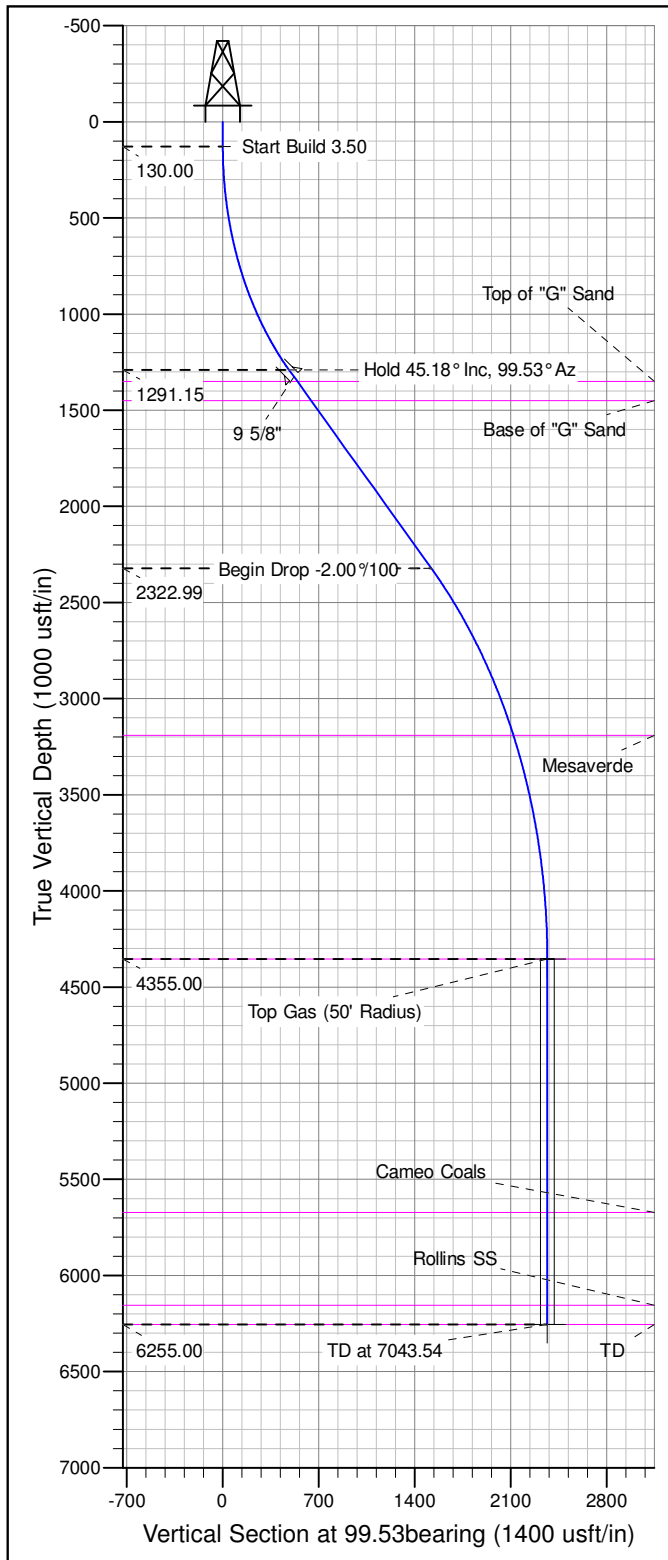
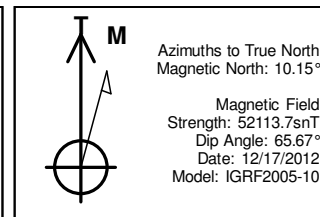
