



Company: TEP Rocky Mountain LLC
Project: Garfield County, CO NAD83
Site: RGU 23-7-297 Pad
Well: Federal RG 314-7-297

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 314-7-297



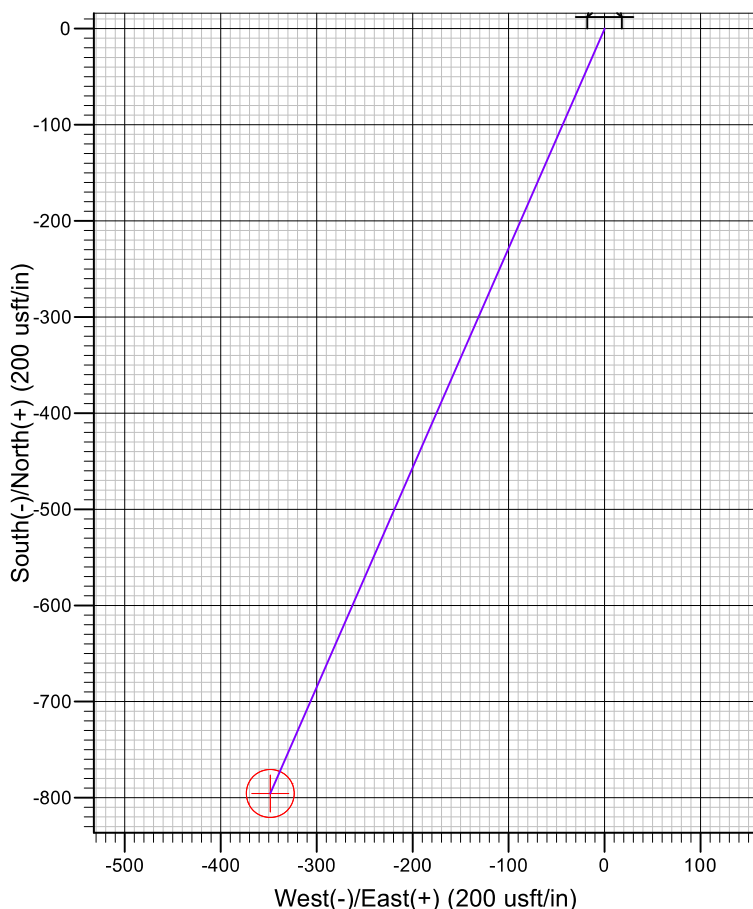
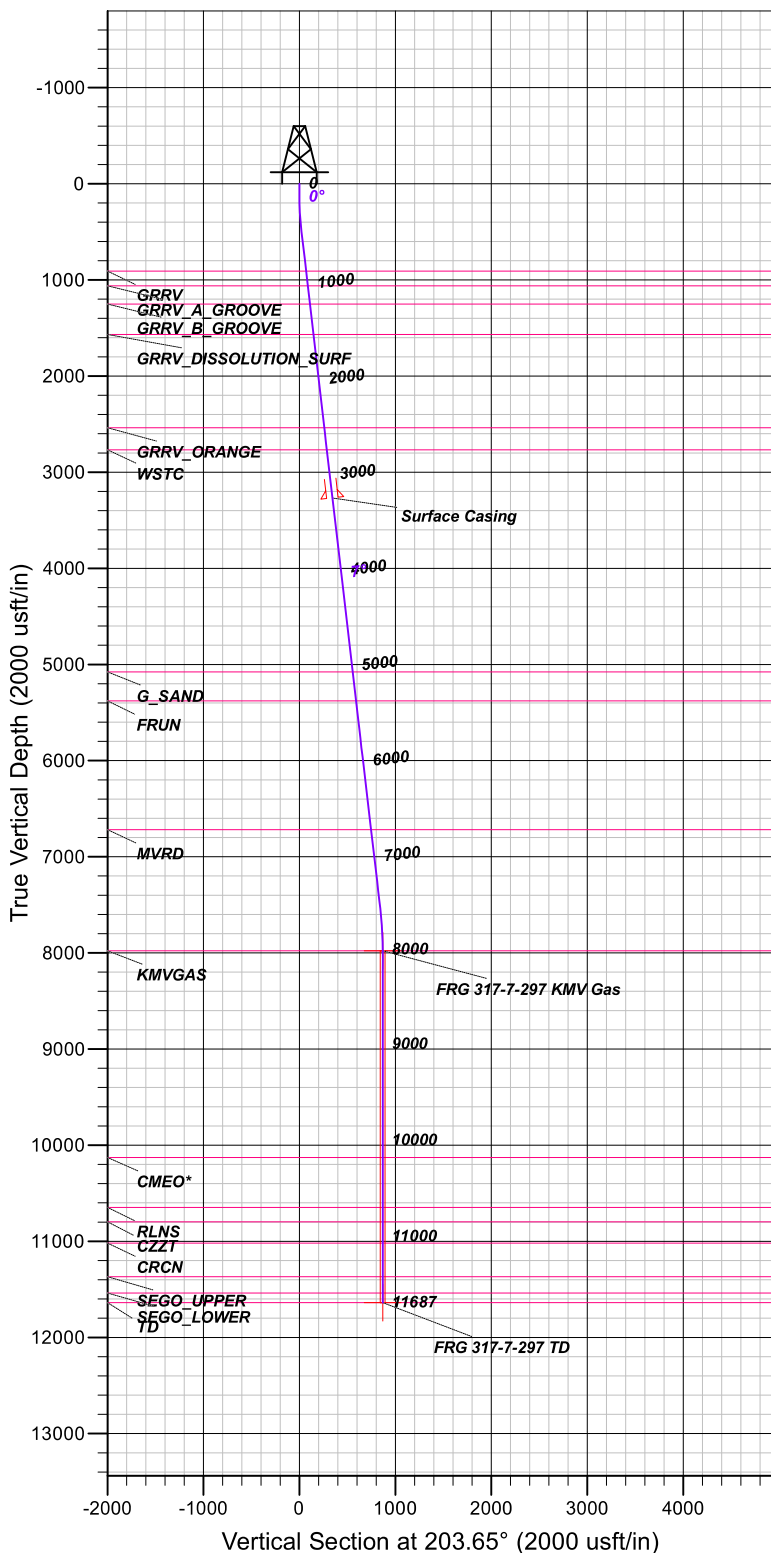
Azimuths to True North
Magnetic North: 9.28°

