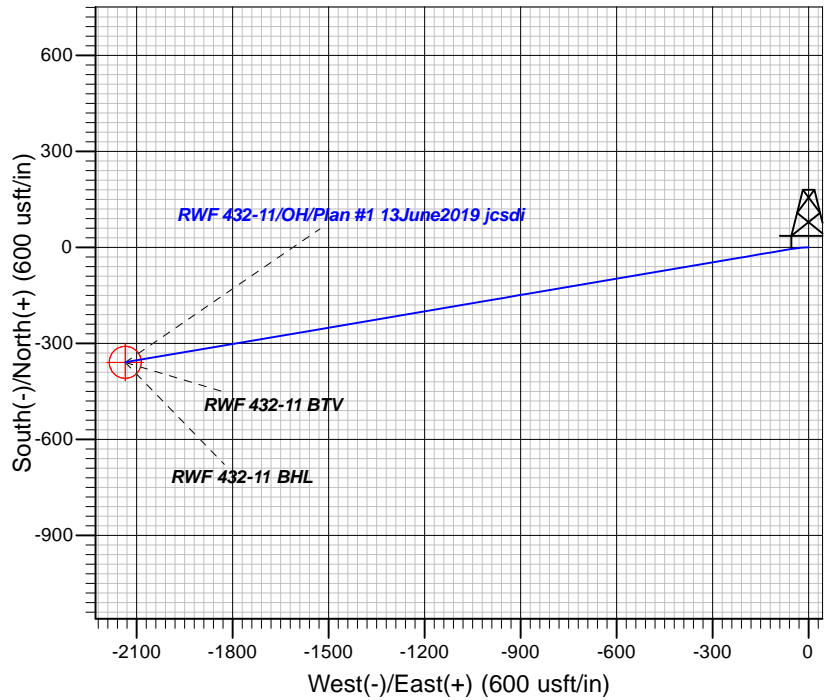
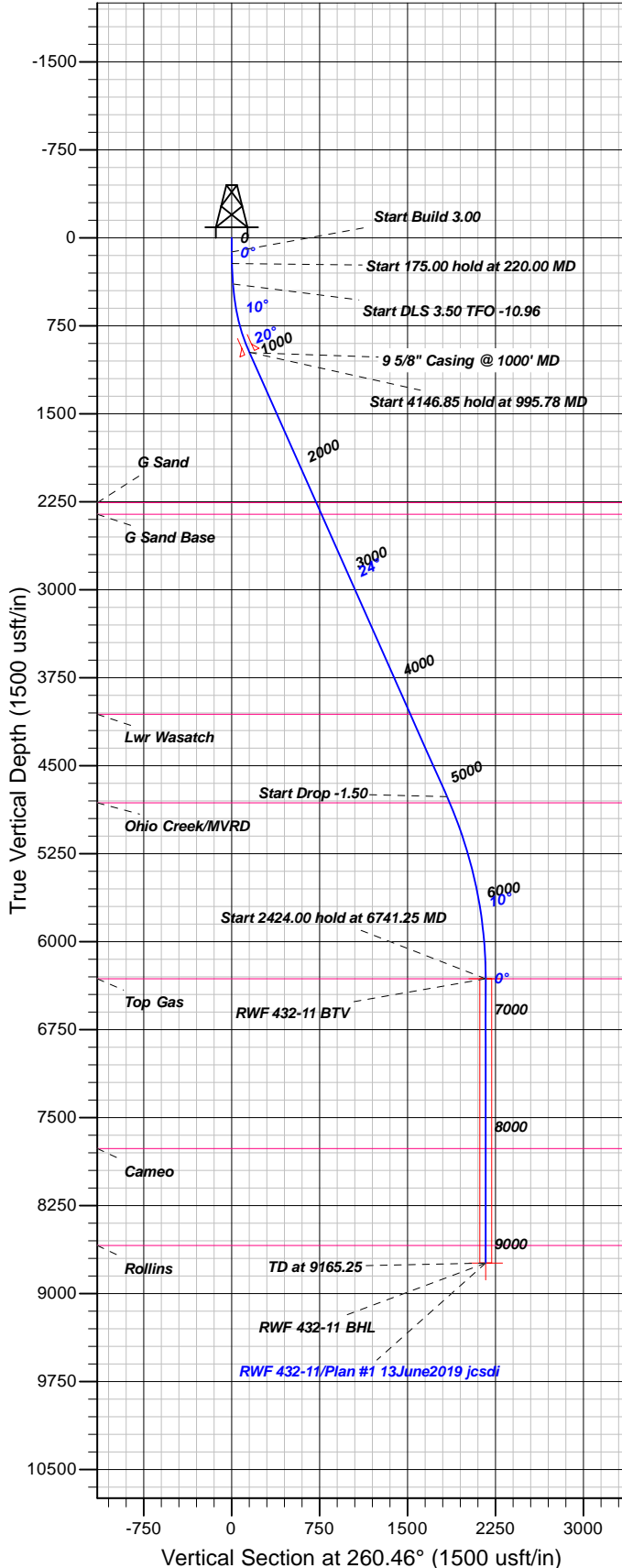




