

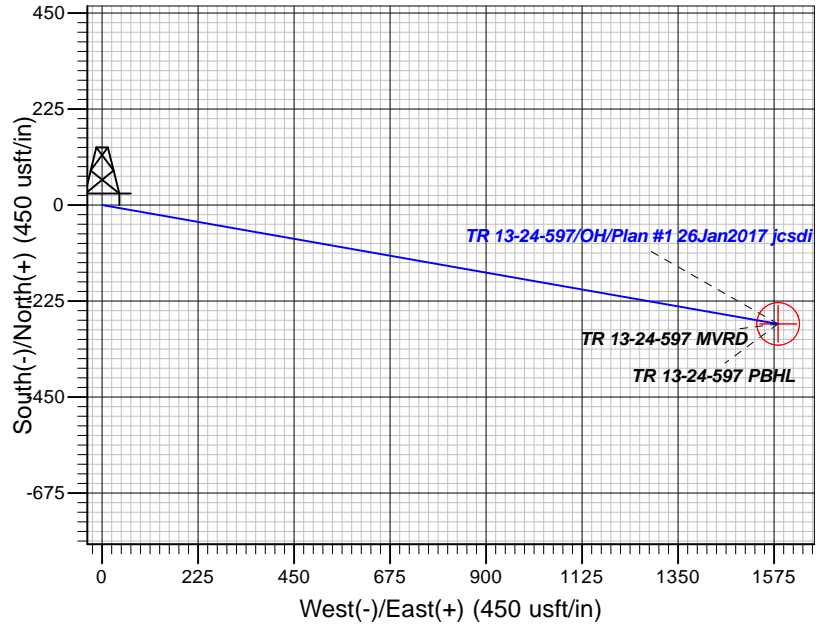
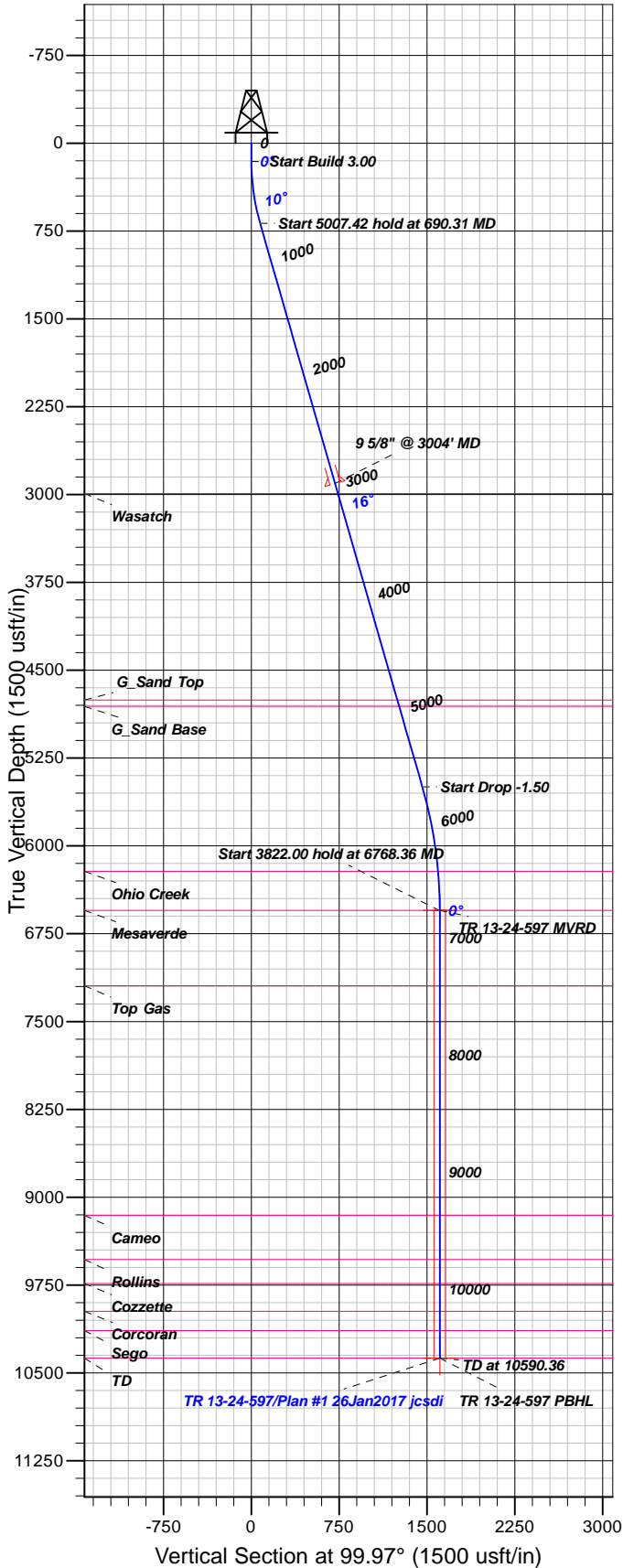
Well Details: TR 13-24-597

