

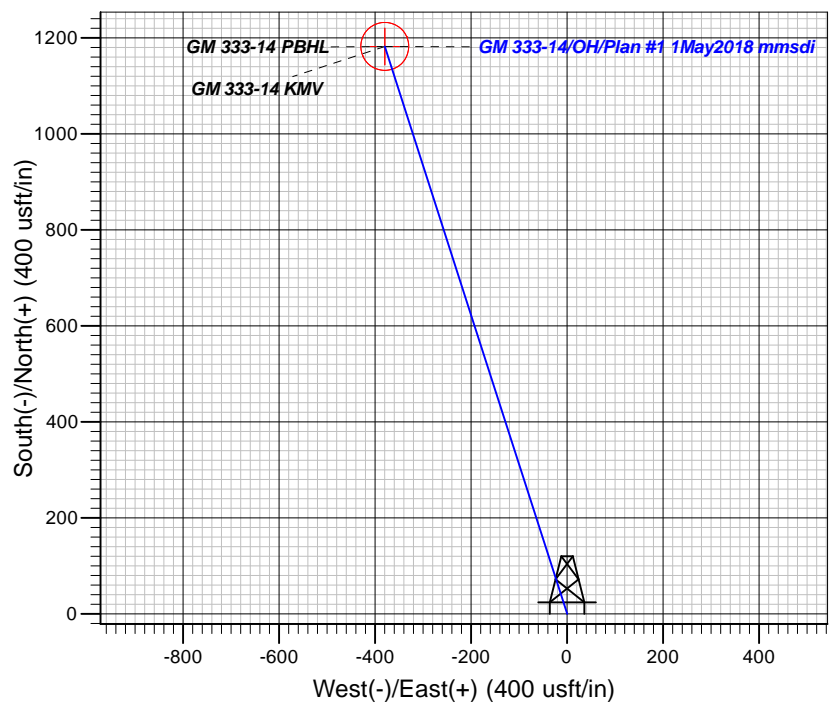
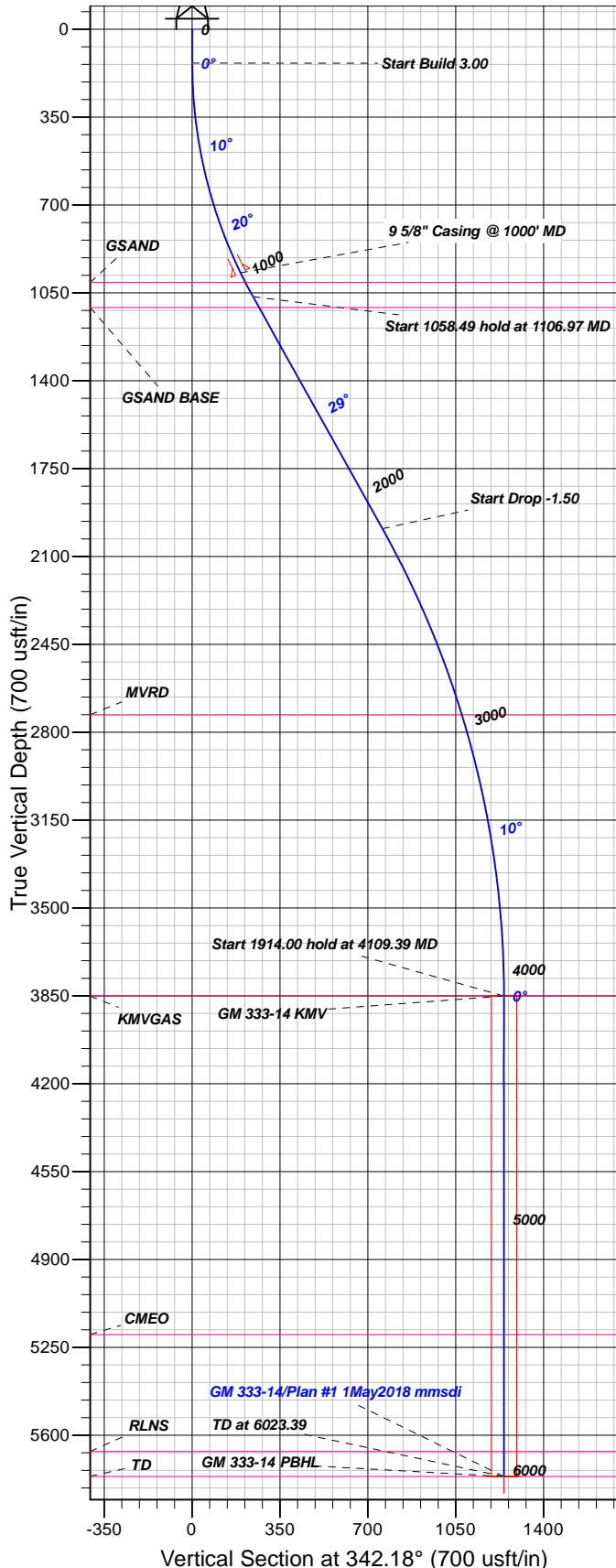


