

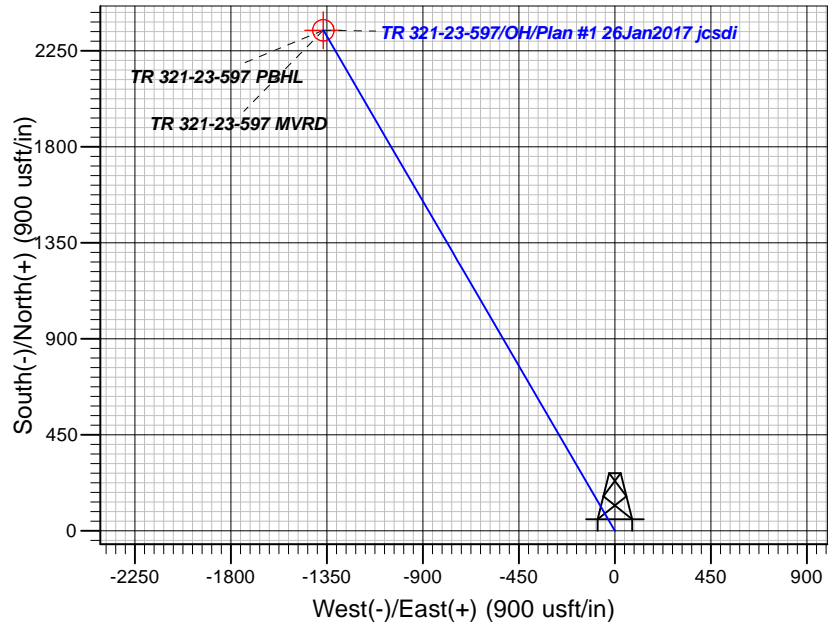
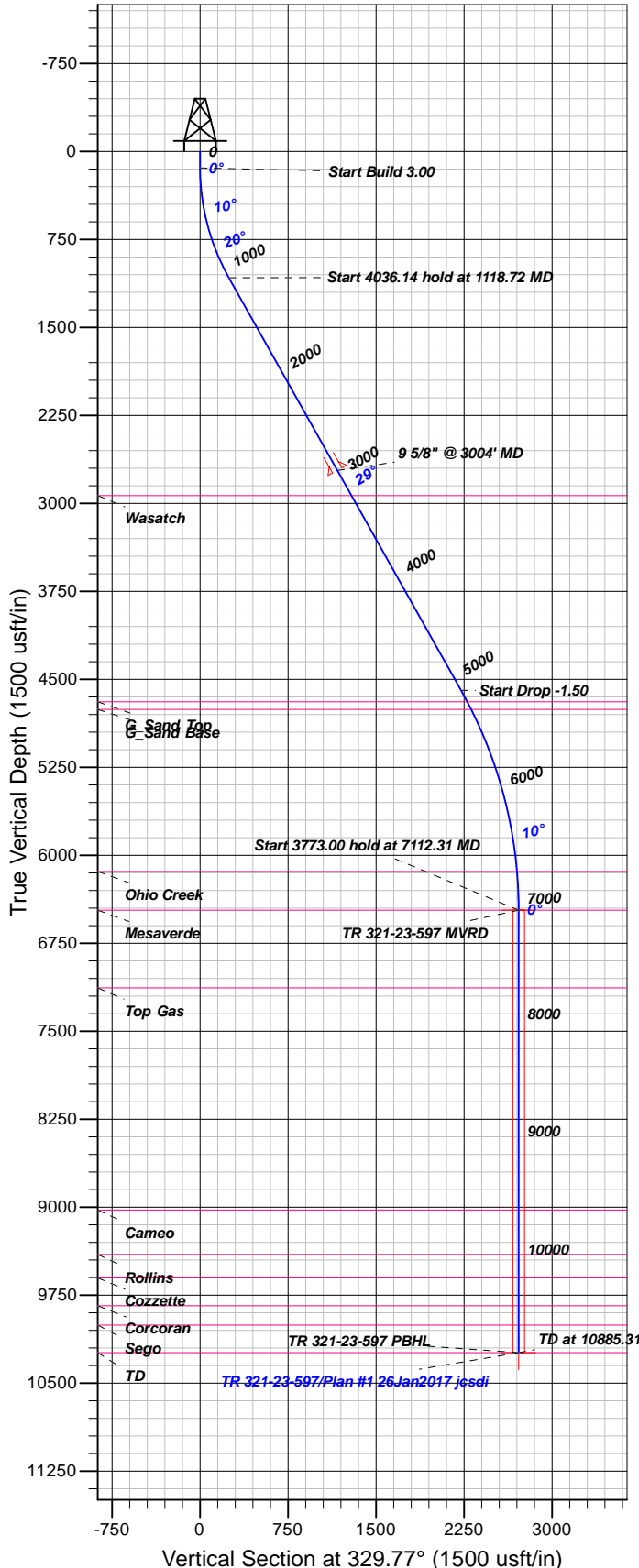
Well Details: TR 321-23-597

