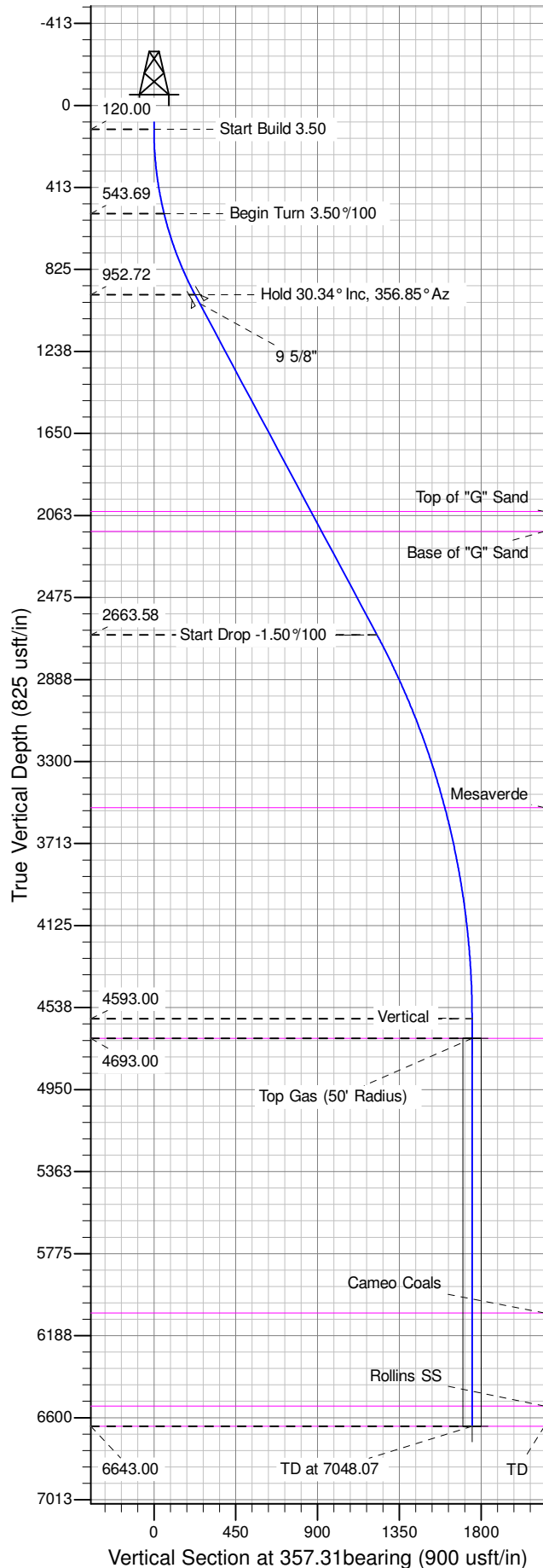




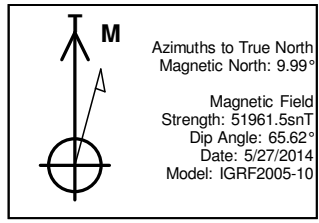
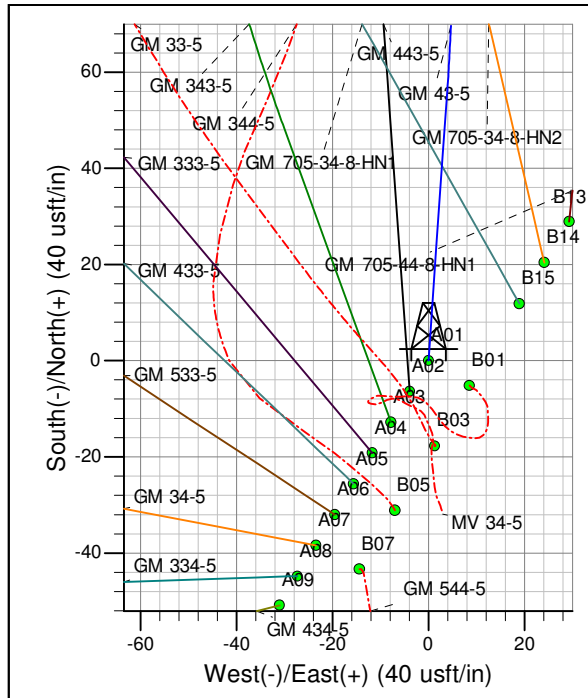
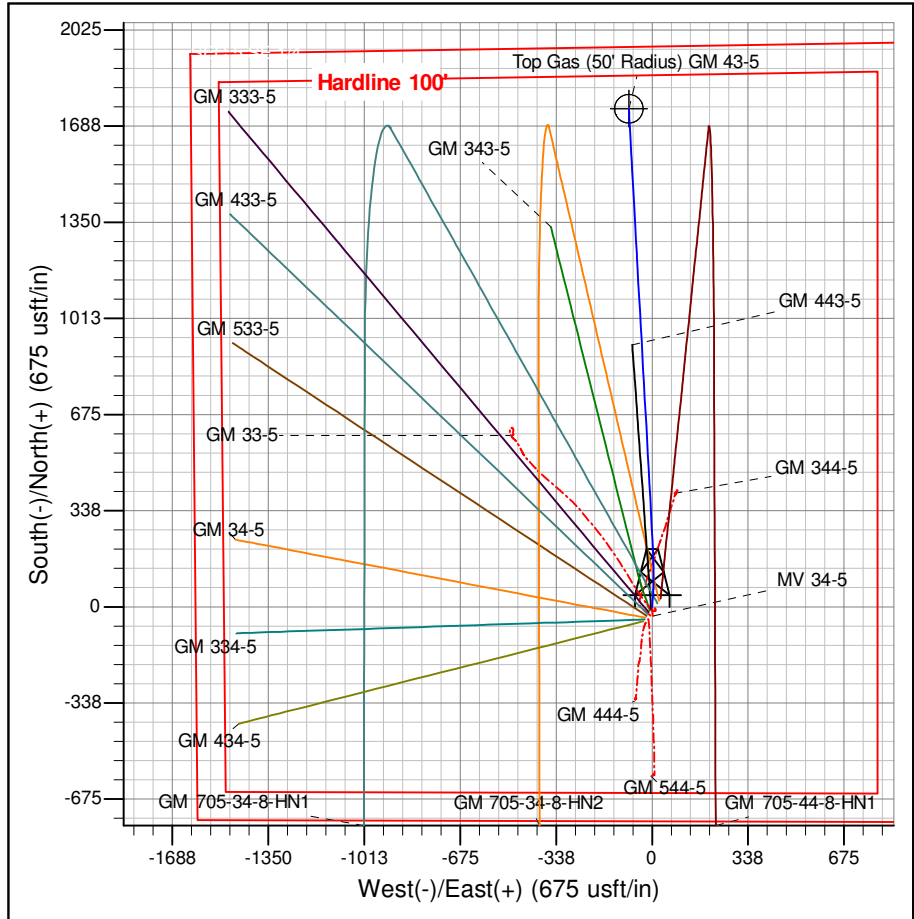
Well Name: GM 43-5
Surface Location: MV 34-5 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 5977.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1603545.57000	2258816.87000	39.46110	-108.12551	A01

KELLY BUSHING @ 6003.00usft (Nabors 577 (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	0.00	Start Build 3.50
543.69	548.57	15.00	4.00	55.64	3.89	55.40	55.78	226.43	Begin Turn 3.50°/100
952.72	993.09	30.34	356.85	226.18	1.72	225.85	226.43	226.43	Hold 30.34° Inc, 356.85° Az
2663.58	2975.44	30.34	356.85	1225.99	-53.35	1227.14	1227.75	1227.75	Start Drop -1.50°/100
4593.00	4998.07	0.00	0.00	1748.31	-82.12	1750.24	1750.87	1750.87	Vertical
4693.00	5098.07	0.00	0.00	1748.31	-82.12	1750.24	1750.87	1750.87	Top Gas
6643.00	7048.07	0.00	0.00	1748.31	-82.12	1750.24	1750.87	1750.87	TD at 7048.07



