

1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well Information

Well	SG 334-23	Wellbore No.	1
Well Name	SG 334-23	Common Name	SG 334-23
Project	SG 23-07S-096W	Site	SG 44-23 Pad
Vertical Section Azimuth	246.65 (°)	North Reference	True
Origin N/S		Origin E/W	
Spud Date	2/16/2013	UWI	SG 334-23
Active Datum	KB @5,051.0ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	Scientific Drilling
Date Started	2/16/2013	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

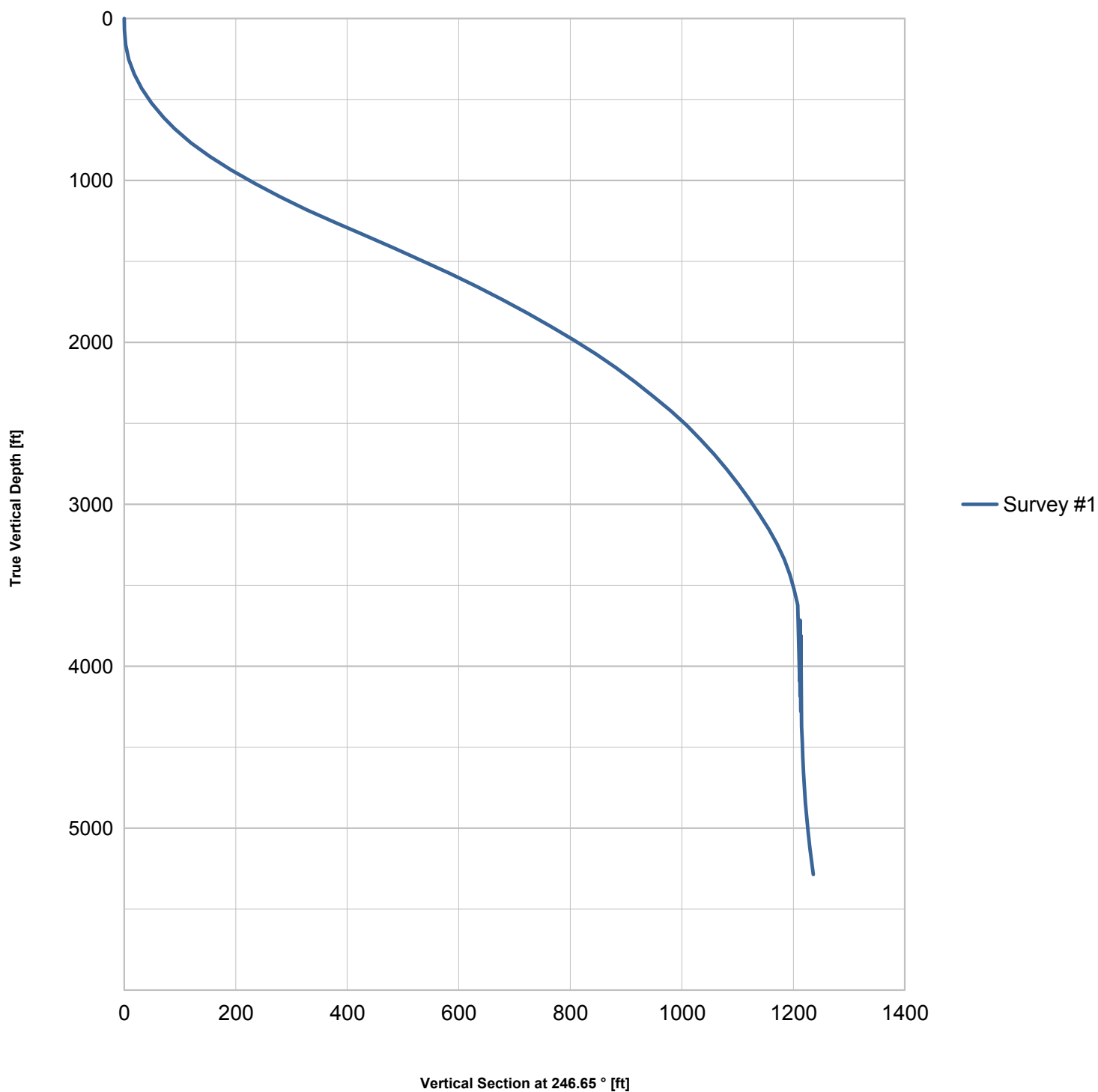
Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLS (°/100ft)	Build Rate (°/100ft)	Turn (°/100ft)	TFace (°)
2/16/2013	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2/16/2013	NORMAL	73.0	0.88	283.45	73.00	0.13	-0.55	0.45	1.21	1.21	0.00	283.45
	NORMAL	163.0	2.20	252.42	162.96	-0.23	-2.86	2.72	1.68	1.47	-34.48	311.56
	NORMAL	163.0	2.20	252.42	162.96	-0.23	-2.86	2.72	1.68	1.47	-34.48	311.56
	NORMAL	254.0	4.84	247.24	253.78	-2.24	-8.07	8.30	2.92	2.90	-5.69	350.54
	NORMAL	345.0	7.48	244.16	344.25	-6.31	-16.94	18.06	2.92	2.90	-3.38	351.33
	NORMAL	435.0	9.68	245.13	433.24	-12.05	-29.08	31.47	2.45	2.44	1.08	4.24
