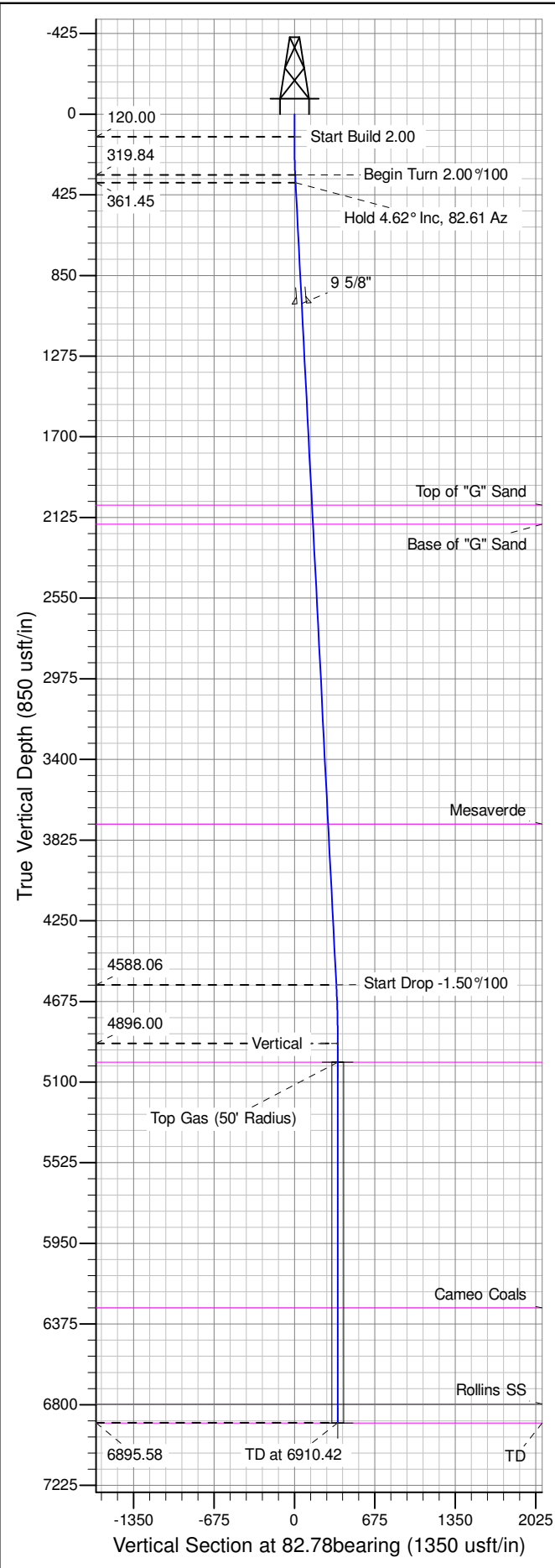
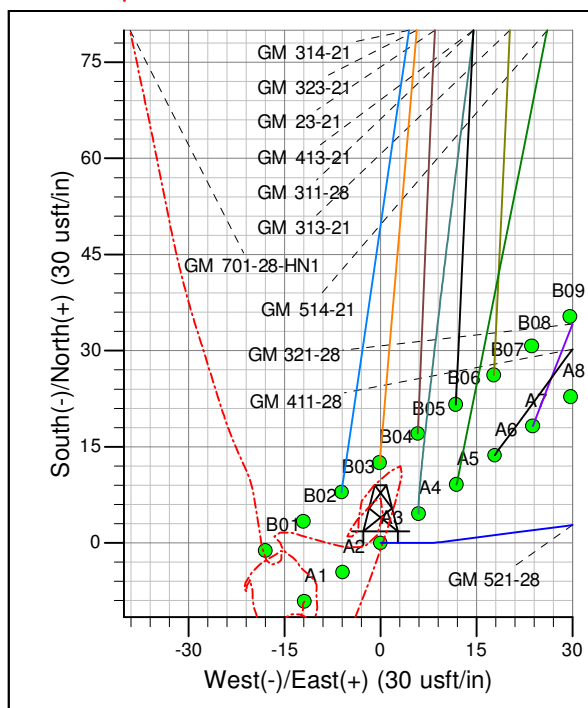
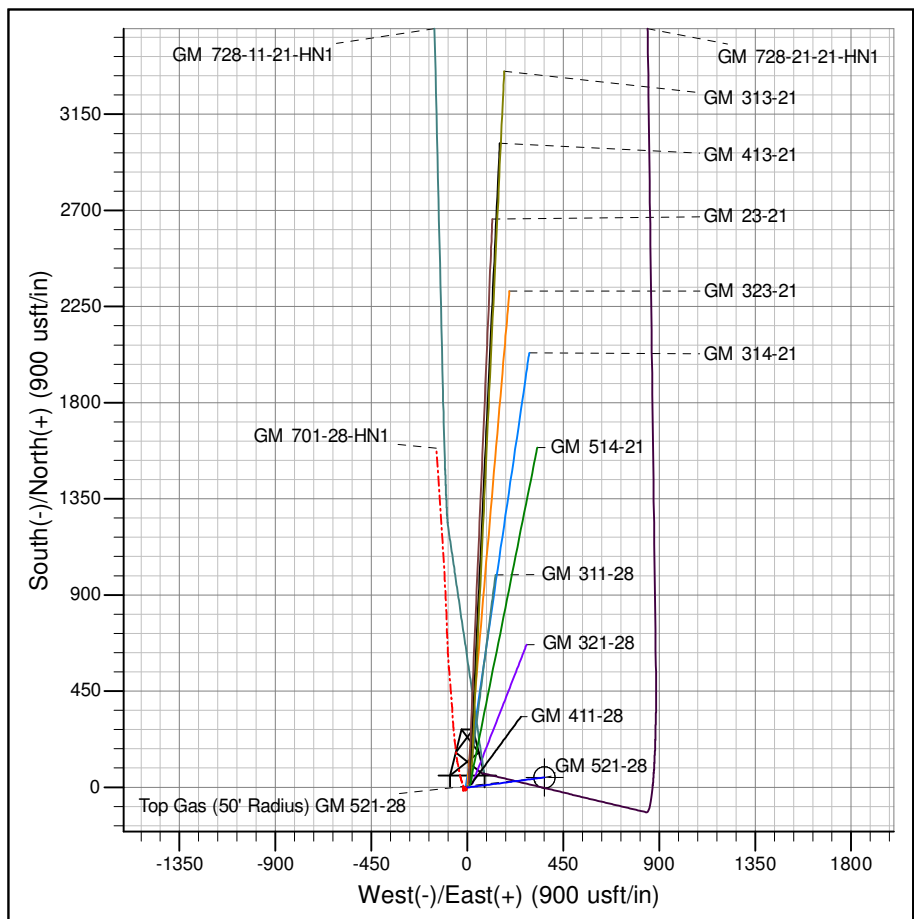




