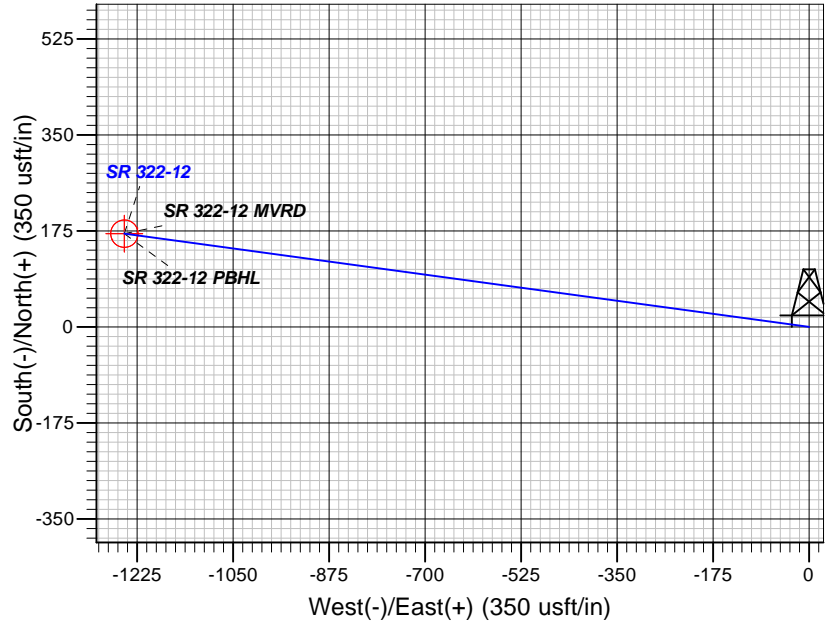
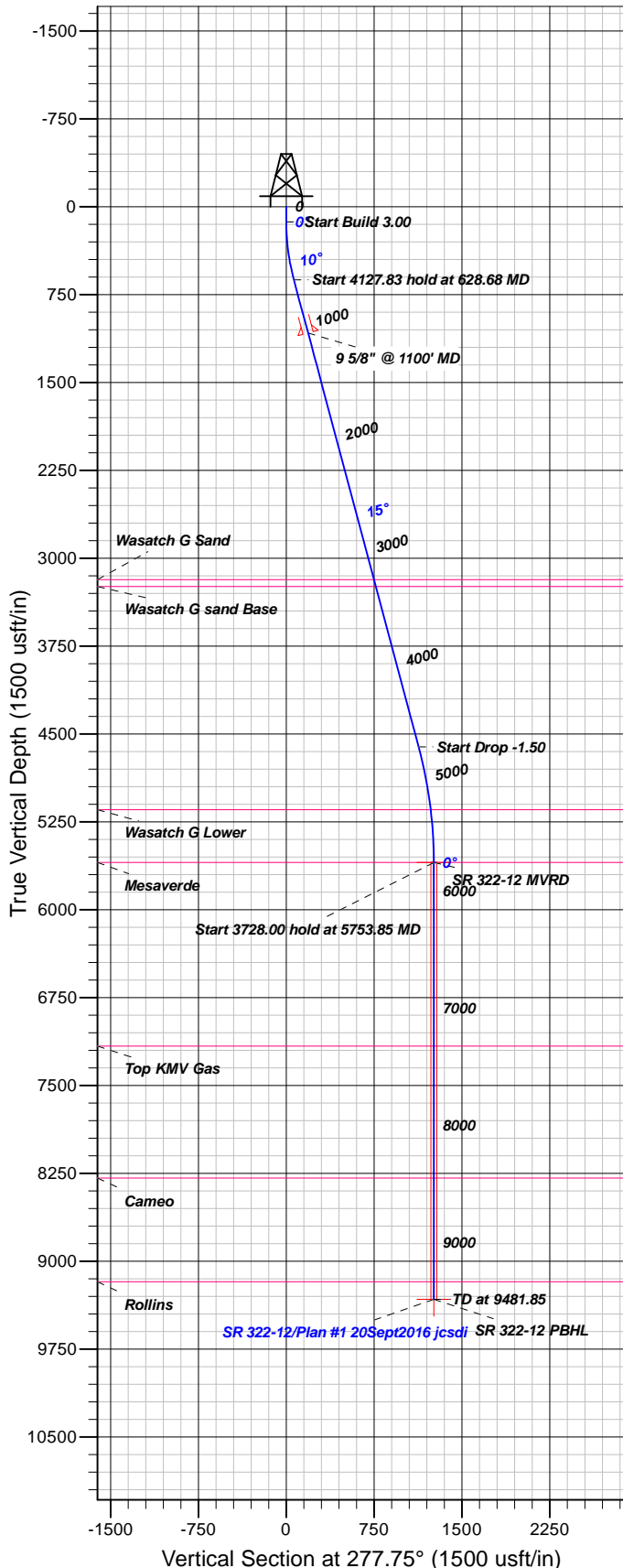


