

1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well Information

Well	SG 433-23	Wellbore No.	1
Well Name	SG 433-23	Common Name	SG 433-23
Project	SG 23-07S-096W	Site	SG 44-23 Pad
Vertical Section Azimuth	300.33 (°)	North Reference	True
Origin N/S		Origin E/W	
Spud Date	3/3/2013	UWI	SG 433-23
Active Datum	KB @5,051.0ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	
Date Started	3/2/2013	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

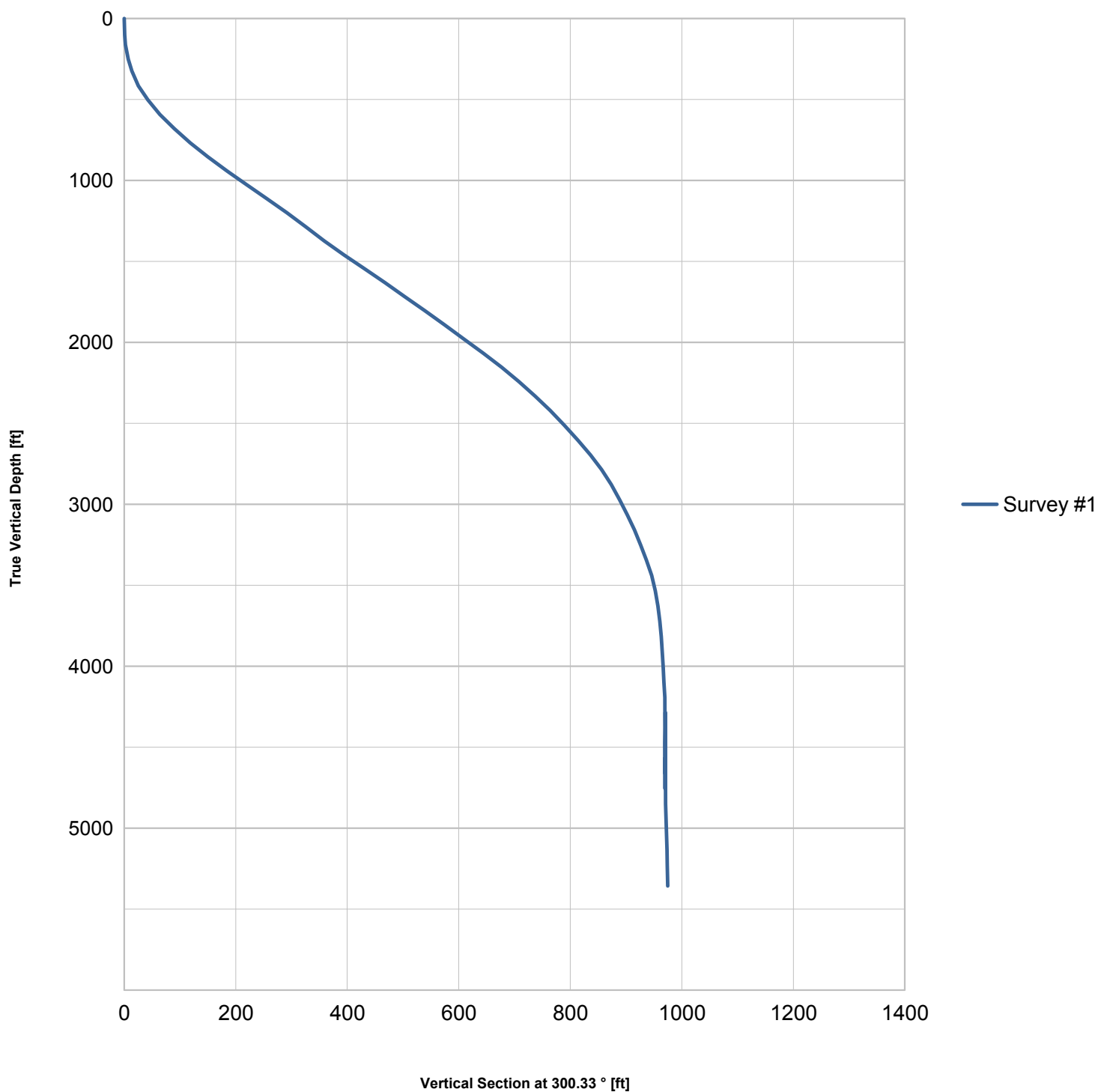
Date	Type	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLS (°/100ft)	Build Rate (°/100ft)	Turn (°/100ft)	TFace (°)
3/2/2013	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3/2/2013	NORMAL	102.0	0.97	294.26	102.00	0.35	-0.79	0.86	0.95	0.95	0.00	294.26
	NORMAL	163.0	2.11	299.71	162.97	1.12	-2.23	2.49	1.88	1.87	8.93	10.05
3/3/2013	NORMAL	253.0	4.05	298.39	252.84	3.46	-6.47	7.33	2.16	2.16	-1.47	357.25
	NORMAL	326.0	5.90	299.02	325.56	6.50	-12.02	13.66	2.54	2.53	0.86	2.01
	NORMAL	417.0	9.23	299.92	415.75	12.41	-22.44	25.63	3.66	3.66	0.99	2.48
	NORMAL	507.0	12.30	300.75	504.16	20.92	-36.93	42.44	3.42	3.41	0.92	3.30
