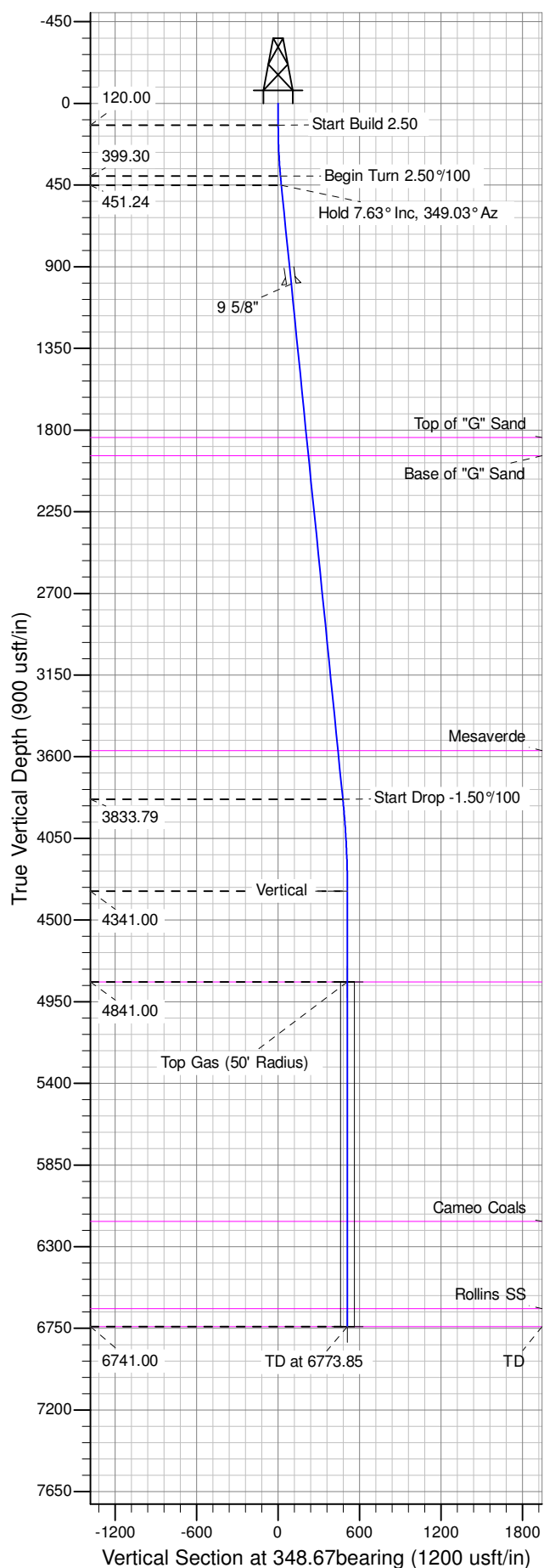
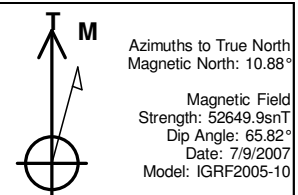