Well Details: SR 322-12

GL 7254' & RKB 24' @ 7278.00usft (H&P 318)
 +N/-S 0.00 +E/-W 0.00 Northing 1599202.20 Easting 2341062.00 Latitude 39.4553413 Longitude -107.8339083 Slot A8

T M Azimuths to True North
 Magnetic North: 9.60°
 Magnetic Field
 Strength: 51598.3snT
 Dip Angle: 65.62°
 Date: 9/19/2016
 Model: BGGM2016



FORMATION TOP DETAILS

TVDPATH	MDPATH	FORMATION
3182.00	3277.43	Wasatch G Sand
3242.00	3339.53	Wasatch G sand Base
5146.00	5301.80	Wasatch G Lower
5597.00	5753.85	Mesaverde
7163.00	7319.85	Top KMV Gas
8290.00	8446.85	Cameo
9175.00	9331.85	Rollins

Plan: Plan #1 20Sept2016 jcsdi

10:46, September 30 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

TVDPATH	MDPATH	NAME	SIZE
1078.38	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	130.00	0.00	0.00	130.00	0.00	0.00	0.00	0.00	0.00	
3	628.68	14.96	277.75	623.03	8.73	-64.14	3.00	277.75	64.73	
4	4756.50	14.96	277.75	4610.94	152.52	-1119.99	0.00	0.001130.33		
5	5753.85	0.00	0.00	5597.00	169.99	-1248.28	1.50	180.001259.80		SR 322-12 MVRD
6	9481.85	0.00	0.00	9325.00	169.99	-1248.28	0.00	0.001259.80		SR 322-12 PBHL

DESIGN TARGET DETAILS

Name	TVDPATH	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
SR 322-12 MVRD	5597.00	169.99	-1248.28	1599404.20	2339818.50	39.4558080	-107.8383292	Circle (Radius: 25.00)
- plan hits target center								
SR 322-12 PBHL	9325.00	169.99	-1248.28	1599404.20	2339818.50	39.4558080	-107.8383292	Point
- plan hits target center								



TEP Rocky Mountain LLC

Garfield County, CO NAD83

RU 32-12 Pad

SR 322-12 - Slot A8

OH

Plan: Plan #1 20Sept2016 jcsdi

Standard Planning Report

30 September, 2016



Database:	Grand Junction District	Local Co-ordinate Reference:	Well SR 322-12 - Slot A8
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 7254' & RKB 24' @ 7278.00usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 7254' & RKB 24' @ 7278.00usft (H&P 318)
Site:	RU 32-12 Pad	North Reference:	True
Well:	SR 322-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 20Sept2016 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	RU 32-12 Pad			
Site Position:		Northing:	1,599,253.30 usft	Latitude: 39.4554808
From: Map		Easting:	2,341,050.00 usft	Longitude: -107.8339555
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence: -1.47 °

Well	SR 322-12 - Slot A8			
Well Position	+N/-S	-50.77 usft	Northing:	1,599,202.20 usft
	+E/-W	13.31 usft	Easting:	2,341,062.00 usft
Position Uncertainty	0.00 usft		Wellhead Elevation:	0.00 usft
			Ground Level:	7,254.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2016	9/19/2016	9.60	65.62	51,598

Design	Plan #1 20Sept2016 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	277.75

