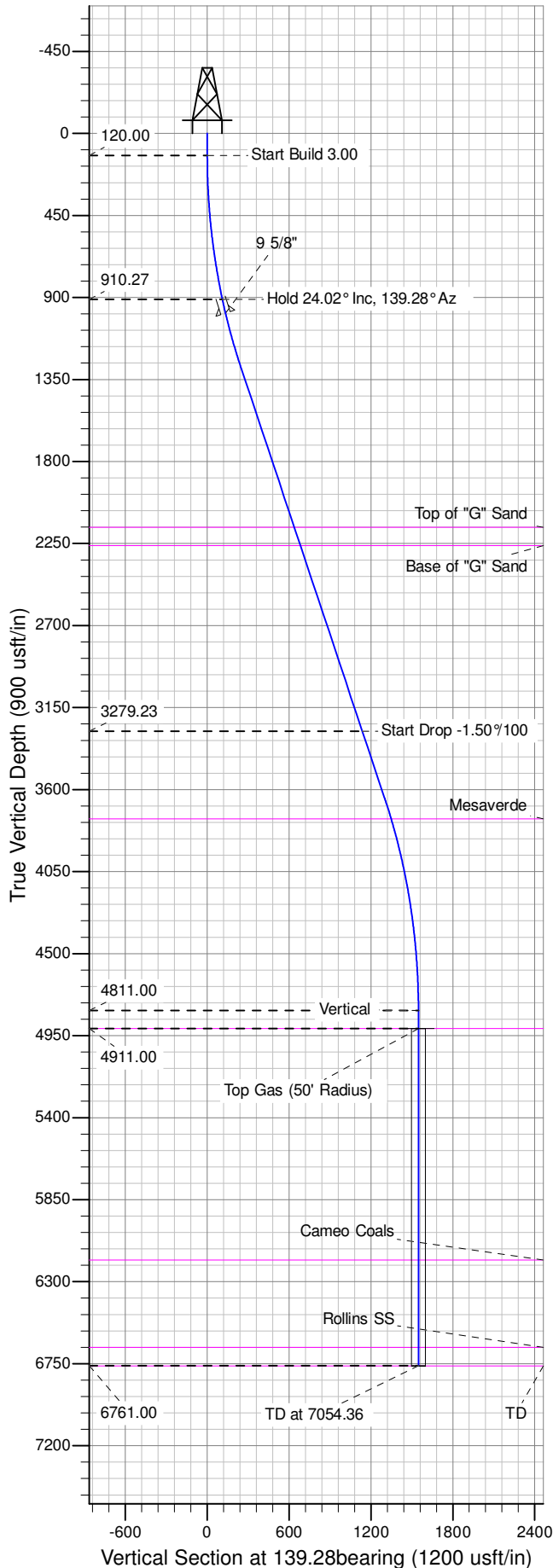
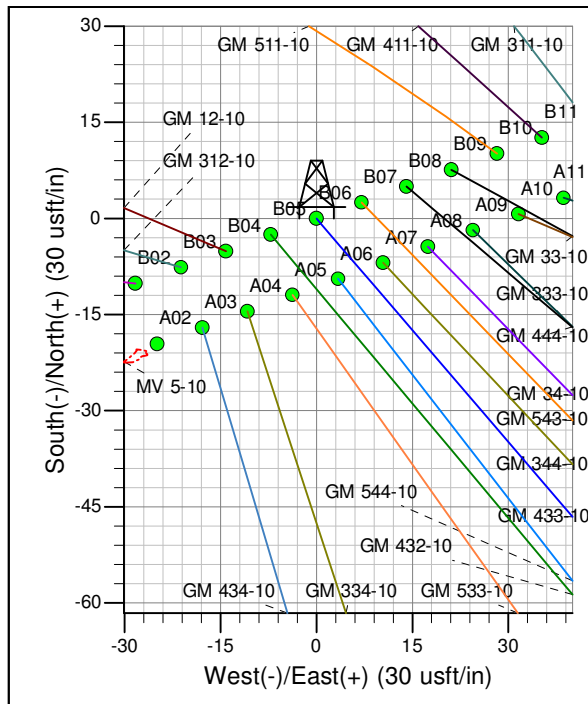
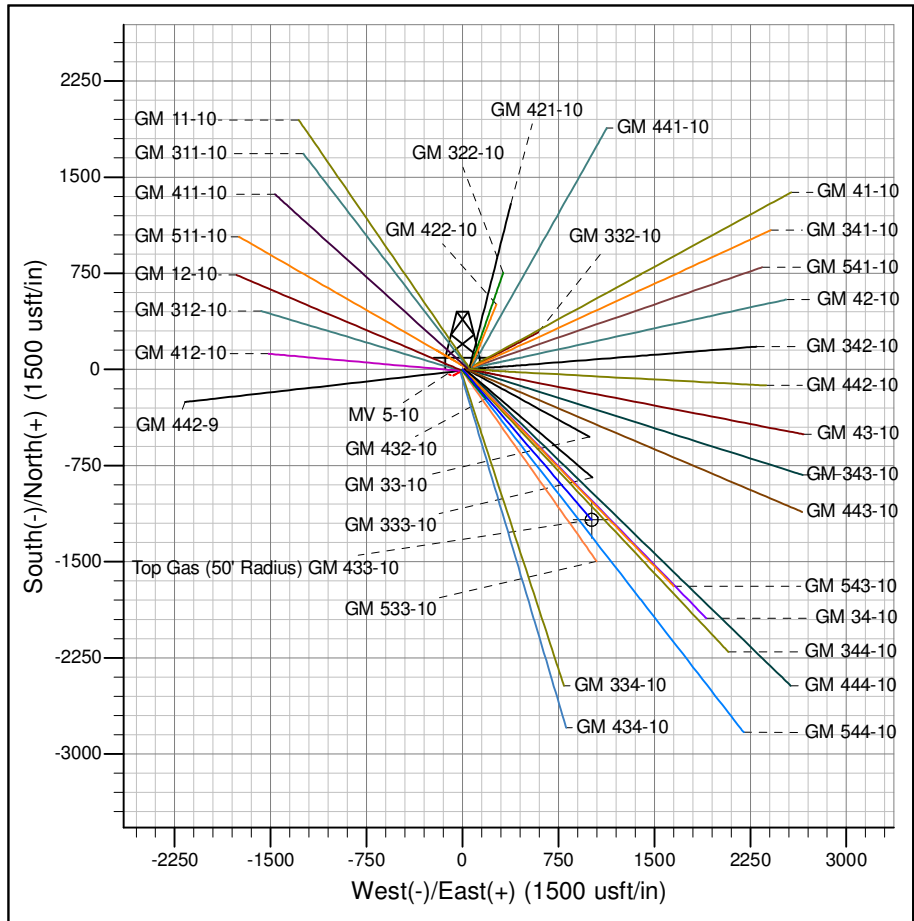




