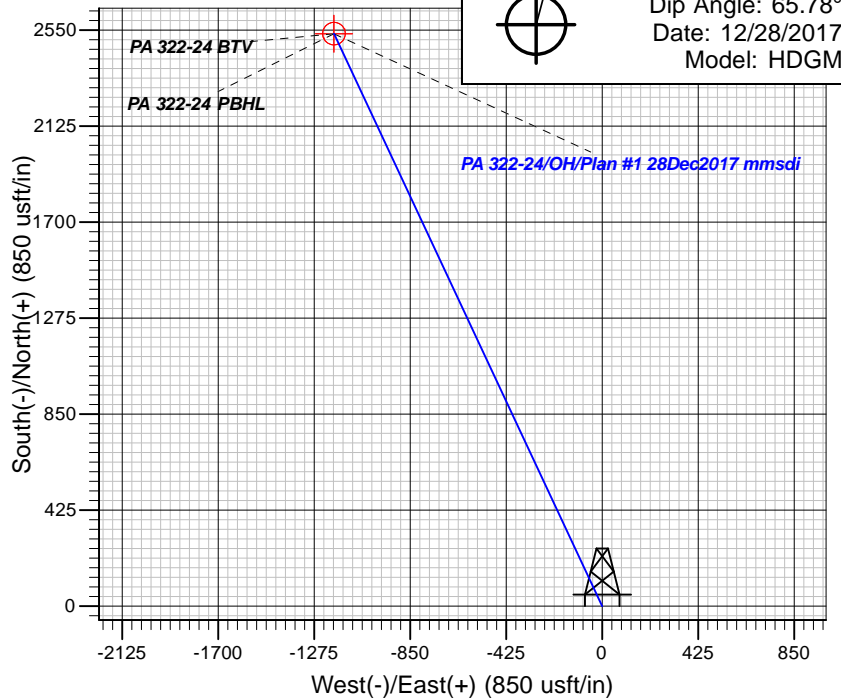
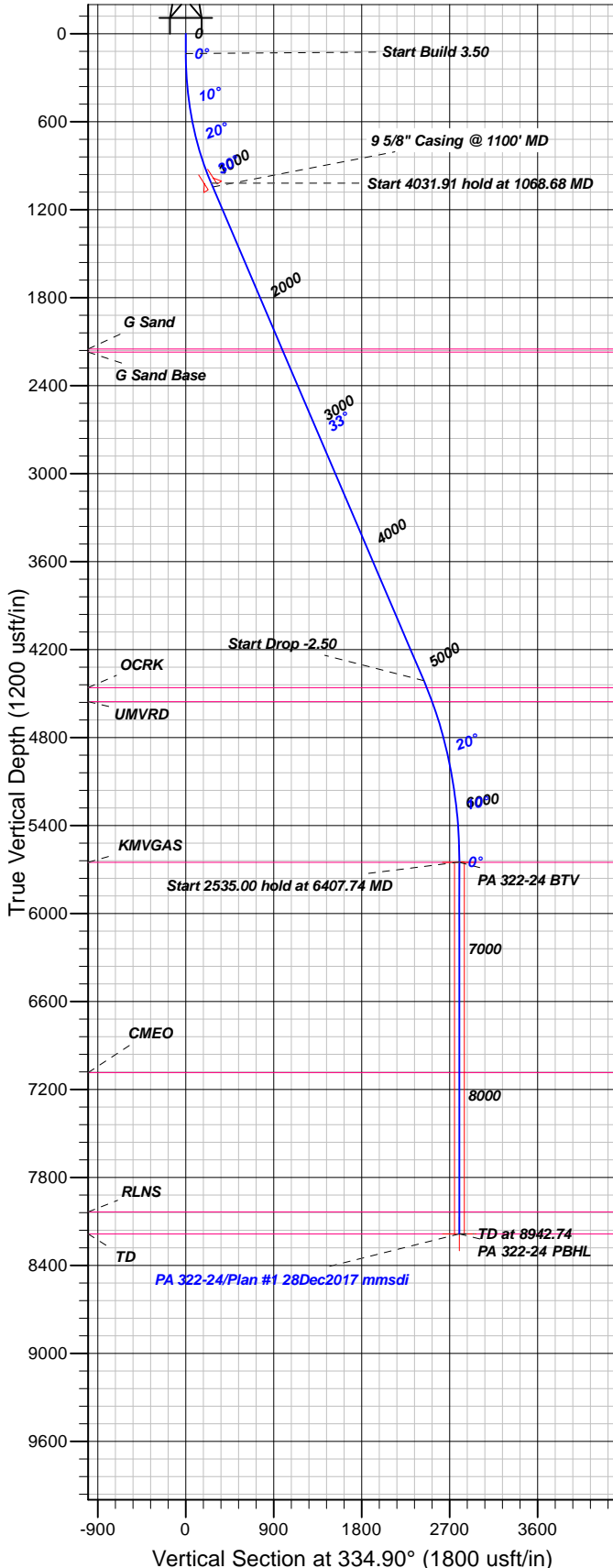


