



PICEANCE VLY NAD 83

SG 22-07S-096W

Nolte 14-44 Pad

SG 714-44-23-HN1 - Slot B11

Wellbore #1

Plan: Plan #4 15Apr14 kjs

Standard Planning Report - Geographic

15 April, 2014

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well SG 714-44-23-HN1 - Slot B11
Company:	PICEANCE VLY NAD 83	TVD Reference:	WELL @ 5128.0usft (Original Well Elev)
Project:	SG 22-07S-096W	MD Reference:	WELL @ 5128.0usft (Original Well Elev)
Site:	Nolte 14-44 Pad	North Reference:	True
Well:	SG 714-44-23-HN1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #4 15Apr14 kjs		

Project	SG 22-07S-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	Nolte 14-44 Pad			
Site Position:		Northing:	1,592,215.4000 usft	Latitude: 39.43120
From: Map		Easting:	2,273,979.2000 usft	Longitude: -108.07069
Position Uncertainty:	0.0 usft	Slot Radius:	13.200 in	Grid Convergence: -1.62 °

Well	SG 714-44-23-HN1 - Slot B11			
Well Position	+N/-S	0.0 usft	Northing:	1,592,106.2600 usft
	+E/-W	0.0 usft	Easting:	2,273,975.8132 usft
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft
			Ground Level:	5,095.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2005-10	2/27/2014	10.00	65.61	51,983

Design	Plan #4 15Apr14 kjs			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (bearing)
	0.0	0.0	0.0	177.92

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Wellbore:	Wellbore #1		
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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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
120.0	0.00	0.00	120.0	0.0	0.0	0.00	0.00	0.00	0.00	
327.3	4.15	171.00	327.1	-7.4	1.2	2.00	2.00	0.00	171.00	
2,827.3	4.15	171.00	2,820.6	-185.9	29.4	0.00	0.00	0.00	0.00	
3,096.0	4.15	112.78	3,088.7	-199.3	39.9	1.50	0.00	-21.66	-119.05	
4,234.2	4.15	112.78	4,223.9	-231.1	115.8	0.00	0.00	0.00	0.00	
4,510.5	0.00	0.00	4,500.0	-235.0	125.0	1.50	-1.50	0.00	180.00	
8,706.9	0.00	0.00	8,696.4	-235.0	125.0	0.00	0.00	0.00	0.00	
9,913.4	96.51	177.92	9,408.0	-1,031.9	153.9	8.00	8.00	0.00	177.92	
10,882.8	96.51	177.92	9,298.0	-1,994.5	188.8	0.00	0.00	0.00	0.00	IP #2 SG 714-44-25-1
11,104.1	92.09	177.92	9,281.4	-2,214.9	196.8	2.00	-2.00	0.00	-180.00	
11,884.0	92.09	177.92	9,253.0	-2,993.8	225.1	0.00	0.00	0.00	0.00	IP #3 SG 714-44-25-1
11,902.6	91.71	177.92	9,252.4	-3,012.4	225.8	2.00	-2.00	0.00	180.00	
12,884.4	91.71	177.92	9,223.0	-3,993.1	261.4	0.00	0.00	0.00	0.00	IP #4 SG 714-44-25-1
12,958.9	93.20	177.92	9,219.8	-4,067.5	264.1	2.00	2.00	0.00	0.00	
13,886.0	93.20	177.92	9,168.0	-4,992.5	297.6	0.00	0.00	0.00	0.00	IP #5 SG 714-44-25-1
13,897.1	92.98	177.92	9,167.4	-5,003.6	298.0	2.00	-2.00	0.00	179.96	
14,462.5	92.98	177.92	9,138.0	-5,567.9	318.5	0.00	0.00	0.00	0.00	TD / PBHL SG 714-44-25-1

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Well:	SG 714-44-23-HN1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #4 15Apr14 kjs		