GL 8545.2' & RKB 24' @ 8569.20usft (H&P 318)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1654887.20	2227634.80	39.5994632	-108.2413833	A10 (TR 13-24-597)

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
2990.00	3090.65	Wasatch
4754.00	4926.29	G_Sand Top
4808.00	4982.48	G_Sand Base
6217.00	6432.93	Ohio Creek
6552.00	6768.36	Mesaverde
7194.00	7410.36	Top Gas
9155.00	9371.36	Cameo
9532.00	9748.36	Rollins
9737.00	9953.36	Cozzette
9974.00	10190.36	Corcoran
10139.00	10355.36	Sego
10374.00	10590.36	TD

Plan: Plan #1 26Jan2017 jcsdi

15:29, 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
2906.73	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	690.31	16.06	99.97	683.33	-12.90	73.41	3.00	99.97	74.53	
4	5697.73	16.06	99.97	5495.34	-252.71	1437.71	0.00	0.001459.75		
5	6768.36	0.00	0.00	6552.00	-278.52	1584.52	1.50	180.001608.82		TR 13-24-597 MVRD
6	10590.36	0.00	0.00	10374.00	-278.52	1584.52	0.00	0.001608.82		TR 13-24-597 PBHL

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
TR 13-24-597 MVRD	6552.00	-278.52	1584.52	1654561.00	2229210.20	39.5986984	-108.2357602	Circle (Radius: 50.00)
- plan hits target center								
TR 13-24-597 PBHL	10374.00	-278.52	1584.52	1654561.00	2229210.20	39.5986984	-108.2357602	Point
- plan hits target center								



# **TEP Rocky Mountain LLC**

**Garfield County, CO NAD83**

**TR 32-23-597 Pad**

**TR 13-24-597 - Slot A10 (TR 13-24-597)**

**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 13-24-597 - Slot A10 (TR 13-24-597)
<b>Company:</b>	TEP Rocky Mountain LLC	<b>TVD Reference:</b>	GL 8545.2' & RKB 24' @ 8569.20usft (H&P 318)
<b>Project:</b>	Garfield County, CO NAD83	<b>MD Reference:</b>	GL 8545.2' & RKB 24' @ 8569.20usft (H&P 318)
<b>Site:</b>	TR 32-23-597 Pad	<b>North Reference:</b>	True
<b>Well:</b>	TR 13-24-597	<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 13-24-597 - Slot A10 (TR 13-24-597)			
<b>Well Position</b>	<b>+N/-S</b>	-12.07 usft	<b>Northing:</b>	1,654,887.20 usft
	<b>+E/-W</b>	-8.84 usft	<b>Easting:</b>	2,227,634.80 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	99.97

<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	
690.31	16.06	99.97	683.33	-12.90	73.41	3.00	3.00	0.00	99.97	
5,697.73	16.06	99.97	5,495.34	-252.71	1,437.71	0.00	0.00	0.00	0.00	
6,768.36	0.00	0.00	6,552.00	-278.52	1,584.52	1.50	-1.50	0.00	180.00	TR 13-24-597 MVRD
10,590.36	0.00	0.00	10,374.00	-278.52	1,584.52	0.00	0.00	0.00	0.00	TR 13-24-597 PBHL

