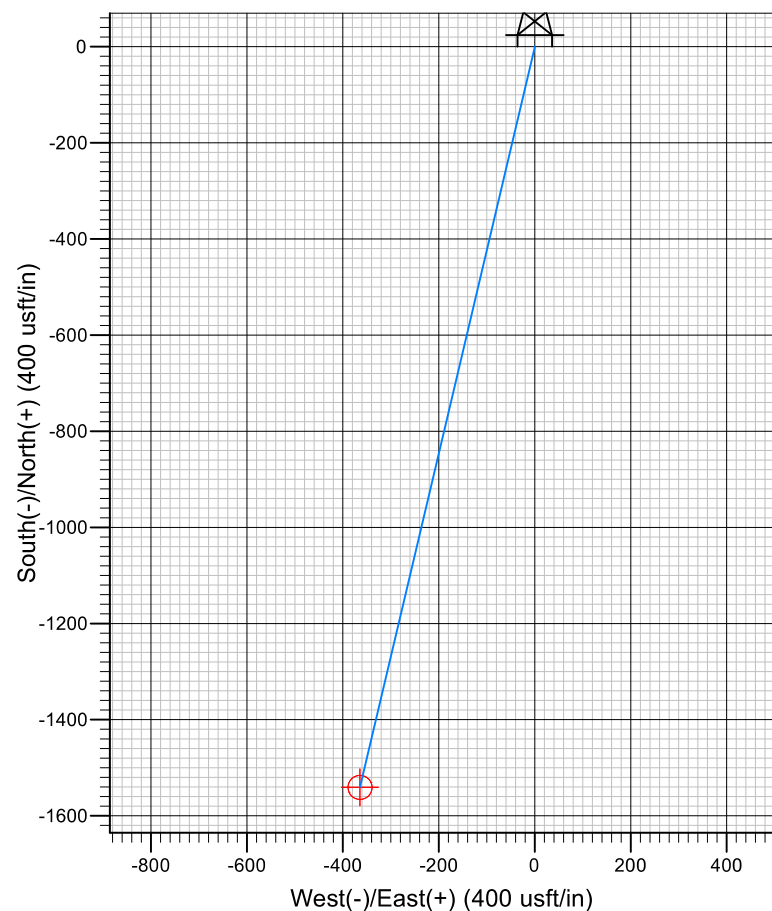
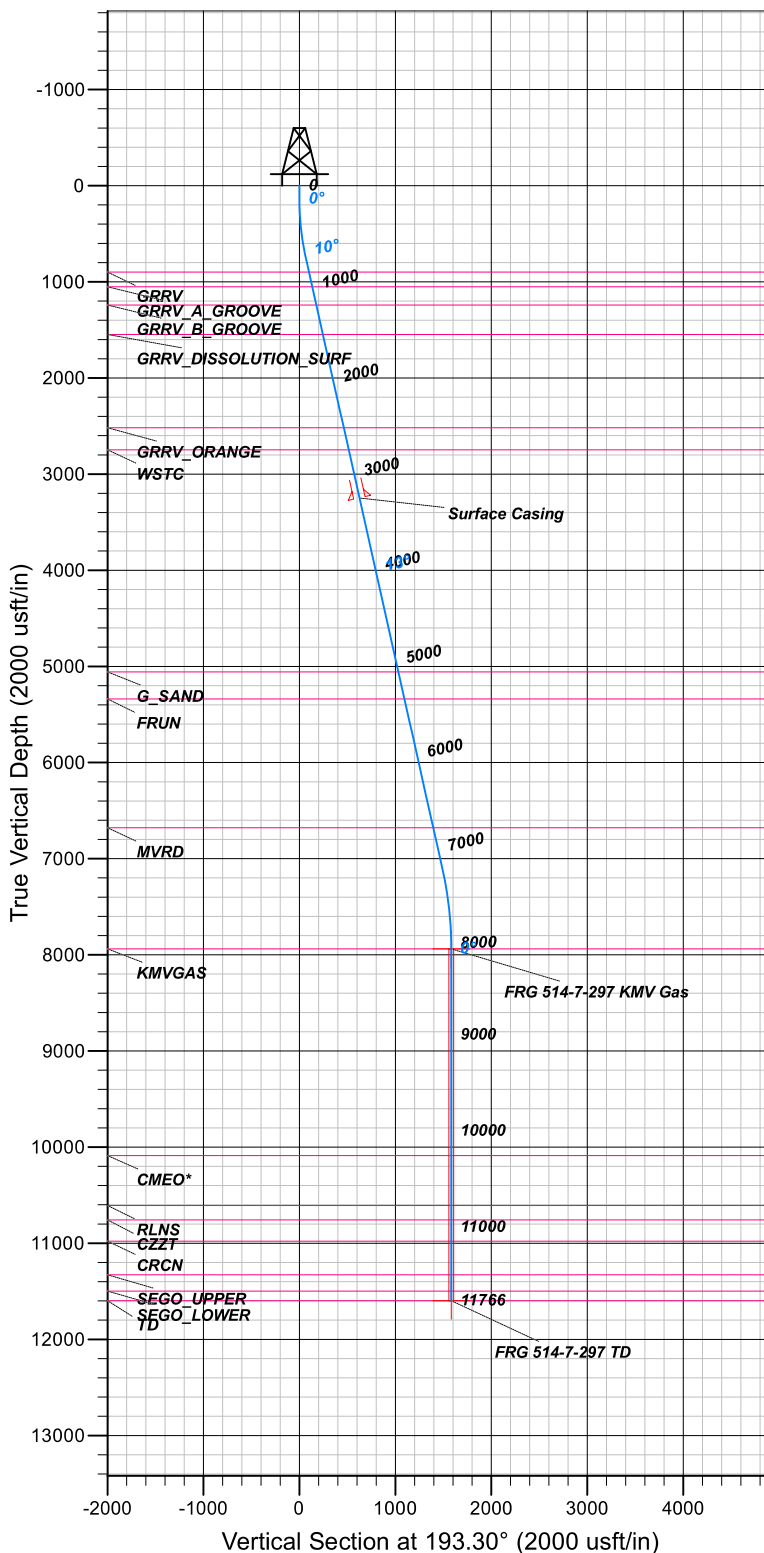