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
0.0	0.00	0.00	0.0	0.0	0.0	1,592,106.2600	2,273,975.8132	39.43090	-108.07069
120.0	0.00	0.00	120.0	0.0	0.0	1,592,106.2600	2,273,975.8132	39.43090	-108.07069
Start Build 2.00									
200.0	1.60	171.00	200.0	-1.1	0.2	1,592,105.1524	2,273,975.9567	39.43089	-108.07069
327.3	4.15	171.00	327.1	-7.4	1.2	1,592,098.8265	2,273,976.7759	39.43088	-108.07069
Hold 4.15° Inc, 171° Az									
400.0	4.15	171.00	399.6	-12.6	2.0	1,592,093.6135	2,273,977.4510	39.43086	-108.07069
600.0	4.15	171.00	599.1	-26.9	4.3	1,592,079.2754	2,273,979.3077	39.43082	-108.07068
800.0	4.15	171.00	798.6	-41.2	6.5	1,592,064.9372	2,273,981.1645	39.43078	-108.07067
1,000.0	4.15	171.00	998.1	-55.4	8.8	1,592,050.5990	2,273,983.0213	39.43074	-108.07066
1,200.0	4.15	171.00	1,197.5	-69.7	11.0	1,592,036.2608	2,273,984.8781	39.43070	-108.07065
1,400.0	4.15	171.00	1,397.0	-84.0	13.3	1,592,021.9226	2,273,986.7349	39.43067	-108.07065
1,600.0	4.15	171.00	1,596.5	-98.3	15.6	1,592,007.5844	2,273,988.5917	39.43063	-108.07064
1,707.5	4.15	171.00	1,703.7	-106.0	16.8	1,591,999.8775	2,273,989.5897	39.43061	-108.07063
Base Fort Union									
1,800.0	4.15	171.00	1,796.0	-112.6	17.8	1,591,993.2462	2,273,990.4484	39.43059	-108.07063
1,864.2	4.15	171.00	1,860.0	-117.1	18.6	1,591,988.6435	2,273,991.0445	39.43057	-108.07063
13 3/8"									
2,000.0	4.15	171.00	1,995.4	-126.8	20.1	1,591,978.9081	2,273,992.3052	39.43055	-108.07062
2,200.0	4.15	171.00	2,194.9	-141.1	22.4	1,591,964.5699	2,273,994.1620	39.43051	-108.07061
2,400.0	4.15	171.00	2,394.4	-155.4	24.6	1,591,950.2317	2,273,996.0188	39.43047	-108.07061
2,600.0	4.15	171.00	2,593.9	-169.7	26.9	1,591,935.8935	2,273,997.8756	39.43043	-108.07060
2,606.0	4.15	171.00	2,599.9	-170.1	26.9	1,591,935.4601	2,273,997.9317	39.43043	-108.07060
Mesaverde									
2,800.0	4.15	171.00	2,793.3	-184.0	29.1	1,591,921.5553	2,273,999.7324	39.43039	-108.07059
2,827.3	4.15	171.00	2,820.6	-185.9	29.4	1,591,919.5992	2,273,999.9857	39.43039	-108.07059
Begin 1.5°/100 Turn									
3,000.0	3.67	132.86	2,992.9	-195.8	34.5	1,591,909.5345	2,274,004.7305	39.43036	-108.07057
3,096.0	4.15	112.78	3,088.7	-199.3	39.9	1,591,905.9482	2,274,010.0825	39.43035	-108.07055
Hold 112.78° Az									
3,200.0	4.15	112.78	3,192.4	-202.2	46.9	1,591,902.8426	2,274,016.9281	39.43034	-108.07053
3,400.0	4.15	112.78	3,391.9	-207.8	60.2	1,591,896.8696	2,274,030.0943	39.43033	-108.07048
3,600.0	4.15	112.78	3,591.4	-213.4	73.5	1,591,890.8966	2,274,043.2605	39.43031	-108.07043
3,800.0	4.15	112.78	3,790.8	-219.0	86.8	1,591,884.9236	2,274,056.4266	39.43030	-108.07039
3,959.2	4.15	112.78	3,949.6	-223.4	97.5	1,591,880.1698	2,274,066.9054	39.43028	-108.07035
Approx. Top Gas									
4,000.0	4.15	112.78	3,990.3	-224.6	100.2	1,591,878.9507	2,274,069.5928	39.43028	-108.07034
4,200.0	4.15	112.78	4,189.8	-230.2	113.5	1,591,872.9777	2,274,082.7590	39.43026	-108.07029
4,234.2	4.15	112.78	4,223.9	-231.1	115.8	1,591,871.9575	2,274,085.0076	39.43026	-108.07028
Start Drop -1.50									
4,400.0	1.66	112.78	4,389.5	-234.4	123.5	1,591,868.4894	2,274,092.6524	39.43025	-108.07026
4,510.5	0.00	0.00	4,500.0	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025
Vertical									
4,600.0	0.00	0.00	4,589.5	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025
4,800.0	0.00	0.00	4,789.5	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025
5,000.0	0.00	0.00	4,989.5	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025
5,002.4	0.00	0.00	4,991.9	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025
Cameo Coals									
5,200.0	0.00	0.00	5,189.5	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025
5,400.0	0.00	0.00	5,389.5	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025
5,526.4	0.00	0.00	5,515.9	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025
Rollins SS									
5,600.0	0.00	0.00	5,589.5	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025