Azimuths to True North
 Magnetic North: 9.37°
 Magnetic Field
 Strength: 51377.6snT
 Dip Angle: 65.62°
 Date: 6/13/2019
 Model: BGGM2016

Well Details: RWF 432-11

GL 5466.8' & RKB 24' @ 5490.80usft (H&P 318)
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.00 0.00 1630830.70 2339715.40 39.5420517 -107.8415626



FORMATION TOP DETAILS

TVDP	MD	Formation
2257.00	2398.12	G Sand
2357.00	2507.56	G Sand Base
4062.00	4373.62	Lwr Wasatch
4817.00	5199.75	Ohio Creek/MVRD
6317.00	6741.25	Top Gas
7764.00	8188.25	Cameo
8591.00	9015.25	Rollins

Plan: Plan #1 13June2019 jcsdi

16:18, June 18 2019
 Created By: Mel Mireles

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

CASING DETAILS

TVD	MD	Name	Size
979.55	1000.00	5/8" Casing @ 1000' MD	9.62

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	0.00	
3	220.00	3.00	270.00	219.95	0.00	-2.62	3.00	270.00	2.58	
4	395.00	3.00	270.00	394.71	0.00	-11.78	0.00	0.00	11.61	
5	995.78	23.98	260.33	975.70	-20.73	-149.39	3.50	-10.96	150.76	
6	5142.64	23.98	260.33	4764.65	-303.71	-1810.77	0.00	0.00	1836.06	
7	6741.25	0.00	0.00	6317.00	-359.06	-2135.76	1.50	180.00	2165.73	RWF 432-11 BTV
8	9165.25	0.00	0.00	8741.00	-359.06	-2135.76	0.00	0.00	2165.73	RWF 432-11 BHL

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
RWF 432-11 BTV	6317.00	-359.06	-2135.76	1630526.80	2337571.10	39.5410657	-107.8491357	Circle (Radius: 50.00)
- plan hits target center								
RWF 432-11 BHL	8741.00	-359.06	-2135.76	1630526.80	2337571.10	39.5410657	-107.8491357	Point
- plan hits target center								



TEP Rocky Mountain LLC

Garfield County, CO NAD83

RWF 12-12 Pad

RWF 432-11

OH

Plan: Plan #1 13June2019 jcsdi

Standard Planning Report

18 June, 2019



Database:	Grand Junction District	Local Co-ordinate Reference:	Well RWF 432-11
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 5466.8' & RKB 24' @ 5490.80usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 5466.8' & RKB 24' @ 5490.80usft (H&P 318)
Site:	RWF 12-12 Pad	North Reference:	True
Well:	RWF 432-11	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 13June2019 jcsdi		