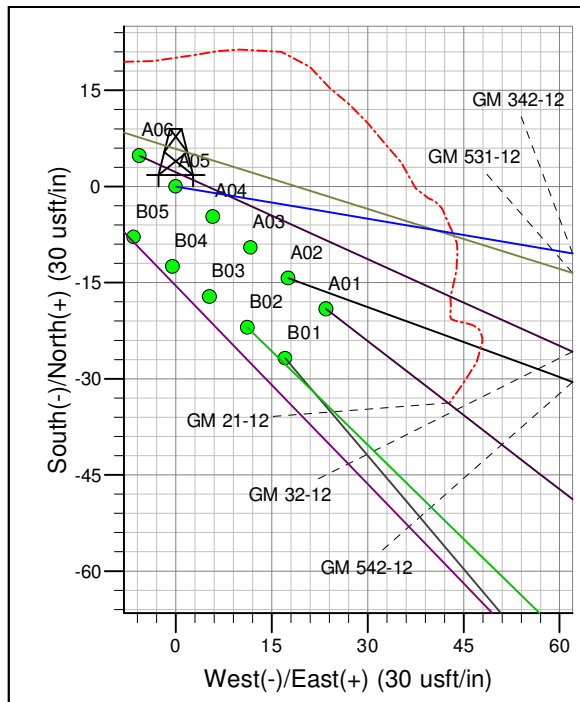
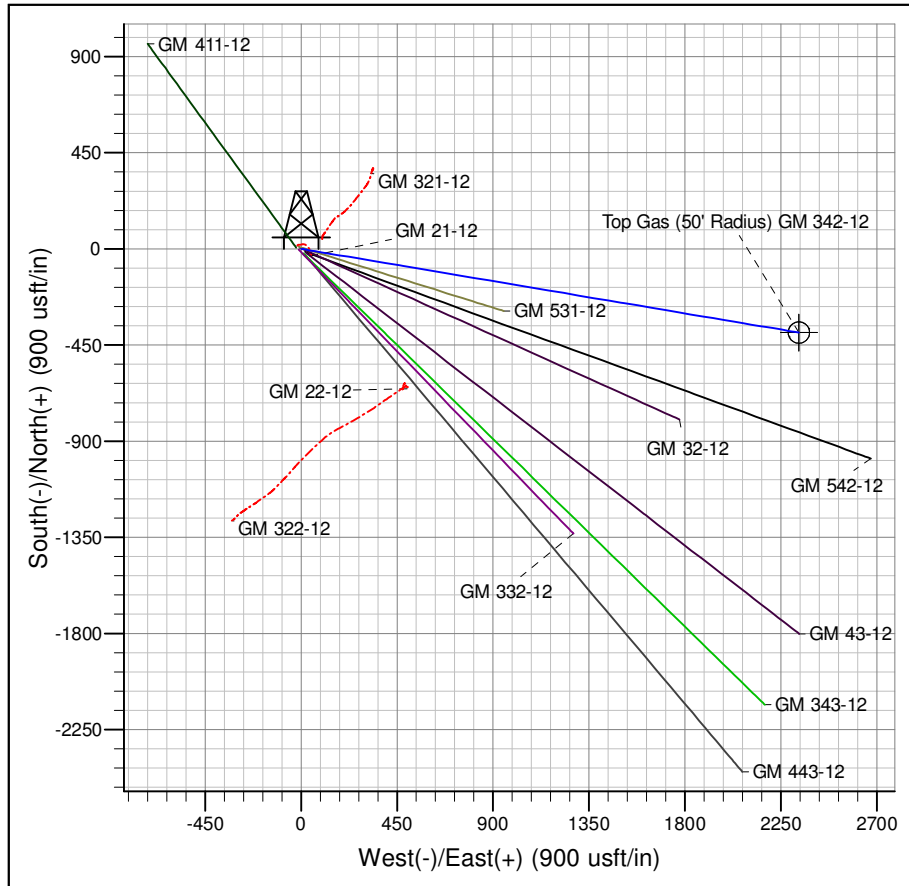




