

1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well Information

Well	SG 13-27	Wellbore No.	1
Well Name	SG 13-27	Common Name	SG 13-27
Project	SG 27-07S-096W	Site	SG 24-27 Pad
Vertical Section	300.50 (°)	North Reference	True
Azimuth		Origin E/W	
Origin N/S		UWI	SG 13-27
Spud Date	5/5/2012		
Active Datum	KB @5,038.0ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	Scientific Drilling
Date Started	5/5/2012	Ended	
Tool Name	MWD	Engineer	

2.1.1 Tie On Point

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)
0.0	0.00	0.00	0.00	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 (°/100ft)	Build Rate (°/100ft)	Turn (°/100ft)	TFace (°)
5/5/2012	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/5/2012	NORMAL	73.0	0.00	205.84	73.00	0.00	0.00	0.00	0.00	0.00	0.00	205.84
	NORMAL	168.0	2.11	306.91	167.98	1.05	-1.40	1.74	2.22	2.22	0.00	306.91
5/6/2012	NORMAL	259.0	6.25	295.75	258.72	4.21	-7.20	8.34	4.62	4.55	-12.26	343.28
	NORMAL	350.0	10.21	295.40	348.76	9.82	-18.95	21.32	4.35	4.35	-0.38	359.10
	NORMAL	441.0	14.08	303.13	437.71	19.34	-35.52	40.42	4.60	4.25	8.49	26.61
	NORMAL	532.0	17.24	302.96	525.33	32.73	-56.11	64.95	3.47	3.47	-0.19	359.09
	NORMAL	624.0	20.23	300.67	612.44	48.26	-81.23	94.49	3.35	3.25	-2.49	345.09
	NORMAL	694.0	22.78	296.69	677.57	60.52	-103.75	120.12	4.20	3.64	-5.69	328.36
	NORMAL	786.0	27.12	302.42	760.97	79.78	-137.39	158.87	5.39	4.72	6.23	31.74
	NORMAL	876.0	31.09	302.88	839.59	103.40	-174.24	202.61	4.42	4.41	0.51	3.43
	NORMAL	968.0	31.68	299.31	918.14	128.12	-215.25	250.50	2.12	0.64	-3.88	286.08
	NORMAL	1,063.0	35.20	299.50	997.40	153.83	-260.85	302.83	3.71	3.71	0.20	1.78
	NORMAL	1,159.0	38.91	299.21	1,074.00	182.18	-311.27	360.66	3.87	3.86	-0.30	357.19
	NORMAL	1,254.0	43.28	299.28	1,145.58	212.68	-365.74	423.07	4.60	4.60	0.07	0.63
	NORMAL	1,349.0	50.39	301.01	1,210.53	247.50	-425.58	492.31	7.60	7.48	1.82	10.66
	NORMAL	1,445.0	53.44	300.16	1,269.74	285.93	-490.63	567.86	3.25	3.18	-0.89	347.36
	NORMAL	1,505.0	54.33	298.89	1,305.10	309.82	-532.81	616.32	2.26	1.48	-2.12	310.57
5/7/2012	NORMAL	1,632.0	54.58	298.78	1,378.93	359.65	-623.33	719.62	0.21	0.20	-0.09	340.27
	NORMAL	1,727.0	53.75	300.08	1,434.55	397.49	-690.41	796.62	1.41	-0.87	1.37	128.60
	NORMAL	1,822.0	53.01	301.86	1,491.22	436.72	-755.78	872.85	1.69	-0.78	1.87	117.91