<b>Database:</b>	Grand Junction District	<b>Local Co-ordinate Reference:</b>	Well TR 13-24-597 - Slot A10 (TR 13-24-597)
<b>Company:</b>	TEP Rocky Mountain LLC	<b>TVD Reference:</b>	GL 8545.2' & RKB 24' @ 8569.20usft (H&P 318)
<b>Project:</b>	Garfield County, CO NAD83	<b>MD Reference:</b>	GL 8545.2' & RKB 24' @ 8569.20usft (H&P 318)
<b>Site:</b>	TR 32-23-597 Pad	<b>North Reference:</b>	True
<b>Well:</b>	TR 13-24-597	<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	99.97	200.00	-0.09	0.52	0.53	3.00	3.00	0.00	
300.00	4.35	99.97	299.86	-0.95	5.42	5.50	3.00	3.00	0.00	
400.00	7.35	99.97	399.33	-2.72	15.46	15.69	3.00	3.00	0.00	
500.00	10.35	99.97	498.13	-5.38	30.61	31.08	3.00	3.00	0.00	
600.00	13.35	99.97	595.98	-8.93	50.83	51.61	3.00	3.00	0.00	
690.31	16.06	99.97	683.33	-12.90	73.41	74.53	3.00	3.00	0.00	
700.00	16.06	99.97	692.64	-13.37	76.04	77.21	0.00	0.00	0.00	
800.00	16.06	99.97	788.74	-18.16	103.29	104.87	0.00	0.00	0.00	
900.00	16.06	99.97	884.83	-22.94	130.54	132.54	0.00	0.00	0.00	
1,000.00	16.06	99.97	980.93	-27.73	157.78	160.20	0.00	0.00	0.00	
1,100.00	16.06	99.97	1,077.03	-32.52	185.03	187.86	0.00	0.00	0.00	
1,200.00	16.06	99.97	1,173.13	-37.31	212.27	215.53	0.00	0.00	0.00	
1,300.00	16.06	99.97	1,269.22	-42.10	239.52	243.19	0.00	0.00	0.00	
1,400.00	16.06	99.97	1,365.32	-46.89	266.76	270.85	0.00	0.00	0.00	
1,500.00	16.06	99.97	1,461.42	-51.68	294.01	298.52	0.00	0.00	0.00	
1,600.00	16.06	99.97	1,557.51	-56.47	321.26	326.18	0.00	0.00	0.00	
1,700.00	16.06	99.97	1,653.61	-61.26	348.50	353.84	0.00	0.00	0.00	
1,800.00	16.06	99.97	1,749.71	-66.05	375.75	381.51	0.00	0.00	0.00	
1,900.00	16.06	99.97	1,845.81	-70.84	402.99	409.17	0.00	0.00	0.00	
2,000.00	16.06	99.97	1,941.90	-75.63	430.24	436.83	0.00	0.00	0.00	
2,100.00	16.06	99.97	2,038.00	-80.41	457.48	464.50	0.00	0.00	0.00	
2,200.00	16.06	99.97	2,134.10	-85.20	484.73	492.16	0.00	0.00	0.00	
2,300.00	16.06	99.97	2,230.20	-89.99	511.98	519.82	0.00	0.00	0.00	
2,400.00	16.06	99.97	2,326.29	-94.78	539.22	547.49	0.00	0.00	0.00	
2,500.00	16.06	99.97	2,422.39	-99.57	566.47	575.15	0.00	0.00	0.00	
2,599.99	16.06	99.97	2,518.49	-104.36	593.71	602.81	0.00	0.00	0.00	
2,699.99	16.06	99.97	2,614.59	-109.15	620.96	630.48	0.00	0.00	0.00	
2,799.99	16.06	99.97	2,710.68	-113.94	648.20	658.14	0.00	0.00	0.00	
2,899.99	16.06	99.97	2,806.78	-118.73	675.45	685.80	0.00	0.00	0.00	
2,999.99	16.06	99.97	2,902.88	-123.52	702.69	713.47	0.00	0.00	0.00	
3,004.00	16.06	99.97	2,906.73	-123.71	703.79	714.58	0.00	0.00	0.00	
<b>9 5/8" @ 3004' MD</b>										
3,090.65	16.06	99.97	2,990.00	-127.86	727.40	738.55	0.00	0.00	0.00	
<b>Wasatch</b>										
3,099.99	16.06	99.97	2,998.98	-128.31	729.94	741.13	0.00	0.00	0.00	
3,199.99	16.06	99.97	3,095.07	-133.09	757.19	768.79	0.00	0.00	0.00	
3,299.99	16.06	99.97	3,191.17	-137.88	784.43	796.46	0.00	0.00	0.00	
3,399.99	16.06	99.97	3,287.27	-142.67	811.68	824.12	0.00	0.00	0.00	
3,499.99	16.06	99.97	3,383.36	-147.46	838.92	851.78	0.00	0.00	0.00	
3,599.99	16.06	99.97	3,479.46	-152.25	866.17	879.45	0.00	0.00	0.00	
3,699.99	16.06	99.97	3,575.56	-157.04	893.41	907.11	0.00	0.00	0.00	
3,799.99	16.06	99.97	3,671.66	-161.83	920.66	934.77	0.00	0.00	0.00	
3,899.99	16.06	99.97	3,767.75	-166.62	947.91	962.44	0.00	0.00	0.00	
3,999.99	16.06	99.97	3,863.85	-171.41	975.15	990.10	0.00	0.00	0.00	
4,099.99	16.06	99.97	3,959.95	-176.20	1,002.40	1,017.76	0.00	0.00	0.00	
4,199.99	16.06	99.97	4,056.05	-180.99	1,029.64	1,045.43	0.00	0.00	0.00	
4,299.99	16.06	99.97	4,152.14	-185.77	1,056.89	1,073.09	0.00	0.00	0.00	
4,399.99	16.06	99.97	4,248.24	-190.56	1,084.13	1,100.75	0.00	0.00	0.00	
4,499.99	16.06	99.97	4,344.34	-195.35	1,111.38	1,128.42	0.00	0.00	0.00	

