

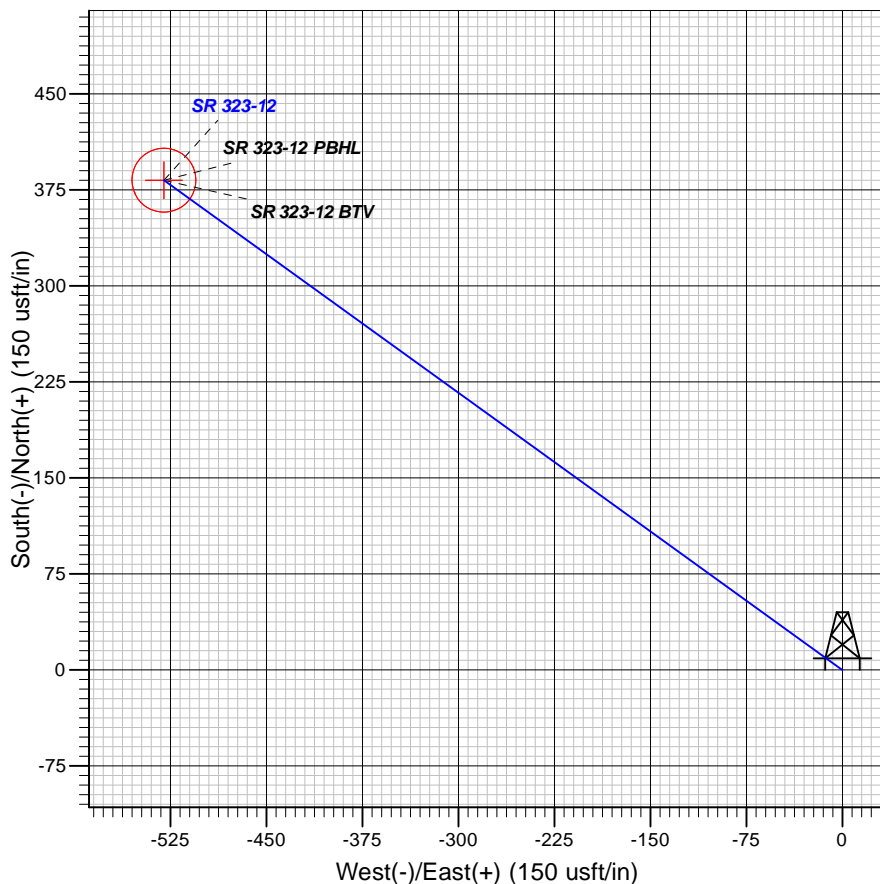
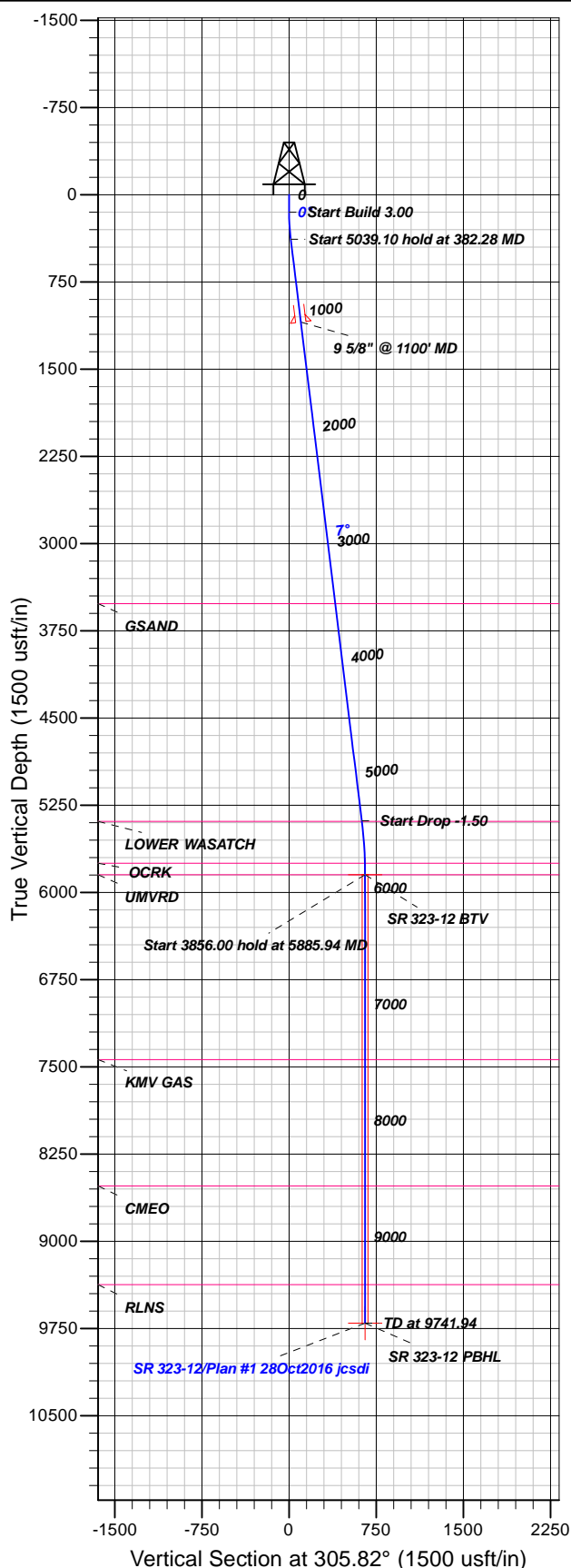
Well Details: SR 323-12

