

Deviation Summary

PICEANCE VLY

1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well/Wellbore Information

Well	SG 311-27	Wellbore No.	0
Wellbore Legal Name	SG 311-27	Common Wellbore Name	SG 311-27
Project	SG 27-07S-096W	Site	SG 21-27 Pad
Vertical Section Azimuth	274.13 (°)	North reference	
Origin N/S		Origin E/W	
Spud date	1/11/2014	UWI	SG 311-27
Active datum	KB @5,283.0ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	
Date Started	1/11/2014	Ended	
Tool Name	MWD	Engineer	

2.1.1 Tie On Point

MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)
9.0	0.00	0.00	8.99	0.00	0.00

2.1.2 Survey Stations

Date	Type	MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. sec. (ft)	DLS (°/100usft)	Build Rate (°/100usft)	Turn (°/100usft)	Tface (°)
1/11/2014	Tie On	9.0	0.00	0.00	8.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1/11/2014	NORMAL	82.0	0.00	250.84	81.99	0.00	0.00	0.00	0.00	0.00	0.00	250.84
	NORMAL	175.0	2.11	268.33	174.97	-0.05	-1.71	1.70	2.27	2.27	0.00	268.33
	NORMAL	267.0	4.22	267.71	266.82	-0.23	-6.79	6.75	2.29	2.29	-0.67	358.76
	NORMAL	358.0	6.51	271.32	357.42	-0.25	-15.29	15.23	2.54	2.52	3.97	10.19
	NORMAL	450.0	8.97	272.64	448.57	0.20	-27.67	27.61	2.68	2.67	-1.43	4.79
	NORMAL	541.0	12.40	276.24	537.98	1.59	-44.48	44.48	3.84	3.77	3.96	12.79
	NORMAL	615.0	14.68	277.60	609.92	3.69	-61.67	61.78	3.11	3.08	1.84	8.61
	NORMAL	705.0	17.23	275.22	696.45	6.42	-86.25	86.49	2.92	2.83	-2.64	344.46
	NORMAL	796.0	18.91	272.59	782.96	8.31	-114.41	114.71	2.05	1.85	-2.89	332.84
1/12/2014	NORMAL	878.0	21.54	273.73	859.91	9.89	-142.71	143.05	3.24	3.21	1.39	9.06
	NORMAL	968.0	24.64	275.71	942.69	12.83	-177.88	178.34	3.55	3.44	2.20	14.98
	NORMAL	1,063.0	28.07	274.71	1,027.80	16.64	-219.87	220.50	3.64	3.61	-1.05	352.18
	NORMAL	1,158.0	31.32	273.98	1,110.32	20.19	-266.79	267.55	3.44	3.42	-0.77	353.33
	NORMAL	1,254.0	34.38	273.55	1,190.96	23.60	-318.75	319.62	3.20	3.19	-0.45	355.46
	NORMAL	1,349.0	37.64	274.08	1,267.79	27.32	-374.47	375.46	3.45	3.43	0.56	5.68
	NORMAL	1,444.0	40.36	273.64	1,341.62	31.34	-434.11	435.24	2.88	2.86	-0.46	354.02
	NORMAL	1,539.0	42.38	274.08	1,412.91	35.57	-496.75	498.02	2.15	2.13	0.46	8.36
	NORMAL	1,601.0	43.09	274.08	1,458.44	38.57	-538.72	540.10	1.15	1.15	0.00	0.00
1/13/2014	NORMAL	1,726.0	43.12	272.45	1,549.71	43.43	-623.99	625.50	0.89	0.02	-1.30	270.95
	NORMAL	1,821.0	42.21	272.50	1,619.57	46.21	-688.31	689.85	0.96	-0.96	0.05	177.89

