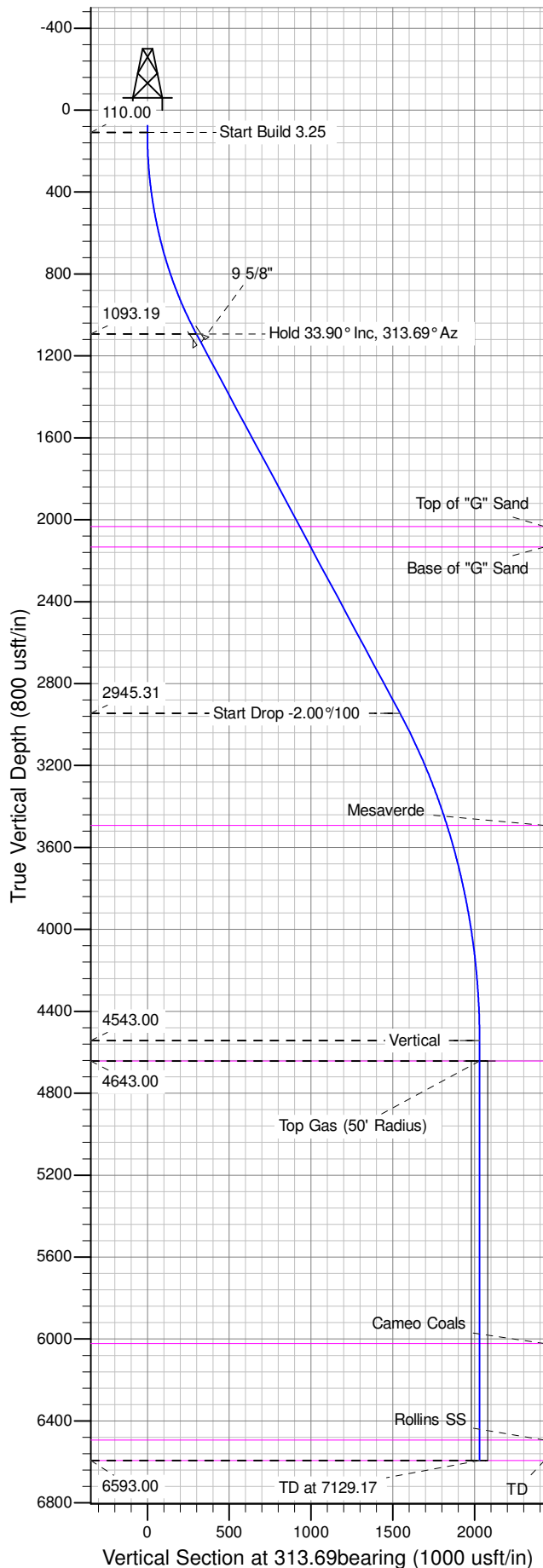




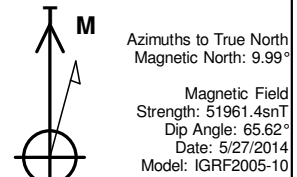
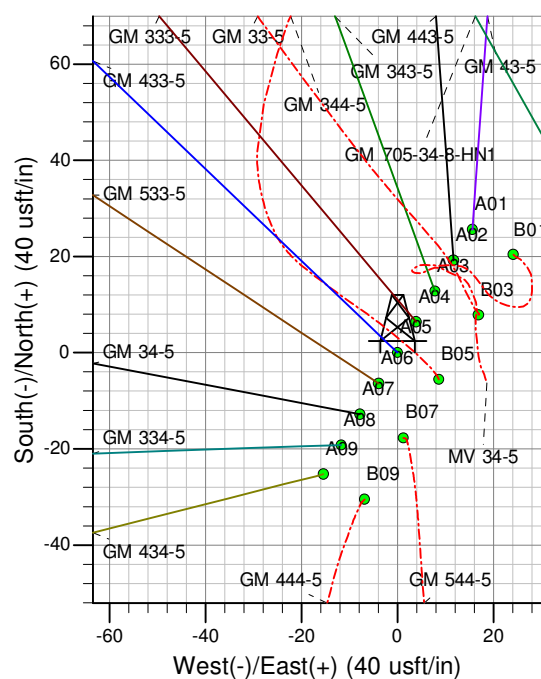
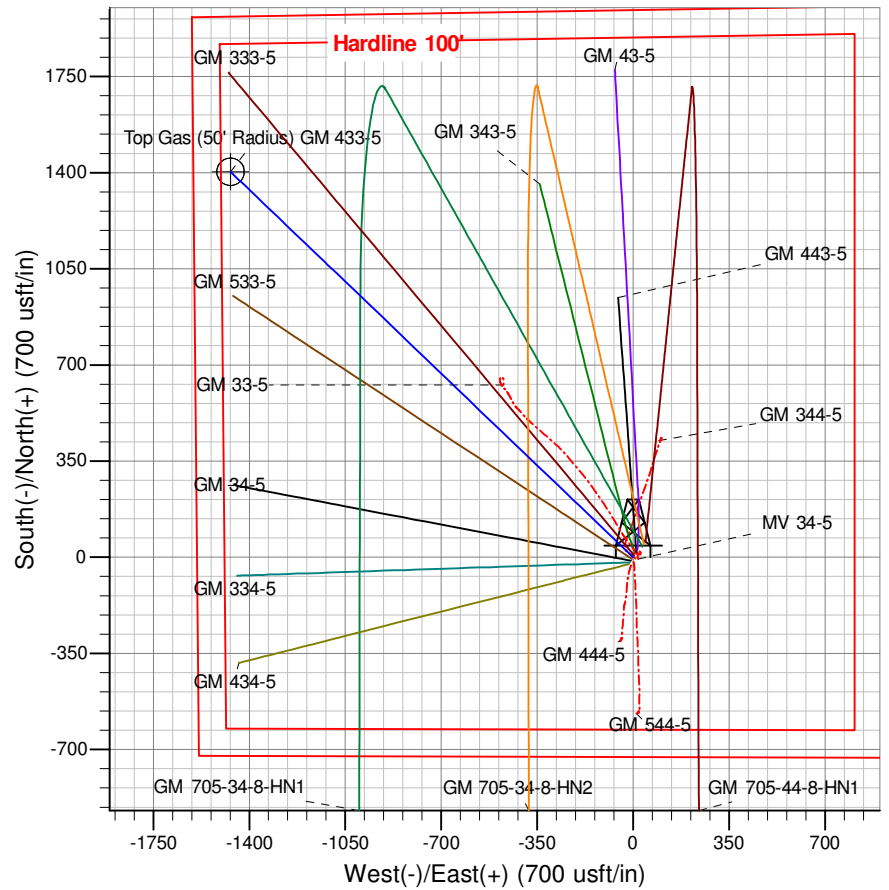
Well Name: GM 433-5
Surface Location: MV 34-5 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 5977.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	1603520.43000	2258800.52000	39.46103	-108.12556	A05

KELLY BUSHING @ 6003.00usft (Nabors 577 (26' RKB) mab)



ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Departure	Annotation	
110.00	110.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build 3.25	
1093.19	1152.98	33.90	313.69	206.99	-216.64	299.62	299.62	Hold 33.90° Inc, 313.69° Az	
2945.31	3384.33	33.90	313.69	1066.66	-1116.39	1544.04	1544.04	Start Drop -2.00°/100	
4543.00	5079.17	0.00	0.00	1403.01	-1468.42	2030.93	2030.93	Vertical	
4643.00	5179.17	0.00	0.00	1403.01	-1468.42	2030.93	2030.93	Top Gas	
6593.00	7129.17	0.00	0.00	1403.01	-1468.42	2030.93	2030.93	TD at 7129.17	



Project: GV 05-07S-096W
Site: MV 34-5 Pad
Well: GM 433-5
Design #2 24Jul14 mab

PICEANCE VLY NAD 83

GV 05-07S-096W

MV 34-5 Pad

GM 433-5 - Slot A05

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 433-5 - Slot A05
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 433-5	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 433-5 - Slot A05			
Well Position	+N/-S	0.00 usft	Northing:	1,603,520.43000 usft
	+E/-W	0.00 usft	Easting:	2,258,800.52000 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:	072914 MAB: 110' KOP requested change by Scott Meade			
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	313.70

