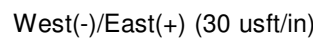
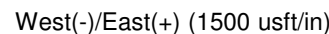
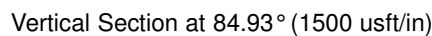




Slot
B01



Azimuths to True North
Magnetic North: 10.03°
Magnetic Field
Strength: 51946.6nT
Dip Angle: 65.61°
Date: 3/3/2014
Model: IGRF2010

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
1321.78	1545.86	57.03	84.93	57.72	650.42	652.98	652.98	Hold 57.03 Inclination
2313.91	3369.19	57.03	84.93	192.96	2174.21	2182.75	2182.75	Start Drop -2.00
4220.00	5720.92	10.00	84.93	304.56	3431.70	3445.19	3445.19	Top Gas
4717.47	6220.92	0.00	0.00	308.41	3475.05	3488.71	3488.71	Vertical
6119.00	7622.45	0.00	0.00	308.41	3475.05	3488.71	3488.71	TD at 7623.45

PICEANCE VLY NAD 83

GV 12-07S-096W

GM 24-12 Pad

GM 444-12 - Slot B01

Wellbore #1

Plan: Design #1 03Mar14 kjs

Standard Planning Report - Geographic

11 March, 2014

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 444-12 - Slot B01
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5165.00usft (H&P 318 (24' RKB) kjs)
Project:	GV 12-07S-096W	MD Reference:	KELLY BUSHING @ 5165.00usft (H&P 318 (24' RKB) kjs)
Site:	GM 24-12 Pad	North Reference:	True
Well:	GM 444-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 03Mar14 kjs		

Project	GV 12-07S-096W, Garfield County CO, GV 12-07W-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	GM 24-12 Pad			
Site Position:		Northing:	1,597,443.66 usft	Latitude: 39.44569
From: Map		Easting:	2,275,817.52 usft	Longitude: -108.06471
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence: -1.618 °

Well	GM 444-12 - Slot B01			
Well Position	+N/-S	0.00 usft	Northing:	1,597,397.91 usft
	+E/-W	0.00 usft	Easting:	2,275,904.18 usft
Position Uncertainty	0.00 usft		Wellhead Elevation:	0.00 usft
			Ground Level:	5,141.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/3/2014	10.028	65.611	51,947

Design	Design #1 03Mar14 kjs			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	84.93

