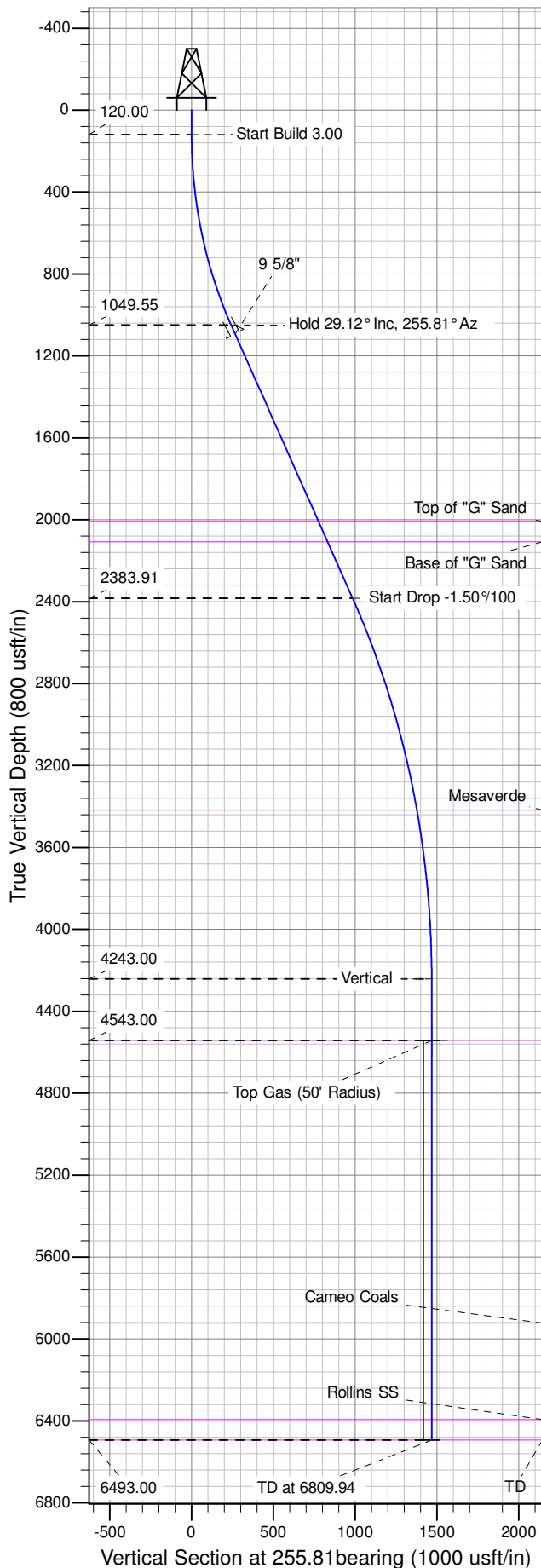
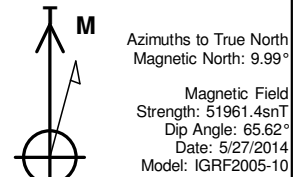
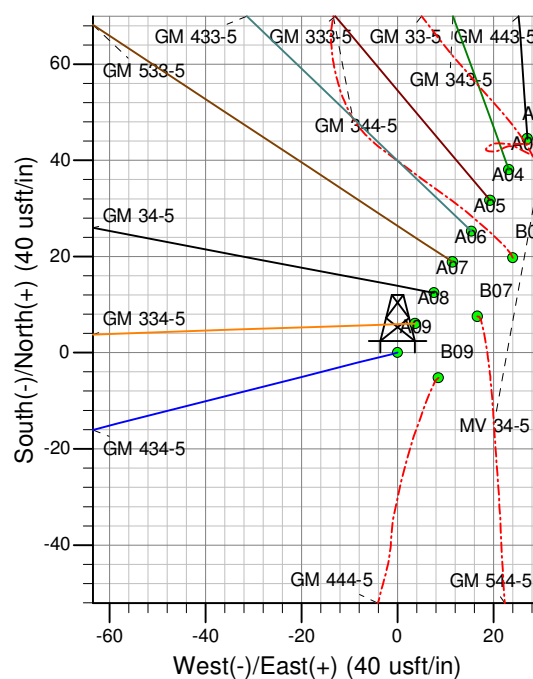
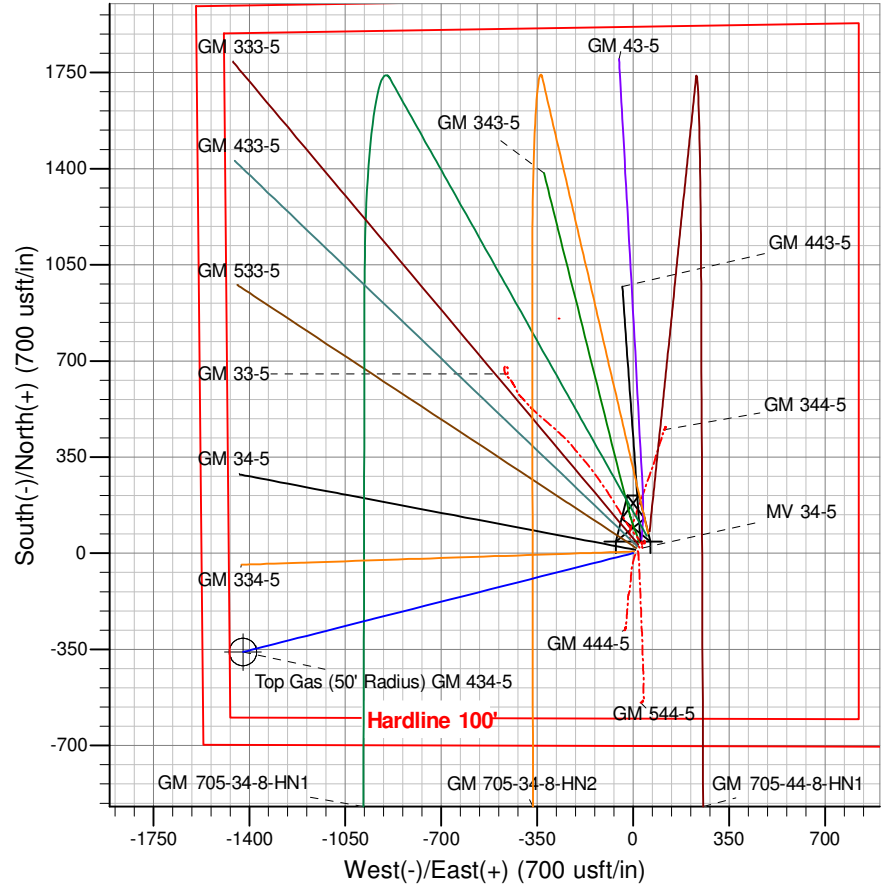