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Wellbore:	Wellbore #1		
Design:	Plan #4 15Apr14 kjs		

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	
5,766.4	0.00	0.00	5,755.9	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
Cozzette										
5,800.0	0.00	0.00	5,789.5	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
6,000.0	0.00	0.00	5,989.5	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
6,007.4	0.00	0.00	5,996.9	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
Corcoran										
6,200.0	0.00	0.00	6,189.5	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
6,204.4	0.00	0.00	6,193.9	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
Upper Sego										
6,400.0	0.00	0.00	6,389.5	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
6,550.4	0.00	0.00	6,539.9	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
Lower Sego										
6,600.0	0.00	0.00	6,589.5	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
6,756.4	0.00	0.00	6,745.9	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
Loyd A										
6,800.0	0.00	0.00	6,789.5	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
7,000.0	0.00	0.00	6,989.5	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
7,200.0	0.00	0.00	7,189.5	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
7,340.4	0.00	0.00	7,329.9	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
Castlegate										
7,400.0	0.00	0.00	7,389.5	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
7,591.4	0.00	0.00	7,580.9	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
Castlegate Hot GR										
7,600.0	0.00	0.00	7,589.5	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
7,691.4	0.00	0.00	7,680.9	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
Marapos										
7,800.0	0.00	0.00	7,789.5	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
7,909.4	0.00	0.00	7,898.9	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
Mancos-B										
8,000.0	0.00	0.00	7,989.5	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
8,200.0	0.00	0.00	8,189.5	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
8,400.0	0.00	0.00	8,389.5	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
8,600.0	0.00	0.00	8,589.5	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
8,656.9	0.00	0.00	8,646.4	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
9 5/8"										
8,706.9	0.00	0.00	8,696.4	-235.0	125.0	1,591,867.8288	2,274,094.1086	39.43025	-108.07025	
KOP 8°/100										
8,800.0	7.45	177.92	8,789.2	-241.0	125.2	1,591,861.7910	2,274,094.1568	39.43023	-108.07025	
8,865.7	12.70	177.92	8,853.8	-252.5	125.6	1,591,850.3139	2,274,094.2482	39.43020	-108.07025	
Top Buck Peak										
8,992.6	22.85	177.92	8,974.5	-291.2	127.0	1,591,811.6175	2,274,094.5567	39.43010	-108.07024	
Top Niobrara										
9,000.0	23.45	177.92	8,981.4	-294.1	127.1	1,591,808.7045	2,274,094.5799	39.43009	-108.07024	
9,013.9	24.56	177.92	8,994.0	-299.7	127.3	1,591,803.0590	2,274,094.6249	39.43007	-108.07024	
Niobrara Hot GR Marker										
9,048.5	27.32	177.92	9,025.1	-314.9	127.9	1,591,787.9293	2,274,094.7455	39.43003	-108.07024	
Niobrara Restivity Marker										
9,124.7	33.42	177.92	9,090.9	-353.3	129.3	1,591,749.4148	2,274,095.0525	39.42993	-108.07024	
Niobrara HN2										
9,200.0	39.45	177.92	9,151.4	-398.0	130.9	1,591,704.7146	2,274,095.4088	39.42980	-108.07023	
9,400.0	55.45	177.92	9,286.2	-544.8	136.2	1,591,557.8780	2,274,096.5792	39.42940	-108.07021	

