

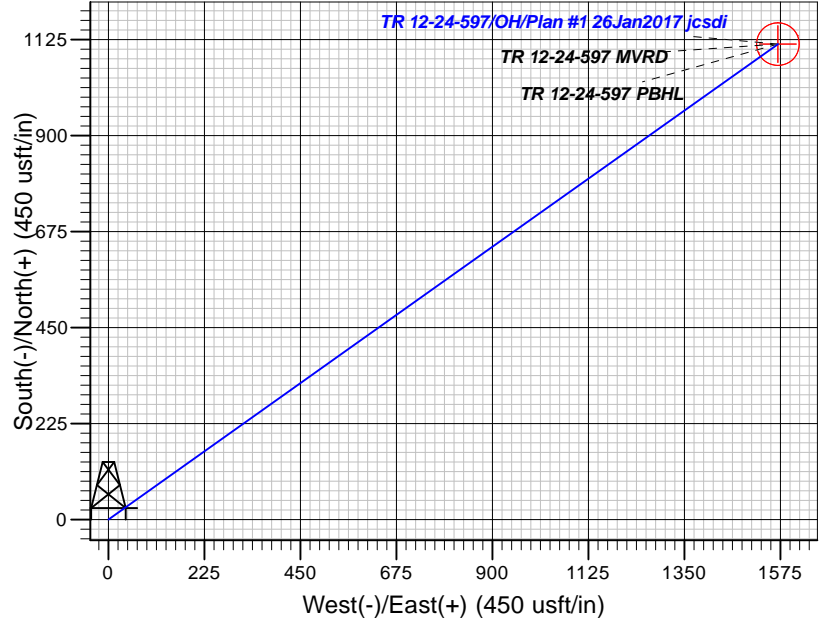
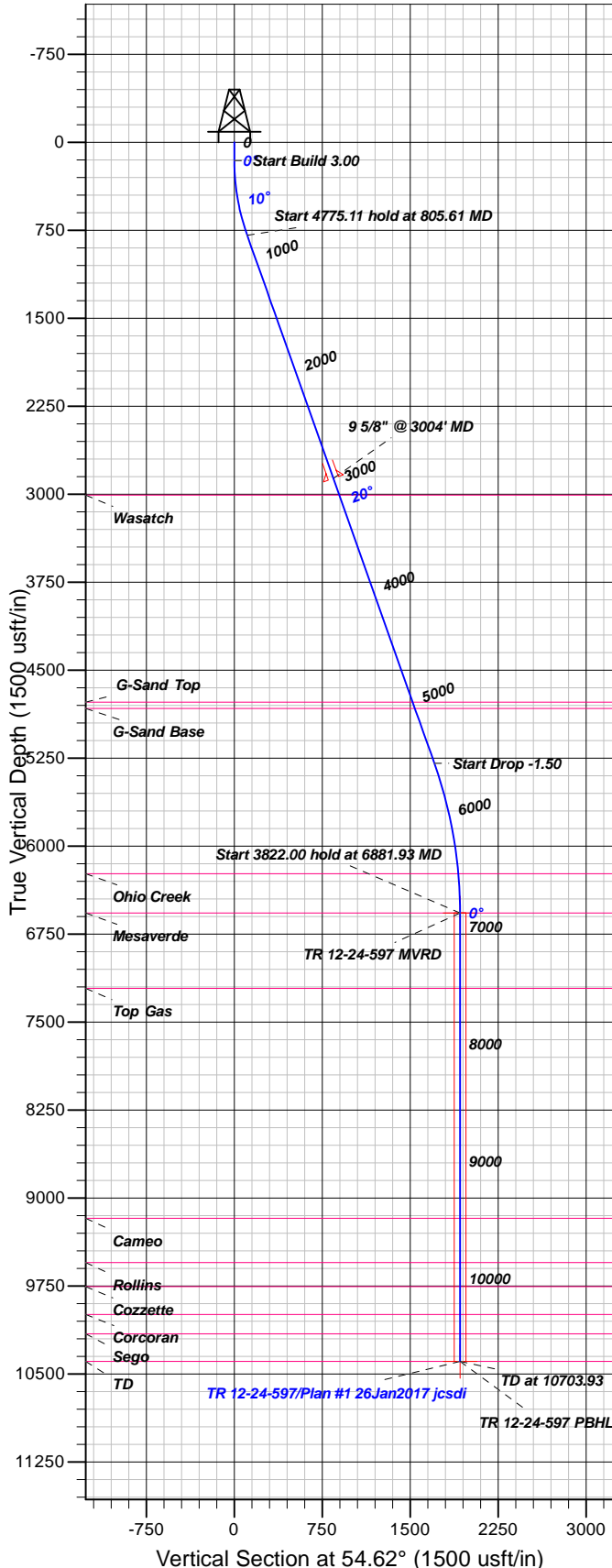
## Well Details: TR 12-24-597