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

+N/-S +E/-W Northing Easting Longitude
0.00 0.00 1760880.9000 2206203.5000 39.8884987 -108.3291138 RGU 314-7-297

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
FRG 317-7-297 KMV Gas	7977.00	-795.53	-348.40	1760096.6000	2205830.5000	39.8863149	-108.3303553	Circle (Radius: 25.00)
- plan hits target center								
FRG 317-7-297 TD	11637.00	-795.53	-348.40	1760096.6000	2205830.5000	39.8863149	-108.3303553	Point
- plan hits target center								



FORMATION TOP DETAILS

TVDPth	MDPath	Formation
907.00	910.72	GRRV
1062.00	1066.77	GRRV_A_GROOVE
1252.00	1258.06	GRRV_B_GROOVE
1567.00	1575.19	GRRV DISSOLUTION_SURF
2537.00	2551.75	GRRV_ORANGE
2767.00	2783.31	WSTC
5077.00	5108.93	G_SAND
5377.00	5410.96	FRUN
6717.00	6760.03	MVRD
7977.00	8026.55	KMGAS
10127.00	10176.55	CMEO*
10647.00	10696.55	RLNS
10797.00	10846.55	CZZT
11017.00	11066.55	CRCN
11367.00	11416.55	SEGO_UPPER
11537.00	11586.55	SEGO_LOWER
11637.00	11686.55	TD

CASING DETAILS

TVD	MD	Name
3267.00	3286.69	Surface Casing

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect
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
467.29	6.65	203.65	466.54	-17.63	-7.72	2.00	203.65	19.25
7583.50	6.65	203.65	7534.94	-772.02	-338.10	0.00	0.00	842.81
8026.55	0.00	0.00	7977.00	-795.53	-348.40	1.50	180.00	868.48
11686.55	0.00	0.00	11637.00	-795.53	-348.40	0.00	0.00	868.48

