



Company: TEP Rocky Mountain LLC
Project: Garfield County, CO NAD83
Site: RWF 43-9 Pad
Well: RWF 444-9

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 #1 8June2020 sbsdi

Well Details: RWF 444-9

+N/-S +E/-W Northing Easting Longitude
0.00 0.00 1630195.2000 2327380.7000 39.5394267 -107.8852260 RWF 444-9

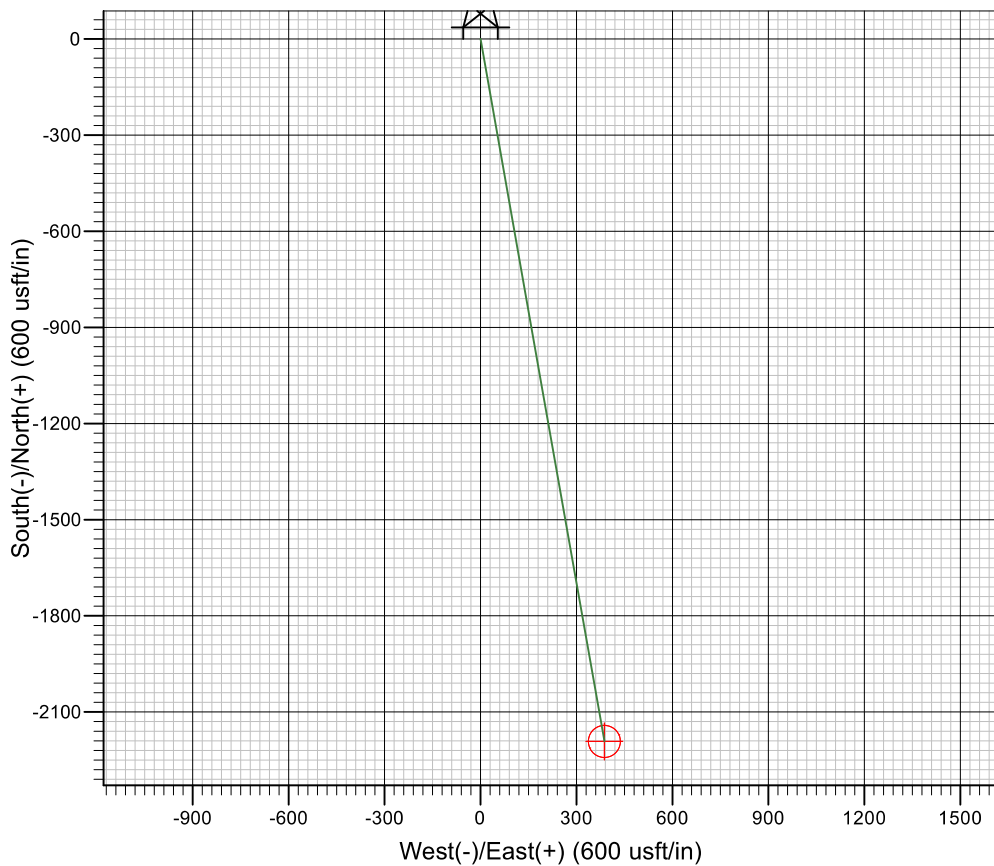
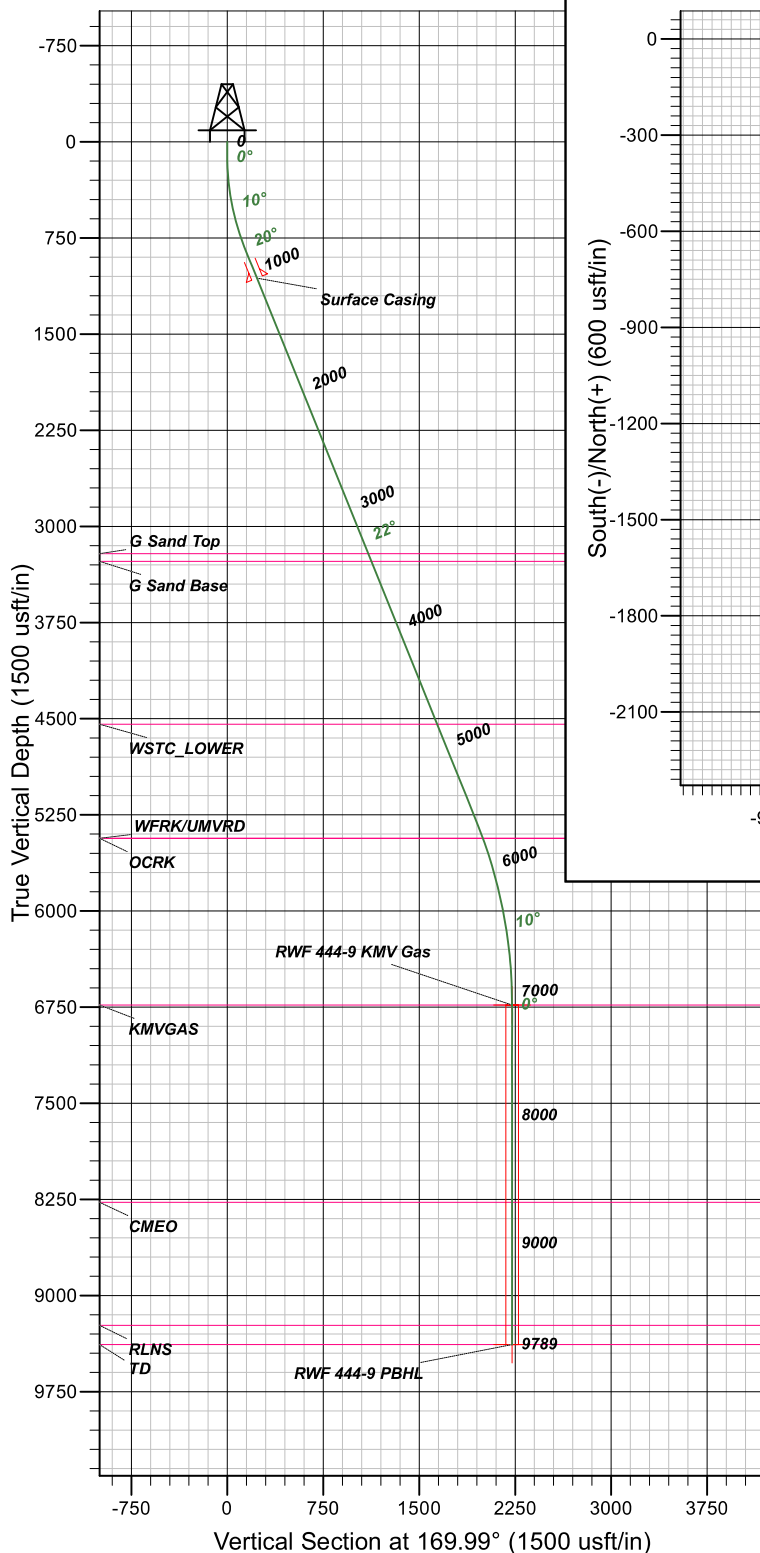