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	
110.00	0.00	0.00	110.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,152.98	33.90	313.70	1,093.19	206.99	-216.64	3.25	3.25	0.00	313.70	
3,384.33	33.90	313.70	2,945.31	1,066.66	-1,116.39	0.00	0.00	0.00	0.00	
5,079.17	0.00	0.00	4,543.00	1,403.01	-1,468.42	2.00	-2.00	0.00	180.00	
5,179.17	0.00	0.00	4,643.00	1,403.01	-1,468.42	0.00	0.00	0.00	0.00	Top Gas (50' Radius)
7,129.17	0.00	0.00	6,593.00	1,403.01	-1,468.42	0.00	0.00	0.00	0.00	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 433-5 - Slot A05
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 433-5	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	
0.00	0.00	0.00	0.00	0.00	0.00	1,603,520.43000	2,258,800.52000	39.461029	-108.125561	
110.00	0.00	0.00	110.00	0.00	0.00	1,603,520.43000	2,258,800.52000	39.461029	-108.125561	
Start Build 3.25										
200.00	2.93	313.70	199.96	1.59	-1.66	1,603,522.06392	2,258,798.90597	39.461033	-108.125567	
400.00	9.43	313.70	398.69	16.44	-17.21	1,603,537.35998	2,258,783.79614	39.461074	-108.125622	
600.00	15.93	313.70	593.72	46.74	-48.92	1,603,568.56208	2,258,752.97392	39.461157	-108.125734	
800.00	22.43	313.70	782.52	92.10	-96.39	1,603,615.26905	2,258,706.83559	39.461282	-108.125903	
1,000.00	28.93	313.70	962.67	151.93	-159.01	1,603,676.88044	2,258,645.97431	39.461446	-108.126124	
1,152.98	33.90	313.70	1,093.19	206.99	-216.64	1,603,733.57975	2,258,589.96531	39.461597	-108.126328	
Hold 33.90° Inc, 313.69° Az										
1,200.00	33.90	313.70	1,132.22	225.10	-235.60	1,603,752.23605	2,258,571.53614	39.461647	-108.126396	
1,202.98	33.90	313.70	1,134.70	226.25	-236.80	1,603,753.41834	2,258,570.36824	39.461650	-108.126400	
9 5/8"										
1,400.00	33.90	313.70	1,298.23	302.16	-316.24	1,603,831.58445	2,258,493.15379	39.461858	-108.126681	
1,600.00	33.90	313.70	1,464.24	379.21	-396.89	1,603,910.93286	2,258,414.77142	39.462070	-108.126967	
1,800.00	33.90	313.70	1,630.25	456.26	-477.54	1,603,990.28128	2,258,336.38906	39.462281	-108.127253	
2,000.00	33.90	313.70	1,796.26	533.32	-558.18	1,604,069.62969	2,258,258.00669	39.462493	-108.127538	
2,200.00	33.90	313.70	1,962.27	610.37	-638.83	1,604,148.97810	2,258,179.62433	39.462704	-108.127824	
2,285.22	33.90	313.70	2,033.00	643.20	-673.19	1,604,182.78663	2,258,146.22741	39.462794	-108.127945	
Top of "G" Sand										
2,400.00	33.90	313.70	2,128.28	687.42	-719.47	1,604,228.32651	2,258,101.24198	39.462916	-108.128109	
2,405.69	33.90	313.70	2,133.00	689.62	-721.77	1,604,230.58434	2,258,099.01163	39.462922	-108.128118	
Base of "G" Sand										
2,600.00	33.90	313.70	2,294.29	764.48	-800.12	1,604,307.67492	2,258,022.85961	39.463127	-108.128395	
2,800.00	33.90	313.70	2,460.29	841.53	-880.77	1,604,387.02334	2,257,944.47725	39.463339	-108.128681	
3,000.00	33.90	313.70	2,626.30	918.59	-961.41	1,604,466.37175	2,257,866.09488	39.463550	-108.128966	
3,200.00	33.90	313.70	2,792.31	995.64	-1,042.06	1,604,545.72016	2,257,787.71252	39.463762	-108.129252	
3,384.33	33.90	313.70	2,945.31	1,066.66	-1,116.39	1,604,618.85165	2,257,715.47139	39.463957	-108.129515	
Start Drop -2.00°/100										
3,400.00	33.58	313.70	2,958.34	1,072.67	-1,122.68	1,604,625.04323	2,257,709.35519	39.463973	-108.129538	
3,600.00	29.58	313.70	3,128.69	1,145.02	-1,198.40	1,604,699.54478	2,257,635.76068	39.464172	-108.129806	
3,800.00	25.58	313.70	3,305.92	1,208.98	-1,265.34	1,604,765.41180	2,257,570.69558	39.464348	-108.130043	
4,000.00	21.58	313.70	3,489.18	1,264.24	-1,323.19	1,604,822.32338	2,257,514.47689	39.464499	-108.130248	