<b>Database:</b>	Grand Junction District	<b>Local Co-ordinate Reference:</b>	Well TR 13-24-597 - Slot A10 (TR 13-24-597)
<b>Company:</b>	TEP Rocky Mountain LLC	<b>TVD Reference:</b>	GL 8545.2' & RKB 24' @ 8569.20usft (H&P 318)
<b>Project:</b>	Garfield County, CO NAD83	<b>MD Reference:</b>	GL 8545.2' & RKB 24' @ 8569.20usft (H&P 318)
<b>Site:</b>	TR 32-23-597 Pad	<b>North Reference:</b>	True
<b>Well:</b>	TR 13-24-597	<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	16.06	99.97	4,440.44	-200.14	1,138.63	1,156.08	0.00	0.00	0.00
4,699.99	16.06	99.97	4,536.53	-204.93	1,165.87	1,183.74	0.00	0.00	0.00
4,799.99	16.06	99.97	4,632.63	-209.72	1,193.12	1,211.41	0.00	0.00	0.00
4,899.99	16.06	99.97	4,728.73	-214.51	1,220.36	1,239.07	0.00	0.00	0.00
4,926.29	16.06	99.97	4,754.00	-215.77	1,227.53	1,246.35	0.00	0.00	0.00
<b>G_Sand Top</b>									
4,982.48	16.06	99.97	4,808.00	-218.46	1,242.84	1,261.89	0.00	0.00	0.00
<b>G_Sand Base</b>									
4,999.99	16.06	99.97	4,824.82	-219.30	1,247.61	1,266.73	0.00	0.00	0.00
5,099.99	16.06	99.97	4,920.92	-224.09	1,274.85	1,294.40	0.00	0.00	0.00
5,199.99	16.06	99.97	5,017.02	-228.88	1,302.10	1,322.06	0.00	0.00	0.00
5,299.99	16.06	99.97	5,113.12	-233.67	1,329.34	1,349.72	0.00	0.00	0.00
5,399.99	16.06	99.97	5,209.21	-238.45	1,356.59	1,377.39	0.00	0.00	0.00
5,499.99	16.06	99.97	5,305.31	-243.24	1,383.84	1,405.05	0.00	0.00	0.00
5,599.99	16.06	99.97	5,401.41	-248.03	1,411.08	1,432.72	0.00	0.00	0.00
5,697.73	16.06	99.97	5,495.34	-252.71	1,437.71	1,459.75	0.00	0.00	0.00
5,699.99	16.03	99.97	5,497.51	-252.82	1,438.33	1,460.38	1.50	-1.50	0.00
5,799.99	14.53	99.97	5,593.97	-257.38	1,464.27	1,486.72	1.50	-1.50	0.00
5,899.99	13.03	99.97	5,691.09	-261.50	1,487.73	1,510.53	1.50	-1.50	0.00
5,999.99	11.53	99.97	5,788.80	-265.19	1,508.67	1,531.79	1.50	-1.50	0.00
6,099.99	10.03	99.97	5,887.04	-268.42	1,527.08	1,550.49	1.50	-1.50	0.00
6,199.99	8.53	99.97	5,985.72	-271.21	1,542.95	1,566.61	1.50	-1.50	0.00
6,299.99	7.03	99.97	6,084.80	-273.55	1,556.28	1,580.14	1.50	-1.50	0.00
6,399.99	5.53	99.97	6,184.20	-275.45	1,567.04	1,591.07	1.50	-1.50	0.00
6,432.93	5.03	99.97	6,217.00	-275.97	1,570.03	1,594.10	1.50	-1.50	0.00
<b>Ohio Creek</b>									
6,499.99	4.03	99.97	6,283.85	-276.89	1,575.24	1,599.39	1.50	-1.50	0.00
6,599.99	2.53	99.97	6,383.68	-277.88	1,580.87	1,605.11	1.50	-1.50	0.00
6,699.99	1.03	99.97	6,483.63	-278.41	1,583.92	1,608.20	1.50	-1.50	0.00
6,768.36	0.00	0.00	6,552.00	-278.52	1,584.52	1,608.82	1.50	-1.50	0.00
<b>Mesaverde - TR 13-24-597 MVRD</b>									
6,799.99	0.00	0.00	6,583.63	-278.52	1,584.52	1,608.82	0.00	0.00	0.00
6,899.99	0.00	0.00	6,683.63	-278.52	1,584.52	1,608.82	0.00	0.00	0.00
6,999.99	0.00	0.00	6,783.63	-278.52	1,584.52	1,608.82	0.00	0.00	0.00
7,099.99	0.00	0.00	6,883.63	-278.52	1,584.52	1,608.82	0.00	0.00	0.00
7,199.99	0.00	0.00	6,983.63	-278.52	1,584.52	1,608.82	0.00	0.00	0.00
7,299.99	0.00	0.00	7,083.63	-278.52	1,584.52	1,608.82	0.00	0.00	0.00
7,399.99	0.00	0.00	7,183.63	-278.52	1,584.52	1,608.82	0.00	0.00	0.00
7,410.36	0.00	0.00	7,194.00	-278.52	1,584.52	1,608.82	0.00	0.00	0.00
<b>Top Gas</b>									
7,499.99	0.00	0.00	7,283.63	-278.52	1,584.52	1,608.82	0.00	0.00	0.00
7,599.98	0.00	0.00	7,383.63	-278.52	1,584.52	1,608.82	0.00	0.00	0.00
7,699.98	0.00	0.00	7,483.63	-278.52	1,584.52	1,608.82	0.00	0.00	0.00
7,799.98	0.00	0.00	7,583.63	-278.52	1,584.52	1,608.82	0.00	0.00	0.00
7,899.98	0.00	0.00	7,683.63	-278.52	1,584.52	1,608.82	0.00	0.00	0.00
7,999.98	0.00	0.00	7,783.63	-278.52	1,584.52	1,608.82	0.00	0.00	0.00
8,099.98	0.00	0.00	7,883.63	-278.52	1,584.52	1,608.82	0.00	0.00	0.00
8,199.98	0.00	0.00	7,983.63	-278.52	1,584.52	1,608.82	0.00	0.00	0.00
8,299.98	0.00	0.00	8,083.63	-278.52	1,584.52	1,608.82	0.00	0.00	0.00
8,399.98	0.00	0.00	8,183.63	-278.52	1,584.52	1,608.82	0.00	0.00	0.00
8,499.98	0.00	0.00	8,283.63	-278.52	1,584.52	1,608.82	0.00	0.00	0.00