Azimuths to True North
Magnetic North: 9.22°

Magnetic Field
Strength: 51370.0nT
Dip Angle: 65.72°
Date: 6/8/2020
Model: HDGM_FILE

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Circle (Radius: 50.00)	Shape
RWF 444-9 KMV Gas	6733.00	-2191.80	386.97	1627994.0000	2327710.0000	39.5334093	-107.8838540	Circle (Radius: 50.00)	Point
RWF 444-9 PBHL	9383.00	-2191.80	386.97	1627994.0000	2327710.0000	39.5334093	-107.8838540		
- plan hits target center									



FORMATION TOP DETAILS

TVDPATH	MDPATH	FORMATION
3213.00	3418.37	G Sand Top
3273.00	3483.11	G Sand Base
4543.00	4853.25	WSTC_LOWER
5433.00	5812.39	OCRK
5433.00	5812.39	WFRK/UMVRD
6733.00	7138.89	KMGAS
8273.00	8678.89	CMEO
9233.00	9638.89	RLNS
9383.00	9788.89	TD

CASING DETAILS

TVD	MD	NAME
1064.08	1100.00	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
854.75	22.04	169.99	836.75	-137.47	24.27	3.00	169.99	139.60
5669.40	22.04	169.99	5299.49	-1916.85	338.43	0.00	0.00	1946.50
7138.89	0.00	0.00	6733.00	-2191.80	386.97	1.50	180.00	2225.70
9788.89	0.00	0.00	9383.00	-2191.80	386.97	0.00	0.00	2225.70



TEP Rocky Mountain LLC

Garfield County, CO NAD83

RWF 43-9 Pad

RWF 444-9 - Slot RWF 444-9

OH

Plan: Plan #1 8June2020 sbsdi

Standard Planning Report

10 June, 2020



Database:	Grand Junction	Local Co-ordinate Reference:	Well RWF 444-9 - Slot RWF 444-9
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 6369.4' & KB 24' @ 6393.40usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 6369.4' & KB 24' @ 6393.40usft (H&P 318)
Site:	RWF 43-9 Pad	North Reference:	True
Well:	RWF 444-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 8June2020 sbsdi		

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	RWF 43-9 Pad, Site Center : RWF 43-9		
Site Position:		Northing:	1,630,175.9000 usft
From:	Map	Easting:	2,327,330.9000 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in
		Latitude:	39.5393702
		Longitude:	-107.8854007
		Grid Convergence:	-1.50 °

Well	RWF 444-9 - Slot RWF 444-9, 2546' FSL 501' FEL Sec 9 T6S R94W		
Well Position	+N/-S	20.60 usft	Northing: 1,630,195.2000 usft
	+E/-W	49.28 usft	Easting: 2,327,380.7000 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	Latitude: 39.5394267
			Longitude: -107.8852260
			Ground Level: 6,369.40 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	6/8/2020	9.22	65.72	51,370.00000000

Design	Plan #1 8June2020 sbsdi			
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	169.99

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	
854.75	22.04	169.99	836.75	-137.47	24.27	3.00	3.00	0.00	169.99	
5,669.40	22.04	169.99	5,299.49	-1,916.85	338.43	0.00	0.00	0.00	0.00	
7,138.89	0.00	0.00	6,733.00	-2,191.80	386.97	1.50	-1.50	0.00	180.00	RWF 444-9 KMV Gas
9,788.89	0.00	0.00	9,383.00	-2,191.80	386.97	0.00	0.00	0.00	0.00	RWF 444-9 PBHL

Database:	Grand Junction	Local Co-ordinate Reference:	Well RWF 444-9 - Slot RWF 444-9
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 6369.4' & KB 24' @ 6393.40usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 6369.4' & KB 24' @ 6393.40usft (H&P 318)
Site:	RWF 43-9 Pad	North Reference:	True
Well:	RWF 444-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 8June2020 sbsdi		

