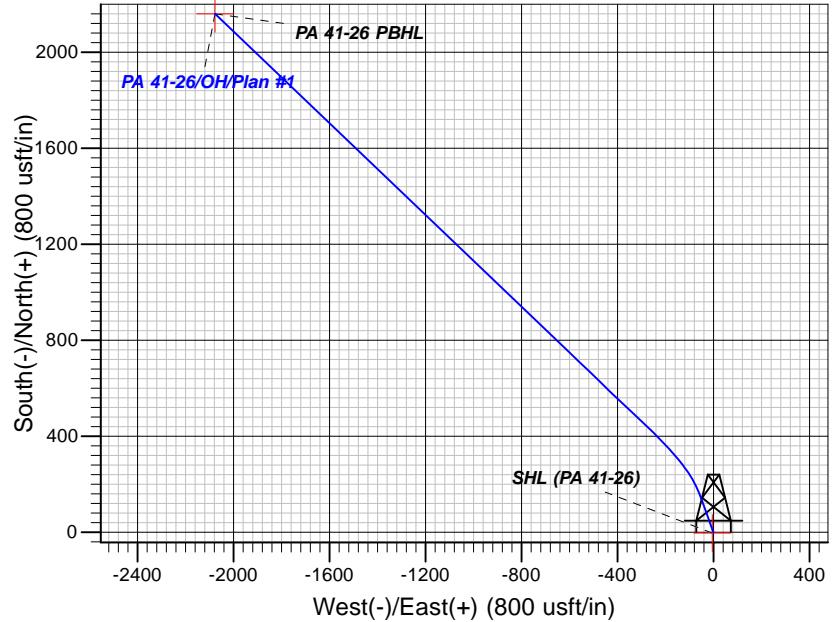
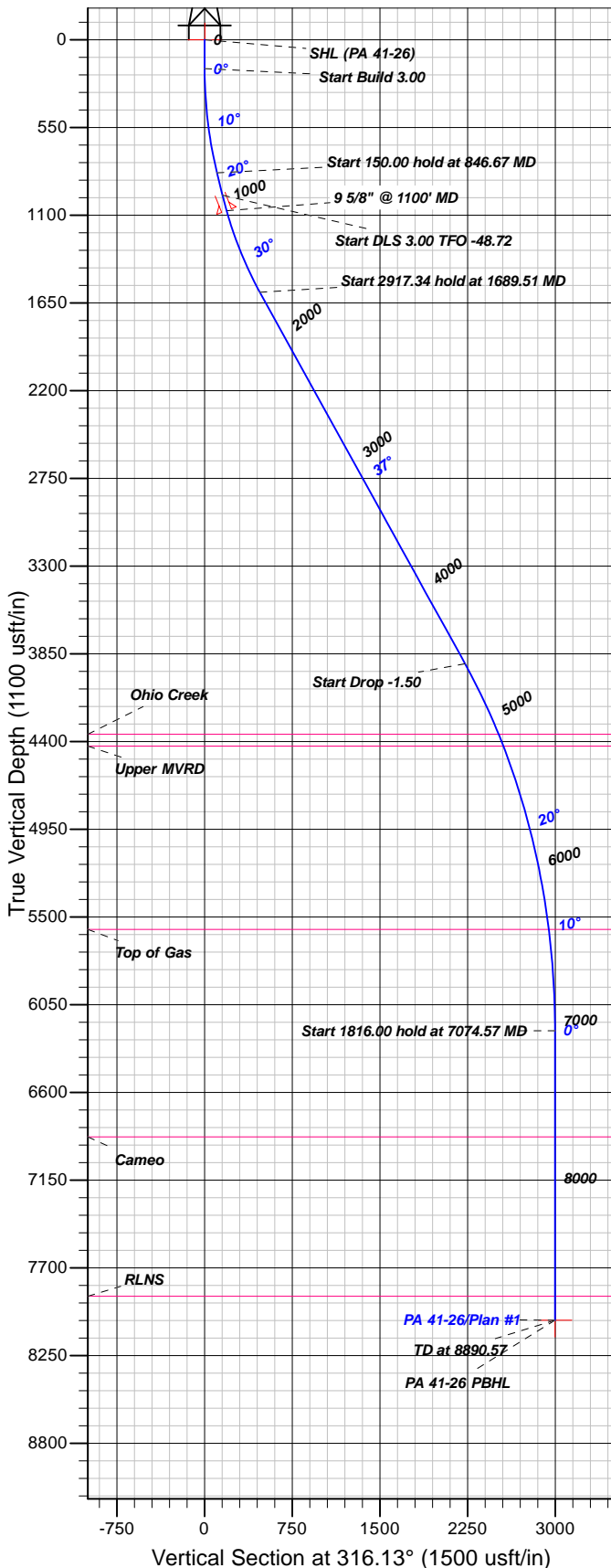