Well Name: GM 434-5
Surface Location: MV 34-5 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 5977.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1603495.61000 2258784.39000 39.46096 -108.12562 A09
KELLY BUSHING @ 6003.00usft (Nabors 577 (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	Start Build 3.00	
1049.55	1090.82	29.12	255.81	-59.17	-234.11	241.48	241.48	Hold 29.12° Inc, 255.81° Az	
2383.91	2618.31	29.12	255.81	-241.36	-954.89	984.92	984.92	Start Drop -1.50°/100	
4243.00	4559.94	0.00	0.00	-359.71	-1423.11	1467.87	1467.87	Vertical	
4543.00	4859.94	0.00	0.00	-359.71	-1423.11	1467.87	1467.87	Top Gas	
6493.00	6809.94	0.00	0.00	-359.71	-1423.11	1467.87	1467.87	TD at 6809.94	



Project: GV 05-07S-096W
Site: MV 34-5 Pad
Well: GM 434-5
Design #2 23Jul14 mab

PICEANCE VLY NAD 83

GV 05-07S-096W

MV 34-5 Pad

GM 434-5 - Slot A09

Wellbore #1

Plan: Design #2 23Jul14 mab

Standard Planning Report - Geographic

30 September, 2014

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 434-5 - Slot A09
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 434-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2 23Jul14 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 434-5 - Slot A09			
Well Position	+N/-S	0.00 usft	Northing:	1,603,495.61000 usft
	+E/-W	0.00 usft	Easting:	2,258,784.39000 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 23Jul14 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	255.81