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 3.00										
200.00	2.40	169.99	199.98	-1.65	0.29	1.68	3.00	3.00	0.00	
300.00	5.40	169.99	299.73	-8.35	1.47	8.48	3.00	3.00	0.00	
400.00	8.40	169.99	399.00	-20.18	3.56	20.49	3.00	3.00	0.00	
500.00	11.40	169.99	497.50	-37.11	6.55	37.68	3.00	3.00	0.00	
600.00	14.40	169.99	594.96	-59.09	10.43	60.00	3.00	3.00	0.00	
700.00	17.40	169.99	691.12	-86.06	15.19	87.39	3.00	3.00	0.00	
800.00	20.40	169.99	785.72	-117.96	20.83	119.78	3.00	3.00	0.00	
854.75	22.04	169.99	836.75	-137.47	24.27	139.60	3.00	3.00	0.00	
Start 4814.65 hold at 854.75 MD										
900.00	22.04	169.99	878.70	-154.20	27.22	156.58	0.00	0.00	0.00	
1,000.00	22.04	169.99	971.39	-191.15	33.75	194.11	0.00	0.00	0.00	
1,100.00	22.04	169.99	1,064.08	-228.11	40.27	231.64	0.00	0.00	0.00	
Surface Casing										
1,200.00	22.04	169.99	1,156.77	-265.07	46.80	269.17	0.00	0.00	0.00	
1,300.00	22.04	169.99	1,249.46	-302.03	53.32	306.70	0.00	0.00	0.00	
1,400.00	22.04	169.99	1,342.15	-338.98	59.85	344.23	0.00	0.00	0.00	
1,500.00	22.04	169.99	1,434.84	-375.94	66.37	381.76	0.00	0.00	0.00	
1,600.00	22.04	169.99	1,527.53	-412.90	72.90	419.28	0.00	0.00	0.00	
1,700.00	22.04	169.99	1,620.22	-449.86	79.42	456.81	0.00	0.00	0.00	
1,800.00	22.04	169.99	1,712.91	-486.81	85.95	494.34	0.00	0.00	0.00	
1,900.00	22.04	169.99	1,805.60	-523.77	92.47	531.87	0.00	0.00	0.00	
2,000.00	22.04	169.99	1,898.30	-560.73	99.00	569.40	0.00	0.00	0.00	
2,100.00	22.04	169.99	1,990.99	-597.69	105.52	606.93	0.00	0.00	0.00	
2,200.00	22.04	169.99	2,083.68	-634.64	112.05	644.46	0.00	0.00	0.00	
2,300.00	22.04	169.99	2,176.37	-671.60	118.57	681.99	0.00	0.00	0.00	
2,400.00	22.04	169.99	2,269.06	-708.56	125.10	719.52	0.00	0.00	0.00	
2,500.00	22.04	169.99	2,361.75	-745.52	131.63	757.05	0.00	0.00	0.00	
2,599.99	22.04	169.99	2,454.44	-782.47	138.15	794.58	0.00	0.00	0.00	
2,699.99	22.04	169.99	2,547.13	-819.43	144.68	832.11	0.00	0.00	0.00	
2,799.99	22.04	169.99	2,639.82	-856.39	151.20	869.63	0.00	0.00	0.00	
2,899.99	22.04	169.99	2,732.51	-893.35	157.73	907.16	0.00	0.00	0.00	
2,999.99	22.04	169.99	2,825.20	-930.30	164.25	944.69	0.00	0.00	0.00	
3,099.99	22.04	169.99	2,917.89	-967.26	170.78	982.22	0.00	0.00	0.00	
3,199.99	22.04	169.99	3,010.58	-1,004.22	177.30	1,019.75	0.00	0.00	0.00	
3,299.99	22.04	169.99	3,103.27	-1,041.18	183.83	1,057.28	0.00	0.00	0.00	
3,399.99	22.04	169.99	3,195.96	-1,078.13	190.35	1,094.81	0.00	0.00	0.00	
3,418.37	22.04	169.99	3,213.00	-1,084.93	191.55	1,101.71	0.00	0.00	0.00	
G Sand Top										
3,483.11	22.04	169.99	3,273.00	-1,108.85	195.77	1,126.00	0.00	0.00	0.00	
G Sand Base										
3,499.99	22.04	169.99	3,288.65	-1,115.09	196.88	1,132.34	0.00	0.00	0.00	
3,599.99	22.04	169.99	3,381.34	-1,152.05	203.40	1,169.87	0.00	0.00	0.00	
3,699.99	22.04	169.99	3,474.03	-1,189.01	209.93	1,207.40	0.00	0.00	0.00	
3,799.99	22.04	169.99	3,566.72	-1,225.96	216.45	1,244.93	0.00	0.00	0.00	
3,899.99	22.04	169.99	3,659.41	-1,262.92	222.98	1,282.45	0.00	0.00	0.00	
3,999.99	22.04	169.99	3,752.10	-1,299.88	229.50	1,319.98	0.00	0.00	0.00	
4,099.99	22.04	169.99	3,844.80	-1,336.84	236.03	1,357.51	0.00	0.00	0.00	

Database:	Grand Junction	Local Co-ordinate Reference:	Well RWF 444-9 - Slot RWF 444-9
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 6369.4' & KB 24' @ 6393.40usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 6369.4' & KB 24' @ 6393.40usft (H&P 318)
Site:	RWF 43-9 Pad	North Reference:	True
Well:	RWF 444-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 8June2020 sbsdi		