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	
130.00	0.00	0.00	130.00	0.00	0.00	0.00	0.00	0.00	0.00	
628.68	14.96	277.75	623.03	8.73	-64.14	3.00	3.00	0.00	277.75	
4,756.50	14.96	277.75	4,610.94	152.52	-1,119.99	0.00	0.00	0.00	0.00	
5,753.85	0.00	0.00	5,597.00	169.99	-1,248.28	1.50	-1.50	0.00	180.00	SR 322-12 MVRD
9,481.85	0.00	0.00	9,325.00	169.99	-1,248.28	0.00	0.00	0.00	0.00	SR 322-12 PBHL

Database:	Grand Junction District	Local Co-ordinate Reference:	Well SR 322-12 - Slot A8
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 7254' & RKB 24' @ 7278.00usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 7254' & RKB 24' @ 7278.00usft (H&P 318)
Site:	RU 32-12 Pad	North Reference:	True
Well:	SR 322-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 20Sept2016 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	
130.00	0.00	0.00	130.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	2.10	277.75	199.98	0.17	-1.27	1.28	3.00	3.00	0.00	
300.00	5.10	277.75	299.78	1.02	-7.49	7.56	3.00	3.00	0.00	
400.00	8.10	277.75	399.10	2.57	-18.88	19.05	3.00	3.00	0.00	
500.00	11.10	277.75	497.69	4.82	-35.40	35.73	3.00	3.00	0.00	
600.00	14.10	277.75	595.27	7.76	-57.01	57.54	3.00	3.00	0.00	
628.68	14.96	277.75	623.03	8.73	-64.14	64.73	3.00	3.00	0.00	
700.00	14.96	277.75	691.94	11.22	-82.39	83.15	0.00	0.00	0.00	
800.00	14.96	277.75	788.55	14.70	-107.97	108.96	0.00	0.00	0.00	
900.00	14.96	277.75	885.16	18.19	-133.54	134.78	0.00	0.00	0.00	
1,000.00	14.96	277.75	981.77	21.67	-159.12	160.59	0.00	0.00	0.00	
1,100.00	14.96	277.75	1,078.38	25.15	-184.70	186.41	0.00	0.00	0.00	
9 5/8" @ 1100' MD										
1,200.00	14.96	277.75	1,174.99	28.64	-210.28	212.22	0.00	0.00	0.00	
1,300.00	14.96	277.75	1,271.60	32.12	-235.86	238.04	0.00	0.00	0.00	
1,400.00	14.96	277.75	1,368.21	35.60	-261.44	263.85	0.00	0.00	0.00	
1,500.00	14.96	277.75	1,464.82	39.09	-287.02	289.67	0.00	0.00	0.00	
1,600.00	14.96	277.75	1,561.43	42.57	-312.60	315.48	0.00	0.00	0.00	
1,700.00	14.96	277.75	1,658.04	46.05	-338.18	341.30	0.00	0.00	0.00	
1,800.00	14.96	277.75	1,754.65	49.54	-363.75	367.11	0.00	0.00	0.00	
1,900.00	14.96	277.75	1,851.26	53.02	-389.33	392.93	0.00	0.00	0.00	
2,000.00	14.96	277.75	1,947.87	56.50	-414.91	418.74	0.00	0.00	0.00	
2,100.00	14.96	277.75	2,044.48	59.99	-440.49	444.56	0.00	0.00	0.00	
2,200.00	14.96	277.75	2,141.09	63.47	-466.07	470.37	0.00	0.00	0.00	
2,300.00	14.96	277.75	2,237.70	66.95	-491.65	496.19	0.00	0.00	0.00	
2,400.00	14.96	277.75	2,334.31	70.44	-517.23	522.00	0.00	0.00	0.00	
2,500.00	14.96	277.75	2,430.92	73.92	-542.81	547.82	0.00	0.00	0.00	
2,600.00	14.96	277.75	2,527.53	77.40	-568.38	573.63	0.00	0.00	0.00	
2,700.00	14.96	277.75	2,624.15	80.89	-593.96	599.45	0.00	0.00	0.00	
2,800.00	14.96	277.75	2,720.76	84.37	-619.54	625.26	0.00	0.00	0.00	
2,900.00	14.96	277.75	2,817.37	87.85	-645.12	651.08	0.00	0.00	0.00	
3,000.00	14.96	277.75	2,913.98	91.34	-670.70	676.89	0.00	0.00	0.00	
3,100.00	14.96	277.75	3,010.59	94.82	-696.28	702.71	0.00	0.00	0.00	
3,200.00	14.96	277.75	3,107.20	98.30	-721.86	728.52	0.00	0.00	0.00	
3,277.43	14.96	277.75	3,182.00	101.00	-741.66	748.51	0.00	0.00	0.00	
Wasatch G Sand										
3,300.00	14.96	277.75	3,203.81	101.79	-747.44	754.34	0.00	0.00	0.00	
3,339.53	14.96	277.75	3,242.00	103.16	-757.55	764.54	0.00	0.00	0.00	
Wasatch G sand Base										
3,400.00	14.96	277.75	3,300.42	105.27	-773.02	780.15	0.00	0.00	0.00	
3,500.00	14.96	277.75	3,397.03	108.75	-798.59	805.97	0.00	0.00	0.00	
3,600.00	14.96	277.75	3,493.64	112.24	-824.17	831.78	0.00	0.00	0.00	
3,700.00	14.96	277.75	3,590.25	115.72	-849.75	857.60	0.00	0.00	0.00	
3,800.00	14.96	277.75	3,686.86	119.20	-875.33	883.41	0.00	0.00	0.00	
3,900.00	14.96	277.75	3,783.47	122.69	-900.91	909.23	0.00	0.00	0.00	
4,000.00	14.96	277.75	3,880.08	126.17	-926.49	935.04	0.00	0.00	0.00	
4,100.00	14.96	277.75	3,976.69	129.65	-952.07	960.86	0.00	0.00	0.00	
4,200.00	14.96	277.75	4,073.30	133.14	-977.65	986.67	0.00	0.00	0.00	
4,300.00	14.96	277.75	4,169.91	136.62	-1,003.23	1,012.49	0.00	0.00	0.00	
4,400.00	14.96	277.75	4,266.52	140.10	-1,028.80	1,038.30	0.00	0.00	0.00	

