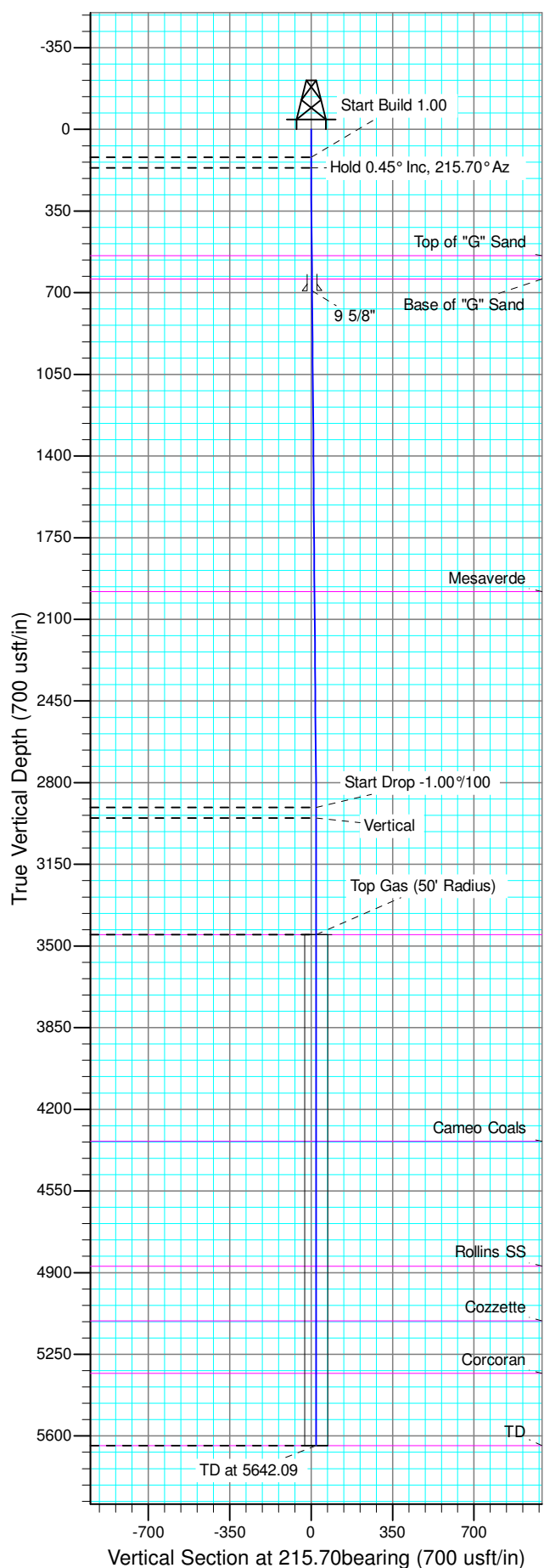
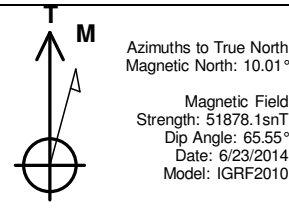
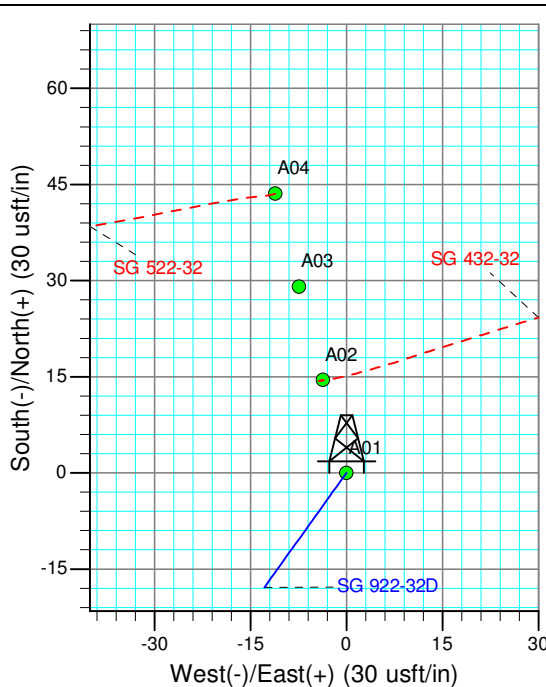
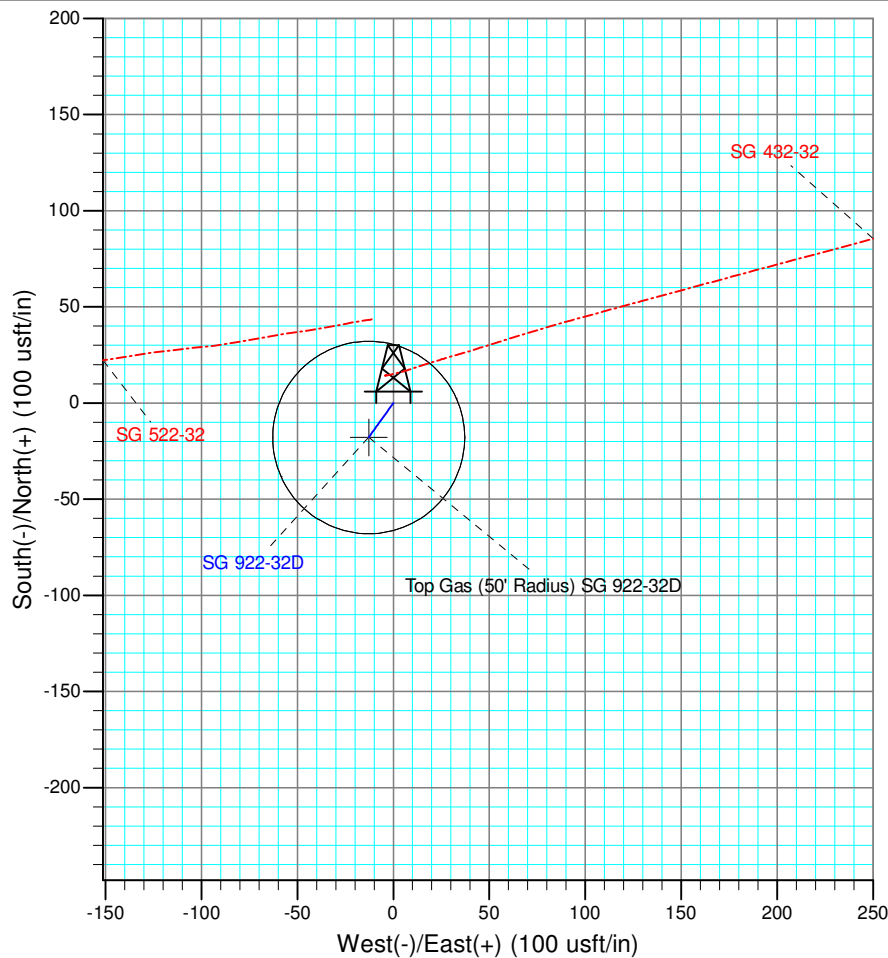