Well Name: GM 342-12
Surface Location: GM 21-12 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 5125.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1601325.62 2276848.17 39.45642 -108.06145 A05
KELLY BUSHING @ 5151.00usft (Nabors (26' RKB))



ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation	
130.00	130.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build 3.50	
1291.15	1420.81	45.18	99.53	-79.95	476.42	483.08	483.08	Hold 45.18° Inc, 99.53° Az	
2322.99	2884.62	45.18	99.53	-251.80	1500.39	1521.37	1521.37	Begin Drop -2.00°/100'	
4355.00	5143.54	0.00	0.00	-391.71	2334.12	2366.76	2366.76	Top Gas	
6255.00	7043.54	0.00	0.00	-391.71	2334.12	2366.76	2366.76	TD at 7043.54	



Project: GV 12-07S-096W
Site: GM 21-12 Pad
Well: GM 342-12
Design #3 15Apr14 mab

PICEANCE VLY NAD 83

GV 12-07S-096W

GM 21-12 Pad

GM 342-12 - Slot A05

Wellbore #1

Plan: Design #3 15Apr14 mab

Standard Planning Report - Geographic

07 May, 2014

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 342-12 - Slot A05
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5151.00usft (Nabors (26' RKB))
Project:	GV 12-07S-096W	MD Reference:	KELLY BUSHING @ 5151.00usft (Nabors (26' RKB))
Site:	GM 21-12 Pad	North Reference:	True
Well:	GM 342-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #3 15Apr14 mab		

Project	GV 12-07S-096W, Garfield County CO, GV 12-07W-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	GM 21-12 Pad			
Site Position:		Northing:	1,601,340.21 usft	Latitude: 39.45646
From: Map		Easting:	2,276,830.88 usft	Longitude: -108.06151
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence: -1.62 °

Well	GM 342-12 - Slot A05			
Well Position	+N/-S	0.00 usft	Northing:	1,601,325.62 usft
	+E/-W	0.00 usft	Easting:	2,276,848.17 usft
Position Uncertainty	0.00 usft		Wellhead Elevation:	
			Ground Level:	5,125.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005-10	12/17/2012	10.15	65.67	52,114

Design	Design #3 15Apr14 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	99.53