Azimuths to True North  
Magnetic North: 9.28°

Magnetic Field  
Strength: 51354.1nT  
Dip Angle: 65.83°  
Date: 4/7/2020  
Model: HDGM\_FILE

#### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
FRG 514-7-297 KMV Gas	7937.00	-1540.89	-364.30	1759349.2000	2205806.1000	39.8842621	-108.3303592	Circle (Radius: 25.00)
FRG 514-7-297 TD	11597.00	-1540.89	-364.30	1759349.2000	2205806.1000	39.8842621	-108.3303592	Point



#### FORMATION TOP DETAILS

TVDPth	MDPath	Formation
897.00	905.47	GRRV
1052.00	1064.32	GRRV_A_GROOVE
1242.00	1259.03	GRRV_B_GROOVE
1547.00	1571.61	GRRV_DISSOLUTION_SURF
2517.00	2565.69	GRRV_ORANGE
2747.00	2801.40	WSTC
5057.00	5168.75	G_SAND
5337.00	5455.71	FRUN
6677.00	6828.98	MVRD
7937.00	8106.32	KMGAS
10087.00	10256.32	CMEO*
10607.00	10776.32	RLNS
10757.00	10926.32	CZZT
10977.00	11146.32	CRCN
11327.00	11496.32	SEGO_UPPER
11497.00	11666.32	SEGO_LOWER
11597.00	11766.32	TD

#### CASING DETAILS

TVD	MD	Name
3247.00	3313.81	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
135.00	0.00	0.00	135.00	0.00	0.00	0.00	0.00	0.00
766.88	12.64	193.30	761.77	-67.54	-15.97	2.00	193.30	69.40
7263.82	12.64	193.30	7101.31	-1450.83	-343.01	0.00	0.00	1490.83
8106.32	0.00	0.00	7937.00	-1540.89	-364.30	1.50	180.00	1583.37
11766.32	0.00	0.00	11597.00	-1540.89	-364.30	0.00	0.00	1583.37

