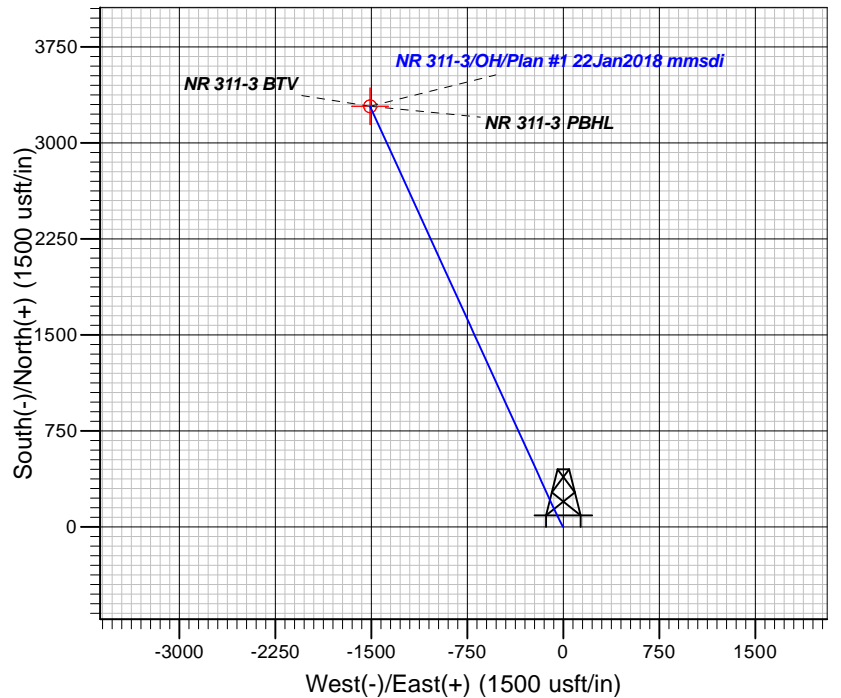
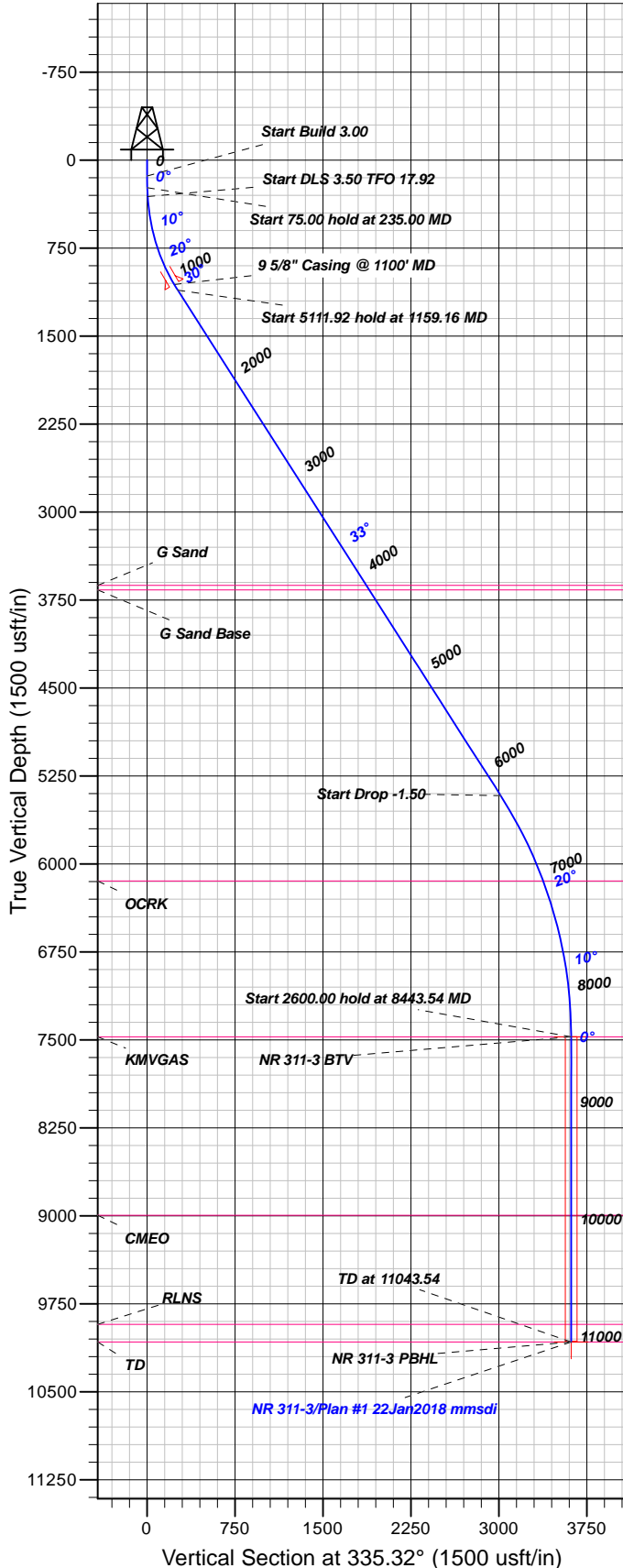