Well Details: PA 41-26

WELL @ 5248.00usft (Original Well Elev)
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1615198.02 2308815.51 39.4969115 -107.9495962 PA 41-26 (B12)

T M Azimuths to True North
Magnetic North: 9.45°
Magnetic Field
Strength: 51743.6snT
Dip Angle: 65.82°
Date: 5/22/2017
Model: HDGM



FORMATION TOP DETAILS

TVDP	MD	Formation
4353.00	5133.04	Ohio Creek
4428.00	5218.37	Upper MVRD
5578.00	6437.62	Top of Gas
6878.00	7740.57	Cameo
7878.00	8740.57	RLNS

Plan: Plan #1

22:52, June 03 2017
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
1070.59	1100.00	9 5/8" @ 1100' 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	180.00	0.00	0.00	180.00	0.00	0.00	0.00	0.00	0.00	
3	846.67	20.00	340.00	833.21	108.23	-39.39	3.00	340.00	105.33	
4	996.67	20.00	340.00	974.16	156.44	-56.94	0.00	0.00	152.24	
5	1689.51	37.02	313.71	1582.99	414.72	-250.36	3.00	-48.72	472.48	
6	4606.85	37.02	313.71	3912.40	1628.26	-1520.03	0.00	0.00	2227.25	
7	7074.57	0.00	0.00	6212.00	2160.14	-2076.52	1.50	180.00	2996.35	
8	8890.57	0.00	0.00	8028.00	2160.14	-2076.52	0.00	0.00	2996.35	PA 41-26 PBHL

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
SHL (PA 41-26)	0.00	-3.38	-4.54	1615194.77	2308810.88	39.4969022	-107.9496123	Point
- plan misses target center by 5.66usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E)								
PA 41-26 PBHL	8028.00	2160.14	-2076.52	1617413.37	2306797.99	39.5028418	-107.9569552	Point
- plan hits target center								



TEP Rocky Mountain LLC

Garfield County, CO NAD83

PA 22-25 Pad

PA 41-26 - Slot PA 41-26 (B12)

OH

Plan: Plan #1

Standard Planning Report

03 June, 2017



Database:	Grand Junction District	Local Co-ordinate Reference:	Well PA 41-26 - Slot PA 41-26 (B12)
Company:	TEP Rocky Mountain LLC	TVD Reference:	WELL @ 5248.00usft (Original Well Elev)
Project:	Garfield County, CO NAD83	MD Reference:	WELL @ 5248.00usft (Original Well Elev)
Site:	PA 22-25 Pad	North Reference:	True
Well:	PA 41-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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		PA 22-25 Pad			
Site Position:		Northing:	1,615,186.77 usft	Latitude:	39.4968742
From:	Map	Easting:	2,308,728.18 usft	Longitude:	-107.9499045
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence:	-1.55 °

Well	PA 41-26 - Slot PA 41-26 (B12), B12					
Well Position	+N/-S	13.61 usft	Northing:	1,615,198.02 usft	Latitude:	39.4969115
	+E/-W	86.99 usft	Easting:	2,308,815.51 usft	Longitude:	-107.9495963
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	5,224.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	5/22/2017	9.45	65.82	51,744