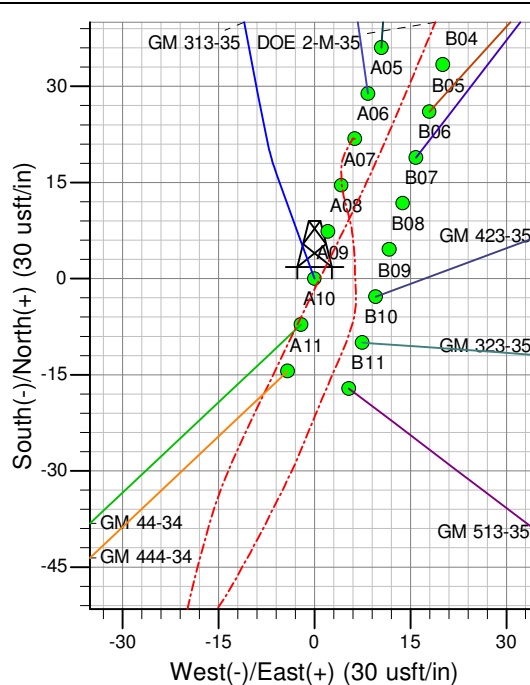
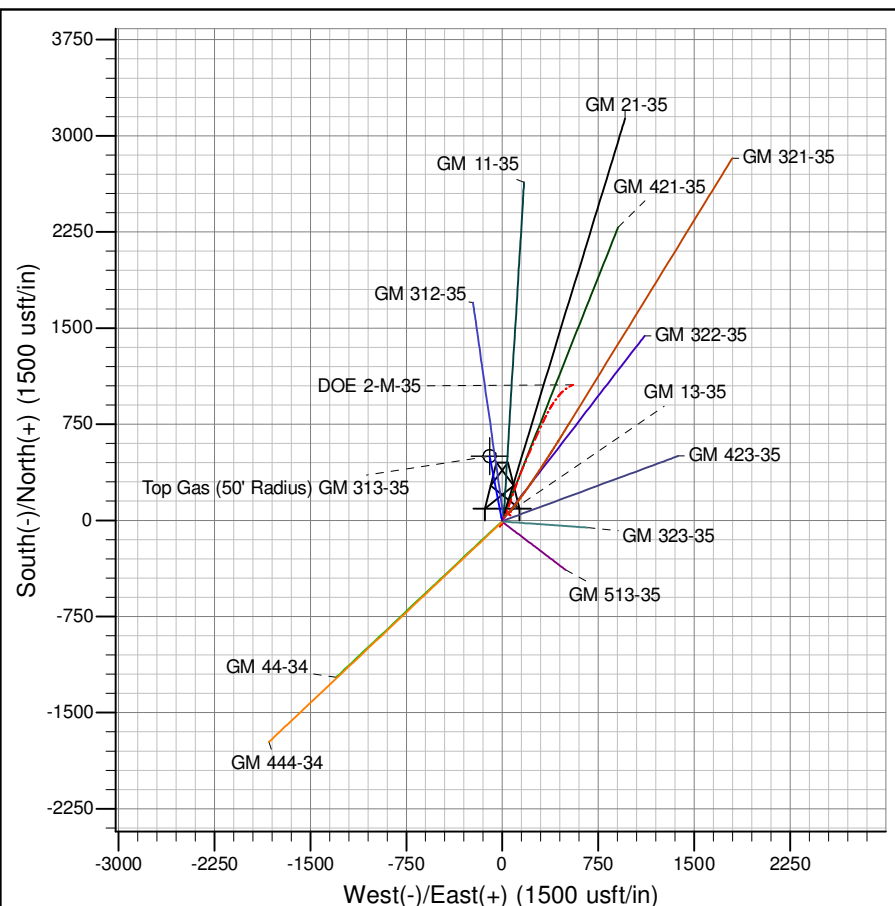