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)
4,199.99	22.04	169.99	3,937.49	-1,373.79	242.55	1,395.04	0.00	0.00	0.00
4,299.99	22.04	169.99	4,030.18	-1,410.75	249.08	1,432.57	0.00	0.00	0.00
4,399.99	22.04	169.99	4,122.87	-1,447.71	255.60	1,470.10	0.00	0.00	0.00
4,499.99	22.04	169.99	4,215.56	-1,484.67	262.13	1,507.63	0.00	0.00	0.00
4,599.99	22.04	169.99	4,308.25	-1,521.62	268.65	1,545.16	0.00	0.00	0.00
4,699.99	22.04	169.99	4,400.94	-1,558.58	275.18	1,582.69	0.00	0.00	0.00
4,799.99	22.04	169.99	4,493.63	-1,595.54	281.70	1,620.22	0.00	0.00	0.00
4,853.26	22.04	169.99	4,543.00	-1,615.23	285.18	1,640.21	0.00	0.00	0.00
WSTC_LOWER									
4,899.99	22.04	169.99	4,586.32	-1,632.50	288.23	1,657.75	0.00	0.00	0.00
4,999.99	22.04	169.99	4,679.01	-1,669.45	294.75	1,695.28	0.00	0.00	0.00
5,099.99	22.04	169.99	4,771.70	-1,706.41	301.28	1,732.80	0.00	0.00	0.00
5,199.99	22.04	169.99	4,864.39	-1,743.37	307.80	1,770.33	0.00	0.00	0.00
5,299.99	22.04	169.99	4,957.08	-1,780.33	314.33	1,807.86	0.00	0.00	0.00
5,399.99	22.04	169.99	5,049.77	-1,817.28	320.85	1,845.39	0.00	0.00	0.00
5,499.99	22.04	169.99	5,142.46	-1,854.24	327.38	1,882.92	0.00	0.00	0.00
5,599.99	22.04	169.99	5,235.15	-1,891.20	333.90	1,920.45	0.00	0.00	0.00
5,669.40	22.04	169.99	5,299.49	-1,916.85	338.43	1,946.50	0.00	0.00	0.00
Start Drop -1.50									
5,699.99	21.58	169.99	5,327.89	-1,928.05	340.41	1,957.87	1.50	-1.50	0.00
5,799.99	20.08	169.99	5,421.35	-1,963.07	346.59	1,993.43	1.50	-1.50	0.00
5,812.39	19.90	169.99	5,433.00	-1,967.24	347.33	1,997.67	1.50	-1.50	0.00
OCRK - WFRK/UMVRD									
5,899.99	18.58	169.99	5,515.71	-1,995.67	352.35	2,026.54	1.50	-1.50	0.00
5,999.99	17.08	169.99	5,610.90	-2,025.83	357.67	2,057.16	1.50	-1.50	0.00
6,099.99	15.58	169.99	5,706.86	-2,053.52	362.56	2,085.28	1.50	-1.50	0.00
6,199.99	14.08	169.99	5,803.52	-2,078.73	367.01	2,110.88	1.50	-1.50	0.00
6,299.99	12.58	169.99	5,900.82	-2,101.44	371.02	2,133.94	1.50	-1.50	0.00
6,399.99	11.08	169.99	5,998.70	-2,121.64	374.59	2,154.45	1.50	-1.50	0.00
6,499.99	9.58	169.99	6,097.07	-2,139.30	377.71	2,172.39	1.50	-1.50	0.00
6,599.99	8.08	169.99	6,195.88	-2,154.42	380.38	2,187.74	1.50	-1.50	0.00
6,699.99	6.58	169.99	6,295.06	-2,166.99	382.59	2,200.51	1.50	-1.50	0.00
6,799.99	5.08	169.99	6,394.54	-2,177.00	384.36	2,210.67	1.50	-1.50	0.00
6,899.99	3.58	169.99	6,494.25	-2,184.44	385.68	2,218.23	1.50	-1.50	0.00
6,999.99	2.08	169.99	6,594.13	-2,189.31	386.53	2,223.17	1.50	-1.50	0.00
7,099.99	0.58	169.99	6,694.10	-2,191.60	386.94	2,225.50	1.50	-1.50	0.00
7,138.89	0.00	0.00	6,733.00	-2,191.80	386.97	2,225.70	1.50	-1.50	-436.93
Start 2650.00 hold at 7138.89 MD - KMGAS									
7,199.99	0.00	0.00	6,794.10	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
7,299.99	0.00	0.00	6,894.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
7,399.99	0.00	0.00	6,994.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
7,499.99	0.00	0.00	7,094.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
7,599.98	0.00	0.00	7,194.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
7,699.98	0.00	0.00	7,294.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
7,799.98	0.00	0.00	7,394.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
7,899.98	0.00	0.00	7,494.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
7,999.98	0.00	0.00	7,594.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
8,099.98	0.00	0.00	7,694.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
8,199.98	0.00	0.00	7,794.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
8,299.98	0.00	0.00	7,894.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
8,399.98	0.00	0.00	7,994.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
8,499.98	0.00	0.00	8,094.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00