TEP Rocky Mountain LLC

Garfield County, CO NAD83

RGU 23-7-297 Pad

Federal RG 314-7-297 - Slot RGU 314-7-297

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 314-7-297 - Slot RGU 314-7-297
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL GL 6603' & KB 24' @ 6627.00usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL GL 6603' & KB 24' @ 6627.00usft (H&P 318)
Site:	RGU 23-7-297 Pad	North Reference:	True
Well:	Federal RG 314-7-297	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 314-7-297 - Slot RGU 314-7-297, 1803' FSL 1320' FWL Sec 7 T2S R94W					
Well Position	+N/-S	0.00 usft	Northing:	1,760,880.9000 usft	Latitude:	39.8884987
	+E/-W	0.00 usft	Easting:	2,206,203.5000 usft	Longitude:	-108.3291139
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	51,354.10000000

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	203.65

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	
135.00	0.00	0.00	135.00	0.00	0.00	0.00	0.00	0.00	0.00	
467.29	6.65	203.65	466.54	-17.63	-7.72	2.00	2.00	0.00	203.65	
7,583.50	6.65	203.65	7,534.94	-772.02	-338.10	0.00	0.00	0.00	0.00	
8,026.55	0.00	0.00	7,977.00	-795.53	-348.40	1.50	-1.50	0.00	180.00	FRG 317-7-297 KMV
11,686.55	0.00	0.00	11,637.00	-795.53	-348.40	0.00	0.00	0.00	0.00	FRG 317-7-297 TD

Scientific Drilling, Intl

Planning Report

Database:	Grand Junction	Local Co-ordinate Reference:	Well Federal RG 314-7-297 - Slot RGU 314-7-297
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL GL 6603' & KB 24' @ 6627.00usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL GL 6603' & KB 24' @ 6627.00usft (H&P 318)
Site:	RGU 23-7-297 Pad	North Reference:	True
Well:	Federal RG 314-7-297	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
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	203.65	199.99	-0.68	-0.30	0.74	2.00	2.00	0.00
300.00	3.30	203.65	299.91	-4.35	-1.91	4.75	2.00	2.00	0.00
400.00	5.30	203.65	399.62	-11.22	-4.91	12.25	2.00	2.00	0.00
467.29	6.65	203.65	466.54	-17.63	-7.72	19.25	2.00	2.00	0.00
Start 7116.21 hold at 467.29 MD									
500.00	6.65	203.65	499.04	-21.10	-9.24	23.04	0.00	0.00	0.00
600.00	6.65	203.65	598.36	-31.70	-13.88	34.61	0.00	0.00	0.00
700.00	6.65	203.65	697.69	-42.30	-18.53	46.18	0.00	0.00	0.00