	NORMAL	435.0	9.68	245.13	433.24	-12.05	-29.08	31.47	2.45	2.44	1.08	4.24
	NORMAL	526.0	12.49	245.92	522.53	-19.28	-45.01	48.97	3.09	3.09	0.87	3.48
	NORMAL	617.0	14.96	246.88	610.93	-27.91	-64.80	70.55	2.73	2.71	1.05	5.74
	NORMAL	690.0	16.80	246.94	681.14	-35.74	-83.17	90.53	2.52	2.52	0.08	0.54
	NORMAL	782.0	20.31	247.64	768.34	-47.03	-110.18	119.80	3.82	3.82	0.76	3.96
	NORMAL	782.0	20.31	247.64	768.34	-47.03	-110.18	119.80	3.82	3.82	0.76	3.96
	NORMAL	873.0	23.57	246.41	852.74	-60.32	-141.47	153.79	3.62	3.58	-1.35	351.40
	NORMAL	873.0	23.57	246.41	852.74	-60.32	-141.47	153.79	3.62	3.58	-1.35	351.40
	NORMAL	964.0	25.79	244.30	935.42	-76.19	-175.98	191.77	2.62	2.44	-2.32	337.39
	NORMAL	1,059.0	27.95	243.41	1,020.16	-95.12	-214.52	234.65	2.31	2.27	-0.94	349.05
	NORMAL	1,153.0	29.81	245.63	1,102.47	-114.62	-255.51	280.01	2.28	1.98	2.36	30.94
	NORMAL	1,247.0	32.13	246.84	1,183.07	-134.10	-299.78	328.38	2.56	2.47	1.29	15.54
	NORMAL	1,341.0	33.65	247.80	1,262.00	-153.77	-346.88	379.41	1.71	1.62	1.02	19.33
2/17/2013	NORMAL	1,341.0	33.65	247.80	1,262.00	-153.77	-346.88	379.41	1.71	1.62	1.02	19.33

