

1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well Information

Well	SG 433-27	Wellbore No.	
Well Name	SG 24-27 Pad	Common Name	SG 24-27 Pad
Project	SG 27-07S-096W	Site	SG 24-27 Pad
Vertical Section Azimuth	58.65 (°)	North Reference	True
Origin N/S		Origin E/W	
Spud Date	4/23/2012	UWI	SG 24-27 Pad
Active Datum	KB @5,038.0ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	
Date Started	4/23/2012	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

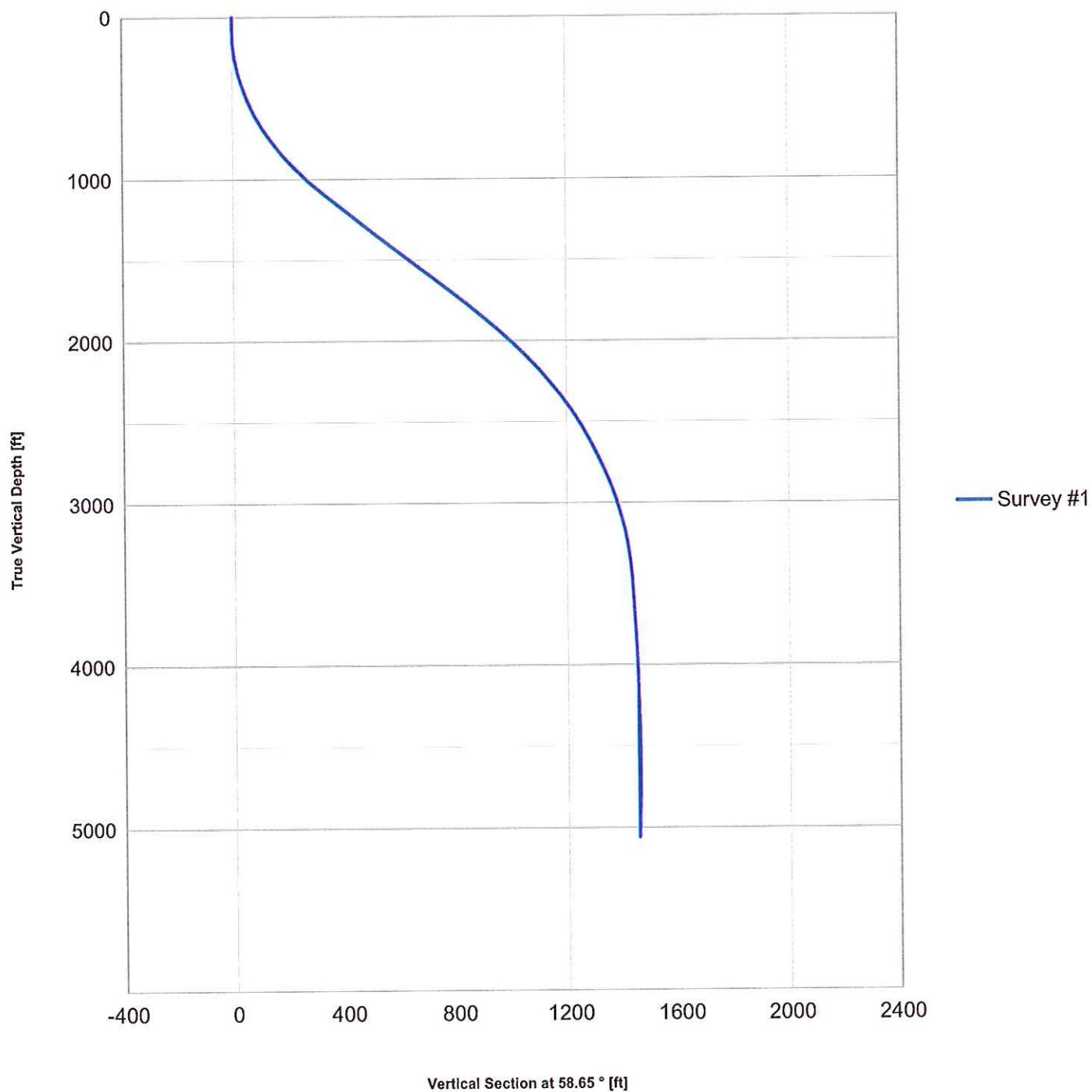
Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLS (°/100ft)	Build Rate (°/100ft)	Turn (°/100ft)	TFace (°)
4/23/2012	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/23/2012	NORMAL	72.0	0.35	272.99	72.00	0.01	-0.22	-0.18	0.49	0.49	0.00	272.99
	NORMAL	163.0	2.73	60.21	162.97	1.10	1.38	1.76	3.33	2.62	161.78	150.80
	NORMAL	255.0	6.16	61.79	254.68	4.53	7.64	8.88	3.73	3.73	1.72	2.83
	NORMAL	346.0	9.41	54.58	344.83	11.15	18.00	21.18	3.72	3.57	-7.92	339.68
	NORMAL	427.0	10.99	57.65	424.55	19.12	29.92	35.50	2.06	1.95	3.79	20.50
	NORMAL	517.0	13.64	58.83	512.47	29.20	46.25	54.69	2.96	2.94	1.31	6.00
