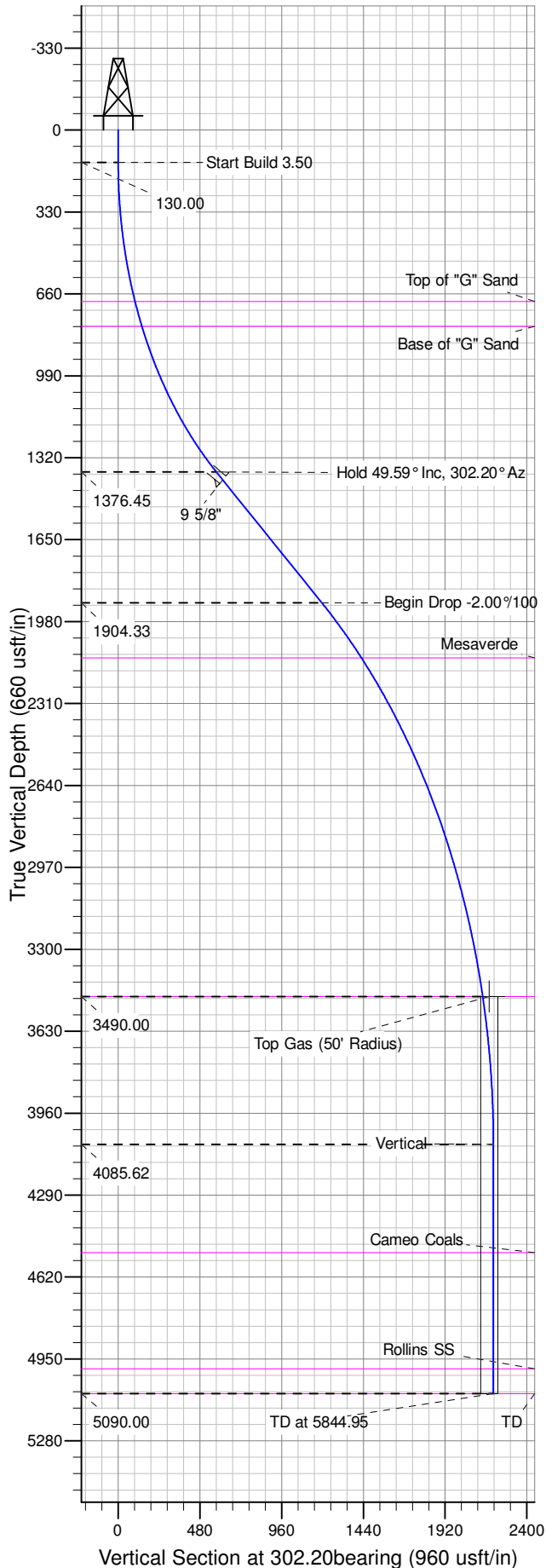
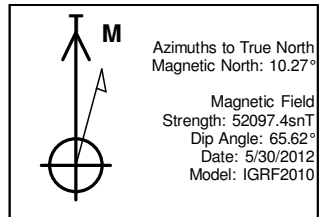
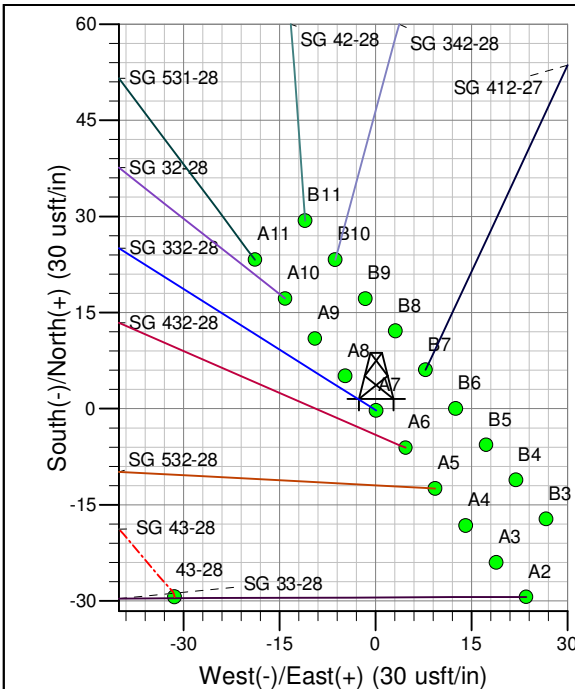
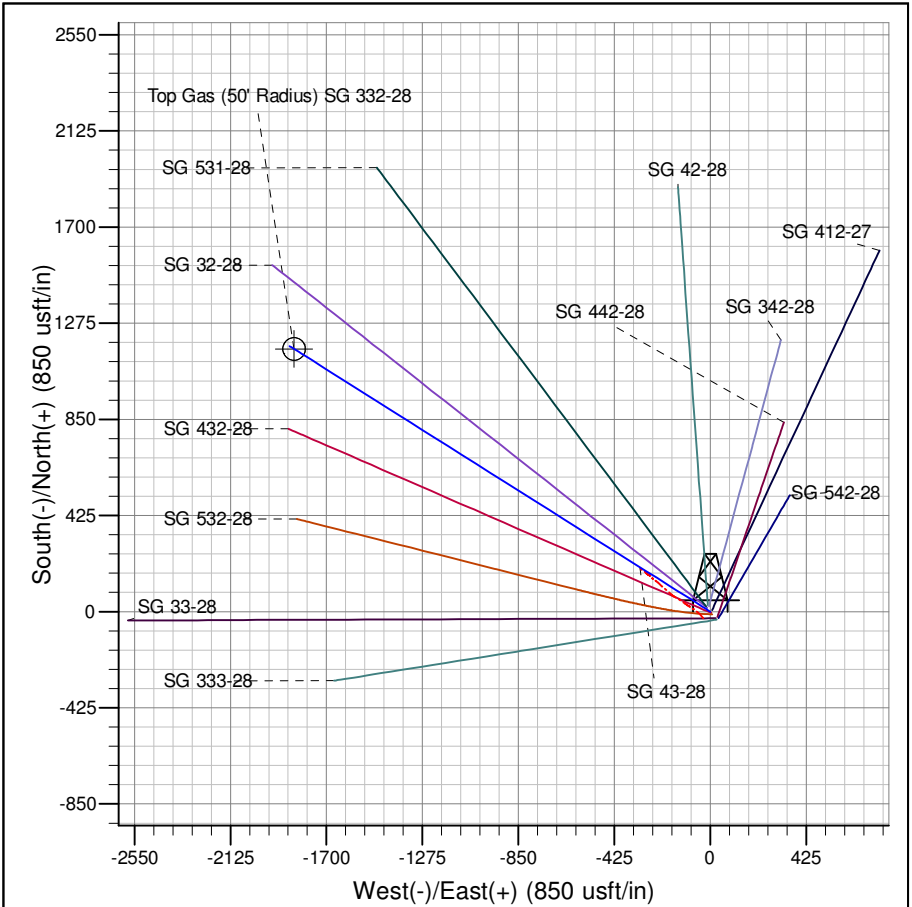