Well Name: GM 433-10  
Surface Location: MV 5-10 Pad  
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone  
Ground Elevation: 6148.00  
+N/-S +E/-W Northing Easting Latitude Longitude Slot  
0.00 0.00 1600361.20 2266900.00 39.45300 -108.09657 B06  
KELLY BUSHING @ 6174.00usft (Nabors (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 3.00	
910.27	920.66	16.01	139.28	-84.25	72.51	111.16	111.43	Hold 24.02° Inc, 139.28° Az	
3279.23	3503.05	24.02	139.28	-861.24	741.22	1136.28	1136.28	Start Drop -1.50%/100	
4811.00	5104.36	0.00	0.00	-1172.78	1009.34	1547.31	1547.31	Vertical	
4911.00	5204.36	0.00	0.00	-1172.78	1009.34	1547.31	1547.31	Top Gas	
6761.00	7054.36	0.00	0.00	-1172.78	1009.34	1547.31	1547.31	TD at 7054.36	



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 433-10  
Design #1 07Aug14 mab

# **PICEANCE VLY NAD 83**

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

**MV 5-10 Pad**

**GM 433-10 - Slot B06**

**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 433-10 - Slot B06
<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 433-10	<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 433-10 - Slot B06			
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b>	1,600,361.20000 usft
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b>	2,266,900.00000 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	139.28

