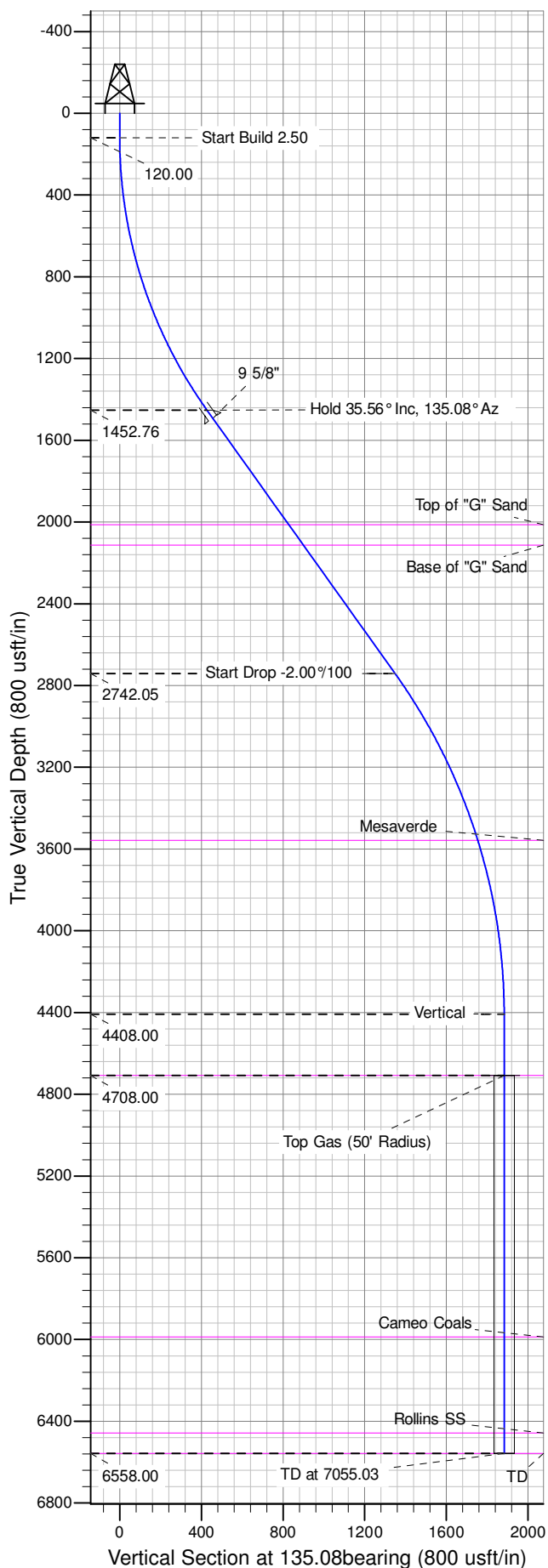
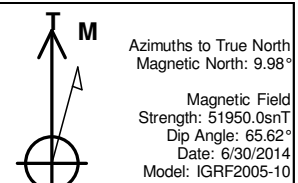
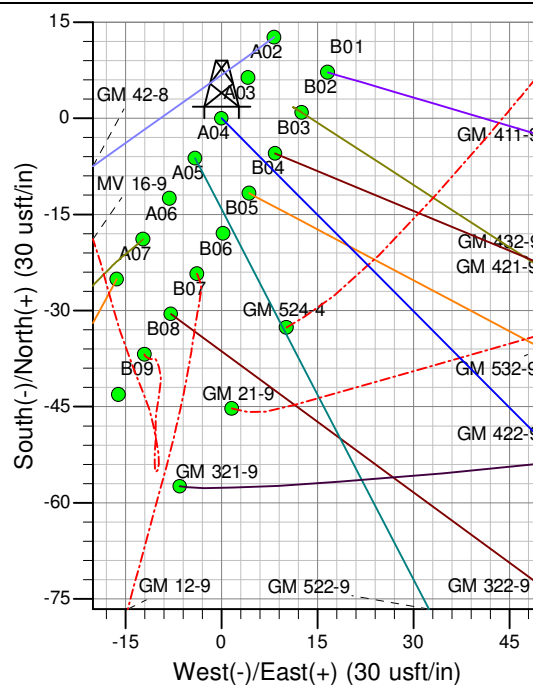
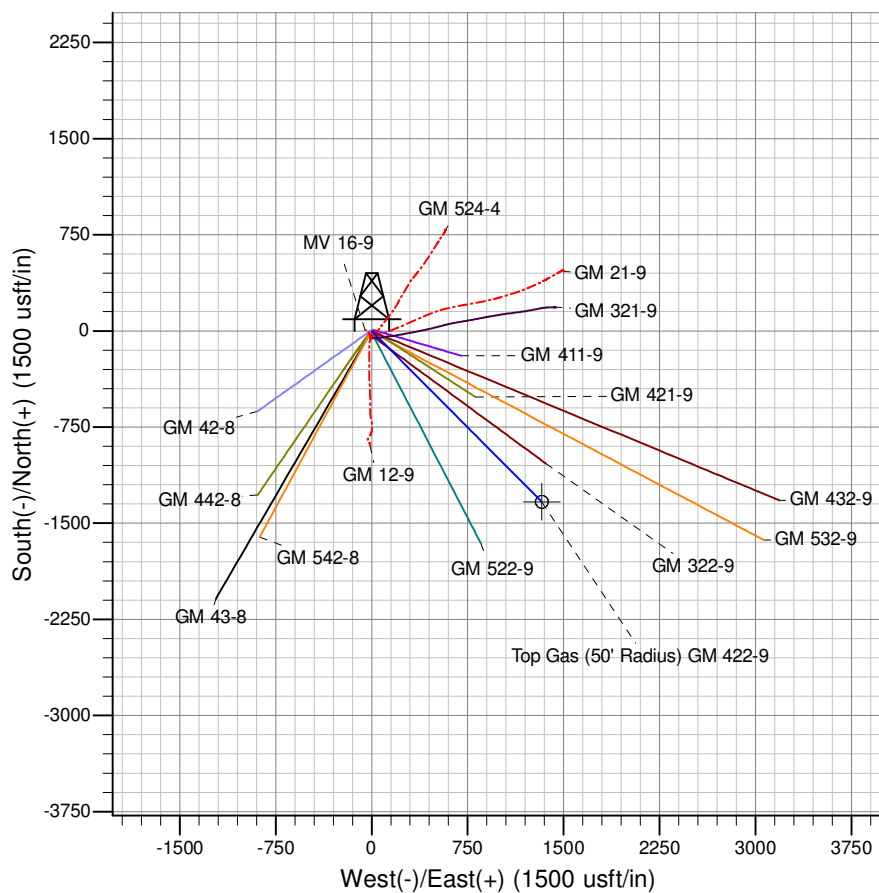