GL 8545.20' & RKB 24' @ 8569.20usft (H&P 318)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1654899.00	2227644.00	39.5994964	-108.2413519	A12 (TR 12-24-597)

**T M** Azimuths to True North  
Magnetic North: 9.80°

Magnetic Field  
Strength: 51645.7snT  
Dip Angle: 65.93°  
Date: 1/26/2017  
Model: HDGM



### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3008.00	3155.55	Wasatch
4772.00	5027.10	G-Sand Top
4826.00	5084.39	G-Sand Base
6235.00	6546.50	Ohio Creek
6570.00	6881.93	Mesaverde
7212.00	7523.93	Top Gas
9173.00	9484.93	Cameo
9550.00	9861.93	Rollins
9755.00	10066.93	Cozzette
9992.00	10303.93	Corcoran
10157.00	10468.93	Sego
10392.00	10703.93	TD

Plan: Plan #1 26Jan2017 jcsdi

15:20, January 27 2017  
Created By: Janie Collins

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
2865.16	3004.00	9 5/8" @ 3004' MD	9.62

### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	155.00	0.00	0.00	155.00	0.00	0.00	0.00	0.00	0.00	
3	805.61	19.52	54.62	793.10	63.54	89.49	3.00	54.62	109.75	
4	5580.72	19.52	54.62	5293.81	987.18	1390.32	0.00	0.00	1705.14	
5	6881.93	0.00	0.00	6570.00	1114.25	1569.30	1.50	180.00	1924.64	TR 12-24-597 MVRD
6	10703.93	0.00	0.00	10392.00	1114.25	1569.30	0.00	0.00	1924.64	TR 12-24-597 PBHL

### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
TR 12-24-597 MVRD 6570.00	1114.25	1569.30	1655965.40	2229246.20	39.6025552	-108.2357825	Circle (Radius: 50.00)	
- plan hits target center								
TR 12-24-597 PBHL 10392.00	1114.25	1569.30	1655965.40	2229246.20	39.6025552	-108.2357825	Point	
- plan hits target center								



# **TEP Rocky Mountain LLC**

**Garfield County, CO NAD83**

**TR 32-23-597 Pad**

**TR 12-24-597 - Slot A12 (TR 12-24-597)**

**OH**

**Plan: Plan #1 26Jan2017 jcsdi**

## **Standard Planning Report**

**27 January, 2017**



<b>Database:</b>	Grand Junction District	<b>Local Co-ordinate Reference:</b>	Well TR 12-24-597 - Slot A12 (TR 12-24-597)
<b>Company:</b>	TEP Rocky Mountain LLC	<b>TVD Reference:</b>	GL 8545.20' & RKB 24' @ 8569.20usft (H&P 318)
<b>Project:</b>	Garfield County, CO NAD83	<b>MD Reference:</b>	GL 8545.20' & RKB 24' @ 8569.20usft (H&P 318)
<b>Site:</b>	TR 32-23-597 Pad	<b>North Reference:</b>	True
<b>Well:</b>	TR 12-24-597	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1 26Jan2017 jcsdi		

<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>	TR 32-23-597 Pad			
<b>Site Position:</b>		<b>Northing:</b>	1,654,899.00 usft	<b>Latitude:</b> 39.5994964
<b>From:</b> Map		<b>Easting:</b>	2,227,644.00 usft	<b>Longitude:</b> -108.2413519
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13.20 in	<b>Grid Convergence:</b> -1.73 °

