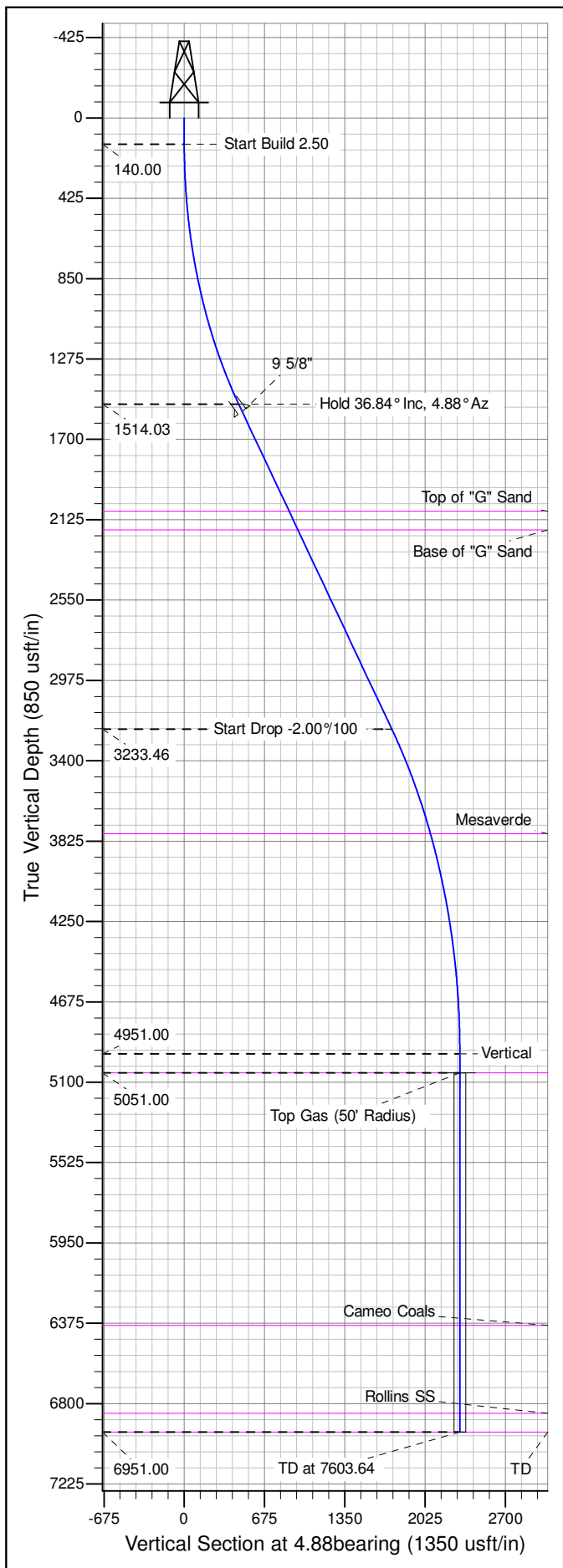
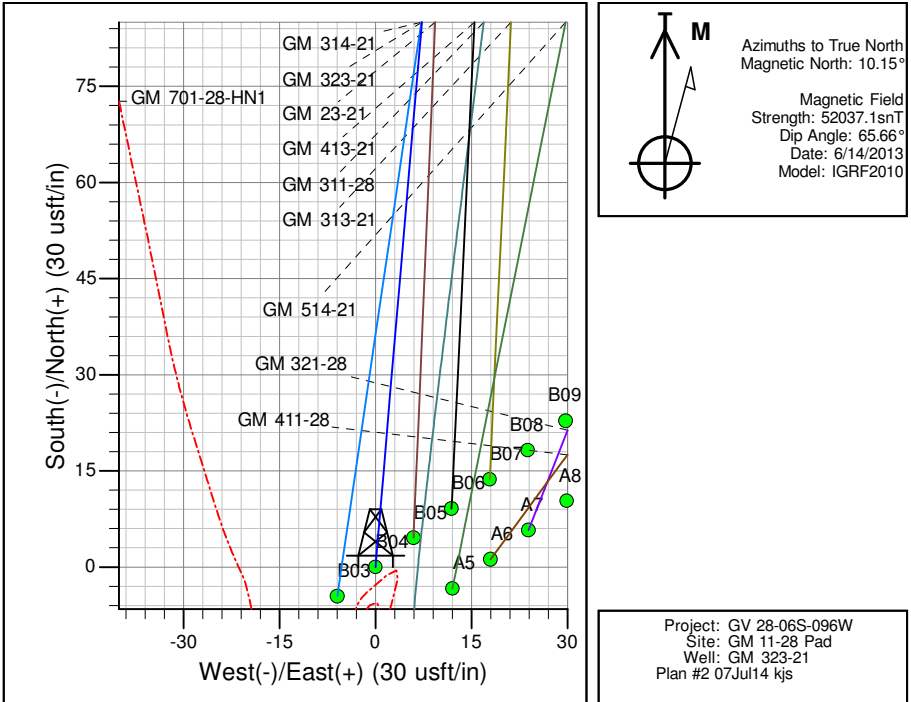
