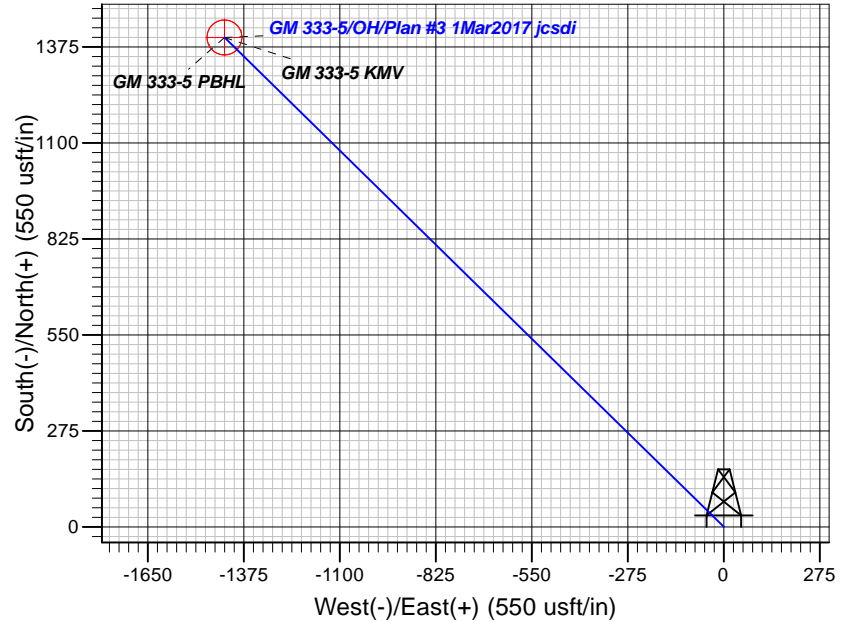
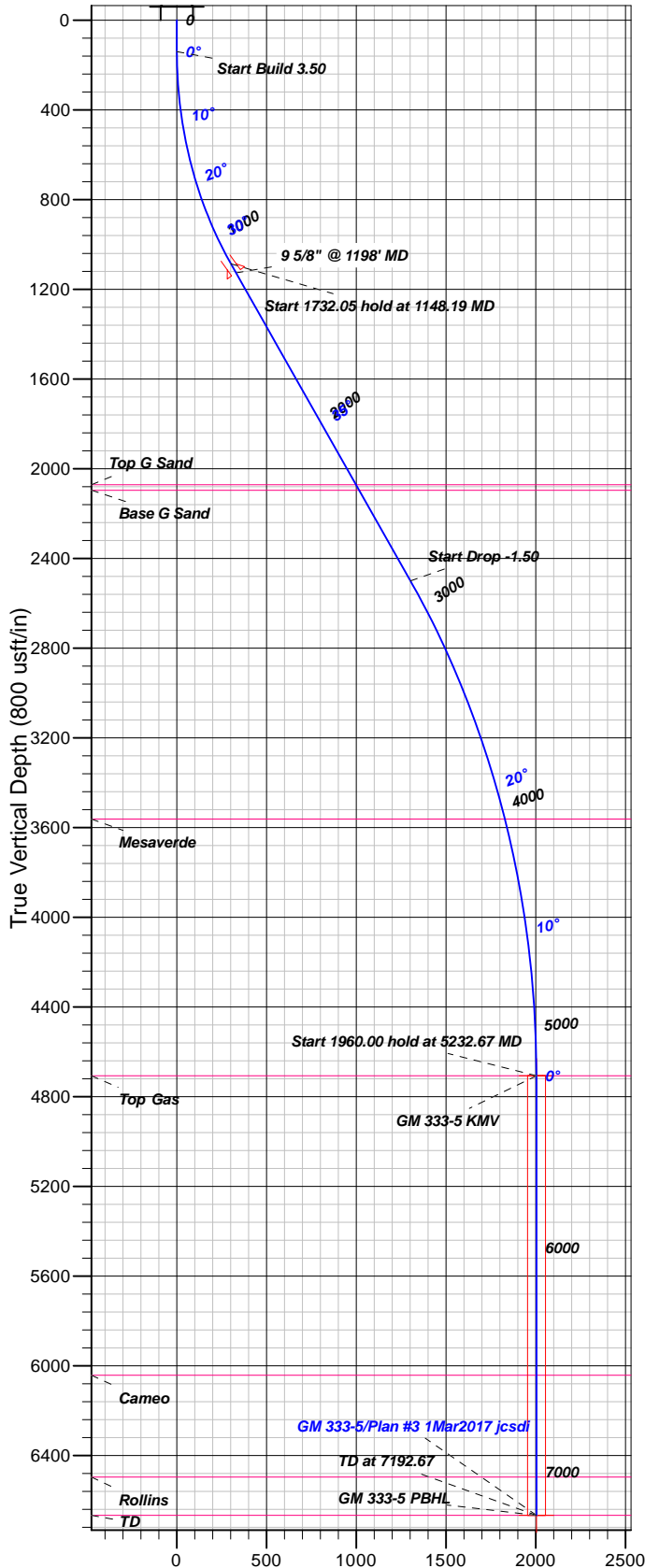