<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	
1,320.98	24.02	139.28	1,286.11	-188.03	161.82	2.00	2.00	0.00	139.28	
3,903.38	24.02	139.28	3,644.89	-984.75	847.51	0.00	0.00	0.00	0.00	
5,104.36	0.00	0.00	4,811.00	-1,172.78	1,009.34	2.00	-2.00	0.00	180.00	
5,204.36	0.00	0.00	4,911.00	-1,172.78	1,009.34	0.00	0.00	0.00	0.00	Top Gas (50' Radius)
7,054.36	0.00	0.00	6,761.00	-1,172.78	1,009.34	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 433-10 - Slot B06
<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 433-10	<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	
0.00	0.00	0.00	0.00	0.00	0.00	1,600,361.20000	2,266,900.00000	39.45300	-108.09657	
120.00	0.00	0.00	120.00	0.00	0.00	1,600,361.20000	2,266,900.00000	39.45300	-108.09657	
<b>Start Build 3.00</b>										
200.00	1.60	139.28	199.99	-0.85	0.73	1,600,360.33298	2,266,900.70407	39.45300	-108.09657	
400.00	5.60	139.28	399.55	-10.36	8.92	1,600,350.58680	2,266,908.61859	39.45297	-108.09654	
600.00	9.60	139.28	597.76	-30.41	26.17	1,600,330.05831	2,266,925.28904	39.45292	-108.09648	
800.00	13.60	139.28	793.63	-60.88	52.40	1,600,298.84752	2,266,950.63419	39.45283	-108.09638	
920.66	16.01	139.28	910.27	-84.25	72.51	1,600,274.91433	2,266,970.06947	39.45277	-108.09631	
<b>Hold 24.02° Inc, 139.28° Az</b>										
1,000.00	17.60	139.28	986.23	-101.64	87.47	1,600,257.10649	2,266,984.53057	39.45272	-108.09626	
<b>9 5/8"</b>										
1,200.00	21.60	139.28	1,174.60	-152.48	131.23	1,600,205.03858	2,267,026.81305	39.45258	-108.09610	
1,320.98	24.02	139.28	1,286.11	-188.03	161.82	1,600,168.63380	2,267,056.37606	39.45248	-108.09600	
1,400.00	24.02	139.28	1,358.29	-212.41	182.80	1,600,143.66688	2,267,076.65079	39.45242	-108.09592	
1,600.00	24.02	139.28	1,540.97	-274.11	235.91	1,600,080.47278	2,267,127.96843	39.45225	-108.09573	
1,800.00	24.02	139.28	1,723.65	-335.81	289.01	1,600,017.27868	2,267,179.28608	39.45208	-108.09555	
2,000.00	24.02	139.28	1,906.33	-397.52	342.12	1,599,954.08457	2,267,230.60372	39.45191	-108.09536	
2,200.00	24.02	139.28	2,089.01	-459.22	395.22	1,599,890.89047	2,267,281.92136	39.45174	-108.09517	
2,278.81	24.02	139.28	2,161.00	-483.54	416.15	1,599,865.98791	2,267,302.14383	39.45167	-108.09510	
<b>Top of "G" Sand</b>										
2,388.29	24.02	139.28	2,261.00	-517.32	445.22	1,599,831.39534	2,267,330.23521	39.45158	-108.09499	
<b>Base of "G" Sand</b>										
2,400.00	24.02	139.28	2,271.69	-520.93	448.33	1,599,827.69637	2,267,333.23901	39.45157	-108.09498	
2,600.00	24.02	139.28	2,454.37	-582.63	501.43	1,599,764.50228	2,267,384.55665	39.45140	-108.09479	
2,800.00	24.02	139.28	2,637.06	-644.34	554.54	1,599,701.30818	2,267,435.87430	39.45123	-108.09460	
3,000.00	24.02	139.28	2,819.74	-706.04	607.64	1,599,638.11408	2,267,487.19194	39.45106	-108.09442	
3,200.00	24.02	139.28	3,002.42	-767.75	660.75	1,599,574.91997	2,267,538.50959	39.45089	-108.09423	
3,400.00	24.02	139.28	3,185.10	-829.45	713.85	1,599,511.72587	2,267,589.82724	39.45072	-108.09404	
3,503.05	24.02	139.28	3,279.23	-861.24	741.22	1,599,479.16507	2,267,616.26869	39.45063	-108.09394	
<b>Start Drop -1.50°/100</b>										
3,600.00	24.02	139.28	3,367.78	-891.16	766.96	1,599,448.53177	2,267,641.14487	39.45055	-108.09385	
3,800.00	24.02	139.28	3,550.46	-952.86	820.06	1,599,385.33768	2,267,692.46252	39.45038	-108.09366	
3,903.38	24.02	139.28	3,644.89	-984.75	847.51	1,599,352.67331	2,267,718.98807	39.45030	-108.09357	
4,000.00	22.09	139.28	3,733.79	-1,013.43	872.19	1,599,323.30455	2,267,742.83738	39.45022	-108.09348	
4,029.31	21.50	139.28	3,761.00	-1,021.68	879.29	1,599,314.85859	2,267,749.69604	39.45019	-108.09346	
<b>Mesaverde</b>										
4,200.00	18.09	139.28	3,921.58	-1,065.48	916.99	1,599,269.99509	2,267,786.12806	39.45007	-108.09332	
4,400.00	14.09	139.28	4,113.71	-1,107.48	953.14	1,599,226.98428	2,267,821.05559	39.44996	-108.09319	
4,600.00	10.09	139.28	4,309.24	-1,139.22	980.45	1,599,194.48168	2,267,847.44978	39.44987	-108.09310	
4,800.00	6.09	139.28	4,507.21	-1,160.54	998.80	1,599,172.64562	2,267,865.18205	39.44981	-108.09303	
5,000.00	2.09	139.28	4,706.66	-1,171.34	1,008.10	1,599,161.58249	2,267,874.16602	39.44978	-108.09300	
5,104.36	0.00	0.00	4,811.00	-1,172.78	1,009.34	1,599,160.10710	2,267,875.36413	39.44978	-108.09299	
<b>Vertical</b>										
5,200.00	0.00	0.00	4,906.64	-1,172.78	1,009.34	1,599,160.10710	2,267,875.36413	39.44978	-108.09299	
5,204.36	0.00	0.00	4,911.00	-1,172.78	1,009.34	1,599,160.10710	2,267,875.36413	39.44978	-108.09299	
<b>Top Gas - Approx. Top Gas</b>										
5,400.00	0.00	0.00	5,106.64	-1,172.78	1,009.34	1,599,160.10710	2,267,875.36413	39.44978	-108.09299	
5,600.00	0.00	0.00	5,306.64	-1,172.78	1,009.34	1,599,160.10710	2,267,875.36413	39.44978	-108.09299	
5,800.00	0.00	0.00	5,506.64	-1,172.78	1,009.34	1,599,160.10710	2,267,875.36413	39.44978	-108.09299	
6,000.00	0.00	0.00	5,706.64	-1,172.78	1,009.34	1,599,160.10710	2,267,875.36413	39.44978	-108.09299	
6,200.00	0.00	0.00	5,906.64	-1,172.78	1,009.34	1,599,160.10710	2,267,875.36413	39.44978	-108.09299	
6,400.00	0.00	0.00	6,106.64	-1,172.78	1,009.34	1,599,160.10710	2,267,875.36413	39.44978	-108.09299	