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 12-12 Pad			
Site Position:		Northing:	1,630,797.20 usft	Latitude:	39.5419586
From:	Map	Easting:	2,339,698.60 usft	Longitude:	-107.8416191
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence:	-1.48 °

Well	RWF 432-11					
Well Position	+N/-S	33.92 usft	Northing:	1,630,830.70 usft	Latitude:	39.5420517
	+E/-W	15.93 usft	Easting:	2,339,715.40 usft	Longitude:	-107.8415626
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	5,466.80 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2016	6/13/2019	9.37	65.62	51,378

Design	Plan #1 13June2019 jcsdi			
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	260.46

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	
220.00	3.00	270.00	219.95	0.00	-2.62	3.00	3.00	0.00	270.00	
395.00	3.00	270.00	394.71	0.00	-11.78	0.00	0.00	0.00	0.00	
995.78	23.98	260.33	975.70	-20.73	-149.39	3.50	3.49	-1.61	-10.96	
5,142.64	23.98	260.33	4,764.65	-303.71	-1,810.77	0.00	0.00	0.00	0.00	
6,741.25	0.00	0.00	6,317.00	-359.06	-2,135.76	1.50	-1.50	0.00	180.00	RWF 432-11 BTW
9,165.25	0.00	0.00	8,741.00	-359.06	-2,135.76	0.00	0.00	0.00	0.00	RWF 432-11 BHL

Database:	Grand Junction District	Local Co-ordinate Reference:	Well RWF 432-11
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 5466.8' & RKB 24' @ 5490.80usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 5466.8' & RKB 24' @ 5490.80usft (H&P 318)
Site:	RWF 12-12 Pad	North Reference:	True
Well:	RWF 432-11	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 13June2019 jcsdi		