GL 7478' & RKB 24' @ 7502.00usft (H&P 318)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1597713.40	2340229.70	39.4511965	-107.8367194	SR 323-12 (A1)

T M Azimuths to True North
Magnetic North: 9.33°

Magnetic Field
Strength: 51770.0snT
Dip Angle: 65.68°
Date: 10/28/2016
Model: HDGM



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3515.00	3538.89	GSAND
5388.00	5425.83	LOWER WASATCH
5747.00	5785.93	OCRK
5847.00	5885.94	UMVRD
7436.00	7474.94	KMV GAS
8523.00	8561.94	CMEO
9371.00	9409.94	RLNS

Plan: Plan #1 28Oct2016 jcsdi

9:40, November 07 2016
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
1094.13	1100.00	9 5/8" @ 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	150.00	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00	
3	382.28	6.97	305.82	381.71	8.26	-11.44	3.00	305.82	14.11	
4	5421.38	6.97	305.82	5383.58	366.08	-507.14	0.00	0.00	625.46	
5	5885.94	0.00	0.00	5847.00	382.60	-530.02	1.50	180.00	653.68	SR 323-12 BTM
6	9741.94	0.00	0.00	9703.00	382.60	-530.02	0.00	0.00	653.68	SR 323-12 PBHL

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
SR 323-12 BTM	5847.00	382.60	-530.02	1598109.50	2339709.70	39.4522469	-107.8385963	Circle (Radius: 25.00)
SR 323-12 PBHL	9703.00	382.60	-530.02	1598109.50	2339709.70	39.4522469	-107.8385963	Point



TEP Rocky Mountain LLC

Garfield County, CO NAD83

SR 23-12 Pad

SR 323-12 - Slot SR 323-12 (A1)

OH

Plan: Plan #1 28Oct2016 jcsdi

Standard Planning Report

07 November, 2016



Database:	Grand Junction District	Local Co-ordinate Reference:	Well SR 323-12 - Slot SR 323-12 (A1)
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 7478' & RKB 24' @ 7502.00usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 7478' & RKB 24' @ 7502.00usft (H&P 318)
Site:	SR 23-12 Pad	North Reference:	True
Well:	SR 323-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 28Oct2016 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	SR 23-12 Pad			
Site Position:		Northing:	1,597,713.40 usft	Latitude: 39.4511965
From: Map		Easting:	2,340,229.70 usft	Longitude: -107.8367194
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence: -1.47 °

