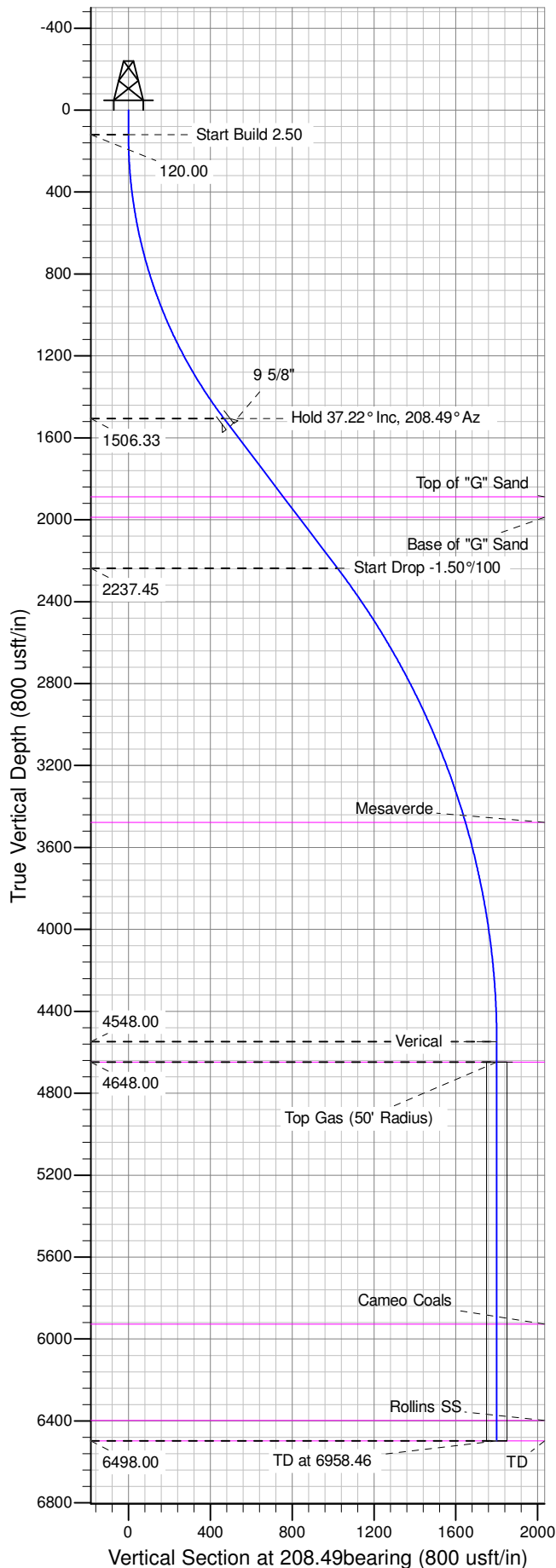
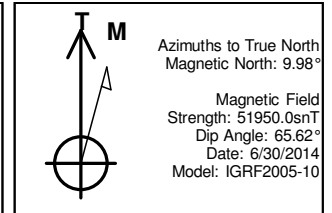
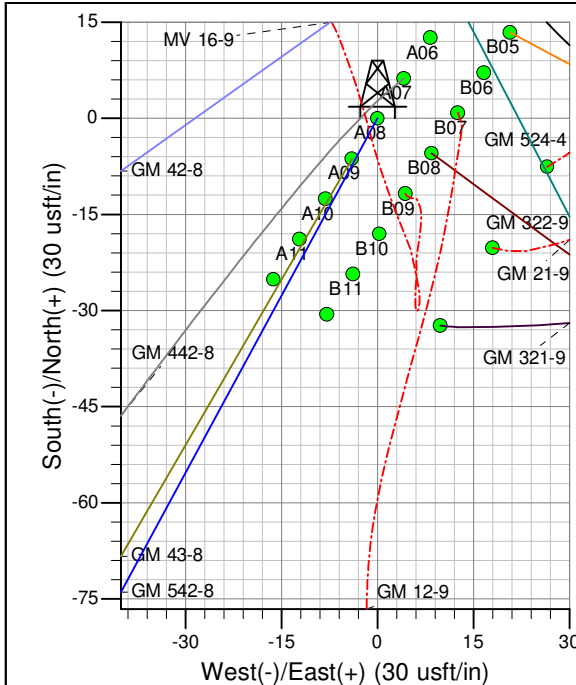
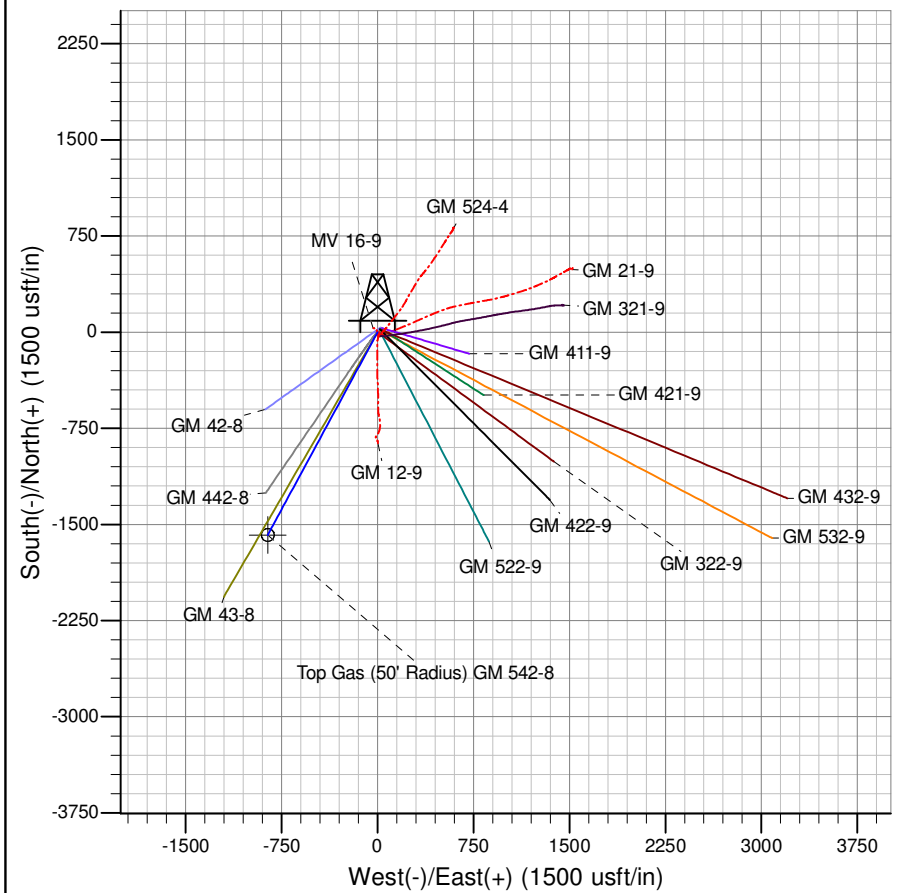