800.00	6.65	203.65	797.02	-52.90	-23.17	57.75	0.00	0.00	0.00
900.00	6.65	203.65	896.35	-63.50	-27.81	69.33	0.00	0.00	0.00
910.72	6.65	203.65	907.00	-64.64	-28.31	70.57	0.00	0.00	0.00
GRRV									
1,000.00	6.65	203.65	995.68	-74.11	-32.45	80.90	0.00	0.00	0.00
1,066.77	6.65	203.65	1,062.00	-81.18	-35.55	88.63	0.00	0.00	0.00
GRRV_A_GROOVE									
1,100.00	6.65	203.65	1,095.00	-84.71	-37.10	92.47	0.00	0.00	0.00
1,200.00	6.65	203.65	1,194.33	-95.31	-41.74	104.05	0.00	0.00	0.00
1,258.06	6.65	203.65	1,252.00	-101.46	-44.43	110.77	0.00	0.00	0.00
GRRV_B_GROOVE									
1,300.00	6.65	203.65	1,293.66	-105.91	-46.38	115.62	0.00	0.00	0.00
1,400.00	6.65	203.65	1,392.99	-116.51	-51.02	127.19	0.00	0.00	0.00
1,500.00	6.65	203.65	1,492.32	-127.11	-55.67	138.77	0.00	0.00	0.00
1,575.19	6.65	203.65	1,567.00	-135.08	-59.16	147.47	0.00	0.00	0.00
GRRV DISSOLUTION_SURF									
1,600.00	6.65	203.65	1,591.64	-137.71	-60.31	150.34	0.00	0.00	0.00
1,700.00	6.65	203.65	1,690.97	-148.31	-64.95	161.91	0.00	0.00	0.00
1,800.00	6.65	203.65	1,790.30	-158.91	-69.60	173.48	0.00	0.00	0.00
1,900.00	6.65	203.65	1,889.63	-169.51	-74.24	185.06	0.00	0.00	0.00
2,000.00	6.65	203.65	1,988.96	-180.12	-78.88	196.63	0.00	0.00	0.00
2,100.00	6.65	203.65	2,088.28	-190.72	-83.52	208.20	0.00	0.00	0.00
2,200.00	6.65	203.65	2,187.61	-201.32	-88.17	219.78	0.00	0.00	0.00
2,300.00	6.65	203.65	2,286.94	-211.92	-92.81	231.35	0.00	0.00	0.00
2,400.00	6.65	203.65	2,386.27	-222.52	-97.45	242.92	0.00	0.00	0.00
2,500.00	6.65	203.65	2,485.60	-233.12	-102.09	254.50	0.00	0.00	0.00
2,551.75	6.65	203.65	2,537.00	-238.61	-104.50	260.49	0.00	0.00	0.00
GRRV_ORANGE									
2,600.00	6.65	203.65	2,584.93	-243.72	-106.74	266.07	0.00	0.00	0.00
2,700.00	6.65	203.65	2,684.25	-254.32	-111.38	277.64	0.00	0.00	0.00
2,783.31	6.65	203.65	2,767.00	-263.15	-115.25	287.28	0.00	0.00	0.00
WSTC									
2,800.00	6.65	203.65	2,783.58	-264.92	-116.02	289.22	0.00	0.00	0.00
2,900.00	6.65	203.65	2,882.91	-275.52	-120.66	300.79	0.00	0.00	0.00
3,000.00	6.65	203.65	2,982.24	-286.13	-125.31	312.36	0.00	0.00	0.00
3,100.00	6.65	203.65	3,081.57	-296.73	-129.95	323.93	0.00	0.00	0.00
3,200.00	6.65	203.65	3,180.89	-307.33	-134.59	335.51	0.00	0.00	0.00
3,286.69	6.65	203.65	3,267.00	-316.52	-138.62	345.54	0.00	0.00	0.00