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	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	0.000	
120.00	0.00	0.00	120.00	0.00	0.00	0.00	0.00	0.00	0.000	
1,545.86	57.03	84.93	1,321.78	57.72	650.42	4.00	4.00	0.00	84.928	
3,369.19	57.03	84.93	2,313.91	192.96	2,174.21	0.00	0.00	0.00	0.000	
5,720.92	10.00	84.93	4,220.00	304.56	3,431.70	2.00	-2.00	0.00	180.000	Top Gas (50' Radius)
6,220.92	0.00	0.00	4,717.47	308.41	3,475.05	2.00	-2.00	-16.99	180.000	
7,623.45	0.00	0.00	6,120.00	308.41	3,475.05	0.00	0.00	0.00	0.000	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 444-12 - Slot B01
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5165.00usft (H&P 318 (24' RKB) kjs)
Project:	GV 12-07S-096W	MD Reference:	KELLY BUSHING @ 5165.00usft (H&P 318 (24' RKB) kjs)
Site:	GM 24-12 Pad	North Reference:	True
Well:	GM 444-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 03Mar14 kjs		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	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	1,597,397.91	2,275,904.18	39.44557	-108.06440
100.00	0.00	0.00	100.00	0.00	0.00	1,597,397.91	2,275,904.18	39.44557	-108.06440
120.00	0.00	0.00	120.00	0.00	0.00	1,597,397.91	2,275,904.18	39.44557	-108.06440
Start Build 4.00									
200.00	3.20	84.93	199.96	0.20	2.22	1,597,398.05	2,275,906.41	39.44557	-108.06439
300.00	7.20	84.93	299.53	1.00	11.25	1,597,398.59	2,275,915.46	39.44557	-108.06436
400.00	11.20	84.93	398.22	2.41	27.17	1,597,399.56	2,275,931.41	39.44557	-108.06430
500.00	15.20	84.93	495.56	4.43	49.91	1,597,400.93	2,275,954.20	39.44558	-108.06422
600.00	19.20	84.93	591.07	7.04	79.36	1,597,402.71	2,275,983.71	39.44559	-108.06412
700.00	23.20	84.93	684.28	10.24	115.38	1,597,404.89	2,276,019.80	39.44560	-108.06399
800.00	27.20	84.93	774.74	14.00	157.78	1,597,407.46	2,276,062.29	39.44561	-108.06384
900.00	31.20	84.93	862.02	18.31	206.36	1,597,410.39	2,276,110.97	39.44562	-108.06367
1,000.00	35.20	84.93	945.68	23.15	260.90	1,597,413.69	2,276,165.61	39.44563	-108.06347
1,100.00	39.20	84.93	1,025.32	28.50	321.11	1,597,417.33	2,276,225.95	39.44565	-108.06326
1,185.61	42.62	84.93	1,090.00	33.45	376.94	1,597,420.71	2,276,281.90	39.44566	-108.06306
Top of "G" Sand									
1,200.00	43.20	84.93	1,100.54	34.32	386.70	1,597,421.30	2,276,291.68	39.44566	-108.06303
1,300.00	47.20	84.93	1,170.99	40.59	457.37	1,597,425.58	2,276,362.49	39.44568	-108.06278
1,328.28	48.33	84.93	1,190.00	42.44	478.23	1,597,426.84	2,276,383.39	39.44568	-108.06270
Base of "G" Sand									
1,400.00	51.20	84.93	1,236.32	47.28	532.76	1,597,430.14	2,276,438.04	39.44570	-108.06251
1,500.00	55.20	84.93	1,296.21	54.36	612.50	1,597,434.96	2,276,517.94	39.44572	-108.06223
1,545.86	57.03	84.93	1,321.78	57.72	650.42	1,597,437.25	2,276,555.95	39.44573	-108.06209
Hold 57.03 Inclination									
1,600.00	57.03	84.93	1,351.23	61.74	695.67	1,597,439.99	2,276,601.28	39.44574	-108.06193
1,646.00	57.03	84.93	1,376.26	65.15	734.11	1,597,442.32	2,276,639.80	39.44575	-108.06180
9 5/8"									
1,700.00	57.03	84.93	1,405.65	69.16	779.24	1,597,445.05	2,276,685.03	39.44576	-108.06164
1,800.00	57.03	84.93	1,460.06	76.57	862.81	1,597,450.10	2,276,768.77	39.44578	-108.06134
1,900.00	57.03	84.93	1,514.47	83.99	946.38	1,597,455.16	2,276,852.51	39.44580	-108.06105
2,000.00	57.03	84.93	1,568.89	91.41	1,029.95	1,597,460.21	2,276,936.26	39.44582	-108.06075
2,100.00	57.03	84.93	1,623.30	98.82	1,113.52	1,597,465.27	2,277,020.00	39.44584	-108.06045
2,200.00	57.03	84.93	1,677.71	106.24	1,197.10	1,597,470.32	2,277,103.74	39.44586	-108.06016
2,300.00	57.03	84.93	1,732.13	113.66	1,280.67	1,597,475.38	2,277,187.49	39.44588	-108.05986
2,400.00	57.03	84.93	1,786.54	121.07	1,364.24	1,597,480.43	2,277,271.23	39.44590	-108.05957
2,500.00	57.03	84.93	1,840.95	128.49	1,447.81	1,597,485.49	2,277,354.97	39.44592	-108.05927
2,600.00	57.03	84.93	1,895.37	135.91	1,531.38	1,597,490.54	2,277,438.72	39.44594	-108.05898
2,700.00	57.03	84.93	1,949.78	143.33	1,614.95	1,597,495.60	2,277,522.46	39.44596	-108.05868
2,800.00	57.03	84.93	2,004.20	150.74	1,698.52	1,597,500.65	2,277,606.21	39.44598	-108.05838
2,900.00	57.03	84.93	2,058.61	158.16	1,782.10	1,597,505.71	2,277,689.95	39.44600	-108.05809
3,000.00	57.03	84.93	2,113.02	165.58	1,865.67	1,597,510.76	2,277,773.69	39.44602	-108.05779
3,100.00	57.03	84.93	2,167.44	172.99	1,949.24	1,597,515.82	2,277,857.44	39.44604	-108.05750
3,200.00	57.03	84.93	2,221.85	180.41	2,032.81	1,597,520.87	2,277,941.18	39.44606	-108.05720
3,300.00	57.03	84.93	2,276.26	187.83	2,116.38	1,597,525.92	2,278,024.92	39.44608	-108.05690
3,369.19	57.03	84.93	2,313.91	192.96	2,174.21	1,597,529.42	2,278,082.87	39.44610	-108.05670
Start Drop -2.00									
3,400.00	56.42	84.93	2,330.81	195.24	2,199.86	1,597,530.97	2,278,108.58	39.44610	-108.05661
3,500.00	54.42	84.93	2,387.57	202.51	2,281.87	1,597,535.93	2,278,190.75	39.44612	-108.05632
3,600.00	52.42	84.93	2,447.16	209.61	2,361.85	1,597,540.77	2,278,270.90	39.44614	-108.05603
3,700.00	50.42	84.93	2,509.52	216.52	2,439.71	1,597,545.48	2,278,348.92	39.44616	-108.05576
3,800.00	48.42	84.93	2,574.57	223.24	2,515.36	1,597,550.06	2,278,424.72	39.44618	-108.05549
3,900.00	46.42	84.93	2,642.23	229.74	2,588.70	1,597,554.49	2,278,498.21	39.44620	-108.05523

