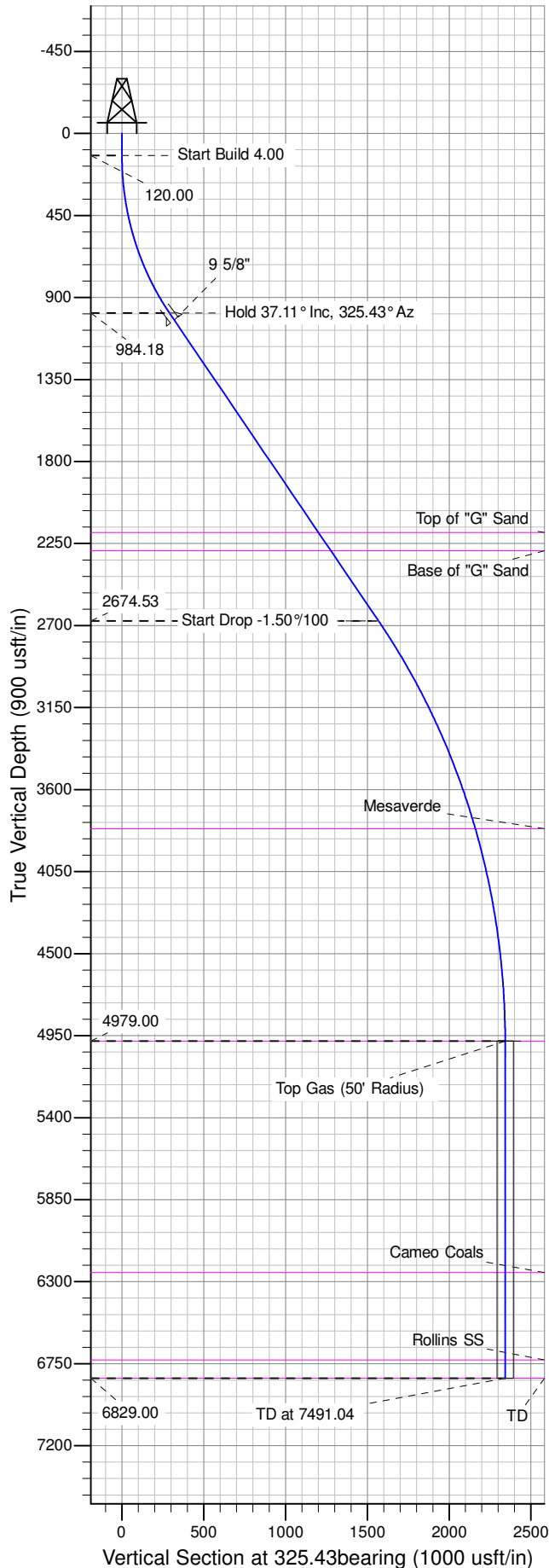
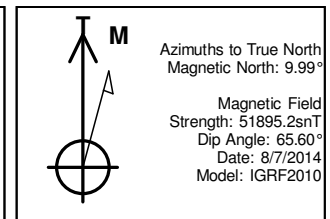
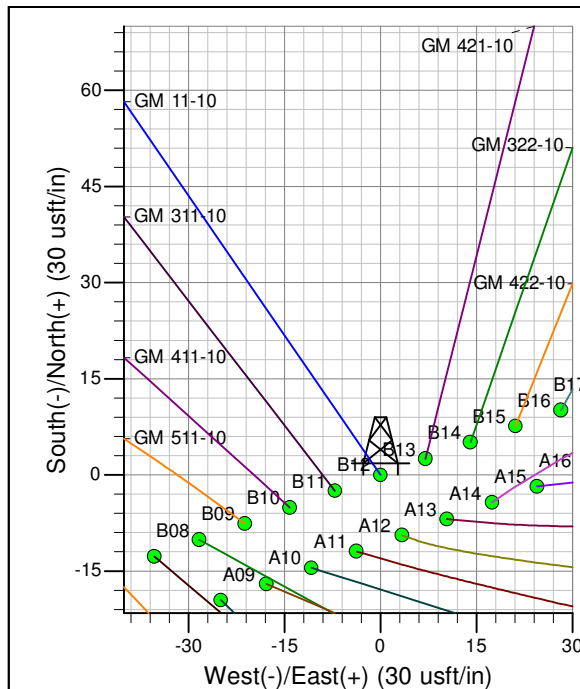
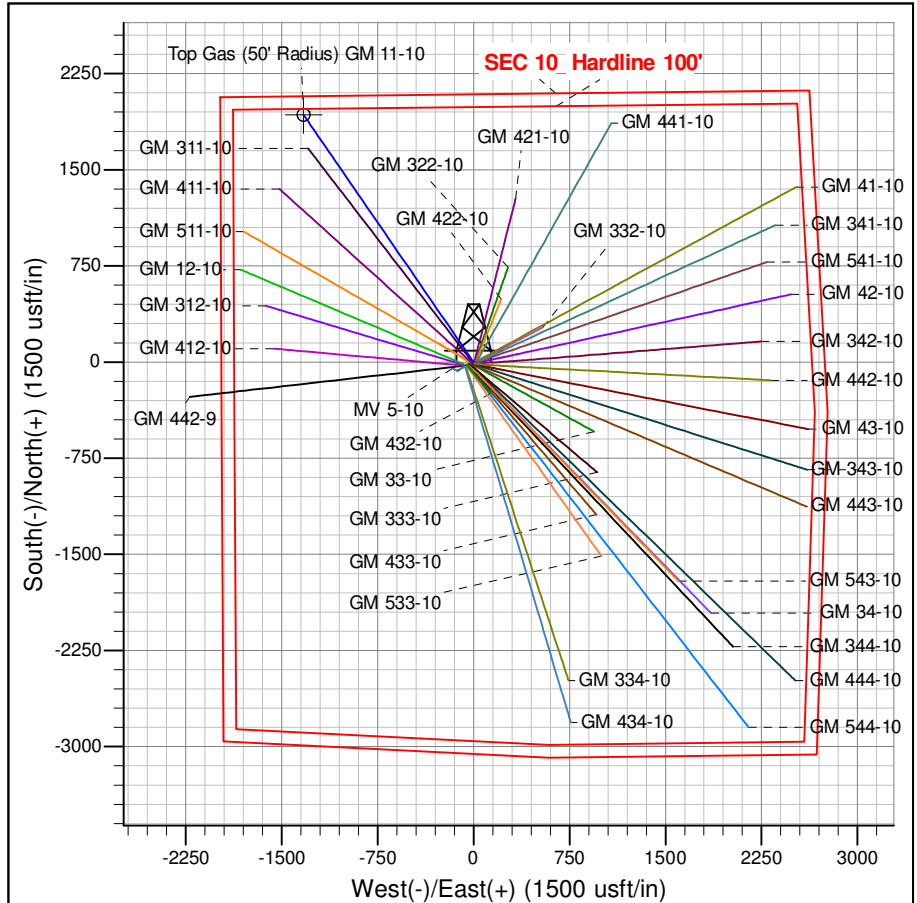