Scientific Drilling, Intl

Planning Report

Database:	Grand Junction	Local Co-ordinate Reference:	Well Federal RG 314-7-297 - Slot RGU 314-7-297
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL GL 6603' & KB 24' @ 6627.00usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL GL 6603' & KB 24' @ 6627.00usft (H&P 318)
Site:	RGU 23-7-297 Pad	North Reference:	True
Well:	Federal RG 314-7-297	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									
3,300.00	6.65	203.65	3,280.22	-317.93	-139.23	347.08	0.00	0.00	0.00
3,400.00	6.65	203.65	3,379.55	-328.53	-143.88	358.65	0.00	0.00	0.00
3,500.00	6.65	203.65	3,478.88	-339.13	-148.52	370.23	0.00	0.00	0.00
3,600.00	6.65	203.65	3,578.21	-349.73	-153.16	381.80	0.00	0.00	0.00
3,700.00	6.65	203.65	3,677.53	-360.33	-157.81	393.37	0.00	0.00	0.00
3,800.00	6.65	203.65	3,776.86	-370.93	-162.45	404.95	0.00	0.00	0.00
3,900.00	6.65	203.65	3,876.19	-381.53	-167.09	416.52	0.00	0.00	0.00
4,000.00	6.65	203.65	3,975.52	-392.14	-171.73	428.09	0.00	0.00	0.00
4,100.00	6.65	203.65	4,074.85	-402.74	-176.38	439.67	0.00	0.00	0.00
4,200.00	6.65	203.65	4,174.17	-413.34	-181.02	451.24	0.00	0.00	0.00
4,300.00	6.65	203.65	4,273.50	-423.94	-185.66	462.81	0.00	0.00	0.00
4,400.00	6.65	203.65	4,372.83	-434.54	-190.30	474.38	0.00	0.00	0.00
4,500.00	6.65	203.65	4,472.16	-445.14	-194.95	485.96	0.00	0.00	0.00
4,600.00	6.65	203.65	4,571.49	-455.74	-199.59	497.53	0.00	0.00	0.00
4,700.00	6.65	203.65	4,670.81	-466.34	-204.23	509.10	0.00	0.00	0.00
4,800.00	6.65	203.65	4,770.14	-476.94	-208.87	520.68	0.00	0.00	0.00
4,900.00	6.65	203.65	4,869.47	-487.55	-213.52	532.25	0.00	0.00	0.00
5,000.00	6.65	203.65	4,968.80	-498.15	-218.16	543.82	0.00	0.00	0.00
5,100.00	6.65	203.65	5,068.13	-508.75	-222.80	555.40	0.00	0.00	0.00
5,108.93	6.65	203.65	5,077.00	-509.69	-223.22	556.43	0.00	0.00	0.00
G_SAND									
5,200.00	6.65	203.65	5,167.45	-519.35	-227.44	566.97	0.00	0.00	0.00
5,300.00	6.65	203.65	5,266.78	-529.95	-232.09	578.54	0.00	0.00	0.00
5,400.00	6.65	203.65	5,366.11	-540.55	-236.73	590.11	0.00	0.00	0.00
5,410.96	6.65	203.65	5,377.00	-541.71	-237.24	591.38	0.00	0.00	0.00
FRUN									
5,500.00	6.65	203.65	5,465.44	-551.15	-241.37	601.69	0.00	0.00	0.00
5,600.00	6.65	203.65	5,564.77	-561.75	-246.02	613.26	0.00	0.00	0.00
5,700.00	6.65	203.65	5,664.10	-572.35	-250.66	624.83	0.00	0.00	0.00
5,800.00	6.65	203.65	5,763.42	-582.95	-255.30	636.41	0.00	0.00	0.00
5,900.00	6.65	203.65	5,862.75	-593.56	-259.94	647.98	0.00	0.00	0.00
6,000.00	6.65	203.65	5,962.08	-604.16	-264.59	659.55	0.00	0.00	0.00
6,100.00	6.65	203.65	6,061.41	-614.76	-269.23	671.13	0.00	0.00	0.00
6,200.00	6.65	203.65	6,160.74	-625.36	-273.87	682.70	0.00	0.00	0.00
6,300.00	6.65	203.65	6,260.06	-635.96	-278.51	694.27	0.00	0.00	0.00
6,400.00	6.65	203.65	6,359.39	-646.56	-283.16	705.85	0.00	0.00	0.00
6,500.00	6.65	203.65	6,458.72	-657.16	-287.80	717.42	0.00	0.00	0.00
6,600.00	6.65	203.65	6,558.05	-667.76	-292.44	728.99	0.00	0.00	0.00
6,700.00	6.65	203.65	6,657.38	-678.36	-297.08	740.56	0.00	0.00	0.00
6,760.03	6.65	203.65	6,717.00	-684.73	-299.87	747.51	0.00	0.00	0.00
MVRD									
6,800.00	6.65	203.65	6,756.70	-688.96	-301.73	752.14	0.00	0.00	0.00
6,900.00	6.65	203.65	6,856.03	-699.57	-306.37	763.71	0.00	0.00	0.00
7,000.00	6.65	203.65	6,955.36	-710.17	-311.01	775.28	0.00	0.00	0.00
7,100.00	6.65	203.65	7,054.69	-720.77	-315.66	786.86	0.00	0.00	0.00
7,200.00	6.65	203.65	7,154.02	-731.37	-320.30	798.43	0.00	0.00	0.00
7,300.00	6.65	203.65	7,253.34	-741.97	-324.94	810.00	0.00	0.00	0.00
7,400.00	6.65	203.65	7,352.67	-752.57	-329.58	821.58	0.00	0.00	0.00
7,500.00	6.65	203.65	7,452.00	-763.17	-334.23	833.15	0.00	0.00	0.00
7,583.50	6.65	203.65	7,534.94	-772.02	-338.10	842.81	0.00	0.00	0.00