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 (°)
2/17/2013	NORMAL	1,433.0	33.99	246.79	1,338.43	-173.54	-394.11	430.61	0.71	0.37	-1.10	300.75
2/18/2013	NORMAL	1,527.0	33.37	245.04	1,416.65	-194.80	-441.70	482.73	1.23	-0.66	-1.86	236.70
	NORMAL	1,621.0	32.78	245.47	1,495.42	-216.27	-488.29	534.02	0.68	-0.63	0.46	158.49
	NORMAL	1,714.0	31.70	247.50	1,574.08	-236.08	-533.77	583.62	1.64	-1.16	2.18	135.78
	NORMAL	1,807.0	30.21	247.63	1,653.84	-254.33	-577.98	631.45	1.60	-1.60	0.14	177.49
	NORMAL	1,900.0	28.89	247.52	1,734.74	-271.83	-620.38	677.31	1.42	-1.42	-0.12	182.31
	NORMAL	1,994.0	27.56	246.94	1,817.56	-289.03	-661.37	721.76	1.44	-1.41	-0.62	191.40
	NORMAL	2,088.0	26.72	245.75	1,901.21	-306.23	-700.65	764.64	1.06	-0.89	-1.27	212.34
	NORMAL	2,182.0	25.41	247.82	1,985.65	-322.52	-738.59	805.93	1.70	-1.39	2.20	146.15
	NORMAL	2,276.0	24.21	247.47	2,070.97	-337.52	-775.07	845.37	1.29	-1.28	-0.37	186.82
	NORMAL	2,370.0	22.05	246.84	2,157.41	-351.85	-809.10	882.29	2.31	-2.30	-0.67	186.25
	NORMAL	2,464.0	20.24	248.75	2,245.08	-364.68	-840.48	916.19	2.06	-1.93	2.03	160.05
	NORMAL	2,557.0	20.17	247.41	2,332.36	-376.67	-870.28	948.30	0.50	-0.08	-1.44	260.77
	NORMAL	2,652.0	18.52	246.65	2,421.99	-388.94	-899.25	979.76	1.76	-1.74	-0.80	188.32
	NORMAL	2,747.0	16.91	248.78	2,512.48	-399.93	-925.99	1,008.66	1.83	-1.69	2.24	159.08
	NORMAL	2,841.0	15.09	249.64	2,602.84	-409.13	-950.20	1,034.54	1.95	-1.94	0.91	172.99
	NORMAL	2,934.0	14.60	248.78	2,692.73	-417.59	-972.48	1,058.34	0.58	-0.53	-0.92	203.80
	NORMAL	3,027.0	12.93	246.85	2,783.06	-425.92	-992.98	1,080.46	1.86	-1.80	-2.08	194.44
	NORMAL	3,122.0	12.56	247.16	2,875.72	-434.11	-1,012.27	1,101.42	0.40	-0.39	0.33	169.68
	NORMAL	3,216.0	11.07	248.20	2,967.72	-441.43	-1,030.07	1,120.66	1.60	-1.59	1.11	172.38
	NORMAL	3,311.0	11.06	248.47	3,060.96	-448.16	-1,047.01	1,138.89	0.06	-0.01	0.28	101.06
	NORMAL	3,405.0	9.97	249.43	3,153.38	-454.33	-1,063.02	1,156.03	1.17	-1.16	1.02	171.34
	NORMAL	3,499.0	8.61	248.31	3,246.14	-459.79	-1,077.18	1,171.19	1.46	-1.45	-1.19	187.02
	NORMAL	3,594.0	6.72	245.94	3,340.29	-464.68	-1,088.86	1,183.86	2.02	-1.99	-2.49	188.32
	NORMAL	3,688.0	5.19	253.09	3,433.78	-468.16	-1,097.95	1,193.58	1.81	-1.63	7.61	157.66
	NORMAL	3,782.0	4.45	252.99	3,527.45	-470.46	-1,105.51	1,201.43	0.79	-0.79	-0.11	180.60
	NORMAL	3,877.0	3.43	237.22	3,622.23	-473.08	-1,111.42	1,207.90	1.56	-1.07	-16.60	219.05
2/19/2013	NORMAL	3,970.0	1.89	231.25	3,715.12	-475.55	-1,114.95	1,212.12	1.68	-1.66	-6.42	187.23
	NORMAL	4,065.0	0.71	345.90	3,810.11	-475.96	-1,116.32	1,213.54	2.40	-1.24	120.68	163.55
	NORMAL	4,159.0	1.03	26.44	3,904.10	-474.64	-1,116.09	1,212.80	0.72	0.34	43.13	83.80
	NORMAL	4,252.0	1.20	3.75	3,997.08	-472.92	-1,115.65	1,211.72	0.50	0.18	-24.40	279.46
	NORMAL	4,347.0	0.36	312.40	4,092.07	-471.72	-1,115.80	1,211.39	1.07	-0.88	-54.05	196.08
	NORMAL	4,439.0	0.79	278.40	4,184.07	-471.43	-1,116.65	1,212.04	0.58	0.47	-36.96	303.73
	NORMAL	4,533.0	0.97	272.25	4,278.05	-471.31	-1,118.08	1,213.31	0.22	0.19	-6.54	329.21
	NORMAL	4,626.0	1.07	280.74	4,371.04	-471.11	-1,119.72	1,214.74	0.19	0.11	9.13	60.80
	NORMAL	4,722.0	0.99	186.27	4,467.03	-471.77	-1,120.69	1,215.89	1.58	-0.08	-98.41	220.71
	NORMAL	4,816.0	1.32	192.71	4,561.01	-473.64	-1,121.02	1,216.93	0.38	0.35	6.85	24.71
	NORMAL	4,910.0	1.26	199.15	4,654.99	-475.67	-1,121.60	1,218.27	0.17	-0.06	6.85	115.68
	NORMAL	5,005.0	1.32	205.45	4,749.96	-477.64	-1,122.41	1,219.80	0.16	0.06	6.63	70.24
	NORMAL	5,100.0	1.60	215.96	4,844.93	-479.70	-1,123.66	1,221.76	0.41	0.29	11.06	49.06
	NORMAL	5,194.0	1.59	228.14	4,938.90	-481.64	-1,125.40	1,224.13	0.36	-0.01	12.96	97.77
	NORMAL	5,288.0	1.66	241.75	5,032.86	-483.15	-1,127.57	1,226.72	0.42	0.07	14.48	86.57
	NORMAL	5,381.0	2.06	242.21	5,125.81	-484.57	-1,130.24	1,229.73	0.43	0.43	0.49	2.37
	NORMAL	5,541.0	2.28	243.39	5,285.69	-487.33	-1,135.63	1,235.77	0.14	0.14	0.74	12.07

3 Charts

3.1 Vertical Section View



3.2 Plan View