Well Details: NR 311-3

+N/-S	+E/-W	Northing	GL 6720' & RKB 24' @ 6744.00usft	Easting	Latitude	Longitude	Slot
0.00	0.00	1634946.62		2329738.79	39.5526365	-107.8773084	NR 311-3 (B4)



FORMATION TOP DETAILS

TVDPPath	MDPath	Formation
3624.00	4143.34	G Sand
3664.00	4190.81	G Sand Base
6144.00	7085.08	OCRK
7474.00	8443.54	KMGAS
8994.00	9963.54	CMEO
9924.00	10893.54	RLNS
10074.00	11043.54	TD

Plan: Plan #1 22Jan2018 mmsdi

21:54, February 07 2018
Created By: Mel Mireles

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
1059.19	1100.00	5/8" Casing @ 1100' 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	135.00	0.00	0.00	135.00	0.00	0.00	0.00	0.00	0.00	
3	235.00	3.00	319.00	234.95	1.98	-1.72	3.00	319.00	2.51	
4	310.00	3.00	319.00	309.85	4.94	-4.29	0.00	0.00	6.28	
5	1159.16	32.59	335.45	1109.60	234.89	-116.39	3.50	17.92	262.03	
6	6271.08	32.59	335.45	5416.78	2739.23	-1260.18	0.00	0.00	3015.20	
7	8443.54	0.00	0.00	7474.00	3286.20	-1509.99	1.50	180.00	3616.51	NR 311-3 BTM
8	11043.54	0.00	0.00	10074.00	3286.20	-1509.99	0.00	0.00	3616.51	NR 311-3 PBHL

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
NR 311-3 BTM	7474.00	3286.20	-1509.99	1638271.20	2328315.30	39.5616582	-107.8826642	Circle (Radius: 50.00)
- plan hits target center								
NR 311-3 PBHL	10074.00	3286.20	-1509.99	1638271.20	2328315.30	39.5616582	-107.8826642	Point
- plan hits target center								



TEP Rocky Mountain LLC

Garfield County, CO NAD83

NR 23-3 Pad

NR 311-3 - Slot NR 311-3 (B4)

OH

Plan: Plan #1 22Jan2018 mmsdi

Standard Planning Report

07 February, 2018



Database:	Grand Junction District	Local Co-ordinate Reference:	Well NR 311-3 - Slot NR 311-3 (B4)
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 6720' & RKB 24' @ 6744.00usft
Project:	Garfield County, CO NAD83	MD Reference:	GL 6720' & RKB 24' @ 6744.00usft
Site:	NR 23-3 Pad	North Reference:	True
Well:	NR 311-3	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 22Jan2018 mmsdi		

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	NR 23-3 Pad			
Site Position:		Northing:	1,634,904.55 usft	Latitude: 39.5525224
From: Map		Easting:	2,329,757.66 usft	Longitude: -107.8772377
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence: -1.50 °

Well	NR 311-3 - Slot NR 311-3 (B4)			
Well Position	+N/-S	41.56 usft	Northing:	1,634,946.62 usft
	+E/-W	-19.96 usft	Easting:	2,329,738.79 usft
Position Uncertainty	0.00 usft		Wellhead Elevation:	0.00 usft
			Ground Level:	6,720.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	1/22/2018	9.48	65.82	51,613

Design	Plan #1 22Jan2018 mmsdi			
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	335.32