Project: GV 05-07S-096W
Site: MV 34-5 Pad
Well: GM 43-5
Design #2 24Jul14 mab

PICEANCE VLY NAD 83

GV 05-07S-096W

MV 34-5 Pad

GM 43-5 - Slot A01

Wellbore #1

Plan: Design #2 24Jul14 mab

Standard Planning Report - Geographic

30 September, 2014

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 43-5 - Slot A01
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 6003.00usft (Nabors 577 (26' RKB) mab)
Project:	GV 05-07S-096W	MD Reference:	KELLY BUSHING @ 6003.00usft (Nabors 577 (26' RKB) mab)
Site:	MV 34-5 Pad	North Reference:	True
Well:	GM 43-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2 24Jul14 mab		

Project	GV 05-07S-096W, Garfield County, CO, 05-07S-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 34-5 Pad			
Site Position:		Northing:	1,603,540.12600 usft	Latitude: 39.461085
From: Map		Easting:	2,258,825.25200 usft	Longitude: -108.125476
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence: -1.66 °

Well	GM 43-5 - Slot A01			
Well Position	+N/-S	0.00 usft	Northing:	1,603,545.57000 usft
	+E/-W	0.00 usft	Easting:	2,258,816.87000 usft
Position Uncertainty	0.00 usft		Wellhead Elevation:	0.00 usft
			Ground Level:	5,977.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005-10	5/27/2014	9.99	65.62	51,961

Design	Design #2 24Jul14 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	357.31

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	
548.57	15.00	4.00	543.69	55.64	3.89	3.50	3.50	0.00	4.00	
993.09	30.34	356.85	952.72	226.18	1.72	3.50	3.45	-1.61	-13.56	
2,975.44	30.34	356.85	2,663.58	1,225.99	-53.35	0.00	0.00	0.00	0.00	
4,998.07	0.00	0.00	4,593.00	1,748.31	-82.12	1.50	-1.50	0.00	180.00	
7,048.07	0.00	0.00	6,643.00	1,748.31	-82.12	0.00	0.00	0.00	0.00	TD / PBHL GM 43-5

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 43-5 - Slot A01
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 6003.00usft (Nabors 577 (26' RKB) mab)
Project:	GV 05-07S-096W	MD Reference:	KELLY BUSHING @ 6003.00usft (Nabors 577 (26' RKB) mab)
Site:	MV 34-5 Pad	North Reference:	True
Well:	GM 43-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2 24Jul14 mab		