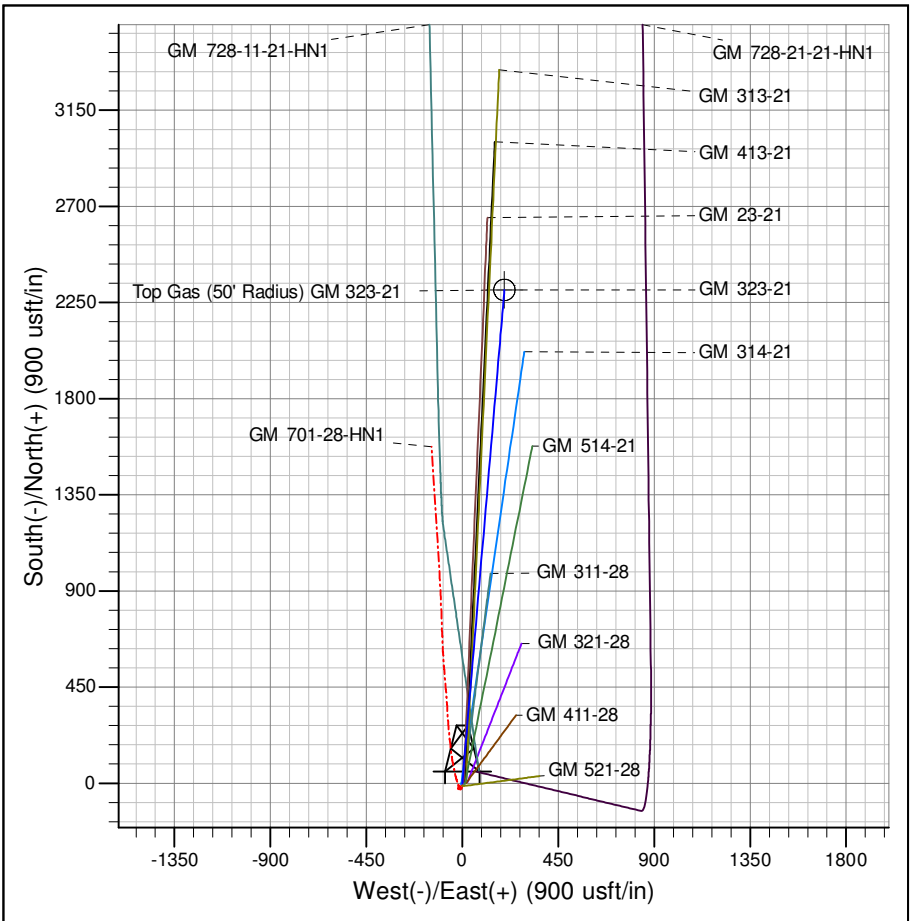