Well Name: SG 332-28
Surface Location: SG 43-28 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 5119.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
-0.28 0.11 1583866.09000 2263448.50000 39.40746 -108.10711 A7
KELLY BUSHING @ 5145.00usft (Nabors 573 (26' RKB) kjs)



ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation	
130.00	130.00	0.00	0.00	-0.28	0.11	0.00	0.00	Start Build 3.50	
1376.45	1546.83	49.59	302.20	306.59	-487.10	575.80	575.80	Hold 49.59° Inc, 302.20° Az	
1904.33	2361.13	49.59	302.20	637.02	-1011.73	1195.81	1195.81	Begin Drop -2.00°/100	
3490.00	4240.58	12.00	302.20	1140.67	-1811.38	2140.86	2140.86	Top Gas	
4085.62	4840.58	0.00	0.00	1174.04	-1864.35	2203.46	2203.46	Vertical	
5090.00	5844.95	0.00	0.00	1174.04	-1864.35	2203.46	2203.46	TD at 5844.95	



Project: SG 28-07S-096W
Site: SG 43-28 Pad
Well: SG 332-28
Design #3 16Apr14 mab

PICEANCE VLY NAD 83

SG 28-07S-096W

SG 43-28 Pad

SG 332-28 - Slot A7

Wellbore #1

Plan: Design #3 16Apr14 mab

Standard Planning Report - Geographic

23 May, 2014

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well SG 332-28 - Slot A7
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5145.00usft (Nabors 573 (26' RKB) kjs)
Project:	SG 28-07S-096W	MD Reference:	KELLY BUSHING @ 5145.00usft (Nabors 573 (26' RKB) kjs)
Site:	SG 43-28 Pad	North Reference:	True
Well:	SG 332-28	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #3 16Apr14 mab		

Project	SG 28-07S-096W, Garfield County, CO, 28-07S-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	SG 43-28 Pad		
Site Position:		Northing:	1,583,837.93900 usft
From:	Map	Easting:	2,263,416.17600 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in
		Latitude:	39.40738
		Longitude:	-108.10722
		Grid Convergence:	-1.64 °

Well	SG 332-28 - Slot A7		
Well Position	+N/-S	-0.28 usft	Northing: 1,583,866.09000 usft
	+E/-W	0.11 usft	Easting: 2,263,448.50000 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	Latitude: 39.40746
			Longitude: -108.10711
			Ground Level: 5,119.00 usft