Scientific Drilling, Intl

Planning Report

Database:	Grand Junction	Local Co-ordinate Reference:	Well Federal RG 314-7-297 - Slot RGU 314-7-297
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL GL 6603' & KB 24' @ 6627.00usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL GL 6603' & KB 24' @ 6627.00usft (H&P 318)
Site:	RGU 23-7-297 Pad	North Reference:	True
Well:	Federal RG 314-7-297	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)
Start Drop -1.50									
7,600.00	6.40	203.65	7,551.33	-773.74	-338.85	844.69	1.50	-1.50	0.00
7,700.00	4.90	203.65	7,650.84	-782.76	-342.80	854.53	1.50	-1.50	0.00
7,800.00	3.40	203.65	7,750.58	-789.38	-345.70	861.76	1.50	-1.50	0.00
7,900.00	1.90	203.65	7,850.47	-793.61	-347.56	866.38	1.50	-1.50	0.00
8,000.00	0.40	203.65	7,950.45	-795.45	-348.36	868.39	1.50	-1.50	0.00
8,026.55	0.00	0.00	7,977.00	-795.53	-348.40	868.48	1.50	-1.50	0.00
Start 3660.00 hold at 8026.55 MD - KMGAS									
8,100.00	0.00	0.00	8,050.45	-795.53	-348.40	868.48	0.00	0.00	0.00
8,200.00	0.00	0.00	8,150.45	-795.53	-348.40	868.48	0.00	0.00	0.00
8,300.00	0.00	0.00	8,250.45	-795.53	-348.40	868.48	0.00	0.00	0.00
8,400.00	0.00	0.00	8,350.45	-795.53	-348.40	868.48	0.00	0.00	0.00
8,500.00	0.00	0.00	8,450.45	-795.53	-348.40	868.48	0.00	0.00	0.00
8,600.00	0.00	0.00	8,550.45	-795.53	-348.40	868.48	0.00	0.00	0.00
8,700.00	0.00	0.00	8,650.45	-795.53	-348.40	868.48	0.00	0.00	0.00
8,800.00	0.00	0.00	8,750.45	-795.53	-348.40	868.48	0.00	0.00	0.00
8,900.00	0.00	0.00	8,850.45	-795.53	-348.40	868.48	0.00	0.00	0.00
9,000.00	0.00	0.00	8,950.45	-795.53	-348.40	868.48	0.00	0.00	0.00
9,100.00	0.00	0.00	9,050.45	-795.53	-348.40	868.48	0.00	0.00	0.00
9,200.00	0.00	0.00	9,150.45	-795.53	-348.40	868.48	0.00	0.00	0.00
9,300.00	0.00	0.00	9,250.45	-795.53	-348.40	868.48	0.00	0.00	0.00
9,400.00	0.00	0.00	9,350.45	-795.53	-348.40	868.48	0.00	0.00	0.00
9,500.00	0.00	0.00	9,450.45	-795.53	-348.40	868.48	0.00	0.00	0.00
9,600.00	0.00	0.00	9,550.45	-795.53	-348.40	868.48	0.00	0.00	0.00
9,700.00	0.00	0.00	9,650.45	-795.53	-348.40	868.48	0.00	0.00	0.00
9,800.00	0.00	0.00	9,750.45	-795.53	-348.40	868.48	0.00	0.00	0.00
9,900.00	0.00	0.00	9,850.45	-795.53	-348.40	868.48	0.00	0.00	0.00
10,000.00	0.00	0.00	9,950.45	-795.53	-348.40	868.48	0.00	0.00	0.00
10,100.00	0.00	0.00	10,050.45	-795.53	-348.40	868.48	0.00	0.00	0.00
10,176.55	0.00	0.00	10,127.00	-795.53	-348.40	868.48	0.00	0.00	0.00
CMEO*									
10,200.00	0.00	0.00	10,150.45	-795.53	-348.40	868.48	0.00	0.00	0.00
10,300.00	0.00	0.00	10,250.45	-795.53	-348.40	868.48	0.00	0.00	0.00
10,400.00	0.00	0.00	10,350.45	-795.53	-348.40	868.48	0.00	0.00	0.00
10,500.00	0.00	0.00	10,450.45	-795.53	-348.40	868.48	0.00	0.00	0.00
10,600.00	0.00	0.00	10,550.45	-795.53	-348.40	868.48	0.00	0.00	0.00
10,696.55	0.00	0.00	10,647.00	-795.53	-348.40	868.48	0.00	0.00	0.00
RLNS									
10,700.00	0.00	0.00	10,650.45	-795.53	-348.40	868.48	0.00	0.00	0.00
10,800.00	0.00	0.00	10,750.45	-795.53	-348.40	868.48	0.00	0.00	0.00
10,846.55	0.00	0.00	10,797.00	-795.53	-348.40	868.48	0.00	0.00	0.00
CZZT									
10,900.00	0.00	0.00	10,850.45	-795.53	-348.40	868.48	0.00	0.00	0.00
11,000.00	0.00	0.00	10,950.45	-795.53	-348.40	868.48	0.00	0.00	0.00
11,066.55	0.00	0.00	11,017.00	-795.53	-348.40	868.48	0.00	0.00	0.00
CRCN									
11,100.00	0.00	0.00	11,050.45	-795.53	-348.40	868.48	0.00	0.00	0.00
11,200.00	0.00	0.00	11,150.45	-795.53	-348.40	868.48	0.00	0.00	0.00
11,300.00	0.00	0.00	11,250.45	-795.53	-348.40	868.48	0.00	0.00	0.00
11,400.00	0.00	0.00	11,350.45	-795.53	-348.40	868.48	0.00	0.00	0.00