Well Name: GM 323-21
Surface Location: GM 11-28 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 5604.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1617268.59 2260924.96 39.49893 -108.11944 B04
KELLY BUSHING @ 5630.00usft



ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation	
140.00	140.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.50	Start Build 2.50
1514.03	1613.46	36.84	4.88	455.91	38.90	457.57	457.57	Hold 36.84° Inc, 4.88° Az	Hold 36.84° Inc, 4.88° Az
3233.46	3761.81	36.84	4.88	1739.26	148.40	1745.58	1745.58	Start Drop -2.00°/100	Start Drop -2.00°/100
4951.00	5603.64	0.00	0.00	2309.14	197.03	2317.54	2317.54	Vertical	Vertical
5051.00	5703.64	0.00	0.00	2309.14	197.03	2317.54	2317.54	Top Gas	Top Gas
6951.00	7603.64	0.00	0.00	2309.14	197.03	2317.54	2317.54	TD at 7603.64	TD at 7603.64



PICEANCE VLY NAD 83

GV 28-06S-096W

GM 11-28 Pad

GM 323-21 - Slot B04

Wellbore #1

Plan: Plan #2 07Jul14 kjs

Standard Planning Report - Geographic

28 August, 2014

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 323-21 - Slot B04
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5630.00usft
Project:	GV 28-06S-096W	MD Reference:	KELLY BUSHING @ 5630.00usft
Site:	GM 11-28 Pad	North Reference:	True
Well:	GM 323-21	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 07Jul14 kjs		

Project	GV 28-06S-096W, 28-06S-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 11-28 Pad			
Site Position:		Northing:	1,617,299.30000 usft	Latitude:	39.49901
From:	Map	Easting:	2,260,967.51000 usft	Longitude:	-108.11930
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	-1.65 °

Well	GM 323-21 - Slot B04					
Well Position	+N/-S	0.00 usft	Northing:	1,617,268.59000 usft	Latitude:	39.49893
	+E/-W	0.00 usft	Easting:	2,260,924.96000 usft	Longitude:	-108.11945
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	5,604.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/14/2013	10.15	65.66	52,037

Design	Plan #2 07Jul14 kjs				
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	4.88	

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	
140.00	0.00	0.00	140.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,613.46	36.84	4.88	1,514.03	455.91	38.90	2.50	2.50	0.00	4.88	
3,761.81	36.84	4.88	3,233.46	1,739.26	148.40	0.00	0.00	0.00	0.00	
5,603.64	0.00	0.00	4,951.00	2,309.15	197.03	2.00	-2.00	0.00	180.00	
5,703.64	0.00	0.00	5,051.00	2,309.15	197.03	0.00	0.00	0.00	0.00	Top Gas (50' Radius)
7,603.64	0.00	0.00	6,951.00	2,309.15	197.03	0.00	0.00	0.00	0.00	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 323-21 - Slot B04
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5630.00usft
Project:	GV 28-06S-096W	MD Reference:	KELLY BUSHING @ 5630.00usft
Site:	GM 11-28 Pad	North Reference:	True
Well:	GM 323-21	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 07Jul14 kjs		