Database:	Grand Junction District	Local Co-ordinate Reference:	Well SR 322-12 - Slot A8
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 7254' & RKB 24' @ 7278.00usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 7254' & RKB 24' @ 7278.00usft (H&P 318)
Site:	RU 32-12 Pad	North Reference:	True
Well:	SR 322-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 20Sept2016 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	14.96	277.75	4,363.13	143.59	-1,054.38	1,064.11	0.00	0.00	0.00
4,600.00	14.96	277.75	4,459.74	147.07	-1,079.96	1,089.93	0.00	0.00	0.00
4,700.00	14.96	277.75	4,556.36	150.55	-1,105.54	1,115.74	0.00	0.00	0.00
4,756.50	14.96	277.75	4,610.94	152.52	-1,119.99	1,130.33	0.00	0.00	0.00
4,800.00	14.31	277.75	4,653.03	154.00	-1,130.88	1,141.32	1.50	-1.50	0.00
4,900.00	12.81	277.75	4,750.24	157.17	-1,154.11	1,164.76	1.50	-1.50	0.00
5,000.00	11.31	277.75	4,848.03	159.99	-1,174.81	1,185.65	1.50	-1.50	0.00
5,100.00	9.81	277.75	4,946.33	162.46	-1,192.96	1,203.97	1.50	-1.50	0.00
5,200.00	8.31	277.75	5,045.08	164.58	-1,208.56	1,219.72	1.50	-1.50	0.00
5,300.00	6.81	277.75	5,144.21	166.36	-1,221.59	1,232.87	1.50	-1.50	0.00
5,301.80	6.78	277.75	5,146.00	166.39	-1,221.80	1,233.08	1.50	-1.50	0.00
Wasatch G Lower									
5,400.00	5.31	277.75	5,243.65	167.78	-1,232.05	1,243.42	1.50	-1.50	0.00
5,500.00	3.81	277.75	5,343.33	168.85	-1,239.92	1,251.37	1.50	-1.50	0.00
5,600.00	2.31	277.75	5,443.19	169.57	-1,245.21	1,256.70	1.50	-1.50	0.00
5,700.00	0.81	277.75	5,543.15	169.94	-1,247.90	1,259.42	1.50	-1.50	0.00
5,753.85	0.00	0.00	5,597.00	169.99	-1,248.28	1,259.80	1.50	-1.50	0.00
Mesaverde - SR 322-12 MVRD									
5,800.00	0.00	0.00	5,643.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
5,900.00	0.00	0.00	5,743.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
6,000.00	0.00	0.00	5,843.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
6,100.00	0.00	0.00	5,943.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
6,200.00	0.00	0.00	6,043.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
6,300.00	0.00	0.00	6,143.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
6,400.00	0.00	0.00	6,243.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
6,500.00	0.00	0.00	6,343.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
6,600.00	0.00	0.00	6,443.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
6,700.00	0.00	0.00	6,543.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
6,800.00	0.00	0.00	6,643.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
6,900.00	0.00	0.00	6,743.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
7,000.00	0.00	0.00	6,843.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
7,100.00	0.00	0.00	6,943.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
7,200.00	0.00	0.00	7,043.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
7,300.00	0.00	0.00	7,143.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
7,319.85	0.00	0.00	7,163.00	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
Top KMV Gas									
7,400.00	0.00	0.00	7,243.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
7,500.00	0.00	0.00	7,343.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
7,600.00	0.00	0.00	7,443.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
7,700.00	0.00	0.00	7,543.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
7,800.00	0.00	0.00	7,643.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
7,900.00	0.00	0.00	7,743.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
8,000.00	0.00	0.00	7,843.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
8,100.00	0.00	0.00	7,943.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
8,200.00	0.00	0.00	8,043.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
8,300.00	0.00	0.00	8,143.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
8,400.00	0.00	0.00	8,243.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
8,446.85	0.00	0.00	8,290.00	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
Cameo									
8,500.00	0.00	0.00	8,343.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00
8,600.00	0.00	0.00	8,443.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00