2.1.2 Survey Stations (Continued)

Date	Type	MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. sec. (ft)	DLS (°/100usft)	Build Rate (°/100usft)	Turn (°/100usft)	Tface (°)
1/13/2014	NORMAL	1,916.0	42.85	273.38	1,689.57	49.51	-752.45	754.06	0.92	0.67	0.93	43.23
	NORMAL	2,010.0	43.53	273.38	1,758.11	53.30	-816.67	818.39	0.72	0.72	0.00	0.00
	NORMAL	2,105.0	42.82	275.93	1,827.39	58.57	-881.45	883.37	1.98	-0.75	2.68	113.07
	NORMAL	2,200.0	42.47	275.14	1,897.27	64.77	-945.50	947.71	0.67	-0.37	-0.83	236.53
1/14/2014	NORMAL	2,295.0	42.47	274.70	1,967.35	70.28	-1,009.41	1,011.85	0.31	0.00	-0.46	269.84
	NORMAL	2,389.0	42.30	274.26	2,036.78	75.23	-1,072.58	1,075.22	0.36	-0.18	-0.47	240.02
	NORMAL	2,484.0	40.98	273.38	2,107.78	79.44	-1,135.56	1,138.33	1.52	-1.39	-0.93	203.56
	NORMAL	2,579.0	39.48	274.43	2,180.30	83.61	-1,196.77	1,199.69	1.73	-1.58	1.11	156.07
	NORMAL	2,674.0	36.40	272.94	2,255.22	87.39	-1,255.05	1,258.08	3.38	-3.24	-1.57	195.98
	NORMAL	2,769.0	34.21	273.03	2,332.74	90.24	-1,309.88	1,312.97	2.31	-2.31	0.09	178.68
	NORMAL	2,863.0	31.83	274.70	2,411.55	93.67	-1,360.98	1,364.19	2.71	-2.53	1.78	159.77
	NORMAL	2,958.0	30.25	274.26	2,492.95	97.50	-1,409.81	1,413.17	1.68	-1.66	-0.46	187.98
	NORMAL	3,053.0	28.14	274.08	2,575.88	100.87	-1,456.02	1,459.51	2.22	-2.22	-0.19	182.30
	NORMAL	3,148.0	26.29	275.57	2,660.36	104.51	-1,499.31	1,502.95	2.08	-1.95	1.57	160.44
	NORMAL	3,243.0	24.53	273.55	2,746.17	107.77	-1,539.94	1,543.70	2.06	-1.85	-2.13	205.31
	NORMAL	3,338.0	23.30	274.61	2,833.01	110.51	-1,578.35	1,582.21	1.37	-1.29	1.12	161.23
	NORMAL	3,432.0	21.68	275.72	2,919.86	113.73	-1,614.16	1,618.16	1.78	-1.72	1.18	165.83
	NORMAL	3,527.0	19.52	277.68	3,008.78	117.60	-1,647.35	1,651.55	2.39	-2.27	2.06	163.21
	NORMAL	3,622.0	18.76	277.42	3,098.53	121.70	-1,678.23	1,682.64	0.81	-0.80	-0.27	186.28
	NORMAL	3,717.0	17.86	279.28	3,188.72	126.02	-1,707.76	1,712.40	1.13	-0.95	1.96	147.89
NORMAL	3,812.0	15.74	276.98	3,279.66	129.93	-1,734.93	1,739.78	2.34	-2.23	-2.42	196.31	
NORMAL	3,907.0	13.10	276.28	3,371.66	132.68	-1,758.42	1,763.41	2.78	-2.78	-0.74	183.44	
NORMAL	4,002.0	11.27	277.24	3,464.51	135.02	-1,778.34	1,783.44	1.94	-1.93	1.01	174.15	
NORMAL	4,096.0	9.40	277.72	3,556.98	137.21	-1,795.06	1,800.28	1.99	-1.99	0.51	177.60	
NORMAL	4,191.0	8.34	282.52	3,650.85	139.75	-1,809.47	1,814.84	1.36	-1.12	5.05	147.43	
NORMAL	4,286.0	6.68	282.17	3,745.03	142.41	-1,821.60	1,827.12	1.75	-1.75	-0.37	181.41	
NORMAL	4,380.0	3.96	286.03	3,838.62	144.46	-1,830.06	1,835.72	2.92	-2.89	4.11	174.42	
NORMAL	4,475.0	1.06	316.88	3,933.52	146.00	-1,833.82	1,839.57	3.26	-3.05	32.47	169.89	
NORMAL	4,570.0	0.44	106.39	4,028.51	146.54	-1,834.07	1,839.86	1.53	-0.65	157.38	171.18	
NORMAL	4,665.0	0.33	115.39	4,123.51	146.32	-1,833.47	1,839.25	0.13	-0.12	9.47	155.65	
NORMAL	4,760.0	0.96	139.53	4,218.51	145.60	-1,832.71	1,838.44	0.71	0.66	25.41	35.72	
NORMAL	4,854.0	0.97	126.25	4,312.49	144.53	-1,831.56	1,837.21	0.24	0.01	-14.13	265.91	
NORMAL	4,949.0	1.11	146.76	4,407.48	143.29	-1,830.40	1,835.97	0.42	0.15	21.59	79.85	
NORMAL	5,044.0	1.47	141.84	4,502.45	141.56	-1,829.15	1,834.59	0.40	0.38	-5.18	340.43	
1/15/2014	NORMAL	5,139.0	1.23	131.17	4,597.43	139.93	-1,827.63	1,832.96	0.36	-0.25	-11.23	221.08
	NORMAL	5,234.0	0.44	177.58	4,692.42	138.89	-1,826.84	1,832.10	1.03	-0.83	48.85	161.02
	NORMAL	5,328.0	0.53	143.56	4,786.42	138.18	-1,826.57	1,831.78	0.32	0.10	-36.19	269.86
	NORMAL	5,423.0	1.23	129.68	4,881.40	137.18	-1,825.52	1,830.66	0.76	0.74	-14.61	336.04
	NORMAL	5,518.0	1.77	124.69	4,976.37	135.69	-1,823.53	1,828.57	0.58	0.57	-5.25	343.90
	NORMAL	5,613.0	2.08	126.45	5,071.32	133.83	-1,820.94	1,825.85	0.33	0.33	1.85	11.68
	NORMAL	5,707.0	1.95	139.31	5,165.26	131.61	-1,818.52	1,823.28	0.50	-0.14	13.68	112.40
	NORMAL	5,756.0	2.01	138.04	5,214.23	130.34	-1,817.41	1,822.07	0.15	0.12	-2.59	323.19
1/16/2014	NORMAL	5,820.0	2.01	138.04	5,278.18	128.67	-1,815.91	1,820.46	0.00	0.00	0.00	0.00