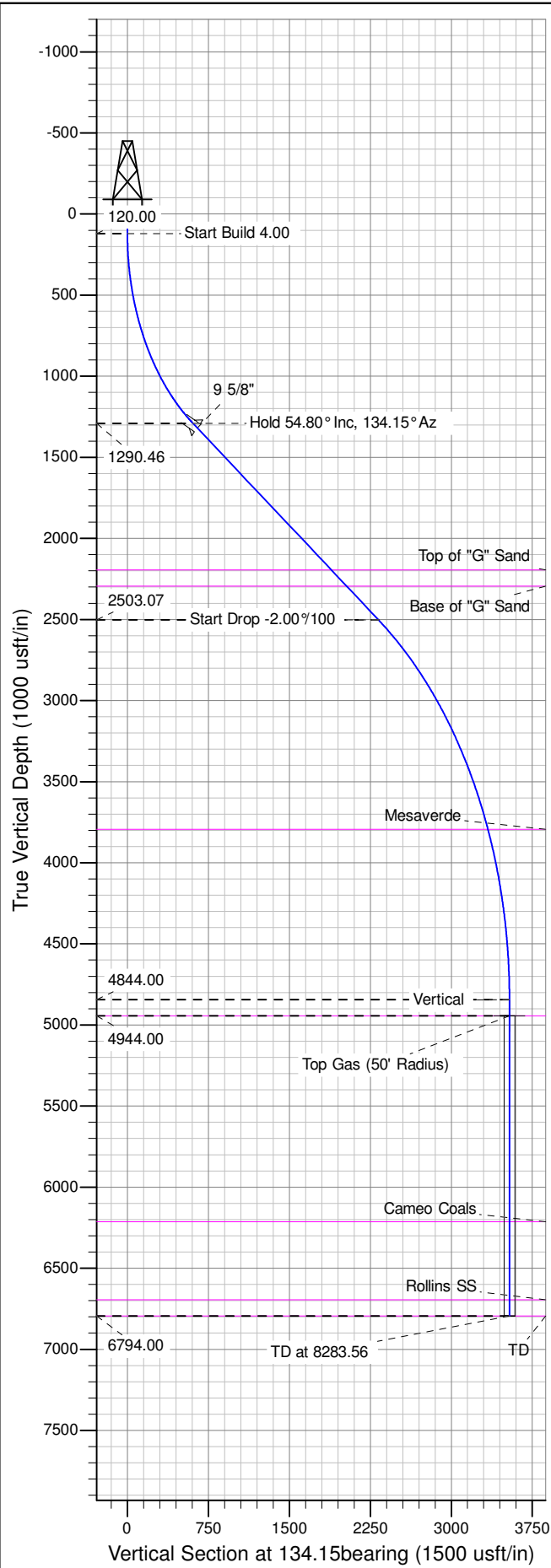
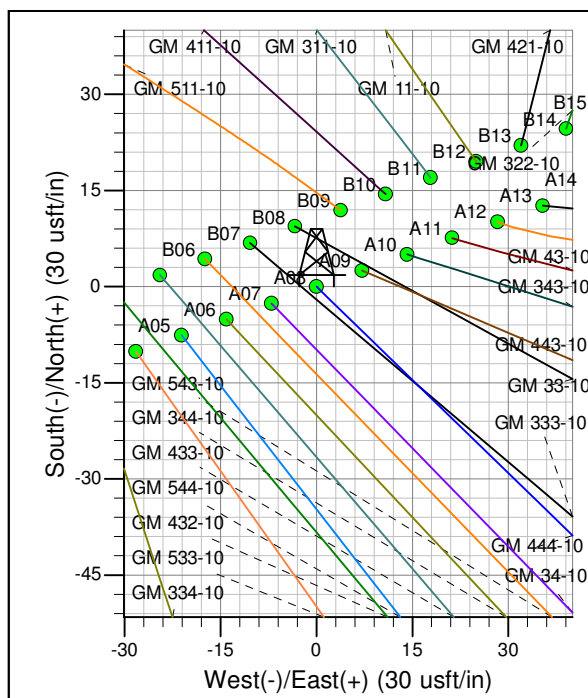
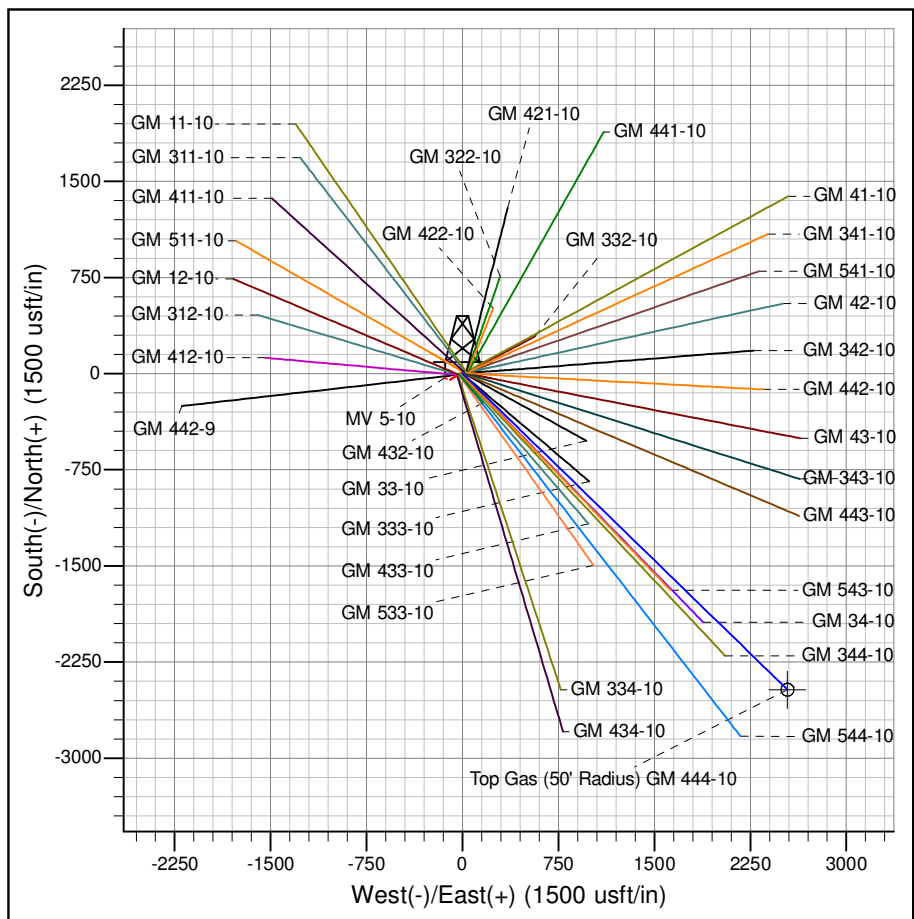




