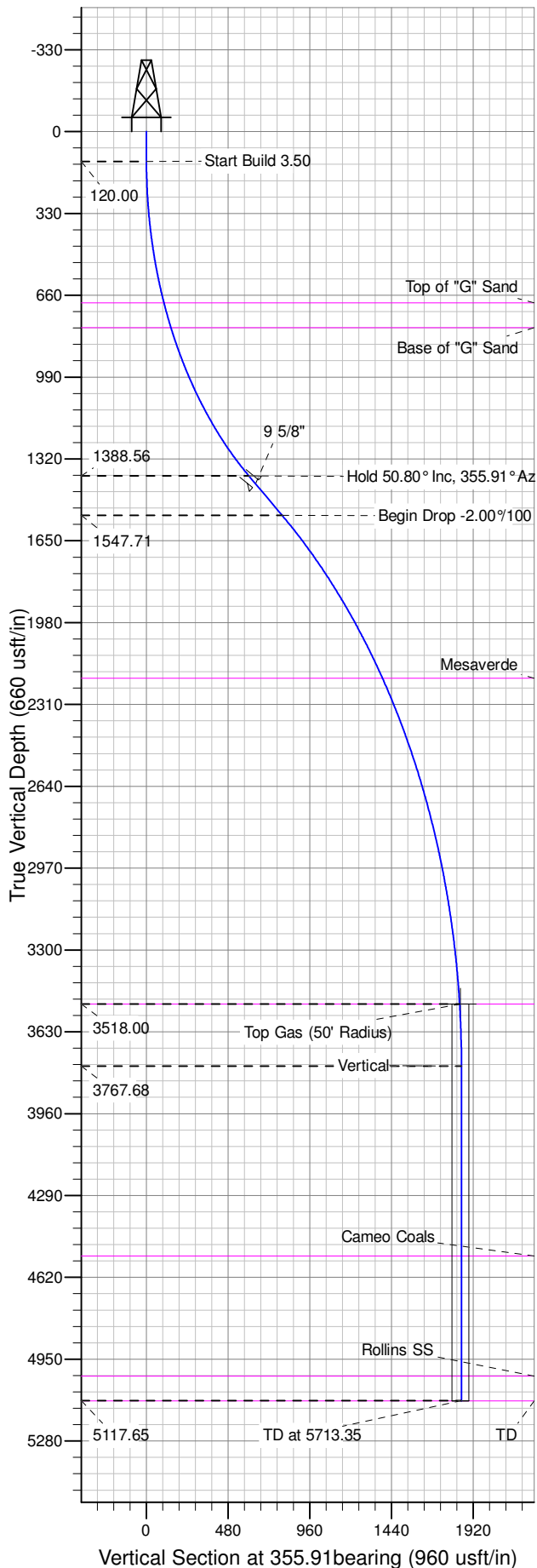
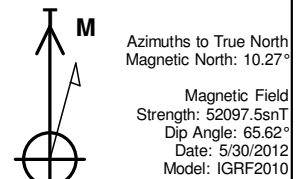