Well Name: GM 542-8
Surface Location: MV 16-9 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 6087.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1601950.30000 2260326.60000 39.45684 -108.12000 A07
KELLY BUSHING @ 6108.00usft (Cyclone 17 (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	0.00	Start Build 2.50
1506.33	1608.87	37.22	208.49	-410.32	-222.68	466.84	466.84	Hold 37.22° Inc, 208.49° Az	
2237.45	2527.01	37.22	208.49	-898.45	-487.58	1022.23	1022.23	Start Drop -1.50°/100	
4548.00	5008.46	0.00	0.00	-1582.31	-858.71	1800.30	1800.30	Verical	
4648.00	5108.46	0.00	0.00	-1582.31	-858.71	1800.30	1800.30	Top Gas	
6498.00	6958.46	0.00	0.00	-1582.31	-858.71	1800.30	1800.30	TD at 6958.46	



Project: GV 09-07S-096W
Site: MV 16-9 Pad
Well: GM 542-8
Design #1 30Jun14 mab

PICEANCE VLY NAD 83

GV 09-07S-096W

MV 16-9 Pad

GM 542-8 - Slot A07

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 542-8 - Slot A07
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 542-8	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 542-8 - Slot A07			
Well Position	+N/-S	0.00 usft	Northing:	1,601,950.30000 usft
	+E/-W	0.00 usft	Easting:	2,260,326.60000 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	208.49