Well Details: GM 333-5

GL 5977' & RKB 24' @ 6001.00usft (H&P 271)
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1603514.14 2258796.44 39.4610110 -108.1255747 A6

T M Azimuths to True North
Magnetic North: 9.65°
Magnetic Field
Strength: 51850.7snT
Dip Angle: 65.78°
Date: 12/21/2016
Model: HDGM



FORMATION TOP DETAILS

TVDPATH	MDPATH	FORMATION
2071.00	2355.32	Top G Sand
2096.00	2385.94	Base G Sand
3561.00	4069.79	Mesaverde
4706.00	5232.67	Top Gas
6041.00	6567.67	Cameo
6496.00	7022.67	Rollins
6666.00	7192.67	TD

Plan: Plan #3 1Mar2017 jcsdi

14:53, March 06 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
1126.31	1198.00	9 5/8" @ 1198' 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	1148.19	35.29	314.42	1085.65	210.53	-214.80	3.50	314.42	300.76	
4	2880.24	35.29	314.42	2499.48	910.88	-929.36	0.00	0.00	301.31	
5	5232.67	0.00	0.00	4706.00	1402.11	-1430.55	1.50	180.00	2003.09	GM 333-5 KMV
6	7192.67	0.00	0.00	6666.00	1402.11	-1430.55	0.00	0.00	2003.09	GM 333-5 PBHL

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
GM 333-5 KMV	4706.00	1402.11	-1430.55	1604957.00	2257407.00	39.4648603	-108.1306418	Circle (Radius: 50.00)
- plan hits target center								
GM 333-5 PBHL	6666.00	1402.11	-1430.55	1604957.00	2257407.00	39.4648603	-108.1306418	Point
- plan hits target center								



TEP Rocky Mountain LLC

Garfield County, CO NAD83

MV 34-5 Pad

GM 333-5 - Slot A6

OH

Plan: Plan #3 1Mar2017 jcsdi

Standard Planning Report

06 March, 2017



Database:	Grand Junction District	Local Co-ordinate Reference:	Well GM 333-5 - Slot A6
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 5977' & RKB 24' @ 6001.00usft (H&P 271)
Project:	Garfield County, CO NAD83	MD Reference:	GL 5977' & RKB 24' @ 6001.00usft (H&P 271)
Site:	MV 34-5 Pad	North Reference:	True
Well:	GM 333-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3 1Mar2017 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		MV 34-5 Pad			
Site Position:		Northing:	1,603,476.79 usft	Latitude:	39.4609066
From:	Map	Easting:	2,258,772.10 usft	Longitude:	-108.1256571
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence:	-1.66 °

Well	GM 333-5 - Slot A6					
Well Position	+N/-S	38.03 usft	Northing:	1,603,514.14 usft	Latitude:	39.4610110
	+E/-W	23.25 usft	Easting:	2,258,796.44 usft	Longitude:	-108.1255748
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	5,977.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	12/21/2016	9.65	65.78	51,851

Design	Plan #3 1Mar2017 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	314.42

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	
1,148.19	35.29	314.42	1,085.65	210.53	-214.80	3.50	3.50	0.00	314.42	
2,880.24	35.29	314.42	2,499.48	910.88	-929.36	0.00	0.00	0.00	0.00	
5,232.67	0.00	0.00	4,706.00	1,402.11	-1,430.55	1.50	-1.50	0.00	180.00	GM 333-5 KMV
7,192.67	0.00	0.00	6,666.00	1,402.11	-1,430.55	0.00	0.00	0.00	0.00	GM 333-5 PBHL