	NORMAL	609.0	16.92	59.88	601.20	41.54	67.12	78.93	3.58	3.57	1.14	5.33
	NORMAL	699.0	20.66	60.55	686.39	55.92	92.28	107.91	4.16	4.16	0.74	3.62
	NORMAL	791.0	24.11	58.88	771.45	73.67	122.48	142.93	3.83	3.75	-2.03	347.47
	NORMAL	882.0	26.73	57.83	853.63	94.24	155.69	181.98	2.91	2.88	-0.93	351.69
	NORMAL	974.0	29.63	58.88	934.72	117.01	192.68	225.42	3.20	3.15	1.14	10.17
	NORMAL	1,069.0	33.06	58.88	1,015.84	142.55	234.98	274.83	3.61	3.61	0.00	0.00
	NORMAL	1,165.0	36.58	57.39	1,094.64	171.51	281.51	329.64	3.77	3.67	-1.55	345.80
	NORMAL	1,250.0	36.33	58.33	1,163.01	198.38	324.27	380.14	0.72	-0.29	1.11	114.49
4/24/2012	NORMAL	1,351.0	36.61	58.53	1,244.23	229.81	375.42	440.17	0.30	0.28	0.20	23.09
	NORMAL	1,447.0	36.20	57.90	1,321.50	259.81	423.85	497.14	0.58	-0.43	-0.66	222.11
	NORMAL	1,542.0	37.37	59.30	1,397.58	289.44	472.41	554.02	1.52	1.23	1.47	36.19
	NORMAL	1,637.0	37.83	59.36	1,472.85	319.01	522.26	611.98	0.49	0.48	0.06	4.57
	NORMAL	1,732.0	37.89	58.67	1,547.85	349.03	572.25	670.29	0.45	0.06	-0.73	277.79
	NORMAL	1,827.0	38.19	57.83	1,622.67	379.83	622.02	728.82	0.63	0.32	-0.88	299.76