Well Name: GM 422-9
Surface Location: MV 16-9 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 6087.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1601974.90000 2260343.70000 39.45691 -108.11994 A03
KELLY BUSHING @ 6108.00usft (Cyclone 17 (21' 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 2.50	
1452.76	1542.32	35.56	135.08	-302.60	301.78	427.37	427.37	Hold 35.56° Inc, 135.08° Az	
2742.05	3127.13	35.56	135.08	-955.16	952.58	1348.97	1348.97	Start Drop -2.00°/100	
4408.00	4905.03	0.00	0.00	-1333.41	1329.81	1883.18	1883.18	Vertical	
4708.00	5205.03	0.00	0.00	-1333.41	1329.81	1883.18	1883.18	Top Gas	
6558.00	7055.03	0.00	0.00	-1333.41	1329.81	1883.18	1883.18	TD at 7055.03	



Project: GV 09-07S-096W
Site: MV 16-9 Pad
Well: GM 422-9
Design #1 30Jun14 mab

PICEANCE VLY NAD 83

GV 09-07S-096W

MV 16-9 Pad

GM 422-9 - Slot A03

Wellbore #1

Plan: Design #1 30Jun14 mab

Standard Planning Report - Geographic

04 August, 2014

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 422-9 - Slot A03
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 6108.00usft (Cyclone 17 (21' RKB) mab)
Project:	GV 09-07S-096W	MD Reference:	KELLY BUSHING @ 6108.00usft (Cyclone 17 (21' RKB) mab)
Site:	MV 16-9 Pad	North Reference:	True
Well:	GM 422-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 30Jun14 mab		

Project	GV 09-07S-096W, Garfield County, CO, 09-07S-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 16-9 Pad			
Site Position:		Northing:	1,601,987.30000 usft	Latitude: 39.45695
From: Map		Easting:	2,260,352.30000 usft	Longitude: -108.11991
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence: -1.65 °

Well	GM 422-9 - Slot A03			
Well Position	+N/-S	0.00 usft	Northing:	1,601,974.90000 usft
	+E/-W	0.00 usft	Easting:	2,260,343.70000 usft
Position Uncertainty	0.00 usft		Wellhead Elevation:	0.00 usft
			Ground Level:	6,087.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005-10	6/30/2014	9.98	65.62	51,950

Design	Design #1 30Jun14 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	135.08