Well Name: GM 313-35
Surface Location: DOE 2-M-35 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 5445.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1609646.20000 2271135.30000 39.47881 -108.08251 A09
KELLY BUSHING @ 5471.00usft (Nabors 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 2.50	
399.30	400.00	7.00	340.00	16.05	-5.84	16.89	17.08	Begin Turn 2.50%/100	
451.24	452.36	7.63	349.03	22.46	-7.60	23.52	23.75	Hold 7.63° Inc, 349.03° Az	
3833.79	3865.13	7.63	349.03	467.35	-93.86	476.68	476.92	Start Drop -1.50%/100	
4341.00	4373.85	0.00	0.00	500.56	-100.30	510.51	510.75	Vertical	
4841.00	4873.85	0.00	0.00	500.56	-100.30	510.51	510.75	Top Gas	
6741.00	6773.85	0.00	0.00	500.56	-100.30	510.51	510.75	TD at 6773.85	



Project: GV 35-06S-096W
Site: DOE 2-M-35 Pad
Well: GM 313-35
Design #2 07Jul14 mab

PICEANCE VLY NAD 83

GV 35-06S-096W

DOE 2-M-35 Pad

GM 313-35 - Slot A09

GM 313-35

Plan: Design #2 07Jul14 mab

Standard Planning Report - Geographic

18 August, 2014

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 313-35 - Slot A09
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5471.00usft (Nabors 573 (26' RKB) mab)
Project:	GV 35-06S-096W	MD Reference:	KELLY BUSHING @ 5471.00usft (Nabors 573 (26' RKB) mab)
Site:	DOE 2-M-35 Pad	North Reference:	True
Well:	GM 313-35	Survey Calculation Method:	Minimum Curvature
Wellbore:	GM 313-35		
Design:	Design #2 07Jul14 mab		

Project	GV 35-06S-096W, Garfield County, CO, 35-06S-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	DOE 2-M-35 Pad			
Site Position:		Northing:	1,609,700.26000 usft	Latitude: 39.47896
From: Map		Easting:	2,271,163.17000 usft	Longitude: -108.08242
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence: -1.63 °

Well	GM 313-35 - Slot A09			
Well Position	+N/-S	0.00 usft	Northing:	1,609,646.20000 usft
	+E/-W	0.00 usft	Easting:	2,271,135.30000 usft
Position Uncertainty	0.00 usft		Wellhead Elevation:	
			Ground Level:	5,445.00 usft

Wellbore	GM 313-35				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005-10	7/9/2007	10.88	65.82	52,650

Design	Design #2 07Jul14 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	348.67

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	
400.00	7.00	340.00	399.30	16.05	-5.84	2.50	2.50	0.00	340.00	
452.36	7.63	349.03	451.24	22.46	-7.60	2.50	1.20	17.24	65.77	
3,865.13	7.63	349.03	3,833.79	467.35	-93.86	0.00	0.00	0.00	0.00	
4,373.85	0.00	0.00	4,341.00	500.56	-100.30	1.50	-1.50	0.00	180.00	
6,773.85	0.00	0.00	6,741.00	500.56	-100.30	0.00	0.00	0.00	0.00	TD / PBHL GM 313-35