Database:	Grand Junction District	Local Co-ordinate Reference:	Well GM 333-5 - Slot A6
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 5977' & RKB 24' @ 6001.00usft (H&P 271)
Project:	Garfield County, CO NAD83	MD Reference:	GL 5977' & RKB 24' @ 6001.00usft (H&P 271)
Site:	MV 34-5 Pad	North Reference:	True
Well:	GM 333-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3 1Mar2017 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	2.10	314.42	199.99	0.77	-0.79	1.10	3.50	3.50	0.00	
300.00	5.60	314.42	299.75	5.47	-5.58	7.81	3.50	3.50	0.00	
400.00	9.10	314.42	398.91	14.42	-14.71	20.60	3.50	3.50	0.00	
500.00	12.60	314.42	497.11	27.60	-28.16	39.42	3.50	3.50	0.00	
600.00	16.10	314.42	593.97	44.94	-45.85	64.21	3.50	3.50	0.00	
700.00	19.60	314.42	689.14	66.39	-67.74	94.85	3.50	3.50	0.00	
800.00	23.10	314.42	782.26	91.87	-93.74	131.25	3.50	3.50	0.00	
900.00	26.60	314.42	872.99	121.29	-123.75	173.27	3.50	3.50	0.00	
1,000.00	30.10	314.42	960.98	154.52	-157.65	220.75	3.50	3.50	0.00	
1,100.00	33.60	314.42	1,045.91	191.45	-195.33	273.51	3.50	3.50	0.00	
1,148.19	35.29	314.42	1,085.65	210.53	-214.80	300.76	3.50	3.50	0.00	
1,198.00	35.29	314.42	1,126.31	230.67	-235.35	329.54	0.00	0.00	0.00	
9 5/8" @ 1198' MD										
1,200.00	35.29	314.42	1,127.95	231.48	-236.17	330.70	0.00	0.00	0.00	
1,300.00	35.29	314.42	1,209.57	271.91	-277.43	388.46	0.00	0.00	0.00	
1,400.00	35.29	314.42	1,291.20	312.35	-318.68	446.23	0.00	0.00	0.00	
1,500.00	35.29	314.42	1,372.83	352.78	-359.94	504.00	0.00	0.00	0.00	
1,600.00	35.29	314.42	1,454.46	393.22	-401.19	561.76	0.00	0.00	0.00	
1,700.00	35.29	314.42	1,536.08	433.65	-442.45	619.53	0.00	0.00	0.00	
1,800.00	35.29	314.42	1,617.71	474.09	-483.70	677.29	0.00	0.00	0.00	
1,900.00	35.29	314.42	1,699.34	514.52	-524.96	735.06	0.00	0.00	0.00	
2,000.00	35.29	314.42	1,780.96	554.96	-566.22	792.83	0.00	0.00	0.00	
2,100.00	35.29	314.42	1,862.59	595.39	-607.47	850.59	0.00	0.00	0.00	
2,200.00	35.29	314.42	1,944.22	635.83	-648.73	908.36	0.00	0.00	0.00	
2,300.00	35.29	314.42	2,025.85	676.26	-689.98	966.13	0.00	0.00	0.00	
2,355.32	35.29	314.42	2,071.00	698.63	-712.80	998.08	0.00	0.00	0.00	
Top G Sand										
2,385.94	35.29	314.42	2,096.00	711.01	-725.44	1,015.77	0.00	0.00	0.00	
Base G Sand										
2,400.00	35.29	314.42	2,107.47	716.70	-731.24	1,023.89	0.00	0.00	0.00	
2,500.00	35.29	314.42	2,189.10	757.13	-772.49	1,081.66	0.00	0.00	0.00	
2,600.00	35.29	314.42	2,270.73	797.56	-813.75	1,139.43	0.00	0.00	0.00	
2,700.00	35.29	314.42	2,352.36	838.00	-855.00	1,197.19	0.00	0.00	0.00	
2,800.00	35.29	314.42	2,433.98	878.43	-896.26	1,254.96	0.00	0.00	0.00	
2,880.24	35.29	314.42	2,499.48	910.88	-929.36	1,301.31	0.00	0.00	0.00	
2,900.00	34.99	314.42	2,515.64	918.84	-937.48	1,312.68	1.50	-1.50	0.00	
3,000.00	33.49	314.42	2,598.31	958.22	-977.67	1,368.95	1.50	-1.50	0.00	
3,100.00	31.99	314.42	2,682.42	996.08	-1,016.29	1,423.03	1.50	-1.50	0.00	
3,200.00	30.49	314.42	2,767.92	1,032.38	-1,053.33	1,474.89	1.50	-1.50	0.00	
3,300.00	28.99	314.42	2,854.74	1,067.10	-1,088.75	1,524.50	1.50	-1.50	0.00	
3,400.00	27.49	314.42	2,942.84	1,100.22	-1,122.54	1,571.81	1.50	-1.50	0.00	
3,500.00	25.99	314.42	3,032.14	1,131.72	-1,154.68	1,616.81	1.50	-1.50	0.00	
3,600.00	24.49	314.42	3,122.59	1,161.56	-1,185.13	1,659.45	1.50	-1.50	0.00	
3,700.00	22.99	314.42	3,214.12	1,189.74	-1,213.88	1,699.70	1.50	-1.50	0.00	
3,800.00	21.49	314.42	3,306.68	1,216.23	-1,240.91	1,737.55	1.50	-1.50	0.00	
3,900.00	19.99	314.42	3,400.20	1,241.02	-1,266.20	1,772.96	1.50	-1.50	0.00	
4,000.00	18.49	314.42	3,494.61	1,264.09	-1,289.73	1,805.92	1.50	-1.50	0.00	
4,013.89	18.28	314.42	3,507.80	1,267.15	-1,292.86	1,810.30	1.50	-1.50	0.00	
GM 433-5 MVRD										