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	270.00	199.98	0.00	-1.68	1.65	3.00	3.00	0.00
220.00	3.00	270.00	219.95	0.00	-2.62	2.58	3.00	3.00	0.00
Start 175.00 hold at 220.00 MD									
300.00	3.00	270.00	299.84	0.00	-6.80	6.71	0.00	0.00	0.00
395.00	3.00	270.00	394.71	0.00	-11.78	11.61	0.00	0.00	0.00
Start DLS 3.50 TFO -10.96									
400.00	3.17	269.40	399.71	0.00	-12.05	11.88	3.50	3.44	-12.03
500.00	6.64	263.95	499.33	-0.64	-20.57	20.39	3.50	3.47	-5.45
600.00	10.14	262.24	598.24	-2.44	-35.04	34.96	3.50	3.49	-1.71
700.00	13.63	261.40	696.08	-5.39	-55.42	55.55	3.50	3.50	-0.84
800.00	17.13	260.90	792.49	-9.48	-81.62	82.07	3.50	3.50	-0.50
900.00	20.63	260.57	887.09	-14.70	-113.55	114.42	3.50	3.50	-0.34
995.78	23.98	260.33	975.70	-20.73	-149.39	150.76	3.50	3.50	-0.24
Start 4146.85 hold at 995.78 MD									
1,000.00	23.98	260.33	979.55	-21.02	-151.08	152.48	0.00	0.00	0.00
9 5/8" Casing @ 1000' MD									
1,100.00	23.98	260.33	1,070.92	-27.84	-191.15	193.12	0.00	0.00	0.00
1,200.00	23.98	260.33	1,162.29	-34.67	-231.21	233.76	0.00	0.00	0.00
1,300.00	23.98	260.33	1,253.66	-41.49	-271.27	274.40	0.00	0.00	0.00
1,400.00	23.98	260.33	1,345.03	-48.31	-311.34	315.04	0.00	0.00	0.00
1,500.00	23.98	260.33	1,436.40	-55.14	-351.40	355.68	0.00	0.00	0.00
1,600.00	23.98	260.33	1,527.76	-61.96	-391.46	396.32	0.00	0.00	0.00
1,700.00	23.98	260.33	1,619.13	-68.79	-431.53	436.96	0.00	0.00	0.00
1,800.00	23.98	260.33	1,710.50	-75.61	-471.59	477.60	0.00	0.00	0.00
1,900.00	23.98	260.33	1,801.87	-82.43	-511.65	518.24	0.00	0.00	0.00
2,000.00	23.98	260.33	1,893.24	-89.26	-551.72	558.88	0.00	0.00	0.00
2,100.00	23.98	260.33	1,984.61	-96.08	-591.78	599.52	0.00	0.00	0.00
2,200.00	23.98	260.33	2,075.98	-102.91	-631.84	640.16	0.00	0.00	0.00
2,300.00	23.98	260.33	2,167.35	-109.73	-671.91	680.80	0.00	0.00	0.00
2,398.12	23.98	260.33	2,257.00	-116.43	-711.22	720.68	0.00	0.00	0.00
G Sand									
2,400.00	23.98	260.33	2,258.72	-116.55	-711.97	721.44	0.00	0.00	0.00
2,500.00	23.98	260.33	2,350.09	-123.38	-752.03	762.08	0.00	0.00	0.00
2,507.56	23.98	260.33	2,357.00	-123.89	-755.07	765.16	0.00	0.00	0.00
G Sand Base									
2,600.00	23.98	260.33	2,441.46	-130.20	-792.10	802.72	0.00	0.00	0.00
2,700.00	23.98	260.33	2,532.83	-137.03	-832.16	843.36	0.00	0.00	0.00
2,800.00	23.98	260.33	2,624.20	-143.85	-872.23	884.00	0.00	0.00	0.00
2,900.00	23.98	260.33	2,715.57	-150.67	-912.29	924.64	0.00	0.00	0.00
3,000.00	23.98	260.33	2,806.93	-157.50	-952.35	965.28	0.00	0.00	0.00
3,100.00	23.98	260.33	2,898.30	-164.32	-992.42	1,005.92	0.00	0.00	0.00
3,200.00	23.98	260.33	2,989.67	-171.14	-1,032.48	1,046.56	0.00	0.00	0.00
3,300.00	23.98	260.33	3,081.04	-177.97	-1,072.54	1,087.21	0.00	0.00	0.00
3,400.00	23.98	260.33	3,172.41	-184.79	-1,112.61	1,127.85	0.00	0.00	0.00
3,500.00	23.98	260.33	3,263.78	-191.62	-1,152.67	1,168.49	0.00	0.00	0.00
3,600.00	23.98	260.33	3,355.15	-198.44	-1,192.73	1,209.13	0.00	0.00	0.00
3,700.00	23.98	260.33	3,446.52	-205.26	-1,232.80	1,249.77	0.00	0.00	0.00
3,800.00	23.98	260.33	3,537.89	-212.09	-1,272.86	1,290.41	0.00	0.00	0.00

Database:	Grand Junction District	Local Co-ordinate Reference:	Well RWF 432-11
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 5466.8' & RKB 24' @ 5490.80usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 5466.8' & RKB 24' @ 5490.80usft (H&P 318)
Site:	RWF 12-12 Pad	North Reference:	True
Well:	RWF 432-11	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 13June2019 jcsdi		

