

1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well Information

Well	SG 444-22	Wellbore No.	
Well Name	SG 444-22	Common Name	SG 444-22
Project	SG 23-07S-096W	Site	SG 14-23 Pad
Vertical Section Azimuth	274.60 (°)	North Reference	
Origin N/S		Origin E/W	
Spud Date	12/22/2011	UWI	SG 444-22
Active Datum	KB @5,094.0ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	SCIENTIFIC
Started	12/22/2011	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)	DLeg (%/100ft)	Build (%/100ft)	Turn (%/100ft)	TFace (°)
12/22/2011	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12/22/2011	NORMAL	84.0	0.18	148.01	84.00	-0.11	0.07	-0.08	0.21	0.21	0.00	148.01
	NORMAL	111.0	1.06	267.10	111.00	-0.16	-0.16	0.14	4.29	3.26	441.07	126.89
	NORMAL	142.0	2.46	266.04	141.98	-0.22	-1.11	1.09	4.52	4.52	-3.42	358.14
	NORMAL	173.0	3.34	270.62	172.94	-0.26	-2.67	2.64	2.93	2.84	14.77	17.05
	NORMAL	201.0	4.13	272.90	200.88	-0.20	-4.50	4.47	2.87	2.82	8.14	11.79
	NORMAL	231.0	4.13	273.87	230.81	-0.07	-6.65	6.63	0.23	0.00	3.23	90.48
	NORMAL	261.0	5.01	273.78	260.71	0.09	-9.04	9.02	2.93	2.93	-0.30	359.49
	NORMAL	291.0	5.63	274.92	290.58	0.30	-11.81	11.80	2.10	2.07	3.80	10.24
	NORMAL	321.0	6.33	271.93	320.42	0.48	-14.93	14.92	2.55	2.33	-9.97	334.52
	NORMAL	351.0	6.95	273.08	350.22	0.64	-18.40	18.39	2.11	2.07	3.83	12.68
	NORMAL	381.0	8.18	275.62	379.95	0.94	-22.33	22.34	4.25	4.10	8.47	16.47
	NORMAL	412.0	8.89	277.65	410.61	1.48	-26.90	26.93	2.49	2.29	6.55	24.00
	NORMAL	442.0	10.12	274.22	440.20	1.98	-31.83	31.88	4.51	4.10	-11.43	333.58
	NORMAL	472.0	11.17	276.42	469.68	2.50	-37.34	37.42	3.75	3.50	7.33	22.24
	NORMAL	503.0	11.61	275.71	500.07	3.15	-43.43	43.54	1.49	1.42	-2.29	341.98
	NORMAL	533.0	12.23	272.99	529.42	3.61	-49.61	49.74	2.79	2.07	-9.07	316.48
	NORMAL	597.0	13.11	275.98	591.87	4.72	-63.60	63.77	1.71	1.38	4.67	38.16
12/23/2011	NORMAL	696.0	13.23	279.18	688.26	7.70	-85.95	86.29	0.75	0.12	3.23	82.21
12/24/2011	NORMAL	787.0	14.01	275.44	776.71	10.40	-107.19	107.68	1.29	0.86	-4.11	309.70
	NORMAL	878.0	14.42	275.77	864.92	12.59	-129.43	130.03	0.46	0.45	0.36	11.34