Well Name: GM 444-10  
Surface Location: MV 5-10 Pad  
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone  
Ground Elevation: 6148.00  
+N/-S +E/-W Northing Easting Latitude Longitude Slot  
0.00 0.00 1600358.70 2266924.40 39.45299 -108.09648 A09  
KELLY BUSHING @ 6174.00usft (Nabors (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 4.00	
1290.46	1489.98	54.80	134.15	-422.57	435.34	606.70	606.70	Hold 54.80° Inc, 134.15° Az	
2503.07	3593.59	54.80	134.15	-1619.83	1668.76	2325.64	2325.64	Start Drop -2.00°/100	
4844.00	6333.56	0.00	0.00	-2464.98	2539.44	3539.04	3539.04	Vertical	
4944.00	6433.56	0.00	0.00	-2464.98	2539.44	3539.04	3539.04	Top Gas	
6794.00	8283.56	0.00	0.00	-2464.98	2539.44	3539.04	3539.04	TD at 8283.56	



Azimuths to True North  
Magnetic North: 9.99°

Magnetic Field  
Strength: 51895.2snT  
Dip Angle: 65.60°  
Date: 8/7/2014  
Model: IGRF2010

Project: GV 10-07S-096W  
Site: MV 5-10 Pad  
Well: GM 444-10  
Design #1 07Aug14 mab

