



# **TEP Rocky Mountain LLC**

**Garfield Co., CO (NAD83)**

**NR 23-3 Pad**

**NR 33-4 - Slot NR 33-4**

**OH**

**Plan: Plan #2**

## **Standard Planning Report**

**15 September, 2020**



Project: Garfield Co., CO (NAD83)  
 Site: NR 23-3 Pad  
 Well: NR 33-4  
 Wellbore: OH  
 Design: Plan #2  
 Lat: 39.554218  
 Long: -107.879121  
 GL: 6728.00  
 KB: KB=24' @ 6752.00usft (H&P 318)

## WELL DETAILS: NR 33-4

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	
0.00	0.00	1635535.90	2329242.90	39.554218	-107.879121	NR 33-4

## WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
NR 33-4 KMW	7272.00	488.97	-3849.22	1636125.50	2325407.80	Circle (Radius: 50.00)
NR 33-4 PBHL	9947.00	488.97	-3849.22	1636125.50	2325407.80	Point

## SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
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	Build 3.00
1332.05	36.36	277.24	1252.31	46.86	-368.90	3.00	277.24	371.86	4662.98 hold
5995.03	36.36	277.24	5007.38	395.25	-3111.43	0.00	0.00	3136.43	Drop -1.50
8419.12	0.00	0.00	7272.00	488.97	-3849.22	1.50	180.00	3880.16	2675.00 hold
11094.12	0.00	0.00	9947.00	488.97	-3849.22	0.00	0.00	3880.16	TD at 11094.12

## CASING DETAILS

TVD	MD	Name	Size
1057.56	1100.00	9 5/8"	9-5/8

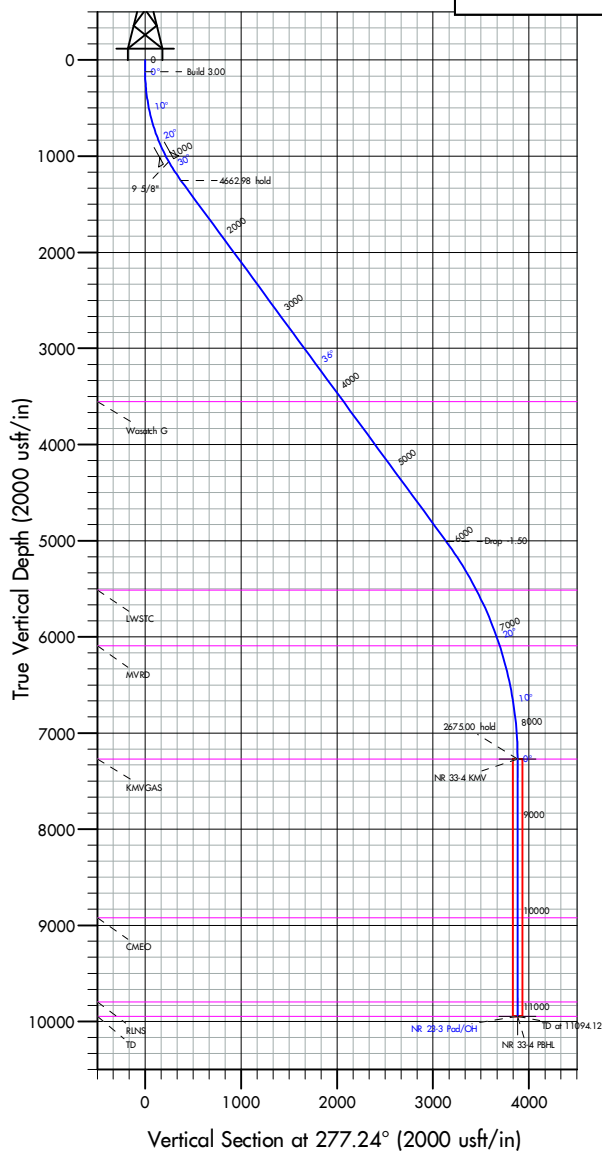
## FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3552.00	4187.76	Wasatch G
5512.00	6590.01	LWSTC
6092.00	7219.50	MVRD
7272.00	8419.12	KMVGAS
8922.00	10069.12	CMEQ
9797.00	10944.12	RLNS
9947.00	11094.12	TD



Azimuths to True North  
 Magnetic North: 9.23°

Magnetic Field  
 Strength: 51337.5nT  
 Dip Angle: 65.73°  
 Date: 8/23/2020  
 Model: HDGM2020