Design	Plan #1			
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	316.13

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	
180.00	0.00	0.00	180.00	0.00	0.00	0.00	0.00	0.00	0.00	
846.67	20.00	340.00	833.21	108.23	-39.39	3.00	3.00	0.00	340.00	
996.67	20.00	340.00	974.16	156.44	-56.94	0.00	0.00	0.00	0.00	
1,689.51	37.02	313.71	1,582.99	414.72	-250.36	3.00	2.46	-3.80	-48.72	
4,606.85	37.02	313.71	3,912.40	1,628.26	-1,520.03	0.00	0.00	0.00	0.00	
7,074.57	0.00	0.00	6,212.00	2,160.14	-2,076.52	1.50	-1.50	0.00	180.00	
8,890.57	0.00	0.00	8,028.00	2,160.14	-2,076.52	0.00	0.00	0.00	0.00	PA 41-26 PBHL

Database:	Grand Junction District	Local Co-ordinate Reference:	Well PA 41-26 - Slot PA 41-26 (B12)
Company:	TEP Rocky Mountain LLC	TVD Reference:	WELL @ 5248.00usft (Original Well Elev)
Project:	Garfield County, CO NAD83	MD Reference:	WELL @ 5248.00usft (Original Well Elev)
Site:	PA 22-25 Pad	North Reference:	True
Well:	PA 41-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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
SHL (PA 41-26)									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
180.00	0.00	0.00	180.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.60	340.00	200.00	0.10	-0.04	0.10	3.00	3.00	0.00
300.00	3.60	340.00	299.92	3.54	-1.29	3.45	3.00	3.00	0.00
400.00	6.60	340.00	399.51	11.89	-4.33	11.57	3.00	3.00	0.00
500.00	9.60	340.00	498.50	25.13	-9.15	24.46	3.00	3.00	0.00
600.00	12.60	340.00	596.62	43.22	-15.73	42.06	3.00	3.00	0.00
700.00	15.60	340.00	693.60	66.11	-24.06	64.34	3.00	3.00	0.00
800.00	18.60	340.00	789.17	93.74	-34.12	91.22	3.00	3.00	0.00
846.67	20.00	340.00	833.21	108.23	-39.39	105.33	3.00	3.00	0.00
900.00	20.00	340.00	883.33	125.37	-45.63	122.01	0.00	0.00	0.00
996.67	20.00	340.00	974.16	156.44	-56.94	152.24	0.00	0.00	0.00
1,000.00	20.07	339.78	977.30	157.51	-57.33	153.29	3.00	1.98	-6.57
1,100.00	22.16	333.82	1,070.59	190.55	-71.59	186.98	3.00	2.10	-5.97
9 5/8" @ 1100' MD									
1,200.00	24.44	328.87	1,162.43	225.19	-90.61	225.14	3.00	2.28	-4.94
1,300.00	26.85	324.74	1,252.58	261.35	-114.35	267.65	3.00	2.41	-4.13
1,400.00	29.36	321.26	1,340.79	298.92	-142.73	314.41	3.00	2.51	-3.48
1,500.00	31.95	318.29	1,426.81	337.81	-175.69	365.29	3.00	2.59	-2.97
1,600.00	34.60	315.72	1,510.41	377.90	-213.13	420.14	3.00	2.65	-2.57
