

Deviation Summary

PICEANCE VLY

1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well/Wellbore Information

Well	SG 14-22	Wellbore No.	00
Wellbore Legal Name	SG 14-22	Common Wellbore Name	SG 14-22
Project	SG 22-07S-096W	Site	SG 24-22 Pad
Vertical Section Azimuth	289.25 (°)	North reference	
Origin N/S		Origin E/W	
Spud date	3/9/2014	UWI	SG 14-22
Active datum	KB @5,272.0ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	SCIENTIFIC
Date Started	3/9/2014	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 (°/100usft)	Build Rate (°/100usft)	Turn (°/100usft)	Tface (°)
3/9/2014	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3/9/2014	NORMAL	126.0	3.47	287.49	125.92	1.15	-3.64	3.81	2.75	2.75	0.00	287.49
	NORMAL	156.0	5.25	294.88	155.84	2.00	-5.75	6.09	6.21	5.93	24.63	21.23
	NORMAL	248.0	10.51	294.48	246.93	7.25	-17.21	18.64	5.72	5.72	-0.43	359.20
	NORMAL	339.0	13.10	289.89	336.00	14.20	-34.47	37.22	3.03	2.85	-5.04	337.81
	NORMAL	431.0	14.91	286.38	425.27	21.08	-55.63	59.47	2.17	1.97	-3.82	333.15
	NORMAL	522.0	18.29	289.71	512.46	29.20	-80.31	85.45	3.86	3.71	3.66	17.32
3/10/2014	NORMAL	612.0	20.47	288.44	597.36	38.94	-108.54	115.31	2.47	2.42	-1.41	348.46
3/10/2014	NORMAL	702.0	22.52	287.16	681.10	49.01	-139.94	148.27	2.34	2.28	-1.42	346.52
	NORMAL	794.0	24.73	287.55	765.38	60.01	-175.13	185.12	2.41	2.40	0.42	4.22
	NORMAL	886.0	25.44	288.13	848.70	71.96	-212.25	224.11	0.82	0.77	0.63	19.37
	NORMAL	977.0	27.47	290.18	930.17	85.29	-250.53	264.64	2.45	2.23	2.25	25.14
	NORMAL	1,069.0	29.69	289.45	1,010.96	100.20	-291.94	308.65	2.44	2.41	-0.79	350.74
	NORMAL	1,164.0	31.95	288.97	1,092.53	116.20	-337.90	357.32	2.39	2.38	-0.51	353.58
	NORMAL	1,226.0	34.32	289.30	1,144.45	127.31	-369.91	391.21	3.83	3.82	0.53	4.49
3/12/2014	NORMAL	1,346.0	34.97	287.00	1,243.18	148.55	-434.73	459.40	1.22	0.54	-1.92	295.48
	NORMAL	1,441.0	35.75	288.38	1,320.65	165.26	-487.10	514.35	1.18	0.82	1.45	46.24
	NORMAL	1,535.0	35.95	289.25	1,396.84	183.02	-539.21	569.40	0.58	0.21	0.93	68.92
	NORMAL	1,630.0	36.56	289.10	1,473.45	201.47	-592.28	625.58	0.65	0.64	-0.16	351.67
	NORMAL	1,724.0	38.77	290.79	1,547.86	221.08	-646.26	683.01	2.59	2.35	1.80	25.72
	NORMAL	1,818.0	38.84	289.61	1,621.11	241.42	-701.54	741.91	0.79	0.07	-1.26	274.95

