

1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well Information

Well	SG 432-23	Wellbore No.	
Well Name	SG 432-23	Common Name	SG 432-23
Project	SG 23-07S-096W	Site	GV 18-23 Pad
Vertical Section Azimuth	125.29 (°)	North Reference	
Origin N/S		Origin E/W	
Spud Date	2/1/2012	UWI	SG 432-23
Active Datum	KB @5,158.0ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	
Date Started	1/13/2012	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

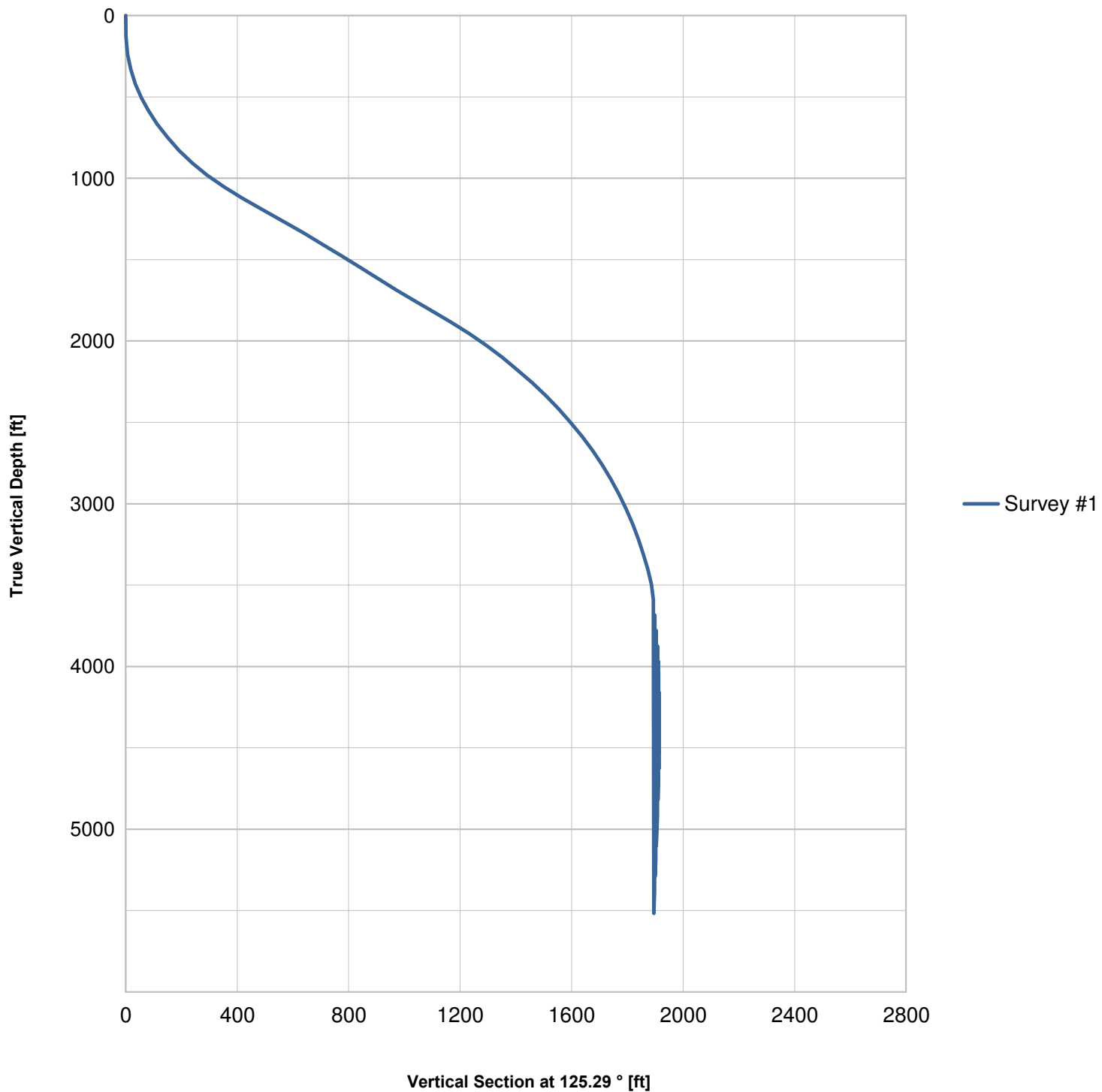
Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLS (°/100ft)	Build Rate (°/100ft)	Turn (°/100ft)	TFace (°)
1/13/2012	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2/2/2012	NORMAL	120.0	1.32	135.88	119.99	-0.99	0.96	1.36	1.10	1.10	0.00	135.88
	NORMAL	150.0	1.76	125.16	149.98	-1.51	1.58	2.16	1.75	1.47	-35.73	321.35
	NORMAL	241.0	5.01	121.38	240.81	-4.38	6.12	7.52	3.58	3.57	-4.15	354.18
	NORMAL	332.0	8.36	122.78	331.18	-10.03	15.07	18.10	3.69	3.68	1.54	3.48
	NORMAL	423.0	12.67	126.74	420.63	-19.59	28.64	34.69	4.80	4.74	4.35	11.47
	NORMAL	513.0	15.92	126.30	507.83	-32.80	46.50	56.91	3.61	3.61	-0.49	357.87
	NORMAL	589.0	19.17	122.80	580.29	-45.74	65.39	79.80	4.49	4.28	-4.61	340.34
	NORMAL	680.0	22.71	124.82	665.26	-63.87	92.38	112.30	3.97	3.89	2.22	12.47
	NORMAL	771.0	26.03	127.11	748.15	-85.95	122.74	149.84	3.79	3.65	2.52	16.93
	NORMAL	862.0	28.82	126.80	828.91	-111.14	156.23	191.73	3.07	3.07	-0.34	356.93
	NORMAL	953.0	33.11	124.54	906.93	-138.39	194.29	238.53	4.88	4.71	-2.48	343.86
	NORMAL	1,044.0	38.43	125.41	980.74	-168.89	237.84	291.70	5.87	5.85	0.96	5.82
	NORMAL	1,138.0	41.59	125.26	1,052.72	-203.83	287.14	352.13	3.36	3.36	-0.16	358.19
	NORMAL	1,233.0	44.76	125.74	1,122.00	-241.58	340.04	417.12	3.35	3.34	0.51	6.09
	NORMAL	1,327.0	46.34	125.57	1,187.82	-280.69	394.57	484.22	1.69	1.68	-0.18	355.55
	NORMAL	1,355.0	46.54	125.50	1,207.12	-292.49	411.08	504.51	0.74	0.71	-0.25	345.74
2/4/2012	NORMAL	1,451.0	46.20	126.30	1,273.36	-333.23	467.36	573.99	0.70	-0.35	0.83	120.70
	NORMAL	1,546.0	44.40	125.60	1,340.18	-372.88	522.02	641.51	1.97	-1.89	-0.74	195.21
	NORMAL	1,641.0	44.20	124.60	1,408.17	-411.03	576.30	707.86	0.76	-0.21	-1.05	253.66
	NORMAL	1,735.0	43.70	123.50	1,475.84	-447.56	630.35	773.08	0.97	-0.53	-1.17	236.38