## Well Details: PA 322-24

GL 5371' & RKB 24' @ 5395.00usft  
+N/-S +E/-W Northing Easting Latitude Longitude Slot  
0.00 0.00 1618402.77 2310464.94 39.5058287 -107.9440589 PA 322-24 (B7)

T M Azimuths to True North  
Magnetic North: 9.42°  
Magnetic Field  
Strength: 51662.3snT  
Dip Angle: 65.78°  
Date: 12/28/2017  
Model: HDGM



### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2150.00	2412.53	G Sand
2170.00	2436.29	G Sand Base
4460.00	5156.52	OCRK
4555.00	5266.13	UMVRD
5650.00	6407.76	KMVGAS
7085.00	7842.76	CMEO
8035.00	8792.76	RLNS
8185.00	8942.76	TD

Plan: Plan #1 28Dec2017 mmsdi

13:52, January 07 2018  
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
1045.24	1100.00	5/8" Casing @ 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	135.00	0.00	0.00	135.00	0.00	0.00	0.00	0.00	0.00	
3	1068.70	32.68	334.90	1018.89	234.65	-109.94	3.50	334.90	259.13	
4	5100.59	32.68	334.90	4412.56	2205.99	-1033.53	0.00	0.00	0.00	0.002436.10
5	6407.76	0.00	0.00	5650.00	2534.50	-1187.45	2.50	180.00	2798.88	PA 322-24 BTV
6	8942.76	0.00	0.00	8185.00	2534.50	-1187.45	0.00	0.00	2798.88	PA 322-24 PBHL

### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PA 322-24 BTV	5650.00	2534.50	-1187.45	1620968.30	2309346.10	39.5127869	-107.9482677	Circle (Radius: 50.00)
- plan hits target center								
PA 322-24 PBHL	8185.00	2534.50	-1187.45	1620968.30	2309346.10	39.5127869	-107.9482677	Point
- plan hits target center								



# **TEP Rocky Mountain LLC**

**Garfield County, CO NAD83**

**PA 34-24 Pad**

**PA 322-24 - Slot PA 322-24 (B7)**

**OH**

**Plan: Plan #1 28Dec2017 mmsdi**

## **Standard Planning Report**

**07 January, 2018**



[www.scientificdrilling.com](http://www.scientificdrilling.com)



<b>Database:</b>	Grand Junction District	<b>Local Co-ordinate Reference:</b>	Well PA 322-24 - Slot PA 322-24 (B7)
<b>Company:</b>	TEP Rocky Mountain LLC	<b>TVD Reference:</b>	GL 5371' & RKB 24' @ 5395.00usft
<b>Project:</b>	Garfield County, CO NAD83	<b>MD Reference:</b>	GL 5371' & RKB 24' @ 5395.00usft
<b>Site:</b>	PA 34-24 Pad	<b>North Reference:</b>	True
<b>Well:</b>	PA 322-24	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1 28Dec2017 mmsdi		

