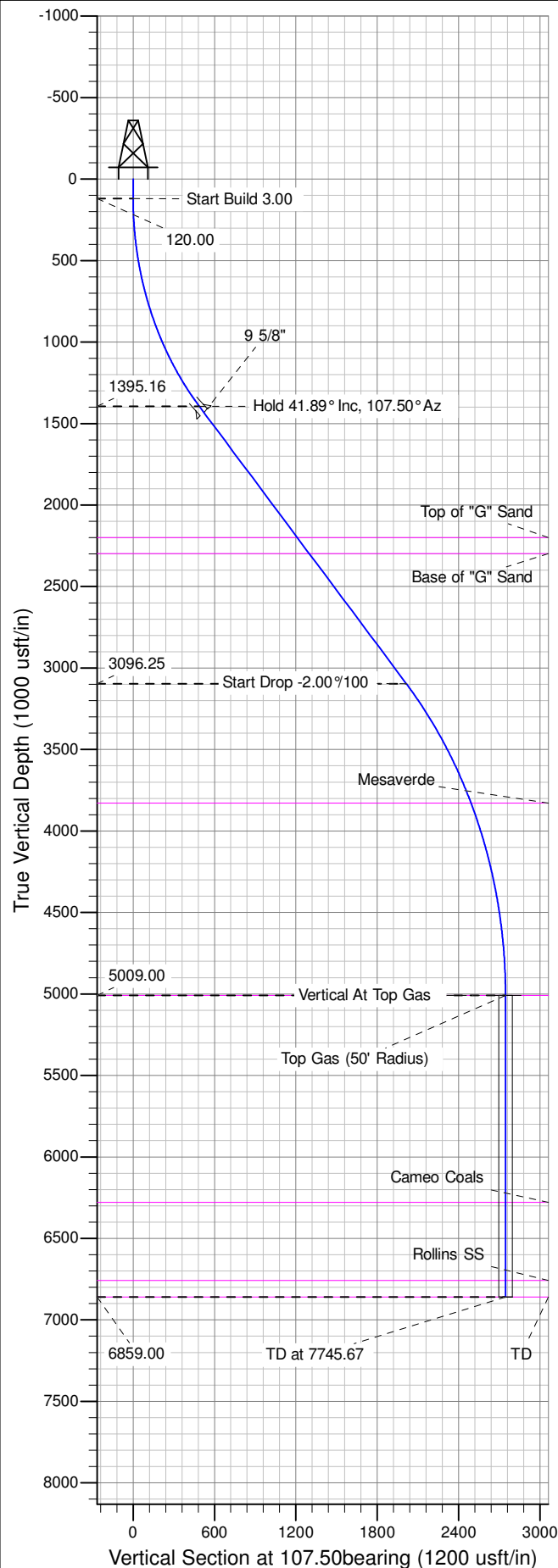
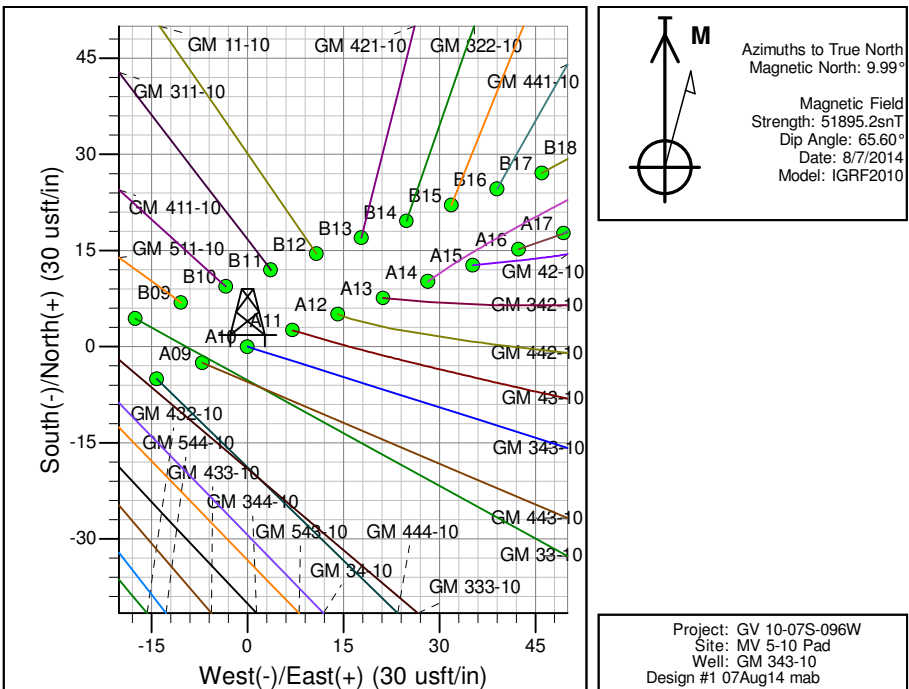