	NORMAL	598.0	15.13	301.15	592.56	32.02	-55.43	64.01	3.11	3.11	0.44	2.11
	NORMAL	690.0	17.25	299.71	680.90	44.99	-77.56	89.66	2.35	2.30	-1.57	348.58
	NORMAL	782.0	19.48	299.75	768.21	59.37	-102.73	118.64	2.42	2.42	0.04	0.34
	NORMAL	873.0	20.88	300.70	853.62	75.17	-129.85	150.04	1.58	1.54	1.04	13.62
	NORMAL	964.0	21.89	300.52	938.36	92.07	-158.40	183.22	1.11	1.11	-0.20	356.20
	NORMAL	980.0	22.25	300.59	953.19	95.13	-163.58	189.23	2.26	2.25	0.44	4.21
3/4/2013	NORMAL	1,058.0	22.83	300.62	1,025.23	110.35	-189.31	219.13	0.74	0.74	0.04	1.15
	NORMAL	1,152.0	22.82	299.28	1,111.87	128.55	-220.91	255.59	0.55	-0.01	-1.43	268.28
	NORMAL	1,246.0	22.17	299.06	1,198.71	146.08	-252.31	291.54	0.70	-0.69	-0.23	187.28
	NORMAL	1,340.0	20.38	297.17	1,286.31	162.17	-282.38	325.62	2.04	-1.90	-2.01	200.08
	NORMAL	1,433.0	21.49	297.59	1,373.17	177.46	-311.88	358.81	1.20	1.19	0.45	7.90
	NORMAL	1,527.0	23.01	301.89	1,460.17	195.14	-342.75	394.38	2.37	1.62	4.57	48.97
	NORMAL	1,621.0	23.21	301.16	1,546.63	214.43	-374.19	431.26	0.37	0.21	-0.78	304.58
	NORMAL	1,714.0	22.86	301.28	1,632.21	233.29	-405.32	467.65	0.38	-0.38	0.13	172.41