<b>Well</b>	TR 12-24-597 - Slot A12 (TR 12-24-597)			
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b>	1,654,899.00 usft
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b>	2,227,644.00 usft
<b>Position Uncertainty</b>	0.00 usft		<b>Wellhead Elevation:</b>	0.00 usft
			<b>Ground Level:</b>	8,545.20 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	1/26/2017	9.80	65.93	51,646

<b>Design</b>	Plan #1 26Jan2017 jcsdi			
<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	54.62

<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	
155.00	0.00	0.00	155.00	0.00	0.00	0.00	0.00	0.00	0.00	
805.61	19.52	54.62	793.10	63.54	89.49	3.00	3.00	0.00	54.62	
5,580.72	19.52	54.62	5,293.81	987.18	1,390.32	0.00	0.00	0.00	0.00	
6,881.93	0.00	0.00	6,570.00	1,114.25	1,569.30	1.50	-1.50	0.00	180.00	TR 12-24-597 MVRD
10,703.93	0.00	0.00	10,392.00	1,114.25	1,569.30	0.00	0.00	0.00	0.00	TR 12-24-597 PBHL

<b>Database:</b>	Grand Junction District	<b>Local Co-ordinate Reference:</b>	Well TR 12-24-597 - Slot A12 (TR 12-24-597)
<b>Company:</b>	TEP Rocky Mountain LLC	<b>TVD Reference:</b>	GL 8545.20' & RKB 24' @ 8569.20usft (H&P 318)
<b>Project:</b>	Garfield County, CO NAD83	<b>MD Reference:</b>	GL 8545.20' & RKB 24' @ 8569.20usft (H&P 318)
<b>Site:</b>	TR 32-23-597 Pad	<b>North Reference:</b>	True
<b>Well:</b>	TR 12-24-597	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1 26Jan2017 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	
155.00	0.00	0.00	155.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	1.35	54.62	200.00	0.31	0.43	0.53	3.00	3.00	0.00	
300.00	4.35	54.62	299.86	3.19	4.49	5.50	3.00	3.00	0.00	
400.00	7.35	54.62	399.33	9.09	12.80	15.69	3.00	3.00	0.00	
500.00	10.35	54.62	498.13	17.99	25.34	31.08	3.00	3.00	0.00	
600.00	13.35	54.62	595.98	29.88	42.08	51.61	3.00	3.00	0.00	
700.00	16.35	54.62	692.63	44.71	62.97	77.23	3.00	3.00	0.00	
800.00	19.35	54.62	787.81	62.46	87.96	107.88	3.00	3.00	0.00	
805.61	19.52	54.62	793.10	63.54	89.49	109.75	3.00	3.00	0.00	
900.00	19.52	54.62	882.06	81.80	115.20	141.29	0.00	0.00	0.00	
1,000.00	19.52	54.62	976.32	101.14	142.44	174.70	0.00	0.00	0.00	
1,100.00	19.52	54.62	1,070.57	120.48	169.68	208.11	0.00	0.00	0.00	
1,200.00	19.52	54.62	1,164.82	139.82	196.93	241.52	0.00	0.00	0.00	
1,300.00	19.52	54.62	1,259.08	159.17	224.17	274.93	0.00	0.00	0.00	