# **PICEANCE VLY NAD 83**

**GV 10-07S-096W**

**MV 5-10 Pad**

**GM 444-10 - Slot A09**

**Wellbore #1**

**Plan: Design #1 07Aug14 mab**

## **Standard Planning Report - Geographic**

**14 October, 2014**

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well GM 444-10 - Slot A09
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
<b>Project:</b>	GV 10-07S-096W	<b>MD Reference:</b>	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
<b>Site:</b>	MV 5-10 Pad	<b>North Reference:</b>	True
<b>Well:</b>	GM 444-10	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 07Aug14 mab		

<b>Project</b>	GV 10-07S-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>	MV 5-10 Pad			
<b>Site Position:</b>		<b>Northing:</b>	1,600,354.00000 usft	<b>Latitude:</b> 39.45298
<b>From:</b> Map		<b>Easting:</b>	2,266,910.20000 usft	<b>Longitude:</b> -108.09653
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b> -1.64 °

<b>Well</b>	GM 444-10 - Slot A09			
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b>	1,600,358.70000 usft
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b>	2,266,924.40000 usft
<b>Position Uncertainty</b>	0.00 usft		<b>Wellhead Elevation:</b>	0.00 usft
			<b>Ground Level:</b>	6,148.00 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	8/7/2014	9.99	65.60	51,895

<b>Design</b>	Design #1 07Aug14 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	0.00	0.00	134.15

<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	0.00	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	
1,489.98	54.80	134.15	1,290.46	-422.57	435.34	4.00	4.00	0.00	134.15	
3,593.59	54.80	134.15	2,503.07	-1,619.83	1,668.76	0.00	0.00	0.00	0.00	
6,333.56	0.00	0.00	4,844.00	-2,464.98	2,539.44	2.00	-2.00	0.00	180.00	
6,433.56	0.00	0.00	4,944.00	-2,464.98	2,539.44	0.00	0.00	0.00	0.00	Top Gas (50' Radius)
8,283.56	0.00	0.00	6,794.00	-2,464.98	2,539.44	0.00	0.00	0.00	0.00	

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well GM 444-10 - Slot A09
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
<b>Project:</b>	GV 10-07S-096W	<b>MD Reference:</b>	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
<b>Site:</b>	MV 5-10 Pad	<b>North Reference:</b>	True
<b>Well:</b>	GM 444-10	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 07Aug14 mab		