<b>Project</b>	Garfield County, 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>	PA 34-24 Pad			
<b>Site Position:</b>		<b>Northing:</b>	1,618,371.20 usft	<b>Latitude:</b> 39.5057421
<b>From:</b> Map		<b>Easting:</b>	2,310,465.70 usft	<b>Longitude:</b> -107.9440532
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13.20 in	<b>Grid Convergence:</b> -1.54 °

<b>Well</b>	PA 322-24 - Slot PA 322-24 (B7)			
<b>Well Position</b>	<b>+N/-S</b>	31.54 usft	<b>Northing:</b>	1,618,402.77 usft
	<b>+E/-W</b>	-1.61 usft	<b>Easting:</b>	2,310,464.94 usft
<b>Position Uncertainty</b>	0.00 usft		<b>Wellhead Elevation:</b>	0.00 usft
			<b>Ground Level:</b>	5,371.00 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>
	HDGM	12/28/2017	9.42	65.78	51,662

<b>Design</b>	Plan #1 28Dec2017 mmsdi			
<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	334.90

<b>Plan Sections</b>										
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	
1,068.70	32.68	334.90	1,018.89	234.65	-109.94	3.50	3.50	0.00	334.90	
5,100.59	32.68	334.90	4,412.56	2,205.99	-1,033.53	0.00	0.00	0.00	0.00	
6,407.76	0.00	0.00	5,650.00	2,534.50	-1,187.45	2.50	-2.50	0.00	180.00	PA 322-24 BTV
8,942.76	0.00	0.00	8,185.00	2,534.50	-1,187.45	0.00	0.00	0.00	0.00	PA 322-24 PBHL

<b>Database:</b>	Grand Junction District	<b>Local Co-ordinate Reference:</b>	Well PA 322-24 - Slot PA 322-24 (B7)
<b>Company:</b>	TEP Rocky Mountain LLC	<b>TVD Reference:</b>	GL 5371' & RKB 24' @ 5395.00usft
<b>Project:</b>	Garfield County, CO NAD83	<b>MD Reference:</b>	GL 5371' & RKB 24' @ 5395.00usft
<b>Site:</b>	PA 34-24 Pad	<b>North Reference:</b>	True
<b>Well:</b>	PA 322-24	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1 28Dec2017 mmsdi		

