

1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well Information

Well	SG 533-27	Wellbore No.	1
Well Name	SG 533-27	Common Name	SG 533-27
Project	SG 27-07S-096W	Site	SG 24-27 Pad
Vertical Section Azimuth	71.58 (°)	North Reference	True
Origin N/S		Origin E/W	
Spud Date	5/11/2012	UWI	SG 533-27
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	5/11/2012	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 (°)
5/11/2012	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/11/2012	NORMAL	76.0	0.09	235.72	76.00	-0.03	-0.05	-0.06	0.12	0.12	0.00	235.72
	NORMAL	168.0	2.90	67.68	167.96	0.81	2.04	2.20	3.25	3.05	-182.65	191.60
	NORMAL	259.0	5.54	72.25	258.71	3.02	8.36	8.89	2.92	2.90	5.02	9.54
	NORMAL	350.0	7.92	74.27	349.07	6.06	18.58	19.54	2.63	2.62	2.22	6.68
	NORMAL	421.0	10.11	73.64	419.19	9.14	29.27	30.66	3.09	3.08	-0.89	357.11
	NORMAL	512.0	12.60	71.92	508.40	14.48	46.37	48.57	2.76	2.74	-1.89	351.41
	NORMAL	604.0	14.69	67.78	597.81	22.00	66.71	70.24	2.51	2.27	-4.50	332.93
	NORMAL	694.0	16.97	71.58	684.39	30.47	89.74	94.77	2.78	2.53	4.22	26.29
	NORMAL	786.0	20.52	72.14	771.49	39.66	117.83	124.33	3.86	3.86	0.61	3.17
	NORMAL	876.0	24.59	71.13	854.59	50.56	150.58	158.84	4.54	4.52	-1.12	354.09
	NORMAL	968.0	25.94	69.73	937.79	63.72	187.57	198.10	1.60	1.47	-1.52	335.49
	NORMAL	1,063.0	27.97	70.02	1,022.47	78.53	228.00	241.14	2.14	2.14	0.31	3.83
	NORMAL	1,159.0	30.15	71.01	1,106.38	94.07	271.96	287.75	2.33	2.27	1.03	12.87
5/12/2012	NORMAL	1,254.0	35.09	73.38	1,186.37	109.66	320.72	338.94	5.37	5.20	2.49	15.51
	NORMAL	1,349.0	37.11	71.35	1,263.13	126.63	374.05	394.90	2.47	2.13	-2.14	328.55
	NORMAL	1,457.0	38.95	71.18	1,348.20	148.01	437.05	461.43	1.71	1.70	-0.16	356.68
5/13/2012	NORMAL	1,568.0	39.03	73.88	1,434.48	168.97	503.66	531.24	1.53	0.07	2.43	88.35
	NORMAL	1,631.0	37.34	75.95	1,484.00	179.11	541.25	570.12	3.36	-2.68	3.29	143.68
	NORMAL	1,726.0	35.82	74.93	1,560.28	193.34	596.05	626.60	1.72	-1.60	-1.07	201.39
	NORMAL	1,821.0	33.74	74.48	1,638.31	207.62	648.32	680.71	2.21	-2.19	-0.47	186.85