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

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1654905.20	2227636.20	39.5995127	-108.2413802	B12 (TR 321-23-597)

T M Azimuths to True North
 Magnetic North: 9.78°

Magnetic Field
 Strength: 51644.4snT
 Dip Angle: 65.93°
 Date: 1/26/2017
 Model: HDGM



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2934.00	3250.07	Wasatch
4691.00	5265.15	G_Sand Top
4756.00	5338.21	G_Sand Base
6137.00	6781.90	Ohio Creek
6467.00	7112.31	Mesaverde
7131.00	7776.31	Top Gas
9024.00	9669.31	Cameo
9403.00	10048.31	Rollins
9603.00	10248.31	Cozzette
9840.00	10485.31	Corcoran
10005.00	10650.31	Sego

Plan: Plan #1 26Jan2017 jcsdi

11:38, January 30 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
2719.54	3004.00	9 5/8" @ 3004' 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	140.00	0.00	0.00	140.00	0.00	0.00	0.00	0.00	0.00	
3	1118.72	29.36	329.77	1076.44	211.98	-123.52	3.00	329.77	245.34	
4	5154.87	29.36	329.77	4594.11	1921.87	-1119.87	0.00	0.002224.34		
5	7112.31	0.00	0.00	6467.00	2345.83	-1366.90	1.50	180.002715.02		TR 321-23-597 MVRD
6	10885.31	0.00	0.00	10240.00	2345.83	-1366.90	0.00	0.002715.02		TR 321-23-597 PBHL

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
TR 321-23-597 MVRD6467.00	2345.83	-1366.90	1657291.20	2226340.70	39.6059527	-108.2462315	Circle (Radius: 50.00)	
- plan hits target center								
TR 321-23-597 PBHL10240.00	2345.83	-1366.90	1657291.20	2226340.70	39.6059527	-108.2462315	Point	
- plan hits target center								



TEP Rocky Mountain LLC

Garfield County, CO NAD83

TR 32-23-597 Pad

TR 321-23-597 - Slot B12 (TR 321-23-597)

OH

Plan: Plan #1 26Jan2017 jcsdi

Standard Planning Report

30 January, 2017



Database:	Grand Junction District	Local Co-ordinate Reference:	Well TR 321-23-597 - Slot B12 (TR 321-23-597)
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 8545.20' & RKB 24' @ 8569.20usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 8545.20' & RKB 24' @ 8569.20usft (H&P 318)
Site:	TR 32-23-597 Pad	North Reference:	True
Well:	TR 321-23-597	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 26Jan2017 jcsdi		

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

Well	TR 321-23-597 - Slot B12 (TR 321-23-597)			
Well Position	+N/-S	5.96 usft	Northing:	1,654,905.20 usft
	+E/-W	-7.98 usft	Easting:	2,227,636.20 usft
Position Uncertainty	0.00 usft		Wellhead Elevation:	0.00 usft
			Ground Level:	8,545.20 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	1/26/2017	9.78	65.93	51,644