Azimuths to True North
Magnetic North: 9.42°

Magnetic Field
Strength: 51710.5snT
Dip Angle: 65.65°
Date: 5/3/2018
Model: HDGM

Well Details: GM 333-14

GL 5172' & RKB 24' @ 5196.00usft
+N/-S 0.00 +E/-W 0.00 Northing 1592886.90 Easting 2272793.00 Latitude 39.4329458 Longitude -108.0749546 Slot GM 333-14 (A10)



FORMATION TOP DETAILS

TVDPth	MDPath	Formation
1009.00	1042.80	GSAND
1109.00	1156.72	GSAND BASE
2731.00	2972.69	MVRD
3851.00	4109.39	KMGAS
5200.00	5458.39	CMEO
5665.00	5923.39	RLNS
5765.00	6023.39	TD

Plan: Plan #1 1May2018 mmsdi

14:02, May 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
970.73	1000.00	5/8" Casing @ 1000' MD	9.62

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSeet	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	1106.97	29.16	342.18	1065.55	230.43	-74.06	3.00	342.18	242.03	
4	2165.46	29.16	342.18	1989.90	721.42	-231.86	0.00	0.00	757.77	
5	4109.39	0.00	0.00	3851.00	1182.28	-379.98	1.50	180.00	1241.84	GM 333-14 KMV
6	6023.39	0.00	0.00	5765.00	1182.28	-379.98	0.00	0.00	1241.84	GM 333-14 PBHL

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
GM 333-14 KMV	3851.00	1182.28	-379.98	1594079.47	2272446.68	39.4361917	-108.0763000	Circle (Radius: 50.00)
- plan hits target center								
GM 333-14 PBHL	5765.00	1182.28	-379.98	1594079.47	2272446.68	39.4361917	-108.0763000	Point
- plan hits target center								



TEP Rocky Mountain LLC

Garfield County, CO NAD83

GM 34-14 Pad

GM 333-14 - Slot GM 333-14 (A10)

OH

Plan: Plan #1 1May2018 mmsdi

Standard Planning Report

07 May, 2018



Database:	Grand Junction District	Local Co-ordinate Reference:	Well GM 333-14 - Slot GM 333-14 (A10)
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 5172' & RKB 24' @ 5196.00usft
Project:	Garfield County, CO NAD83	MD Reference:	GL 5172' & RKB 24' @ 5196.00usft
Site:	GM 34-14 Pad	North Reference:	True
Well:	GM 333-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 1May2018 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		GM 34-14 Pad			
Site Position:		Northing:	1,592,890.50 usft	Latitude:	39.4329552
From:	Map	Easting:	2,272,786.40 usft	Longitude:	-108.0749784
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence:	-1.62 °

Well	GM 333-14 - Slot GM 333-14 (A10)					
Well Position	+N/-S	-3.41 usft	Northing:	1,592,886.90 usft	Latitude:	39.4329458
	+E/-W	6.70 usft	Easting:	2,272,793.00 usft	Longitude:	-108.0749547
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	5,172.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	5/3/2018	9.42	65.65	51,711

Design	Plan #1 1May2018 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	342.18

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	
1,106.97	29.16	342.18	1,065.55	230.43	-74.06	3.00	3.00	0.00	342.18	
2,165.46	29.16	342.18	1,989.90	721.42	-231.86	0.00	0.00	0.00	0.00	
4,109.39	0.00	0.00	3,851.00	1,182.28	-379.98	1.50	-1.50	0.00	180.00	GM 333-14 KMV
6,023.39	0.00	0.00	5,765.00	1,182.28	-379.98	0.00	0.00	0.00	0.00	GM 333-14 PBHL