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	1,617,268.59000	2,260,924.96000	39.49893	-108.11945	
140.00	0.00	0.00	140.00	0.00	0.00	1,617,268.59000	2,260,924.96000	39.49893	-108.11945	
Start Build 2.50										
200.00	1.50	4.88	199.99	0.78	0.07	1,617,269.37022	2,260,925.04929	39.49893	-108.11945	
400.00	6.50	4.88	399.44	14.68	1.25	1,617,283.22608	2,260,926.63509	39.49897	-108.11944	
600.00	11.50	4.88	596.92	45.84	3.91	1,617,314.29895	2,260,930.19136	39.49905	-108.11943	
800.00	16.50	4.88	790.92	94.04	8.02	1,617,362.35235	2,260,935.69103	39.49919	-108.11942	
1,000.00	21.50	4.88	979.96	158.89	13.56	1,617,427.02057	2,260,943.09227	39.49936	-108.11940	
1,200.00	26.50	4.88	1,162.61	239.92	20.47	1,617,507.81143	2,260,952.33873	39.49959	-108.11937	
1,400.00	31.50	4.88	1,337.48	336.50	28.71	1,617,604.11007	2,260,963.36004	39.49985	-108.11934	
1,600.00	36.50	4.88	1,503.23	447.90	38.22	1,617,715.18359	2,260,976.07233	39.50016	-108.11931	
1,613.46	36.84	4.88	1,514.03	455.91	38.90	1,617,723.17169	2,260,976.98657	39.50018	-108.11931	
Hold 36.84° Inc, 4.88° Az										
1,663.46	36.84	4.88	1,554.05	485.78	41.45	1,617,752.95033	2,260,980.39471	39.50026	-108.11930	
9 5/8"										
1,800.00	36.84	4.88	1,663.33	567.34	48.41	1,617,834.27667	2,260,989.70246	39.50048	-108.11927	
2,000.00	36.84	4.88	1,823.40	686.81	58.60	1,617,953.40123	2,261,003.33618	39.50081	-108.11924	
2,200.00	36.84	4.88	1,983.47	806.29	68.80	1,618,072.52579	2,261,016.96991	39.50114	-108.11920	
2,320.61	36.84	4.88	2,080.00	878.34	74.94	1,618,144.36669	2,261,025.19205	39.50134	-108.11918	
Top of "G" Sand										
2,400.00	36.84	4.88	2,143.54	925.76	78.99	1,618,191.65036	2,261,030.60363	39.50147	-108.11917	
2,445.56	36.84	4.88	2,180.00	952.98	81.31	1,618,218.78712	2,261,033.70942	39.50154	-108.11916	
Base of "G" Sand										
2,600.00	36.84	4.88	2,303.61	1,045.23	89.19	1,618,310.77492	2,261,044.23736	39.50180	-108.11913	
2,800.00	36.84	4.88	2,463.68	1,164.71	99.38	1,618,429.89949	2,261,057.87109	39.50212	-108.11909	
3,000.00	36.84	4.88	2,623.75	1,284.18	109.57	1,618,549.02404	2,261,071.50481	39.50245	-108.11906	
3,200.00	36.84	4.88	2,783.81	1,403.65	119.77	1,618,668.14861	2,261,085.13854	39.50278	-108.11902	
3,400.00	36.84	4.88	2,943.88	1,523.12	129.96	1,618,787.27317	2,261,098.77227	39.50311	-108.11899	
3,600.00	36.84	4.88	3,103.95	1,642.60	140.16	1,618,906.39773	2,261,112.40599	39.50344	-108.11895	
3,761.81	36.84	4.88	3,233.46	1,739.26	148.40	1,619,002.77554	2,261,123.43637	39.50370	-108.11892	
Start Drop -2.00°/100										
3,800.00	36.07	4.88	3,264.18	1,761.87	150.33	1,619,025.31923	2,261,126.01648	39.50376	-108.11891	
4,000.00	32.07	4.88	3,429.81	1,873.49	159.86	1,619,136.61464	2,261,138.75416	39.50407	-108.11888	
4,200.00	28.07	4.88	3,602.85	1,973.32	168.38	1,619,236.16045	2,261,150.14712	39.50434	-108.11885	
4,400.00	24.07	4.88	3,782.46	2,060.89	175.85	1,619,323.47170	2,261,160.13983	39.50459	-108.11882	
4,403.88	24.00	4.88	3,786.00	2,062.46	175.98	1,619,325.03977	2,261,160.31929	39.50459	-108.11882	
Mesaverde										
4,600.00	20.07	4.88	3,967.76	2,135.76	182.24	1,619,398.12301	2,261,168.68362	39.50479	-108.11880	
4,800.00	16.07	4.88	4,157.86	2,197.57	187.51	1,619,459.75068	2,261,175.73687	39.50496	-108.11878	
5,000.00	12.07	4.88	4,351.82	2,246.01	191.64	1,619,508.05447	2,261,181.26520	39.50509	-108.11877	
5,200.00	8.07	4.88	4,548.69	2,280.86	194.62	1,619,542.79905	2,261,185.24170	39.50519	-108.11876	
5,400.00	4.07	4.88	4,747.53	2,301.94	196.41	1,619,563.81515	2,261,187.64698	39.50525	-108.11875	
5,600.00	0.07	4.88	4,947.36	2,309.14	197.03	1,619,571.00038	2,261,188.46932	39.50527	-108.11875	
5,603.64	0.00	0.00	4,951.00	2,309.15	197.03	1,619,571.00267	2,261,188.46958	39.50527	-108.11875	
Vertical										
5,703.64	0.00	0.00	5,051.00	2,309.15	197.03	1,619,571.00267	2,261,188.46958	39.50527	-108.11875	
Top Gas - Approx. Top Gas										
5,800.00	0.00	0.00	5,147.36	2,309.15	197.03	1,619,571.00267	2,261,188.46958	39.50527	-108.11875	
6,000.00	0.00	0.00	5,347.36	2,309.15	197.03	1,619,571.00267	2,261,188.46958	39.50527	-108.11875	
6,200.00	0.00	0.00	5,547.36	2,309.15	197.03	1,619,571.00267	2,261,188.46958	39.50527	-108.11875	
6,400.00	0.00	0.00	5,747.36	2,309.15	197.03	1,619,571.00267	2,261,188.46958	39.50527	-108.11875	
6,600.00	0.00	0.00	5,947.36	2,309.15	197.03	1,619,571.00267	2,261,188.46958	39.50527	-108.11875	
6,800.00	0.00	0.00	6,147.36	2,309.15	197.03	1,619,571.00267	2,261,188.46958	39.50527	-108.11875	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 323-21 - Slot B04
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5630.00usft
Project:	GV 28-06S-096W	MD Reference:	KELLY BUSHING @ 5630.00usft
Site:	GM 11-28 Pad	North Reference:	True
Well:	GM 323-21	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 07Jul14 kjs		