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 (°)
4/24/2012	NORMAL	1,922.0	36.67	59.26	1,698.11	409.97	671.27	786.56	1.84	-1.60	1.51	150.80
	NORMAL	2,018.0	36.47	59.51	1,775.21	439.10	720.49	843.75	0.26	-0.21	0.26	143.42
	NORMAL	2,113.0	34.57	58.66	1,852.53	467.44	767.85	898.94	2.07	-2.00	-0.89	194.22
	NORMAL	2,208.0	33.98	58.28	1,931.03	495.42	813.45	952.44	0.66	-0.62	-0.40	199.78
	NORMAL	2,303.0	32.20	58.44	2,010.62	522.63	857.60	1,004.30	1.88	-1.87	0.17	177.26
	NORMAL	2,397.0	29.87	57.70	2,091.16	548.25	898.74	1,052.76	2.51	-2.48	-0.79	188.98
4/25/2012	NORMAL	2,491.0	28.21	59.17	2,173.34	572.14	937.60	1,098.38	1.92	-1.77	1.56	157.38
	NORMAL	2,586.0	26.04	58.60	2,257.89	594.52	974.69	1,141.69	2.30	-2.28	-0.60	186.58
	NORMAL	2,682.0	24.16	58.83	2,344.82	615.67	1,009.48	1,182.42	1.96	-1.96	0.24	177.13
	NORMAL	2,777.0	21.80	58.07	2,432.27	635.06	1,041.09	1,219.50	2.50	-2.48	-0.80	186.82
	NORMAL	2,873.0	19.57	59.20	2,522.08	652.73	1,070.04	1,253.41	2.36	-2.32	1.18	170.38
	NORMAL	2,968.0	16.93	59.02	2,612.29	667.99	1,095.57	1,283.15	2.78	-2.78	-0.19	181.14
	NORMAL	3,063.0	15.88	59.72	2,703.42	681.67	1,118.65	1,309.98	1.12	-1.11	0.74	169.67
	NORMAL	3,158.0	14.73	58.64	2,795.05	694.51	1,140.19	1,335.06	1.25	-1.21	-1.14	193.40
	NORMAL	3,253.0	12.84	60.35	2,887.31	706.02	1,159.68	1,357.69	2.03	-1.99	1.80	168.66
	NORMAL	3,348.0	11.09	58.10	2,980.25	716.07	1,176.61	1,377.38	1.91	-1.84	-2.37	193.83
	NORMAL	3,444.0	9.22	58.97	3,074.74	724.91	1,191.04	1,394.30	1.95	-1.95	0.91	175.74
	NORMAL	3,539.0	7.66	57.83	3,168.71	732.21	1,202.92	1,408.24	1.65	-1.64	-1.20	185.56
	NORMAL	3,634.0	5.61	62.69	3,263.07	737.71	1,212.41	1,419.21	2.24	-2.16	5.12	167.09
	NORMAL	3,729.0	3.97	58.77	3,357.73	741.54	1,219.35	1,427.13	1.76	-1.73	-4.13	189.34
	NORMAL	3,825.0	2.52	54.96	3,453.57	744.48	1,223.92	1,432.56	1.53	-1.51	-3.97	186.56
	NORMAL	3,920.0	2.26	65.09	3,548.49	746.47	1,227.32	1,436.50	0.52	-0.27	10.66	126.61
	NORMAL	4,015.0	2.13	72.81	3,643.42	747.78	1,230.71	1,440.08	0.34	-0.14	8.13	117.56
	NORMAL	4,111.0	1.89	44.30	3,739.37	749.44	1,233.52	1,443.34	1.06	-0.25	-29.70	242.53
	NORMAL	4,206.0	1.91	34.19	3,834.31	751.87	1,235.50	1,446.30	0.35	0.02	-10.64	268.35
	NORMAL	4,301.0	1.64	42.56	3,929.27	754.18	1,237.31	1,449.04	0.39	-0.28	8.81	140.29
	NORMAL	4,396.0	1.45	48.67	4,024.23	755.97	1,239.14	1,451.53	0.26	-0.20	6.43	142.10
	NORMAL	4,491.0	1.07	56.24	4,119.21	757.26	1,240.78	1,453.60	0.44	-0.40	7.97	160.10
	NORMAL	4,586.0	1.00	86.07	4,214.20	757.81	1,242.34	1,455.23	0.57	-0.07	31.40	112.15
	NORMAL	4,681.0	1.18	91.77	4,309.18	757.84	1,244.14	1,456.78	0.22	0.19	6.00	33.93
	NORMAL	4,777.0	1.03	104.56	4,405.16	757.59	1,245.97	1,458.21	0.30	-0.16	13.32	127.59
4/26/2012	NORMAL	4,872.0	0.89	128.22	4,500.15	756.92	1,247.37	1,459.06	0.44	-0.15	24.91	121.02
	NORMAL	4,967.0	0.88	141.76	4,595.14	755.89	1,248.41	1,459.41	0.22	-0.01	14.25	99.49
	NORMAL	5,062.0	0.92	141.19	4,690.12	754.72	1,249.33	1,459.59	0.04	0.04	-0.60	347.10
	NORMAL	5,158.0	0.79	173.76	4,786.11	753.46	1,249.89	1,459.41	0.52	-0.14	33.93	120.87
	NORMAL	5,253.0	1.41	195.96	4,881.10	751.69	1,249.64	1,458.28	0.78	0.65	23.37	45.94
	NORMAL	5,348.0	1.39	192.89	4,976.07	749.44	1,249.06	1,456.61	0.08	-0.02	-3.23	253.54
	NORMAL	5,372.0	1.52	200.14	5,000.06	748.86	1,248.89	1,456.16	0.94	0.54	30.21	58.43
	NORMAL	5,432.0	1.52	200.14	5,060.04	747.37	1,248.34	1,454.92	0.00	0.00	0.00	0.00

3 Charts

3.1 Vertical Section View



3.2 Plan View