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
<b>Start Build 3.50</b>									
200.00	2.28	334.90	199.98	1.17	-0.55	1.29	3.50	3.50	0.00
300.00	5.78	334.90	299.72	7.52	-3.52	8.31	3.50	3.50	0.00
400.00	9.28	334.90	398.84	19.38	-9.08	21.40	3.50	3.50	0.00
500.00	12.78	334.90	496.98	36.70	-17.19	40.52	3.50	3.50	0.00
600.00	16.28	334.90	593.77	59.40	-27.83	65.60	3.50	3.50	0.00
700.00	19.78	334.90	688.85	87.42	-40.96	96.54	3.50	3.50	0.00
800.00	23.28	334.90	781.86	120.64	-56.52	133.22	3.50	3.50	0.00
900.00	26.78	334.90	872.46	158.94	-74.46	175.52	3.50	3.50	0.00
1,000.00	30.28	334.90	960.31	202.18	-94.72	223.26	3.50	3.50	0.00
1,068.68	32.68	334.90	1,018.88	234.65	-109.94	259.12	3.50	3.50	0.00
<b>Start 4031.91 hold at 1068.68 MD</b>									
1,068.70	32.68	334.90	1,018.89	234.65	-109.94	259.13	3.50	3.50	0.00
1,100.00	32.68	334.90	1,045.24	249.96	-117.11	276.03	0.00	0.00	0.00
<b>9 5/8" Casing @ 1100' MD</b>									
1,200.00	32.68	334.90	1,129.41	298.85	-140.02	330.03	0.00	0.00	0.00
1,300.00	32.68	334.90	1,213.58	347.75	-162.92	384.02	0.00	0.00	0.00
1,400.00	32.68	334.90	1,297.75	396.64	-185.83	438.02	0.00	0.00	0.00
1,500.00	32.68	334.90	1,381.92	445.53	-208.74	492.01	0.00	0.00	0.00
1,600.00	32.68	334.90	1,466.09	494.43	-231.65	546.00	0.00	0.00	0.00
1,700.00	32.68	334.90	1,550.26	543.32	-254.55	600.00	0.00	0.00	0.00
1,800.00	32.68	334.90	1,634.43	592.21	-277.46	653.99	0.00	0.00	0.00
1,900.00	32.68	334.90	1,718.60	641.11	-300.37	707.98	0.00	0.00	0.00
2,000.00	32.68	334.90	1,802.77	690.00	-323.27	761.98	0.00	0.00	0.00
2,100.00	32.68	334.90	1,886.94	738.90	-346.18	815.97	0.00	0.00	0.00
2,200.00	32.68	334.90	1,971.11	787.79	-369.09	869.96	0.00	0.00	0.00
2,300.00	32.68	334.90	2,055.28	836.68	-392.00	923.96	0.00	0.00	0.00
2,400.00	32.68	334.90	2,139.46	885.58	-414.90	977.95	0.00	0.00	0.00
2,412.53	32.68	334.90	2,150.00	891.70	-417.77	984.72	0.00	0.00	0.00
<b>G Sand</b>									
2,436.29	32.68	334.90	2,170.00	903.32	-423.22	997.55	0.00	0.00	0.00
<b>G Sand Base</b>									
2,500.00	32.68	334.90	2,223.63	934.47	-437.81	1,031.95	0.00	0.00	0.00
2,600.00	32.68	334.90	2,307.80	983.36	-460.72	1,085.94	0.00	0.00	0.00
2,700.00	32.68	334.90	2,391.97	1,032.26	-483.63	1,139.93	0.00	0.00	0.00
2,800.00	32.68	334.90	2,476.14	1,081.15	-506.53	1,193.93	0.00	0.00	0.00
2,900.00	32.68	334.90	2,560.31	1,130.04	-529.44	1,247.92	0.00	0.00	0.00
3,000.00	32.68	334.90	2,644.48	1,178.94	-552.35	1,301.91	0.00	0.00	0.00
3,100.00	32.68	334.90	2,728.65	1,227.83	-575.25	1,355.91	0.00	0.00	0.00
3,200.00	32.68	334.90	2,812.82	1,276.72	-598.16	1,409.90	0.00	0.00	0.00
3,300.00	32.68	334.90	2,896.99	1,325.62	-621.07	1,463.89	0.00	0.00	0.00
3,400.00	32.68	334.90	2,981.16	1,374.51	-643.98	1,517.89	0.00	0.00	0.00
3,500.00	32.68	334.90	3,065.33	1,423.40	-666.88	1,571.88	0.00	0.00	0.00
3,600.00	32.68	334.90	3,149.50	1,472.30	-689.79	1,625.88	0.00	0.00	0.00
3,700.00	32.68	334.90	3,233.67	1,521.19	-712.70	1,679.87	0.00	0.00	0.00
3,800.00	32.68	334.90	3,317.84	1,570.09	-735.60	1,733.86	0.00	0.00	0.00
3,900.00	32.68	334.90	3,402.01	1,618.98	-758.51	1,787.86	0.00	0.00	0.00
4,000.00	32.68	334.90	3,486.18	1,667.87	-781.42	1,841.85	0.00	0.00	0.00
4,100.00	32.68	334.90	3,570.35	1,716.77	-804.33	1,895.84	0.00	0.00	0.00
4,200.00	32.68	334.90	3,654.53	1,765.66	-827.23	1,949.84	0.00	0.00	0.00
4,300.00	32.68	334.90	3,738.70	1,814.55	-850.14	2,003.83	0.00	0.00	0.00

<b>Database:</b>	Grand Junction District	<b>Local Co-ordinate Reference:</b>	Well PA 322-24 - Slot PA 322-24 (B7)
<b>Company:</b>	TEP Rocky Mountain LLC	<b>TVD Reference:</b>	GL 5371' & RKB 24' @ 5395.00usft
<b>Project:</b>	Garfield County, CO NAD83	<b>MD Reference:</b>	GL 5371' & RKB 24' @ 5395.00usft
<b>Site:</b>	PA 34-24 Pad	<b>North Reference:</b>	True
<b>Well:</b>	PA 322-24	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1 28Dec2017 mmsdi		