Database:	Grand Junction	Local Co-ordinate Reference:	Well RWF 444-9 - Slot RWF 444-9
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 6369.4' & KB 24' @ 6393.40usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 6369.4' & KB 24' @ 6393.40usft (H&P 318)
Site:	RWF 43-9 Pad	North Reference:	True
Well:	RWF 444-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 8June2020 sbsdi		

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)
8,599.98	0.00	0.00	8,194.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
8,678.89	0.00	0.00	8,273.00	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
CME0									
8,699.98	0.00	0.00	8,294.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
8,799.98	0.00	0.00	8,394.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
8,899.98	0.00	0.00	8,494.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
8,999.98	0.00	0.00	8,594.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
9,099.98	0.00	0.00	8,694.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
9,199.98	0.00	0.00	8,794.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
9,299.98	0.00	0.00	8,894.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
9,399.98	0.00	0.00	8,994.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
9,499.98	0.00	0.00	9,094.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
9,599.98	0.00	0.00	9,194.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
9,638.89	0.00	0.00	9,233.00	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
RLNS									
9,699.98	0.00	0.00	9,294.09	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
9,788.89	0.00	0.00	9,383.00	-2,191.80	386.97	2,225.70	0.00	0.00	0.00
TD at 9788.89 - 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
RWF 444-9 KMV Gas - plan hits target center - Circle (radius 50.00)	0.00	0.00	6,733.00	-2,191.80	386.97	1,627,994.0000	2,327,710.0000	39.5334093	-107.8838540
RWF 444-9 PBHL - plan hits target center - Point	0.00	0.00	9,383.00	-2,191.80	386.97	1,627,994.0000	2,327,710.0000	39.5334093	-107.8838540

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,100.00	1,064.08	Surface Casing	13.50	13.50	

Database:	Grand Junction	Local Co-ordinate Reference:	Well RWF 444-9 - Slot RWF 444-9
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 6369.4' & KB 24' @ 6393.40usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 6369.4' & KB 24' @ 6393.40usft (H&P 318)
Site:	RWF 43-9 Pad	North Reference:	True
Well:	RWF 444-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 8June2020 sbsdi		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,418.37	3,213.00	G Sand Top		0.00		
3,483.11	3,273.00	G Sand Base		0.00		
4,853.26	4,543.00	WSTC_LOWER		0.00		
5,812.39	5,433.00	OCRK		0.00		
5,812.39	5,433.00	WFRK/UMVRD		0.00		
7,138.89	6,733.00	KMVGAS		0.00		
8,678.89	8,273.00	CME0		0.00		
9,638.89	9,233.00	RLNS		0.00		
9,788.89	9,383.00	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 3.00	
854.75	836.75	-137.47	24.27	Start 4814.65 hold at 854.75 MD	
5,669.40	5,299.49	-1,916.85	338.43	Start Drop -1.50	
7,138.89	6,733.00	-2,191.80	386.97	Start 2650.00 hold at 7138.89 MD	
9,788.89	9,383.00	-2,191.80	386.97	TD at 9788.89	