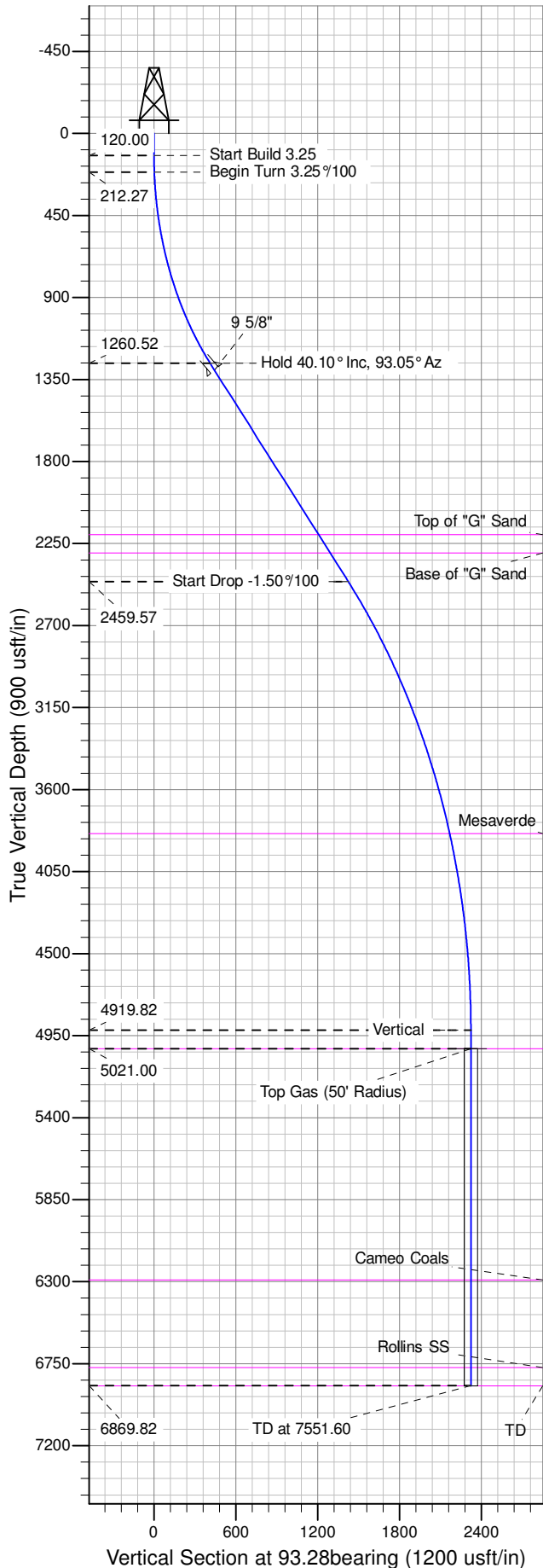
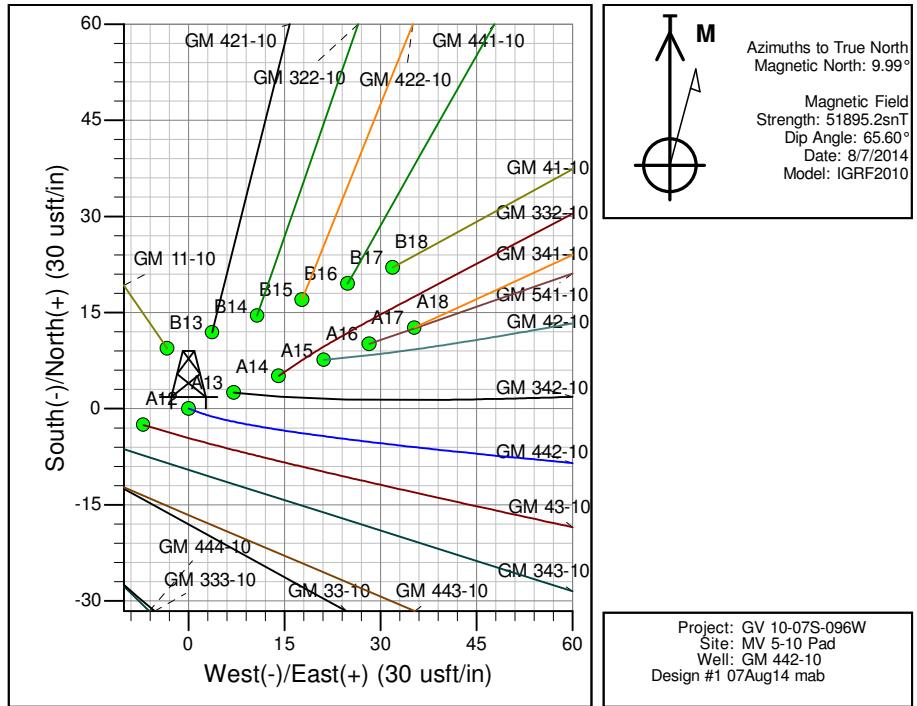