Well Name: SG 922-32D
Surface Location: SG 22-32 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 5166.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1579049.00000 2255469.50000 39.39361 -108.13484 A01
KELLY BUSHING @ 5192.00usft (NABORS 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 1.00		
165.17	165.17	0.45	215.70	-0.14	-0.10	0.18	0.18	Hold 0.45° Inc, 215.70° Az		
2906.82	2906.91	0.45	215.70	-17.70	-12.72	21.79	21.79	Start Drop -1.00°/100		
2952.00	2952.09	0.00	0.00	-17.84	-12.82	21.97	21.97	Vertical		
3452.00	3452.09	0.00	0.00	-17.84	-12.82	21.97	21.97	Top Gas		
5641.99	5642.08	0.00	0.00	-17.84	-12.82	21.97	21.97	TD at 5642.09		



Project: GV 32-07S-R96W
Site: SG 22-32 Pad
Well: SG 922-32D
Plan #1 23Jun14 mab



PICEANCE VLY NAD 83

GV 32-07S-R96W

SG 22-32 Pad

SG 922-32D - Slot A01

Wellbore #1

Plan: Plan #1 23Jun14 mab

Standard Planning Report - Geographic

15 August, 2014



WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well SG 922-32D - Slot A01
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5192.00usft (NABORS 573 (26' RKB) mab)
Project:	GV 32-07S-R96W	MD Reference:	KELLY BUSHING @ 5192.00usft (NABORS 573 (26' RKB) mab)
Site:	SG 22-32 Pad	North Reference:	True
Well:	SG 922-32D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 23Jun14 mab		

Project	GV 32-07S-R96W, Garfield County, CO		
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 22-32 Pad			
Site Position:		Northing:	1,579,063.60000 usft	Latitude: 39.39365
From: Map		Easting:	2,255,466.23000 usft	Longitude: -108.13486
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence: -1.66 °

Well	SG 922-32D - Slot A01				
Well Position	+N/-S	0.00 usft	Northing:	1,579,049.00000 usft	Latitude: 39.39361
	+E/-W	0.00 usft	Easting:	2,255,469.50000 usft	Longitude: -108.13484
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level: 5,166.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/23/2014	10.01	65.55	51,878

Design	Plan #1 23Jun14 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	215.70