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well GM 433-10 - Slot B06
<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 433-10	<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
6,474.36	0.00	0.00	6,181.00	-1,172.78	1,009.34	1,599,160.10710	2,267,875.36413	39.44978	-108.09299
<b>Cameo Coals</b>									
6,600.00	0.00	0.00	6,306.64	-1,172.78	1,009.34	1,599,160.10710	2,267,875.36413	39.44978	-108.09299
6,800.00	0.00	0.00	6,506.64	-1,172.78	1,009.34	1,599,160.10710	2,267,875.36413	39.44978	-108.09299
6,954.36	0.00	0.00	6,661.00	-1,172.78	1,009.34	1,599,160.10710	2,267,875.36413	39.44978	-108.09299
<b>Rollins SS</b>									
7,000.00	0.00	0.00	6,706.64	-1,172.78	1,009.34	1,599,160.10710	2,267,875.36413	39.44978	-108.09299
7,054.36	0.00	0.00	6,761.00	-1,172.78	1,009.34	1,599,160.10710	2,267,875.36413	39.44978	-108.09299
<b>TD at 7054.36</b>									

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	4,911.00	-1,172.78	1,009.34	1,599,160.10710	2,267,875.36413	39.44978	-108.09299

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,000.00	986.23	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
2,278.81	2,161.00	Top of "G" Sand				
2,388.29	2,261.00	Base of "G" Sand				
4,029.31	3,761.00	Mesaverde				
5,204.36	4,911.00	Approx. Top Gas				
6,474.36	6,181.00	Cameo Coals				
6,954.36	6,661.00	Rollins SS				
7,054.36	6,761.00	TD				

**WPX**  
Planning Report - Geographic

<b>Database:</b>	COMPASS-PICEANCE	<b>Local Co-ordinate Reference:</b>	Well GM 433-10 - Slot B06
<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 433-10	<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 3.00
920.66	897.41	-125.35	107.88	Hold 24.02° Inc, 139.28° Az
3,503.05	3,256.18	-922.08	793.57	Start Drop -1.50°/100
5,104.36	4,811.00	-1,172.78	1,009.34	Vertical
5,204.36	4,911.00	-1,172.78	1,009.34	Top Gas
7,054.36	6,761.00	-1,172.78	1,009.34	TD at 7054.36