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well NR 33-4 - Slot NR 33-4
<b>Company:</b>	TEP Rocky Mountain LLC	<b>TVD Reference:</b>	KB=24' @ 6752.00usft (H&P 318)
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>MD Reference:</b>	KB=24' @ 6752.00usft (H&P 318)
<b>Site:</b>	NR 23-3 Pad	<b>North Reference:</b>	True
<b>Well:</b>	NR 33-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #2		

<b>Project</b>	Garfield Co., 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>	NR 23-3 Pad			
<b>Site Position:</b>		<b>Northing:</b>	1,635,494.60 usft	<b>Latitude:</b> 39.554107
<b>From:</b>	Map	<b>Easting:</b>	2,329,275.40 usft	<b>Longitude:</b> -107.879002
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "	

<b>Well</b>	NR 33-4 - Slot NR 33-4			
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b>	1,635,535.90 usft
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b>	2,329,242.90 usft
<b>Position Uncertainty</b>		0.00 usft	<b>Wellhead Elevation:</b>	usft
<b>Grid Convergence:</b>		-1.50 °	<b>Ground Level:</b>	6,728.00 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>
	HDGM2020	8/23/2020	9.23	65.73	51,337.50000000

<b>Design</b>	Plan #2			
<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	277.24

<b>Plan Survey Tool Program</b>	<b>Date</b>	9/15/2020		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	11,094.12 Plan #2 (OH)	MWD+ HGDM	
			OWSG MWD + HGDM	

<b>Plan Sections</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	<b>TFO (°)</b>	<b>Target</b>
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	
1,332.05	36.36	277.24	1,252.31	46.86	-368.90	3.00	3.00	0.00	277.24	
5,995.03	36.36	277.24	5,007.38	395.25	-3,111.43	0.00	0.00	0.00	0.00	
8,419.12	0.00	0.00	7,272.00	488.97	-3,849.22	1.50	-1.50	0.00	180.00	
11,094.12	0.00	0.00	9,947.00	488.97	-3,849.22	0.00	0.00	0.00	0.00	NR 33-4 PBHL

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well NR 33-4 - Slot NR 33-4
<b>Company:</b>	TEP Rocky Mountain LLC	<b>TVD Reference:</b>	KB=24' @ 6752.00usft (H&P 318)
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>MD Reference:</b>	KB=24' @ 6752.00usft (H&P 318)
<b>Site:</b>	NR 23-3 Pad	<b>North Reference:</b>	True
<b>Well:</b>	NR 33-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #2		