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	
135.00	0.00	0.00	135.00	0.00	0.00	0.00	0.00	0.00	0.00	
235.00	3.00	319.00	234.95	1.98	-1.72	3.00	3.00	0.00	319.00	
310.00	3.00	319.00	309.85	4.94	-4.29	0.00	0.00	0.00	0.00	
1,159.16	32.59	335.45	1,109.60	234.89	-116.39	3.50	3.48	1.94	17.92	
6,271.08	32.59	335.45	5,416.78	2,739.23	-1,260.18	0.00	0.00	0.00	0.00	
8,443.54	0.00	0.00	7,474.00	3,286.20	-1,509.99	1.50	-1.50	0.00	180.00	NR 311-3 BTV
11,043.54	0.00	0.00	10,074.00	3,286.20	-1,509.99	0.00	0.00	0.00	0.00	NR 311-3 PBHL

Database:	Grand Junction District	Local Co-ordinate Reference:	Well NR 311-3 - Slot NR 311-3 (B4)
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 6720' & RKB 24' @ 6744.00usft
Project:	Garfield County, CO NAD83	MD Reference:	GL 6720' & RKB 24' @ 6744.00usft
Site:	NR 23-3 Pad	North Reference:	True
Well:	NR 311-3	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 22Jan2018 mmsdi		

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
135.00	0.00	0.00	135.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 3.00									
200.00	1.95	319.00	199.99	0.83	-0.73	1.06	3.00	3.00	0.00
235.00	3.00	319.00	234.95	1.98	-1.72	2.51	3.00	3.00	0.00
Start 75.00 hold at 235.00 MD									
300.00	3.00	319.00	299.87	4.54	-3.95	5.78	0.00	0.00	0.00
310.00	3.00	319.00	309.85	4.94	-4.29	6.28	0.00	0.00	0.00
Start DLS 3.50 TFO 17.92									
400.00	6.07	328.19	399.56	10.76	-8.35	13.27	3.50	3.42	10.21
500.00	9.55	331.40	498.62	22.55	-15.11	26.80	3.50	3.47	3.21
600.00	13.04	332.91	596.67	39.88	-24.22	46.35	3.50	3.49	1.51
700.00	16.53	333.79	693.34	62.69	-35.64	71.84	3.50	3.49	0.88
800.00	20.03	334.36	788.28	90.89	-49.34	103.19	3.50	3.50	0.58
900.00	23.52	334.78	881.13	124.39	-65.26	140.28	3.50	3.50	0.41
1,000.00	27.02	335.09	971.55	163.06	-83.33	182.96	3.50	3.50	0.31
1,100.00	30.52	335.33	1,059.19	206.75	-103.51	231.08	3.50	3.50	0.24
9 5/8" Casing @ 1100' MD									
1,159.16	32.59	335.45	1,109.60	234.89	-116.39	262.03	3.50	3.50	0.21
Start 5111.92 hold at 1159.16 MD									
1,200.00	32.59	335.45	1,144.01	254.90	-125.53	284.03	0.00	0.00	0.00
1,300.00	32.59	335.45	1,228.27	303.89	-147.91	337.89	0.00	0.00	0.00
1,400.00	32.59	335.45	1,312.53	352.88	-170.28	391.74	0.00	0.00	0.00
1,500.00	32.59	335.45	1,396.79	401.87	-192.66	445.60	0.00	0.00	0.00
1,600.00	32.59	335.45	1,481.04	450.86	-215.03	499.46	0.00	0.00	0.00
1,700.00	32.59	335.45	1,565.30	499.85	-237.41	553.32	0.00	0.00	0.00
1,800.00	32.59	335.45	1,649.56	548.84	-259.78	607.18	0.00	0.00	0.00
1,900.00	32.59	335.45	1,733.82	597.83	-282.16	661.03	0.00	0.00	0.00
2,000.00	32.59	335.45	1,818.08	646.82	-304.53	714.89	0.00	0.00	0.00
2,100.00	32.59	335.45	1,902.33	695.81	-326.91	768.75	0.00	0.00	0.00
2,200.00	32.59	335.45	1,986.59	744.80	-349.28	822.61	0.00	0.00	0.00
2,300.00	32.59	335.45	2,070.85	793.79	-371.66	876.46	0.00	0.00	0.00
2,400.00	32.59	335.45	2,155.11	842.78	-394.03	930.32	0.00	0.00	0.00
2,500.00	32.59	335.45	2,239.36	891.77	-416.41	984.18	0.00	0.00	0.00
2,600.00	32.59	335.45	2,323.62	940.76	-438.78	1,038.04	0.00	0.00	0.00
2,700.00	32.59	335.45	2,407.88	989.75	-461.16	1,091.89	0.00	0.00	0.00
2,800.00	32.59	335.45	2,492.14	1,038.74	-483.53	1,145.75	0.00	0.00	0.00
2,900.00	32.59	335.45	2,576.39	1,087.73	-505.90	1,199.61	0.00	0.00	0.00
3,000.00	32.59	335.45	2,660.65	1,136.72	-528.28	1,253.47	0.00	0.00	0.00
3,100.00	32.59	335.45	2,744.91	1,185.71	-550.65	1,307.33	0.00	0.00	0.00
3,200.00	32.59	335.45	2,829.17	1,234.70	-573.03	1,361.18	0.00	0.00	0.00
3,300.00	32.59	335.45	2,913.42	1,283.69	-595.40	1,415.04	0.00	0.00	0.00
3,400.00	32.59	335.45	2,997.68	1,332.68	-617.78	1,468.90	0.00	0.00	0.00
3,500.00	32.59	335.45	3,081.94	1,381.67	-640.15	1,522.76	0.00	0.00	0.00
3,600.00	32.59	335.45	3,166.20	1,430.66	-662.53	1,576.61	0.00	0.00	0.00
3,700.00	32.59	335.45	3,250.45	1,479.65	-684.90	1,630.47	0.00	0.00	0.00
3,800.00	32.59	335.45	3,334.71	1,528.64	-707.28	1,684.33	0.00	0.00	0.00
3,900.00	32.59	335.45	3,418.97	1,577.63	-729.65	1,738.19	0.00	0.00	0.00
4,000.00	32.59	335.45	3,503.23	1,626.62	-752.03	1,792.04	0.00	0.00	0.00
4,100.00	32.59	335.45	3,587.48	1,675.61	-774.40	1,845.90	0.00	0.00	0.00
4,143.34	32.59	335.45	3,624.00	1,696.84	-784.10	1,869.24	0.00	0.00	0.00
G Sand									