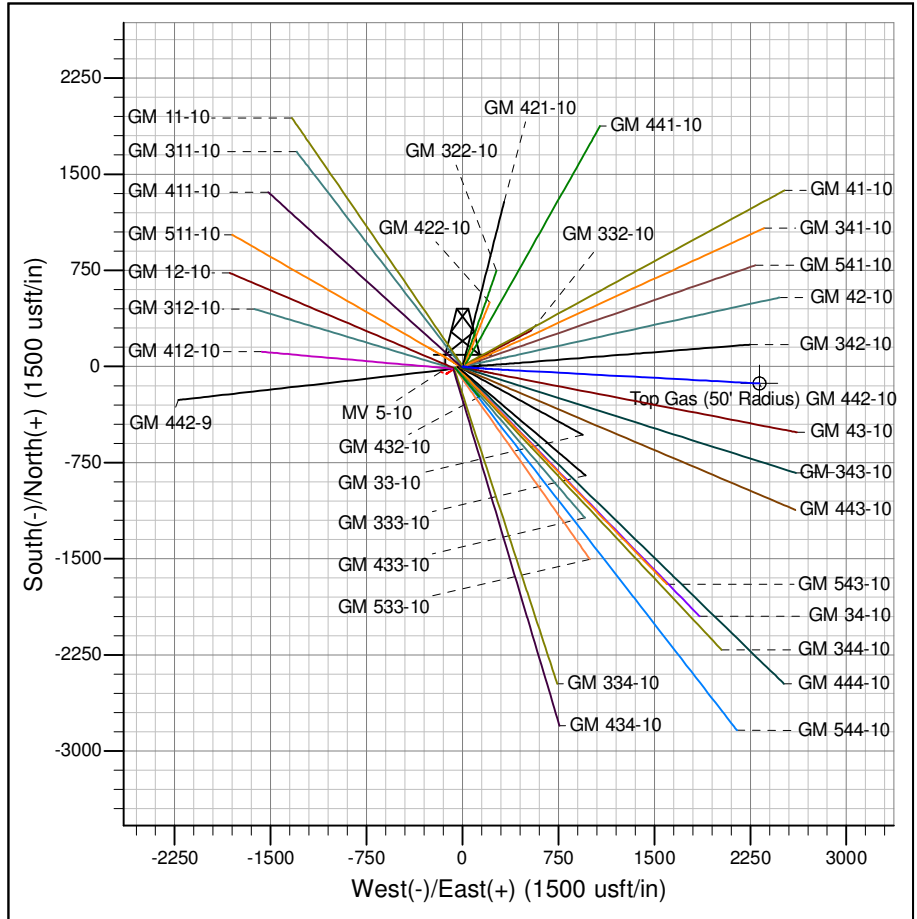