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well GM 444-12 - Slot B01
Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5165.00usft (H&P 318 (24' RKB) kjs)
Project:	GV 12-07S-096W	MD Reference:	KELLY BUSHING @ 5165.00usft (H&P 318 (24' RKB) kjs)
Site:	GM 24-12 Pad	North Reference:	True
Well:	GM 444-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 03Mar14 kjs		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
4,000.00	44.42	84.93	2,712.42	236.04	2,659.64	1,597,558.79	2,278,569.30	39.44622	-108.05498
4,100.00	42.42	84.93	2,785.05	242.12	2,728.10	1,597,562.93	2,278,637.90	39.44623	-108.05474
4,200.00	40.42	84.93	2,860.04	247.96	2,793.99	1,597,566.91	2,278,703.93	39.44625	-108.05450
4,300.00	38.42	84.93	2,937.29	253.58	2,857.24	1,597,570.74	2,278,767.31	39.44626	-108.05428
4,400.00	36.42	84.93	3,016.71	258.95	2,917.76	1,597,574.40	2,278,827.95	39.44628	-108.05407
4,477.88	34.86	84.93	3,080.00	262.96	2,962.96	1,597,577.13	2,278,873.25	39.44629	-108.05391
Mesaverde									
4,500.00	34.42	84.93	3,098.20	264.07	2,975.49	1,597,577.89	2,278,885.80	39.44629	-108.05386
4,600.00	32.42	84.93	3,181.66	268.94	3,030.34	1,597,581.21	2,278,940.77	39.44631	-108.05367
4,700.00	30.42	84.93	3,266.99	273.55	3,082.26	1,597,584.35	2,278,992.80	39.44632	-108.05348
4,800.00	28.42	84.93	3,354.09	277.89	3,131.19	1,597,587.31	2,279,041.82	39.44633	-108.05331
4,900.00	26.42	84.93	3,442.86	281.96	3,177.05	1,597,590.08	2,279,087.78	39.44634	-108.05315
5,000.00	24.42	84.93	3,533.17	285.75	3,219.80	1,597,592.67	2,279,130.62	39.44635	-108.05300
5,100.00	22.42	84.93	3,624.93	289.27	3,259.39	1,597,595.06	2,279,170.29	39.44636	-108.05286
5,200.00	20.42	84.93	3,718.02	292.50	3,295.76	1,597,597.26	2,279,206.74	39.44637	-108.05273
5,300.00	18.42	84.93	3,812.33	295.44	3,328.88	1,597,599.27	2,279,239.92	39.44638	-108.05261
5,400.00	16.42	84.93	3,907.74	298.08	3,358.69	1,597,601.07	2,279,269.80	39.44639	-108.05250
5,500.00	14.42	84.93	4,004.13	300.43	3,385.18	1,597,602.67	2,279,296.33	39.44639	-108.05241
5,600.00	12.42	84.93	4,101.40	302.48	3,408.29	1,597,604.07	2,279,319.49	39.44640	-108.05233
5,700.00	10.42	84.93	4,199.41	304.23	3,428.01	1,597,605.26	2,279,339.25	39.44640	-108.05226
5,720.92	10.00	84.93	4,220.00	304.56	3,431.70	1,597,605.48	2,279,342.95	39.44640	-108.05225
Top Gas - Approx. Top Gas									
5,800.00	8.42	84.93	4,298.06	305.68	3,444.31	1,597,606.25	2,279,355.59	39.44641	-108.05220
5,900.00	6.42	84.93	4,397.22	306.82	3,457.17	1,597,607.02	2,279,368.47	39.44641	-108.05216
6,000.00	4.42	84.93	4,496.77	307.66	3,466.57	1,597,607.59	2,279,377.90	39.44641	-108.05212
6,100.00	2.42	84.93	4,596.58	308.18	3,472.51	1,597,607.95	2,279,383.85	39.44641	-108.05210
6,200.00	0.42	84.93	4,696.55	308.40	3,474.98	1,597,608.10	2,279,386.32	39.44641	-108.05209
6,220.92	0.00	0.00	4,717.47	308.41	3,475.05	1,597,608.11	2,279,386.40	39.44641	-108.05209
Vertical									
6,300.00	0.00	0.00	4,796.55	308.41	3,475.05	1,597,608.11	2,279,386.40	39.44641	-108.05209
6,400.00	0.00	0.00	4,896.55	308.41	3,475.05	1,597,608.11	2,279,386.40	39.44641	-108.05209
6,500.00	0.00	0.00	4,996.55	308.41	3,475.05	1,597,608.11	2,279,386.40	39.44641	-108.05209
6,600.00	0.00	0.00	5,096.55	308.41	3,475.05	1,597,608.11	2,279,386.40	39.44641	-108.05209
6,700.00	0.00	0.00	5,196.55	308.41	3,475.05	1,597,608.11	2,279,386.40	39.44641	-108.05209
6,800.00	0.00	0.00	5,296.55	308.41	3,475.05	1,597,608.11	2,279,386.40	39.44641	-108.05209
6,900.00	0.00	0.00	5,396.55	308.41	3,475.05	1,597,608.11	2,279,386.40	39.44641	-108.05209
7,000.00	0.00	0.00	5,496.55	308.41	3,475.05	1,597,608.11	2,279,386.40	39.44641	-108.05209
7,063.45	0.00	0.00	5,560.00	308.41	3,475.05	1,597,608.11	2,279,386.40	39.44641	-108.05209
Cameo Coals									
7,100.00	0.00	0.00	5,596.55	308.41	3,475.05	1,597,608.11	2,279,386.40	39.44641	-108.05209
7,200.00	0.00	0.00	5,696.55	308.41	3,475.05	1,597,608.11	2,279,386.40	39.44641	-108.05209
7,300.00	0.00	0.00	5,796.55	308.41	3,475.05	1,597,608.11	2,279,386.40	39.44641	-108.05209
7,400.00	0.00	0.00	5,896.55	308.41	3,475.05	1,597,608.11	2,279,386.40	39.44641	-108.05209
7,500.00	0.00	0.00	5,996.55	308.41	3,475.05	1,597,608.11	2,279,386.40	39.44641	-108.05209
7,523.45	0.00	0.00	6,020.00	308.41	3,475.05	1,597,608.11	2,279,386.40	39.44641	-108.05209
Rollins SS									
7,600.00	0.00	0.00	6,096.55	308.41	3,475.05	1,597,608.11	2,279,386.40	39.44641	-108.05209
7,623.45	0.00	0.00	6,120.00	308.41	3,475.05	1,597,608.11	2,279,386.40	39.44641	-108.05209
TD at 7623.45 - TD									