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)
3,900.00	23.98	260.33	3,629.26	-218.91	-1,312.92	1,331.05	0.00	0.00	0.00
4,000.00	23.98	260.33	3,720.63	-225.74	-1,352.99	1,371.69	0.00	0.00	0.00
4,100.00	23.98	260.33	3,812.00	-232.56	-1,393.05	1,412.33	0.00	0.00	0.00
4,200.00	23.98	260.33	3,903.37	-239.38	-1,433.11	1,452.97	0.00	0.00	0.00
4,300.00	23.98	260.33	3,994.74	-246.21	-1,473.18	1,493.61	0.00	0.00	0.00
4,373.62	23.98	260.33	4,062.00	-251.23	-1,502.67	1,523.53	0.00	0.00	0.00
Lwr Wasatch									
4,400.00	23.98	260.33	4,086.11	-253.03	-1,513.24	1,534.25	0.00	0.00	0.00
4,500.00	23.98	260.33	4,177.47	-259.86	-1,553.30	1,574.89	0.00	0.00	0.00
4,600.00	23.98	260.33	4,268.84	-266.68	-1,593.37	1,615.53	0.00	0.00	0.00
4,700.00	23.98	260.33	4,360.21	-273.50	-1,633.43	1,656.17	0.00	0.00	0.00
4,800.00	23.98	260.33	4,451.58	-280.33	-1,673.50	1,696.81	0.00	0.00	0.00
4,900.00	23.98	260.33	4,542.95	-287.15	-1,713.56	1,737.45	0.00	0.00	0.00
5,000.00	23.98	260.33	4,634.32	-293.97	-1,753.62	1,778.09	0.00	0.00	0.00
5,100.00	23.98	260.33	4,725.69	-300.80	-1,793.69	1,818.73	0.00	0.00	0.00
5,142.64	23.98	260.33	4,764.65	-303.71	-1,810.77	1,836.06	0.00	0.00	0.00
Start Drop -1.50									
5,199.75	23.12	260.33	4,817.00	-307.54	-1,833.26	1,858.88	1.50	-1.50	0.00
Ohio Creek/MVRD									
5,200.00	23.12	260.33	4,817.23	-307.56	-1,833.36	1,858.98	1.50	-1.50	0.00
5,300.00	21.62	260.33	4,909.71	-313.95	-1,870.88	1,897.03	1.50	-1.50	0.00
5,400.00	20.12	260.33	5,003.14	-319.93	-1,905.99	1,932.66	1.50	-1.50	0.00
5,500.00	18.62	260.33	5,097.48	-325.50	-1,938.68	1,965.82	1.50	-1.50	0.00
5,600.00	17.12	260.33	5,192.65	-330.65	-1,968.93	1,996.50	1.50	-1.50	0.00
5,700.00	15.62	260.33	5,288.60	-335.38	-1,996.71	2,024.68	1.50	-1.50	0.00
5,800.00	14.12	260.33	5,385.25	-339.69	-2,022.01	2,050.34	1.50	-1.50	0.00
5,900.00	12.62	260.33	5,482.53	-343.57	-2,044.80	2,073.46	1.50	-1.50	0.00
6,000.00	11.12	260.33	5,580.39	-347.02	-2,065.08	2,094.03	1.50	-1.50	0.00
6,100.00	9.62	260.33	5,678.76	-350.05	-2,082.82	2,112.03	1.50	-1.50	0.00
6,200.00	8.12	260.33	5,777.56	-352.63	-2,098.02	2,127.44	1.50	-1.50	0.00
6,300.00	6.62	260.33	5,876.73	-354.79	-2,110.66	2,140.27	1.50	-1.50	0.00
6,400.00	5.12	260.33	5,976.20	-356.50	-2,120.74	2,150.49	1.50	-1.50	0.00
6,500.00	3.62	260.33	6,075.91	-357.78	-2,128.25	2,158.11	1.50	-1.50	0.00
6,600.00	2.12	260.33	6,175.78	-358.62	-2,133.18	2,163.12	1.50	-1.50	0.00
6,700.00	0.62	260.33	6,275.75	-359.02	-2,135.54	2,165.51	1.50	-1.50	0.00
6,741.25	0.00	0.00	6,317.00	-359.06	-2,135.76	2,165.73	1.50	-1.50	0.00
Start 2424.00 hold at 6741.25 MD - Top Gas - RWF 432-11 BTV									
6,800.00	0.00	0.00	6,375.75	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00
6,900.00	0.00	0.00	6,475.75	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00
7,000.00	0.00	0.00	6,575.75	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00
7,100.00	0.00	0.00	6,675.75	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00
7,200.00	0.00	0.00	6,775.75	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00
7,300.00	0.00	0.00	6,875.75	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00
7,400.00	0.00	0.00	6,975.75	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00
7,500.00	0.00	0.00	7,075.75	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00
7,600.00	0.00	0.00	7,175.75	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00
7,700.00	0.00	0.00	7,275.75	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00
7,800.00	0.00	0.00	7,375.75	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00
7,900.00	0.00	0.00	7,475.75	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00
8,000.00	0.00	0.00	7,575.75	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00
8,100.00	0.00	0.00	7,675.75	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00