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	
130.00	0.00	0.00	130.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,420.81	45.18	99.53	1,291.15	-79.95	476.42	3.50	3.50	0.00	99.53	
2,884.62	45.18	99.53	2,322.99	-251.80	1,500.39	0.00	0.00	0.00	0.00	
5,143.54	0.00	0.00	4,355.00	-391.71	2,334.12	2.00	-2.00	0.00	180.00	Top Gas (50' Radius)
7,043.54	0.00	0.00	6,255.00	-391.71	2,334.12	0.00	0.00	0.00	0.00	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 342-12 - Slot A05
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5151.00usft (Nabors (26' RKB))
Project:	GV 12-07S-096W	MD Reference:	KELLY BUSHING @ 5151.00usft (Nabors (26' RKB))
Site:	GM 21-12 Pad	North Reference:	True
Well:	GM 342-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #3 15Apr14 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	1,601,325.62	2,276,848.17	39.45642	-108.06145	
130.00	0.00	0.00	130.00	0.00	0.00	1,601,325.62	2,276,848.17	39.45642	-108.06145	
Start Build 3.50										
200.00	2.45	99.53	199.98	-0.25	1.48	1,601,325.33	2,276,849.64	39.45642	-108.06144	
400.00	9.45	99.53	398.78	-3.68	21.91	1,601,321.33	2,276,869.97	39.45641	-108.06137	
600.00	16.45	99.53	593.57	-11.09	66.08	1,601,312.67	2,276,913.91	39.45639	-108.06121	
800.00	23.45	99.53	781.45	-22.38	133.34	1,601,299.49	2,276,980.82	39.45636	-108.06098	
1,000.00	30.45	99.53	959.62	-37.37	222.68	1,601,281.99	2,277,069.70	39.45632	-108.06066	
1,200.00	37.45	99.53	1,125.42	-55.84	332.76	1,601,260.42	2,277,179.21	39.45627	-108.06027	
1,400.00	44.45	99.53	1,276.38	-77.53	461.95	1,601,235.11	2,277,307.74	39.45621	-108.05981	
1,420.81	45.18	99.53	1,291.15	-79.95	476.42	1,601,232.27	2,277,322.13	39.45620	-108.05976	
Hold 45.18° Inc, 99.53° Az										
1,470.81	45.18	99.53	1,326.39	-85.82	511.40	1,601,225.42	2,277,356.92	39.45618	-108.05964	
9 5/8"										
1,505.72	45.18	99.53	1,351.00	-89.92	535.82	1,601,220.63	2,277,381.22	39.45617	-108.05955	
Top of "G" Sand										
1,600.00	45.18	99.53	1,417.46	-100.99	601.77	1,601,207.71	2,277,446.83	39.45614	-108.05932	
1,647.58	45.18	99.53	1,451.00	-106.57	635.05	1,601,201.19	2,277,479.94	39.45613	-108.05920	
Base of "G" Sand										
1,800.00	45.18	99.53	1,558.44	-124.47	741.67	1,601,180.30	2,277,586.01	39.45608	-108.05882	
2,000.00	45.18	99.53	1,699.42	-147.95	881.58	1,601,152.89	2,277,725.19	39.45601	-108.05833	
2,200.00	45.18	99.53	1,840.40	-171.43	1,021.48	1,601,125.47	2,277,864.37	39.45595	-108.05783	
2,400.00	45.18	99.53	1,981.38	-194.90	1,161.38	1,601,098.06	2,278,003.55	39.45589	-108.05734	
2,600.00	45.18	99.53	2,122.36	-218.38	1,301.29	1,601,070.65	2,278,142.73	39.45582	-108.05684	
2,800.00	45.18	99.53	2,263.34	-241.86	1,441.19	1,601,043.24	2,278,281.91	39.45576	-108.05634	
2,884.62	45.18	99.53	2,322.99	-251.80	1,500.39	1,601,031.64	2,278,340.80	39.45573	-108.05613	
Begin Drop -2.00°/100										
3,000.00	42.87	99.53	2,405.95	-265.07	1,579.46	1,601,016.15	2,278,419.46	39.45569	-108.05585	
3,200.00	38.87	99.53	2,557.15	-286.72	1,708.50	1,600,990.86	2,278,547.84	39.45563	-108.05540	
3,400.00	34.87	99.53	2,717.12	-306.58	1,826.83	1,600,967.68	2,278,665.55	39.45558	-108.05498	
3,600.00	30.87	99.53	2,885.06	-324.54	1,933.86	1,600,946.71	2,278,772.02	39.45553	-108.05460	
3,800.00	26.87	99.53	3,060.17	-340.52	2,029.07	1,600,928.05	2,278,866.75	39.45549	-108.05426	
3,944.87	23.97	99.53	3,191.00	-350.81	2,090.40	1,600,916.03	2,278,927.76	39.45546	-108.05405	
Mesaverde										
4,000.00	22.87	99.53	3,241.59	-354.44	2,112.01	1,600,911.80	2,278,949.26	39.45545	-108.05397	
4,200.00	18.87	99.53	3,428.42	-366.23	2,182.27	1,600,898.03	2,279,019.15	39.45541	-108.05372	
4,400.00	14.87	99.53	3,619.78	-375.83	2,239.50	1,600,886.82	2,279,076.08	39.45539	-108.05352	
4,600.00	10.87	99.53	3,814.71	-383.21	2,283.42	1,600,878.21	2,279,119.78	39.45537	-108.05336	
4,800.00	6.87	99.53	4,012.28	-388.31	2,313.83	1,600,872.25	2,279,150.04	39.45535	-108.05325	
5,000.00	2.87	99.53	4,211.52	-391.12	2,330.58	1,600,868.97	2,279,166.69	39.45535	-108.05319	
5,143.54	0.00	0.00	4,355.00	-391.71	2,334.12	1,600,868.28	2,279,170.22	39.45534	-108.05318	
Top Gas - Approx. Top Gas										
5,200.00	0.00	0.00	4,411.46	-391.71	2,334.12	1,600,868.28	2,279,170.22	39.45534	-108.05318	
5,400.00	0.00	0.00	4,611.46	-391.71	2,334.12	1,600,868.28	2,279,170.22	39.45534	-108.05318	
5,600.00	0.00	0.00	4,811.46	-391.71	2,334.12	1,600,868.28	2,279,170.22	39.45534	-108.05318	
5,800.00	0.00	0.00	5,011.46	-391.71	2,334.12	1,600,868.28	2,279,170.22	39.45534	-108.05318	
6,000.00	0.00	0.00	5,211.46	-391.71	2,334.12	1,600,868.28	2,279,170.22	39.45534	-108.05318	
6,200.00	0.00	0.00	5,411.46	-391.71	2,334.12	1,600,868.28	2,279,170.22	39.45534	-108.05318	
6,400.00	0.00	0.00	5,611.46	-391.71	2,334.12	1,600,868.28	2,279,170.22	39.45534	-108.05318	
6,461.54	0.00	0.00	5,673.00	-391.71	2,334.12	1,600,868.28	2,279,170.22	39.45534	-108.05318	
Cameo Coals										