2.1.2 Survey Stations (Continued)

Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Build (°/100ft)	Turn (°/100ft)	TFace (°)
12/24/2011	NORMAL	969.0	14.42	271.62	953.05	14.05	-152.03	152.67	1.14	0.00	-4.56	267.99
	NORMAL	1,064.0	14.87	268.68	1,044.97	14.10	-176.04	176.61	0.91	0.47	-3.09	299.76
	NORMAL	1,158.0	14.68	272.50	1,135.86	14.34	-200.00	200.51	1.06	-0.20	4.06	102.88
	NORMAL	1,253.0	14.38	271.84	1,227.82	15.25	-223.82	224.32	0.36	-0.32	-0.69	208.58
	NORMAL	1,347.0	14.79	274.19	1,318.80	16.50	-247.45	247.98	0.77	0.44	2.50	56.43
	NORMAL	1,442.0	13.37	274.96	1,410.94	18.33	-270.49	271.09	1.51	-1.49	0.81	172.86
	NORMAL	1,536.0	13.19	274.78	1,502.43	20.17	-292.00	292.68	0.20	-0.19	-0.19	192.85
	NORMAL	1,631.0	13.35	274.02	1,594.89	21.84	-313.75	314.49	0.25	0.17	-0.80	312.16
	NORMAL	1,725.0	14.09	276.87	1,686.21	23.97	-335.93	336.77	1.07	0.79	3.03	43.80
	NORMAL	1,820.0	14.47	276.09	1,778.27	26.61	-359.21	360.19	0.45	0.40	-0.82	332.77
	NORMAL	1,914.0	14.65	276.03	1,869.25	29.11	-382.71	383.81	0.19	0.19	-0.06	355.18
	NORMAL	2,009.0	14.87	274.53	1,961.12	31.33	-406.81	408.01	0.46	0.23	-1.58	299.20
	NORMAL	2,103.0	13.98	277.77	2,052.16	33.82	-430.09	431.41	1.28	-0.95	3.45	139.36
	NORMAL	2,198.0	13.28	277.42	2,144.48	36.78	-452.28	453.77	0.74	-0.74	-0.37	186.55
	NORMAL	2,292.0	13.55	275.86	2,235.92	39.30	-473.94	475.56	0.48	0.29	-1.66	305.96
	NORMAL	2,387.0	13.82	276.30	2,328.22	41.68	-496.29	498.03	0.30	0.28	0.46	21.30
	NORMAL	2,481.0	14.07	276.10	2,419.45	44.13	-518.81	520.67	0.27	0.27	-0.21	348.99
	NORMAL	2,575.0	13.92	275.71	2,510.66	46.46	-541.42	543.40	0.19	-0.16	-0.41	211.97
	NORMAL	2,670.0	12.80	277.75	2,603.09	49.02	-563.22	565.33	1.28	-1.18	2.15	158.16
	NORMAL	2,764.0	10.55	275.33	2,695.14	51.22	-582.11	584.34	2.45	-2.39	-2.57	191.10
	NORMAL	2,859.0	8.79	275.93	2,788.78	52.78	-597.99	600.29	1.86	-1.85	0.63	177.02
	NORMAL	2,953.0	7.21	278.47	2,881.87	54.39	-610.96	613.36	1.72	-1.68	2.70	168.64
	NORMAL	3,048.0	6.17	277.92	2,976.22	55.97	-621.92	624.40	1.10	-1.09	-0.58	183.25
	NORMAL	3,143.0	4.81	281.89	3,070.78	57.50	-630.87	633.45	1.49	-1.43	4.18	166.37
	NORMAL	3,237.0	3.50	270.11	3,164.53	58.32	-637.60	640.22	1.66	-1.39	-12.53	207.30
	NORMAL	3,332.0	1.93	259.05	3,259.42	58.02	-642.07	644.65	1.73	-1.65	-11.64	192.98
	NORMAL	3,426.0	0.14	283.66	3,353.40	57.74	-643.74	646.29	1.92	-1.90	26.18	178.15
	NORMAL	3,520.0	0.62	227.15	3,447.40	57.43	-644.22	646.75	0.59	0.51	-60.12	291.35
	NORMAL	3,615.0	0.86	233.12	3,542.39	56.65	-645.17	647.63	0.27	0.25	6.28	20.81
	NORMAL	3,710.0	0.68	231.31	3,637.39	55.87	-646.18	648.58	0.19	-0.19	-1.91	186.79
12/25/2011	NORMAL	3,805.0	0.26	18.41	3,732.38	55.72	-646.55	648.94	0.96	-0.44	154.84	171.07
	NORMAL	3,898.0	0.31	45.95	3,825.38	56.10	-646.30	648.72	0.15	0.05	29.61	84.08
	NORMAL	3,993.0	0.03	93.78	3,920.38	56.27	-646.09	648.52	0.31	-0.29	50.35	175.61
	NORMAL	4,088.0	0.35	248.42	4,015.38	56.16	-646.34	648.76	0.40	0.34	162.78	156.59
	NORMAL	4,182.0	0.42	88.37	4,109.38	56.07	-646.26	648.67	0.81	0.07	-170.27	190.89
	NORMAL	4,277.0	0.33	116.42	4,204.38	55.96	-645.67	648.07	0.21	-0.09	29.53	129.68
	NORMAL	4,371.0	0.35	179.25	4,298.38	55.55	-645.42	647.80	0.38	0.02	66.84	118.66
	NORMAL	4,466.0	0.09	190.14	4,393.38	55.19	-645.43	647.78	0.28	-0.27	11.46	176.28
	NORMAL	4,560.0	0.17	335.25	4,487.38	55.24	-645.50	647.85	0.27	0.09	154.37	157.03
	NORMAL	4,655.0	0.62	237.08	4,582.37	55.09	-645.99	648.33	0.70	0.47	-103.34	247.19
	NORMAL	4,749.0	1.24	236.86	4,676.36	54.26	-647.27	649.54	0.66	0.66	-0.23	359.56
	NORMAL	4,844.0	1.65	238.34	4,771.33	52.98	-649.29	651.45	0.43	0.43	1.56	5.94
	NORMAL	4,938.0	1.80	230.39	4,865.29	51.32	-651.58	653.60	0.30	0.16	-8.46	298.06
	NORMAL	5,033.0	2.27	228.23	4,960.23	49.12	-654.14	655.97	0.50	0.49	-2.27	349.65
	NORMAL	5,127.0	3.09	221.75	5,054.13	45.99	-657.21	658.78	0.93	0.87	-6.89	336.46
	NORMAL	5,222.0	3.28	222.61	5,148.98	42.08	-660.76	662.00	0.21	0.20	0.91	14.55
	NORMAL	5,242.0	3.14	224.44	5,168.95	41.27	-661.53	662.71	0.87	-0.70	9.15	144.71
	NORMAL	5,300.0	3.14	224.44	5,226.86	39.00	-663.75	664.74	0.00	0.00	0.00	0.00