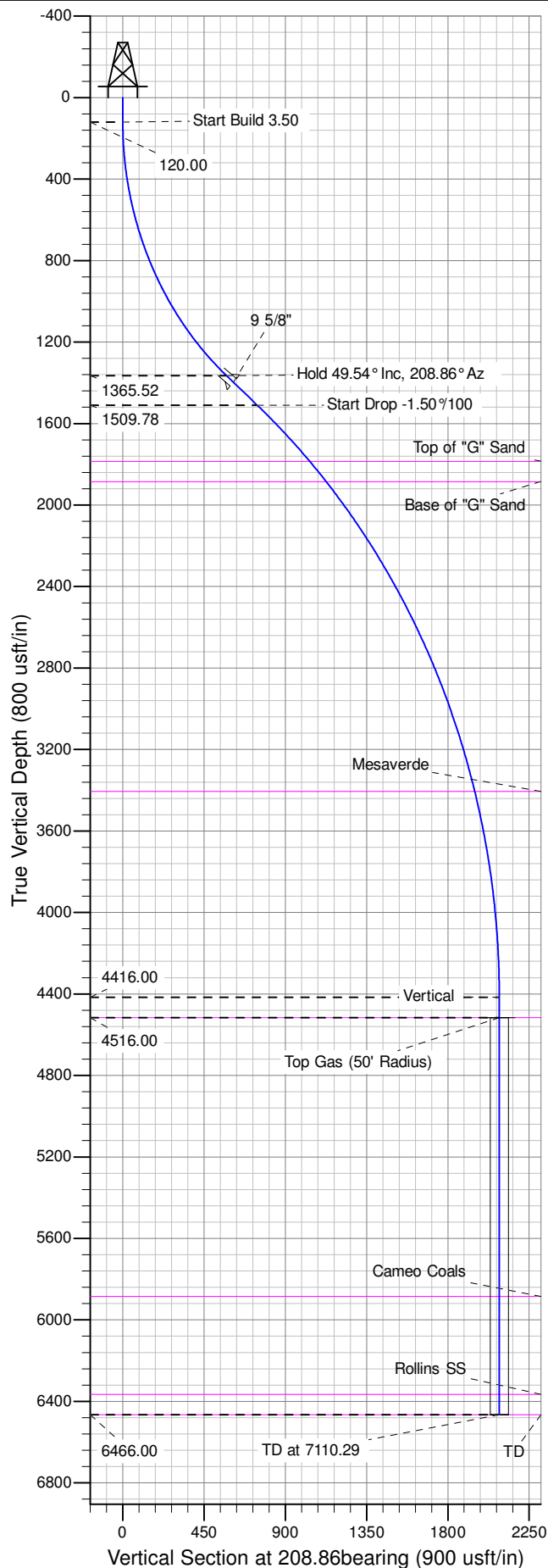
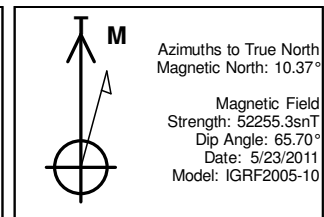