4,004.11	21.50	313.70	3,493.00	1,265.29	-1,324.28	1,604,823.39733	2,257,513.41601	39.464502	-108.130252	
Mesaverde										
4,200.00	17.58	313.70	3,677.57	1,310.54	-1,371.64	1,604,870.00226	2,257,467.37849	39.464626	-108.130419	
4,400.00	13.58	313.70	3,870.18	1,347.65	-1,410.48	1,604,908.21614	2,257,429.62985	39.464728	-108.130557	
4,600.00	9.58	313.70	4,066.06	1,375.39	-1,439.51	1,604,936.77886	2,257,401.41487	39.464804	-108.130660	
4,800.00	5.58	313.70	4,264.28	1,393.62	-1,458.59	1,604,955.55127	2,257,382.87102	39.464855	-108.130727	
5,000.00	1.58	313.70	4,463.84	1,402.25	-1,467.63	1,604,964.44189	2,257,374.08864	39.464878	-108.130759	
5,079.17	0.00	0.00	4,543.00	1,403.01	-1,468.42	1,604,965.22000	2,257,373.32000	39.464880	-108.130762	
Vertical										
5,179.17	0.00	0.00	4,643.00	1,403.01	-1,468.42	1,604,965.22000	2,257,373.32000	39.464880	-108.130762	
Top Gas - Approx. Top Gas										
5,200.00	0.00	0.00	4,663.83	1,403.01	-1,468.42	1,604,965.22000	2,257,373.32000	39.464880	-108.130762	
5,400.00	0.00	0.00	4,863.83	1,403.01	-1,468.42	1,604,965.22000	2,257,373.32000	39.464880	-108.130762	
5,600.00	0.00	0.00	5,063.83	1,403.01	-1,468.42	1,604,965.22000	2,257,373.32000	39.464880	-108.130762	
5,800.00	0.00	0.00	5,263.83	1,403.01	-1,468.42	1,604,965.22000	2,257,373.32000	39.464880	-108.130762	
6,000.00	0.00	0.00	5,463.83	1,403.01	-1,468.42	1,604,965.22000	2,257,373.32000	39.464880	-108.130762	
6,200.00	0.00	0.00	5,663.83	1,403.01	-1,468.42	1,604,965.22000	2,257,373.32000	39.464880	-108.130762	
6,400.00	0.00	0.00	5,863.83	1,403.01	-1,468.42	1,604,965.22000	2,257,373.32000	39.464880	-108.130762	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 433-5 - Slot A05
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 433-5	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
6,559.17	0.00	0.00	6,023.00	1,403.01	-1,468.42	1,604,965.22000	2,257,373.32000	39.464880	-108.130762
Cameo Coals									
6,600.00	0.00	0.00	6,063.83	1,403.01	-1,468.42	1,604,965.22000	2,257,373.32000	39.464880	-108.130762
6,800.00	0.00	0.00	6,263.83	1,403.01	-1,468.42	1,604,965.22000	2,257,373.32000	39.464880	-108.130762
7,000.00	0.00	0.00	6,463.83	1,403.01	-1,468.42	1,604,965.22000	2,257,373.32000	39.464880	-108.130762
7,029.17	0.00	0.00	6,493.00	1,403.01	-1,468.42	1,604,965.22000	2,257,373.32000	39.464880	-108.130762
Rollins SS									
7,129.17	0.00	0.00	6,593.00	1,403.01	-1,468.42	1,604,965.22000	2,257,373.32000	39.464880	-108.130762
TD at 7129.17 - 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	4,643.00	1,403.01	-1,468.42	1,604,965.22000	2,257,373.32000	39.464880	-108.130762

Casing Points									
Measured Depth (usft)	Vertical Depth (usft)	Name			Casing Diameter (in)	Hole Diameter (in)			
1,202.98	1,134.70	9 5/8"			9.625	13.500			

Formations									
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)				
2,285.22	2,033.00	Top of "G" Sand							
2,405.69	2,133.00	Base of "G" Sand							
4,004.11	3,493.00	Mesaverde							
5,179.17	4,643.00	Approx. Top Gas							
6,559.17	6,023.00	Cameo Coals							
7,029.17	6,493.00	Rollins SS							
7,129.17	6,593.00	TD							

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 433-5 - Slot A05
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 433-5	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)	
110.00	110.00	0.00	0.00	Start Build 3.25
1,152.98	1,093.19	206.99	-216.64	Hold 33.90° Inc, 313.69° Az
3,384.33	2,945.31	1,066.66	-1,116.39	Start Drop -2.00°/100
5,079.17	4,543.00	1,403.01	-1,468.42	Vertical
5,179.17	4,643.00	1,403.01	-1,468.42	Top Gas
7,129.17	6,593.00	1,403.01	-1,468.42	TD at 7129.17