Well	SR 323-12 - Slot SR 323-12 (A1)			
Well Position	+N/-S	0.00 usft	Northing:	1,597,713.40 usft
	+E/-W	0.00 usft	Easting:	2,340,229.70 usft
Position Uncertainty	0.00 usft		Wellhead Elevation:	0.00 usft
			Ground Level:	7,478.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	10/28/2016	9.33	65.68	51,770

Design	Plan #1 28Oct2016 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	305.82

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	
150.00	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00	0.00	
382.28	6.97	305.82	381.71	8.26	-11.44	3.00	3.00	0.00	305.82	
5,421.38	6.97	305.82	5,383.58	366.08	-507.14	0.00	0.00	0.00	0.00	
5,885.94	0.00	0.00	5,847.00	382.60	-530.02	1.50	-1.50	0.00	180.00	SR 323-12 BTV
9,741.94	0.00	0.00	9,703.00	382.60	-530.02	0.00	0.00	0.00	0.00	SR 323-12 PBHL

Database:	Grand Junction District	Local Co-ordinate Reference:	Well SR 323-12 - Slot SR 323-12 (A1)
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 7478' & RKB 24' @ 7502.00usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 7478' & RKB 24' @ 7502.00usft (H&P 318)
Site:	SR 23-12 Pad	North Reference:	True
Well:	SR 323-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 28Oct2016 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	
150.00	0.00	0.00	150.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	1.50	305.82	199.99	0.38	-0.53	0.65	3.00	3.00	0.00	
300.00	4.50	305.82	299.85	3.45	-4.77	5.89	3.00	3.00	0.00	
382.28	6.97	305.82	381.71	8.26	-11.44	14.11	3.00	3.00	0.00	
400.00	6.97	305.82	399.30	9.52	-13.18	16.26	0.00	0.00	0.00	
500.00	6.97	305.82	498.56	16.62	-23.02	28.39	0.00	0.00	0.00	
600.00	6.97	305.82	597.82	23.72	-32.86	40.52	0.00	0.00	0.00	
700.00	6.97	305.82	697.08	30.82	-42.69	52.65	0.00	0.00	0.00	
800.00	6.97	305.82	796.34	37.92	-52.53	64.79	0.00	0.00	0.00	
900.00	6.97	305.82	895.60	45.02	-62.37	76.92	0.00	0.00	0.00	
1,000.00	6.97	305.82	994.86	52.12	-72.20	89.05	0.00	0.00	0.00	
1,100.00	6.97	305.82	1,094.13	59.22	-82.04	101.18	0.00	0.00	0.00	
9 5/8" @ 1100' MD										
1,200.00	6.97	305.82	1,193.39	66.32	-91.88	113.32	0.00	0.00	0.00	
1,300.00	6.97	305.82	1,292.65	73.42	-101.72	125.45	0.00	0.00	0.00	
1,400.00	6.97	305.82	1,391.91	80.52	-111.55	137.58	0.00	0.00	0.00	