WPX
Planning Report - Geographic

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Company:	PICEANCE VLY NAD 83	TVD Reference:	KELLY BUSHING @ 5165.00usft (H&P 318 (24' RKB) kjs)
Project:	GV 12-07S-096W	MD Reference:	KELLY BUSHING @ 5165.00usft (H&P 318 (24' RKB) kjs)
Site:	GM 24-12 Pad	North Reference:	True
Well:	GM 444-12	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1 03Mar14 kjs		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
Top Gas (50' Radius) GM	0.00	0.00	4,220.00	308.13	3,474.14	1,597,607.85	2,279,385.48	39.44641	-108.05210
- plan misses target center by 41.96usft at 5727.73usft MD (4226.71 TVD, 304.66 N, 3432.87 E)									
- Circle (radius 50.00)									

Casing Points					
	Measured Depth	Vertical Depth		Casing Diameter	Hole Diameter
	(usft)	(usft)	Name	(in)	(in)
	1,646.00	1,376.26	9 5/8"	9.625	12.250

Formations						
	Measured Depth	Vertical Depth			Dip	Dip Direction
	(usft)	(usft)	Name	Lithology	(°)	(°)
	1,185.61	1,090.00	Top of "G" Sand			
	1,328.28	1,190.00	Base of "G" Sand			
	4,477.88	3,080.00	Mesaverde			
	5,720.92	4,220.00	Approx. Top Gas			
	7,063.45	5,560.00	Cameo Coals			
	7,523.45	6,020.00	Rollins SS			
	7,623.45	6,120.00	TD			

Plan Annotations					
	Measured Depth	Vertical Depth	Local Coordinates		
	(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	Comment
	120.00	120.00	0.00	0.00	Start Build 4.00
	1,545.86	1,321.78	57.72	650.42	Hold 57.03 Inclination
	3,369.19	2,313.91	192.96	2,174.21	Start Drop -2.00
	5,720.92	4,220.00	304.56	3,431.70	Top Gas
	6,220.92	4,717.47	308.41	3,475.05	Vertical
	7,623.45	6,120.00	308.41	3,475.05	TD at 7623.45