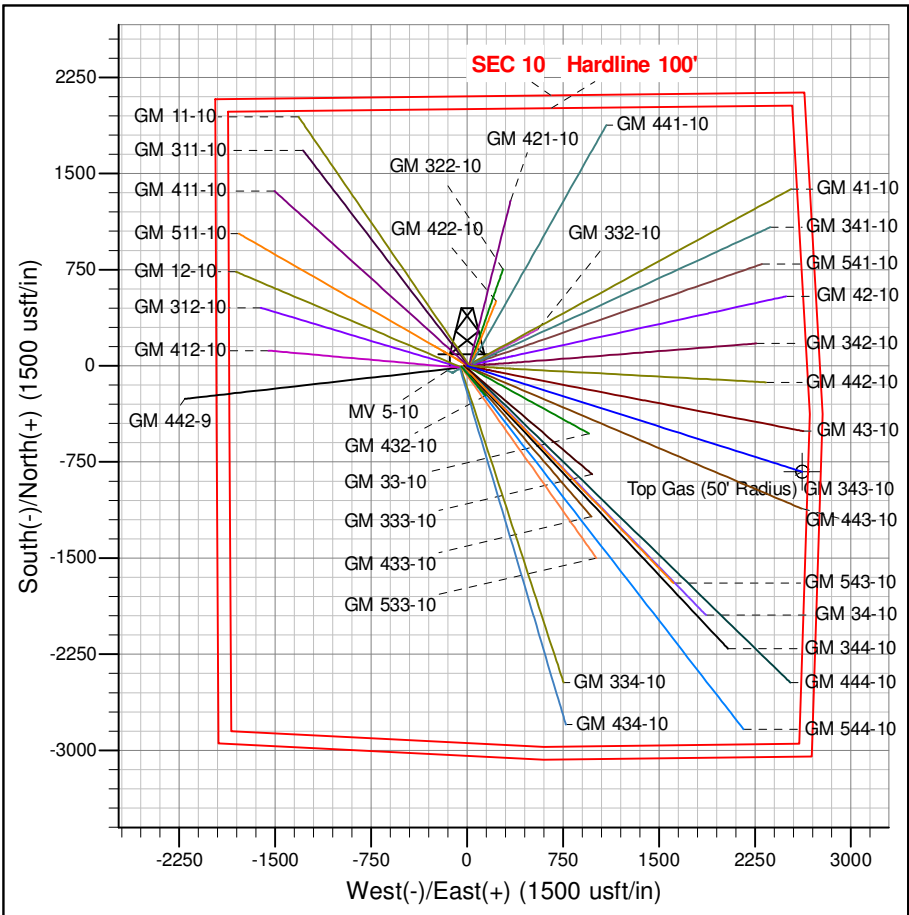