1,400.00	19.52	54.62	1,353.33	178.51	251.41	308.34	0.00	0.00	0.00	
1,500.00	19.52	54.62	1,447.58	197.85	278.65	341.75	0.00	0.00	0.00	
1,600.00	19.52	54.62	1,541.84	217.20	305.89	375.16	0.00	0.00	0.00	
1,700.00	19.52	54.62	1,636.09	236.54	333.14	408.57	0.00	0.00	0.00	
1,800.00	19.52	54.62	1,730.34	255.88	360.38	441.98	0.00	0.00	0.00	
1,900.00	19.52	54.62	1,824.60	275.22	387.62	475.39	0.00	0.00	0.00	
2,000.00	19.52	54.62	1,918.85	294.57	414.86	508.80	0.00	0.00	0.00	
2,100.00	19.52	54.62	2,013.10	313.91	442.10	542.21	0.00	0.00	0.00	
2,200.00	19.52	54.62	2,107.36	333.25	469.35	575.62	0.00	0.00	0.00	
2,300.00	19.52	54.62	2,201.61	352.59	496.59	609.03	0.00	0.00	0.00	
2,400.00	19.52	54.62	2,295.86	371.94	523.83	642.44	0.00	0.00	0.00	
2,500.00	19.52	54.62	2,390.12	391.28	551.07	675.86	0.00	0.00	0.00	
2,599.99	19.52	54.62	2,484.37	410.62	578.31	709.27	0.00	0.00	0.00	
2,699.99	19.52	54.62	2,578.62	429.97	605.56	742.68	0.00	0.00	0.00	
2,799.99	19.52	54.62	2,672.88	449.31	632.80	776.09	0.00	0.00	0.00	
2,899.99	19.52	54.62	2,767.13	468.65	660.04	809.50	0.00	0.00	0.00	
2,999.99	19.52	54.62	2,861.38	487.99	687.28	842.91	0.00	0.00	0.00	
3,004.00	19.52	54.62	2,865.16	488.77	688.37	844.25	0.00	0.00	0.00	
<b>9 5/8" @ 3004' MD</b>										
3,099.99	19.52	54.62	2,955.64	507.34	714.52	876.32	0.00	0.00	0.00	
3,155.55	19.52	54.62	3,008.00	518.08	729.66	894.88	0.00	0.00	0.00	
<b>Wasatch</b>										
3,199.99	19.52	54.62	3,049.89	526.68	741.77	909.73	0.00	0.00	0.00	
3,299.99	19.52	54.62	3,144.14	546.02	769.01	943.14	0.00	0.00	0.00	
3,399.99	19.52	54.62	3,238.40	565.36	796.25	976.55	0.00	0.00	0.00	
3,499.99	19.52	54.62	3,332.65	584.71	823.49	1,009.96	0.00	0.00	0.00	
3,599.99	19.52	54.62	3,426.90	604.05	850.73	1,043.37	0.00	0.00	0.00	
3,699.99	19.52	54.62	3,521.16	623.39	877.98	1,076.78	0.00	0.00	0.00	
3,799.99	19.52	54.62	3,615.41	642.74	905.22	1,110.19	0.00	0.00	0.00	
3,899.99	19.52	54.62	3,709.66	662.08	932.46	1,143.60	0.00	0.00	0.00	
3,999.99	19.52	54.62	3,803.92	681.42	959.70	1,177.01	0.00	0.00	0.00	
4,099.99	19.52	54.62	3,898.17	700.76	986.94	1,210.42	0.00	0.00	0.00	
4,199.99	19.52	54.62	3,992.42	720.11	1,014.19	1,243.84	0.00	0.00	0.00	
4,299.99	19.52	54.62	4,086.68	739.45	1,041.43	1,277.25	0.00	0.00	0.00	
4,399.99	19.52	54.62	4,180.93	758.79	1,068.67	1,310.66	0.00	0.00	0.00	
4,499.99	19.52	54.62	4,275.18	778.14	1,095.91	1,344.07	0.00	0.00	0.00	