Database:	Grand Junction District	Local Co-ordinate Reference:	Well GM 333-5 - Slot A6
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 5977' & RKB 24' @ 6001.00usft (H&P 271)
Project:	Garfield County, CO NAD83	MD Reference:	GL 5977' & RKB 24' @ 6001.00usft (H&P 271)
Site:	MV 34-5 Pad	North Reference:	True
Well:	GM 333-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3 1Mar2017 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)
4,069.79	17.44	314.42	3,561.00	1,279.16	-1,305.11	1,827.44	1.50	-1.50	0.00
Mesaverde									
4,100.00	16.99	314.42	3,589.85	1,285.41	-1,311.49	1,836.38	1.50	-1.50	0.00
4,118.92	16.71	314.42	3,607.96	1,289.25	-1,315.41	1,841.87	1.50	-1.50	0.00
GM 333-5 MVRD									
4,200.00	15.49	314.42	3,685.86	1,304.99	-1,331.47	1,864.35	1.50	-1.50	0.00
4,300.00	13.99	314.42	3,782.57	1,322.80	-1,349.64	1,889.79	1.50	-1.50	0.00
4,400.00	12.49	314.42	3,879.91	1,338.83	-1,365.99	1,912.69	1.50	-1.50	0.00
4,500.00	10.99	314.42	3,977.81	1,353.07	-1,380.52	1,933.04	1.50	-1.50	0.00
4,600.00	9.49	314.42	4,076.22	1,365.51	-1,393.22	1,950.82	1.50	-1.50	0.00
4,700.00	7.99	314.42	4,175.05	1,376.15	-1,404.07	1,966.01	1.50	-1.50	0.00
4,800.00	6.49	314.42	4,274.25	1,384.97	-1,413.07	1,978.62	1.50	-1.50	0.00
4,900.00	4.99	314.42	4,373.75	1,391.97	-1,420.21	1,988.62	1.50	-1.50	0.00
5,000.00	3.49	314.42	4,473.47	1,397.15	-1,425.50	1,996.01	1.50	-1.50	0.00
5,100.00	1.99	314.42	4,573.35	1,400.49	-1,428.91	2,000.79	1.50	-1.50	0.00
5,200.00	0.49	314.42	4,673.33	1,402.01	-1,430.45	2,002.96	1.50	-1.50	0.00
5,232.67	0.00	0.00	4,706.00	1,402.11	-1,430.55	2,003.09	1.50	-1.50	0.00
Top Gas - GM 333-5 KMV									
5,300.00	0.00	0.00	4,773.33	1,402.11	-1,430.55	2,003.09	0.00	0.00	0.00
5,400.00	0.00	0.00	4,873.33	1,402.11	-1,430.55	2,003.09	0.00	0.00	0.00
5,500.00	0.00	0.00	4,973.33	1,402.11	-1,430.55	2,003.09	0.00	0.00	0.00
5,600.00	0.00	0.00	5,073.33	1,402.11	-1,430.55	2,003.09	0.00	0.00	0.00
5,700.00	0.00	0.00	5,173.33	1,402.11	-1,430.55	2,003.09	0.00	0.00	0.00
5,800.00	0.00	0.00	5,273.33	1,402.11	-1,430.55	2,003.09	0.00	0.00	0.00
5,900.00	0.00	0.00	5,373.33	1,402.11	-1,430.55	2,003.09	0.00	0.00	0.00
6,000.00	0.00	0.00	5,473.33	1,402.11	-1,430.55	2,003.09	0.00	0.00	0.00
6,100.00	0.00	0.00	5,573.33	1,402.11	-1,430.55	2,003.09	0.00	0.00	0.00
6,200.00	0.00	0.00	5,673.33	1,402.11	-1,430.55	2,003.09	0.00	0.00	0.00
6,300.00	0.00	0.00	5,773.33	1,402.11	-1,430.55	2,003.09	0.00	0.00	0.00
6,400.00	0.00	0.00	5,873.33	1,402.11	-1,430.55	2,003.09	0.00	0.00	0.00
6,500.00	0.00	0.00	5,973.33	1,402.11	-1,430.55	2,003.09	0.00	0.00	0.00
6,567.67	0.00	0.00	6,041.00	1,402.11	-1,430.55	2,003.09	0.00	0.00	0.00
Cameo									
6,600.00	0.00	0.00	6,073.33	1,402.11	-1,430.55	2,003.09	0.00	0.00	0.00
6,700.00	0.00	0.00	6,173.33	1,402.11	-1,430.55	2,003.09	0.00	0.00	0.00
6,800.00	0.00	0.00	6,273.33	1,402.11	-1,430.55	2,003.09	0.00	0.00	0.00
6,900.00	0.00	0.00	6,373.33	1,402.11	-1,430.55	2,003.09	0.00	0.00	0.00
7,000.00	0.00	0.00	6,473.33	1,402.11	-1,430.55	2,003.09	0.00	0.00	0.00
7,022.67	0.00	0.00	6,496.00	1,402.11	-1,430.55	2,003.09	0.00	0.00	0.00
Rollins									
7,100.00	0.00	0.00	6,573.33	1,402.11	-1,430.55	2,003.09	0.00	0.00	0.00
7,177.67	0.00	0.00	6,651.00	1,402.11	-1,430.55	2,003.09	0.00	0.00	0.00
GM 433-5 PBHL									
7,192.67	0.00	0.00	6,666.00	1,402.11	-1,430.55	2,003.09	0.00	0.00	0.00
TD - GM 333-5 PBHL									