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Wellbore:	Wellbore #1		
Design:	Plan #4 15Apr14 kjs		

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
9,499.4	63.40	177.92	9,336.8	-630.3	139.3	1,591,472.3412	2,274,097.2611	39.42917	-108.07020
LP SG 714-44-23-HN1									
9,530.0	65.84	177.92	9,349.9	-657.8	140.3	1,591,444.7699	2,274,097.4808	39.42909	-108.07020
HN1									
9,600.0	71.45	177.92	9,375.4	-723.0	142.7	1,591,379.5713	2,274,098.0005	39.42891	-108.07019
9,601.8	71.59	177.92	9,375.9	-724.6	142.8	1,591,377.9105	2,274,098.0138	39.42891	-108.07019
Top Horizontal Target									
9,747.0	83.21	177.92	9,407.6	-866.0	147.9	1,591,236.4145	2,274,099.1416	39.42852	-108.07017
HN1 Base									
9,800.0	87.45	177.92	9,411.9	-918.8	149.8	1,591,183.6090	2,274,099.5625	39.42837	-108.07016
9,876.5	93.57	177.92	9,411.2	-995.2	152.6	1,591,107.1398	2,274,100.1721	39.42816	-108.07015
IP #1 SG 714-44-25-HN1									
9,913.4	96.51	177.92	9,408.0	-1,031.9	153.9	1,591,070.4481	2,274,100.4645	39.42806	-108.07015
Landing Pt 96.51° Inc, 177.92° Az									
10,000.0	96.51	177.92	9,398.1	-1,117.9	157.0	1,590,984.3700	2,274,101.1507	39.42783	-108.07014
10,200.0	96.51	177.92	9,375.5	-1,316.5	164.2	1,590,785.6768	2,274,102.7344	39.42728	-108.07011
10,400.0	96.51	177.92	9,352.8	-1,515.1	171.4	1,590,586.9836	2,274,104.3182	39.42674	-108.07009
10,600.0	96.51	177.92	9,330.1	-1,713.7	178.7	1,590,388.2905	2,274,105.9020	39.42619	-108.07006
10,800.0	96.51	177.92	9,307.4	-1,912.3	185.9	1,590,189.5973	2,274,107.4858	39.42565	-108.07004
10,882.8	96.51	177.92	9,298.0	-1,994.5	188.8	1,590,107.3506	2,274,108.1413	39.42542	-108.07002
Begin 2°/100 Drop - IP #2 SG 714-44-25-HN1									
11,000.0	94.17	177.92	9,287.1	-2,111.1	193.1	1,589,990.6646	2,274,109.0714	39.42510	-108.07001
11,104.1	92.09	177.92	9,281.4	-2,214.9	196.8	1,589,886.7347	2,274,109.8999	39.42482	-108.07000
Hold 92.09° Inc									
11,200.0	92.09	177.92	9,277.9	-2,310.7	200.3	1,589,790.9050	2,274,110.6637	39.42455	-108.06998
11,400.0	92.09	177.92	9,270.6	-2,510.5	207.6	1,589,591.0536	2,274,112.2568	39.42400	-108.06996
11,600.0	92.09	177.92	9,263.3	-2,710.2	214.8	1,589,391.2022	2,274,113.8498	39.42346	-108.06993
11,800.0	92.09	177.92	9,256.1	-2,909.9	222.1	1,589,191.3508	2,274,115.4428	39.42291	-108.06991
11,884.0	92.09	177.92	9,253.0	-2,993.8	225.1	1,589,107.4324	2,274,116.1117	39.42268	-108.06990
Begin 2°/100 Drop - IP #3 SG 714-44-25-HN1									
11,902.6	91.71	177.92	9,252.4	-3,012.4	225.8	1,589,088.8118	2,274,116.2602	39.42263	-108.06989
Hold 91.71° Inc									
12,000.0	91.71	177.92	9,249.5	-3,109.7	229.3	1,588,991.4763	2,274,117.0360	39.42236	-108.06988
12,200.0	91.71	177.92	9,243.5	-3,309.5	236.6	1,588,791.5818	2,274,118.6293	39.42181	-108.06986
12,400.0	91.71	177.92	9,237.5	-3,509.2	243.8	1,588,591.6872	2,274,120.2226	39.42126	-108.06983
12,600.0	91.71	177.92	9,231.5	-3,709.0	251.1	1,588,391.7926	2,274,121.8159	39.42071	-108.06980
12,800.0	91.71	177.92	9,225.5	-3,908.8	258.3	1,588,191.8980	2,274,123.4092	39.42017	-108.06978
12,884.4	91.71	177.92	9,223.0	-3,993.1	261.4	1,588,107.5040	2,274,124.0819	39.41993	-108.06977
Begin 2°/100 Build - IP #4 SG 714-44-25-HN1									
12,958.9	93.20	177.92	9,219.8	-4,067.5	264.1	1,588,033.1538	2,274,124.6745	39.41973	-108.06976
Hold 93.2° Inc									
13,000.0	93.20	177.92	9,217.5	-4,108.5	265.5	1,587,992.0866	2,274,125.0018	39.41962	-108.06975
13,200.0	93.20	177.92	9,206.3	-4,308.1	272.8	1,587,792.4150	2,274,126.5934	39.41907	-108.06973
13,400.0	93.20	177.92	9,195.2	-4,507.6	280.0	1,587,592.7433	2,274,128.1850	39.41852	-108.06970
13,600.0	93.20	177.92	9,184.0	-4,707.2	287.3	1,587,393.0716	2,274,129.7766	39.41797	-108.06968
13,800.0	93.20	177.92	9,172.8	-4,906.7	294.5	1,587,193.4000	2,274,131.3682	39.41743	-108.06965
13,886.0	93.20	177.92	9,168.0	-4,992.5	297.6	1,587,107.5857	2,274,132.0523	39.41719	-108.06964
Begin 2°/100 Drop - IP #5 SG 714-44-25-HN1									
13,897.1	92.98	177.92	9,167.4	-5,003.6	298.0	1,587,096.4462	2,274,132.1410	39.41716	-108.06964
Hold 92.98° Inc									
14,000.0	92.98	177.92	9,162.0	-5,106.3	301.7	1,586,993.7055	2,274,132.9597	39.41688	-108.06963
14,200.0	92.98	177.92	9,151.7	-5,305.9	309.0	1,586,793.9919	2,274,134.5510	39.41633	-108.06960
14,400.0	92.98	177.92	9,141.3	-5,505.5	316.2	1,586,594.2782	2,274,136.1424	39.41578	-108.06957