Well Name: GM 521-28
Surface Location: GM 11-28 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 5604.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1617256.09 2260924.73 39.49889 -108.11944 A3
KELLY BUSHING @ 5630.00usft (Nabors 573 (26' 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	2.00
319.84	320.00	4.00	90.00	0.00	6.98	6.92	6.98	Begin Turn	2.00°/100
361.45	361.73	4.62	82.61	0.22	10.10	10.05	10.12	Hold	4.62° Inc, 82.61 Az
4588.06	4602.14	4.62	82.61	44.21	349.12	351.91	351.98	Start Drop	-1.50°/100
4896.00	4910.42	0.00	0.00	45.81	361.45	364.34	364.41	Vertical	
6895.58	6910.00	0.00	0.00	45.81	361.45	364.34	364.41	TD at	6910.42



Azimuths to True North
Magnetic North: 10.15°

Magnetic Field
Strength: 52037.1snT
Dip Angle: 65.66°
Date: 6/14/2013
Model: IGRF2010

Project: GV 28-06S-096W
Site: GM 11-28 Pad
Well: GM 521-28
Plan #2 07Jul14 kjs

PICEANCE VLY NAD 83

GV 28-06S-096W

GM 11-28 Pad

GM 521-28 - Slot A3

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 521-28 - Slot A3
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5630.00usft (Nabors 573 (26' RKB) mab)
Project:	GV 28-06S-096W	MD Reference:	KELLY BUSHING @ 5630.00usft (Nabors 573 (26' RKB) mab)
Site:	GM 11-28 Pad	North Reference:	True
Well:	GM 521-28	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 521-28 - Slot A3			
Well Position	+N/-S	0.00 usft	Northing:	1,617,256.09000 usft
	+E/-W	0.00 usft	Easting:	2,260,924.73000 usft
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	82.78

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	
320.00	4.00	90.00	319.84	0.00	6.98	2.00	2.00	0.00	90.00	
361.73	4.62	82.61	361.45	0.21	10.10	2.00	1.50	-17.72	-45.42	
4,602.14	4.62	82.61	4,588.06	44.21	349.12	0.00	0.00	0.00	0.00	
4,910.42	0.00	0.00	4,896.00	45.81	361.45	1.50	-1.50	0.00	180.00	
6,910.42	0.00	0.00	6,896.00	45.81	361.45	0.00	0.00	0.00	0.00	TD / PBHL GM 521-28