# **TEP Rocky Mountain LLC**

**Garfield County, CO NAD83**

**RGU 23-7-297 Pad**

**Federal RG 514-7-297 - Slot RGU 514-7-297**

**OH**

**Plan: Plan #2 7April2020 SB-SDI**

## **Standard Planning Report**

**07 April, 2020**



# Scientific Drilling, Intl

## Planning Report

<b>Database:</b>	Grand Junction	<b>Local Co-ordinate Reference:</b>	Well Federal RG 514-7-297 - Slot RGU 514-7-297
<b>Company:</b>	TEP Rocky Mountain LLC	<b>TVD Reference:</b>	GL 6603' & KB 24' @ 6627.00usft (H&P 318)
<b>Project:</b>	Garfield County, CO NAD83	<b>MD Reference:</b>	GL 6603' & KB 24' @ 6627.00usft (H&P 318)
<b>Site:</b>	RGU 23-7-297 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Federal RG 514-7-297	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #2 7April2020 SB-SDI		

<b>Project</b>	Garfield County, CO NAD83		
<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 23-7-297 Pad, Site Center : RGU 314-7-297			
<b>Site Position:</b>		<b>Northing:</b>	1,760,880.9000 usft	<b>Latitude:</b> 39.8884987
<b>From:</b> Map		<b>Easting:</b>	2,206,203.5000 usft	<b>Longitude:</b> -108.3291139
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13.20 in	<b>Grid Convergence:</b> -1.78 °

<b>Well</b>	Federal RG 514-7-297 - Slot RGU 514-7-297, 1801' FSL 1335' FWL Sec 7 T2S R97W			
<b>Well Position</b>	<b>+N/-S</b>	-2.44 usft	<b>Northing:</b>	1,760,878.0000 usft
	<b>+E/-W</b>	14.78 usft	<b>Easting:</b>	2,206,218.2000 usft
<b>Position Uncertainty</b>	0.00 usft		<b>Wellhead Elevation:</b>	
			<b>Ground Level:</b>	6,603.00 usft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	HDGM_FILE	4/7/2020	9.28	65.83	51,354.10000000

<b>Design</b>	Plan #2 7April2020 SB-SDI			
<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	193.30

<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	
135.00	0.00	0.00	135.00	0.00	0.00	0.00	0.00	0.00	0.00	
766.88	12.64	193.30	761.77	-67.54	-15.97	2.00	2.00	0.00	193.30	
7,263.82	12.64	193.30	7,101.31	-1,450.83	-343.01	0.00	0.00	0.00	0.00	
8,106.33	0.00	0.00	7,937.00	-1,540.89	-364.30	1.50	-1.50	0.00	180.00	FRG 514-7-297 KMV
11,766.33	0.00	0.00	11,597.00	-1,540.89	-364.30	0.00	0.00	0.00	0.00	FRG 514-7-297 TD