Database:	Grand Junction District	Local Co-ordinate Reference:	Well GM 333-14 - Slot GM 333-14 (A10)
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 5172' & RKB 24' @ 5196.00usft
Project:	Garfield County, CO NAD83	MD Reference:	GL 5172' & RKB 24' @ 5196.00usft
Site:	GM 34-14 Pad	North Reference:	True
Well:	GM 333-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 1May2018 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
200.00	1.95	342.18	199.99	1.05	-0.34	1.11	3.00	3.00	0.00
300.00	4.95	342.18	299.79	6.78	-2.18	7.12	3.00	3.00	0.00
400.00	7.95	342.18	399.15	17.48	-5.62	18.36	3.00	3.00	0.00
500.00	10.95	342.18	497.78	33.10	-10.64	34.77	3.00	3.00	0.00
600.00	13.95	342.18	595.42	53.63	-17.24	56.33	3.00	3.00	0.00
700.00	16.95	342.18	691.79	78.99	-25.39	82.97	3.00	3.00	0.00
800.00	19.95	342.18	786.64	109.11	-35.07	114.61	3.00	3.00	0.00
900.00	22.95	342.18	879.71	143.92	-46.26	151.17	3.00	3.00	0.00
1,000.00	25.95	342.18	970.73	183.32	-58.92	192.56	3.00	3.00	0.00
9 5/8" Casing @ 1000' MD									
1,042.80	27.23	342.18	1,009.00	201.56	-64.78	211.72	3.00	3.00	0.00
GSAND									
1,100.00	28.95	342.18	1,059.46	227.21	-73.02	238.65	3.00	3.00	0.00
1,106.97	29.16	342.18	1,065.55	230.43	-74.06	242.03	3.00	3.00	0.00
1,156.72	29.16	342.18	1,109.00	253.51	-81.48	266.28	0.00	0.00	0.00
GSAND BASE									
1,200.00	29.16	342.18	1,146.79	273.58	-87.93	287.36	0.00	0.00	0.00
1,300.00	29.16	342.18	1,234.12	319.97	-102.84	336.09	0.00	0.00	0.00
1,400.00	29.16	342.18	1,321.45	366.35	-117.74	384.81	0.00	0.00	0.00
1,500.00	29.16	342.18	1,408.77	412.74	-132.65	433.53	0.00	0.00	0.00
1,600.00	29.16	342.18	1,496.10	459.13	-147.56	482.26	0.00	0.00	0.00
1,700.00	29.16	342.18	1,583.43	505.51	-162.47	530.98	0.00	0.00	0.00
1,800.00	29.16	342.18	1,670.76	551.90	-177.38	579.70	0.00	0.00	0.00
1,900.00	29.16	342.18	1,758.08	598.29	-192.29	628.43	0.00	0.00	0.00
2,000.00	29.16	342.18	1,845.41	644.67	-207.20	677.15	0.00	0.00	0.00
2,100.00	29.16	342.18	1,932.74	691.06	-222.10	725.88	0.00	0.00	0.00
2,165.46	29.16	342.18	1,989.90	721.42	-231.86	757.77	0.00	0.00	0.00
2,200.00	28.64	342.18	2,020.14	737.32	-236.97	774.46	1.50	-1.50	0.00
2,300.00	27.14	342.18	2,108.52	781.85	-251.28	821.24	1.50	-1.50	0.00
2,400.00	25.64	342.18	2,198.10	824.17	-264.88	865.69	1.50	-1.50	0.00
2,500.00	24.14	342.18	2,288.81	864.24	-277.76	907.78	1.50	-1.50	0.00
2,600.00	22.64	342.18	2,380.59	902.03	-289.91	947.47	1.50	-1.50	0.00
2,700.00	21.14	342.18	2,473.37	937.53	-301.32	984.76	1.50	-1.50	0.00
2,800.00	19.64	342.18	2,567.10	970.70	-311.98	1,019.60	1.50	-1.50	0.00
2,900.00	18.14	342.18	2,661.71	1,001.52	-321.88	1,051.97	1.50	-1.50	0.00
2,972.69	17.05	342.18	2,731.00	1,022.44	-328.61	1,073.95	1.50	-1.50	0.00
MVRD									
3,000.00	16.64	342.18	2,757.14	1,029.97	-331.03	1,081.86	1.50	-1.50	0.00
3,100.00	15.14	342.18	2,853.32	1,056.04	-339.41	1,109.24	1.50	-1.50	0.00
3,200.00	13.64	342.18	2,950.18	1,079.70	-347.01	1,134.09	1.50	-1.50	0.00
3,300.00	12.14	342.18	3,047.65	1,100.94	-353.84	1,156.40	1.50	-1.50	0.00
3,400.00	10.64	342.18	3,145.68	1,119.74	-359.88	1,176.15	1.50	-1.50	0.00
3,500.00	9.14	342.18	3,244.19	1,136.10	-365.14	1,193.33	1.50	-1.50	0.00
3,600.00	7.64	342.18	3,343.12	1,149.99	-369.60	1,207.92	1.50	-1.50	0.00
3,700.00	6.14	342.18	3,442.39	1,161.41	-373.27	1,219.92	1.50	-1.50	0.00
3,800.00	4.64	342.18	3,541.95	1,170.35	-376.15	1,229.31	1.50	-1.50	0.00
3,900.00	3.14	342.18	3,641.71	1,176.81	-378.22	1,236.10	1.50	-1.50	0.00
4,000.00	1.64	342.18	3,741.62	1,180.79	-379.50	1,240.27	1.50	-1.50	0.00
4,100.00	0.14	342.18	3,841.61	1,182.27	-379.98	1,241.83	1.50	-1.50	0.00
4,109.39	0.00	0.00	3,851.00	1,182.28	-379.98	1,241.84	1.50	-1.50	189.72
KMGAS - GM 333-14 KMV									