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
<b>Build 3.00</b>									
200.00	2.40	277.24	199.98	0.21	-1.66	1.68	3.00	3.00	0.00
300.00	5.40	277.24	299.73	1.07	-8.41	8.48	3.00	3.00	0.00
400.00	8.40	277.24	399.00	2.58	-20.32	20.49	3.00	3.00	0.00
500.00	11.40	277.24	497.50	4.75	-37.38	37.68	3.00	3.00	0.00
600.00	14.40	277.24	594.96	7.56	-59.52	60.00	3.00	3.00	0.00
700.00	17.40	277.24	691.13	11.01	-86.70	87.39	3.00	3.00	0.00
800.00	20.40	277.24	785.72	15.09	-118.83	119.78	3.00	3.00	0.00
900.00	23.40	277.24	878.50	19.79	-155.82	157.08	3.00	3.00	0.00
1,000.00	26.40	277.24	969.19	25.10	-197.59	199.18	3.00	3.00	0.00
1,100.00	29.40	277.24	1,057.56	31.00	-244.00	245.96	3.00	3.00	0.00
<b>9 5/8"</b>									
1,200.00	32.40	277.24	1,143.35	37.47	-294.94	297.31	3.00	3.00	0.00
1,300.00	35.40	277.24	1,226.35	44.49	-350.27	353.08	3.00	3.00	0.00
1,332.05	36.36	277.24	1,252.31	46.86	-368.90	371.86	3.00	3.00	0.00
<b>4662.98 hold</b>									
1,400.00	36.36	277.24	1,307.03	51.94	-408.86	412.15	0.00	0.00	0.00
1,500.00	36.36	277.24	1,387.56	59.41	-467.68	471.44	0.00	0.00	0.00
1,600.00	36.36	277.24	1,468.09	66.88	-526.49	530.73	0.00	0.00	0.00
1,700.00	36.36	277.24	1,548.62	74.35	-585.31	590.01	0.00	0.00	0.00
1,800.00	36.36	277.24	1,629.15	81.82	-644.12	649.30	0.00	0.00	0.00
1,900.00	36.36	277.24	1,709.68	89.30	-702.94	708.59	0.00	0.00	0.00
2,000.00	36.36	277.24	1,790.21	96.77	-761.75	767.88	0.00	0.00	0.00
2,100.00	36.36	277.24	1,870.74	104.24	-820.57	827.16	0.00	0.00	0.00
2,200.00	36.36	277.24	1,951.27	111.71	-879.38	886.45	0.00	0.00	0.00
2,300.00	36.36	277.24	2,031.80	119.18	-938.20	945.74	0.00	0.00	0.00
2,400.00	36.36	277.24	2,112.33	126.65	-997.01	1,005.03	0.00	0.00	0.00
2,500.00	36.36	277.24	2,192.86	134.12	-1,055.83	1,064.31	0.00	0.00	0.00
2,600.00	36.36	277.24	2,273.39	141.60	-1,114.64	1,123.60	0.00	0.00	0.00
2,700.00	36.36	277.24	2,353.91	149.07	-1,173.46	1,182.89	0.00	0.00	0.00
2,800.00	36.36	277.24	2,434.44	156.54	-1,232.27	1,242.18	0.00	0.00	0.00
2,900.00	36.36	277.24	2,514.97	164.01	-1,291.09	1,301.46	0.00	0.00	0.00
3,000.00	36.36	277.24	2,595.50	171.48	-1,349.90	1,360.75	0.00	0.00	0.00
3,100.00	36.36	277.24	2,676.03	178.95	-1,408.72	1,420.04	0.00	0.00	0.00
3,200.00	36.36	277.24	2,756.56	186.42	-1,467.53	1,479.33	0.00	0.00	0.00
3,300.00	36.36	277.24	2,837.09	193.89	-1,526.35	1,538.62	0.00	0.00	0.00
3,400.00	36.36	277.24	2,917.62	201.37	-1,585.16	1,597.90	0.00	0.00	0.00
3,500.00	36.36	277.24	2,998.15	208.84	-1,643.98	1,657.19	0.00	0.00	0.00
3,600.00	36.36	277.24	3,078.68	216.31	-1,702.79	1,716.48	0.00	0.00	0.00
3,700.00	36.36	277.24	3,159.21	223.78	-1,761.61	1,775.77	0.00	0.00	0.00
3,800.00	36.36	277.24	3,239.74	231.25	-1,820.42	1,835.05	0.00	0.00	0.00
3,900.00	36.36	277.24	3,320.27	238.72	-1,879.24	1,894.34	0.00	0.00	0.00
4,000.00	36.36	277.24	3,400.80	246.19	-1,938.05	1,953.63	0.00	0.00	0.00
4,100.00	36.36	277.24	3,481.33	253.67	-1,996.87	2,012.92	0.00	0.00	0.00
4,187.76	36.36	277.24	3,552.00	260.22	-2,048.49	2,064.95	0.00	0.00	0.00
<b>Wasatch G</b>									
4,200.00	36.36	277.24	3,561.86	261.14	-2,055.68	2,072.20	0.00	0.00	0.00
4,300.00	36.36	277.24	3,642.38	268.61	-2,114.50	2,131.49	0.00	0.00	0.00
4,400.00	36.36	277.24	3,722.91	276.08	-2,173.31	2,190.78	0.00	0.00	0.00
4,500.00	36.36	277.24	3,803.44	283.55	-2,232.13	2,250.07	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well NR 33-4 - Slot NR 33-4
<b>Company:</b>	TEP Rocky Mountain LLC	<b>TVD Reference:</b>	KB=24' @ 6752.00usft (H&P 318)
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>MD Reference:</b>	KB=24' @ 6752.00usft (H&P 318)
<b>Site:</b>	NR 23-3 Pad	<b>North Reference:</b>	True
<b>Well:</b>	NR 33-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #2		