Well Name: GM 343-10
Surface Location: MV 5-10 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 6148.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1600363.32 2266938.71 39.45301 -108.09643 A11
KELLY BUSHING @ 6174.00usft (Nabors (26' RKB) mab)



ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation	
120.00	120.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build 3.00	
1395.16	1516.26	41.89	107.50	-146.76	465.47	488.06	488.06	Hold 41.89° Inc, 107.50° Az	
3096.25	3801.28	41.89	107.50	-605.51	1920.51	2013.71	2013.71	Start Drop -2.00°/100	
5009.00	5895.67	0.00	0.00	-825.64	2618.72	2745.79	2745.79	Vertical At Top Gas	
6859.00	7745.67	0.00	0.00	-825.64	2618.72	2745.79	2745.79	TD at 7745.67	



PICEANCE VLY NAD 83

GV 10-07S-096W

MV 5-10 Pad

GM 343-10 - Slot A11

Wellbore #1

Plan: Design #1 07Aug14 mab

Standard Planning Report - Geographic

13 October, 2014

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 343-10 - Slot A11
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
Project:	GV 10-07S-096W	MD Reference:	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
Site:	MV 5-10 Pad	North Reference:	True
Well:	GM 343-10	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 07Aug14 mab		

Project	GV 10-07S-096W		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		Using geodetic scale factor

Site	MV 5-10 Pad			
Site Position:		Northing:	1,600,354.00000 usft	Latitude: 39.45298
From: Map		Easting:	2,266,910.20000 usft	Longitude: -108.09653
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence: -1.64 °

Well	GM 343-10 - Slot A11					
Well Position	+N-S	0.00 usft	Northing:	1,600,363.32106 usft	Latitude:	39.45301
	+E-W	0.00 usft	Easting:	2,266,938.71379 usft	Longitude:	-108.09643
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	6,148.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/7/2014	9.99	65.60	51,895

Design	Design #1 07Aug14 mab			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (bearing)
	0.00	0.00	0.00	107.50