Well Name: GM 11-10
Surface Location: MV 5-10 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 6148.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1600377.50000 2266949.90000 39.45305 -108.09639 B13
KELLY BUSHING @ 6174.00usft (Nabors (26' 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 4.00	
984.18	1047.68	37.11	325.43	238.83	-164.59	290.05	290.05	Hold 37.11° Inc, 325.43° Az	
2674.53	3167.22	37.11	325.43	1291.77	-890.19	1568.79	1568.79	Start Drop -1.50°/100	
4979.00	5641.04	0.00	0.00	1928.65	-1329.09	2342.26	2342.26	Top Gas	
6829.00	7491.04	0.00	0.00	1928.65	-1329.09	2342.26	2342.26	TD at 7491.04	



Azimuths to True North
Magnetic North: 9.99°
Magnetic Field
Strength: 51895.2snT
Dip Angle: 65.60°
Date: 8/7/2014
Model: IGRF2010
Project: GV 10-07S-096W
Site: MV 5-10 Pad
Well: GM 11-10
Design #1 07Aug14 mab

PICEANCE VLY NAD 83

GV 10-07S-096W

MV 5-10 Pad

GM 11-10 - Slot B13

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 11-10 - Slot B13
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 11-10	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 11-10 - Slot B13			
Well Position	+N/-S	0.00 usft	Northing:	1,600,377.50000 usft
	+E/-W	0.00 usft	Easting:	2,266,949.90000 usft
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	325.43