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	
1,542.32	35.56	135.08	1,452.76	-302.60	301.78	2.50	2.50	0.00	135.08	
3,127.13	35.56	135.08	2,742.05	-955.16	952.58	0.00	0.00	0.00	0.00	
4,905.03	0.00	0.00	4,408.00	-1,333.41	1,329.81	2.00	-2.00	0.00	180.00	
5,205.03	0.00	0.00	4,708.00	-1,333.41	1,329.81	0.00	0.00	0.00	0.00	Top Gas (50' Radius)
7,055.03	0.00	0.00	6,558.00	-1,333.41	1,329.81	0.00	0.00	0.00	0.00	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 422-9 - Slot A03
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 6108.00usft (Cyclone 17 (21' RKB) mab)
Project:	GV 09-07S-096W	MD Reference:	KELLY BUSHING @ 6108.00usft (Cyclone 17 (21' RKB) mab)
Site:	MV 16-9 Pad	North Reference:	True
Well:	GM 422-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 30Jun14 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	1,601,974.90000	2,260,343.70000	39.45691	-108.11994
120.00	0.00	0.00	120.00	0.00	0.00	1,601,974.90000	2,260,343.70000	39.45691	-108.11994
Start Build 2.50									
200.00	2.00	135.08	199.98	-0.99	0.99	1,601,973.88349	2,260,344.65691	39.45691	-108.11994
400.00	7.00	135.08	399.30	-12.10	12.06	1,601,962.46193	2,260,355.40880	39.45688	-108.11990
600.00	12.00	135.08	596.50	-35.46	35.37	1,601,938.43540	2,260,378.02661	39.45681	-108.11982
800.00	17.00	135.08	790.07	-70.91	70.72	1,601,901.98675	2,260,412.33821	39.45672	-108.11969
1,000.00	22.00	135.08	978.54	-118.16	117.84	1,601,853.39337	2,260,458.08247	39.45659	-108.11953
1,200.00	27.00	135.08	1,160.47	-176.87	176.39	1,601,793.02510	2,260,514.91124	39.45642	-108.11932
1,400.00	32.00	135.08	1,334.49	-246.58	245.92	1,601,721.34136	2,260,582.39203	39.45623	-108.11907
1,542.32	35.56	135.08	1,452.76	-302.60	301.78	1,601,663.73623	2,260,636.61967	39.45608	-108.11887
Hold 35.56° Inc, 135.08° Az									
1,592.32	35.56	135.08	1,493.44	-323.19	322.32	1,601,642.56679	2,260,656.54790	39.45602	-108.11880
9 5/8"									
1,600.00	35.56	135.08	1,499.69	-326.35	325.47	1,601,639.31501	2,260,659.60902	39.45601	-108.11879
1,800.00	35.56	135.08	1,662.39	-408.70	407.60	1,601,554.63323	2,260,739.32576	39.45579	-108.11850
2,000.00	35.56	135.08	1,825.10	-491.05	489.73	1,601,469.95145	2,260,819.04250	39.45556	-108.11821
2,200.00	35.56	135.08	1,987.80	-573.41	571.86	1,601,385.26967	2,260,898.75922	39.45534	-108.11792
2,230.97	35.56	135.08	2,013.00	-586.16	584.58	1,601,372.15479	2,260,911.10515	39.45530	-108.11787
Top of "G" Sand									
2,353.90	35.56	135.08	2,113.00	-636.77	635.05	1,601,320.10869	2,260,960.09970	39.45516	-108.11769
Base of "G" Sand									