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	
1,090.82	29.12	255.81	1,049.55	-59.17	-234.11	3.00	3.00	0.00	255.81	
2,618.31	29.12	255.81	2,383.91	-241.36	-954.89	0.00	0.00	0.00	0.00	
4,559.94	0.00	0.00	4,243.00	-359.71	-1,423.11	1.50	-1.50	0.00	180.00	
4,859.94	0.00	0.00	4,543.00	-359.71	-1,423.11	0.00	0.00	0.00	0.00	Top Gas (50' Radius)
6,809.94	0.00	0.00	6,493.00	-359.71	-1,423.11	0.00	0.00	0.00	0.00	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 434-5 - Slot A09
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 434-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2 23Jul14 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	1,603,495.61000	2,258,784.39000	39.460959	-108.125616
120.00	0.00	0.00	120.00	0.00	0.00	1,603,495.61000	2,258,784.39000	39.460959	-108.125616
Start Build 3.00									
200.00	2.40	255.81	199.98	-0.41	-1.62	1,603,495.24659	2,258,782.75470	39.460958	-108.125622
400.00	8.40	255.81	399.00	-5.02	-19.86	1,603,491.16553	2,258,764.39047	39.460946	-108.125686
600.00	14.40	255.81	594.96	-14.70	-58.17	1,603,482.59402	2,258,725.81975	39.460919	-108.125822
800.00	20.40	255.81	785.72	-29.35	-116.13	1,603,469.62597	2,258,667.46514	39.460879	-108.126027
1,000.00	26.40	255.81	969.19	-48.81	-193.10	1,603,452.40345	2,258,589.96598	39.460825	-108.126300
1,090.82	29.12	255.81	1,049.55	-59.17	-234.11	1,603,443.22756	2,258,548.67561	39.460797	-108.126445
Hold 29.12° Inc, 255.81° Az									
1,140.82	29.12	255.81	1,093.23	-65.14	-257.71	1,603,437.94836	2,258,524.91988	39.460780	-108.126528
9 5/8"									
1,200.00	29.12	255.81	1,144.92	-72.20	-285.63	1,603,431.70012	2,258,496.80359	39.460761	-108.126627
1,400.00	29.12	255.81	1,319.64	-96.05	-380.01	1,603,410.58406	2,258,401.78399	39.460696	-108.126962
1,600.00	29.12	255.81	1,494.35	-119.91	-474.38	1,603,389.46801	2,258,306.76440	39.460630	-108.127296
1,800.00	29.12	255.81	1,669.06	-143.76	-568.75	1,603,368.35196	2,258,211.74480	39.460565	-108.127630
2,000.00	29.12	255.81	1,843.78	-167.61	-663.13	1,603,347.23591	2,258,116.72521	39.460499	-108.127964
2,187.99	29.12	255.81	2,008.00	-190.04	-751.84	1,603,327.38745	2,258,027.40965	39.460438	-108.128279
Top of "G" Sand									
2,200.00	29.12	255.81	2,018.49	-191.47	-757.50	1,603,326.11985	2,258,021.70561	39.460434	-108.128299
2,302.47	29.12	255.81	2,108.00	-203.69	-805.85	1,603,315.30129	2,257,973.02346	39.460400	-108.128470
Base of "G" Sand									
2,400.00	29.12	255.81	2,193.20	-215.32	-851.88	1,603,305.00379	2,257,926.68601	39.460368	-108.128633
2,600.00	29.12	255.81	2,367.91	-239.18	-946.25	1,603,283.88774	2,257,831.66641	39.460303	-108.128967
2,618.31	29.12	255.81	2,383.91	-241.36	-954.89	1,603,281.95487	2,257,822.96876	39.460297	-108.128998
Start Drop -1.50°/100									
2,800.00	26.40	255.81	2,544.67	-262.10	-1,036.93	1,603,263.59764	2,257,740.36353	39.460240	-108.129288
3,000.00	23.40	255.81	2,726.06	-282.73	-1,118.56	1,603,245.33354	2,257,658.17736	39.460183	-108.129577
3,200.00	20.40	255.81	2,911.61	-301.01	-1,190.87	1,603,229.15379	2,257,585.37051	39.460133	-108.129833
3,400.00	17.40	255.81	3,100.80	-316.88	-1,253.67	1,603,215.10274	2,257,522.14256	39.460089	-108.130056
3,600.00	14.40	255.81	3,293.13	-330.31	-1,306.78	1,603,203.21890	2,257,468.66679	39.460052	-108.130244
3,728.39	12.47	255.81	3,418.00	-337.62	-1,335.70	1,603,196.74758	2,257,439.54667	39.460032	-108.130346
Mesaverde									
3,800.00	11.40	255.81	3,488.06	-341.24	-1,350.06	1,603,193.53486	2,257,425.08980	39.460022	-108.130397
4,000.00	8.40	255.81	3,685.06	-349.67	-1,383.39	1,603,186.07714	2,257,391.53102	39.459999	-108.130515
4,200.00	5.40	255.81	3,883.59	-355.56	-1,406.68	1,603,180.86620	2,257,368.08242	39.459983	-108.130598
4,400.00	2.40	255.81	4,083.10	-358.89	-1,419.87	1,603,177.91631	2,257,354.80830	39.459974	-108.130644
4,559.94	0.00	0.00	4,243.00	-359.71	-1,423.11	1,603,177.19000	2,257,351.54000	39.459972	-108.130656
Vertical									
4,600.00	0.00	0.00	4,283.06	-359.71	-1,423.11	1,603,177.19000	2,257,351.54000	39.459972	-108.130656
4,800.00	0.00	0.00	4,483.06	-359.71	-1,423.11	1,603,177.19000	2,257,351.54000	39.459972	-108.130656
4,859.94	0.00	0.00	4,543.00	-359.71	-1,423.11	1,603,177.19000	2,257,351.54000	39.459972	-108.130656
Top Gas - Approx. Top Gas									
5,000.00	0.00	0.00	4,683.06	-359.71	-1,423.11	1,603,177.19000	2,257,351.54000	39.459972	-108.130656
5,200.00	0.00	0.00	4,883.06	-359.71	-1,423.11	1,603,177.19000	2,257,351.54000	39.459972	-108.130656
5,400.00	0.00	0.00	5,083.06	-359.71	-1,423.11	1,603,177.19000	2,257,351.54000	39.459972	-108.130656
5,600.00	0.00	0.00	5,283.06	-359.71	-1,423.11	1,603,177.19000	2,257,351.54000	39.459972	-108.130656
5,800.00	0.00	0.00	5,483.06	-359.71	-1,423.11	1,603,177.19000	2,257,351.54000	39.459972	-108.130656
6,000.00	0.00	0.00	5,683.06	-359.71	-1,423.11	1,603,177.19000	2,257,351.54000	39.459972	-108.130656
6,200.00	0.00	0.00	5,883.06	-359.71	-1,423.11	1,603,177.19000	2,257,351.54000	39.459972	-108.130656