Database:	Grand Junction District	Local Co-ordinate Reference:	Well NR 311-3 - Slot NR 311-3 (B4)
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 6720' & RKB 24' @ 6744.00usft
Project:	Garfield County, CO NAD83	MD Reference:	GL 6720' & RKB 24' @ 6744.00usft
Site:	NR 23-3 Pad	North Reference:	True
Well:	NR 311-3	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 22Jan2018 mmsdi		

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)
4,190.81	32.59	335.45	3,664.00	1,720.10	-794.72	1,894.81	0.00	0.00	0.00
G Sand Base									
4,200.00	32.59	335.45	3,671.74	1,724.60	-796.78	1,899.76	0.00	0.00	0.00
4,300.00	32.59	335.45	3,756.00	1,773.59	-819.15	1,953.62	0.00	0.00	0.00
4,400.00	32.59	335.45	3,840.26	1,822.58	-841.53	2,007.48	0.00	0.00	0.00
4,500.00	32.59	335.45	3,924.51	1,871.57	-863.90	2,061.33	0.00	0.00	0.00
4,600.00	32.59	335.45	4,008.77	1,920.56	-886.28	2,115.19	0.00	0.00	0.00
4,700.00	32.59	335.45	4,093.03	1,969.55	-908.65	2,169.05	0.00	0.00	0.00
4,800.00	32.59	335.45	4,177.29	2,018.54	-931.03	2,222.91	0.00	0.00	0.00
4,900.00	32.59	335.45	4,261.54	2,067.53	-953.40	2,276.76	0.00	0.00	0.00
5,000.00	32.59	335.45	4,345.80	2,116.52	-975.78	2,330.62	0.00	0.00	0.00
5,100.00	32.59	335.45	4,430.06	2,165.51	-998.15	2,384.48	0.00	0.00	0.00
5,200.00	32.59	335.45	4,514.32	2,214.50	-1,020.53	2,438.34	0.00	0.00	0.00
5,300.00	32.59	335.45	4,598.57	2,263.49	-1,042.90	2,492.19	0.00	0.00	0.00
5,400.00	32.59	335.45	4,682.83	2,312.48	-1,065.28	2,546.05	0.00	0.00	0.00
5,500.00	32.59	335.45	4,767.09	2,361.47	-1,087.65	2,599.91	0.00	0.00	0.00
5,600.00	32.59	335.45	4,851.35	2,410.46	-1,110.03	2,653.77	0.00	0.00	0.00
5,700.00	32.59	335.45	4,935.60	2,459.45	-1,132.40	2,707.63	0.00	0.00	0.00
5,800.00	32.59	335.45	5,019.86	2,508.44	-1,154.78	2,761.48	0.00	0.00	0.00
5,900.00	32.59	335.45	5,104.12	2,557.43	-1,177.15	2,815.34	0.00	0.00	0.00
6,000.00	32.59	335.45	5,188.38	2,606.42	-1,199.53	2,869.20	0.00	0.00	0.00
6,100.00	32.59	335.45	5,272.63	2,655.41	-1,221.90	2,923.06	0.00	0.00	0.00
6,200.00	32.59	335.45	5,356.89	2,704.40	-1,244.27	2,976.91	0.00	0.00	0.00
