

## 1 General

### 1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

### 1.2 Well Information

Well	SG 514-27	Wellbore No.	
Well Name	SG 514-27	Common Name	SG 514-27
Project	SG 27-07S-096W	Site	SG 24-27 Pad
Vertical Section Azimuth	227.15 (°)	North Reference	True
Origin N/S		Origin E/W	
Spud Date	6/20/2012	UWI	SG 514-27
Active Datum	KB @5,038.0ft (above Mean Sea Level)		

## 2 Survey Name

### 2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	
Date Started	6/20/2012	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 (°)
6/20/2012	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6/20/2012	NORMAL	111.0	1.67	238.01	110.98	-0.86	-1.37	1.59	1.50	1.50	0.00	238.01
	NORMAL	172.0	0.70	279.23	171.97	-1.27	-2.49	2.69	2.02	-1.59	67.57	158.03
	NORMAL	263.0	1.23	228.16	262.96	-1.83	-3.77	4.01	1.05	0.58	-56.12	274.36
	NORMAL	355.0	4.75	202.68	354.82	-6.01	-5.98	8.46	4.00	3.83	-27.70	326.26
	NORMAL	430.0	8.16	226.54	429.35	-12.53	-11.04	16.62	5.69	4.55	31.81	50.46
	NORMAL	521.0	12.26	230.10	518.89	-23.18	-23.14	32.73	4.56	4.51	3.91	10.51
	NORMAL	613.0	16.59	229.47	607.97	-37.99	-40.63	55.62	4.71	4.71	-0.68	357.62
	NORMAL	704.0	20.98	227.30	694.10	-57.49	-62.49	84.91	4.88	4.82	-2.38	349.92
	NORMAL	795.0	25.54	225.81	777.68	-82.22	-88.54	120.83	5.05	5.01	-1.64	351.96
	NORMAL	886.0	30.52	227.67	857.99	-111.47	-119.71	163.57	5.56	5.47	2.04	10.78
	NORMAL	978.0	35.55	228.39	935.09	-144.99	-157.00	213.70	5.48	5.47	0.78	4.77
	NORMAL	1,095.0	40.71	227.56	1,027.09	-193.35	-210.62	285.91	4.43	4.41	-0.71	354.00
6/21/2012	NORMAL	1,187.0	40.96	224.19	1,096.71	-235.23	-253.79	346.04	2.41	0.27	-3.66	275.20
	NORMAL	1,250.0	40.58	224.70	1,144.42	-264.60	-282.60	387.13	0.80	-0.60	0.81	138.96
	NORMAL	1,345.0	38.84	224.54	1,217.50	-307.80	-325.23	447.76	1.83	-1.83	-0.17	183.30
	NORMAL	1,441.0	36.70	226.52	1,293.38	-349.00	-367.16	506.53	2.56	-2.23	2.06	151.24
	NORMAL	1,536.0	36.37	226.55	1,369.71	-387.90	-408.21	563.08	0.35	-0.35	0.03	176.91
6/22/2012	NORMAL	1,631.0	35.08	227.59	1,446.84	-425.69	-448.82	618.55	1.50	-1.36	1.09	155.21
	NORMAL	1,726.0	34.81	227.36	1,524.71	-462.47	-488.92	672.96	0.32	-0.28	-0.24	205.92
	NORMAL	1,821.0	33.04	227.29	1,603.53	-498.41	-527.90	725.98	1.86	-1.86	-0.07	181.24