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)
4,400.00	32.68	334.90	3,822.87	1,863.45	-873.05	2,057.83	0.00	0.00	0.00
4,500.00	32.68	334.90	3,907.04	1,912.34	-895.96	2,111.82	0.00	0.00	0.00
4,600.00	32.68	334.90	3,991.21	1,961.23	-918.86	2,165.81	0.00	0.00	0.00
4,700.00	32.68	334.90	4,075.38	2,010.13	-941.77	2,219.81	0.00	0.00	0.00
4,800.00	32.68	334.90	4,159.55	2,059.02	-964.68	2,273.80	0.00	0.00	0.00
4,900.00	32.68	334.90	4,243.72	2,107.91	-987.58	2,327.79	0.00	0.00	0.00
5,000.00	32.68	334.90	4,327.89	2,156.81	-1,010.49	2,381.79	0.00	0.00	0.00
5,100.00	32.68	334.90	4,412.06	2,205.70	-1,033.40	2,435.78	0.00	0.00	0.00
5,100.59	32.68	334.90	4,412.55	2,205.99	-1,033.53	2,436.10	0.00	0.00	0.00
<b>Start Drop -2.50</b>									
5,156.52	31.28	334.90	4,460.00	2,232.81	-1,046.10	2,465.72	2.50	-2.50	0.00
<b>OCRK</b>									
5,200.00	30.19	334.90	4,497.37	2,252.94	-1,055.53	2,487.94	2.50	-2.50	0.00
5,266.13	28.54	334.90	4,555.00	2,282.30	-1,069.29	2,520.37	2.50	-2.50	0.00
<b>UMVRD</b>									
5,300.00	27.69	334.90	4,584.87	2,296.76	-1,076.06	2,536.34	2.50	-2.50	0.00
5,400.00	25.19	334.90	4,674.40	2,337.08	-1,094.95	2,580.86	2.50	-2.50	0.00
5,500.00	22.69	334.90	4,765.79	2,373.83	-1,112.17	2,621.45	2.50	-2.50	0.00
5,600.00	20.19	334.90	4,858.86	2,406.93	-1,127.68	2,658.00	2.50	-2.50	0.00
5,700.00	17.69	334.90	4,953.43	2,436.33	-1,141.45	2,690.46	2.50	-2.50	0.00
5,800.00	15.19	334.90	5,049.34	2,461.96	-1,153.46	2,718.77	2.50	-2.50	0.00
5,900.00	12.69	334.90	5,146.38	2,483.78	-1,163.68	2,742.86	2.50	-2.50	0.00
6,000.00	10.19	334.90	5,244.39	2,501.74	-1,172.10	2,762.70	2.50	-2.50	0.00
6,100.00	7.69	334.90	5,343.16	2,515.82	-1,178.69	2,778.25	2.50	-2.50	0.00
6,200.00	5.19	334.90	5,442.52	2,525.98	-1,183.46	2,789.47	2.50	-2.50	0.00
6,300.00	2.69	334.90	5,542.28	2,532.21	-1,186.37	2,796.35	2.50	-2.50	0.00
6,400.00	0.19	334.90	5,642.24	2,534.49	-1,187.44	2,798.87	2.50	-2.50	0.00
6,407.74	0.00	334.90	5,649.98	2,534.50	-1,187.45	2,798.88	2.50	-2.50	0.00
<b>Start 2535.00 hold at 6407.74 MD</b>									
6,407.76	0.00	0.00	5,650.00	2,534.50	-1,187.45	2,798.88	2.50	-2.50	0.00
<b>KMVGAS - PA 322-24 BTV</b>									
6,500.00	0.00	0.00	5,742.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
6,600.00	0.00	0.00	5,842.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
6,700.00	0.00	0.00	5,942.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
6,800.00	0.00	0.00	6,042.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
6,900.00	0.00	0.00	6,142.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
7,000.00	0.00	0.00	6,242.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
7,100.00	0.00	0.00	6,342.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
7,200.00	0.00	0.00	6,442.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
7,300.00	0.00	0.00	6,542.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
7,400.00	0.00	0.00	6,642.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
7,500.00	0.00	0.00	6,742.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
7,600.00	0.00	0.00	6,842.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
7,700.00	0.00	0.00	6,942.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
7,800.00	0.00	0.00	7,042.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
7,842.76	0.00	0.00	7,085.00	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
<b>CME0</b>									
7,900.00	0.00	0.00	7,142.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
8,000.00	0.00	0.00	7,242.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
8,100.00	0.00	0.00	7,342.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
8,200.00	0.00	0.00	7,442.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
8,300.00	0.00	0.00	7,542.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
8,400.00	0.00	0.00	7,642.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00