1,500.00	6.97	305.82	1,491.17	87.63	-121.39	149.71	0.00	0.00	0.00	
1,600.00	6.97	305.82	1,590.43	94.73	-131.23	161.84	0.00	0.00	0.00	
1,700.00	6.97	305.82	1,689.69	101.83	-141.06	173.98	0.00	0.00	0.00	
1,800.00	6.97	305.82	1,788.96	108.93	-150.90	186.11	0.00	0.00	0.00	
1,900.00	6.97	305.82	1,888.22	116.03	-160.74	198.24	0.00	0.00	0.00	
2,000.00	6.97	305.82	1,987.48	123.13	-170.57	210.37	0.00	0.00	0.00	
2,100.00	6.97	305.82	2,086.74	130.23	-180.41	222.51	0.00	0.00	0.00	
2,200.00	6.97	305.82	2,186.00	137.33	-190.25	234.64	0.00	0.00	0.00	
2,300.00	6.97	305.82	2,285.26	144.43	-200.09	246.77	0.00	0.00	0.00	
2,400.00	6.97	305.82	2,384.52	151.53	-209.92	258.90	0.00	0.00	0.00	
2,500.00	6.97	305.82	2,483.78	158.64	-219.76	271.03	0.00	0.00	0.00	
2,600.00	6.97	305.82	2,583.05	165.74	-229.60	283.17	0.00	0.00	0.00	
2,700.00	6.97	305.82	2,682.31	172.84	-239.43	295.30	0.00	0.00	0.00	
2,800.00	6.97	305.82	2,781.57	179.94	-249.27	307.43	0.00	0.00	0.00	
2,900.00	6.97	305.82	2,880.83	187.04	-259.11	319.56	0.00	0.00	0.00	
3,000.00	6.97	305.82	2,980.09	194.14	-268.95	331.70	0.00	0.00	0.00	
3,100.00	6.97	305.82	3,079.35	201.24	-278.78	343.83	0.00	0.00	0.00	
3,200.00	6.97	305.82	3,178.61	208.34	-288.62	355.96	0.00	0.00	0.00	
3,300.00	6.97	305.82	3,277.88	215.44	-298.46	368.09	0.00	0.00	0.00	
3,400.00	6.97	305.82	3,377.14	222.54	-308.29	380.22	0.00	0.00	0.00	
3,500.00	6.97	305.82	3,476.40	229.64	-318.13	392.36	0.00	0.00	0.00	
3,538.89	6.97	305.82	3,515.00	232.41	-321.96	397.07	0.00	0.00	0.00	
GSAND										
3,600.00	6.97	305.82	3,575.66	236.75	-327.97	404.49	0.00	0.00	0.00	
3,700.00	6.97	305.82	3,674.92	243.85	-337.80	416.62	0.00	0.00	0.00	
3,800.00	6.97	305.82	3,774.18	250.95	-347.64	428.75	0.00	0.00	0.00	
3,900.00	6.97	305.82	3,873.44	258.05	-357.48	440.89	0.00	0.00	0.00	
4,000.00	6.97	305.82	3,972.70	265.15	-367.32	453.02	0.00	0.00	0.00	
4,100.00	6.97	305.82	4,071.97	272.25	-377.15	465.15	0.00	0.00	0.00	
4,200.00	6.97	305.82	4,171.23	279.35	-386.99	477.28	0.00	0.00	0.00	
4,300.00	6.97	305.82	4,270.49	286.45	-396.83	489.41	0.00	0.00	0.00	
4,400.00	6.97	305.82	4,369.75	293.55	-406.66	501.55	0.00	0.00	0.00	
4,500.00	6.97	305.82	4,469.01	300.65	-416.50	513.68	0.00	0.00	0.00	
4,600.00	6.97	305.82	4,568.27	307.76	-426.34	525.81	0.00	0.00	0.00	