# Scientific Drilling, Intl

## Planning Report

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<b>Project:</b>	Garfield County, CO NAD83	<b>MD Reference:</b>	GL 6603' & KB 24' @ 6627.00usft (H&P 318)
<b>Site:</b>	RGU 23-7-297 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Federal RG 514-7-297	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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
135.00	0.00	0.00	135.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
200.00	1.30	193.30	199.99	-0.72	-0.17	0.74	2.00	2.00	0.00
300.00	3.30	193.30	299.91	-4.62	-1.09	4.75	2.00	2.00	0.00
400.00	5.30	193.30	399.62	-11.92	-2.82	12.25	2.00	2.00	0.00
500.00	7.30	193.30	499.01	-22.60	-5.34	23.22	2.00	2.00	0.00
600.00	9.30	193.30	597.96	-36.65	-8.66	37.66	2.00	2.00	0.00
700.00	11.30	193.30	696.34	-54.05	-12.78	55.53	2.00	2.00	0.00
766.88	12.64	193.30	761.77	-67.54	-15.97	69.40	2.00	2.00	0.00
Start 6496.94 hold at 766.88 MD									
800.00	12.64	193.30	794.09	-74.59	-17.64	76.65	0.00	0.00	0.00
900.00	12.64	193.30	891.66	-95.89	-22.67	98.53	0.00	0.00	0.00
905.47	12.64	193.30	897.00	-97.05	-22.94	99.73	0.00	0.00	0.00
GRRV									
1,000.00	12.64	193.30	989.24	-117.18	-27.70	120.41	0.00	0.00	0.00
1,064.32	12.64	193.30	1,052.00	-130.87	-30.94	134.48	0.00	0.00	0.00
GRRV_A_GROOVE									
1,100.00	12.64	193.30	1,086.82	-138.47	-32.74	142.29	0.00	0.00	0.00
1,200.00	12.64	193.30	1,184.40	-159.76	-37.77	164.16	0.00	0.00	0.00
1,259.03	12.64	193.30	1,242.00	-172.33	-40.74	177.08	0.00	0.00	0.00
GRRV_B_GROOVE									
1,300.00	12.64	193.30	1,281.97	-181.05	-42.80	186.04	0.00	0.00	0.00
1,400.00	12.64	193.30	1,379.55	-202.34	-47.84	207.92	0.00	0.00	0.00
1,500.00	12.64	193.30	1,477.13	-223.63	-52.87	229.80	0.00	0.00	0.00
1,571.61	12.64	193.30	1,547.00	-238.88	-56.48	245.47	0.00	0.00	0.00
GRRV DISSOLUTION SURF									
1,600.00	12.64	193.30	1,574.71	-244.93	-57.91	251.68	0.00	0.00	0.00
1,700.00	12.64	193.30	1,672.28	-266.22	-62.94	273.56	0.00	0.00	0.00
1,800.00	12.64	193.30	1,769.86	-287.51	-67.97	295.43	0.00	0.00	0.00
1,900.00	12.64	193.30	1,867.44	-308.80	-73.01	317.31	0.00	0.00	0.00
2,000.00	12.64	193.30	1,965.01	-330.09	-78.04	339.19	0.00	0.00	0.00
2,100.00	12.64	193.30	2,062.59	-351.38	-83.07	361.07	0.00	0.00	0.00
2,200.00	12.64	193.30	2,160.17	-372.67	-88.11	382.95	0.00	0.00	0.00
2,300.00	12.64	193.30	2,257.75	-393.97	-93.14	404.83	0.00	0.00	0.00
2,400.00	12.64	193.30	2,355.32	-415.26	-98.18	426.70	0.00	0.00	0.00
2,500.00	12.64	193.30	2,452.90	-436.55	-103.21	448.58	0.00	0.00	0.00
2,565.69	12.64	193.30	2,517.00	-450.53	-106.52	462.95	0.00	0.00	0.00
GRRV_ORANGE									
2,600.00	12.64	193.30	2,550.48	-457.84	-108.24	470.46	0.00	0.00	0.00
2,700.00	12.64	193.30	2,648.06	-479.13	-113.28	492.34	0.00	0.00	0.00
2,800.00	12.64	193.30	2,745.63	-500.42	-118.31	514.22	0.00	0.00	0.00
2,801.40	12.64	193.30	2,747.00	-500.72	-118.38	514.52	0.00	0.00	0.00
WSTC									
2,900.00	12.64	193.30	2,843.21	-521.71	-123.34	536.10	0.00	0.00	0.00
3,000.00	12.64	193.30	2,940.79	-543.01	-128.38	557.97	0.00	0.00	0.00
3,100.00	12.64	193.30	3,038.37	-564.30	-133.41	579.85	0.00	0.00	0.00
3,200.00	12.64	193.30	3,135.94	-585.59	-138.45	601.73	0.00	0.00	0.00
3,300.00	12.64	193.30	3,233.52	-606.88	-143.48	623.61	0.00	0.00	0.00
3,313.81	12.64	193.30	3,247.00	-609.82	-144.17	626.63	0.00	0.00	0.00
Surface Casing									