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 (°)
2/4/2012	NORMAL	1,830.0	43.40	124.60	1,544.70	-484.20	684.59	838.52	0.86	-0.32	1.16	111.99
	NORMAL	1,924.0	42.50	125.60	1,613.50	-521.02	736.99	902.56	1.20	-0.96	1.06	143.24
	NORMAL	2,019.0	44.00	125.80	1,682.69	-559.01	789.84	967.65	1.59	1.58	0.21	5.29
	NORMAL	2,113.0	44.90	125.80	1,749.80	-597.51	843.23	1,033.47	0.96	0.96	0.00	0.00
	NORMAL	2,208.0	45.50	125.30	1,816.74	-636.71	898.08	1,100.88	0.73	0.63	-0.53	329.23
	NORMAL	2,302.0	43.90	125.30	1,883.55	-674.91	952.04	1,167.00	1.70	-1.70	0.00	180.00
	NORMAL	2,397.0	41.10	124.60	1,953.58	-711.68	1,004.63	1,231.17	2.99	-2.95	-0.74	189.33
	NORMAL	2,491.0	38.90	124.20	2,025.59	-745.82	1,054.48	1,291.58	2.36	-2.34	-0.43	186.51
	NORMAL	2,586.0	36.60	124.60	2,100.70	-778.67	1,102.47	1,349.73	2.43	-2.42	0.42	174.08
	NORMAL	2,680.0	34.80	122.60	2,177.03	-809.04	1,148.14	1,404.55	2.28	-1.91	-2.13	212.15
	NORMAL	2,775.0	33.20	123.70	2,255.79	-838.08	1,192.62	1,457.63	1.80	-1.68	1.16	159.43
	NORMAL	2,869.0	30.50	123.50	2,335.63	-865.53	1,233.93	1,507.21	2.87	-2.87	-0.21	182.15
	NORMAL	2,963.0	28.10	125.30	2,417.60	-891.49	1,271.90	1,553.20	2.72	-2.55	1.91	160.63
	NORMAL	3,058.0	26.00	124.00	2,502.20	-916.07	1,307.42	1,596.39	2.30	-2.21	-1.37	195.15
	NORMAL	3,153.0	25.60	124.20	2,587.73	-939.25	1,341.66	1,637.73	0.43	-0.42	0.21	167.81
	NORMAL	3,247.0	22.30	123.20	2,673.63	-960.43	1,373.39	1,675.87	3.54	-3.51	-1.06	186.56
	NORMAL	3,342.0	20.00	123.50	2,762.22	-979.27	1,402.02	1,710.13	2.42	-2.42	0.32	177.45
	NORMAL	3,436.0	18.00	123.80	2,851.10	-996.23	1,427.50	1,740.71	2.13	-2.13	0.32	177.35
	NORMAL	3,531.0	17.10	125.30	2,941.68	-1,012.46	1,451.10	1,769.36	1.06	-0.95	1.58	154.03
	NORMAL	3,625.0	15.20	125.30	3,031.96	-1,027.57	1,472.43	1,795.50	2.02	-2.02	0.00	180.00
	NORMAL	3,720.0	13.20	124.20	3,124.06	-1,040.87	1,491.57	1,818.80	2.12	-2.11	-1.16	187.15
2/5/2012	NORMAL	3,814.0	11.60	125.10	3,215.86	-1,052.33	1,508.18	1,838.98	1.71	-1.70	0.96	173.55
	NORMAL	3,909.0	10.20	130.40	3,309.15	-1,063.28	1,522.40	1,856.91	1.81	-1.47	5.58	146.99
	NORMAL	4,004.0	9.80	128.30	3,402.70	-1,073.74	1,535.15	1,873.37	0.57	-0.42	-2.21	221.32