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 434-5 - Slot A09
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 434-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2 23Jul14 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
6,239.94	0.00	0.00	5,923.00	-359.71	-1,423.11	1,603,177.19000	2,257,351.54000	39.459972	-108.130656
Cameo Coals									
6,400.00	0.00	0.00	6,083.06	-359.71	-1,423.11	1,603,177.19000	2,257,351.54000	39.459972	-108.130656
6,600.00	0.00	0.00	6,283.06	-359.71	-1,423.11	1,603,177.19000	2,257,351.54000	39.459972	-108.130656
6,709.94	0.00	0.00	6,393.00	-359.71	-1,423.11	1,603,177.19000	2,257,351.54000	39.459972	-108.130656
Rollins SS									
6,800.00	0.00	0.00	6,483.06	-359.71	-1,423.11	1,603,177.19000	2,257,351.54000	39.459972	-108.130656
6,809.94	0.00	0.00	6,493.00	-359.71	-1,423.11	1,603,177.19000	2,257,351.54000	39.459972	-108.130656
TD at 6809.94 - 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	4,543.00	-359.71	-1,423.11	1,603,177.19000	2,257,351.54000	39.459972	-108.130656

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,140.82	1,093.23	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
2,187.99	2,008.00	Top of "G" Sand				
2,302.47	2,108.00	Base of "G" Sand				
3,728.39	3,418.00	Mesaverde				
4,859.94	4,543.00	Approx. Top Gas				
6,239.94	5,923.00	Cameo Coals				
6,709.94	6,393.00	Rollins SS				
6,809.94	6,493.00	TD				

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 434-5 - Slot A09
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 434-5	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2 23Jul14 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 3.00
1,090.82	1,049.55	-59.17	-234.11	Hold 29.12° Inc, 255.81° Az
2,618.31	2,383.91	-241.36	-954.89	Start Drop -1.50°/100
4,559.94	4,243.00	-359.71	-1,423.11	Vertical
4,859.94	4,543.00	-359.71	-1,423.11	Top Gas
6,809.94	6,493.00	-359.71	-1,423.11	TD at 6809.94