1,689.51	37.02	313.71	1,582.99	414.72	-250.36	472.48	3.00	2.69	-2.26
1,700.00	37.02	313.71	1,591.37	419.08	-254.92	478.79	0.00	0.00	0.00
1,800.00	37.02	313.71	1,671.22	460.68	-298.45	538.94	0.00	0.00	0.00
1,900.00	37.02	313.71	1,751.06	502.28	-341.97	599.09	0.00	0.00	0.00
2,000.00	37.02	313.71	1,830.91	543.88	-385.49	659.24	0.00	0.00	0.00
2,100.00	37.02	313.71	1,910.76	585.47	-429.01	719.39	0.00	0.00	0.00
2,200.00	37.02	313.71	1,990.60	627.07	-472.53	779.54	0.00	0.00	0.00
2,300.00	37.02	313.71	2,070.45	668.67	-516.05	839.69	0.00	0.00	0.00
2,400.00	37.02	313.71	2,150.30	710.27	-559.57	899.84	0.00	0.00	0.00
2,500.00	37.02	313.71	2,230.14	751.86	-603.10	959.99	0.00	0.00	0.00
2,600.00	37.02	313.71	2,309.99	793.46	-646.62	1,020.14	0.00	0.00	0.00
2,700.00	37.02	313.71	2,389.84	835.06	-690.14	1,080.29	0.00	0.00	0.00
2,800.00	37.02	313.71	2,469.68	876.66	-733.66	1,140.44	0.00	0.00	0.00
2,900.00	37.02	313.71	2,549.53	918.25	-777.18	1,200.59	0.00	0.00	0.00
3,000.00	37.02	313.71	2,629.38	959.85	-820.70	1,260.74	0.00	0.00	0.00
3,100.00	37.02	313.71	2,709.23	1,001.45	-864.23	1,320.89	0.00	0.00	0.00
3,200.00	37.02	313.71	2,789.07	1,043.05	-907.75	1,381.04	0.00	0.00	0.00
3,300.00	37.02	313.71	2,868.92	1,084.64	-951.27	1,441.19	0.00	0.00	0.00
3,400.00	37.02	313.71	2,948.77	1,126.24	-994.79	1,501.34	0.00	0.00	0.00
3,500.00	37.02	313.71	3,028.61	1,167.84	-1,038.31	1,561.49	0.00	0.00	0.00
3,600.00	37.02	313.71	3,108.46	1,209.43	-1,081.83	1,621.64	0.00	0.00	0.00
3,700.00	37.02	313.71	3,188.31	1,251.03	-1,125.35	1,681.79	0.00	0.00	0.00
3,800.00	37.02	313.71	3,268.15	1,292.63	-1,168.88	1,741.94	0.00	0.00	0.00
3,900.00	37.02	313.71	3,348.00	1,334.23	-1,212.40	1,802.08	0.00	0.00	0.00
4,000.00	37.02	313.71	3,427.85	1,375.82	-1,255.92	1,862.23	0.00	0.00	0.00
4,100.00	37.02	313.71	3,507.69	1,417.42	-1,299.44	1,922.38	0.00	0.00	0.00
4,200.00	37.02	313.71	3,587.54	1,459.02	-1,342.96	1,982.53	0.00	0.00	0.00
4,300.00	37.02	313.71	3,667.39	1,500.62	-1,386.48	2,042.68	0.00	0.00	0.00
4,400.00	37.02	313.71	3,747.24	1,542.21	-1,430.01	2,102.83	0.00	0.00	0.00
4,500.00	37.02	313.71	3,827.08	1,583.81	-1,473.53	2,162.98	0.00	0.00	0.00
4,600.00	37.02	313.71	3,906.93	1,625.41	-1,517.05	2,223.13	0.00	0.00	0.00
4,606.85	37.02	313.71	3,912.40	1,628.26	-1,520.03	2,227.25	0.00	0.00	0.00