<b>Database:</b>	Grand Junction District	<b>Local Co-ordinate Reference:</b>	Well TR 12-24-597 - Slot A12 (TR 12-24-597)
<b>Company:</b>	TEP Rocky Mountain LLC	<b>TVD Reference:</b>	GL 8545.20' & RKB 24' @ 8569.20usft (H&P 318)
<b>Project:</b>	Garfield County, CO NAD83	<b>MD Reference:</b>	GL 8545.20' & RKB 24' @ 8569.20usft (H&P 318)
<b>Site:</b>	TR 32-23-597 Pad	<b>North Reference:</b>	True
<b>Well:</b>	TR 12-24-597	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1 26Jan2017 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)	
4,599.99	19.52	54.62	4,369.44	797.48	1,123.15	1,377.48	0.00	0.00	0.00	
4,699.99	19.52	54.62	4,463.69	816.82	1,150.40	1,410.89	0.00	0.00	0.00	
4,799.99	19.52	54.62	4,557.94	836.16	1,177.64	1,444.30	0.00	0.00	0.00	
4,899.99	19.52	54.62	4,652.20	855.51	1,204.88	1,477.71	0.00	0.00	0.00	
4,999.99	19.52	54.62	4,746.45	874.85	1,232.12	1,511.12	0.00	0.00	0.00	
5,027.10	19.52	54.62	4,772.00	880.09	1,239.51	1,520.18	0.00	0.00	0.00	
<b>G-Sand Top</b>										
5,084.39	19.52	54.62	4,826.00	891.17	1,255.11	1,539.32	0.00	0.00	0.00	
<b>G-Sand Base</b>										
5,099.99	19.52	54.62	4,840.70	894.19	1,259.36	1,544.53	0.00	0.00	0.00	
5,199.99	19.52	54.62	4,934.96	913.53	1,286.61	1,577.94	0.00	0.00	0.00	
5,299.99	19.52	54.62	5,029.21	932.88	1,313.85	1,611.35	0.00	0.00	0.00	
5,399.99	19.52	54.62	5,123.46	952.22	1,341.09	1,644.76	0.00	0.00	0.00	
5,499.99	19.52	54.62	5,217.72	971.56	1,368.33	1,678.17	0.00	0.00	0.00	
5,580.72	19.52	54.62	5,293.81	987.18	1,390.32	1,705.15	0.00	0.00	0.00	
5,599.99	19.23	54.62	5,311.99	990.88	1,395.54	1,711.54	1.50	-1.50	0.00	
5,699.99	17.73	54.62	5,406.83	1,009.23	1,421.38	1,743.23	1.50	-1.50	0.00	
5,799.99	16.23	54.62	5,502.47	1,026.13	1,445.19	1,772.43	1.50	-1.50	0.00	
5,899.99	14.73	54.62	5,598.84	1,041.59	1,466.95	1,799.12	1.50	-1.50	0.00	
5,999.99	13.23	54.62	5,695.87	1,055.57	1,486.65	1,823.28	1.50	-1.50	0.00	
6,099.99	11.73	54.62	5,793.51	1,068.08	1,504.26	1,844.89	1.50	-1.50	0.00	
6,199.99	10.23	54.62	5,891.67	1,079.11	1,519.79	1,863.93	1.50	-1.50	0.00	
6,299.99	8.73	54.62	5,990.30	1,088.64	1,533.22	1,880.40	1.50	-1.50	0.00	
6,399.99	7.23	54.62	6,089.33	1,096.68	1,544.54	1,894.28	1.50	-1.50	0.00	
6,499.99	5.73	54.62	6,188.69	1,103.21	1,553.74	1,905.56	1.50	-1.50	0.00	
6,546.50	5.03	54.62	6,235.00	1,105.73	1,557.30	1,909.93	1.50	-1.50	0.00	
<b>Ohio Creek</b>										
6,599.99	4.23	54.62	6,288.31	1,108.23	1,560.82	1,914.24	1.50	-1.50	0.00	
6,699.99	2.73	54.62	6,388.12	1,111.75	1,565.76	1,920.31	1.50	-1.50	0.00	
6,799.99	1.23	54.62	6,488.06	1,113.75	1,568.58	1,923.76	1.50	-1.50	0.00	
6,881.93	0.00	0.00	6,570.00	1,114.25	1,569.30	1,924.64	1.50	-1.50	-66.66	
<b>Mesaverde - TR 12-24-597 MVRD</b>										
6,899.99	0.00	0.00	6,588.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
6,999.99	0.00	0.00	6,688.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
7,099.99	0.00	0.00	6,788.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
7,199.99	0.00	0.00	6,888.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
7,299.99	0.00	0.00	6,988.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
7,399.99	0.00	0.00	7,088.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
7,499.99	0.00	0.00	7,188.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
7,523.93	0.00	0.00	7,212.00	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
<b>Top Gas</b>										
7,599.98	0.00	0.00	7,288.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
7,699.98	0.00	0.00	7,388.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
7,799.98	0.00	0.00	7,488.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
7,899.98	0.00	0.00	7,588.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
7,999.98	0.00	0.00	7,688.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
8,099.98	0.00	0.00	7,788.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
8,199.98	0.00	0.00	7,888.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
8,299.98	0.00	0.00	7,988.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
8,399.98	0.00	0.00	8,088.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
8,499.98	0.00	0.00	8,188.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	