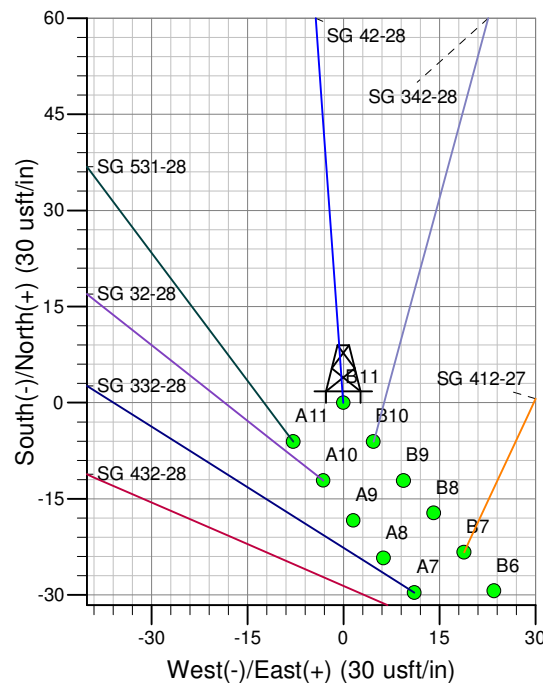
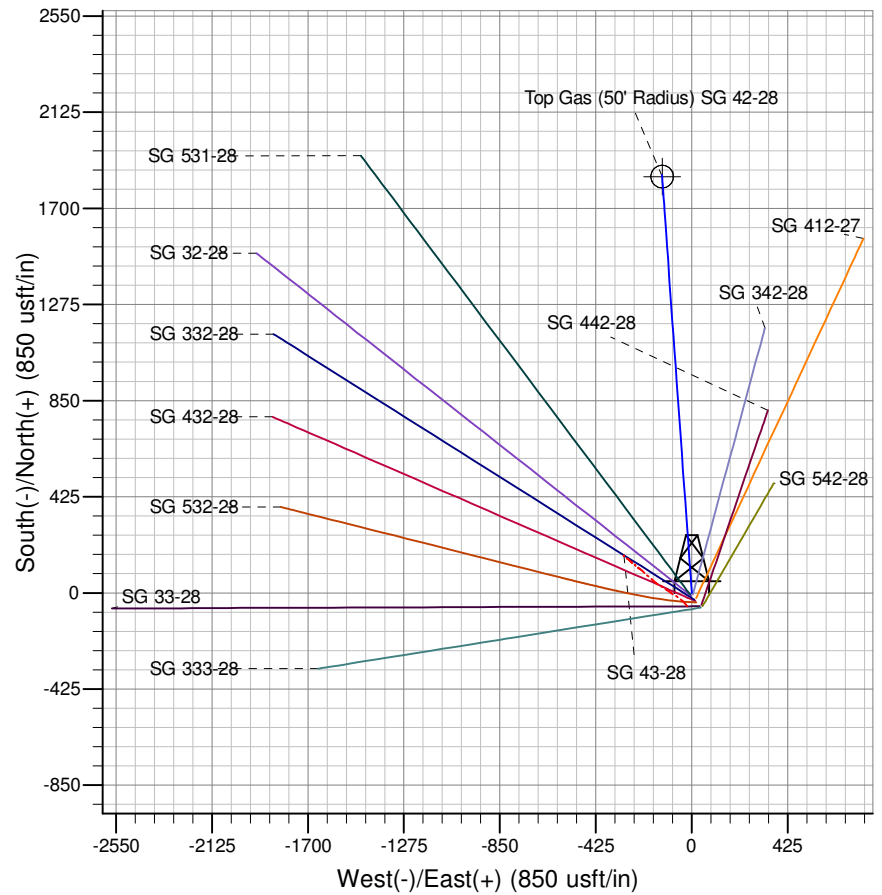