Database:	Grand Junction District	Local Co-ordinate Reference:	Well PA 41-26 - Slot PA 41-26 (B12)
Company:	TEP Rocky Mountain LLC	TVD Reference:	WELL @ 5248.00usft (Original Well Elev)
Project:	Garfield County, CO NAD83	MD Reference:	WELL @ 5248.00usft (Original Well Elev)
Site:	PA 22-25 Pad	North Reference:	True
Well:	PA 41-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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)	
4,700.00	35.62	313.71	3,987.45	1,666.38	-1,559.91	2,282.37	1.50	-1.50	0.00	
4,800.00	34.12	313.71	4,069.50	1,705.88	-1,601.24	2,339.49	1.50	-1.50	0.00	
4,900.00	32.62	313.71	4,153.01	1,743.88	-1,641.00	2,394.44	1.50	-1.50	0.00	
5,000.00	31.12	313.71	4,237.93	1,780.36	-1,679.16	2,447.19	1.50	-1.50	0.00	
5,100.00	29.62	313.71	4,324.21	1,815.29	-1,715.71	2,497.70	1.50	-1.50	0.00	
5,133.04	29.12	313.71	4,353.00	1,826.48	-1,727.42	2,513.88	1.50	-1.50	0.00	
Ohio Creek										
5,200.00	28.12	313.71	4,411.78	1,848.65	-1,750.61	2,545.93	1.50	-1.50	0.00	
5,218.37	27.84	313.71	4,428.00	1,854.60	-1,756.84	2,554.54	1.50	-1.50	0.00	
Upper MVRD										
5,300.00	26.62	313.71	4,500.58	1,880.41	-1,783.84	2,591.86	1.50	-1.50	0.00	
5,392.36	25.23	313.71	4,583.65	1,908.31	-1,813.03	2,632.20	1.50	-1.50	0.00	
PA 41-26 MVRD										
5,400.00	25.12	313.71	4,590.56	1,910.55	-1,815.38	2,635.45	1.50	-1.50	0.00	
5,500.00	23.62	313.71	4,681.65	1,939.06	-1,845.21	2,676.67	1.50	-1.50	0.00	
5,600.00	22.12	313.71	4,773.79	1,965.91	-1,873.30	2,715.50	1.50	-1.50	0.00	
5,700.00	20.62	313.71	4,866.91	1,991.09	-1,899.64	2,751.90	1.50	-1.50	0.00	
5,800.00	19.12	313.71	4,960.96	2,014.57	-1,924.21	2,785.86	1.50	-1.50	0.00	
5,900.00	17.62	313.71	5,055.86	2,036.34	-1,946.99	2,817.34	1.50	-1.50	0.00	
6,000.00	16.12	313.71	5,151.55	2,056.39	-1,967.97	2,846.33	1.50	-1.50	0.00	
6,100.00	14.62	313.71	5,247.97	2,074.70	-1,987.13	2,872.81	1.50	-1.50	0.00	
6,200.00	13.12	313.71	5,345.06	2,091.26	-2,004.45	2,896.76	1.50	-1.50	0.00	
6,300.00	11.62	313.71	5,442.73	2,106.06	-2,019.94	2,918.16	1.50	-1.50	0.00	
6,400.00	10.12	313.71	5,540.94	2,119.09	-2,033.57	2,936.99	1.50	-1.50	0.00	
6,437.62	9.55	313.71	5,578.00	2,123.53	-2,038.21	2,943.42	1.50	-1.50	0.00	
Top of Gas										
6,500.00	8.62	313.71	5,639.60	2,130.34	-2,045.34	2,953.26	1.50	-1.50	0.00	
6,600.00	7.12	313.71	5,738.65	2,139.80	-2,055.23	2,966.94	1.50	-1.50	0.00	
6,700.00	5.62	313.71	5,838.03	2,147.46	-2,063.25	2,978.02	1.50	-1.50	0.00	
6,800.00	4.12	313.71	5,937.67	2,153.33	-2,069.39	2,986.50	1.50	-1.50	0.00	
6,900.00	2.62	313.71	6,037.49	2,157.38	-2,073.63	2,992.37	1.50	-1.50	0.00	
7,000.00	1.12	313.71	6,137.44	2,159.64	-2,075.99	2,995.62	1.50	-1.50	0.00	
7,074.57	0.00	0.00	6,212.00	2,160.14	-2,076.52	2,996.35	1.50	-1.50	0.00	
7,100.00	0.00	0.00	6,237.43	2,160.14	-2,076.52	2,996.35	0.00	0.00	0.00	
7,200.00	0.00	0.00	6,337.43	2,160.14	-2,076.52	2,996.35	0.00	0.00	0.00	
7,300.00	0.00	0.00	6,437.43	2,160.14	-2,076.52	2,996.35	0.00	0.00	0.00	
7,400.00	0.00	0.00	6,537.43	2,160.14	-2,076.52	2,996.35	0.00	0.00	0.00	
7,500.00	0.00	0.00	6,637.43	2,160.14	-2,076.52	2,996.35	0.00	0.00	0.00	
7,600.00	0.00	0.00	6,737.43	2,160.14	-2,076.52	2,996.35	0.00	0.00	0.00	
7,700.00	0.00	0.00	6,837.43	2,160.14	-2,076.52	2,996.35	0.00	0.00	0.00	
7,740.57	0.00	0.00	6,878.00	2,160.14	-2,076.52	2,996.35	0.00	0.00	0.00	
Cameo										
7,800.00	0.00	0.00	6,937.43	2,160.14	-2,076.52	2,996.35	0.00	0.00	0.00	
7,900.00	0.00	0.00	7,037.43	2,160.14	-2,076.52	2,996.35	0.00	0.00	0.00	
8,000.00	0.00	0.00	7,137.43	2,160.14	-2,076.52	2,996.35	0.00	0.00	0.00	
8,100.00	0.00	0.00	7,237.43	2,160.14	-2,076.52	2,996.35	0.00	0.00	0.00	
8,200.00	0.00	0.00	7,337.43	2,160.14	-2,076.52	2,996.35	0.00	0.00	0.00	
8,300.00	0.00	0.00	7,437.43	2,160.14	-2,076.52	2,996.35	0.00	0.00	0.00	
8,400.00	0.00	0.00	7,537.43	2,160.14	-2,076.52	2,996.35	0.00	0.00	0.00	
8,500.00	0.00	0.00	7,637.43	2,160.14	-2,076.52	2,996.35	0.00	0.00	0.00	
8,600.00	0.00	0.00	7,737.43	2,160.14	-2,076.52	2,996.35	0.00	0.00	0.00	
8,700.00	0.00	0.00	7,837.43	2,160.14	-2,076.52	2,996.35	0.00	0.00	0.00	
8,740.57	0.00	0.00	7,878.00	2,160.14	-2,076.52	2,996.35	0.00	0.00	0.00	