Database:	Grand Junction District	Local Co-ordinate Reference:	Well SR 322-12 - Slot A8
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 7254' & RKB 24' @ 7278.00usft (H&P 318)
Project:	Garfield County, CO NAD83	MD Reference:	GL 7254' & RKB 24' @ 7278.00usft (H&P 318)
Site:	RU 32-12 Pad	North Reference:	True
Well:	SR 322-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 20Sept2016 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	8,543.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00	
8,800.00	0.00	0.00	8,643.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00	
8,900.00	0.00	0.00	8,743.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00	
9,000.00	0.00	0.00	8,843.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00	
9,100.00	0.00	0.00	8,943.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00	
9,200.00	0.00	0.00	9,043.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00	
9,300.00	0.00	0.00	9,143.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00	
9,331.85	0.00	0.00	9,175.00	169.99	-1,248.28	1,259.80	0.00	0.00	0.00	
Rollins										
9,400.00	0.00	0.00	9,243.15	169.99	-1,248.28	1,259.80	0.00	0.00	0.00	
9,481.85	0.00	0.00	9,325.00	169.99	-1,248.28	1,259.80	0.00	0.00	0.00	
SR 322-12 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
SR 322-12 MVRD - plan hits target center - Circle (radius 25.00)	0.00	0.00	5,597.00	169.99	-1,248.28	1,599,404.20	2,339,818.50	39.4558080	-107.8383292
SR 322-12 PBHL - plan hits target center - Point	0.00	0.00	9,325.00	169.99	-1,248.28	1,599,404.20	2,339,818.50	39.4558080	-107.8383292

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,100.00	1,078.38	9 5/8" @ 1100' MD	9.62	9.62	

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,277.43	3,182.00	Wasatch G Sand		0.00	0.00
3,339.53	3,242.00	Wasatch G sand Base		0.00	0.00
5,301.80	5,146.00	Wasatch G Lower		0.00	0.00
5,753.85	5,597.00	Mesaverde		0.00	0.00
7,319.85	7,163.00	Top KVM Gas		0.00	0.00
8,446.85	8,290.00	Cameo		0.00	0.00
9,331.85	9,175.00	Rollins		0.00	0.00