Scientific Drilling, Intl

Planning Report

Database:	Grand Junction	Local Co-ordinate Reference:	Well Federal RG 314-7-297 - Slot RGU 314-7-297
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL GL 6603' & KB 24' @ 6627.00usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL GL 6603' & KB 24' @ 6627.00usft (H&P 318)
Site:	RGU 23-7-297 Pad	North Reference:	True
Well:	Federal RG 314-7-297	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)	
11,416.55	0.00	0.00	11,367.00	-795.53	-348.40	868.48	0.00	0.00	0.00	
SEGO_UPPER										
11,500.00	0.00	0.00	11,450.45	-795.53	-348.40	868.48	0.00	0.00	0.00	
11,586.55	0.00	0.00	11,537.00	-795.53	-348.40	868.48	0.00	0.00	0.00	
SEGO_LOWER										
11,600.00	0.00	0.00	11,550.45	-795.53	-348.40	868.48	0.00	0.00	0.00	
11,686.55	0.00	0.00	11,637.00	-795.53	-348.40	868.48	0.00	0.00	0.00	
TD at 11686.55 - TD										

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	
FRG 317-7-297 KMV Gc - plan hits target center - Circle (radius 25.00)	0.00	0.00	7,977.00	-795.53	-348.40	1,760,096.6000	2,205,830.5000	39.8863149	-108.3303553	
FRG 317-7-297 TD - plan hits target center - Point	0.00	0.00	11,637.00	-795.53	-348.40	1,760,096.6000	2,205,830.5000	39.8863149	-108.3303553	

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
3,286.69	3,267.00	Surface Casing	0.00	0.00	

Scientific Drilling, Intl

Planning Report

Database:	Grand Junction	Local Co-ordinate Reference:	Well Federal RG 314-7-297 - Slot RGU 314-7-297
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL GL 6603' & KB 24' @ 6627.00usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL GL 6603' & KB 24' @ 6627.00usft (H&P 318)
Site:	RGU 23-7-297 Pad	North Reference:	True
Well:	Federal RG 314-7-297	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 (°)	
910.72	907.00	GRRV		0.00		
1,066.77	1,062.00	GRRV_A_GROOVE		0.00		
1,258.06	1,252.00	GRRV_B_GROOVE		0.00		
1,575.19	1,567.00	GRRV DISSOLUTION_SURF		0.00		
2,551.75	2,537.00	GRRV_ORANGE		0.00		
2,783.31	2,767.00	WSTC		0.00		
5,108.93	5,077.00	G_SAND		0.00		
5,410.96	5,377.00	FRUN		0.00		
6,760.03	6,717.00	MVRD		0.00		
8,026.55	7,977.00	KMVGAS		0.00		
10,176.55	10,127.00	CMEO*		0.00		
10,696.55	10,647.00	RLNS		0.00		
10,846.55	10,797.00	CZZT		0.00		
11,066.55	11,017.00	CRCN		0.00		
11,416.55	11,367.00	SEGO_UPPER		0.00		
11,586.55	11,537.00	SEGO_LOWER		0.00		
11,686.55	11,637.00	TD		0.00		

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
135.00	135.00	0.00	0.00	Start Build 2.00	
467.29	466.54	-17.63	-7.72	Start 7116.21 hold at 467.29 MD	
7,583.50	7,534.94	-772.02	-338.10	Start Drop -1.50	
8,026.55	7,977.00	-795.53	-348.40	Start 3660.00 hold at 8026.55 MD	
11,686.55	11,637.00	-795.53	-348.40	TD at 11686.55	