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

Design	Design #3 16Apr14 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	-0.28	0.11	302.20

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	-0.28	0.11	0.00	0.00	0.00	0.00	
130.00	0.00	0.00	130.00	-0.28	0.11	0.00	0.00	0.00	0.00	
1,546.83	49.59	302.20	1,376.45	306.59	-487.10	3.50	3.50	0.00	302.20	
2,361.13	49.59	302.20	1,904.33	637.02	-1,011.73	0.00	0.00	0.00	0.00	
4,240.58	12.00	302.20	3,490.00	1,140.67	-1,811.38	2.00	-2.00	0.00	180.00	Top Gas (50' Radius)
4,840.58	0.00	0.00	4,085.62	1,174.04	-1,864.35	2.00	-2.00	9.63	180.00	
5,844.95	0.00	0.00	5,090.00	1,174.04	-1,864.35	0.00	0.00	0.00	0.00	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well SG 332-28 - Slot A7
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5145.00usft (Nabors 573 (26' RKB) kjs)
Project:	SG 28-07S-096W	MD Reference:	KELLY BUSHING @ 5145.00usft (Nabors 573 (26' RKB) kjs)
Site:	SG 43-28 Pad	North Reference:	True
Well:	SG 332-28	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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	-0.28	0.11	1,583,866.09000	2,263,448.50000	39.40746	-108.10711	
130.00	0.00	0.00	130.00	-0.28	0.11	1,583,866.09000	2,263,448.50000	39.40746	-108.10711	
Start Build 3.50										
200.00	2.45	302.20	199.98	0.52	-1.16	1,583,866.92345	2,263,447.25729	39.40746	-108.10712	
400.00	9.45	302.20	398.78	11.56	-18.69	1,583,878.46348	2,263,430.05058	39.40749	-108.10718	
600.00	16.45	302.20	593.57	35.44	-56.59	1,583,903.41153	2,263,392.85189	39.40756	-108.10731	
701.54	20.00	302.20	690.00	52.36	-83.46	1,583,921.09820	2,263,366.48027	39.40760	-108.10741	
Top of "G" Sand										
800.00	23.45	302.20	781.45	71.78	-114.30	1,583,941.39568	2,263,336.21579	39.40766	-108.10752	
809.33	23.78	302.20	790.00	73.77	-117.46	1,583,943.47733	2,263,333.11196	39.40766	-108.10753	
Base of "G" Sand										
1,000.00	30.45	302.20	959.62	120.06	-190.95	1,583,991.84967	2,263,260.98658	39.40779	-108.10779	
1,200.00	37.45	302.20	1,125.42	179.55	-285.40	1,584,054.02136	2,263,168.28574	39.40795	-108.10812	
1,400.00	44.45	302.20	1,276.38	249.36	-396.24	1,584,126.98391	2,263,059.49525	39.40814	-108.10851	
1,546.83	49.59	302.20	1,376.45	306.59	-487.10	1,584,186.79283	2,262,970.31742	39.40830	-108.10883	
Hold 49.59° Inc, 302.20° Az										
1,596.83	49.59	302.20	1,408.87	326.88	-519.32	1,584,207.99747	2,262,938.70032	39.40836	-108.10895	
9 5/8"										
1,600.00	49.59	302.20	1,410.92	328.17	-521.36	1,584,209.34183	2,262,936.69583	39.40836	-108.10896	
1,800.00	49.59	302.20	1,540.57	409.32	-650.21	1,584,294.15914	2,262,810.22935	39.40858	-108.10941	
2,000.00	49.59	302.20	1,670.23	490.48	-779.07	1,584,378.97645	2,262,683.76286	39.40881	-108.10987	
2,200.00	49.59	302.20	1,799.88	571.64	-907.92	1,584,463.79376	2,262,557.29636	39.40903	-108.11032	
2,361.13	49.59	302.20	1,904.33	637.02	-1,011.73	1,584,532.12490	2,262,455.41152	39.40921	-108.11069	
Begin Drop -2.00°/100										
2,400.00	48.81	302.20	1,929.73	652.70	-1,036.63	1,584,548.51533	2,262,430.97263	39.40925	-108.11078	
2,600.00	44.81	302.20	2,066.59	730.40	-1,160.00	1,584,629.71725	2,262,309.89686	39.40946	-108.11122	
2,682.58	43.16	302.20	2,126.00	760.97	-1,208.52	1,584,661.65808	2,262,262.27162	39.40955	-108.11139	
Mesaverde										
2,800.00	40.81	302.20	2,213.27	802.82	-1,274.98	1,584,705.40432	2,262,197.04397	39.40966	-108.11162	
3,000.00	36.81	302.20	2,369.09	869.62	-1,381.02	1,584,775.20781	2,262,092.96378	39.40985	-108.11200	
3,200.00	32.81	302.20	2,533.26	930.45	-1,477.62	1,584,838.78763	2,261,998.16336	39.41001	-108.11234	
3,400.00	28.81	302.20	2,705.00	985.04	-1,564.28	1,584,895.83404	2,261,913.10456	39.41016	-108.11265	
3,600.00	24.81	302.20	2,883.46	1,033.10	-1,640.60	1,584,946.06911	2,261,838.20177	39.41030	-108.11292	
3,800.00	20.81	302.20	3,067.78	1,074.42	-1,706.20	1,584,989.24810	2,261,773.81992	39.41041	-108.11315	
4,000.00	16.81	302.20	3,257.06	1,108.78	-1,760.75	1,585,025.16064	2,261,720.27268	39.41050	-108.11334	
4,200.00	12.81	302.20	3,450.37	1,136.03	-1,804.01	1,585,053.63178	2,261,677.82091	39.41058	-108.11350	
4,240.58	12.00	302.20	3,490.00	1,140.67	-1,811.38	1,585,058.48701	2,261,670.58155	39.41059	-108.11352	
Top Gas - Approx. Top Gas										
4,400.00	8.81	302.20	3,646.78	1,156.02	-1,835.74	1,585,074.52281	2,261,646.67144	39.41063	-108.11361	
4,600.00	4.81	302.20	3,845.33	1,168.66	-1,855.81	1,585,087.73194	2,261,626.97602	39.41067	-108.11368	
4,800.00	0.81	302.20	4,045.05	1,173.88	-1,864.11	1,585,093.19482	2,261,618.83061	39.41068	-108.11371	
4,840.58	0.00	0.00	4,085.62	1,174.04	-1,864.35	1,585,093.35487	2,261,618.59197	39.41068	-108.11371	
Vertical										
5,000.00	0.00	0.00	4,245.05	1,174.04	-1,864.35	1,585,093.35488	2,261,618.59197	39.41068	-108.11371	
5,200.00	0.00	0.00	4,445.05	1,174.04	-1,864.35	1,585,093.35488	2,261,618.59197	39.41068	-108.11371	
5,276.95	0.00	0.00	4,522.00	1,174.04	-1,864.35	1,585,093.35488	2,261,618.59197	39.41068	-108.11371	
Cameo Coals										
5,400.00	0.00	0.00	4,645.05	1,174.04	-1,864.35	1,585,093.35488	2,261,618.59197	39.41068	-108.11371	
5,600.00	0.00	0.00	4,845.05	1,174.04	-1,864.35	1,585,093.35489	2,261,618.59197	39.41068	-108.11371	
5,744.95	0.00	0.00	4,990.00	1,174.04	-1,864.35	1,585,093.35489	2,261,618.59197	39.41068	-108.11371	
Rollins SS										