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	
165.17	0.45	215.70	165.17	-0.14	-0.10	1.00	1.00	0.00	215.70	
2,906.91	0.45	215.70	2,906.83	-17.70	-12.72	0.00	0.00	0.00	0.00	
2,952.09	0.00	0.00	2,952.00	-17.84	-12.82	1.00	-1.00	0.00	180.00	
3,452.09	0.00	0.00	3,452.00	-17.84	-12.82	0.00	0.00	0.00	0.00	Top Gas (50' Radius)
5,642.09	0.00	0.00	5,642.00	-17.84	-12.82	0.00	0.00	0.00	0.00	



WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well SG 922-32D - Slot A01
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5192.00usft (NABORS 573 (26' RKB) mab)
Project:	GV 32-07S-R96W	MD Reference:	KELLY BUSHING @ 5192.00usft (NABORS 573 (26' RKB) mab)
Site:	SG 22-32 Pad	North Reference:	True
Well:	SG 922-32D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 23Jun14 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	1,579,049.00000	2,255,469.50000	39.39361	-108.13484	
120.00	0.00	0.00	120.00	0.00	0.00	1,579,049.00000	2,255,469.50000	39.39361	-108.13484	
Start Build 1.00										
165.17	0.45	215.70	165.17	-0.14	-0.10	1,579,048.85848	2,255,469.39196	39.39361	-108.13484	
Hold 0.45° Inc, 215.70° Az										
200.00	0.45	215.70	200.00	-0.37	-0.26	1,579,048.64023	2,255,469.22534	39.39361	-108.13484	
400.00	0.45	215.70	399.99	-1.65	-1.18	1,579,047.38696	2,255,468.26857	39.39360	-108.13485	
542.01	0.45	215.70	542.00	-2.56	-1.84	1,579,046.49706	2,255,467.58921	39.39360	-108.13485	
Top of "G" Sand										
600.00	0.45	215.70	599.99	-2.93	-2.10	1,579,046.13369	2,255,467.31181	39.39360	-108.13485	
642.02	0.45	215.70	642.00	-3.20	-2.30	1,579,045.87041	2,255,467.11081	39.39360	-108.13485	
Base of "G" Sand										
692.02	0.45	215.70	692.00	-3.52	-2.53	1,579,045.55708	2,255,466.87161	39.39360	-108.13485	
9 5/8"										
800.00	0.45	215.70	799.98	-4.21	-3.02	1,579,044.88042	2,255,466.35504	39.39360	-108.13485	
1,000.00	0.45	215.70	999.97	-5.49	-3.94	1,579,043.62715	2,255,465.39827	39.39359	-108.13486	
1,200.00	0.45	215.70	1,199.97	-6.77	-4.86	1,579,042.37388	2,255,464.44150	39.39359	-108.13486	
1,400.00	0.45	215.70	1,399.96	-8.05	-5.78	1,579,041.12061	2,255,463.48474	39.39358	-108.13486	
1,600.00	0.45	215.70	1,599.95	-9.33	-6.70	1,579,039.86734	2,255,462.52797	39.39358	-108.13487	
1,800.00	0.45	215.70	1,799.95	-10.61	-7.62	1,579,038.61407	2,255,461.57120	39.39358	-108.13487	
1,982.06	0.45	215.70	1,982.00	-11.78	-8.46	1,579,037.47324	2,255,460.70027	39.39357	-108.13487	
Mesaverde										
2,000.00	0.45	215.70	1,999.94	-11.89	-8.54	1,579,037.36080	2,255,460.61444	39.39357	-108.13487	
2,200.00	0.45	215.70	2,199.94	-13.17	-9.46	1,579,036.10753	2,255,459.65767	39.39357	-108.13488	
2,400.00	0.45	215.70	2,399.93	-14.45	-10.38	1,579,034.85426	2,255,458.70090	39.39357	-108.13488	
2,600.00	0.45	215.70	2,599.92	-15.73	-11.30	1,579,033.60099	2,255,457.74413	39.39356	-108.13488	
2,800.00	0.45	215.70	2,799.92	-17.01	-12.23	1,579,032.34773	2,255,456.78737	39.39356	-108.13489	
2,906.91	0.45	215.70	2,906.82	-17.70	-12.72	1,579,031.67779	2,255,456.27593	39.39356	-108.13489	
Start Drop -1.00°/100										
2,952.09	0.00	0.00	2,952.00	-17.84	-12.82	1,579,031.53623	2,255,456.16786	39.39356	-108.13489	
Vertical										
3,000.00	0.00	0.00	2,999.91	-17.84	-12.82	1,579,031.53623	2,255,456.16786	39.39356	-108.13489	
3,200.00	0.00	0.00	3,199.91	-17.84	-12.82	1,579,031.53623	2,255,456.16786	39.39356	-108.13489	
3,400.00	0.00	0.00	3,399.91	-17.84	-12.82	1,579,031.53623	2,255,456.16786	39.39356	-108.13489	
3,452.09	0.00	0.00	3,452.00	-17.84	-12.82	1,579,031.53623	2,255,456.16786	39.39356	-108.13489	
Top Gas - Approx. Top Gas										
3,600.00	0.00	0.00	3,599.91	-17.84	-12.82	1,579,031.53623	2,255,456.16786	39.39356	-108.13489	
3,800.00	0.00	0.00	3,799.91	-17.84	-12.82	1,579,031.53623	2,255,456.16786	39.39356	-108.13489	
4,000.00	0.00	0.00	3,999.91	-17.84	-12.82	1,579,031.53623	2,255,456.16786	39.39356	-108.13489	
4,200.00	0.00	0.00	4,199.91	-17.84	-12.82	1,579,031.53623	2,255,456.16786	39.39356	-108.13489	
4,337.09	0.00	0.00	4,337.00	-17.84	-12.82	1,579,031.53623	2,255,456.16786	39.39356	-108.13489	
Cameo Coals										
4,400.00	0.00	0.00	4,399.91	-17.84	-12.82	1,579,031.53623	2,255,456.16786	39.39356	-108.13489	
4,600.00	0.00	0.00	4,599.91	-17.84	-12.82	1,579,031.53623	2,255,456.16786	39.39356	-108.13489	
4,800.00	0.00	0.00	4,799.91	-17.84	-12.82	1,579,031.53623	2,255,456.16786	39.39356	-108.13489	
4,872.09	0.00	0.00	4,872.00	-17.84	-12.82	1,579,031.53623	2,255,456.16786	39.39356	-108.13489	
Rollins SS										
5,000.00	0.00	0.00	4,999.91	-17.84	-12.82	1,579,031.53623	2,255,456.16786	39.39356	-108.13489	
5,107.09	0.00	0.00	5,107.00	-17.84	-12.82	1,579,031.53623	2,255,456.16786	39.39356	-108.13489	
Cozzette										
5,200.00	0.00	0.00	5,199.91	-17.84	-12.82	1,579,031.53623	2,255,456.16786	39.39356	-108.13489	



WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well SG 922-32D - Slot A01
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5192.00usft (NABORS 573 (26' RKB) mab)
Project:	GV 32-07S-R96W	MD Reference:	KELLY BUSHING @ 5192.00usft (NABORS 573 (26' RKB) mab)
Site:	SG 22-32 Pad	North Reference:	True
Well:	SG 922-32D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 23Jun14 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
5,332.09	0.00	0.00	5,332.00	-17.84	-12.82	1,579,031.53623	2,255,456.16786	39.39356	-108.13489
Corcoran									
5,400.00	0.00	0.00	5,399.91	-17.84	-12.82	1,579,031.53623	2,255,456.16786	39.39356	-108.13489
5,600.00	0.00	0.00	5,599.91	-17.84	-12.82	1,579,031.53623	2,255,456.16786	39.39356	-108.13489
5,642.08	0.00	0.00	5,641.99	-17.84	-12.82	1,579,031.53623	2,255,456.16786	39.39356	-108.13489
TD at 5642.09									
5,642.09	0.00	0.00	5,642.00	-17.84	-12.82	1,579,031.53623	2,255,456.16786	39.39356	-108.13489
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	3,452.00	-17.88	-12.79	1,579,031.50000	2,255,456.20000	39.39356	-108.13489
- plan misses target center by 0.05usft at 3452.09usft MD (3452.00 TVD, -17.84 N, -12.82 E)									
- Circle (radius 50.00)									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
692.02	692.00	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
542.01	542.00	Top of "G" Sand				
642.02	642.00	Base of "G" Sand				
1,982.06	1,982.00	Mesaverde				
3,452.09	3,452.00	Approx. Top Gas				
4,337.09	4,337.00	Cameo Coals				
4,872.09	4,872.00	Rollins SS				
5,107.09	5,107.00	Cozzette				
5,332.09	5,332.00	Corcoran				
5,642.09	5,642.00	TD				



Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well SG 922-32D - Slot A01
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5192.00usft (NABORS 573 (26' RKB) mab)
Project:	GV 32-07S-R96W	MD Reference:	KELLY BUSHING @ 5192.00usft (NABORS 573 (26' RKB) mab)
Site:	SG 22-32 Pad	North Reference:	True
Well:	SG 922-32D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 23Jun14 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 1.00
165.17	165.17	-0.14	-0.10	Hold 0.45° Inc, 215.70° Az
2,906.91	2,906.82	-17.70	-12.72	Start Drop -1.00°/100
2,952.09	2,952.00	-17.84	-12.82	Vertical
3,452.09	3,452.00	-17.84	-12.82	Top Gas
5,642.08	5,641.99	-17.84	-12.82	TD at 5642.09