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## Planning Report

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<b>Company:</b>	TEP Rocky Mountain LLC	<b>TVD Reference:</b>	GL 6603' & KB 24' @ 6627.00usft (H&P 318)
<b>Project:</b>	Garfield County, CO NAD83	<b>MD Reference:</b>	GL 6603' & KB 24' @ 6627.00usft (H&P 318)
<b>Site:</b>	RGU 23-7-297 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Federal RG 514-7-297	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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)	
3,400.00	12.64	193.30	3,331.10	-628.17	-148.51	645.49	0.00	0.00	0.00	
3,500.00	12.64	193.30	3,428.67	-649.46	-153.55	667.37	0.00	0.00	0.00	
3,600.00	12.64	193.30	3,526.25	-670.75	-158.58	689.25	0.00	0.00	0.00	
3,700.00	12.64	193.30	3,623.83	-692.05	-163.61	711.12	0.00	0.00	0.00	
3,800.00	12.64	193.30	3,721.41	-713.34	-168.65	733.00	0.00	0.00	0.00	
3,900.00	12.64	193.30	3,818.98	-734.63	-173.68	754.88	0.00	0.00	0.00	
4,000.00	12.64	193.30	3,916.56	-755.92	-178.72	776.76	0.00	0.00	0.00	
4,100.00	12.64	193.30	4,014.14	-777.21	-183.75	798.64	0.00	0.00	0.00	
4,200.00	12.64	193.30	4,111.72	-798.50	-188.78	820.52	0.00	0.00	0.00	
4,300.00	12.64	193.30	4,209.29	-819.79	-193.82	842.39	0.00	0.00	0.00	
4,400.00	12.64	193.30	4,306.87	-841.09	-198.85	864.27	0.00	0.00	0.00	
4,500.00	12.64	193.30	4,404.45	-862.38	-203.88	886.15	0.00	0.00	0.00	
4,600.00	12.64	193.30	4,502.03	-883.67	-208.92	908.03	0.00	0.00	0.00	
4,700.00	12.64	193.30	4,599.60	-904.96	-213.95	929.91	0.00	0.00	0.00	
4,800.00	12.64	193.30	4,697.18	-926.25	-218.99	951.79	0.00	0.00	0.00	
4,900.00	12.64	193.30	4,794.76	-947.54	-224.02	973.66	0.00	0.00	0.00	
5,000.00	12.64	193.30	4,892.33	-968.83	-229.05	995.54	0.00	0.00	0.00	
5,100.00	12.64	193.30	4,989.91	-990.13	-234.09	1,017.42	0.00	0.00	0.00	
5,168.75	12.64	193.30	5,057.00	-1,004.76	-237.55	1,032.46	0.00	0.00	0.00	
<b>G_SAND</b>										
5,200.00	12.64	193.30	5,087.49	-1,011.42	-239.12	1,039.30	0.00	0.00	0.00	
5,300.00	12.64	193.30	5,185.07	-1,032.71	-244.15	1,061.18	0.00	0.00	0.00	
5,400.00	12.64	193.30	5,282.64	-1,054.00	-249.19	1,083.06	0.00	0.00	0.00	
5,455.71	12.64	193.30	5,337.00	-1,065.86	-251.99	1,095.24	0.00	0.00	0.00	
<b>FRUN</b>										
5,500.00	12.64	193.30	5,380.22	-1,075.29	-254.22	1,104.93	0.00	0.00	0.00	
5,600.00	12.64	193.30	5,477.80	-1,096.58	-259.26	1,126.81	0.00	0.00	0.00	
5,700.00	12.64	193.30	5,575.38	-1,117.87	-264.29	1,148.69	0.00	0.00	0.00	
5,800.00	12.64	193.30	5,672.95	-1,139.17	-269.32	1,170.57	0.00	0.00	0.00	
5,900.00	12.64	193.30	5,770.53	-1,160.46	-274.36	1,192.45	0.00	0.00	0.00	
6,000.00	12.64	193.30	5,868.11	-1,181.75	-279.39	1,214.33	0.00	0.00	0.00	
6,100.00	12.64	193.30	5,965.69	-1,203.04	-284.42	1,236.21	0.00	0.00	0.00	
6,200.00	12.64	193.30	6,063.26	-1,224.33	-289.46	1,258.08	0.00	0.00	0.00	
6,300.00	12.64	193.30	6,160.84	-1,245.62	-294.49	1,279.96	0.00	0.00	0.00	
6,400.00	12.64	193.30	6,258.42	-1,266.91	-299.53	1,301.84	0.00	0.00	0.00	
6,500.00	12.64	193.30	6,355.99	-1,288.21	-304.56	1,323.72	0.00	0.00	0.00	
6,600.00	12.64	193.30	6,453.57	-1,309.50	-309.59	1,345.60	0.00	0.00	0.00	
6,700.00	12.64	193.30	6,551.15	-1,330.79	-314.63	1,367.48	0.00	0.00	0.00	
6,800.00	12.64	193.30	6,648.73	-1,352.08	-319.66	1,389.35	0.00	0.00	0.00	
6,828.98	12.64	193.30	6,677.00	-1,358.25	-321.12	1,395.69	0.00	0.00	0.00	
<b>MVRD</b>										
6,900.00	12.64	193.30	6,746.30	-1,373.37	-324.69	1,411.23	0.00	0.00	0.00	
7,000.00	12.64	193.30	6,843.88	-1,394.66	-329.73	1,433.11	0.00	0.00	0.00	
7,100.00	12.64	193.30	6,941.46	-1,415.95	-334.76	1,454.99	0.00	0.00	0.00	
7,200.00	12.64	193.30	7,039.04	-1,437.25	-339.80	1,476.87	0.00	0.00	0.00	
7,263.82	12.64	193.30	7,101.31	-1,450.83	-343.01	1,490.83	0.00	0.00	0.00	
<b>Start Drop -1.50</b>										
7,300.00	12.09	193.30	7,136.65	-1,458.37	-344.79	1,498.58	1.50	-1.50	0.00	
7,400.00	10.59	193.30	7,234.69	-1,477.52	-349.32	1,518.25	1.50	-1.50	0.00	
7,500.00	9.09	193.30	7,333.22	-1,494.16	-353.25	1,535.35	1.50	-1.50	0.00	
7,600.00	7.59	193.30	7,432.16	-1,508.28	-356.59	1,549.86	1.50	-1.50	0.00	
7,700.00	6.09	193.30	7,531.44	-1,519.88	-359.33	1,561.78	1.50	-1.50	0.00	