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well SG 332-28 - Slot A7
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5145.00usft (Nabors 573 (26' RKB) kjs)
Project:	SG 28-07S-096W	MD Reference:	KELLY BUSHING @ 5145.00usft (Nabors 573 (26' RKB) kjs)
Site:	SG 43-28 Pad	North Reference:	True
Well:	SG 332-28	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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
5,800.00	0.00	0.00	5,045.05	1,174.04	-1,864.35	1,585,093.35489	2,261,618.59197	39.41068	-108.11371
5,844.95	0.00	0.00	5,090.00	1,174.04	-1,864.35	1,585,093.35489	2,261,618.59197	39.41068	-108.11371
TD at 5844.95 - 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) SC	0.00	0.00	3,490.00	1,161.16	-1,843.56	1,585,079.89000	2,261,639.01000	39.41065	-108.11364
- plan misses target center by 37.33usft at 4247.47usft MD (3496.74 TVD, 1141.43 N, -1812.59 E)									
- Circle (radius 50.00)									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,596.83	1,408.87	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
701.54	690.00	Top of "G" Sand				
809.33	790.00	Base of "G" Sand				
2,682.58	2,126.00	Mesaverde				
4,240.58	3,490.00	Approx. Top Gas				
5,276.95	4,522.00	Cameo Coals				
5,744.95	4,990.00	Rollins SS				
5,844.95	5,090.00	TD				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
130.00	130.00	-0.28	0.11	Start Build 3.50	
1,546.83	1,376.45	306.59	-487.10	Hold 49.59° Inc, 302.20° Az	
2,361.13	1,904.33	637.02	-1,011.73	Begin Drop -2.00°/100	
4,240.58	3,490.00	1,140.67	-1,811.38	Top Gas	
4,840.58	4,085.62	1,174.04	-1,864.35	Vertical	
5,844.95	5,090.00	1,174.04	-1,864.35	TD at 5844.95	