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	
1,608.87	37.22	208.49	1,506.33	-410.32	-222.68	2.50	2.50	0.00	208.49	
2,527.01	37.22	208.49	2,237.45	-898.45	-487.58	0.00	0.00	0.00	0.00	
5,008.46	0.00	0.00	4,548.00	-1,582.31	-858.71	1.50	-1.50	0.00	180.00	
5,108.46	0.00	0.00	4,648.00	-1,582.31	-858.71	0.00	0.00	0.00	0.00	Top Gas (50' Radius)
6,958.46	0.00	0.00	6,498.00	-1,582.31	-858.71	0.00	0.00	0.00	0.00	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 542-8 - Slot A07
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 542-8	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	1,601,950.30000	2,260,326.60000	39.45684	-108.12000	
120.00	0.00	0.00	120.00	0.00	0.00	1,601,950.30000	2,260,326.60000	39.45684	-108.12000	
Start Build 2.50										
200.00	2.00	208.49	199.98	-1.23	-0.67	1,601,949.09269	2,260,325.89900	39.45684	-108.12000	
400.00	7.00	208.49	399.30	-15.01	-8.15	1,601,935.52741	2,260,318.02259	39.45680	-108.12003	
600.00	12.00	208.49	596.50	-44.02	-23.89	1,601,906.99129	2,260,301.45365	39.45672	-108.12009	
800.00	17.00	208.49	790.07	-88.02	-47.77	1,601,863.70152	2,260,276.31830	39.45660	-108.12017	
1,000.00	22.00	208.49	978.54	-146.68	-79.60	1,601,805.98756	2,260,242.80782	39.45644	-108.12028	
1,200.00	27.00	208.49	1,160.47	-219.55	-119.15	1,601,734.28865	2,260,201.17726	39.45624	-108.12042	
1,400.00	32.00	208.49	1,334.49	-306.08	-166.11	1,601,649.15045	2,260,151.74344	39.45600	-108.12059	
1,600.00	37.00	208.49	1,499.26	-405.61	-220.12	1,601,551.22092	2,260,094.88259	39.45573	-108.12078	
1,608.87	37.22	208.49	1,506.33	-410.32	-222.68	1,601,546.59405	2,260,092.19609	39.45572	-108.12079	
Hold 37.22° Inc, 208.49° Az										
1,658.87	37.22	208.49	1,546.15	-436.90	-237.10	1,601,520.43836	2,260,077.00930	39.45564	-108.12084	
9 5/8"										
1,800.00	37.22	208.49	1,658.53	-511.93	-277.82	1,601,446.61448	2,260,034.14492	39.45544	-108.12098	
2,000.00	37.22	208.49	1,817.79	-618.26	-335.53	1,601,341.99622	2,259,973.40038	39.45514	-108.12119	
2,088.17	37.22	208.49	1,888.00	-665.14	-360.97	1,601,295.87460	2,259,946.62077	39.45502	-108.12128	
Top of "G" Sand										
2,200.00	37.22	208.49	1,977.05	-724.59	-393.23	1,601,237.37795	2,259,912.65584	39.45485	-108.12139	
2,213.75	37.22	208.49	1,988.00	-731.91	-397.20	1,601,230.18444	2,259,908.47907	39.45483	-108.12141	
Base of "G" Sand										
2,400.00	37.22	208.49	2,136.31	-830.93	-450.94	1,601,132.75967	2,259,851.91130	39.45456	-108.12160	
2,527.01	37.22	208.49	2,237.45	-898.45	-487.58	1,601,066.32061	2,259,813.33476	39.45437	-108.12173	
Start Drop -1.50°/100										
2,600.00	36.13	208.49	2,295.99	-936.77	-508.38	1,601,028.62390	2,259,791.44691	39.45427	-108.12180	
2,800.00	33.13	208.49	2,460.54	-1,036.64	-562.58	1,600,930.35912	2,259,734.39140	39.45400	-108.12199	
3,000.00	30.13	208.49	2,630.82	-1,128.81	-612.60	1,600,839.67642	2,259,681.73828	39.45374	-108.12217	
3,200.00	27.13	208.49	2,806.35	-1,213.02	-658.29	1,600,756.82434	2,259,633.63185	39.45351	-108.12233	
3,400.00	24.13	208.49	2,986.66	-1,289.04	-699.55	1,600,682.02999	2,259,590.20398	39.45330	-108.12248	
3,600.00	21.13	208.49	3,171.24	-1,356.66	-736.25	1,600,615.49838	2,259,551.57370	39.45312	-108.12261	
3,800.00	18.13	208.49	3,359.60	-1,415.69	-768.29	1,600,557.41184	2,259,517.84690	39.45295	-108.12272	