Planned Survey										
Measured			Vertical			Map				
Depth (usft)	Inclination (°)	Azimuth (bearing)	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	1,603,545.57000	2,258,816.87000	39.461099	-108.125506	
120.00	0.00	0.00	120.00	0.00	0.00	1,603,545.57000	2,258,816.87000	39.461099	-108.125506	
Start Build 3.50										
200.00	2.80	4.00	199.97	1.95	0.14	1,603,547.51478	2,258,817.06260	39.461104	-108.125505	
400.00	9.80	4.00	398.64	23.83	1.67	1,603,569.34025	2,258,819.22410	39.461164	-108.125500	
548.57	15.00	4.00	543.69	55.64	3.89	1,603,601.07616	2,258,822.36709	39.461252	-108.125492	
Begin Turn 3.50°/100										
600.00	16.76	2.54	593.16	69.69	4.68	1,603,615.09273	2,258,823.56490	39.461290	-108.125489	
800.00	23.64	358.87	780.75	138.67	5.17	1,603,684.02795	2,258,826.04178	39.461480	-108.125488	
993.09	30.34	356.85	952.72	226.18	1.72	1,603,771.59320	2,258,825.12109	39.461720	-108.125500	
Hold 30.34° Inc, 356.85° Az										
1,000.00	30.34	356.85	958.68	229.66	1.52	1,603,775.08098	2,258,825.02997	39.461729	-108.125501	
1,043.09	30.34	356.85	995.87	251.39	0.33	1,603,796.83826	2,258,824.46154	39.461789	-108.125505	
9 5/8"										
1,200.00	30.34	356.85	1,131.29	330.53	-4.03	1,603,876.06633	2,258,822.39162	39.462006	-108.125520	
1,400.00	30.34	356.85	1,303.90	431.40	-9.59	1,603,977.05169	2,258,819.75328	39.462283	-108.125540	
1,600.00	30.34	356.85	1,476.51	532.28	-15.14	1,604,078.03705	2,258,817.11493	39.462560	-108.125560	
1,800.00	30.34	356.85	1,649.12	633.15	-20.70	1,604,179.02241	2,258,814.47658	39.462837	-108.125579	
2,000.00	30.34	356.85	1,821.73	734.02	-26.25	1,604,280.00777	2,258,811.83824	39.463114	-108.125599	
2,200.00	30.34	356.85	1,994.34	834.89	-31.81	1,604,380.99313	2,258,809.19989	39.463391	-108.125619	
2,256.38	30.34	356.85	2,043.00	863.33	-33.38	1,604,409.46340	2,258,808.45608	39.463469	-108.125624	
Top of "G" Sand										
2,372.25	30.34	356.85	2,143.00	921.77	-36.59	1,604,467.96845	2,258,806.92757	39.463630	-108.125636	
Base of "G" Sand										
2,400.00	30.34	356.85	2,166.95	935.76	-37.36	1,604,481.97849	2,258,806.56154	39.463668	-108.125638	
2,600.00	30.34	356.85	2,339.56	1,036.63	-42.92	1,604,582.96384	2,258,803.92320	39.463945	-108.125658	
2,800.00	30.34	356.85	2,512.17	1,137.50	-48.48	1,604,683.94921	2,258,801.28485	39.464222	-108.125678	
2,975.44	30.34	356.85	2,663.58	1,225.99	-53.35	1,604,772.53286	2,258,798.97051	39.464465	-108.125695	
Start Drop -1.50°/100										
3,000.00	29.97	356.85	2,684.82	1,238.31	-54.03	1,604,784.86633	2,258,798.64829	39.464499	-108.125697	
3,200.00	26.97	356.85	2,860.61	1,333.49	-59.27	1,604,880.16147	2,258,796.15860	39.464760	-108.125716	
3,400.00	23.97	356.85	3,041.15	1,419.37	-64.00	1,604,966.12933	2,258,793.91260	39.464996	-108.125733	
3,600.00	20.97	356.85	3,225.94	1,495.68	-68.20	1,605,042.53428	2,258,791.91644	39.465205	-108.125747	
3,800.00	17.97	356.85	3,414.48	1,562.24	-71.87	1,605,109.16690	2,258,790.17560	39.465388	-108.125760	
3,923.97	16.11	356.85	3,533.00	1,598.52	-73.87	1,605,145.48110	2,258,789.22685	39.465487	-108.125768	
Mesaverde										
4,000.00	14.97	356.85	3,606.25	1,618.86	-74.99	1,605,165.84457	2,258,788.69484	39.465543	-108.125771	
4,200.00	11.97	356.85	3,800.73	1,665.37	-77.55	1,605,212.41192	2,258,787.47822	39.465671	-108.125781	
4,400.00	8.97	356.85	3,997.37	1,701.66	-79.55	1,605,248.74132	2,258,786.52907	39.465771	-108.125788	
4,600.00	5.97	356.85	4,195.65	1,727.62	-80.98	1,605,274.73319	2,258,785.85001	39.465842	-108.125793	
4,800.00	2.97	356.85	4,395.02	1,743.19	-81.83	1,605,290.31630	2,258,785.44288	39.465885	-108.125796	