2.1.2 Survey Stations (Continued)

Date	Type	MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. sec. (ft)	DLS (°/100usft)	Build Rate (°/100usft)	Turn (°/100usft)	Tface (°)
3/12/2014	NORMAL	1,913.0	36.40	287.78	1,696.36	260.03	-756.45	799.88	2.82	-2.57	-1.93	203.88
	NORMAL	2,007.0	36.48	286.58	1,771.98	276.52	-809.79	855.68	0.76	0.09	-1.28	275.92
	NORMAL	2,101.0	35.10	286.16	1,848.23	292.01	-862.53	910.58	1.49	-1.47	-0.45	189.92
	NORMAL	2,196.0	33.08	283.92	1,926.90	305.85	-913.94	963.68	2.50	-2.13	-2.36	210.94
	NORMAL	2,290.0	31.29	284.78	2,006.45	318.25	-962.44	1,013.56	1.97	-1.90	0.91	166.01
	NORMAL	2,384.0	29.94	285.82	2,087.35	330.88	-1,008.62	1,061.31	1.54	-1.44	1.11	159.03
	NORMAL	2,479.0	27.15	286.48	2,170.79	343.49	-1,052.22	1,106.64	2.96	-2.94	0.69	173.84
	NORMAL	2,573.0	23.80	290.95	2,255.65	356.36	-1,090.51	1,147.03	4.11	-3.56	4.76	152.15
	NORMAL	2,668.0	20.02	294.12	2,343.77	369.87	-1,123.27	1,182.41	4.17	-3.98	3.34	164.09
	NORMAL	2,762.0	18.53	299.41	2,432.51	383.78	-1,150.97	1,213.15	2.44	-1.59	5.63	132.95
	NORMAL	2,856.0	18.06	298.54	2,521.76	398.07	-1,176.78	1,242.23	0.58	-0.50	-0.93	209.75
	NORMAL	2,950.0	15.56	298.41	2,611.73	411.04	-1,200.68	1,269.06	2.66	-2.66	-0.14	180.80
	NORMAL	3,045.0	14.14	297.07	2,703.56	422.38	-1,222.22	1,293.14	1.54	-1.49	-1.41	192.95
	NORMAL	3,139.0	12.78	296.48	2,794.98	432.24	-1,241.75	1,314.83	1.45	-1.45	-0.63	185.48
3/13/2014	NORMAL	3,233.0	11.92	302.06	2,886.80	442.03	-1,259.28	1,334.61	1.56	-0.91	5.94	128.48
	NORMAL	3,327.0	11.04	300.11	2,978.92	451.70	-1,275.30	1,352.91	1.02	-0.94	-2.07	202.85
	NORMAL	3,421.0	10.38	298.70	3,071.28	460.28	-1,290.51	1,370.11	0.76	-0.70	-1.50	200.96
	NORMAL	3,515.0	10.37	296.57	3,163.75	468.13	-1,305.50	1,386.85	0.41	-0.01	-2.27	267.46
	NORMAL	3,609.0	8.78	294.79	3,256.43	474.92	-1,319.59	1,402.38	1.72	-1.69	-1.89	189.67
	NORMAL	3,703.0	8.73	290.42	3,349.34	480.42	-1,332.78	1,416.66	0.71	-0.05	-4.65	263.54
	NORMAL	3,798.0	6.57	290.82	3,443.49	484.87	-1,344.62	1,429.30	2.27	-2.27	0.42	178.79
	NORMAL	3,892.0	5.03	285.26	3,537.01	487.86	-1,353.62	1,438.79	1.74	-1.64	-5.91	197.29
	NORMAL	3,986.0	3.92	279.37	3,630.72	489.47	-1,360.77	1,446.06	1.28	-1.18	-6.27	199.57
	NORMAL	4,080.0	4.08	277.87	3,724.49	490.45	-1,367.25	1,452.51	0.20	0.17	-1.60	326.07
	NORMAL	4,174.0	2.86	269.07	3,818.32	490.87	-1,372.91	1,457.99	1.41	-1.30	-9.36	199.23
	NORMAL	4,269.0	1.15	284.31	3,913.26	491.07	-1,376.20	1,461.16	1.87	-1.80	16.04	170.20
	NORMAL	4,363.0	1.51	112.02	4,007.25	490.84	-1,375.97	1,460.86	2.82	0.38	-183.29	184.38
	NORMAL	4,457.0	1.65	106.77	4,101.21	489.98	-1,373.53	1,458.27	0.21	0.15	-5.59	311.40
3/14/2014	NORMAL	4,552.0	1.78	126.15	4,196.17	488.72	-1,371.02	1,455.50	0.62	0.14	20.40	87.17
	NORMAL	4,646.0	1.51	55.88	4,290.14	488.55	-1,368.82	1,453.36	2.03	-0.29	-74.76	228.22
	NORMAL	4,740.0	1.55	63.16	4,384.11	489.82	-1,366.66	1,451.74	0.21	0.04	7.74	82.03
	NORMAL	4,835.0	1.03	68.45	4,478.08	490.72	-1,364.72	1,450.20	0.56	-0.55	5.57	169.74
	NORMAL	4,928.0	1.10	53.90	4,572.06	491.55	-1,363.22	1,449.06	0.30	0.08	-15.65	277.16
	NORMAL	5,023.0	0.77	60.49	4,667.05	492.40	-1,361.93	1,448.12	0.36	-0.35	6.94	165.23
	NORMAL	5,117.0	0.45	47.66	4,761.05	492.96	-1,361.11	1,447.53	0.37	-0.34	-13.65	196.79
	NORMAL	5,211.0	0.38	181.61	4,855.05	492.90	-1,360.84	1,447.26	0.81	-0.07	142.50	159.03
	NORMAL	5,306.0	0.39	232.21	4,950.04	492.38	-1,361.11	1,447.34	0.35	0.01	53.26	113.73
	NORMAL	5,400.0	0.37	291.35	5,044.04	492.30	-1,361.64	1,447.82	0.40	-0.02	62.92	122.22
	NORMAL	5,494.0	0.55	270.52	5,138.04	492.41	-1,362.38	1,448.55	0.26	0.19	-22.16	306.37
	NORMAL	5,590.0	0.44	210.94	5,234.04	492.10	-1,363.03	1,449.06	0.52	-0.11	-62.06	229.23
	NORMAL	5,657.0	0.59	192.44	5,301.03	491.54	-1,363.23	1,449.07	0.33	0.22	-27.61	302.55
	NORMAL	5,712.0	0.59	192.44	5,356.03	490.99	-1,363.36	1,449.00	0.00	0.00	0.00	0.00