<b>Database:</b>	Grand Junction District	<b>Local Co-ordinate Reference:</b>	Well PA 322-24 - Slot PA 322-24 (B7)
<b>Company:</b>	TEP Rocky Mountain LLC	<b>TVD Reference:</b>	GL 5371' & RKB 24' @ 5395.00usft
<b>Project:</b>	Garfield County, CO NAD83	<b>MD Reference:</b>	GL 5371' & RKB 24' @ 5395.00usft
<b>Site:</b>	PA 34-24 Pad	<b>North Reference:</b>	True
<b>Well:</b>	PA 322-24	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1 28Dec2017 mmsdi		

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)
8,500.00	0.00	0.00	7,742.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
8,600.00	0.00	0.00	7,842.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
8,700.00	0.00	0.00	7,942.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
8,792.76	0.00	0.00	8,035.00	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
RLNS									
8,800.00	0.00	0.00	8,042.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
8,900.00	0.00	0.00	8,142.24	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
8,942.74	0.00	0.00	8,184.98	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
TD at 8942.74									
8,942.76	0.00	0.00	8,185.00	2,534.50	-1,187.45	2,798.88	0.00	0.00	0.00
TD - PA 322-24 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
PA 322-24 BTV - plan hits target center - Circle (radius 50.00)	0.00	0.00	5,650.00	2,534.50	-1,187.45	1,620,968.30	2,309,346.10	39.5127870	-107.9482677
PA 322-24 PBHL - plan hits target center - Point	0.00	0.00	8,185.00	2,534.50	-1,187.45	1,620,968.30	2,309,346.10	39.5127870	-107.9482677

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,100.00	1,045.24	9 5/8" Casing @ 1100' MD	9.62	13.50	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,412.53	2,150.00	G Sand		0.00	0.00	
2,436.29	2,170.00	G Sand Base		0.00	0.00	
5,156.52	4,460.00	OCRK		0.00	0.00	
5,266.13	4,555.00	UMVRD		0.00	0.00	
6,407.76	5,650.00	KMVGAS		0.00	0.00	
7,842.76	7,085.00	CMEO		0.00	0.00	
8,792.76	8,035.00	RLNS		0.00	0.00	
8,942.76	8,185.00	TD		0.00	0.00	

<b>Database:</b>	Grand Junction District	<b>Local Co-ordinate Reference:</b>	Well PA 322-24 - Slot PA 322-24 (B7)
<b>Company:</b>	TEP Rocky Mountain LLC	<b>TVD Reference:</b>	GL 5371' & RKB 24' @ 5395.00usft
<b>Project:</b>	Garfield County, CO NAD83	<b>MD Reference:</b>	GL 5371' & RKB 24' @ 5395.00usft
<b>Site:</b>	PA 34-24 Pad	<b>North Reference:</b>	True
<b>Well:</b>	PA 322-24	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1 28Dec2017 mmsdi		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
135.00	135.00	0.00	0.00	Start Build 3.50
1,068.68	1,018.88	234.65	-109.94	Start 4031.91 hold at 1068.68 MD
5,100.59	4,412.55	2,205.99	-1,033.53	Start Drop -2.50
6,407.74	5,649.98	2,534.50	-1,187.45	Start 2535.00 hold at 6407.74 MD
8,942.74	8,184.98	2,534.50	-1,187.45	TD at 8942.74