# Scientific Drilling, Intl

## Planning Report

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<b>Site:</b>	RGU 23-7-297 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Federal RG 514-7-297	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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	4.59	193.30	7,631.00	-1,528.94	-361.47	1,571.09	1.50	-1.50	0.00
7,900.00	3.09	193.30	7,730.78	-1,535.47	-363.02	1,577.80	1.50	-1.50	0.00
8,000.00	1.59	193.30	7,830.69	-1,539.45	-363.96	1,581.89	1.50	-1.50	0.00
8,100.00	0.09	193.30	7,930.68	-1,540.88	-364.30	1,583.36	1.50	-1.50	0.00
8,106.33	0.00	0.00	7,937.00	-1,540.89	-364.30	1,583.37	1.50	-1.50	2,635.56
Start 3660.00 hold at 8106.32 MD - KMYGAS									
8,200.00	0.00	0.00	8,030.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
8,300.00	0.00	0.00	8,130.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
8,400.00	0.00	0.00	8,230.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
8,500.00	0.00	0.00	8,330.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
8,600.00	0.00	0.00	8,430.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
8,700.00	0.00	0.00	8,530.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
8,800.00	0.00	0.00	8,630.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
8,900.00	0.00	0.00	8,730.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
9,000.00	0.00	0.00	8,830.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
9,100.00	0.00	0.00	8,930.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
9,200.00	0.00	0.00	9,030.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
9,300.00	0.00	0.00	9,130.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
9,400.00	0.00	0.00	9,230.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
9,500.00	0.00	0.00	9,330.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
9,600.00	0.00	0.00	9,430.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
9,700.00	0.00	0.00	9,530.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
9,800.00	0.00	0.00	9,630.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
9,900.00	0.00	0.00	9,730.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
10,000.00	0.00	0.00	9,830.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
10,100.00	0.00	0.00	9,930.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
10,200.00	0.00	0.00	10,030.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
10,256.33	0.00	0.00	10,087.00	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
CME0*									
10,300.00	0.00	0.00	10,130.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
10,400.00	0.00	0.00	10,230.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
10,500.00	0.00	0.00	10,330.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
10,600.00	0.00	0.00	10,430.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
10,700.00	0.00	0.00	10,530.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
10,776.33	0.00	0.00	10,607.00	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
RLNS									
10,800.00	0.00	0.00	10,630.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
10,900.00	0.00	0.00	10,730.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
10,926.33	0.00	0.00	10,757.00	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
CZZT									
11,000.00	0.00	0.00	10,830.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
11,100.00	0.00	0.00	10,930.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
11,146.33	0.00	0.00	10,977.00	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
CRCN									
11,200.00	0.00	0.00	11,030.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
11,300.00	0.00	0.00	11,130.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
11,400.00	0.00	0.00	11,230.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
11,496.33	0.00	0.00	11,327.00	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
SEGO_UPPER									
11,500.00	0.00	0.00	11,330.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
11,600.00	0.00	0.00	11,430.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
11,666.33	0.00	0.00	11,497.00	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00