Database:	Grand Junction District	Local Co-ordinate Reference:	Well SR 323-12 - Slot SR 323-12 (A1)
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 7478' & RKB 24' @ 7502.00usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 7478' & RKB 24' @ 7502.00usft (H&P 318)
Site:	SR 23-12 Pad	North Reference:	True
Well:	SR 323-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 28Oct2016 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)
4,700.00	6.97	305.82	4,667.53	314.86	-436.18	537.94	0.00	0.00	0.00
4,800.00	6.97	305.82	4,766.79	321.96	-446.01	550.08	0.00	0.00	0.00
4,900.00	6.97	305.82	4,866.06	329.06	-455.85	562.21	0.00	0.00	0.00
5,000.00	6.97	305.82	4,965.32	336.16	-465.69	574.34	0.00	0.00	0.00
5,100.00	6.97	305.82	5,064.58	343.26	-475.52	586.47	0.00	0.00	0.00
5,200.00	6.97	305.82	5,163.84	350.36	-485.36	598.60	0.00	0.00	0.00
5,300.00	6.97	305.82	5,263.10	357.46	-495.20	610.74	0.00	0.00	0.00
5,400.00	6.97	305.82	5,362.36	364.56	-505.03	622.87	0.00	0.00	0.00
5,421.38	6.97	305.82	5,383.58	366.08	-507.14	625.46	0.00	0.00	0.00
5,425.83	6.90	305.82	5,388.00	366.40	-507.57	626.00	1.50	-1.50	0.00
LOWER WASATCH									
5,500.00	5.79	305.82	5,461.72	371.19	-514.22	634.20	1.50	-1.50	0.00
5,600.00	4.29	305.82	5,561.33	376.33	-521.34	642.98	1.50	-1.50	0.00
5,700.00	2.79	305.82	5,661.13	379.95	-526.35	649.15	1.50	-1.50	0.00
5,785.93	1.50	305.82	5,747.00	381.83	-528.95	652.37	1.50	-1.50	0.00
OCRK									
5,800.00	1.29	305.82	5,761.07	382.03	-529.23	652.71	1.50	-1.50	0.00
5,885.94	0.00	0.00	5,847.00	382.60	-530.02	653.68	1.50	-1.50	0.00
UMVRD - SR 323-12 BTV									
5,900.00	0.00	0.00	5,861.06	382.60	-530.02	653.68	0.00	0.00	0.00
6,000.00	0.00	0.00	5,961.06	382.60	-530.02	653.68	0.00	0.00	0.00
6,100.00	0.00	0.00	6,061.06	382.60	-530.02	653.68	0.00	0.00	0.00
6,200.00	0.00	0.00	6,161.06	382.60	-530.02	653.68	0.00	0.00	0.00
6,300.00	0.00	0.00	6,261.06	382.60	-530.02	653.68	0.00	0.00	0.00
6,400.00	0.00	0.00	6,361.06	382.60	-530.02	653.68	0.00	0.00	0.00
6,500.00	0.00	0.00	6,461.06	382.60	-530.02	653.68	0.00	0.00	0.00
6,600.00	0.00	0.00	6,561.06	382.60	-530.02	653.68	0.00	0.00	0.00
6,700.00	0.00	0.00	6,661.06	382.60	-530.02	653.68	0.00	0.00	0.00
6,800.00	0.00	0.00	6,761.06	382.60	-530.02	653.68	0.00	0.00	0.00
6,900.00	0.00	0.00	6,861.06	382.60	-530.02	653.68	0.00	0.00	0.00
7,000.00	0.00	0.00	6,961.06	382.60	-530.02	653.68	0.00	0.00	0.00
7,100.00	0.00	0.00	7,061.06	382.60	-530.02	653.68	0.00	0.00	0.00
7,200.00	0.00	0.00	7,161.06	382.60	-530.02	653.68	0.00	0.00	0.00
7,300.00	0.00	0.00	7,261.06	382.60	-530.02	653.68	0.00	0.00	0.00
7,400.00	0.00	0.00	7,361.06	382.60	-530.02	653.68	0.00	0.00	0.00
7,474.94	0.00	0.00	7,436.00	382.60	-530.02	653.68	0.00	0.00	0.00
KMV GAS									
7,500.00	0.00	0.00	7,461.06	382.60	-530.02	653.68	0.00	0.00	0.00
7,600.00	0.00	0.00	7,561.06	382.60	-530.02	653.68	0.00	0.00	0.00
7,700.00	0.00	0.00	7,661.06	382.60	-530.02	653.68	0.00	0.00	0.00
7,800.00	0.00	0.00	7,761.06	382.60	-530.02	653.68	0.00	0.00	0.00
7,900.00	0.00	0.00	7,861.06	382.60	-530.02	653.68	0.00	0.00	0.00
8,000.00	0.00	0.00	7,961.06	382.60	-530.02	653.68	0.00	0.00	0.00
8,100.00	0.00	0.00	8,061.06	382.60	-530.02	653.68	0.00	0.00	0.00
8,200.00	0.00	0.00	8,161.06	382.60	-530.02	653.68	0.00	0.00	0.00
8,300.00	0.00	0.00	8,261.06	382.60	-530.02	653.68	0.00	0.00	0.00
8,400.00	0.00	0.00	8,361.06	382.60	-530.02	653.68	0.00	0.00	0.00
8,500.00	0.00	0.00	8,461.06	382.60	-530.02	653.68	0.00	0.00	0.00
8,561.94	0.00	0.00	8,523.00	382.60	-530.02	653.68	0.00	0.00	0.00
CMEO									
8,600.00	0.00	0.00	8,561.06	382.60	-530.02	653.68	0.00	0.00	0.00