Design	Plan #1 26Jan2017 jcsdi			
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	329.77

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	
140.00	0.00	0.00	140.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,118.72	29.36	329.77	1,076.44	211.98	-123.52	3.00	3.00	0.00	329.77	
5,154.87	29.36	329.77	4,594.11	1,921.87	-1,119.87	0.00	0.00	0.00	0.00	
7,112.31	0.00	0.00	6,467.00	2,345.83	-1,366.90	1.50	-1.50	0.00	180.00	TR 321-23-597 MVRI
10,885.31	0.00	0.00	10,240.00	2,345.83	-1,366.90	0.00	0.00	0.00	0.00	TR 321-23-597 PBHL

Database:	Grand Junction District	Local Co-ordinate Reference:	Well TR 321-23-597 - Slot B12 (TR 321-23-597)
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 8545.20' & RKB 24' @ 8569.20usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 8545.20' & RKB 24' @ 8569.20usft (H&P 318)
Site:	TR 32-23-597 Pad	North Reference:	True
Well:	TR 321-23-597	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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
140.00	0.00	0.00	140.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	1.80	329.77	199.99	0.81	-0.47	0.94	3.00	3.00	0.00
300.00	4.80	329.77	299.81	5.79	-3.37	6.70	3.00	3.00	0.00
400.00	7.80	329.77	399.20	15.27	-8.90	17.67	3.00	3.00	0.00
500.00	10.80	329.77	497.87	29.23	-17.03	33.83	3.00	3.00	0.00
600.00	13.80	329.77	595.57	47.63	-27.76	55.13	3.00	3.00	0.00
700.00	16.80	329.77	692.01	70.43	-41.04	81.51	3.00	3.00	0.00
800.00	19.80	329.77	786.94	97.56	-56.85	112.91	3.00	3.00	0.00
900.00	22.80	329.77	880.10	128.94	-75.13	149.23	3.00	3.00	0.00
1,000.00	25.80	329.77	971.23	164.49	-95.85	190.38	3.00	3.00	0.00
1,100.00	28.80	329.77	1,060.08	204.11	-118.94	236.24	3.00	3.00	0.00
1,118.72	29.36	329.77	1,076.44	211.98	-123.52	245.34	3.00	3.00	0.00
1,200.00	29.36	329.77	1,147.28	246.41	-143.58	285.19	0.00	0.00	0.00
1,300.00	29.36	329.77	1,234.43	288.77	-168.27	334.22	0.00	0.00	0.00
1,400.00	29.36	329.77	1,321.59	331.14	-192.95	383.25	0.00	0.00	0.00
1,500.00	29.36	329.77	1,408.74	373.50	-217.64	432.29	0.00	0.00	0.00
1,600.00	29.36	329.77	1,495.90	415.87	-242.32	481.32	0.00	0.00	0.00
1,700.00	29.36	329.77	1,583.05	458.23	-267.01	530.35	0.00	0.00	0.00
1,800.00	29.36	329.77	1,670.21	500.60	-291.69	579.38	0.00	0.00	0.00
1,900.00	29.36	329.77	1,757.36	542.96	-316.38	628.41	0.00	0.00	0.00
2,000.00	29.36	329.77	1,844.51	585.33	-341.07	677.45	0.00	0.00	0.00
2,100.00	29.36	329.77	1,931.67	627.69	-365.75	726.48	0.00	0.00	0.00
2,200.00	29.36	329.77	2,018.82	670.06	-390.44	775.51	0.00	0.00	0.00
2,300.00	29.36	329.77	2,105.98	712.42	-415.12	824.54	0.00	0.00	0.00
2,400.00	29.36	329.77	2,193.13	754.78	-439.81	873.57	0.00	0.00	0.00
2,500.00	29.36	329.77	2,280.29	797.15	-464.49	922.61	0.00	0.00	0.00
2,600.00	29.36	329.77	2,367.44	839.51	-489.18	971.64	0.00	0.00	0.00
2,700.00	29.36	329.77	2,454.59	881.88	-513.87	1,020.67	0.00	0.00	0.00
2,800.00	29.36	329.77	2,541.75	924.24	-538.55	1,069.70	0.00	0.00	0.00
2,900.00	29.36	329.77	2,628.90	966.61	-563.24	1,118.73	0.00	0.00	0.00
3,000.00	29.36	329.77	2,716.06	1,008.97	-587.92	1,167.77	0.00	0.00	0.00
3,004.00	29.36	329.77	2,719.54	1,010.67	-588.91	1,169.73	0.00	0.00	0.00
9 5/8" @ 3004' MD									
3,100.00	29.36	329.77	2,803.21	1,051.34	-612.61	1,216.80	0.00	0.00	0.00
3,200.00	29.36	329.77	2,890.36	1,093.70	-637.29	1,265.83	0.00	0.00	0.00
3,250.07	29.36	329.77	2,934.00	1,114.91	-649.65	1,290.38	0.00	0.00	0.00
Wasatch									
3,300.00	29.36	329.77	2,977.52	1,136.07	-661.98	1,314.86	0.00	0.00	0.00
3,400.00	29.36	329.77	3,064.67	1,178.43	-686.67	1,363.90	0.00	0.00	0.00
3,500.00	29.36	329.77	3,151.83	1,220.80	-711.35	1,412.93	0.00	0.00	0.00
3,600.00	29.36	329.77	3,238.98	1,263.16	-736.04	1,461.96	0.00	0.00	0.00
3,700.00	29.36	329.77	3,326.14	1,305.53	-760.72	1,510.99	0.00	0.00	0.00
3,800.00	29.36	329.77	3,413.29	1,347.89	-785.41	1,560.02	0.00	0.00	0.00
3,900.00	29.36	329.77	3,500.44	1,390.26	-810.09	1,609.06	0.00	0.00	0.00
4,000.00	29.36	329.77	3,587.60	1,432.62	-834.78	1,658.09	0.00	0.00	0.00
4,100.00	29.36	329.77	3,674.75	1,474.98	-859.46	1,707.12	0.00	0.00	0.00
4,200.00	29.36	329.77	3,761.91	1,517.35	-884.15	1,756.15	0.00	0.00	0.00
4,300.00	29.36	329.77	3,849.06	1,559.71	-908.84	1,805.18	0.00	0.00	0.00
4,400.00	29.36	329.77	3,936.21	1,602.08	-933.52	1,854.22	0.00	0.00	0.00