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	
1,047.68	37.11	325.43	984.18	238.83	-164.59	4.00	4.00	0.00	325.43	
3,167.22	37.11	325.43	2,674.53	1,291.77	-890.19	0.00	0.00	0.00	0.00	
5,641.05	0.00	0.00	4,979.00	1,928.65	-1,329.09	1.50	-1.50	0.00	180.00	Top Gas (50' Radius)
7,491.05	0.00	0.00	6,829.00	1,928.65	-1,329.09	0.00	0.00	0.00	0.00	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 11-10 - Slot B13
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 11-10	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	1,600,377.50000	2,266,949.90000	39.45305	-108.09639	
120.00	0.00	0.00	120.00	0.00	0.00	1,600,377.50000	2,266,949.90000	39.45305	-108.09639	
Start Build 4.00										
200.00	3.20	325.43	199.96	1.84	-1.27	1,600,379.37443	2,266,948.68578	39.45305	-108.09640	
400.00	11.20	325.43	398.22	22.46	-15.48	1,600,400.39470	2,266,935.06931	39.45311	-108.09645	
600.00	19.20	325.43	591.07	65.61	-45.21	1,600,444.36776	2,266,906.58452	39.45323	-108.09655	
800.00	27.20	325.43	774.74	130.43	-89.88	1,600,510.43774	2,266,863.78584	39.45341	-108.09671	
1,000.00	35.20	325.43	945.68	215.67	-148.62	1,600,597.31865	2,266,807.50629	39.45364	-108.09692	
1,047.68	37.11	325.43	984.18	238.83	-164.59	1,600,620.92640	2,266,792.21370	39.45370	-108.09698	
Hold 37.11° Inc, 325.43° Az										
1,097.68	37.11	325.43	1,024.05	263.67	-181.70	1,600,646.24152	2,266,775.81512	39.45377	-108.09704	
9 5/8"										
1,200.00	37.11	325.43	1,105.65	314.50	-216.73	1,600,698.04939	2,266,742.25511	39.45391	-108.09716	
1,400.00	37.11	325.43	1,265.15	413.85	-285.20	1,600,799.31576	2,266,676.65697	39.45418	-108.09740	
1,600.00	37.11	325.43	1,424.65	513.21	-353.67	1,600,900.58212	2,266,611.05883	39.45446	-108.09765	
1,800.00	37.11	325.43	1,584.16	612.56	-422.13	1,601,001.84848	2,266,545.46070	39.45473	-108.09789	
2,000.00	37.11	325.43	1,743.66	711.92	-490.60	1,601,103.11484	2,266,479.86256	39.45500	-108.09813	
2,200.00	37.11	325.43	1,903.16	811.27	-559.07	1,601,204.38120	2,266,414.26443	39.45527	-108.09837	
2,400.00	37.11	325.43	2,062.66	910.63	-627.54	1,601,305.64757	2,266,348.66629	39.45555	-108.09862	
2,558.42	37.11	325.43	2,189.00	989.33	-681.77	1,601,385.86005	2,266,296.70640	39.45576	-108.09881	
Top of "G" Sand										
2,600.00	37.11	325.43	2,222.16	1,009.98	-696.01	1,601,406.91393	2,266,283.06816	39.45582	-108.09886	
2,683.81	37.11	325.43	2,289.00	1,051.62	-724.70	1,601,449.34938	2,266,255.57939	39.45593	-108.09896	
Base of "G" Sand										
2,800.00	37.11	325.43	2,381.66	1,109.34	-764.48	1,601,508.18028	2,266,217.47002	39.45609	-108.09910	
3,000.00	37.11	325.43	2,541.16	1,208.69	-832.94	1,601,609.44665	2,266,151.87188	39.45637	-108.09934	
3,167.22	37.11	325.43	2,674.53	1,291.77	-890.19	1,601,694.11745	2,266,097.02399	39.45659	-108.09955	
Start Drop -1.50°/100										
3,200.00	36.62	325.43	2,700.75	1,307.96	-901.35	1,601,710.61869	2,266,086.33484	39.45664	-108.09959	
3,400.00	33.62	325.43	2,864.33	1,402.68	-966.62	1,601,807.16062	2,266,023.79709	39.45690	-108.09982	
3,600.00	30.62	325.43	3,033.71	1,490.22	-1,026.95	1,601,896.38529	2,265,965.99930	39.45714	-108.10003	
3,800.00	27.62	325.43	3,208.41	1,570.34	-1,082.16	1,601,978.04813	2,265,913.09990	39.45736	-108.10023	
4,000.00	24.62	325.43	3,387.97	1,642.82	-1,132.11	1,602,051.92530	2,265,865.24388	39.45756	-108.10040	