Well Name: GM 442-10
Surface Location: MV 5-10 Pad
North American Datum 1983 , US State Plane 1983 , Colorado Central Zone
Ground Elevation: 6148.00
+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.00 0.00 1600367.98 2266952.97 39.45302 -108.09638 A13
KELLY BUSHING @ 6174.00usft (Nabors (26' RKB) 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	3.25
212.27	212.31	2.84	109.00	-0.70	2.04	2.08	2.18	Begin Turn	3.25°/100
1260.52	1357.73	39.94	93.06	-31.13	410.38	411.49	411.95	Hold 40.10° Inc,	93.05° Az
2459.57	2928.06	40.12	93.05	-85.12	1422.95	1425.49	1425.80	Start Drop	-1.50°/100
4919.82	5601.60	0.02	93.05	-132.98	2320.51	2324.31	2324.67	Vertical	
5021.00	5702.78	0.00	0.00	-132.98	2320.51	2324.31	2324.68	Top Gas	
6869.82	7551.60	0.00	0.00	-132.98	2320.51	2324.31	2324.68	TD at 7551.60	



PICEANCE VLY NAD 83

GV 10-07S-096W

MV 5-10 Pad

GM 442-10 - Slot A13

Wellbore #1

Plan: Design #1 07Aug14 mab

Standard Planning Report - Geographic

14 October, 2014

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 442-10 - Slot A13
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
Project:	GV 10-07S-096W	MD Reference:	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
Site:	MV 5-10 Pad	North Reference:	True
Well:	GM 442-10	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 07Aug14 mab		

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

Well	GM 442-10 - Slot A13			
Well Position	+N/-S	0.00 usft	Northing:	1,600,367.98159 usft
	+E/-W	0.00 usft	Easting:	2,266,952.97069 usft
Position Uncertainty	0.00 usft		Wellhead Elevation:	0.00 usft
			Ground Level:	6,148.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/7/2014	9.99	65.60	51,895

Design	Design #1 07Aug14 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	93.28