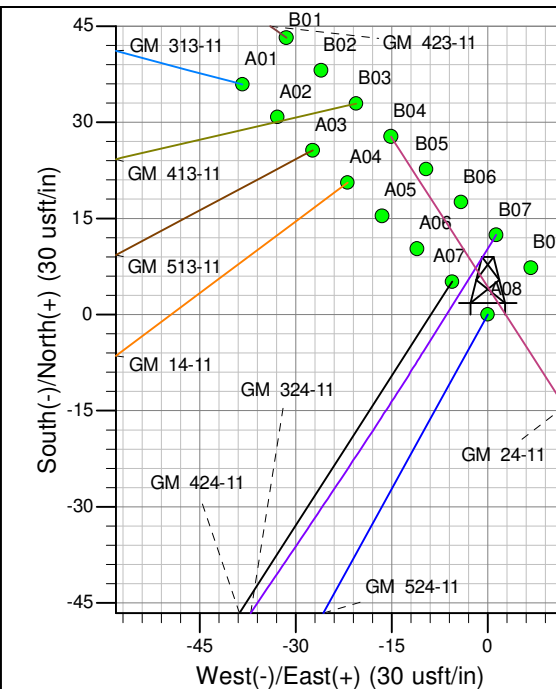
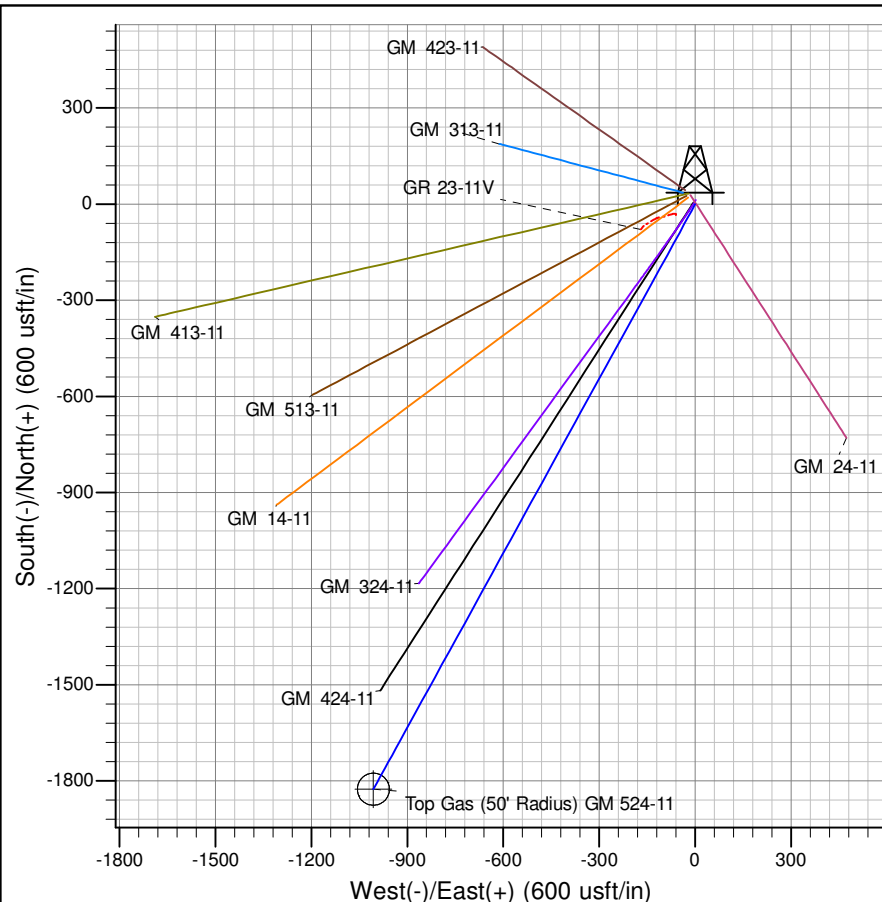