Database:	Grand Junction District	Local Co-ordinate Reference:	Well SR 323-12 - Slot SR 323-12 (A1)
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 7478' & RKB 24' @ 7502.00usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 7478' & RKB 24' @ 7502.00usft (H&P 318)
Site:	SR 23-12 Pad	North Reference:	True
Well:	SR 323-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 28Oct2016 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)	
8,700.00	0.00	0.00	8,661.06	382.60	-530.02	653.68	0.00	0.00	0.00	
8,800.00	0.00	0.00	8,761.06	382.60	-530.02	653.68	0.00	0.00	0.00	
8,900.00	0.00	0.00	8,861.06	382.60	-530.02	653.68	0.00	0.00	0.00	
9,000.00	0.00	0.00	8,961.06	382.60	-530.02	653.68	0.00	0.00	0.00	
9,100.00	0.00	0.00	9,061.06	382.60	-530.02	653.68	0.00	0.00	0.00	
9,200.00	0.00	0.00	9,161.06	382.60	-530.02	653.68	0.00	0.00	0.00	
9,300.00	0.00	0.00	9,261.06	382.60	-530.02	653.68	0.00	0.00	0.00	
9,400.00	0.00	0.00	9,361.06	382.60	-530.02	653.68	0.00	0.00	0.00	
9,409.94	0.00	0.00	9,371.00	382.60	-530.02	653.68	0.00	0.00	0.00	
RLNS										
9,500.00	0.00	0.00	9,461.06	382.60	-530.02	653.68	0.00	0.00	0.00	
9,600.00	0.00	0.00	9,561.06	382.60	-530.02	653.68	0.00	0.00	0.00	
9,700.00	0.00	0.00	9,661.06	382.60	-530.02	653.68	0.00	0.00	0.00	
9,741.94	0.00	0.00	9,703.00	382.60	-530.02	653.68	0.00	0.00	0.00	
SR 323-12 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									
SR 323-12 BTV	0.00	0.00	5,847.00	382.60	-530.02	1,598,109.50	2,339,709.70	39.4522469	-107.8385964
- plan hits target center									
- Circle (radius 25.00)									
SR 323-12 PBHL	0.00	0.00	9,703.00	382.60	-530.02	1,598,109.50	2,339,709.70	39.4522469	-107.8385964
- plan hits target center									
- Point									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (in)	Hole Diameter (in)
1,100.00	1,094.13	9 5/8" @ 1100' MD		9.62	9.62

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,538.89	3,515.00	GSAND		0.00	0.00
5,425.83	5,388.00	LOWER WASATCH		0.00	0.00
5,785.93	5,747.00	OCRK		0.00	0.00
5,885.94	5,847.00	UMVRD		0.00	0.00
7,474.94	7,436.00	KMV GAS		0.00	0.00
8,561.94	8,523.00	CMEQ		0.00	0.00
9,409.94	9,371.00	RLNS		0.00	0.00

Database:	Grand Junction District	Local Co-ordinate Reference:	Well SR 323-12 - Slot SR 323-12 (A1)
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 7478' & RKB 24' @ 7502.00usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 7478' & RKB 24' @ 7502.00usft (H&P 318)
Site:	SR 23-12 Pad	North Reference:	True
Well:	SR 323-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 28Oct2016 jcsdi		