<b>Database:</b>	Grand Junction District	<b>Local Co-ordinate Reference:</b>	Well TR 13-24-597 - Slot A10 (TR 13-24-597)
<b>Company:</b>	TEP Rocky Mountain LLC	<b>TVD Reference:</b>	GL 8545.2' & RKB 24' @ 8569.20usft (H&P 318)
<b>Project:</b>	Garfield County, CO NAD83	<b>MD Reference:</b>	GL 8545.2' & RKB 24' @ 8569.20usft (H&P 318)
<b>Site:</b>	TR 32-23-597 Pad	<b>North Reference:</b>	True
<b>Well:</b>	TR 13-24-597	<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	8,383.62	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
8,699.98	0.00	0.00	8,483.62	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
8,799.98	0.00	0.00	8,583.62	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
8,899.98	0.00	0.00	8,683.62	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
8,999.98	0.00	0.00	8,783.62	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
9,099.98	0.00	0.00	8,883.62	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
9,199.98	0.00	0.00	8,983.62	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
9,299.98	0.00	0.00	9,083.62	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
9,371.36	0.00	0.00	9,155.00	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
Cameo										
9,399.98	0.00	0.00	9,183.62	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
9,499.98	0.00	0.00	9,283.62	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
9,599.98	0.00	0.00	9,383.62	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
9,699.98	0.00	0.00	9,483.62	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
9,748.36	0.00	0.00	9,532.00	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
Rollins										
9,799.98	0.00	0.00	9,583.62	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
9,899.98	0.00	0.00	9,683.62	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
9,953.36	0.00	0.00	9,737.00	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
Cozzette										
9,999.98	0.00	0.00	9,783.62	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
10,099.98	0.00	0.00	9,883.62	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
10,190.36	0.00	0.00	9,974.00	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
Corcoran										
10,199.98	0.00	0.00	9,983.62	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
10,299.98	0.00	0.00	10,083.62	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
10,355.36	0.00	0.00	10,139.00	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
Sego										
10,399.98	0.00	0.00	10,183.62	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
10,499.98	0.00	0.00	10,283.62	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
10,590.36	0.00	0.00	10,374.00	-278.52	1,584.52	1,608.82	0.00	0.00	0.00	
TD - TR 13-24-597 PBHL										