Well Name: GM 524-11
Surface Location: GR 23-11V Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 5793.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1599202.50000 2271937.10000 39.450212 -108.078618 A08
KELLY BUSHING @ 5817.00usft (H&P 318 (24' 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 3.50	
1365.52	1535.40	49.54	208.86	-503.31	-277.43	574.71	574.71	Hold 49.54° Inc, 208.86° Az	
1509.78	1757.69	49.54	208.86	-651.43	-359.08	743.84	743.84	Start Drop -1.50°/100	
4416.00	5060.29	0.00	0.00	-1825.82	-1006.41	2084.82	2084.82	Vertical	
4516.00	5160.29	0.00	0.00	-1825.82	-1006.41	2084.82	2084.82	Top Gas	
6466.00	7110.29	0.00	0.00	-1825.82	-1006.41	2084.82	2084.82	TD at 7110.29	



Project: GV 11-07S-096W
Site: GR 23-11V Pad
Well: GM 524-11
Design #2 22Jul14 mab

PICEANCE VLY NAD 83

GV 11-07S-096W

GR 23-11V Pad

GM 524-11 - Slot A08

Wellbore #1

Plan: Design #2 22Jul14 mab

Standard Planning Report - Geographic

11 September, 2014

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 524-11 - Slot A08
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5817.00usft (H&P 318 (24' RKB) mab)
Project:	GV 11-07S-096W	MD Reference:	KELLY BUSHING @ 5817.00usft (H&P 318 (24' RKB) mab)
Site:	GR 23-11V Pad	North Reference:	True
Well:	GM 524-11	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2 22Jul14 mab		

Project	GV 11-07S-096W, Garfield County, CO, 11-07S-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	GR 23-11V Pad		
Site Position:		Northing:	1,599,207.80000 usft
From:	Map	Easting:	2,271,931.70000 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in
		Latitude:	39.450226
		Longitude:	-108.078638
		Grid Convergence:	-1.63 °

Well	GM 524-11 - Slot A08		
Well Position	+N/-S	0.00 usft	Northing: 1,599,202.50000 usft
	+E/-W	0.00 usft	Easting: 2,271,937.10000 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	Latitude: 39.450212
			Longitude: -108.078619
			Ground Level: 5,793.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005-10	5/23/2011	10.37	65.70	52,255

Design	Design #2 22Jul14 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	208.86	