6,271.08	32.59	335.45	5,416.78	2,739.23	-1,260.18	3,015.20	0.00	0.00	0.00
Start Drop -1.50									
6,300.00	32.15	335.45	5,441.21	2,753.31	-1,266.61	3,030.68	1.50	-1.50	0.00
6,400.00	30.65	335.45	5,526.56	2,800.70	-1,288.26	3,082.78	1.50	-1.50	0.00
6,500.00	29.15	335.45	5,613.24	2,846.05	-1,308.97	3,132.63	1.50	-1.50	0.00
6,600.00	27.65	335.45	5,701.20	2,889.32	-1,328.73	3,180.20	1.50	-1.50	0.00
6,700.00	26.15	335.45	5,790.38	2,930.48	-1,347.53	3,225.45	1.50	-1.50	0.00
6,800.00	24.65	335.45	5,880.71	2,969.50	-1,365.35	3,268.34	1.50	-1.50	0.00
6,900.00	23.15	335.45	5,972.13	3,006.35	-1,382.18	3,308.86	1.50	-1.50	0.00
7,000.00	21.65	335.45	6,064.58	3,041.02	-1,398.01	3,346.97	1.50	-1.50	0.00
7,085.08	20.38	335.45	6,144.00	3,068.77	-1,410.69	3,377.48	1.50	-1.50	0.00
OCRK									
7,100.00	20.15	335.45	6,157.99	3,073.47	-1,412.84	3,382.65	1.50	-1.50	0.00
7,200.00	18.65	335.45	6,252.31	3,103.69	-1,426.64	3,415.87	1.50	-1.50	0.00
7,300.00	17.15	335.45	6,347.47	3,131.65	-1,439.41	3,446.61	1.50	-1.50	0.00
7,400.00	15.65	335.45	6,443.39	3,157.34	-1,451.14	3,474.85	1.50	-1.50	0.00
7,500.00	14.15	335.45	6,540.03	3,180.73	-1,461.82	3,500.57	1.50	-1.50	0.00
7,600.00	12.65	335.45	6,637.30	3,201.81	-1,471.45	3,523.75	1.50	-1.50	0.00
7,700.00	11.15	335.45	6,735.15	3,220.58	-1,480.02	3,544.37	1.50	-1.50	0.00
7,800.00	9.65	335.45	6,833.50	3,237.00	-1,487.52	3,562.43	1.50	-1.50	0.00
7,900.00	8.15	335.45	6,932.29	3,251.08	-1,493.95	3,577.90	1.50	-1.50	0.00
8,000.00	6.65	335.45	7,031.46	3,262.80	-1,499.31	3,590.79	1.50	-1.50	0.00
8,100.00	5.15	335.45	7,130.92	3,272.15	-1,503.58	3,601.07	1.50	-1.50	0.00
8,200.00	3.65	335.45	7,230.62	3,279.14	-1,506.77	3,608.75	1.50	-1.50	0.00
8,300.00	2.15	335.45	7,330.49	3,283.74	-1,508.87	3,613.81	1.50	-1.50	0.00
8,400.00	0.65	335.45	7,430.46	3,285.97	-1,509.89	3,616.26	1.50	-1.50	0.00
8,443.54	0.00	0.00	7,474.00	3,286.20	-1,509.99	3,616.51	1.50	-1.50	0.00
Start 2600.00 hold at 8443.54 MD - KMGAS - NR 311-3 BTV									
8,500.00	0.00	0.00	7,530.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
8,600.00	0.00	0.00	7,630.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00