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 13-24-597 MVRD	0.00	0.00	6,552.00	-278.52	1,584.52	1,654,561.00	2,229,210.20	39.5986985	-108.2357602
- plan hits target center									
- Circle (radius 50.00)									
TR 13-24-597 PBHL	0.00	0.00	10,374.00	-278.52	1,584.52	1,654,561.00	2,229,210.20	39.5986985	-108.2357602
- plan hits target center									
- Point									

<b>Database:</b>	Grand Junction District	<b>Local Co-ordinate Reference:</b>	Well TR 13-24-597 - Slot A10 (TR 13-24-597)
<b>Company:</b>	TEP Rocky Mountain LLC	<b>TVD Reference:</b>	GL 8545.2' & RKB 24' @ 8569.20usft (H&P 318)
<b>Project:</b>	Garfield County, CO NAD83	<b>MD Reference:</b>	GL 8545.2' & RKB 24' @ 8569.20usft (H&P 318)
<b>Site:</b>	TR 32-23-597 Pad	<b>North Reference:</b>	True
<b>Well:</b>	TR 13-24-597	<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	2,906.73	9 5/8" @ 3004' MD	9.62	9.62	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,090.65	2,990.00	Wasatch		0.00	0.00	
4,926.29	4,754.00	G_Sand Top		0.00	0.00	
4,982.48	4,808.00	G_Sand Base		0.00	0.00	
6,432.93	6,217.00	Ohio Creek		0.00	0.00	
6,768.36	6,552.00	Mesaverde		0.00	0.00	
7,410.36	7,194.00	Top Gas		0.00	0.00	
9,371.36	9,155.00	Cameo		0.00	0.00	
9,748.36	9,532.00	Rollins		0.00	0.00	
9,953.36	9,737.00	Cozzette		0.00	0.00	
10,190.36	9,974.00	Corcoran		0.00	0.00	
10,355.36	10,139.00	Sego		0.00	0.00	
10,590.36	10,374.00	TD		0.00	0.00	