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Company:	TEP Rocky Mountain LLC	TVD Reference:	WELL @ 5248.00usft (Original Well Elev)
Project:	Garfield County, CO NAD83	MD Reference:	WELL @ 5248.00usft (Original Well Elev)
Site:	PA 22-25 Pad	North Reference:	True
Well:	PA 41-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1		

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)
RLNS									
8,800.00	0.00	0.00	7,937.43	2,160.14	-2,076.52	2,996.35	0.00	0.00	0.00
8,890.57	0.00	0.00	8,028.00	2,160.14	-2,076.52	2,996.35	0.00	0.00	0.00
PA 41-26 PBHL									

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
SHL (PA 41-26) - plan misses target center by 5.66usft at 0.00usft MD (0.00 TVD, 0.00 N, 0.00 E) - Point	0.00	0.00	0.00	-3.38	-4.54	1,615,194.76	2,308,810.88	39.4969022	-107.9496123
PA 41-26 PBHL - plan hits target center - Point	0.00	0.00	8,028.00	2,160.14	-2,076.52	1,617,413.36	2,306,797.99	39.5028418	-107.9569553

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,100.00	1,070.59	9 5/8" @ 1100' MD	9.62	13.50	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
5,133.04	4,353.00	Ohio Creek		0.00		
5,218.37	4,428.00	Upper MVRD		0.00		
6,437.62	5,578.00	Top of Gas		0.00		
7,740.57	6,878.00	Cameo		0.00		
8,740.57	7,878.00	RLNS		0.00		