# Scientific Drilling, Intl

## Planning Report

<b>Database:</b>	Grand Junction	<b>Local Co-ordinate Reference:</b>	Well Federal RG 514-7-297 - Slot RGU 514-7-297
<b>Company:</b>	TEP Rocky Mountain LLC	<b>TVD Reference:</b>	GL 6603' & KB 24' @ 6627.00usft (H&P 318)
<b>Project:</b>	Garfield County, CO NAD83	<b>MD Reference:</b>	GL 6603' & KB 24' @ 6627.00usft (H&P 318)
<b>Site:</b>	RGU 23-7-297 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Federal RG 514-7-297	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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)
<b>SEGO_LOWER</b>									
11,700.00	0.00	0.00	11,530.68	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
11,766.33	0.00	0.00	11,597.00	-1,540.89	-364.30	1,583.37	0.00	0.00	0.00
<b>TD at 11766.32 - TD</b>									

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 514-7-297 KMV Gz	0.00	0.00	7,937.00	-1,540.89	-364.30	1,759,349.2000	2,205,806.1000	39.8842622	-108.3303593
- plan hits target center									
- Circle (radius 25.00)									
FRG 514-7-297 TD	0.00	0.00	11,597.00	-1,540.89	-364.30	1,759,349.2000	2,205,806.1000	39.8842622	-108.3303593
- plan hits target center									
- Point									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
3,313.81	3,247.00	Surface Casing	0.00	0.00	

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
905.47	897.00	GRRV		0.00	
1,064.32	1,052.00	GRRV_A_GROOVE		0.00	
1,259.03	1,242.00	GRRV_B_GROOVE		0.00	
1,571.61	1,547.00	GRRV DISSOLUTION_SURF		0.00	
2,565.69	2,517.00	GRRV_ORANGE		0.00	
2,801.40	2,747.00	WSTC		0.00	
5,168.75	5,057.00	G_SAND		0.00	
5,455.71	5,337.00	FRUN		0.00	
6,828.98	6,677.00	MVRD		0.00	
8,106.33	7,937.00	KMVGAS		0.00	
10,256.33	10,087.00	CMEO*		0.00	
10,776.33	10,607.00	RLNS		0.00	
10,926.33	10,757.00	CZZT		0.00	
11,146.33	10,977.00	CRCN		0.00	
11,496.33	11,327.00	SEGO_UPPER		0.00	
11,666.33	11,497.00	SEGO_LOWER		0.00	
11,766.33	11,597.00	TD		0.00	

# Scientific Drilling, Intl

## Planning Report

<b>Database:</b>	Grand Junction	<b>Local Co-ordinate Reference:</b>	Well Federal RG 514-7-297 - Slot RGU 514-7-297
<b>Company:</b>	TEP Rocky Mountain LLC	<b>TVD Reference:</b>	GL 6603' & KB 24' @ 6627.00usft (H&P 318)
<b>Project:</b>	Garfield County, CO NAD83	<b>MD Reference:</b>	GL 6603' & KB 24' @ 6627.00usft (H&P 318)
<b>Site:</b>	RGU 23-7-297 Pad	<b>North Reference:</b>	True
<b>Well:</b>	Federal RG 514-7-297	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #2 7April2020 SB-SDI		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
135.00	135.00	0.00	0.00	Start Build 2.00
766.88	761.77	-67.54	-15.97	Start 6496.94 hold at 766.88 MD
7,263.82	7,101.31	-1,450.83	-343.01	Start Drop -1.50
8,106.33	7,937.00	-1,540.89	-364.30	Start 3660.00 hold at 8106.32 MD
11,766.33	11,597.00	-1,540.89	-364.30	TD at 11766.32