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	
125.00	0.00	0.00	125.00	0.00	0.00	0.00	0.00	0.00	0.00	
217.31	3.00	109.00	217.27	-0.79	2.28	3.25	3.25	0.00	109.00	
1,366.37	40.22	93.05	1,267.13	-31.42	415.94	3.25	3.24	-1.39	-17.01	
2,921.35	40.22	93.05	2,454.44	-84.89	1,418.63	0.00	0.00	0.00	0.00	
5,602.78	0.00	0.00	4,921.00	-132.98	2,320.51	1.50	-1.50	0.00	180.00	
7,552.78	0.00	0.00	6,871.00	-132.98	2,320.51	0.00	0.00	0.00	0.00	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 442-10 - Slot A13
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
Project:	GV 10-07S-096W	MD Reference:	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
Site:	MV 5-10 Pad	North Reference:	True
Well:	GM 442-10	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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	1,600,367.98159	2,266,952.97069	39.45302	-108.09638	
120.00	0.00	0.00	120.00	0.00	0.00	1,600,367.98159	2,266,952.97069	39.45302	-108.09638	
Start Build 3.25										
125.00	0.00	0.00	125.00	0.00	0.00	1,600,367.98159	2,266,952.97069	39.45302	-108.09638	
200.00	2.44	109.00	199.98	-0.52	1.51	1,600,367.41942	2,266,954.46336	39.45302	-108.09638	
212.31	2.84	109.00	212.27	-0.70	2.04	1,600,367.21981	2,266,954.99335	39.45302	-108.09637	
Begin Turn 3.25°/100										
217.31	3.00	109.00	217.27	-0.79	2.28	1,600,367.13008	2,266,955.23160	39.45302	-108.09637	
400.00	8.85	97.66	398.91	-4.22	20.75	1,600,363.17182	2,266,973.58963	39.45301	-108.09631	
600.00	15.33	95.22	594.37	-8.68	62.37	1,600,357.52586	2,267,015.06525	39.45300	-108.09616	
800.00	21.82	94.21	783.85	-13.81	125.84	1,600,350.57868	2,267,078.36229	39.45298	-108.09594	
1,000.00	28.32	93.64	964.91	-19.56	210.35	1,600,342.41961	2,267,162.66697	39.45297	-108.09564	
1,200.00	34.82	93.28	1,135.22	-25.84	314.81	1,600,333.15354	2,267,266.89544	39.45295	-108.09527	
1,357.73	39.94	93.06	1,260.52	-31.13	410.38	1,600,325.14270	2,267,362.27775	39.45294	-108.09493	
Hold 40.10° Inc, 93.05° Az										
1,366.37	40.22	93.05	1,267.13	-31.42	415.94	1,600,324.68755	2,267,367.81981	39.45294	-108.09491	
1,400.00	40.22	93.05	1,292.81	-32.58	437.62	1,600,322.91192	2,267,389.46438	39.45293	-108.09483	
1,407.73	40.22	93.05	1,298.71	-32.85	442.61	1,600,322.50382	2,267,394.43903	39.45293	-108.09481	
9 5/8"										
1,600.00	40.22	93.05	1,445.52	-39.46	566.59	1,600,312.35304	2,267,518.17475	39.45291	-108.09438	
1,800.00	40.22	93.05	1,598.23	-46.33	695.55	1,600,301.79417	2,267,646.88511	39.45289	-108.09392	
2,000.00	40.22	93.05	1,750.94	-53.21	824.52	1,600,291.23530	2,267,775.59548	39.45288	-108.09346	
2,200.00	40.22	93.05	1,903.65	-60.09	953.48	1,600,280.67642	2,267,904.30585	39.45286	-108.09301	
2,400.00	40.22	93.05	2,056.36	-66.96	1,082.45	1,600,270.11755	2,268,033.01621	39.45284	-108.09255	
2,589.43	40.22	93.05	2,201.00	-73.48	1,204.60	1,600,260.11680	2,268,154.92324	39.45282	-108.09212	
Top of "G" Sand										
2,600.00	40.22	93.05	2,209.07	-73.84	1,211.42	1,600,259.55868	2,268,161.72658	39.45282	-108.09209	
2,720.39	40.22	93.05	2,301.00	-77.98	1,289.05	1,600,253.20251	2,268,239.20688	39.45281	-108.09182	
Base of "G" Sand										
2,800.00	40.22	93.05	2,361.78	-80.72	1,340.38	1,600,248.99981	2,268,290.43695	39.45280	-108.09164	
2,921.35	40.22	93.05	2,454.44	-84.89	1,418.63	1,600,242.59297	2,268,368.53485	39.45279	-108.09136	
2,928.06	40.12	93.05	2,459.57	-85.12	1,422.95	1,600,242.23950	2,268,372.84360	39.45279	-108.09134	
Start Drop -1.50°/100										
3,000.00	39.04	93.05	2,515.01	-87.56	1,468.73	1,600,238.49177	2,268,418.52760	39.45278	-108.09118	
3,200.00	36.04	93.05	2,673.58	-94.05	1,590.41	1,600,228.52930	2,268,539.96800	39.45276	-108.09075	
3,400.00	33.04	93.05	2,838.30	-100.09	1,703.63	1,600,219.25896	2,268,652.97154	39.45275	-108.09035	
3,600.00	30.04	93.05	3,008.73	-105.66	1,808.10	1,600,210.70614	2,268,757.22849	39.45273	-108.08998	
3,800.00	27.04	93.05	3,184.41	-110.75	1,903.51	1,600,202.89431	2,268,852.45306	39.45272	-108.08964	
4,000.00	24.04	93.05	3,364.84	-115.34	1,989.61	1,600,195.84486	2,268,938.38428	39.45270	-108.08934	
4,200.00	21.04	93.05	3,549.54	-119.42	2,066.17	1,600,189.57713	2,269,014.78661	39.45269	-108.08907	