	NORMAL	4,098.0	5.20	134.80	3,495.88	-1,081.71	1,544.46	1,885.56	4.97	-4.89	6.91	172.76
	NORMAL	4,193.0	3.40	118.90	3,590.61	-1,086.10	1,549.98	1,892.61	2.26	-1.89	-16.74	205.76
	NORMAL	4,287.0	3.30	102.90	3,684.45	-1,088.05	1,555.06	1,897.88	1.00	-0.11	-17.02	255.95
	NORMAL	4,382.0	3.20	106.50	3,779.30	-1,089.42	1,560.26	1,902.92	0.24	-0.11	3.79	117.89
	NORMAL	4,476.0	3.10	105.20	3,873.15	-1,090.83	1,565.23	1,907.79	0.13	-0.11	-1.38	214.89
	NORMAL	4,571.0	1.00	144.60	3,968.09	-1,092.18	1,568.19	1,910.99	2.54	-2.21	41.47	164.74
	NORMAL	4,665.0	1.10	208.60	4,062.08	-1,093.64	1,568.24	1,911.87	1.19	0.11	68.09	117.64
	NORMAL	4,760.0	1.50	185.20	4,157.05	-1,095.68	1,567.69	1,912.59	0.69	0.42	-24.63	294.91
	NORMAL	4,854.0	1.10	261.30	4,251.04	-1,097.04	1,566.68	1,912.56	1.74	-0.43	80.96	139.16
2/6/2012	NORMAL	4,949.0	0.20	99.30	4,346.03	-1,097.20	1,565.95	1,912.06	1.36	-0.95	-170.53	182.74
	NORMAL	5,043.0	0.90	206.10	4,440.03	-1,097.89	1,565.78	1,912.32	1.04	0.74	113.62	118.10
	NORMAL	5,138.0	1.70	204.70	4,535.00	-1,099.84	1,564.87	1,912.70	0.84	0.84	-1.47	357.03
	NORMAL	5,232.0	1.10	262.70	4,628.98	-1,101.22	1,563.39	1,912.29	1.55	-0.64	61.70	140.13
	NORMAL	5,327.0	1.30	262.70	4,723.96	-1,101.48	1,561.41	1,910.83	0.21	0.21	0.00	0.00
	NORMAL	5,421.0	1.70	259.60	4,817.92	-1,101.86	1,558.99	1,909.07	0.43	0.43	-3.30	346.98
	NORMAL	5,516.0	1.70	255.20	4,912.88	-1,102.48	1,556.24	1,907.18	0.14	0.00	-4.63	267.80
	NORMAL	5,610.0	1.50	268.20	5,006.85	-1,102.87	1,553.66	1,905.30	0.44	-0.21	13.83	125.25
	NORMAL	5,705.0	1.50	279.90	5,101.81	-1,102.70	1,551.19	1,903.19	0.32	0.00	12.32	95.85
	NORMAL	5,799.0	1.50	269.20	5,195.78	-1,102.50	1,548.75	1,901.08	0.30	0.00	-11.38	264.65
	NORMAL	5,894.0	1.90	260.80	5,290.74	-1,102.77	1,545.95	1,898.95	0.49	0.42	-8.84	323.83
	NORMAL	5,988.0	1.80	253.20	5,384.69	-1,103.45	1,543.00	1,896.94	0.28	-0.11	-8.09	244.06
	NORMAL	6,075.0	1.60	256.60	5,471.65	-1,104.13	1,540.51	1,895.29	0.26	-0.23	3.91	154.93
	NORMAL	6,120.0	1.60	256.60	5,516.64	-1,104.42	1,539.29	1,894.46	0.00	0.00	0.00	0.00

3 Charts

3.1 Vertical Section View



3.2 Plan View