4,200.00	21.62	325.43	3,571.90	1,707.47	-1,176.66	1,602,117.81432	2,265,822.56241	39.45773	-108.10056	
4,400.00	18.62	325.43	3,759.67	1,764.10	-1,215.69	1,602,175.53459	2,265,785.17249	39.45789	-108.10070	
4,457.18	17.76	325.43	3,814.00	1,778.79	-1,225.82	1,602,190.51308	2,265,775.46975	39.45793	-108.10073	
Mesaverde										
4,600.00	15.62	325.43	3,950.80	1,812.56	-1,249.08	1,602,224.92789	2,265,753.17658	39.45802	-108.10082	
4,800.00	12.62	325.43	4,144.73	1,852.72	-1,276.76	1,602,265.85885	2,265,726.66240	39.45813	-108.10092	
5,000.00	9.62	325.43	4,340.96	1,884.46	-1,298.63	1,602,298.21528	2,265,705.70261	39.45822	-108.10099	
5,200.00	6.62	325.43	4,538.93	1,907.71	-1,314.65	1,602,321.90850	2,265,690.35466	39.45828	-108.10105	
5,400.00	3.62	325.43	4,738.12	1,922.39	-1,324.77	1,602,336.87355	2,265,680.66063	39.45832	-108.10109	
5,600.00	0.62	325.43	4,937.96	1,928.47	-1,328.96	1,602,343.06942	2,265,676.64707	39.45834	-108.10110	
5,641.05	0.00	0.00	4,979.00	1,928.65	-1,329.09	1,602,343.25450	2,265,676.52719	39.45834	-108.10110	
Top Gas - Approx. Top Gas										
5,800.00	0.00	0.00	5,137.96	1,928.65	-1,329.09	1,602,343.25450	2,265,676.52719	39.45834	-108.10110	
6,000.00	0.00	0.00	5,337.96	1,928.65	-1,329.09	1,602,343.25450	2,265,676.52719	39.45834	-108.10110	
6,200.00	0.00	0.00	5,537.96	1,928.65	-1,329.09	1,602,343.25450	2,265,676.52719	39.45834	-108.10110	
6,400.00	0.00	0.00	5,737.96	1,928.65	-1,329.09	1,602,343.25450	2,265,676.52719	39.45834	-108.10110	
6,600.00	0.00	0.00	5,937.96	1,928.65	-1,329.09	1,602,343.25450	2,265,676.52719	39.45834	-108.10110	
6,800.00	0.00	0.00	6,137.96	1,928.65	-1,329.09	1,602,343.25450	2,265,676.52719	39.45834	-108.10110	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 11-10 - Slot B13
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 11-10	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
6,911.05	0.00	0.00	6,249.00	1,928.65	-1,329.09	1,602,343.25450	2,265,676.52719	39.45834	-108.10110
Cameo Coals									
7,000.00	0.00	0.00	6,337.96	1,928.65	-1,329.09	1,602,343.25450	2,265,676.52719	39.45834	-108.10110
7,200.00	0.00	0.00	6,537.96	1,928.65	-1,329.09	1,602,343.25450	2,265,676.52719	39.45834	-108.10110
7,391.05	0.00	0.00	6,729.00	1,928.65	-1,329.09	1,602,343.25450	2,265,676.52719	39.45834	-108.10110
Rollins SS									
7,400.00	0.00	0.00	6,737.96	1,928.65	-1,329.09	1,602,343.25450	2,265,676.52719	39.45834	-108.10110
7,491.05	0.00	0.00	6,829.00	1,928.65	-1,329.09	1,602,343.25450	2,265,676.52719	39.45834	-108.10110
TD at 7491.04 - 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	4,979.00	1,928.65	-1,329.09	1,602,343.25450	2,265,676.52719	39.45834	-108.10110

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,097.68	1,024.05	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
2,558.42	2,189.00	Top of "G" Sand				
2,683.81	2,289.00	Base of "G" Sand				
4,457.18	3,814.00	Mesaverde				
5,641.05	4,979.00	Approx. Top Gas				
6,911.05	6,249.00	Cameo Coals				
7,391.05	6,729.00	Rollins SS				
7,491.05	6,829.00	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 4.00	
1,047.68	984.18	238.83	-164.59	Hold 37.11° Inc, 325.43° Az	
3,167.22	2,674.53	1,291.77	-890.19	Start Drop -1.50°/100	
5,641.05	4,979.00	1,928.65	-1,329.09	Top Gas	
7,491.05	6,829.00	1,928.65	-1,329.09	TD at 7491.04	