Database:	Grand Junction District	Local Co-ordinate Reference:	Well TR 321-23-597 - Slot B12 (TR 321-23-597)
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 8545.20' & RKB 24' @ 8569.20usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 8545.20' & RKB 24' @ 8569.20usft (H&P 318)
Site:	TR 32-23-597 Pad	North Reference:	True
Well:	TR 321-23-597	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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)	
4,500.00	29.36	329.77	4,023.37	1,644.44	-958.21	1,903.25	0.00	0.00	0.00	
4,600.00	29.36	329.77	4,110.52	1,686.81	-982.89	1,952.28	0.00	0.00	0.00	
4,700.00	29.36	329.77	4,197.68	1,729.17	-1,007.58	2,001.31	0.00	0.00	0.00	
4,800.00	29.36	329.77	4,284.83	1,771.54	-1,032.26	2,050.34	0.00	0.00	0.00	
4,900.00	29.36	329.77	4,371.99	1,813.90	-1,056.95	2,099.38	0.00	0.00	0.00	
5,000.00	29.36	329.77	4,459.14	1,856.27	-1,081.64	2,148.41	0.00	0.00	0.00	
5,100.00	29.36	329.77	4,546.29	1,898.63	-1,106.32	2,197.44	0.00	0.00	0.00	
5,154.87	29.36	329.77	4,594.11	1,921.87	-1,119.87	2,224.34	0.00	0.00	0.00	
5,200.00	28.68	329.77	4,633.58	1,940.79	-1,130.89	2,246.24	1.50	-1.50	0.00	
5,265.15	27.71	329.77	4,691.00	1,967.39	-1,146.39	2,277.02	1.50	-1.50	0.00	
G_Sand Top										
5,300.00	27.18	329.77	4,721.92	1,981.27	-1,154.47	2,293.09	1.50	-1.50	0.00	
5,338.21	26.61	329.77	4,756.00	1,996.21	-1,163.18	2,310.37	1.50	-1.50	0.00	
G_Sand Base										
5,400.00	25.68	329.77	4,811.47	2,019.73	-1,176.89	2,337.60	1.50	-1.50	0.00	
5,500.00	24.18	329.77	4,902.14	2,056.16	-1,198.11	2,379.76	1.50	-1.50	0.00	
5,600.00	22.68	329.77	4,993.89	2,090.52	-1,218.13	2,419.53	1.50	-1.50	0.00	
5,700.00	21.18	329.77	5,086.65	2,122.79	-1,236.94	2,456.88	1.50	-1.50	0.00	
5,800.00	19.68	329.77	5,180.35	2,152.96	-1,254.52	2,491.80	1.50	-1.50	0.00	
5,900.00	18.18	329.77	5,274.94	2,180.99	-1,270.85	2,524.24	1.50	-1.50	0.00	
6,000.00	16.68	329.77	5,370.34	2,206.88	-1,285.94	2,554.20	1.50	-1.50	0.00	
6,100.00	15.18	329.77	5,466.50	2,230.60	-1,299.76	2,581.66	1.50	-1.50	0.00	
6,200.00	13.68	329.77	5,563.34	2,252.14	-1,312.31	2,606.58	1.50	-1.50	0.00	
6,300.00	12.18	329.77	5,660.80	2,271.48	-1,323.58	2,628.97	1.50	-1.50	0.00	
6,400.00	10.68	329.77	5,758.81	2,288.61	-1,333.56	2,648.79	1.50	-1.50	0.00	
6,500.00	9.18	329.77	5,857.31	2,303.51	-1,342.24	2,666.04	1.50	-1.50	0.00	
6,600.00	7.68	329.77	5,956.22	2,316.19	-1,349.63	2,680.71	1.50	-1.50	0.00	
6,700.00	6.18	329.77	6,055.49	2,326.62	-1,355.71	2,692.79	1.50	-1.50	0.00	
6,781.90	4.96	329.77	6,137.00	2,333.49	-1,359.71	2,700.74	1.50	-1.50	0.00	
Ohio Creek										
6,800.00	4.68	329.77	6,155.04	2,334.80	-1,360.47	2,702.26	1.50	-1.50	0.00	
6,900.00	3.18	329.77	6,254.80	2,340.73	-1,363.93	2,709.12	1.50	-1.50	0.00	
7,000.00	1.68	329.77	6,354.71	2,344.40	-1,366.07	2,713.37	1.50	-1.50	0.00	
7,100.00	0.18	329.77	6,454.69	2,345.81	-1,366.89	2,715.00	1.50	-1.50	0.00	
7,112.31	0.00	0.00	6,467.00	2,345.83	-1,366.90	2,715.02	1.50	-1.50	0.00	
Mesaverde - TR 321-23-597 MVRD										
7,200.00	0.00	0.00	6,554.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00	
7,300.00	0.00	0.00	6,654.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00	
7,400.00	0.00	0.00	6,754.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00	
7,500.00	0.00	0.00	6,854.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00	
7,600.00	0.00	0.00	6,954.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00	
7,700.00	0.00	0.00	7,054.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00	
7,776.31	0.00	0.00	7,131.00	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00	
Top Gas										
7,800.00	0.00	0.00	7,154.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00	
7,900.00	0.00	0.00	7,254.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00	
8,000.00	0.00	0.00	7,354.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00	
8,100.00	0.00	0.00	7,454.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00	
8,200.00	0.00	0.00	7,554.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00	
8,300.00	0.00	0.00	7,654.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00	