Well Name: SG 42-28  
Surface Location: SG 43-28 Pad  
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone  
Ground Elevation: 5119.00  
+N/-S +E/-W Northing Easting Latitude Longitude Slot  
-0.02 -0.03 1583895.99000 2263438.23000 39.40754 -108.10715 B 11  
KELLY BUSHING @ 5145.00usft (Nabors 573 (26' RKB) kjs)



ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation	
120.00	120.00	0.00	0.00	-0.02	-0.03	0.00	0.00	Start Build 3.50	
1388.56	1571.36	50.80	355.91	600.77	-43.03	602.32	602.32	Hold 50.80° Inc, 355.91° Az	
1547.71	1823.15	50.80	355.91	795.39	-56.95	797.44	797.44	Begin Drop -2.00%/100	
3518.00	4113.03	5.00	355.91	1835.89	-131.42	1840.61	1840.61	Top Gas	
3767.68	4363.03	0.00	0.00	1846.76	-132.20	1851.51	1851.51	Vertical	
5117.65	5713.00	0.00	0.00	1846.76	-132.20	1851.51	1851.51	TD at 5713.35	



Project: SG 28-07S-096W  
Site: SG 43-28 Pad  
Well: SG 42-28  
Design #3 16Apr14 mab

# **PICEANCE VLY NAD 83**

**SG 28-07S-096W**

**SG 43-28 Pad**

**SG 42-28 - Slot B11**

**Wellbore #1**

**Plan: Design #3 16Apr14 mab**

## **Standard Planning Report - Geographic**

**23 May, 2014**

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well SG 42-28 - Slot B11
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 5145.00usft (Nabors 573 (26' RKB) kjs)
<b>Project:</b>	SG 28-07S-096W	<b>MD Reference:</b>	KELLY BUSHING @ 5145.00usft (Nabors 573 (26' RKB) kjs)
<b>Site:</b>	SG 43-28 Pad	<b>North Reference:</b>	True
<b>Well:</b>	SG 42-28	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #3 16Apr14 mab		

<b>Project</b>	SG 28-07S-096W, Garfield County, CO, 28-07S-096W		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Central Zone		Using geodetic scale factor

<b>Site</b>	SG 43-28 Pad		
<b>Site Position:</b>		<b>Northing:</b>	1,583,837.93900 usft
<b>From:</b>	Map	<b>Easting:</b>	2,263,416.17600 usft
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13.200 in
		<b>Latitude:</b>	39.40738
		<b>Longitude:</b>	-108.10722
		<b>Grid Convergence:</b>	-1.64 °

<b>Well</b>	SG 42-28 - Slot B11		
<b>Well Position</b>	<b>+N/-S</b>	-0.02 usft	<b>Northing:</b> 1,583,895.99000 usft
	<b>+E/-W</b>	-0.03 usft	<b>Easting:</b> 2,263,438.23000 usft
<b>Position Uncertainty</b>	0.00 usft	<b>Wellhead Elevation:</b>	<b>Latitude:</b> 39.40754
			<b>Longitude:</b> -108.10715
			<b>Ground Level:</b> 5,119.00 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	5/30/2012	10.27	65.62	52,097

<b>Design</b>	Design #3 16Apr14 mab			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (bearing)</b>
	0.00	-0.02	-0.03	355.91

<b>Plan Sections</b>										
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	-0.02	-0.03	0.00	0.00	0.00	0.00	
120.00	0.00	0.00	120.00	-0.02	-0.03	0.00	0.00	0.00	0.00	
1,571.36	50.80	355.91	1,388.56	600.76	-43.03	3.50	3.50	0.00	355.91	
1,823.15	50.80	355.91	1,547.71	795.39	-56.95	0.00	0.00	0.00	0.00	
4,113.03	5.00	355.91	3,518.00	1,835.89	-131.42	2.00	-2.00	0.00	180.00	Top Gas (50' Radius)
4,363.03	0.00	0.00	3,767.68	1,846.76	-132.20	2.00	-2.00	1.64	180.00	
5,713.35	0.00	0.00	5,118.00	1,846.76	-132.20	0.00	0.00	0.00	0.00	