3,923.95	16.27	208.49	3,478.00	-1,447.90	-785.76	1,600,525.72312	2,259,499.44747	39.45287	-108.12278	
Mesaverde										
4,000.00	15.13	208.49	3,551.22	-1,465.99	-795.58	1,600,507.92961	2,259,489.11602	39.45282	-108.12282	
4,200.00	12.13	208.49	3,745.56	-1,507.40	-818.05	1,600,467.18730	2,259,465.45980	39.45270	-108.12290	
4,400.00	9.13	208.49	3,942.11	-1,539.81	-835.64	1,600,435.29659	2,259,446.94308	39.45261	-108.12296	
4,600.00	6.13	208.49	4,140.32	-1,563.14	-848.30	1,600,412.34489	2,259,433.61663	39.45255	-108.12300	
4,800.00	3.13	208.49	4,339.64	-1,577.31	-856.00	1,600,398.39511	2,259,425.51696	39.45251	-108.12303	
5,000.00	0.13	208.49	4,539.54	-1,582.30	-858.70	1,600,393.48548	2,259,422.66629	39.45250	-108.12304	
5,008.46	0.00	0.00	4,548.00	-1,582.31	-858.71	1,600,393.47738	2,259,422.66158	39.45250	-108.12304	
Verical										
5,108.46	0.00	0.00	4,648.00	-1,582.31	-858.71	1,600,393.47738	2,259,422.66158	39.45250	-108.12304	
Top Gas - Approx. Top Gas										
5,200.00	0.00	0.00	4,739.54	-1,582.31	-858.71	1,600,393.47738	2,259,422.66158	39.45250	-108.12304	
5,400.00	0.00	0.00	4,939.54	-1,582.31	-858.71	1,600,393.47738	2,259,422.66158	39.45250	-108.12304	
5,600.00	0.00	0.00	5,139.54	-1,582.31	-858.71	1,600,393.47738	2,259,422.66158	39.45250	-108.12304	
5,800.00	0.00	0.00	5,339.54	-1,582.31	-858.71	1,600,393.47738	2,259,422.66158	39.45250	-108.12304	
6,000.00	0.00	0.00	5,539.54	-1,582.31	-858.71	1,600,393.47738	2,259,422.66158	39.45250	-108.12304	
6,200.00	0.00	0.00	5,739.54	-1,582.31	-858.71	1,600,393.47738	2,259,422.66158	39.45250	-108.12304	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 542-8 - Slot A07
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 542-8	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
6,388.46	0.00	0.00	5,928.00	-1,582.31	-858.71	1,600,393.47738	2,259,422.66158	39.45250	-108.12304
Cameo Coals									
6,400.00	0.00	0.00	5,939.54	-1,582.31	-858.71	1,600,393.47738	2,259,422.66158	39.45250	-108.12304
6,600.00	0.00	0.00	6,139.54	-1,582.31	-858.71	1,600,393.47738	2,259,422.66158	39.45250	-108.12304
6,800.00	0.00	0.00	6,339.54	-1,582.31	-858.71	1,600,393.47738	2,259,422.66158	39.45250	-108.12304
6,858.46	0.00	0.00	6,398.00	-1,582.31	-858.71	1,600,393.47738	2,259,422.66158	39.45250	-108.12304
Rollins SS									
6,958.46	0.00	0.00	6,498.00	-1,582.31	-858.71	1,600,393.47738	2,259,422.66158	39.45250	-108.12304
TD at 6958.46 - 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	4,648.00	-1,582.31	-858.71	1,600,393.47738	2,259,422.66159	39.45250	-108.12304

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,658.87	1,546.15	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
2,088.17	1,888.00	Top of "G" Sand				
2,213.75	1,988.00	Base of "G" Sand				
3,923.95	3,478.00	Mesaverde				
5,108.46	4,648.00	Approx. Top Gas				
6,388.46	5,928.00	Cameo Coals				
6,858.46	6,398.00	Rollins SS				
6,958.46	6,498.00	TD				

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 542-8 - Slot A07
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 542-8	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
1,608.87	1,506.33	-410.32	-222.68	Hold 37.22° Inc, 208.49° Az
2,527.01	2,237.45	-898.45	-487.58	Start Drop -1.50°/100
5,008.46	4,548.00	-1,582.31	-858.71	Verical
5,108.46	4,648.00	-1,582.31	-858.71	Top Gas
6,958.46	6,498.00	-1,582.31	-858.71	TD at 6958.46