Database:	Grand Junction District	Local Co-ordinate Reference:	Well RWF 432-11
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 5466.8' & RKB 24' @ 5490.80usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 5466.8' & RKB 24' @ 5490.80usft (H&P 318)
Site:	RWF 12-12 Pad	North Reference:	True
Well:	RWF 432-11	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 13June2019 jcsdi		

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)	
8,188.25	0.00	0.00	7,764.00	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00	
Cameo										
8,200.00	0.00	0.00	7,775.75	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00	
8,300.00	0.00	0.00	7,875.75	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00	
8,400.00	0.00	0.00	7,975.75	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00	
8,500.00	0.00	0.00	8,075.75	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00	
8,600.00	0.00	0.00	8,175.75	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00	
8,700.00	0.00	0.00	8,275.75	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00	
8,800.00	0.00	0.00	8,375.75	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00	
8,900.00	0.00	0.00	8,475.75	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00	
9,000.00	0.00	0.00	8,575.75	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00	
9,015.25	0.00	0.00	8,591.00	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00	
Rollins										
9,100.00	0.00	0.00	8,675.75	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00	
9,165.25	0.00	0.00	8,741.00	-359.06	-2,135.76	2,165.73	0.00	0.00	0.00	
TD at 9165.25 - RWF 432-11 BHL										

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										
RWF 432-11 BTV	0.00	0.00	6,317.00	-359.06	-2,135.76	1,630,526.80	2,337,571.10	39.5410657	-107.8491357	
- plan hits target center										
- Circle (radius 50.00)										
RWF 432-11 BHL	0.00	0.00	8,741.00	-359.06	-2,135.76	1,630,526.80	2,337,571.10	39.5410657	-107.8491357	
- plan hits target center										
- Point										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,000.00	979.55	9 5/8" Casing @ 1000' MD	9.62	12.25	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,398.12	2,257.00	G Sand		0.00	0.00	
2,507.56	2,357.00	G Sand Base		0.00	0.00	
4,373.62	4,062.00	Lwr Wasatch		0.00	0.00	
5,199.75	4,817.00	Ohio Creek/MVRD		0.00	0.00	
6,741.25	6,317.00	Top Gas		0.00	0.00	
8,188.25	7,764.00	Cameo		0.00	0.00	
9,015.25	8,591.00	Rollins		0.00	0.00	

Database:	Grand Junction District	Local Co-ordinate Reference:	Well RWF 432-11
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 5466.8' & RKB 24' @ 5490.80usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 5466.8' & RKB 24' @ 5490.80usft (H&P 318)
Site:	RWF 12-12 Pad	North Reference:	True
Well:	RWF 432-11	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 13June2019 jcsdi		

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 3.00
220.00	219.95	0.00	-2.62	Start 175.00 hold at 220.00 MD
395.00	394.71	0.00	-11.78	Start DLS 3.50 TFO -10.96
995.78	975.70	-20.73	-149.39	Start 4146.85 hold at 995.78 MD
5,142.64	4,764.65	-303.71	-1,810.77	Start Drop -1.50
6,741.25	6,317.00	-359.06	-2,135.76	Start 2424.00 hold at 6741.25 MD
9,165.25	8,741.00	-359.06	-2,135.76	TD at 9165.25