

## 1 General

### 1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

### 1.2 Well/Wellbore Information

Well	PA 43-3	Wellbore No.	00
Wellbore Legal Name	PA 43-3	Common Wellbore Name	PA 43-3
Project	PA 02-07S-095W	Site	GV 86-2 Pad
Vertical Section Azimuth	279.12 (°)	North reference	
Origin N/S		Origin E/W	
Spud date	5/13/2014	UWI	PA 43-3
Active datum	KB @5,847.0ft (above Mean Sea Level)		

## 2 Survey Name

### 2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	
Date Started	5/15/2014	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 (°)
5/15/2014	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/15/2014	NORMAL	72.0	0.18	323.17	72.00	0.09	-0.07	0.08	0.25	0.25	0.00	323.17
	NORMAL	162.0	2.46	280.90	161.97	0.57	-2.05	2.11	2.59	2.53	-46.97	314.75
	NORMAL	254.0	5.89	285.21	253.71	2.18	-8.55	8.78	3.74	3.73	4.68	7.38
	NORMAL	344.0	10.03	278.70	342.83	4.58	-20.75	21.22	4.70	4.60	-7.23	344.47
	NORMAL	435.0	12.67	276.50	432.04	6.91	-38.51	39.11	2.94	2.90	-2.42	349.61
	NORMAL	509.0	15.19	279.42	503.86	9.41	-56.14	56.92	3.53	3.41	3.95	17.01
	NORMAL	599.0	18.64	277.76	589.95	13.29	-82.03	83.10	3.87	3.83	-1.84	351.23
	NORMAL	690.0	22.10	276.59	675.25	17.22	-113.45	114.75	3.83	3.80	-1.29	352.74
	NORMAL	780.0	25.59	276.18	757.56	21.25	-149.61	151.08	3.88	3.88	-0.46	357.09
	NORMAL	871.0	29.99	279.70	838.05	27.20	-191.59	193.48	5.16	4.84	3.87	22.02
	NORMAL	961.0	34.12	280.14	914.31	35.44	-238.63	241.23	4.60	4.59	0.49	3.42
	NORMAL	1,056.0	37.11	280.31	991.53	45.26	-293.06	296.53	3.15	3.15	0.18	1.97
	NORMAL	1,151.0	39.31	280.58	1,066.17	55.92	-350.85	355.27	2.32	2.32	0.28	4.45
	NORMAL	1,338.0	40.63	278.29	1,209.49	75.58	-469.33	475.38	1.06	0.71	-1.22	311.02
	NORMAL	1,432.0	41.59	278.68	1,280.31	84.70	-530.46	537.18	1.06	1.02	0.41	15.10
	NORMAL	1,527.0	42.39	279.81	1,350.92	94.91	-593.19	600.73	1.16	0.84	1.19	43.80
	NORMAL	1,622.0	42.97	278.70	1,420.77	105.27	-656.75	665.13	1.00	0.61	-1.17	307.22
	NORMAL	1,717.0	44.20	278.74	1,489.58	115.20	-721.49	730.62	1.30	1.29	0.04	1.30
	NORMAL	1,812.0	45.06	280.50	1,557.19	126.36	-787.28	797.36	1.59	0.91	1.85	55.81
	NORMAL	1,906.0	45.00	279.82	1,623.62	138.09	-852.74	863.85	0.52	-0.06	-0.72	262.65

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)	Buld Rate (°/100usft)	Turn (°/100usft)	Tface (°)
5/15/2014	NORMAL	2,001.0	44.11	280.74	1,691.32	149.98	-918.32	930.48	1.16	-0.94	0.97	144.38
	NORMAL	2,096.0	44.76	279.43	1,759.15	161.62	-983.80	996.98	1.18	0.68	-1.38	304.86
	NORMAL	2,191.0	43.09	279.52	1,827.57	172.47	-1,048.80	1,062.88	1.76	-1.76	0.09	177.89
	NORMAL	2,286.0	41.96	281.99	1,897.59	184.43	-1,111.86	1,127.05	2.12	-1.19	2.60	125.00
	NORMAL	2,381.0	42.16	283.14	1,968.12	196.28	-1,173.99	1,190.58	0.84	0.21	1.21	75.87
	NORMAL	2,476.0	40.45	281.46	2,039.49	211.65	-1,235.25	1,253.18	2.15	-1.80	-1.77	212.33
	NORMAL	2,571.0	39.21	280.85	2,112.44	223.42	-1,294.94	1,313.99	1.37	-1.31	-0.64	197.26
	NORMAL	2,665.0	39.31	280.14	2,185.22	234.26	-1,353.44	1,373.46	0.49	0.11	-0.76	282.27
	NORMAL	2,760.0	39.39	279.87	2,258.69	244.72	-1,412.76	1,433.69	0.20	0.08	-0.28	294.94
	NORMAL	2,855.0	39.31	279.26	2,332.15	254.73	-1,472.15	1,493.92	0.42	-0.08	-0.64	258.08
	NORMAL	2,950.0	38.87	278.38	2,405.89	263.92	-1,531.34	1,553.82	0.75	-0.46	-0.93	231.25
	NORMAL	3,045.0	38.43	277.59	2,480.08	272.16	-1,590.10	1,613.14	0.70	-0.46	-0.83	227.97
	NORMAL	3,140.0	36.75	277.76	2,555.35	279.90	-1,647.53	1,671.07	1.77	-1.77	0.18	176.54
	NORMAL	3,235.0	35.23	278.44	2,632.22	287.76	-1,702.80	1,726.88	1.65	-1.60	0.72	165.55
	NORMAL	3,330.0	33.06	277.97	2,710.84	295.38	-1,755.57	1,780.20	2.30	-2.28	-0.49	186.74
	NORMAL	3,425.0	31.99	277.33	2,790.94	302.18	-1,806.19	1,831.26	1.18	-1.13	-0.67	197.56
	NORMAL	3,585.0	31.99	277.33	2,926.63	313.00	-1,890.26	1,915.97	0.00	0.00	0.00	0.00