2,400.00	35.56	135.08	2,150.51	-655.76	653.99	1,601,300.58789	2,260,978.47596	39.45511	-108.11763
2,600.00	35.56	135.08	2,313.21	-738.11	736.11	1,601,215.90610	2,261,058.19270	39.45488	-108.11734
2,800.00	35.56	135.08	2,475.92	-820.46	818.24	1,601,131.22432	2,261,137.90943	39.45466	-108.11704
3,000.00	35.56	135.08	2,638.62	-902.81	900.37	1,601,046.54253	2,261,217.62617	39.45443	-108.11675
3,127.13	35.56	135.08	2,742.05	-955.16	952.58	1,600,992.71476	2,261,268.29793	39.45429	-108.11657
Start Drop -2.00°/100									
3,200.00	34.10	135.08	2,801.86	-984.63	981.97	1,600,962.41302	2,261,296.82302	39.45421	-108.11646
3,400.00	30.10	135.08	2,971.25	-1,059.87	1,057.00	1,600,885.04531	2,261,369.65451	39.45400	-108.11620
3,600.00	26.10	135.08	3,147.64	-1,126.55	1,123.51	1,600,816.46925	2,261,434.20983	39.45382	-108.11596
3,800.00	22.10	135.08	3,330.17	-1,184.37	1,181.17	1,600,757.01892	2,261,490.17448	39.45366	-108.11576
4,000.00	18.10	135.08	3,517.95	-1,233.03	1,229.70	1,600,706.98396	2,261,537.27580	39.45353	-108.11559
4,042.04	17.26	135.08	3,558.00	-1,242.07	1,238.71	1,600,697.68801	2,261,546.02671	39.45350	-108.11556
Mesaverde									
4,200.00	14.10	135.08	3,710.06	-1,272.29	1,268.85	1,600,666.60814	2,261,575.28431	39.45342	-108.11545
4,400.00	10.10	135.08	3,905.58	-1,301.97	1,298.45	1,600,636.08816	2,261,604.01485	39.45334	-108.11534
4,600.00	6.10	135.08	4,103.54	-1,321.92	1,318.35	1,600,615.57273	2,261,623.32743	39.45328	-108.11527
4,800.00	2.10	135.08	4,302.99	-1,332.05	1,328.45	1,600,605.16177	2,261,633.12798	39.45325	-108.11524
4,905.03	0.00	0.00	4,408.00	-1,333.41	1,329.81	1,600,603.76003	2,261,634.44753	39.45325	-108.11523
Vertical									
5,000.00	0.00	0.00	4,502.97	-1,333.41	1,329.81	1,600,603.76003	2,261,634.44753	39.45325	-108.11523
5,200.00	0.00	0.00	4,702.97	-1,333.41	1,329.81	1,600,603.76003	2,261,634.44753	39.45325	-108.11523
5,205.03	0.00	0.00	4,708.00	-1,333.41	1,329.81	1,600,603.76003	2,261,634.44753	39.45325	-108.11523
Top Gas - Approx. Top Gas									
5,400.00	0.00	0.00	4,902.97	-1,333.41	1,329.81	1,600,603.76003	2,261,634.44753	39.45325	-108.11523
5,600.00	0.00	0.00	5,102.97	-1,333.41	1,329.81	1,600,603.76003	2,261,634.44753	39.45325	-108.11523
5,800.00	0.00	0.00	5,302.97	-1,333.41	1,329.81	1,600,603.76003	2,261,634.44753	39.45325	-108.11523
6,000.00	0.00	0.00	5,502.97	-1,333.41	1,329.81	1,600,603.76003	2,261,634.44753	39.45325	-108.11523
6,200.00	0.00	0.00	5,702.97	-1,333.41	1,329.81	1,600,603.76003	2,261,634.44753	39.45325	-108.11523
6,400.00	0.00	0.00	5,902.97	-1,333.41	1,329.81	1,600,603.76003	2,261,634.44753	39.45325	-108.11523