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 (°)
5/13/2012	NORMAL	1,916.0	32.24	72.81	1,717.99	222.17	697.95	732.39	1.85	-1.58	-1.76	210.53
	NORMAL	2,012.0	29.56	71.44	1,800.36	237.28	744.87	781.68	2.89	-2.79	-1.43	194.12
	NORMAL	2,107.0	27.50	69.95	1,883.82	252.26	787.69	827.05	2.29	-2.17	-1.57	198.41
	NORMAL	2,202.0	24.90	69.32	1,969.05	266.85	827.02	868.96	2.75	-2.74	-0.66	185.82
	NORMAL	2,297.0	23.70	69.26	2,055.63	280.67	863.58	908.02	1.26	-1.26	-0.06	181.15
	NORMAL	2,391.0	23.07	67.68	2,141.91	294.36	898.29	945.28	0.95	-0.67	-1.68	224.15
	NORMAL	2,486.0	21.09	69.02	2,229.94	307.55	931.47	980.92	2.15	-2.08	1.41	166.35
	NORMAL	2,581.0	19.30	68.99	2,319.10	319.30	962.09	1,013.69	1.88	-1.88	-0.03	180.32
	NORMAL	2,676.0	17.10	69.02	2,409.34	329.93	989.79	1,043.33	2.32	-2.32	0.03	179.77
	NORMAL	2,771.0	15.60	70.24	2,500.49	339.25	1,014.85	1,070.05	1.62	-1.58	1.28	167.69
	NORMAL	2,867.0	13.69	69.90	2,593.37	347.51	1,037.67	1,094.31	1.99	-1.99	-0.35	182.41
	NORMAL	2,962.0	12.22	69.98	2,685.95	354.82	1,057.67	1,115.60	1.55	-1.55	0.08	179.34
	NORMAL	3,057.0	11.07	72.49	2,778.99	361.01	1,075.82	1,134.77	1.32	-1.21	2.64	157.45
	NORMAL	3,153.0	9.50	72.58	2,873.45	366.15	1,092.17	1,151.91	1.64	-1.64	0.09	179.46
	NORMAL	3,247.0	7.02	74.97	2,966.47	369.96	1,105.12	1,165.40	2.66	-2.64	2.54	173.30
	NORMAL	3,342.0	3.83	71.57	3,061.03	372.47	1,113.74	1,174.37	3.37	-3.36	-3.58	184.06
5/14/2012	NORMAL	3,438.0	3.15	62.15	3,156.85	374.72	1,119.11	1,180.18	0.92	-0.71	-9.81	215.50
	NORMAL	3,533.0	1.57	52.79	3,251.77	376.73	1,122.46	1,183.99	1.71	-1.66	-9.85	189.06
	NORMAL	3,628.0	0.50	251.37	3,346.76	377.38	1,123.10	1,184.80	2.16	-1.13	-169.92	184.46
	NORMAL	3,723.0	0.70	268.44	3,441.75	377.23	1,122.13	1,183.83	0.28	0.21	17.97	50.54
	NORMAL	3,819.0	0.45	320.03	3,537.75	377.51	1,121.30	1,183.13	0.57	-0.26	53.74	140.01
	NORMAL	3,914.0	0.74	292.70	3,632.74	378.03	1,120.49	1,182.54	0.42	0.31	-28.77	301.40
	NORMAL	4,009.0	0.55	5.84	3,727.74	378.72	1,119.97	1,182.26	0.82	-0.20	76.99	137.80
	NORMAL	4,105.0	0.62	43.72	3,823.73	379.55	1,120.38	1,182.91	0.40	0.07	39.46	99.05
	NORMAL	4,200.0	0.68	58.78	3,918.73	380.22	1,121.22	1,183.91	0.19	0.06	15.85	78.28
	NORMAL	4,295.0	0.75	70.73	4,013.72	380.71	1,122.29	1,185.08	0.17	0.07	12.58	70.91
	NORMAL	4,390.0	0.93	76.73	4,108.71	381.10	1,123.62	1,186.47	0.21	0.19	6.32	29.06
	NORMAL	4,485.0	0.26	85.15	4,203.70	381.29	1,124.59	1,187.45	0.71	-0.71	8.86	176.76
	NORMAL	4,580.0	0.20	0.90	4,298.70	381.47	1,124.81	1,187.72	0.33	-0.06	-88.68	219.67
	NORMAL	4,675.0	0.45	307.09	4,393.70	381.87	1,124.51	1,187.56	0.39	0.26	-56.64	280.26
	NORMAL	4,770.0	0.28	298.73	4,488.70	382.20	1,124.01	1,187.19	0.19	-0.18	-8.80	193.24
	NORMAL	4,866.0	0.41	250.29	4,584.70	382.20	1,123.48	1,186.69	0.32	0.14	-50.46	268.51
5/15/2012	NORMAL	4,961.0	0.78	245.83	4,679.69	381.82	1,122.57	1,185.70	0.39	0.39	-4.69	350.63
	NORMAL	5,057.0	1.35	236.76	4,775.68	380.93	1,121.03	1,183.96	0.62	0.59	-9.45	338.96
	NORMAL	5,152.0	1.95	235.94	4,870.64	379.41	1,118.75	1,181.32	0.63	0.63	-0.86	357.34
	NORMAL	5,215.0	2.09	235.33	4,933.60	378.16	1,116.92	1,179.19	0.22	0.22	-0.97	350.96
	NORMAL	5,280.0	2.09	235.33	4,998.55	376.81	1,114.97	1,176.91	0.00	0.00	0.00	0.00