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well SG 42-28 - Slot B11
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 5145.00usft (Nabors 573 (26' RKB) kjs)
<b>Project:</b>	SG 28-07S-096W	<b>MD Reference:</b>	KELLY BUSHING @ 5145.00usft (Nabors 573 (26' RKB) kjs)
<b>Site:</b>	SG 43-28 Pad	<b>North Reference:</b>	True
<b>Well:</b>	SG 42-28	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #3 16Apr14 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	-0.02	-0.03	1,583,895.99000	2,263,438.23000	39.40754	-108.10715
120.00	0.00	0.00	120.00	-0.02	-0.03	1,583,895.99000	2,263,438.23000	39.40754	-108.10715
<b>Start Build 3.50</b>									
200.00	2.80	355.91	199.97	1.93	-0.17	1,583,897.94250	2,263,438.14649	39.40755	-108.10715
400.00	9.80	355.91	398.64	23.81	-1.73	1,583,919.85459	2,263,437.20927	39.40761	-108.10716
600.00	16.80	355.91	593.15	69.67	-5.02	1,583,965.79164	2,263,435.24447	39.40773	-108.10717
702.20	20.38	355.91	690.00	102.16	-7.34	1,583,998.33160	2,263,433.85268	39.40782	-108.10718
<b>Top of "G" Sand</b>									
800.00	23.80	355.91	780.61	138.84	-9.97	1,584,035.06882	2,263,432.28137	39.40792	-108.10719
810.27	24.16	355.91	790.00	143.00	-10.27	1,584,039.24036	2,263,432.10295	39.40793	-108.10719
<b>Base of "G" Sand</b>									
1,000.00	30.80	355.91	958.23	230.28	-16.51	1,584,126.65340	2,263,428.36415	39.40817	-108.10721
1,200.00	37.80	355.91	1,123.34	342.62	-24.55	1,584,239.18004	2,263,423.55120	39.40848	-108.10724
1,400.00	44.80	355.91	1,273.50	474.21	-33.97	1,584,370.97123	2,263,417.91428	39.40884	-108.10727
1,571.36	50.80	355.91	1,388.56	600.77	-43.03	1,584,497.73233	2,263,412.49250	39.40919	-108.10730
<b>Hold 50.80° Inc, 355.91° Az</b>									
1,600.00	50.80	355.91	1,406.66	622.90	-44.61	1,584,519.90519	2,263,411.54413	39.40925	-108.10731
1,621.36	50.80	355.91	1,420.16	639.41	-45.79	1,584,536.44149	2,263,410.83685	39.40930	-108.10731
<b>9 5/8"</b>									
1,800.00	50.80	355.91	1,533.07	777.49	-55.67	1,584,674.73944	2,263,404.92162	39.40967	-108.10735
1,823.15	50.80	355.91	1,547.71	795.39	-56.95	1,584,692.66403	2,263,404.15495	39.40972	-108.10735
<b>Begin Drop -2.00°/100</b>									
2,000.00	47.26	355.91	1,663.64	928.55	-66.48	1,584,826.04108	2,263,398.45020	39.41009	-108.10739
2,200.00	43.26	355.91	1,804.39	1,070.22	-76.62	1,584,967.93864	2,263,392.38101	39.41048	-108.10742
2,400.00	39.26	355.91	1,954.70	1,201.76	-86.04	1,585,099.68192	2,263,386.74613	39.41084	-108.10745
2,600.00	35.26	355.91	2,113.85	1,322.51	-94.68	1,585,220.62906	2,263,381.57303	39.41117	-108.10749
2,708.97	33.08	355.91	2,204.00	1,383.56	-99.05	1,585,281.76974	2,263,378.95794	39.41134	-108.10750
<b>Mesaverde</b>									
2,800.00	31.26	355.91	2,281.05	1,431.90	-102.51	1,585,330.19086	2,263,376.88689	39.41147	-108.10751
3,000.00	27.26	355.91	2,455.50	1,529.39	-109.48	1,585,427.83351	2,263,372.71056	39.41174	-108.10754
3,200.00	23.26	355.91	2,636.34	1,614.50	-115.57	1,585,513.08133	2,263,369.06437	39.41197	-108.10756
3,400.00	19.26	355.91	2,822.69	1,686.82	-120.75	1,585,585.51897	2,263,365.96609	39.41217	-108.10758
3,600.00	15.26	355.91	3,013.64	1,746.00	-124.99	1,585,644.79355	2,263,363.43082	39.41233	-108.10759
3,800.00	11.26	355.91	3,208.27	1,791.75	-128.26	1,585,690.61628	2,263,361.47091	39.41246	-108.10760
4,000.00	7.26	355.91	3,405.62	1,823.85	-130.56	1,585,722.76392	2,263,360.09590	39.41255	-108.10761
4,113.03	5.00	355.91	3,518.00	1,835.89	-131.42	1,585,734.82222	2,263,359.58015	39.41258	-108.10762
<b>Top Gas - Approx. Top Gas</b>									
4,200.00	3.26	355.91	3,604.74	1,842.14	-131.87	1,585,741.07984	2,263,359.31250	39.41260	-108.10762
4,363.03	0.00	0.00	3,767.68	1,846.76	-132.20	1,585,745.71311	2,263,359.11433	39.41261	-108.10762
<b>Vertical</b>									
4,400.00	0.00	0.00	3,804.65	1,846.76	-132.20	1,585,745.71311	2,263,359.11433	39.41261	-108.10762
4,600.00	0.00	0.00	4,004.65	1,846.76	-132.20	1,585,745.71311	2,263,359.11433	39.41261	-108.10762
4,800.00	0.00	0.00	4,204.65	1,846.76	-132.20	1,585,745.71312	2,263,359.11433	39.41261	-108.10762
5,000.00	0.00	0.00	4,404.65	1,846.76	-132.20	1,585,745.71312	2,263,359.11433	39.41261	-108.10762
5,129.35	0.00	0.00	4,534.00	1,846.76	-132.20	1,585,745.71312	2,263,359.11433	39.41261	-108.10762
<b>Cameo Coals</b>									
5,200.00	0.00	0.00	4,604.65	1,846.76	-132.20	1,585,745.71312	2,263,359.11433	39.41261	-108.10762
5,400.00	0.00	0.00	4,804.65	1,846.76	-132.20	1,585,745.71313	2,263,359.11433	39.41261	-108.10762
5,600.00	0.00	0.00	5,004.65	1,846.76	-132.20	1,585,745.71313	2,263,359.11433	39.41261	-108.10762
5,613.35	0.00	0.00	5,018.00	1,846.76	-132.20	1,585,745.71313	2,263,359.11433	39.41261	-108.10762
<b>Rollins SS</b>									