Database:	Grand Junction District	Local Co-ordinate Reference:	Well NR 311-3 - Slot NR 311-3 (B4)
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 6720' & RKB 24' @ 6744.00usft
Project:	Garfield County, CO NAD83	MD Reference:	GL 6720' & RKB 24' @ 6744.00usft
Site:	NR 23-3 Pad	North Reference:	True
Well:	NR 311-3	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 22Jan2018 mmsdi		

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	7,730.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
8,800.00	0.00	0.00	7,830.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
8,900.00	0.00	0.00	7,930.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
9,000.00	0.00	0.00	8,030.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
9,100.00	0.00	0.00	8,130.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
9,200.00	0.00	0.00	8,230.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
9,300.00	0.00	0.00	8,330.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
9,400.00	0.00	0.00	8,430.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
9,500.00	0.00	0.00	8,530.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
9,600.00	0.00	0.00	8,630.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
9,700.00	0.00	0.00	8,730.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
9,800.00	0.00	0.00	8,830.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
9,900.00	0.00	0.00	8,930.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
9,963.54	0.00	0.00	8,994.00	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
CME0									
10,000.00	0.00	0.00	9,030.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
10,100.00	0.00	0.00	9,130.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
10,200.00	0.00	0.00	9,230.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
10,300.00	0.00	0.00	9,330.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
10,400.00	0.00	0.00	9,430.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
10,500.00	0.00	0.00	9,530.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
10,600.00	0.00	0.00	9,630.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
10,700.00	0.00	0.00	9,730.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
10,800.00	0.00	0.00	9,830.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
10,893.54	0.00	0.00	9,924.00	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
RLNS									
10,900.00	0.00	0.00	9,930.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
11,000.00	0.00	0.00	10,030.46	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
11,043.54	0.00	0.00	10,074.00	3,286.20	-1,509.99	3,616.51	0.00	0.00	0.00
TD at 11043.54 - TD - NR 311-3 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									
NR 311-3 BTV	0.00	0.00	7,474.00	3,286.20	-1,509.99	1,638,271.20	2,328,315.30	39.5616583	-107.8826642
- plan hits target center									
- Circle (radius 50.00)									
NR 311-3 PBHL	0.00	0.00	10,074.00	3,286.20	-1,509.99	1,638,271.20	2,328,315.30	39.5616583	-107.8826642
- plan hits target center									
- Point									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,100.00	1,059.19	9 5/8" Casing @ 1100' MD	9.62	13.50	

Database:	Grand Junction District	Local Co-ordinate Reference:	Well NR 311-3 - Slot NR 311-3 (B4)
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 6720' & RKB 24' @ 6744.00usft
Project:	Garfield County, CO NAD83	MD Reference:	GL 6720' & RKB 24' @ 6744.00usft
Site:	NR 23-3 Pad	North Reference:	True
Well:	NR 311-3	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 22Jan2018 mmsdi		

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,143.34	3,624.00	G Sand		0.00	0.00
4,190.81	3,664.00	G Sand Base		0.00	0.00
7,085.08	6,144.00	OCRK		0.00	0.00
8,443.54	7,474.00	KMVGAS		0.00	0.00
9,963.54	8,994.00	CME0		0.00	0.00
10,893.54	9,924.00	RLNS		0.00	0.00
11,043.54	10,074.00	TD		0.00	0.00

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
135.00	135.00	0.00	0.00	Start Build 3.00	
235.00	234.95	1.98	-1.72	Start 75.00 hold at 235.00 MD	
310.00	309.85	4.94	-4.29	Start DLS 3.50 TFO 17.92	
1,159.16	1,109.60	234.89	-116.39	Start 5111.92 hold at 1159.16 MD	
6,271.08	5,416.78	2,739.23	-1,260.18	Start Drop -1.50	
8,443.54	7,474.00	3,286.20	-1,509.99	Start 2600.00 hold at 8443.54 MD	
11,043.54	10,074.00	3,286.20	-1,509.99	TD at 11043.54	