Planned Survey										
Measured			Vertical			Map				
Depth (usft)	Inclination (°)	Azimuth (bearing)	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	1,600,358.70000	2,266,924.40000	39.45299	-108.09648	
120.00	0.00	0.00	120.00	0.00	0.00	1,600,358.70000	2,266,924.40000	39.45299	-108.09648	
Start Build 4.00										
200.00	3.20	134.15	199.96	-1.56	1.60	1,600,357.09930	2,266,925.95742	39.45299	-108.09648	
400.00	11.20	134.15	398.22	-19.00	19.57	1,600,339.14869	2,266,943.42268	39.45294	-108.09641	
600.00	19.20	134.15	591.07	-55.49	57.17	1,600,301.59716	2,266,979.95891	39.45284	-108.09628	
800.00	27.20	134.15	774.74	-110.33	113.66	1,600,245.17559	2,267,034.85497	39.45269	-108.09608	
1,000.00	35.20	134.15	945.68	-182.43	187.94	1,600,170.98219	2,267,107.04236	39.45249	-108.09582	
1,200.00	43.20	134.15	1,100.54	-270.40	278.57	1,600,080.46103	2,267,195.11605	39.45225	-108.09550	
1,400.00	51.20	134.15	1,236.32	-372.53	383.78	1,599,975.37400	2,267,297.36176	39.45197	-108.09512	
1,489.98	54.80	134.15	1,290.46	-422.57	435.34	1,599,923.87999	2,267,347.46349	39.45183	-108.09494	
Hold 54.80° Inc, 134.15° Az										
1,539.98	54.80	134.15	1,319.28	-451.03	464.65	1,599,894.59795	2,267,375.95381	39.45176	-108.09484	
9 5/8"										
1,600.00	54.80	134.15	1,353.88	-485.19	499.85	1,599,859.44780	2,267,410.15358	39.45166	-108.09471	
1,800.00	54.80	134.15	1,469.17	-599.02	617.11	1,599,742.31966	2,267,524.11486	39.45135	-108.09430	
2,000.00	54.80	134.15	1,584.46	-712.85	734.38	1,599,625.19152	2,267,638.07612	39.45104	-108.09388	
2,200.00	54.80	134.15	1,699.75	-826.68	851.65	1,599,508.06337	2,267,752.03740	39.45072	-108.09347	
2,400.00	54.80	134.15	1,815.04	-940.50	968.91	1,599,390.93523	2,267,865.99867	39.45041	-108.09305	
2,600.00	54.80	134.15	1,930.32	-1,054.33	1,086.18	1,599,273.80709	2,267,979.95995	39.45010	-108.09264	
2,800.00	54.80	134.15	2,045.61	-1,168.16	1,203.45	1,599,156.67894	2,268,093.92121	39.44979	-108.09222	
3,000.00	54.80	134.15	2,160.90	-1,281.99	1,320.72	1,599,039.55079	2,268,207.88249	39.44947	-108.09181	
3,057.42	54.80	134.15	2,194.00	-1,314.67	1,354.38	1,599,005.92367	2,268,240.60042	39.44938	-108.09169	
Top of "G" Sand										
3,200.00	54.80	134.15	2,276.19	-1,395.82	1,437.98	1,598,922.42266	2,268,321.84376	39.44916	-108.09139	
3,230.90	54.80	134.15	2,294.00	-1,413.40	1,456.10	1,598,904.32787	2,268,339.44931	39.44911	-108.09133	
Base of "G" Sand										
3,400.00	54.80	134.15	2,391.48	-1,509.65	1,555.25	1,598,805.29451	2,268,435.80503	39.44885	-108.09097	
3,593.59	54.80	134.15	2,503.07	-1,619.83	1,668.76	1,598,691.92217	2,268,546.11205	39.44855	-108.09057	
Start Drop -2.00°/100										
3,600.00	54.67	134.15	2,506.77	-1,623.47	1,672.51	1,598,688.16933	2,268,549.76342	39.44854	-108.09056	
3,800.00	50.67	134.15	2,628.03	-1,734.22	1,786.61	1,598,574.21351	2,268,660.63815	39.44823	-108.09016	
4,000.00	46.67	134.15	2,760.07	-1,838.80	1,894.35	1,598,466.59723	2,268,765.34474	39.44795	-108.08977	
4,200.00	42.67	134.15	2,902.28	-1,936.72	1,995.22	1,598,365.84480	2,268,863.37304	39.44768	-108.08942	
4,400.00	38.67	134.15	3,053.94	-2,027.49	2,088.73	1,598,272.44708	2,268,954.24551	39.44743	-108.08909	
4,600.00	34.67	134.15	3,214.32	-2,110.66	2,174.42	1,598,186.85910	2,269,037.51940	39.44720	-108.08878	
4,800.00	30.67	134.15	3,382.64	-2,185.84	2,251.87	1,598,109.49781	2,269,112.78902	39.44699	-108.08851	
5,000.00	26.67	134.15	3,558.09	-2,252.67	2,320.71	1,598,040.74013	2,269,179.68765	39.44681	-108.08826	
5,200.00	22.67	134.15	3,739.79	-2,310.80	2,380.60	1,597,980.92103	2,269,237.88937	39.44665	-108.08805	
5,258.50	21.50	134.15	3,794.00	-2,326.12	2,396.39	1,597,965.15629	2,269,253.22788	39.44661	-108.08800	
Mesaverde										
5,400.00	18.67	134.15	3,926.88	-2,359.96	2,431.25	1,597,930.33195	2,269,287.11064	39.44651	-108.08787	
5,600.00	14.67	134.15	4,118.43	-2,399.92	2,472.41	1,597,889.21935	2,269,327.11166	39.44640	-108.08773	
5,800.00	10.67	134.15	4,313.52	-2,430.47	2,503.89	1,597,857.78352	2,269,357.69753	39.44632	-108.08762	
6,000.00	6.67	134.15	4,511.20	-2,451.47	2,525.52	1,597,836.17764	2,269,378.71925	39.44626	-108.08754	
6,200.00	2.67	134.15	4,710.49	-2,462.81	2,537.20	1,597,824.50694	2,269,390.07440	39.44623	-108.08750	
6,333.56	0.00	0.00	4,844.00	-2,464.98	2,539.44	1,597,822.27609	2,269,392.24493	39.44623	-108.08749	
Vertical										
6,400.00	0.00	0.00	4,910.44	-2,464.98	2,539.44	1,597,822.27609	2,269,392.24493	39.44623	-108.08749	
6,433.56	0.00	0.00	4,944.00	-2,464.98	2,539.44	1,597,822.27609	2,269,392.24493	39.44623	-108.08749	
Top Gas - Approx. Top Gas										
6,600.00	0.00	0.00	5,110.44	-2,464.98	2,539.44	1,597,822.27609	2,269,392.24493	39.44623	-108.08749	