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	
1,535.40	49.54	208.86	1,365.52	-503.31	-277.43	3.50	3.50	0.00	208.86	
1,757.69	49.54	208.86	1,509.78	-651.43	-359.08	0.00	0.00	0.00	0.00	
5,060.29	0.00	0.00	4,416.00	-1,825.82	-1,006.41	1.50	-1.50	0.00	180.00	
5,160.29	0.00	0.00	4,516.00	-1,825.82	-1,006.41	0.00	0.00	0.00	0.00	Top Gas (50' Radius)
7,110.29	0.00	0.00	6,466.00	-1,825.82	-1,006.41	0.00	0.00	0.00	0.00	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 524-11 - Slot A08
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5817.00usft (H&P 318 (24' RKB) mab)
Project:	GV 11-07S-096W	MD Reference:	KELLY BUSHING @ 5817.00usft (H&P 318 (24' RKB) mab)
Site:	GR 23-11V Pad	North Reference:	True
Well:	GM 524-11	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2 22Jul14 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	1,599,202.50000	2,271,937.10000	39.450212	-108.078619	
120.00	0.00	0.00	120.00	0.00	0.00	1,599,202.50000	2,271,937.10000	39.450212	-108.078619	
Start Build 3.50										
200.00	2.80	208.86	199.97	-1.71	-0.94	1,599,200.81596	2,271,936.10841	39.450207	-108.078622	
400.00	9.80	208.86	398.64	-20.92	-11.53	1,599,181.91664	2,271,924.98015	39.450154	-108.078659	
600.00	16.80	208.86	593.15	-61.19	-33.73	1,599,142.29565	2,271,901.65060	39.450044	-108.078738	
800.00	23.80	208.86	780.61	-121.92	-67.20	1,599,082.54364	2,271,866.46754	39.449877	-108.078856	
1,000.00	30.80	208.86	958.23	-202.20	-111.46	1,599,003.55139	2,271,819.95547	39.449657	-108.079013	
1,200.00	37.80	208.86	1,123.34	-300.84	-165.83	1,598,906.49646	2,271,762.80778	39.449386	-108.079206	
1,400.00	44.80	208.86	1,273.50	-416.37	-229.51	1,598,792.82574	2,271,695.87640	39.449069	-108.079431	
1,535.40	49.54	208.86	1,365.52	-503.31	-277.43	1,598,707.28875	2,271,645.51068	39.448830	-108.079601	
Hold 49.54° Inc, 208.86° Az										
1,585.40	49.54	208.86	1,397.97	-536.63	-295.80	1,598,674.50729	2,271,626.20836	39.448738	-108.079666	
9 5/8"										
1,600.00	49.54	208.86	1,407.45	-546.36	-301.16	1,598,664.93548	2,271,620.57231	39.448712	-108.079685	
1,757.69	49.54	208.86	1,509.78	-651.43	-359.08	1,598,561.55092	2,271,559.69762	39.448423	-108.079890	
Start Drop -1.50°/100										
1,800.00	48.90	208.86	1,537.41	-679.49	-374.54	1,598,533.94641	2,271,543.44359	39.448346	-108.079945	
2,000.00	45.90	208.86	1,672.76	-808.41	-445.61	1,598,407.09671	2,271,468.75220	39.447992	-108.080196	
2,159.35	43.51	208.86	1,786.00	-906.58	-499.72	1,598,310.50469	2,271,411.87707	39.447723	-108.080388	
Top of "G" Sand										
2,200.00	42.90	208.86	1,815.63	-930.96	-513.15	1,598,286.52462	2,271,397.75717	39.447656	-108.080436	
2,294.99	41.48	208.86	1,886.00	-986.82	-543.95	1,598,231.55557	2,271,365.39040	39.447502	-108.080545	
Base of "G" Sand										
2,400.00	39.90	208.86	1,965.62	-1,046.78	-577.00	1,598,172.56062	2,271,330.65311	39.447338	-108.080662	
2,600.00	36.90	208.86	2,122.33	-1,155.58	-636.97	1,598,065.51707	2,271,267.62393	39.447039	-108.080874	
2,800.00	33.90	208.86	2,285.33	-1,257.04	-692.89	1,597,965.68736	2,271,208.84240	39.446761	-108.081072	
3,000.00	30.90	208.86	2,454.17	-1,350.89	-744.63	1,597,873.34514	2,271,154.46964	39.446503	-108.081255	
3,200.00	27.90	208.86	2,628.38	-1,436.88	-792.02	1,597,788.74350	2,271,104.65466	39.446267	-108.081423	
3,400.00	24.90	208.86	2,807.50	-1,514.76	-834.95	1,597,712.11432	2,271,059.53402	39.446053	-108.081575	
3,600.00	21.90	208.86	2,991.02	-1,584.33	-873.30	1,597,643.66765	2,271,019.23139	39.445862	-108.081711	
3,800.00	18.90	208.86	3,178.45	-1,645.39	-906.95	1,597,583.59109	2,270,983.85722	39.445694	-108.081830	
4,000.00	15.90	208.86	3,369.27	-1,697.77	-935.83	1,597,532.04930	2,270,953.50849	39.445551	-108.081932	
4,038.13	15.33	208.86	3,406.00	-1,706.76	-940.79	1,597,523.20287	2,270,948.29955	39.445526	-108.081950	