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 313-35 - Slot A09
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5471.00usft (Nabors 573 (26' RKB) mab)
Project:	GV 35-06S-096W	MD Reference:	KELLY BUSHING @ 5471.00usft (Nabors 573 (26' RKB) mab)
Site:	DOE 2-M-35 Pad	North Reference:	True
Well:	GM 313-35	Survey Calculation Method:	Minimum Curvature
Wellbore:	GM 313-35		
Design:	Design #2 07Jul14 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	1,609,646.20000	2,271,135.30000	39.47881	-108.08251	
120.00	0.00	0.00	120.00	0.00	0.00	1,609,646.20000	2,271,135.30000	39.47881	-108.08251	
Start Build 2.50										
200.00	2.00	340.00	199.98	1.31	-0.48	1,609,647.52491	2,271,134.86000	39.47881	-108.08251	
400.00	7.00	340.00	399.30	16.05	-5.84	1,609,662.41163	2,271,129.91615	39.47886	-108.08253	
Begin Turn 2.50°/100										
452.36	7.63	349.03	451.24	22.46	-7.60	1,609,668.87003	2,271,128.34603	39.47887	-108.08254	
Hold 7.63° Inc, 349.03° Az										
600.00	7.63	349.03	597.57	41.71	-11.33	1,609,688.21359	2,271,125.16278	39.47893	-108.08255	
800.00	7.63	349.03	795.80	67.78	-16.38	1,609,714.41758	2,271,120.85054	39.47900	-108.08257	
1,000.00	7.63	349.03	994.03	93.85	-21.44	1,609,740.62156	2,271,116.53831	39.47907	-108.08259	
9 5/8"										
1,200.00	7.63	349.03	1,192.26	119.93	-26.49	1,609,766.82555	2,271,112.22608	39.47914	-108.08260	
1,400.00	7.63	349.03	1,390.49	146.00	-31.55	1,609,793.02954	2,271,107.91385	39.47921	-108.08262	
1,600.00	7.63	349.03	1,588.72	172.07	-36.61	1,609,819.23353	2,271,103.60162	39.47928	-108.08264	
1,800.00	7.63	349.03	1,786.95	198.14	-41.66	1,609,845.43751	2,271,099.28938	39.47936	-108.08266	
1,854.54	7.63	349.03	1,841.00	205.25	-43.04	1,609,852.58305	2,271,098.11349	39.47937	-108.08266	
Top of "G" Sand										
1,955.43	7.63	349.03	1,941.00	218.40	-45.59	1,609,865.80211	2,271,095.93811	39.47941	-108.08267	
Base of "G" Sand										
2,000.00	7.63	349.03	1,985.17	224.21	-46.72	1,609,871.64150	2,271,094.97715	39.47943	-108.08268	
2,200.00	7.63	349.03	2,183.40	250.29	-51.77	1,609,897.84549	2,271,090.66492	39.47950	-108.08269	
2,400.00	7.63	349.03	2,381.63	276.36	-56.83	1,609,924.04948	2,271,086.35269	39.47957	-108.08271	
2,600.00	7.63	349.03	2,579.86	302.43	-61.88	1,609,950.25347	2,271,082.04045	39.47964	-108.08273	
2,800.00	7.63	349.03	2,778.09	328.50	-66.94	1,609,976.45746	2,271,077.72822	39.47971	-108.08275	
3,000.00	7.63	349.03	2,976.32	354.57	-71.99	1,610,002.66145	2,271,073.41599	39.47978	-108.08277	
3,200.00	7.63	349.03	3,174.55	380.65	-77.05	1,610,028.86544	2,271,069.10376	39.47986	-108.08278	
3,400.00	7.63	349.03	3,372.78	406.72	-82.10	1,610,055.06943	2,271,064.79152	39.47993	-108.08280	
3,594.95	7.63	349.03	3,566.00	432.13	-87.03	1,610,080.61176	2,271,060.58818	39.48000	-108.08282	
Mesaverde										
3,600.00	7.63	349.03	3,571.01	432.79	-87.16	1,610,081.27342	2,271,060.47929	39.48000	-108.08282	
3,800.00	7.63	349.03	3,769.23	458.86	-92.22	1,610,107.47740	2,271,056.16706	39.48007	-108.08284	
3,865.13	7.63	349.03	3,833.79	467.35	-93.86	1,610,116.01080	2,271,054.76277	39.48009	-108.08284	
Start Drop -1.50°/100										
4,000.00	5.61	349.03	3,967.75	482.61	-96.82	1,610,131.34942	2,271,052.23859	39.48014	-108.08285	
4,200.00	2.61	349.03	4,167.21	496.68	-99.55	1,610,145.48329	2,271,049.91266	39.48017	-108.08286	
4,373.85	0.00	0.00	4,341.00	500.56	-100.30	1,610,149.38602	2,271,049.27041	39.48019	-108.08287	
Vertical										
4,400.00	0.00	0.00	4,367.15	500.56	-100.30	1,610,149.38602	2,271,049.27041	39.48019	-108.08287	
4,600.00	0.00	0.00	4,567.15	500.56	-100.30	1,610,149.38602	2,271,049.27041	39.48019	-108.08287	
4,800.00	0.00	0.00	4,767.15	500.56	-100.30	1,610,149.38602	2,271,049.27041	39.48019	-108.08287	
4,873.85	0.00	0.00	4,841.00	500.56	-100.30	1,610,149.38602	2,271,049.27041	39.48019	-108.08287	
Top Gas - Approx. Top Gas										
5,000.00	0.00	0.00	4,967.15	500.56	-100.30	1,610,149.38602	2,271,049.27041	39.48019	-108.08287	
5,200.00	0.00	0.00	5,167.15	500.56	-100.30	1,610,149.38602	2,271,049.27041	39.48019	-108.08287	
5,400.00	0.00	0.00	5,367.15	500.56	-100.30	1,610,149.38602	2,271,049.27041	39.48019	-108.08287	
5,600.00	0.00	0.00	5,567.15	500.56	-100.30	1,610,149.38602	2,271,049.27041	39.48019	-108.08287	
5,800.00	0.00	0.00	5,767.15	500.56	-100.30	1,610,149.38602	2,271,049.27041	39.48019	-108.08287	
6,000.00	0.00	0.00	5,967.15	500.56	-100.30	1,610,149.38602	2,271,049.27041	39.48019	-108.08287	
6,193.85	0.00	0.00	6,161.00	500.56	-100.30	1,610,149.38602	2,271,049.27041	39.48019	-108.08287	
Cameo Coals										