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 521-28 - Slot A3
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5630.00usft (Nabors 573 (26' RKB) mab)
Project:	GV 28-06S-096W	MD Reference:	KELLY BUSHING @ 5630.00usft (Nabors 573 (26' RKB) mab)
Site:	GM 11-28 Pad	North Reference:	True
Well:	GM 521-28	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	1,617,256.09000	2,260,924.73000	39.49889	-108.11945	
120.00	0.00	0.00	120.00	0.00	0.00	1,617,256.09000	2,260,924.73000	39.49889	-108.11945	
Start Build 2.00										
200.00	1.60	90.00	199.99	0.00	1.12	1,617,256.05780	2,260,925.84642	39.49889	-108.11944	
320.00	4.00	90.00	319.84	0.00	6.98	1,617,255.88882	2,260,931.70530	39.49889	-108.11942	
Begin Turn 2.00°/100										
361.73	4.62	82.61	361.45	0.21	10.10	1,617,256.01517	2,260,934.83405	39.49889	-108.11941	
Hold 4.62° Inc, 82.61 Az										
400.00	4.62	82.61	399.60	0.61	13.16	1,617,256.32382	2,260,937.90348	39.49889	-108.11940	
600.00	4.62	82.61	598.94	2.69	29.15	1,617,257.93702	2,260,953.94587	39.49890	-108.11934	
800.00	4.62	82.61	798.29	4.76	45.14	1,617,259.55021	2,260,969.98827	39.49891	-108.11929	
1,000.00	4.62	82.61	997.64	6.84	61.13	1,617,261.16341	2,260,986.03066	39.49891	-108.11923	
9 5/8"										
1,200.00	4.62	82.61	1,196.99	8.91	77.12	1,617,262.77661	2,261,002.07306	39.49892	-108.11917	
1,400.00	4.62	82.61	1,396.34	10.99	93.11	1,617,264.38980	2,261,018.11545	39.49892	-108.11912	
1,600.00	4.62	82.61	1,595.69	13.06	109.10	1,617,266.00300	2,261,034.15785	39.49893	-108.11906	
1,800.00	4.62	82.61	1,795.04	15.14	125.09	1,617,267.61620	2,261,050.20025	39.49893	-108.11900	
2,000.00	4.62	82.61	1,994.39	17.21	141.08	1,617,269.22939	2,261,066.24264	39.49894	-108.11895	
2,066.83	4.62	82.61	2,061.00	17.91	146.42	1,617,269.76845	2,261,071.60326	39.49894	-108.11893	
Top of "G" Sand										
2,167.16	4.62	82.61	2,161.00	18.95	154.44	1,617,270.57768	2,261,079.65065	39.49894	-108.11890	
Base of "G" Sand										
2,200.00	4.62	82.61	2,193.74	19.29	157.07	1,617,270.84259	2,261,082.28504	39.49895	-108.11889	
2,400.00	4.62	82.61	2,393.08	21.36	173.06	1,617,272.45578	2,261,098.32743	39.49895	-108.11883	
2,600.00	4.62	82.61	2,592.43	23.44	189.05	1,617,274.06898	2,261,114.36983	39.49896	-108.11878	
2,800.00	4.62	82.61	2,791.78	25.51	205.04	1,617,275.68218	2,261,130.41223	39.49896	-108.11872	
3,000.00	4.62	82.61	2,991.13	27.59	221.03	1,617,277.29537	2,261,146.45462	39.49897	-108.11866	
3,200.00	4.62	82.61	3,190.48	29.66	237.02	1,617,278.90857	2,261,162.49702	39.49897	-108.11861	
3,400.00	4.62	82.61	3,389.83	31.74	253.01	1,617,280.52177	2,261,178.53941	39.49898	-108.11855	
3,600.00	4.62	82.61	3,589.18	33.81	269.00	1,617,282.13496	2,261,194.58181	39.49899	-108.11849	
3,752.32	4.62	82.61	3,741.00	35.39	281.18	1,617,283.36355	2,261,206.79946	39.49899	-108.11845	
Mesaverde										
3,800.00	4.62	82.61	3,788.53	35.89	284.99	1,617,283.74816	2,261,210.62420	39.49899	-108.11844	
4,000.00	4.62	82.61	3,987.88	37.96	300.98	1,617,285.36136	2,261,226.66660	39.49900	-108.11838	
4,200.00	4.62	82.61	4,187.23	40.04	316.97	1,617,286.97455	2,261,242.70900	39.49900	-108.11832	
4,400.00	4.62	82.61	4,386.57	42.11	332.96	1,617,288.58775	2,261,258.75139	39.49901	-108.11827	
4,600.00	4.62	82.61	4,585.92	44.19	348.95	1,617,290.20094	2,261,274.79379	39.49901	-108.11821	