Database:	Grand Junction District	Local Co-ordinate Reference:	Well GM 333-5 - Slot A6
Company:	TEP Rocky Mountain LLC	TVD Reference:	GL 5977' & RKB 24' @ 6001.00usft (H&P 271)
Project:	Garfield County, CO NAD83	MD Reference:	GL 5977' & RKB 24' @ 6001.00usft (H&P 271)
Site:	MV 34-5 Pad	North Reference:	True
Well:	GM 333-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3 1Mar2017 jcsdi		

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
GM 333-5 KMV - plan hits target center - Circle (radius 50.00)	0.00	0.00	4,706.00	1,402.11	-1,430.55	1,604,957.00	2,257,407.00	39.4648604	-108.1306418
GM 333-5 PBHL - plan hits target center - Point	0.00	0.00	6,666.00	1,402.11	-1,430.55	1,604,957.00	2,257,407.00	39.4648604	-108.1306418

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,198.00	1,126.31	9 5/8" @ 1198' MD	9.62	13.50	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,355.32	2,071.00	Top G Sand		0.00	0.00	
2,385.94	2,096.00	Base G Sand		0.00	0.00	
4,069.79	3,561.00	Mesaverde		0.00	0.00	
5,232.67	4,706.00	Top Gas		0.00	0.00	
6,567.67	6,041.00	Cameo		0.00	0.00	
7,022.67	6,496.00	Rollins		0.00	0.00	
7,192.67	6,666.00	TD		0.00	0.00	