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 (°)
3/4/2013	NORMAL	1,807.0	22.52	301.66	1,718.01	252.02	-435.91	503.51	0.40	-0.37	0.41	156.85
	NORMAL	1,900.0	22.23	301.65	1,804.01	270.60	-466.05	538.91	0.31	-0.31	-0.01	180.75
	NORMAL	1,994.0	21.64	300.94	1,891.21	288.84	-496.05	574.01	0.69	-0.63	-0.76	203.88
	NORMAL	2,088.0	21.59	299.84	1,978.60	306.35	-525.92	608.64	0.43	-0.05	-1.17	262.45
	NORMAL	2,183.0	21.61	299.20	2,066.93	323.59	-556.35	643.61	0.25	0.02	-0.67	274.55
	NORMAL	2,276.0	20.16	301.04	2,153.81	340.21	-585.03	676.76	1.71	-1.56	1.98	156.52
	NORMAL	2,370.0	18.32	302.66	2,242.56	356.53	-611.35	707.72	2.04	-1.96	1.72	164.58
	NORMAL	2,464.0	17.79	302.09	2,331.93	372.13	-635.95	736.83	0.59	-0.56	-0.61	198.16
	NORMAL	2,557.0	15.98	304.51	2,420.92	386.93	-658.54	763.80	2.09	-1.95	2.60	159.93
	NORMAL	2,652.0	15.15	302.79	2,512.44	401.07	-679.75	789.25	1.00	-0.87	-1.81	208.25
3/5/2013	NORMAL	2,747.0	14.86	301.79	2,604.20	414.21	-700.54	813.83	0.41	-0.31	-1.05	221.28
	NORMAL	2,841.0	12.68	302.89	2,695.49	426.16	-719.46	836.19	2.34	-2.32	1.17	173.69
	NORMAL	2,934.0	12.14	300.76	2,786.32	436.70	-736.43	856.16	0.76	-0.58	-2.29	219.25
	NORMAL	3,027.0	9.41	302.39	2,877.67	445.78	-751.26	873.54	2.95	-2.94	1.75	174.43
	NORMAL	3,122.0	8.73	302.18	2,971.48	453.78	-763.92	888.51	0.72	-0.72	-0.22	182.68
	NORMAL	3,216.0	8.02	301.53	3,064.48	461.01	-775.54	902.20	0.76	-0.76	-0.69	187.27
	NORMAL	3,311.0	7.38	297.99	3,158.62	467.34	-786.58	914.92	0.84	-0.67	-3.73	214.80
	NORMAL	3,405.0	6.51	294.09	3,251.93	472.35	-796.78	926.25	1.05	-0.93	-4.15	206.53
	NORMAL	3,499.0	6.18	300.81	3,345.36	477.11	-805.99	936.60	0.86	-0.35	7.15	117.27
	NORMAL	3,594.0	5.05	312.59	3,439.90	482.56	-813.46	945.80	1.69	-1.19	12.40	140.19
	NORMAL	3,688.0	3.23	311.51	3,533.65	487.12	-818.49	952.44	1.94	-1.94	-1.15	181.91
	NORMAL	3,782.0	2.37	308.75	3,627.54	490.09	-821.98	956.97	0.93	-0.91	-2.94	187.53
	NORMAL	3,877.0	2.20	303.52	3,722.46	492.33	-825.04	960.73	0.28	-0.18	-5.51	228.22
	NORMAL	3,971.0	1.06	330.12	3,816.43	494.08	-826.97	963.29	1.42	-1.21	28.30	159.24
	NORMAL	4,065.0	1.02	313.00	3,910.41	495.40	-828.02	964.86	0.33	-0.04	-18.21	254.16
	NORMAL	4,159.0	0.92	295.68	4,004.40	496.30	-829.31	966.42	0.33	-0.11	-18.43	242.64
	NORMAL	4,252.0	1.04	294.46	4,097.38	496.97	-830.75	968.01	0.13	0.13	-1.31	349.53
	NORMAL	4,347.0	1.22	269.71	4,192.37	497.32	-832.55	969.74	0.54	0.19	-26.05	277.58
	NORMAL	4,439.0	0.05	303.79	4,284.36	497.34	-833.56	970.62	1.28	-1.27	37.04	178.64
3/6/2013	NORMAL	4,533.0	0.17	126.51	4,378.36	497.28	-833.48	970.52	0.23	0.13	-188.60	182.10
	NORMAL	4,626.0	0.62	193.89	4,471.36	496.71	-833.49	970.24	0.62	0.48	72.45	83.18
	NORMAL	4,722.0	0.36	171.86	4,567.35	495.91	-833.57	969.91	0.33	-0.27	-22.95	205.25
	NORMAL	4,816.0	0.24	340.60	4,661.35	495.80	-833.60	969.87	0.64	-0.13	179.51	175.50
	NORMAL	4,910.0	0.26	301.21	4,755.35	496.10	-833.85	970.24	0.18	0.02	-41.90	256.68
	NORMAL	5,005.0	0.66	268.14	4,850.35	496.19	-834.58	970.92	0.49	0.42	-34.81	309.14
	NORMAL	5,100.0	0.88	249.79	4,945.34	495.92	-835.81	971.84	0.35	0.23	-19.32	302.32
	NORMAL	5,194.0	1.30	238.69	5,039.32	495.12	-837.40	972.81	0.50	0.45	-11.81	327.69
	NORMAL	5,288.0	1.08	225.13	5,133.30	493.94	-838.94	973.54	0.38	-0.23	-14.43	225.35
	NORMAL	5,381.0	1.32	221.67	5,226.28	492.52	-840.27	973.98	0.27	0.26	-3.72	341.47
	NORMAL	5,446.0	1.32	225.80	5,291.26	491.44	-841.30	974.32	0.15	0.00	6.35	92.06
	NORMAL	5,511.0	1.32	229.93	5,356.25	490.43	-842.41	974.77	0.15	0.00	6.35	92.06

3 Charts

3.1 Vertical Section View



3.2 Plan View