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	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	
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,516.26	41.89	107.50	1,395.16	-146.76	465.47	3.00	3.00	0.00	107.50	
3,801.28	41.89	107.50	3,096.25	-605.51	1,920.51	0.00	0.00	0.00	0.00	
5,895.67	0.00	0.00	5,009.00	-825.64	2,618.72	2.00	-2.00	0.00	180.00	Top Gas (50' Radius)
7,745.67	0.00	0.00	6,859.00	-825.64	2,618.72	0.00	0.00	0.00	0.00	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 343-10 - Slot A11
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
Project:	GV 10-07S-096W	MD Reference:	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
Site:	MV 5-10 Pad	North Reference:	True
Well:	GM 343-10	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 07Aug14 mab		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	1,600,363.32106	2,266,938.71379	39.45301	-108.09643
120.00	0.00	0.00	120.00	0.00	0.00	1,600,363.32106	2,266,938.71379	39.45301	-108.09643
Start Build 3.00									
200.00	2.40	107.50	199.98	-0.50	1.60	1,600,362.77189	2,266,940.29641	39.45301	-108.09643
400.00	8.40	107.50	399.00	-6.16	19.54	1,600,356.60479	2,266,958.06904	39.45299	-108.09636
600.00	14.40	107.50	594.96	-18.04	57.22	1,600,343.65193	2,266,995.39720	39.45296	-108.09623
800.00	20.40	107.50	785.72	-36.02	114.24	1,600,324.05521	2,267,051.87191	39.45291	-108.09603
1,000.00	26.40	107.50	969.19	-59.89	189.96	1,600,298.02935	2,267,126.87444	39.45284	-108.09576
1,200.00	32.40	107.50	1,143.35	-89.40	283.55	1,600,265.85948	2,267,219.58303	39.45276	-108.09543
1,400.00	38.40	107.50	1,306.30	-124.22	394.00	1,600,227.89808	2,267,328.98194	39.45267	-108.09504
1,516.26	41.89	107.50	1,395.16	-146.76	465.47	1,600,203.33101	2,267,399.78045	39.45260	-108.09478
Hold 41.89° Inc, 107.50° Az									
1,566.26	41.89	107.50	1,432.39	-156.79	497.31	1,600,192.38778	2,267,431.31716	39.45258	-108.09467
9 5/8"									
1,600.00	41.89	107.50	1,457.50	-163.57	518.79	1,600,185.00311	2,267,452.59864	39.45256	-108.09459
1,800.00	41.89	107.50	1,606.39	-203.72	646.15	1,600,141.22912	2,267,578.74854	39.45245	-108.09414
2,000.00	41.89	107.50	1,755.29	-243.87	773.50	1,600,097.45513	2,267,704.89842	39.45234	-108.09369
2,200.00	41.89	107.50	1,904.18	-284.03	900.86	1,600,053.68113	2,267,831.04832	39.45223	-108.09324
2,400.00	41.89	107.50	2,053.07	-324.18	1,028.21	1,600,009.90714	2,267,957.19821	39.45212	-108.09279
2,596.03	41.89	107.50	2,199.00	-363.53	1,153.04	1,599,967.00261	2,268,080.84245	39.45201	-108.09235
Top of "G" Sand									
2,600.00	41.89	107.50	2,201.96	-364.33	1,155.57	1,599,966.13315	2,268,083.34809	39.45201	-108.09234
2,730.35	41.89	107.50	2,299.00	-390.50	1,238.58	1,599,937.60251	2,268,165.56899	39.45194	-108.09205
Base of "G" Sand									
2,800.00	41.89	107.50	2,350.85	-404.49	1,282.92	1,599,922.35916	2,268,209.49799	39.45190	-108.09189
3,000.00	41.89	107.50	2,499.74	-444.64	1,410.28	1,599,878.58516	2,268,335.64788	39.45179	-108.09144
3,200.00	41.89	107.50	2,648.63	-484.79	1,537.63	1,599,834.81117	2,268,461.79777	39.45168	-108.09099
3,400.00	41.89	107.50	2,797.52	-524.94	1,664.99	1,599,791.03719	2,268,587.94766	39.45157	-108.09054
3,600.00	41.89	107.50	2,946.41	-565.10	1,792.34	1,599,747.26320	2,268,714.09755	39.45146	-108.09008
3,800.00	41.89	107.50	3,095.30	-605.25	1,919.70	1,599,703.48921	2,268,840.24744	39.45135	-108.08963
3,801.28	41.89	107.50	3,096.25	-605.51	1,920.51	1,599,703.20931	2,268,841.05404	39.45134	-108.08963
Start Drop -2.00°/100									
4,000.00	37.91	107.50	3,248.67	-643.83	2,042.06	1,599,661.43141	2,268,961.45153	39.45124	-108.08920
4,200.00	33.91	107.50	3,410.62	-679.10	2,153.92	1,599,622.98311	2,269,072.25358	39.45114	-108.08880
4,400.00	29.91	107.50	3,580.36	-710.88	2,254.74	1,599,588.33172	2,269,172.11356	39.45106	-108.08845
4,600.00	25.91	107.50	3,757.05	-739.03	2,344.01	1,599,557.64603	2,269,260.54497	39.45098	-108.08813
4,679.47	24.32	107.50	3,829.00	-749.17	2,376.18	1,599,546.58844	2,269,292.41122	39.45095	-108.08802
Mesaverde									
4,800.00	21.91	107.50	3,939.85	-763.40	2,421.32	1,599,531.07555	2,269,337.11698	39.45091	-108.08786
5,000.00	17.91	107.50	4,127.85	-783.88	2,486.27	1,599,508.74974	2,269,401.45654	39.45086	-108.08763
5,200.00	13.91	107.50	4,320.15	-800.37	2,538.56	1,599,490.77735	2,269,453.25020	39.45081	-108.08744
5,400.00	9.91	107.50	4,515.80	-812.78	2,577.93	1,599,477.24594	2,269,492.24562	39.45078	-108.08730
5,600.00	5.91	107.50	4,713.85	-821.06	2,604.18	1,599,468.22145	2,269,518.25281	39.45075	-108.08721
5,800.00	1.91	107.50	4,913.35	-825.16	2,617.20	1,599,463.74784	2,269,531.14508	39.45074	-108.08716
5,895.67	0.00	0.00	5,009.00	-825.64	2,618.72	1,599,463.22422	2,269,532.65407	39.45074	-108.08716
Vertical At Top Gas - Approx. Top Gas									
6,000.00	0.00	0.00	5,113.33	-825.64	2,618.72	1,599,463.22422	2,269,532.65407	39.45074	-108.08716
6,200.00	0.00	0.00	5,313.33	-825.64	2,618.72	1,599,463.22422	2,269,532.65407	39.45074	-108.08716
6,400.00	0.00	0.00	5,513.33	-825.64	2,618.72	1,599,463.22422	2,269,532.65407	39.45074	-108.08716
6,600.00	0.00	0.00	5,713.33	-825.64	2,618.72	1,599,463.22422	2,269,532.65407	39.45074	-108.08716
6,800.00	0.00	0.00	5,913.33	-825.64	2,618.72	1,599,463.22422	2,269,532.65407	39.45074	-108.08716
7,000.00	0.00	0.00	6,113.33	-825.64	2,618.72	1,599,463.22422	2,269,532.65407	39.45074	-108.08716