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	
7,000.00	0.00	0.00	6,347.36	2,309.15	197.03	1,619,571.00267	2,261,188.46958	39.50527	-108.11875	
7,038.64	0.00	0.00	6,386.00	2,309.15	197.03	1,619,571.00267	2,261,188.46958	39.50527	-108.11875	
Cameo Coals										
7,200.00	0.00	0.00	6,547.36	2,309.15	197.03	1,619,571.00267	2,261,188.46958	39.50527	-108.11875	
7,400.00	0.00	0.00	6,747.36	2,309.15	197.03	1,619,571.00267	2,261,188.46958	39.50527	-108.11875	
7,503.64	0.00	0.00	6,851.00	2,309.15	197.03	1,619,571.00267	2,261,188.46958	39.50527	-108.11875	
Rollins SS										
7,600.00	0.00	0.00	6,947.36	2,309.15	197.03	1,619,571.00267	2,261,188.46958	39.50527	-108.11875	
7,603.64	0.00	0.00	6,951.00	2,309.15	197.03	1,619,571.00267	2,261,188.46958	39.50527	-108.11875	
TD at 7603.64 - 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) G1	0.00	0.00	5,051.00	2,309.15	197.03	1,619,571.00267	2,261,188.46958	39.50527	-108.11875	
- plan hits target center										
- Circle (radius 50.00)										

Casing Points							Casing Diameter (in)	Hole Diameter (in)
Measured Depth (usft)	Vertical Depth (usft)	Name						
1,663.46	1,554.05	9 5/8"					9.625	13.500

Formations							Dip (°)	Dip Direction (bearing)
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology					
2,320.61	2,080.00	Top of "G" Sand						
2,445.56	2,180.00	Base of "G" Sand						
4,403.88	3,786.00	Mesaverde						
5,703.64	5,051.00	Approx. Top Gas						
7,038.64	6,386.00	Cameo Coals						
7,503.64	6,851.00	Rollins SS						
7,603.64	6,951.00	TD						

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
140.00	140.00	0.00	0.00	Start Build 2.50	
1,613.46	1,514.03	455.91	38.90	Hold 36.84° Inc, 4.88° Az	
3,761.81	3,233.46	1,739.26	148.40	Start Drop -2.00°/100	
5,603.64	4,951.00	2,309.15	197.03	Vertical	
5,703.64	5,051.00	2,309.15	197.03	Top Gas	
7,603.64	6,951.00	2,309.15	197.03	TD at 7603.64	