## 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 (°)
6/22/2012	NORMAL	1,916.0	31.63	227.54	1,683.80	-532.79	-565.31	776.79	1.49	-1.48	0.26	174.69
	NORMAL	2,013.0	30.68	228.11	1,766.81	-566.49	-602.50	826.97	1.03	-0.98	0.59	163.00
	NORMAL	2,108.0	29.21	226.47	1,849.13	-598.64	-637.35	874.38	1.77	-1.55	-1.73	208.40
	NORMAL	2,203.0	27.24	225.37	1,932.83	-629.88	-669.63	919.30	2.14	-2.07	-1.16	194.31
	NORMAL	2,298.0	25.16	226.84	2,018.06	-658.97	-699.84	961.23	2.29	-2.19	1.55	163.33
	NORMAL	2,392.0	23.04	227.61	2,103.86	-685.04	-728.00	999.61	2.28	-2.26	0.82	171.91
	NORMAL	2,486.0	21.24	228.53	2,190.93	-708.72	-754.35	1,035.03	1.95	-1.91	0.98	169.52
	NORMAL	2,582.0	18.80	228.67	2,281.12	-730.46	-779.00	1,067.88	2.54	-2.54	0.15	178.94
	NORMAL	2,677.0	16.83	230.78	2,371.56	-749.26	-801.15	1,096.91	2.18	-2.07	2.22	162.86
	NORMAL	2,772.0	14.80	231.19	2,462.96	-765.56	-821.26	1,122.74	2.14	-2.14	0.43	177.05
	NORMAL	2,868.0	12.44	227.05	2,556.26	-780.30	-838.39	1,145.32	2.66	-2.46	-4.31	200.44
	NORMAL	2,963.0	10.90	226.70	2,649.29	-793.43	-852.41	1,164.53	1.62	-1.62	-0.37	182.46
	NORMAL	3,058.0	8.64	230.61	2,742.91	-804.12	-864.47	1,180.64	2.48	-2.38	4.12	165.56
	NORMAL	3,154.0	6.98	221.02	2,838.02	-813.10	-873.87	1,193.64	2.19	-1.73	-9.99	213.45
	NORMAL	3,248.0	5.16	225.28	2,931.49	-820.38	-880.62	1,203.54	1.99	-1.94	4.53	168.21
	NORMAL	3,344.0	3.15	219.52	3,027.23	-825.45	-885.37	1,210.47	2.14	-2.09	-6.00	188.87
	NORMAL	3,439.0	1.07	210.90	3,122.16	-828.23	-887.49	1,213.91	2.21	-2.19	-9.07	184.38
	NORMAL	3,534.0	0.36	237.19	3,217.16	-829.15	-888.19	1,215.06	0.80	-0.75	27.67	167.95
	NORMAL	3,629.0	0.31	207.42	3,312.15	-829.54	-888.56	1,215.59	0.19	-0.05	-31.34	239.43
	NORMAL	3,724.0	0.66	202.68	3,407.15	-830.28	-888.89	1,216.33	0.37	0.37	-4.99	351.09
6/23/2012	NORMAL	3,820.0	0.93	192.44	3,503.14	-831.55	-889.27	1,217.48	0.32	0.28	-10.67	327.06
	NORMAL	3,915.0	0.55	244.16	3,598.13	-832.50	-889.85	1,218.55	0.77	-0.40	54.44	143.77
	NORMAL	4,010.0	0.59	295.87	3,693.13	-832.48	-890.70	1,219.16	0.52	0.04	54.43	111.71
	NORMAL	4,106.0	0.48	280.58	3,789.13	-832.19	-891.54	1,219.58	0.19	-0.11	-15.93	224.91
	NORMAL	4,201.0	0.20	204.21	3,884.12	-832.27	-892.00	1,219.97	0.50	-0.29	-80.39	204.18
	NORMAL	4,296.0	0.39	259.77	3,979.12	-832.48	-892.38	1,220.39	0.34	0.20	58.48	86.34
	NORMAL	4,391.0	0.38	253.21	4,074.12	-832.63	-893.00	1,220.95	0.05	-0.01	-6.91	253.95
	NORMAL	4,486.0	0.17	194.70	4,169.12	-832.86	-893.34	1,221.35	0.34	-0.22	-61.59	206.47
	NORMAL	4,581.0	0.21	217.60	4,264.12	-833.13	-893.48	1,221.64	0.09	0.04	24.11	73.99
	NORMAL	4,676.0	0.07	16.07	4,359.12	-833.21	-893.57	1,221.76	0.29	-0.15	166.81	174.67
	NORMAL	4,772.0	0.08	9.16	4,455.12	-833.09	-893.55	1,221.66	0.01	0.01	-7.20	314.38
	NORMAL	4,867.0	0.51	194.18	4,550.12	-833.43	-893.64	1,221.96	0.62	0.45	-184.19	184.34
	NORMAL	4,962.0	1.19	179.91	4,645.11	-834.83	-893.74	1,222.99	0.74	0.72	-15.02	335.49
	NORMAL	5,058.0	1.78	183.37	4,741.07	-837.32	-893.83	1,224.74	0.62	0.61	3.60	10.37
	NORMAL	5,153.0	1.47	191.94	4,836.04	-839.98	-894.17	1,226.80	0.41	-0.33	9.02	146.14
	NORMAL	5,242.0	1.47	191.94	4,925.01	-842.22	-894.64	1,228.67	0.00	0.00	0.00	0.00