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 422-9 - Slot A03
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 6108.00usft (Cyclone 17 (21' RKB) mab)
Project:	GV 09-07S-096W	MD Reference:	KELLY BUSHING @ 6108.00usft (Cyclone 17 (21' RKB) mab)
Site:	MV 16-9 Pad	North Reference:	True
Well:	GM 422-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 30Jun14 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
6,485.03	0.00	0.00	5,988.00	-1,333.41	1,329.81	1,600,603.76003	2,261,634.44753	39.45325	-108.11523
Cameo Coals									
6,600.00	0.00	0.00	6,102.97	-1,333.41	1,329.81	1,600,603.76003	2,261,634.44753	39.45325	-108.11523
6,800.00	0.00	0.00	6,302.97	-1,333.41	1,329.81	1,600,603.76003	2,261,634.44753	39.45325	-108.11523
6,955.03	0.00	0.00	6,458.00	-1,333.41	1,329.81	1,600,603.76003	2,261,634.44753	39.45325	-108.11523
Rollins SS									
7,000.00	0.00	0.00	6,502.97	-1,333.41	1,329.81	1,600,603.76003	2,261,634.44753	39.45325	-108.11523
7,055.03	0.00	0.00	6,558.00	-1,333.41	1,329.81	1,600,603.76003	2,261,634.44753	39.45325	-108.11523
TD at 7055.03 - 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	4,708.00	-1,333.41	1,329.81	1,600,603.76003	2,261,634.44753	39.45325	-108.11523

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,592.32	1,493.44	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
2,230.97	2,013.00	Top of "G" Sand				
2,353.90	2,113.00	Base of "G" Sand				
4,042.04	3,558.00	Mesaverde				
5,205.03	4,708.00	Approx. Top Gas				
6,485.03	5,988.00	Cameo Coals				
6,955.03	6,458.00	Rollins SS				
7,055.03	6,558.00	TD				

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 422-9 - Slot A03
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 6108.00usft (Cyclone 17 (21' RKB) mab)
Project:	GV 09-07S-096W	MD Reference:	KELLY BUSHING @ 6108.00usft (Cyclone 17 (21' RKB) mab)
Site:	MV 16-9 Pad	North Reference:	True
Well:	GM 422-9	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 30Jun14 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 2.50
1,542.32	1,452.76	-302.60	301.78	Hold 35.56° Inc, 135.08° Az
3,127.13	2,742.05	-955.16	952.58	Start Drop -2.00°/100
4,905.03	4,408.00	-1,333.41	1,329.81	Vertical
5,205.03	4,708.00	-1,333.41	1,329.81	Top Gas
7,055.03	6,558.00	-1,333.41	1,329.81	TD at 7055.03