Database:	Grand Junction District	Local Co-ordinate Reference:	Well GM 333-14 - Slot GM 333-14 (A10)
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 5172' & RKB 24' @ 5196.00usft
Project:	Garfield County, CO NAD83	MD Reference:	GL 5172' & RKB 24' @ 5196.00usft
Site:	GM 34-14 Pad	North Reference:	True
Well:	GM 333-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 1May2018 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)	
4,200.00	0.00	0.00	3,941.61	1,182.28	-379.98	1,241.84	0.00	0.00	0.00	
4,300.00	0.00	0.00	4,041.61	1,182.28	-379.98	1,241.84	0.00	0.00	0.00	
4,400.00	0.00	0.00	4,141.61	1,182.28	-379.98	1,241.84	0.00	0.00	0.00	
4,500.00	0.00	0.00	4,241.61	1,182.28	-379.98	1,241.84	0.00	0.00	0.00	
4,600.00	0.00	0.00	4,341.61	1,182.28	-379.98	1,241.84	0.00	0.00	0.00	
4,700.00	0.00	0.00	4,441.61	1,182.28	-379.98	1,241.84	0.00	0.00	0.00	
4,800.00	0.00	0.00	4,541.61	1,182.28	-379.98	1,241.84	0.00	0.00	0.00	
4,900.00	0.00	0.00	4,641.61	1,182.28	-379.98	1,241.84	0.00	0.00	0.00	
5,000.00	0.00	0.00	4,741.61	1,182.28	-379.98	1,241.84	0.00	0.00	0.00	
5,100.00	0.00	0.00	4,841.61	1,182.28	-379.98	1,241.84	0.00	0.00	0.00	
5,200.00	0.00	0.00	4,941.61	1,182.28	-379.98	1,241.84	0.00	0.00	0.00	
5,300.00	0.00	0.00	5,041.61	1,182.28	-379.98	1,241.84	0.00	0.00	0.00	
5,400.00	0.00	0.00	5,141.61	1,182.28	-379.98	1,241.84	0.00	0.00	0.00	
5,458.39	0.00	0.00	5,200.00	1,182.28	-379.98	1,241.84	0.00	0.00	0.00	
CMEO										
5,500.00	0.00	0.00	5,241.61	1,182.28	-379.98	1,241.84	0.00	0.00	0.00	
5,600.00	0.00	0.00	5,341.61	1,182.28	-379.98	1,241.84	0.00	0.00	0.00	
5,700.00	0.00	0.00	5,441.61	1,182.28	-379.98	1,241.84	0.00	0.00	0.00	
5,800.00	0.00	0.00	5,541.61	1,182.28	-379.98	1,241.84	0.00	0.00	0.00	
5,900.00	0.00	0.00	5,641.61	1,182.28	-379.98	1,241.84	0.00	0.00	0.00	
5,923.39	0.00	0.00	5,665.00	1,182.28	-379.98	1,241.84	0.00	0.00	0.00	
RLNS										
6,000.00	0.00	0.00	5,741.61	1,182.28	-379.98	1,241.84	0.00	0.00	0.00	
6,023.39	0.00	0.00	5,765.00	1,182.28	-379.98	1,241.84	0.00	0.00	0.00	
TD - GM 333-14 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										
GM 333-14 KMV	0.00	0.00	3,851.00	1,182.28	-379.98	1,594,079.47	2,272,446.68	39.4361917	-108.0763000	
- plan hits target center										
- Circle (radius 50.00)										
GM 333-14 PBHL	0.00	0.00	5,765.00	1,182.28	-379.98	1,594,079.47	2,272,446.68	39.4361917	-108.0763000	
- plan hits target center										
- Point										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,000.00	970.73	9 5/8" Casing @ 1000' MD	9.62	13.50	

Database:	Grand Junction District	Local Co-ordinate Reference:	Well GM 333-14 - Slot GM 333-14 (A10)
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 5172' & RKB 24' @ 5196.00usft
Project:	Garfield County, CO NAD83	MD Reference:	GL 5172' & RKB 24' @ 5196.00usft
Site:	GM 34-14 Pad	North Reference:	True
Well:	GM 333-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #1 1May2018 mmsdi		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,042.80	1,009.00	GSAND		0.00	0.00	
1,156.72	1,109.00	GSAND BASE		0.00	0.00	
2,972.69	2,731.00	MVRD		0.00	0.00	
4,109.39	3,851.00	KMVGAS		0.00	0.00	
5,458.39	5,200.00	CMEQ		0.00	0.00	
5,923.39	5,665.00	RLNS		0.00	0.00	
6,023.39	5,765.00	TD		0.00	0.00	