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well SG 42-28 - Slot B11
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 5145.00usft (Nabors 573 (26' RKB) kjs)
<b>Project:</b>	SG 28-07S-096W	<b>MD Reference:</b>	KELLY BUSHING @ 5145.00usft (Nabors 573 (26' RKB) kjs)
<b>Site:</b>	SG 43-28 Pad	<b>North Reference:</b>	True
<b>Well:</b>	SG 42-28	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #3 16Apr14 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
5,713.00	0.00	0.00	5,117.65	1,846.76	-132.20	1,585,745.71313	2,263,359.11433	39.41261	-108.10762
TD at 5713.35									
5,713.35	0.00	0.00	5,118.00	1,846.76	-132.20	1,585,745.71313	2,263,359.11433	39.41261	-108.10762
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) SC - plan misses target center by 4.66usft at 4113.37usft MD (3518.34 TVD, 1835.92 N, -131.42 E) - Circle (radius 50.00)	0.00	0.00	3,518.00	1,840.56	-131.58	1,585,739.50000	2,263,359.55000	39.41259	-108.10762

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,621.36	1,420.16	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
702.20	690.00	Top of "G" Sand				
810.27	790.00	Base of "G" Sand				
2,708.97	2,204.00	Mesaverde				
4,113.03	3,518.00	Approx. Top Gas				
5,129.35	4,534.00	Cameo Coals				
5,613.35	5,018.00	Rollins SS				
5,713.35	5,118.00	TD				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
120.00	120.00	-0.02	-0.03	Start Build 3.50	
1,571.36	1,388.56	600.77	-43.03	Hold 50.80° Inc, 355.91° Az	
1,823.15	1,547.71	795.39	-56.95	Begin Drop -2.00°/100	
4,113.03	3,518.00	1,835.89	-131.42	Top Gas	
4,363.03	3,767.68	1,846.76	-132.20	Vertical	
5,713.00	5,117.65	1,846.76	-132.20	TD at 5713.35	