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 313-35 - Slot A09
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5471.00usft (Nabors 573 (26' RKB) mab)
Project:	GV 35-06S-096W	MD Reference:	KELLY BUSHING @ 5471.00usft (Nabors 573 (26' RKB) mab)
Site:	DOE 2-M-35 Pad	North Reference:	True
Well:	GM 313-35	Survey Calculation Method:	Minimum Curvature
Wellbore:	GM 313-35		
Design:	Design #2 07Jul14 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
6,200.00	0.00	0.00	6,167.15	500.56	-100.30	1,610,149.38602	2,271,049.27041	39.48019	-108.08287
6,400.00	0.00	0.00	6,367.15	500.56	-100.30	1,610,149.38602	2,271,049.27041	39.48019	-108.08287
6,600.00	0.00	0.00	6,567.15	500.56	-100.30	1,610,149.38602	2,271,049.27041	39.48019	-108.08287
6,673.85	0.00	0.00	6,641.00	500.56	-100.30	1,610,149.38602	2,271,049.27041	39.48019	-108.08287
Rollins SS									
6,773.85	0.00	0.00	6,741.00	500.56	-100.30	1,610,149.38602	2,271,049.27041	39.48019	-108.08287
TD at 6773.85 - 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) GM	0.00	0.00	4,841.00	500.56	-100.30	1,610,149.38602	2,271,049.27041	39.48019	-108.08287
- plan hits target center									
- Circle (radius 50.00)									
TD / PBHL GM 313-35	0.00	0.00	6,741.00	500.56	-100.30	1,610,149.38602	2,271,049.27041	39.48019	-108.08287
- plan hits target center									
- Point									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,000.00	994.03	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
1,854.54	1,841.00	Top of "G" Sand				
1,955.43	1,941.00	Base of "G" Sand				
3,594.95	3,566.00	Mesaverde				
4,873.85	4,841.00	Approx. Top Gas				
6,193.85	6,161.00	Cameo Coals				
6,673.85	6,641.00	Rollins SS				
6,773.85	6,741.00	TD				

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 313-35 - Slot A09
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5471.00usft (Nabors 573 (26' RKB) mab)
Project:	GV 35-06S-096W	MD Reference:	KELLY BUSHING @ 5471.00usft (Nabors 573 (26' RKB) mab)
Site:	DOE 2-M-35 Pad	North Reference:	True
Well:	GM 313-35	Survey Calculation Method:	Minimum Curvature
Wellbore:	GM 313-35		
Design:	Design #2 07Jul14 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 2.50
400.00	399.30	16.05	-5.84	Begin Turn 2.50°/100
452.36	451.24	22.46	-7.60	Hold 7.63° Inc, 349.03° Az
3,865.13	3,833.79	467.35	-93.86	Start Drop -1.50°/100
4,373.85	4,341.00	500.56	-100.30	Vertical
4,873.85	4,841.00	500.56	-100.30	Top Gas
6,773.85	6,741.00	500.56	-100.30	TD at 6773.85