4,602.14	4.62	82.61	4,588.06	44.21	349.12	1,617,290.21819	2,261,274.96532	39.49901	-108.11821	
Start Drop -1.50°/100										
4,800.00	1.66	82.61	4,785.60	45.61	359.87	1,617,291.30249	2,261,285.74813	39.49902	-108.11817	
4,910.42	0.00	0.00	4,896.00	45.81	361.45	1,617,291.46216	2,261,287.33588	39.49902	-108.11816	
Vertical										
5,000.00	0.00	0.00	4,985.58	45.81	361.45	1,617,291.46216	2,261,287.33588	39.49902	-108.11816	
5,010.42	0.00	0.00	4,996.00	45.81	361.45	1,617,291.46216	2,261,287.33588	39.49902	-108.11816	
Approx. Top Gas										
5,200.00	0.00	0.00	5,185.58	45.81	361.45	1,617,291.46216	2,261,287.33588	39.49902	-108.11816	
5,400.00	0.00	0.00	5,385.58	45.81	361.45	1,617,291.46216	2,261,287.33588	39.49902	-108.11816	
5,600.00	0.00	0.00	5,585.58	45.81	361.45	1,617,291.46216	2,261,287.33588	39.49902	-108.11816	
5,800.00	0.00	0.00	5,785.58	45.81	361.45	1,617,291.46216	2,261,287.33588	39.49902	-108.11816	
6,000.00	0.00	0.00	5,985.58	45.81	361.45	1,617,291.46216	2,261,287.33588	39.49902	-108.11816	
6,200.00	0.00	0.00	6,185.58	45.81	361.45	1,617,291.46216	2,261,287.33588	39.49902	-108.11816	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 521-28 - Slot A3
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5630.00usft (Nabors 573 (26' RKB) mab)
Project:	GV 28-06S-096W	MD Reference:	KELLY BUSHING @ 5630.00usft (Nabors 573 (26' RKB) mab)
Site:	GM 11-28 Pad	North Reference:	True
Well:	GM 521-28	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
6,304.42	0.00	0.00	6,290.00	45.81	361.45	1,617,291.46216	2,261,287.33588	39.49902	-108.11816
Cameo Coals									
6,400.00	0.00	0.00	6,385.58	45.81	361.45	1,617,291.46216	2,261,287.33588	39.49902	-108.11816
6,600.00	0.00	0.00	6,585.58	45.81	361.45	1,617,291.46216	2,261,287.33588	39.49902	-108.11816
6,800.00	0.00	0.00	6,785.58	45.81	361.45	1,617,291.46216	2,261,287.33588	39.49902	-108.11816
6,810.42	0.00	0.00	6,796.00	45.81	361.45	1,617,291.46216	2,261,287.33588	39.49902	-108.11816
Rollins SS									
6,910.42	0.00	0.00	6,896.00	45.81	361.45	1,617,291.46216	2,261,287.33588	39.49902	-108.11816
TD at 6910.42 - 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	4,996.00	45.81	361.45	1,617,291.46216	2,261,287.33588	39.49902	-108.11816
TD / PBHL GM 521-28 - plan hits target center - Point	0.00	0.00	6,896.00	45.81	361.45	1,617,291.46216	2,261,287.33588	39.49902	-108.11816

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,000.00	997.64	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
2,066.83	2,061.00	Top of "G" Sand				
2,167.16	2,161.00	Base of "G" Sand				
3,752.32	3,741.00	Mesaverde				
5,010.42	4,996.00	Approx. Top Gas				
6,304.42	6,290.00	Cameo Coals				
6,810.42	6,796.00	Rollins SS				
6,910.42	6,896.00	TD				

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 521-28 - Slot A3
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5630.00usft (Nabors 573 (26' RKB) mab)
Project:	GV 28-06S-096W	MD Reference:	KELLY BUSHING @ 5630.00usft (Nabors 573 (26' RKB) mab)
Site:	GM 11-28 Pad	North Reference:	True
Well:	GM 521-28	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2 07Jul14 kjs		

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 2.00
320.00	319.84	0.00	6.98	Begin Turn 2.00°/100
361.73	361.45	0.21	10.10	Hold 4.62° Inc, 82.61 Az
4,602.14	4,588.06	44.21	349.12	Start Drop -1.50°/100
4,910.42	4,896.00	45.81	361.45	Vertical
6,910.42	6,896.00	45.81	361.45	TD at 6910.42