Mesaverde										
4,200.00	12.90	208.86	3,562.97	-1,741.34	-959.84	1,597,489.18357	2,270,928.26837	39.445431	-108.082017	
4,400.00	9.90	208.86	3,758.99	-1,775.97	-978.93	1,597,455.11137	2,270,908.20605	39.445336	-108.082085	
4,600.00	6.90	208.86	3,956.82	-1,801.56	-993.04	1,597,429.92612	2,270,893.37651	39.445266	-108.082135	
4,800.00	3.90	208.86	4,155.91	-1,818.06	-1,002.13	1,597,413.69682	2,270,883.82041	39.445220	-108.082167	
5,000.00	0.90	208.86	4,355.71	-1,825.41	-1,006.18	1,597,406.46797	2,270,879.56393	39.445200	-108.082181	
5,060.29	0.00	0.00	4,416.00	-1,825.82	-1,006.41	1,597,406.05799	2,270,879.32253	39.445199	-108.082182	
Vertical										
5,160.29	0.00	0.00	4,516.00	-1,825.82	-1,006.41	1,597,406.05799	2,270,879.32253	39.445199	-108.082182	
Top Gas - Approx. Top Gas										
5,200.00	0.00	0.00	4,555.71	-1,825.82	-1,006.41	1,597,406.05799	2,270,879.32253	39.445199	-108.082182	
5,400.00	0.00	0.00	4,755.71	-1,825.82	-1,006.41	1,597,406.05799	2,270,879.32253	39.445199	-108.082182	
5,600.00	0.00	0.00	4,955.71	-1,825.82	-1,006.41	1,597,406.05799	2,270,879.32253	39.445199	-108.082182	
5,800.00	0.00	0.00	5,155.71	-1,825.82	-1,006.41	1,597,406.05799	2,270,879.32253	39.445199	-108.082182	
6,000.00	0.00	0.00	5,355.71	-1,825.82	-1,006.41	1,597,406.05799	2,270,879.32253	39.445199	-108.082182	
6,200.00	0.00	0.00	5,555.71	-1,825.82	-1,006.41	1,597,406.05799	2,270,879.32253	39.445199	-108.082182	
6,400.00	0.00	0.00	5,755.71	-1,825.82	-1,006.41	1,597,406.05799	2,270,879.32253	39.445199	-108.082182	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 524-11 - Slot A08
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5817.00usft (H&P 318 (24' RKB) mab)
Project:	GV 11-07S-096W	MD Reference:	KELLY BUSHING @ 5817.00usft (H&P 318 (24' RKB) mab)
Site:	GR 23-11V Pad	North Reference:	True
Well:	GM 524-11	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2 22Jul14 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
6,530.29	0.00	0.00	5,886.00	-1,825.82	-1,006.41	1,597,406.05799	2,270,879.32253	39.445199	-108.082182
Cameo Coals									
6,600.00	0.00	0.00	5,955.71	-1,825.82	-1,006.41	1,597,406.05799	2,270,879.32253	39.445199	-108.082182
6,800.00	0.00	0.00	6,155.71	-1,825.82	-1,006.41	1,597,406.05799	2,270,879.32253	39.445199	-108.082182
7,000.00	0.00	0.00	6,355.71	-1,825.82	-1,006.41	1,597,406.05799	2,270,879.32253	39.445199	-108.082182
7,010.29	0.00	0.00	6,366.00	-1,825.82	-1,006.41	1,597,406.05799	2,270,879.32253	39.445199	-108.082182
Rollins SS									
7,110.29	0.00	0.00	6,466.00	-1,825.82	-1,006.41	1,597,406.05799	2,270,879.32253	39.445199	-108.082182
TD at 7110.29 - 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	4,516.00	-1,825.82	-1,006.41	1,597,406.05799	2,270,879.32253	39.445199	-108.082182

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,585.40	1,397.97	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
2,159.35	1,786.00	Top of "G" Sand				
2,294.99	1,886.00	Base of "G" Sand				
4,038.13	3,406.00	Mesaverde				
5,160.29	4,516.00	Approx. Top Gas				
6,530.29	5,886.00	Cameo Coals				
7,010.29	6,366.00	Rollins SS				
7,110.29	6,466.00	TD				

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 524-11 - Slot A08
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5817.00usft (H&P 318 (24' RKB) mab)
Project:	GV 11-07S-096W	MD Reference:	KELLY BUSHING @ 5817.00usft (H&P 318 (24' RKB) mab)
Site:	GR 23-11V Pad	North Reference:	True
Well:	GM 524-11	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #2 22Jul14 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 3.50
1,535.40	1,365.52	-503.31	-277.43	Hold 49.54° Inc, 208.86° Az
1,757.69	1,509.78	-651.43	-359.08	Start Drop -1.50°/100
5,060.29	4,416.00	-1,825.82	-1,006.41	Vertical
5,160.29	4,516.00	-1,825.82	-1,006.41	Top Gas
7,110.29	6,466.00	-1,825.82	-1,006.41	TD at 7110.29