Database:	Grand Junction District	Local Co-ordinate Reference:	Well TR 321-23-597 - Slot B12 (TR 321-23-597)
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 8545.20' & RKB 24' @ 8569.20usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 8545.20' & RKB 24' @ 8569.20usft (H&P 318)
Site:	TR 32-23-597 Pad	North Reference:	True
Well:	TR 321-23-597	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	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)
8,400.00	0.00	0.00	7,754.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
8,500.00	0.00	0.00	7,854.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
8,600.00	0.00	0.00	7,954.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
8,700.00	0.00	0.00	8,054.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
8,800.00	0.00	0.00	8,154.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
8,900.00	0.00	0.00	8,254.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
9,000.00	0.00	0.00	8,354.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
9,100.00	0.00	0.00	8,454.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
9,200.00	0.00	0.00	8,554.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
9,300.00	0.00	0.00	8,654.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
9,400.00	0.00	0.00	8,754.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
9,500.00	0.00	0.00	8,854.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
9,600.00	0.00	0.00	8,954.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
9,669.31	0.00	0.00	9,024.00	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
Cameo									
9,700.00	0.00	0.00	9,054.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
9,800.00	0.00	0.00	9,154.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
9,900.00	0.00	0.00	9,254.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
10,000.00	0.00	0.00	9,354.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
10,048.31	0.00	0.00	9,403.00	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
Rollins									
10,100.00	0.00	0.00	9,454.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
10,200.00	0.00	0.00	9,554.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
10,248.31	0.00	0.00	9,603.00	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
Cozzette									
10,300.00	0.00	0.00	9,654.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
10,400.00	0.00	0.00	9,754.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
10,485.31	0.00	0.00	9,840.00	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
Corcoran									
10,500.00	0.00	0.00	9,854.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
10,600.00	0.00	0.00	9,954.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
10,650.31	0.00	0.00	10,005.00	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
Sego									
10,700.00	0.00	0.00	10,054.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
10,800.00	0.00	0.00	10,154.69	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
10,885.31	0.00	0.00	10,240.00	2,345.83	-1,366.90	2,715.02	0.00	0.00	0.00
TR 321-23-597 PBHL									