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 342-12 - Slot A05
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5151.00usft (Nabors (26' RKB))
Project:	GV 12-07S-096W	MD Reference:	KELLY BUSHING @ 5151.00usft (Nabors (26' RKB))
Site:	GM 21-12 Pad	North Reference:	True
Well:	GM 342-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #3 15Apr14 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
6,600.00	0.00	0.00	5,811.46	-391.71	2,334.12	1,600,868.28	2,279,170.22	39.45534	-108.05318
6,800.00	0.00	0.00	6,011.46	-391.71	2,334.12	1,600,868.28	2,279,170.22	39.45534	-108.05318
6,943.54	0.00	0.00	6,155.00	-391.71	2,334.12	1,600,868.28	2,279,170.22	39.45534	-108.05318
Rollins SS									
7,000.00	0.00	0.00	6,211.46	-391.71	2,334.12	1,600,868.28	2,279,170.22	39.45534	-108.05318
7,043.54	0.00	0.00	6,255.00	-391.71	2,334.12	1,600,868.28	2,279,170.22	39.45534	-108.05318
TD at 7043.54 - 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) GM	0.00	0.00	4,355.00	-391.71	2,334.12	1,600,868.28	2,279,170.22	39.45534	-108.05318
- plan hits target center									
- Circle (radius 50.00)									
TD/PBHL GM 342-12	0.00	0.00	6,255.00	-391.71	2,334.12	1,600,868.28	2,279,170.22	39.45534	-108.05318
- plan hits target center									
- Point									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,470.81	1,326.39	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
1,505.72	1,351.00	Top of "G" Sand				
1,647.58	1,451.00	Base of "G" Sand				
3,944.87	3,191.00	Mesaverde				
5,143.54	4,355.00	Approx. Top Gas				
6,461.54	5,673.00	Cameo Coals				
6,943.54	6,155.00	Rollins SS				
7,043.54	6,255.00	TD				

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 342-12 - Slot A05
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5151.00usft (Nabors (26' RKB))
Project:	GV 12-07S-096W	MD Reference:	KELLY BUSHING @ 5151.00usft (Nabors (26' RKB))
Site:	GM 21-12 Pad	North Reference:	True
Well:	GM 342-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #3 15Apr14 mab		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
130.00	130.00	0.00	0.00	Start Build 3.50
1,420.81	1,291.15	-79.95	476.42	Hold 45.18° Inc, 99.53° Az
2,884.62	2,322.99	-251.80	1,500.39	Begin Drop -2.00°/100
5,143.54	4,355.00	-391.71	2,334.12	Top Gas
7,043.54	6,255.00	-391.71	2,334.12	TD at 7043.54