<b>Database:</b>	Grand Junction District	<b>Local Co-ordinate Reference:</b>	Well TR 12-24-597 - Slot A12 (TR 12-24-597)
<b>Company:</b>	TEP Rocky Mountain LLC	<b>TVD Reference:</b>	GL 8545.20' & RKB 24' @ 8569.20usft (H&P 318)
<b>Project:</b>	Garfield County, CO NAD83	<b>MD Reference:</b>	GL 8545.20' & RKB 24' @ 8569.20usft (H&P 318)
<b>Site:</b>	TR 32-23-597 Pad	<b>North Reference:</b>	True
<b>Well:</b>	TR 12-24-597	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1 26Jan2017 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)	
8,599.98	0.00	0.00	8,288.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
8,699.98	0.00	0.00	8,388.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
8,799.98	0.00	0.00	8,488.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
8,899.98	0.00	0.00	8,588.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
8,999.98	0.00	0.00	8,688.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
9,099.98	0.00	0.00	8,788.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
9,199.98	0.00	0.00	8,888.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
9,299.98	0.00	0.00	8,988.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
9,399.98	0.00	0.00	9,088.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
9,484.93	0.00	0.00	9,173.00	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
<b>Cameo</b>										
9,499.98	0.00	0.00	9,188.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
9,599.98	0.00	0.00	9,288.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
9,699.98	0.00	0.00	9,388.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
9,799.98	0.00	0.00	9,488.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
9,861.93	0.00	0.00	9,550.00	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
<b>Rollins</b>										
9,899.98	0.00	0.00	9,588.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
9,999.98	0.00	0.00	9,688.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
10,066.93	0.00	0.00	9,755.00	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
<b>Cozzette</b>										
10,099.98	0.00	0.00	9,788.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
10,199.98	0.00	0.00	9,888.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
10,299.98	0.00	0.00	9,988.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
10,303.93	0.00	0.00	9,992.00	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
<b>Corcoran</b>										
10,399.98	0.00	0.00	10,088.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
10,468.93	0.00	0.00	10,157.00	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
<b>Sego</b>										
10,499.98	0.00	0.00	10,188.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
10,599.98	0.00	0.00	10,288.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
10,699.98	0.00	0.00	10,388.05	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
10,703.93	0.00	0.00	10,392.00	1,114.25	1,569.30	1,924.64	0.00	0.00	0.00	
<b>TD - TR 12-24-597 PBHL</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										
TR 12-24-597 MVRD	0.00	0.00	6,570.00	1,114.25	1,569.30	1,655,965.40	2,229,246.20	39.6025553	-108.2357826	
- plan hits target center										
- Circle (radius 50.00)										
TR 12-24-597 PBHL	0.00	0.00	10,392.00	1,114.25	1,569.30	1,655,965.40	2,229,246.20	39.6025553	-108.2357826	
- plan hits target center										
- Point										

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<b>Site:</b>	TR 32-23-597 Pad	<b>North Reference:</b>	True
<b>Well:</b>	TR 12-24-597	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #1 26Jan2017 jcsdi		

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
3,004.00	2,865.16	9 5/8" @ 3004' MD	9.62	9.62	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,155.55	3,008.00	Wasatch		0.00	0.00	
5,027.10	4,772.00	G-Sand Top		0.00	0.00	
5,084.39	4,826.00	G-Sand Base		0.00	0.00	
6,546.50	6,235.00	Ohio Creek		0.00	0.00	
6,881.93	6,570.00	Mesaverde		0.00	0.00	
7,523.93	7,212.00	Top Gas		0.00	0.00	
9,484.93	9,173.00	Cameo		0.00	0.00	
9,861.93	9,550.00	Rollins		0.00	0.00	
10,066.93	9,755.00	Cozzette		0.00	0.00	
10,303.93	9,992.00	Corcoran		0.00	0.00	
10,468.93	10,157.00	Sego		0.00	0.00	
10,703.93	10,392.00	TD		0.00	0.00	