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)
4,600.00	36.36	277.24	3,883.97	291.02	-2,290.94	2,309.35	0.00	0.00	0.00
4,700.00	36.36	277.24	3,964.50	298.49	-2,349.76	2,368.64	0.00	0.00	0.00
4,800.00	36.36	277.24	4,045.03	305.97	-2,408.57	2,427.93	0.00	0.00	0.00
4,900.00	36.36	277.24	4,125.56	313.44	-2,467.39	2,487.22	0.00	0.00	0.00
5,000.00	36.36	277.24	4,206.09	320.91	-2,526.20	2,546.50	0.00	0.00	0.00
5,100.00	36.36	277.24	4,286.62	328.38	-2,585.02	2,605.79	0.00	0.00	0.00
5,200.00	36.36	277.24	4,367.15	335.85	-2,643.83	2,665.08	0.00	0.00	0.00
5,300.00	36.36	277.24	4,447.68	343.32	-2,702.65	2,724.37	0.00	0.00	0.00
5,400.00	36.36	277.24	4,528.21	350.79	-2,761.46	2,783.66	0.00	0.00	0.00
5,500.00	36.36	277.24	4,608.74	358.27	-2,820.28	2,842.94	0.00	0.00	0.00
5,600.00	36.36	277.24	4,689.27	365.74	-2,879.09	2,902.23	0.00	0.00	0.00
5,700.00	36.36	277.24	4,769.80	373.21	-2,937.91	2,961.52	0.00	0.00	0.00
5,800.00	36.36	277.24	4,850.32	380.68	-2,996.72	3,020.81	0.00	0.00	0.00
5,900.00	36.36	277.24	4,930.85	388.15	-3,055.54	3,080.09	0.00	0.00	0.00
5,995.03	36.36	277.24	5,007.38	395.25	-3,111.43	3,136.43	0.00	0.00	0.00
<b>Drop -1.50</b>									
6,000.00	36.29	277.24	5,011.39	395.62	-3,114.35	3,139.38	1.50	-1.50	0.00
6,100.00	34.79	277.24	5,092.76	402.95	-3,172.01	3,197.50	1.50	-1.50	0.00
6,200.00	33.29	277.24	5,175.62	410.00	-3,227.53	3,253.47	1.50	-1.50	0.00
6,300.00	31.79	277.24	5,259.92	416.78	-3,280.89	3,307.25	1.50	-1.50	0.00
6,400.00	30.29	277.24	5,345.61	423.27	-3,332.03	3,358.81	1.50	-1.50	0.00
6,500.00	28.79	277.24	5,432.61	429.49	-3,380.94	3,408.11	1.50	-1.50	0.00
6,590.01	27.44	277.24	5,512.00	434.83	-3,423.01	3,450.52	1.50	-1.50	0.00
<b>LWSTC</b>									
6,600.00	27.29	277.24	5,520.87	435.41	-3,427.57	3,455.11	1.50	-1.50	0.00
6,700.00	25.79	277.24	5,610.33	441.04	-3,471.88	3,499.79	1.50	-1.50	0.00
6,800.00	24.29	277.24	5,700.93	446.37	-3,513.87	3,542.10	1.50	-1.50	0.00
6,900.00	22.79	277.24	5,792.61	451.41	-3,553.48	3,582.04	1.50	-1.50	0.00
7,000.00	21.29	277.24	5,885.30	456.13	-3,590.70	3,619.56	1.50	-1.50	0.00
7,100.00	19.79	277.24	5,978.94	460.55	-3,625.50	3,654.64	1.50	-1.50	0.00
7,200.00	18.29	277.24	6,073.47	464.66	-3,657.86	3,687.25	1.50	-1.50	0.00
7,219.50	17.99	277.24	6,092.00	465.43	-3,663.88	3,693.32	1.50	-1.50	0.00
<b>MVRD</b>									
7,300.00	16.79	277.24	6,168.82	468.46	-3,687.75	3,717.38	1.50	-1.50	0.00
7,400.00	15.29	277.24	6,264.93	471.94	-3,715.15	3,745.01	1.50	-1.50	0.00
7,500.00	13.79	277.24	6,361.72	475.11	-3,740.05	3,770.11	1.50	-1.50	0.00
7,600.00	12.29	277.24	6,459.14	477.95	-3,762.43	3,792.67	1.50	-1.50	0.00
7,700.00	10.79	277.24	6,557.12	480.47	-3,782.27	3,812.66	1.50	-1.50	0.00
7,800.00	9.29	277.24	6,655.59	482.66	-3,799.56	3,830.09	1.50	-1.50	0.00
7,900.00	7.79	277.24	6,754.48	484.54	-3,814.28	3,844.94	1.50	-1.50	0.00
8,000.00	6.29	277.24	6,853.72	486.08	-3,826.44	3,857.19	1.50	-1.50	0.00
8,100.00	4.79	277.24	6,953.25	487.30	-3,836.01	3,866.83	1.50	-1.50	0.00
8,200.00	3.29	277.24	7,053.00	488.18	-3,842.99	3,873.87	1.50	-1.50	0.00
8,300.00	1.79	277.24	7,152.90	488.74	-3,847.38	3,878.30	1.50	-1.50	0.00
8,400.00	0.29	277.24	7,252.88	488.97	-3,849.18	3,880.11	1.50	-1.50	0.00
8,419.12	0.00	0.00	7,272.00	488.97	-3,849.22	3,880.16	1.50	-1.50	0.00
<b>2675.00 hold - KMVGAS</b>									
8,500.00	0.00	0.00	7,352.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00
8,600.00	0.00	0.00	7,452.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00
8,700.00	0.00	0.00	7,552.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00
8,800.00	0.00	0.00	7,652.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00
8,900.00	0.00	0.00	7,752.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00
9,000.00	0.00	0.00	7,852.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well NR 33-4 - Slot NR 33-4
<b>Company:</b>	TEP Rocky Mountain LLC	<b>TVD Reference:</b>	KB=24' @ 6752.00usft (H&P 318)
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>MD Reference:</b>	KB=24' @ 6752.00usft (H&P 318)
<b>Site:</b>	NR 23-3 Pad	<b>North Reference:</b>	True
<b>Well:</b>	NR 33-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #2		