Database:	Grand Junction District	Local Co-ordinate Reference:	Well TR 321-23-597 - Slot B12 (TR 321-23-597)
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 8545.20' & RKB 24' @ 8569.20usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 8545.20' & RKB 24' @ 8569.20usft (H&P 318)
Site:	TR 32-23-597 Pad	North Reference:	True
Well:	TR 321-23-597	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 26Jan2017 jcsdi		

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
TR 321-23-597 MVRD - hit/miss target - Shape	0.00	0.00	6,467.00	2,345.83	-1,366.90	1,657,291.20	2,226,340.70	39.6059528	-108.2462316
TR 321-23-597 PBHL - plan hits target center - Circle (radius 50.00)	0.00	0.00	10,240.00	2,345.83	-1,366.90	1,657,291.20	2,226,340.70	39.6059528	-108.2462316

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
3,004.00	2,719.54	9 5/8" @ 3004' MD	9.62	9.62	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,250.07	2,934.00	Wasatch		0.00	0.00	
5,265.15	4,691.00	G_Sand Top		0.00	0.00	
5,338.21	4,756.00	G_Sand Base		0.00	0.00	
6,781.90	6,137.00	Ohio Creek		0.00	0.00	
7,112.31	6,467.00	Mesaverde		0.00	0.00	
7,776.31	7,131.00	Top Gas		0.00	0.00	
9,669.31	9,024.00	Cameo		0.00	0.00	
10,048.31	9,403.00	Rollins		0.00	0.00	
10,248.31	9,603.00	Cozzette		0.00	0.00	
10,485.31	9,840.00	Corcoran		0.00	0.00	
10,650.31	10,005.00	Sego		0.00	0.00	