2.1.2 Survey Stations (Continued)

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLS (°/100ft)	Build Rate (°/100ft)	Turn (°/100ft)	TFace (°)
5/7/2012	NORMAL	1,917.0	51.81	300.83	1,549.17	475.88	-820.07	948.12	1.53	-1.26	-1.08	213.91
	NORMAL	2,013.0	51.24	301.00	1,608.90	514.49	-884.55	1,023.28	0.61	-0.59	0.18	166.91
	NORMAL	2,108.0	50.00	300.79	1,669.18	552.20	-947.56	1,096.70	1.32	-1.31	-0.22	187.39
	NORMAL	2,203.0	48.47	300.67	1,731.20	588.96	-1,009.40	1,168.65	1.61	-1.61	-0.13	183.36
5/8/2012	NORMAL	2,298.0	45.04	301.00	1,796.28	624.42	-1,068.82	1,237.84	3.62	-3.61	0.35	176.10
	NORMAL	2,392.0	40.20	302.49	1,865.43	657.87	-1,122.94	1,301.46	5.26	-5.15	1.59	168.77
	NORMAL	2,486.0	38.42	300.76	1,938.16	689.11	-1,173.64	1,360.99	2.22	-1.89	-1.84	210.96
	NORMAL	2,582.0	36.14	301.55	2,014.54	719.18	-1,223.40	1,419.13	2.43	-2.38	0.82	168.46
	NORMAL	2,677.0	35.70	301.74	2,091.48	748.42	-1,270.84	1,474.85	0.48	-0.46	0.20	165.86
	NORMAL	2,772.0	34.60	300.46	2,169.15	776.67	-1,317.67	1,529.53	1.39	-1.16	-1.35	213.30
	NORMAL	2,868.0	34.72	300.83	2,248.12	804.50	-1,364.64	1,584.13	0.25	0.12	0.39	60.46
	NORMAL	2,963.0	32.21	301.12	2,327.36	831.46	-1,409.55	1,636.51	2.65	-2.64	0.31	176.48
	NORMAL	3,058.0	29.82	298.80	2,408.78	855.93	-1,451.94	1,685.44	2.81	-2.52	-2.44	205.58
	NORMAL	3,153.0	26.27	298.71	2,492.61	877.41	-1,491.09	1,730.08	3.74	-3.74	-0.09	180.64
	NORMAL	3,248.0	24.94	300.68	2,578.28	897.73	-1,526.75	1,771.13	1.66	-1.40	2.07	148.26
	NORMAL	3,343.0	23.36	300.83	2,664.96	917.60	-1,560.15	1,809.99	1.66	-1.66	0.16	177.84
	NORMAL	3,439.0	21.46	302.05	2,753.71	936.68	-1,591.38	1,846.58	2.04	-1.98	1.27	166.81
	NORMAL	3,534.0	20.11	304.02	2,842.53	955.04	-1,619.65	1,880.26	1.60	-1.42	2.07	153.54
	NORMAL	3,629.0	19.04	302.87	2,932.03	972.59	-1,646.20	1,912.04	1.20	-1.13	-1.21	199.26
	NORMAL	3,724.0	18.37	302.10	3,022.02	988.95	-1,671.90	1,942.49	0.75	-0.71	-0.81	199.87
	NORMAL	3,820.0	16.07	299.05	3,113.71	1,003.45	-1,696.33	1,970.90	2.57	-2.40	-3.18	199.98
	NORMAL	3,915.0	13.46	295.31	3,205.57	1,014.56	-1,717.83	1,995.06	2.92	-2.75	-3.94	198.26
	NORMAL	4,010.0	11.15	298.32	3,298.38	1,023.64	-1,735.91	2,015.25	2.52	-2.43	3.17	165.95
	NORMAL	4,106.0	9.82	296.34	3,392.77	1,031.68	-1,751.42	2,032.69	1.44	-1.39	-2.06	194.19
5/9/2012	NORMAL	4,201.0	7.19	299.44	3,486.72	1,038.20	-1,763.86	2,046.72	2.81	-2.77	3.26	171.64
	NORMAL	4,296.0	4.71	298.67	3,581.20	1,042.99	-1,772.46	2,056.56	2.61	-2.61	-0.81	181.46
	NORMAL	4,391.0	2.22	316.53	3,676.02	1,046.20	-1,777.15	2,062.23	2.83	-2.62	18.80	165.31
	NORMAL	4,486.0	0.99	108.67	3,771.00	1,047.27	-1,777.64	2,063.20	3.29	-1.29	160.15	171.50
	NORMAL	4,581.0	2.18	125.23	3,865.97	1,045.97	-1,775.38	2,060.59	1.33	1.25	17.43	29.46
	NORMAL	4,676.0	2.61	118.27	3,960.88	1,043.90	-1,772.00	2,056.63	0.55	0.45	-7.33	322.42
	NORMAL	4,772.0	1.20	122.23	4,056.83	1,042.33	-1,769.23	2,053.44	1.47	-1.47	4.13	176.64
	NORMAL	4,867.0	1.00	125.95	4,151.81	1,041.31	-1,767.72	2,051.62	0.22	-0.21	3.92	162.20
	NORMAL	4,962.0	1.08	122.26	4,246.80	1,040.35	-1,766.29	2,049.90	0.11	0.08	-3.88	318.21
	NORMAL	5,058.0	1.29	112.92	4,342.77	1,039.44	-1,764.53	2,047.93	0.30	0.22	-9.73	312.66
	NORMAL	5,153.0	1.30	120.77	4,437.75	1,038.48	-1,762.62	2,045.79	0.19	0.01	8.26	90.70
	NORMAL	5,248.0	1.42	127.92	4,532.72	1,037.20	-1,760.76	2,043.54	0.22	0.13	7.53	58.34
	NORMAL	5,343.0	1.66	129.96	4,627.69	1,035.59	-1,758.78	2,041.02	0.26	0.25	2.15	13.89
	NORMAL	5,439.0	1.66	139.58	4,723.65	1,033.64	-1,756.81	2,038.33	0.29	0.00	10.02	94.81
	NORMAL	5,534.0	1.36	148.98	4,818.62	1,031.63	-1,755.34	2,036.04	0.41	-0.32	9.89	145.09
	NORMAL	5,647.0	1.31	164.23	4,931.59	1,029.24	-1,754.29	2,033.93	0.32	-0.04	13.50	105.59
	NORMAL	5,712.0	1.28	173.00	4,996.57	1,027.80	-1,754.00	2,032.95	0.31	-0.05	13.49	102.97
5/10/2012	NORMAL	5,647.0	1.31	164.23	4,931.59	1,029.24	-1,754.30	2,033.93	0.32	-0.04	13.50	105.59
	NORMAL	5,712.0	1.28	173.00	4,996.57	1,027.80	-1,754.00	2,032.95	0.31	-0.05	13.49	102.97