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well SG 714-44-23-HN1 - Slot B11
Company:	PICEANCE VLY NAD 83	TVD Reference:	WELL @ 5128.0usft (Original Well Elev)
Project:	SG 22-07S-096W	MD Reference:	WELL @ 5128.0usft (Original Well Elev)
Site:	Nolte 14-44 Pad	North Reference:	True
Well:	SG 714-44-23-HN1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #4 15Apr14 kjs		

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
14,462.5	92.98	177.92	9,138.0	-5,567.9	318.5	1,586,531.8200	2,274,136.6400	39.41561	-108.06957
TD at 14462.5 - TD / PBHL SG 714-44-23-HN1									

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
TD / PBHL SG 714-44-2 - plan hits target center - Point	0.00	0.00	9,138.0	-5,567.9	318.5	1,586,531.8200	2,274,136.6400	39.41561	-108.06957
IP #5 SG 714-44-25-HN - plan hits target center - Point	0.00	0.00	9,168.0	-4,992.5	297.6	1,587,107.5857	2,274,132.0523	39.41719	-108.06964
IP #4 SG 714-44-25-HN - plan hits target center - Point	0.00	0.00	9,223.0	-3,993.1	261.4	1,588,107.5040	2,274,124.0819	39.41993	-108.06977
IP #3 SG 714-44-25-HN - plan hits target center - Point	0.00	0.00	9,253.0	-2,993.8	225.1	1,589,107.4324	2,274,116.1117	39.42268	-108.06990
IP #2 SG 714-44-25-HN - plan hits target center - Point	0.00	0.00	9,298.0	-1,994.5	188.8	1,590,107.3506	2,274,108.1413	39.42542	-108.07002
IP #1 SG 714-44-25-HN - plan misses target center by 3.2usft at 9876.7usft MD (9411.2 TVD, -995.4 N, 152.6 E) - Point	0.00	0.00	9,408.0	-995.1	152.6	1,591,107.2689	2,274,100.1709	39.42816	-108.07015