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)	
9,100.00	0.00	0.00	7,952.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00	
9,200.00	0.00	0.00	8,052.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00	
9,300.00	0.00	0.00	8,152.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00	
9,400.00	0.00	0.00	8,252.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00	
9,500.00	0.00	0.00	8,352.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00	
9,600.00	0.00	0.00	8,452.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00	
9,700.00	0.00	0.00	8,552.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00	
9,800.00	0.00	0.00	8,652.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00	
9,900.00	0.00	0.00	8,752.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00	
10,000.00	0.00	0.00	8,852.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00	
10,069.12	0.00	0.00	8,922.00	488.97	-3,849.22	3,880.16	0.00	0.00	0.00	
<b>CMEO</b>										
10,100.00	0.00	0.00	8,952.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00	
10,200.00	0.00	0.00	9,052.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00	
10,300.00	0.00	0.00	9,152.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00	
10,400.00	0.00	0.00	9,252.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00	
10,500.00	0.00	0.00	9,352.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00	
10,600.00	0.00	0.00	9,452.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00	
10,700.00	0.00	0.00	9,552.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00	
10,800.00	0.00	0.00	9,652.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00	
10,900.00	0.00	0.00	9,752.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00	
10,944.12	0.00	0.00	9,797.00	488.97	-3,849.22	3,880.16	0.00	0.00	0.00	
<b>RLNS</b>										
11,000.00	0.00	0.00	9,852.88	488.97	-3,849.22	3,880.16	0.00	0.00	0.00	
11,094.12	0.00	0.00	9,947.00	488.97	-3,849.22	3,880.16	0.00	0.00	0.00	
<b>TD at 11094.12 - 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									
NR 33-4 KMV	0.00	0.00	7,272.00	488.97	-3,849.22	1,636,125.50	2,325,407.80	39.555560	-107.892773
- plan hits target center									
- Circle (radius 50.00)									
NR 33-4 PBHL	0.00	0.00	9,947.00	488.97	-3,849.22	1,636,125.50	2,325,407.80	39.555560	-107.892773
- plan hits target center									
- Point									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,100.00	1,057.56	9 5/8"	9-5/8	13-1/2	

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well NR 33-4 - Slot NR 33-4
<b>Company:</b>	TEP Rocky Mountain LLC	<b>TVD Reference:</b>	KB=24' @ 6752.00usft (H&P 318)
<b>Project:</b>	Garfield Co., CO (NAD83)	<b>MD Reference:</b>	KB=24' @ 6752.00usft (H&P 318)
<b>Site:</b>	NR 23-3 Pad	<b>North Reference:</b>	True
<b>Well:</b>	NR 33-4	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #2		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,187.76	3,552.00	Wasatch G		0.00		
6,590.01	5,512.00	LWSTC		0.00		
7,219.50	6,092.00	MVRD		0.00		
8,419.12	7,272.00	KMVGAS		0.00		
10,069.12	8,922.00	CMEO		0.00		
10,944.12	9,797.00	RLNS		0.00		
11,094.12	9,947.00	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	Build 3.00	
1,332.05	1,252.31	46.86	-368.90	4662.98 hold	
5,995.03	5,007.38	395.25	-3,111.43	Drop -1.50	
8,419.12	7,272.00	488.97	-3,849.22	2675.00 hold	
11,094.12	9,947.00	488.97	-3,849.22	TD at 11094.12	