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well GM 444-10 - Slot A09
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
<b>Project:</b>	GV 10-07S-096W	<b>MD Reference:</b>	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
<b>Site:</b>	MV 5-10 Pad	<b>North Reference:</b>	True
<b>Well:</b>	GM 444-10	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 07Aug14 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
6,800.00	0.00	0.00	5,310.44	-2,464.98	2,539.44	1,597,822.27609	2,269,392.24493	39.44623	-108.08749
7,000.00	0.00	0.00	5,510.44	-2,464.98	2,539.44	1,597,822.27609	2,269,392.24493	39.44623	-108.08749
7,200.00	0.00	0.00	5,710.44	-2,464.98	2,539.44	1,597,822.27609	2,269,392.24493	39.44623	-108.08749
7,400.00	0.00	0.00	5,910.44	-2,464.98	2,539.44	1,597,822.27609	2,269,392.24493	39.44623	-108.08749
7,600.00	0.00	0.00	6,110.44	-2,464.98	2,539.44	1,597,822.27609	2,269,392.24493	39.44623	-108.08749
7,703.56	0.00	0.00	6,214.00	-2,464.98	2,539.44	1,597,822.27609	2,269,392.24493	39.44623	-108.08749
Cameo Coals									
7,800.00	0.00	0.00	6,310.44	-2,464.98	2,539.44	1,597,822.27609	2,269,392.24493	39.44623	-108.08749
8,000.00	0.00	0.00	6,510.44	-2,464.98	2,539.44	1,597,822.27609	2,269,392.24493	39.44623	-108.08749
8,183.56	0.00	0.00	6,694.00	-2,464.98	2,539.44	1,597,822.27609	2,269,392.24493	39.44623	-108.08749
Rollins SS									
8,200.00	0.00	0.00	6,710.44	-2,464.98	2,539.44	1,597,822.27609	2,269,392.24493	39.44623	-108.08749
8,283.56	0.00	0.00	6,794.00	-2,464.98	2,539.44	1,597,822.27609	2,269,392.24493	39.44623	-108.08749
TD at 8283.56 - 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	4,944.00	-2,464.98	2,539.44	1,597,822.27609	2,269,392.24493	39.44623	-108.08749

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,539.98	1,319.28	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
3,057.42	2,194.00	Top of "G" Sand				
3,230.90	2,294.00	Base of "G" Sand				
5,258.50	3,794.00	Mesaverde				
6,433.56	4,944.00	Approx. Top Gas				
7,703.56	6,214.00	Cameo Coals				
8,183.56	6,694.00	Rollins SS				
8,283.56	6,794.00	TD				

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well GM 444-10 - Slot A09
<b>Company:</b>	PICEANCE VLY NAD 83	<b>TVD Reference:</b>	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
<b>Project:</b>	GV 10-07S-096W	<b>MD Reference:</b>	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
<b>Site:</b>	MV 5-10 Pad	<b>North Reference:</b>	True
<b>Well:</b>	GM 444-10	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1 07Aug14 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 4.00
1,489.98	1,290.46	-422.57	435.34	Hold 54.80° Inc, 134.15° Az
3,593.59	2,503.07	-1,619.83	1,668.76	Start Drop -2.00°/100
6,333.56	4,844.00	-2,464.98	2,539.44	Vertical
6,433.56	4,944.00	-2,464.98	2,539.44	Top Gas
8,283.56	6,794.00	-2,464.98	2,539.44	TD at 8283.56