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,864.2	1,860.0	13 3/8"	13.375	17.500	
8,656.9	8,646.4	9 5/8"	9.625	12.250	

WPX
Planning Report - Geographic

Database:	COMPASS-PICEANCE	Local Co-ordinate Reference:	Well SG 714-44-23-HN1 - Slot B11
Company:	PICEANCE VLY NAD 83	TVD Reference:	WELL @ 5128.0usft (Original Well Elev)
Project:	SG 22-07S-096W	MD Reference:	WELL @ 5128.0usft (Original Well Elev)
Site:	Nolte 14-44 Pad	North Reference:	True
Well:	SG 714-44-23-HN1	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #4 15Apr14 kjs		

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (bearing)
1,707.5	1,703.7	Base Fort Union		-3.38	177.92
2,606.0	2,599.9	Mesaverde		-3.38	177.92
3,959.2	3,949.6	Approx. Top Gas		-3.38	177.92
5,002.4	4,991.9	Cameo Coals		-3.38	177.92
5,526.4	5,515.9	Rollins SS		-3.38	177.92
5,766.4	5,755.9	Cozzette		-3.38	177.92
6,007.4	5,996.9	Corcoran		-3.38	177.92
6,204.4	6,193.9	Upper Sego		-3.38	177.92
6,550.4	6,539.9	Lower Sego		-3.38	177.92
6,756.4	6,745.9	Loyd A		-3.38	177.92
7,340.4	7,329.9	Castlegate		-3.38	177.92
7,591.4	7,580.9	Castlegate Hot GR		-3.38	177.92
7,691.4	7,680.9	Marapos		-3.38	177.92
7,909.4	7,898.9	Mancos-B		-3.38	177.92
8,865.7	8,853.8	Top Buck Peak		-3.38	177.92
8,992.6	8,974.5	Top Niobrara		-3.38	177.92
9,013.9	8,994.0	Niobrara Hot GR Marker		-3.38	177.92
9,048.5	9,025.1	Niobrara Restivity Marker		-3.38	177.92
9,124.7	9,090.9	Niobrara HN2		-3.38	177.92
9,530.0	9,349.9	HN1		-3.38	177.92
9,601.8	9,375.9	Top Horizontal Target		-3.38	177.92
9,747.0	9,407.6	HN1 Base		-3.38	177.92

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
120.0	120.0	0.0	0.0	Start Build 2.00
327.3	327.1	-7.4	1.2	Hold 4.15° Inc, 171° Az
2,827.3	2,820.6	-185.9	29.4	Begin 1.5°/100 Turn
3,096.0	3,088.7	-199.3	39.9	Hold 112.78° Az
4,234.2	4,223.9	-231.1	115.8	Start Drop -1.50
4,510.5	4,500.0	-235.0	125.0	Vertical
8,706.9	8,696.4	-235.0	125.0	KOP 8°/100
9,913.4	9,408.0	-1,031.9	153.9	Landing Pt 96.51° Inc, 177.92° Az
10,882.8	9,298.0	-1,994.5	188.8	Begin 2°/100 Drop
11,104.1	9,281.4	-2,214.9	196.8	Hold 92.09° Inc
11,884.0	9,253.0	-2,993.8	225.1	Begin 2°/100 Drop
11,902.6	9,252.4	-3,012.4	225.8	Hold 91.71° Inc
12,884.4	9,223.0	-3,993.1	261.4	Begin 2°/100 Build
12,958.9	9,219.8	-4,067.5	264.1	Hold 93.2° Inc
13,886.0	9,168.0	-4,992.5	297.6	Begin 2°/100 Drop
13,897.1	9,167.4	-5,003.6	298.0	Hold 92.98° Inc
14,462.5	9,138.0	-5,567.9	318.5	TD at 14462.5