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 343-10 - Slot A11
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
Project:	GV 10-07S-096W	MD Reference:	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
Site:	MV 5-10 Pad	North Reference:	True
Well:	GM 343-10	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 07Aug14 mab		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (bearing)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
7,165.67	0.00	0.00	6,279.00	-825.64	2,618.72	1,599,463.22422	2,269,532.65407	39.45074	-108.08716
Cameo Coals									
7,200.00	0.00	0.00	6,313.33	-825.64	2,618.72	1,599,463.22422	2,269,532.65407	39.45074	-108.08716
7,400.00	0.00	0.00	6,513.33	-825.64	2,618.72	1,599,463.22422	2,269,532.65407	39.45074	-108.08716
7,600.00	0.00	0.00	6,713.33	-825.64	2,618.72	1,599,463.22422	2,269,532.65407	39.45074	-108.08716
7,645.67	0.00	0.00	6,759.00	-825.64	2,618.72	1,599,463.22422	2,269,532.65407	39.45074	-108.08716
Rollins SS									
7,745.67	0.00	0.00	6,859.00	-825.64	2,618.72	1,599,463.22422	2,269,532.65407	39.45074	-108.08716
TD at 7745.67 - TD									

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (bearing)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Top Gas (50' Radius) G1 - plan hits target center - Circle (radius 50.00)	0.00	0.00	5,009.00	-825.64	2,618.72	1,599,463.22422	2,269,532.65407	39.45074	-108.08716

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,566.26	1,432.39	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
2,596.03	2,199.00	Top of "G" Sand				
2,730.35	2,299.00	Base of "G" Sand				
4,679.47	3,829.00	Mesaverde				
5,895.67	5,009.00	Approx. Top Gas				
7,165.67	6,279.00	Cameo Coals				
7,645.67	6,759.00	Rollins SS				
7,745.67	6,859.00	TD				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
120.00	120.00	0.00	0.00	Start Build 3.00	
1,516.26	1,395.16	-146.76	465.47	Hold 41.89° Inc, 107.50° Az	
3,801.28	3,096.25	-605.51	1,920.51	Start Drop -2.00°/100	
5,895.67	5,009.00	-825.64	2,618.72	Vertical At Top Gas	
7,745.67	6,859.00	-825.64	2,618.72	TD at 7745.67	