4,998.07	0.00	0.00	4,593.00	1,748.31	-82.12	1,605,295.44840	2,258,785.30880	39.465899	-108.125797	
Vertical										
5,000.00	0.00	0.00	4,594.93	1,748.31	-82.12	1,605,295.44840	2,258,785.30880	39.465899	-108.125797	
5,098.07	0.00	0.00	4,693.00	1,748.31	-82.12	1,605,295.44840	2,258,785.30880	39.465899	-108.125797	
Top Gas - Approx. Top Gas										
5,200.00	0.00	0.00	4,794.93	1,748.31	-82.12	1,605,295.44840	2,258,785.30880	39.465899	-108.125797	
5,400.00	0.00	0.00	4,994.93	1,748.31	-82.12	1,605,295.44840	2,258,785.30880	39.465899	-108.125797	
5,600.00	0.00	0.00	5,194.93	1,748.31	-82.12	1,605,295.44840	2,258,785.30880	39.465899	-108.125797	
5,800.00	0.00	0.00	5,394.93	1,748.31	-82.12	1,605,295.44840	2,258,785.30880	39.465899	-108.125797	
6,000.00	0.00	0.00	5,594.93	1,748.31	-82.12	1,605,295.44840	2,258,785.30880	39.465899	-108.125797	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 43-5 - Slot A01
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 6003.00usft (Nabors 577 (26' RKB) mab)
Project:	GV 05-07S-096W	MD Reference:	KELLY BUSHING @ 6003.00usft (Nabors 577 (26' RKB) mab)
Site:	MV 34-5 Pad	North Reference:	True
Well:	GM 43-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2 24Jul14 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
6,200.00	0.00	0.00	5,794.93	1,748.31	-82.12	1,605,295.44840	2,258,785.30880	39.465899	-108.125797
6,400.00	0.00	0.00	5,994.93	1,748.31	-82.12	1,605,295.44840	2,258,785.30880	39.465899	-108.125797
6,478.07	0.00	0.00	6,073.00	1,748.31	-82.12	1,605,295.44840	2,258,785.30880	39.465899	-108.125797
Cameo Coals									
6,600.00	0.00	0.00	6,194.93	1,748.31	-82.12	1,605,295.44840	2,258,785.30880	39.465899	-108.125797
6,800.00	0.00	0.00	6,394.93	1,748.31	-82.12	1,605,295.44840	2,258,785.30880	39.465899	-108.125797
6,948.07	0.00	0.00	6,543.00	1,748.31	-82.12	1,605,295.44840	2,258,785.30880	39.465899	-108.125797
Rollins SS									
7,000.00	0.00	0.00	6,594.93	1,748.31	-82.12	1,605,295.44840	2,258,785.30880	39.465899	-108.125797
7,048.07	0.00	0.00	6,643.00	1,748.31	-82.12	1,605,295.44840	2,258,785.30880	39.465899	-108.125797
TD at 7048.07 - TD									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (bearing)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Top Gas (50' Radius) G1	0.00	0.00	4,693.00	1,748.31	-82.12	1,605,295.44840	2,258,785.30880	39.465899	-108.125797
- plan hits target center									
- Circle (radius 50.00)									
TD / PBHL GM 43-5	0.00	0.00	6,643.00	1,748.31	-82.12	1,605,295.44840	2,258,785.30880	39.465899	-108.125797
- plan hits target center									
- Point									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,043.09	995.87	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
2,256.38	2,043.00	Top of "G" Sand				
2,372.25	2,143.00	Base of "G" Sand				
3,923.97	3,533.00	Mesaverde				
5,098.07	4,693.00	Approx. Top Gas				
6,478.07	6,073.00	Cameo Coals				
6,948.07	6,543.00	Rollins SS				
7,048.07	6,643.00	TD				

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 43-5 - Slot A01
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 6003.00usft (Nabors 577 (26' RKB) mab)
Project:	GV 05-07S-096W	MD Reference:	KELLY BUSHING @ 6003.00usft (Nabors 577 (26' RKB) mab)
Site:	MV 34-5 Pad	North Reference:	True
Well:	GM 43-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2 24Jul14 mab		

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 3.50
548.57	543.69	55.64	3.89	Begin Turn 3.50°/100
993.09	952.72	226.18	1.72	Hold 30.34° Inc, 356.85° Az
2,975.44	2,663.58	1,225.99	-53.35	Start Drop -1.50°/100
4,998.07	4,593.00	1,748.31	-82.12	Vertical
5,098.07	4,693.00	1,748.31	-82.12	Top Gas
7,048.07	6,643.00	1,748.31	-82.12	TD at 7048.07