4,400.00	18.04	93.05	3,738.00	-122.98	2,132.96	1,600,184.10828	2,269,081.45063	39.45268	-108.08883	
4,507.85	16.42	93.05	3,841.00	-124.68	2,164.87	1,600,181.49617	2,269,113.29166	39.45268	-108.08872	
Mesaverde										
4,600.00	15.04	93.05	3,929.70	-126.01	2,189.82	1,600,179.45332	2,269,138.19362	39.45268	-108.08863	
4,800.00	12.04	93.05	4,124.12	-128.51	2,236.58	1,600,175.62500	2,269,184.86006	39.45267	-108.08846	
5,000.00	9.04	93.05	4,320.72	-130.45	2,273.11	1,600,172.63380	2,269,221.32201	39.45266	-108.08833	
5,200.00	6.04	93.05	4,518.96	-131.85	2,299.32	1,600,170.48794	2,269,247.47957	39.45266	-108.08824	
5,400.00	3.04	93.05	4,718.31	-132.69	2,315.13	1,600,169.19330	2,269,263.26103	39.45266	-108.08818	
5,600.00	0.04	93.05	4,918.22	-132.98	2,320.51	1,600,168.75341	2,269,268.62313	39.45266	-108.08816	
5,601.60	0.02	93.05	4,919.82	-132.98	2,320.51	1,600,168.75335	2,269,268.62396	39.45266	-108.08816	
Vertical										
5,602.78	0.00	0.00	4,921.00	-132.98	2,320.51	1,600,168.75333	2,269,268.62411	39.45266	-108.08816	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 442-10 - Slot A13
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
Project:	GV 10-07S-096W	MD Reference:	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
Site:	MV 5-10 Pad	North Reference:	True
Well:	GM 442-10	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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
5,702.78	0.00	0.00	5,021.00	-132.98	2,320.51	1,600,168.75333	2,269,268.62411	39.45266	-108.08816
Top Gas - Approx. Top Gas									
5,800.00	0.00	0.00	5,118.22	-132.98	2,320.51	1,600,168.75333	2,269,268.62411	39.45266	-108.08816
6,000.00	0.00	0.00	5,318.22	-132.98	2,320.51	1,600,168.75333	2,269,268.62411	39.45266	-108.08816
6,200.00	0.00	0.00	5,518.22	-132.98	2,320.51	1,600,168.75333	2,269,268.62411	39.45266	-108.08816
6,400.00	0.00	0.00	5,718.22	-132.98	2,320.51	1,600,168.75333	2,269,268.62411	39.45266	-108.08816
6,600.00	0.00	0.00	5,918.22	-132.98	2,320.51	1,600,168.75333	2,269,268.62411	39.45266	-108.08816
6,800.00	0.00	0.00	6,118.22	-132.98	2,320.51	1,600,168.75333	2,269,268.62411	39.45266	-108.08816
6,972.78	0.00	0.00	6,291.00	-132.98	2,320.51	1,600,168.75333	2,269,268.62411	39.45266	-108.08816
Cameo Coals									
7,000.00	0.00	0.00	6,318.22	-132.98	2,320.51	1,600,168.75333	2,269,268.62411	39.45266	-108.08816
7,200.00	0.00	0.00	6,518.22	-132.98	2,320.51	1,600,168.75333	2,269,268.62411	39.45266	-108.08816
7,400.00	0.00	0.00	6,718.22	-132.98	2,320.51	1,600,168.75333	2,269,268.62411	39.45266	-108.08816
7,452.78	0.00	0.00	6,771.00	-132.98	2,320.51	1,600,168.75333	2,269,268.62411	39.45266	-108.08816
Rollins SS									
7,551.60	0.00	0.00	6,869.82	-132.98	2,320.51	1,600,168.75333	2,269,268.62411	39.45266	-108.08816
TD at 7551.60									
7,552.78	0.00	0.00	6,871.00	-132.98	2,320.51	1,600,168.75333	2,269,268.62411	39.45266	-108.08816
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	5,021.00	-132.98	2,320.51	1,600,168.75333	2,269,268.62411	39.45266	-108.08816
- plan hits target center									
- Circle (radius 50.00)									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,407.73	1,298.71	9 5/8"	9.625	13.500	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)	
2,589.43	2,201.00	Top of "G" Sand				
2,720.39	2,301.00	Base of "G" Sand				
4,507.85	3,841.00	Mesaverde				
5,702.78	5,021.00	Approx. Top Gas				
6,972.78	6,291.00	Cameo Coals				
7,452.78	6,771.00	Rollins SS				
7,552.78	6,871.00	TD				

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 442-10 - Slot A13
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
Project:	GV 10-07S-096W	MD Reference:	KELLY BUSHING @ 6174.00usft (Nabors _ (26' RKB) mab)
Site:	MV 5-10 Pad	North Reference:	True
Well:	GM 442-10	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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 3.25
212.31	212.27	-0.79	2.28	Begin Turn 3.25°/100
1,357.73	1,259.35	-31.27	413.59	Hold 40.10° Inc, 93.05° Az
2,928.06	2,460.47	-85.15	1,423.71	Start Drop -1.50°/100
5,601.60	4,921.00	-132.98	2,320.51	Vertical
5,701.60	5,021.00	-132.98	2,320.51	Top Gas
7,551.60	6,871.00	-132.98	2,320.51	TD at 7551.60