

1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well Information

Well	RWF 312-35	Wellbore No.	
Well Name	RWF 312-35	Common Name	RWF 312-35
Project	RU 35-06S-094W	Site	RMV 15-35 Pad
Vertical Section Azimuth	33.58 (°)	North Reference	True
Origin N/S		Origin E/W	
Spud Date	6/9/2012	UWI	RWF 312-35
Active Datum	KB @5,575.7ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	
Date Started	6/9/2012	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

5624

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 (°)
6/9/2012	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6/9/2012	NORMAL	86.0	0.88	7.65	86.00	0.65	0.09	0.59	1.02	1.02	0.00	7.65
	NORMAL	178.0	1.32	76.64	177.98	1.60	1.21	2.00	1.41	0.48	74.99	108.26
	NORMAL	269.0	2.82	61.44	268.92	2.91	4.20	4.75	1.74	1.65	-16.70	332.19
6/10/2012	NORMAL	360.0	2.90	43.07	359.81	5.66	7.74	9.00	1.01	0.09	-20.19	265.77
	NORMAL	430.0	3.08	30.52	429.72	8.58	9.90	12.62	0.97	0.26	-17.93	279.05
	NORMAL	521.0	3.42	24.89	520.57	13.15	12.29	17.75	0.51	0.37	-6.19	313.98
	NORMAL	612.0	3.96	26.77	611.38	18.41	14.84	23.55	0.61	0.59	2.07	13.57
	NORMAL	703.0	4.47	26.36	702.13	24.40	17.83	30.19	0.56	0.56	-0.45	356.41
	NORMAL	794.0	5.48	26.74	792.79	31.45	21.36	38.02	1.11	1.11	0.42	2.06
	NORMAL	886.0	4.29	36.11	884.46	38.16	25.37	45.82	1.55	-1.29	10.18	150.77
	NORMAL	977.0	2.96	31.48	975.27	42.91	28.60	51.57	1.50	-1.46	-5.09	190.11
	NORMAL	1,088.0	3.52	32.75	1,086.09	48.22	31.94	57.84	0.51	0.50	1.14	7.94
6/11/2012	NORMAL	1,165.0	3.90	30.74	1,162.93	52.46	34.56	62.82	0.52	0.49	-2.61	340.10
	NORMAL	1,257.0	2.75	36.57	1,254.78	56.92	37.47	68.15	1.30	-1.25	6.34	166.51
	NORMAL	1,352.0	2.60	39.97	1,349.67	60.40	40.21	72.57	0.23	-0.16	3.58	135.08
	NORMAL	1,448.0	2.64	45.32	1,445.57	63.63	43.18	76.89	0.26	0.04	5.57	83.39
	NORMAL	1,544.0	2.29	13.88	1,541.49	67.04	45.22	80.86	1.43	-0.36	-32.75	240.13
	NORMAL	1,640.0	1.85	16.84	1,637.42	70.39	46.13	84.15	0.47	-0.46	3.08	167.82
	NORMAL	1,734.0	3.25	28.97	1,731.33	74.17	47.86	88.26	1.59	1.49	12.90	27.21
	NORMAL	1,828.0	3.02	33.37	1,825.19	78.57	50.51	93.40	0.35	-0.24	4.68	135.89

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 (°)
6/11/2012	NORMAL	1,924.0	2.55	36.00	1,921.08	82.41	53.16	98.06	0.51	-0.49	2.74	166.10
	NORMAL	2,020.0	2.73	32.66	2,016.97	86.06	55.64	102.48	0.25	0.19	-3.48	317.80
	NORMAL	2,115.0	2.58	33.97	2,111.87	89.74	58.06	106.88	0.17	-0.16	1.38	158.63
	NORMAL	2,211.0	3.13	30.69	2,207.75	93.79	60.60	111.66	0.60	0.57	-3.42	341.81
6/12/2012	NORMAL	2,306.0	2.16	41.94	2,302.65	97.35	63.13	116.02	1.15	-1.02	11.84	157.39
	NORMAL	2,402.0	2.46	49.71	2,398.57	100.03	65.91	119.79	0.45	0.31	8.09	50.16
	NORMAL	2,497.0	2.41	50.15	2,493.49	102.63	68.99	123.66	0.06	-0.05	0.46	159.72
	NORMAL	2,593.0	1.79	34.43	2,589.42	105.16	71.39	127.09	0.88	-0.65	-16.38	215.22
	NORMAL	2,689.0	2.03	23.32	2,685.37	107.95	72.91	130.27	0.46	0.25	-11.57	297.31
	NORMAL	2,784.0	1.35	19.54	2,780.33	110.55	73.95	133.01	0.72	-0.72	-3.98	187.42
	NORMAL	2,878.0	2.11	14.55	2,874.28	113.27	74.76	135.72	0.82	0.81	-5.31	346.29
	NORMAL	2,973.0	2.02	10.34	2,969.22	116.61	75.50	138.91	0.19	-0.09	-4.43	237.23
	NORMAL	3,068.0	2.09	23.52	3,064.16	119.85	76.49	142.15	0.50	0.07	13.87	88.20
	NORMAL	3,163.0	1.99	17.58	3,159.10	123.01	77.68	145.44	0.25	-0.11	-6.25	241.74
	NORMAL	3,257.0	1.96	41.14	3,253.05	125.78	79.23	148.61	0.86	-0.03	25.06	103.86
	NORMAL	3,353.0	2.46	48.04	3,348.98	128.39	81.84	152.23	0.59	0.52	7.19	31.50
	NORMAL	3,447.0	1.56	51.45	3,442.92	130.54	84.34	155.40	0.97	-0.96	3.63	174.13
	NORMAL	3,542.0	2.23	49.98	3,537.87	132.53	86.77	158.40	0.71	0.71	-1.55	355.12
	NORMAL	3,638.0	2.22	35.16	3,633.79	135.25	89.27	162.06	0.60	-0.01	-15.44	261.61
	NORMAL	3,734.0	1.61	35.94	3,729.74	137.86	91.13	165.26	0.64	-0.64	0.81	177.94
	NORMAL	3,861.0	2.39	27.71	3,856.66	141.65	93.41	169.68	0.65	0.61	-6.48	335.64
	NORMAL	3,925.0	2.71	30.50	3,920.60	144.14	94.80	172.52	0.54	0.50	4.36	22.60
	NORMAL	4,020.0	2.66	39.05	4,015.49	147.78	97.33	176.95	0.42	-0.05	9.00	101.37
	NORMAL	4,115.0	2.11	36.88	4,110.41	150.89	99.77	180.89	0.59	-0.58	-2.28	188.24
	NORMAL	4,210.0	1.85	38.37	4,205.35	153.50	101.77	184.17	0.28	-0.27	1.57	169.54
	NORMAL	4,305.0	2.29	39.60	4,300.29	156.16	103.93	187.58	0.47	0.46	1.29	6.38
	NORMAL	4,400.0	2.37	49.10	4,395.21	158.91	106.62	191.36	0.41	0.08	10.00	83.07
	NORMAL	4,496.0	2.31	47.95	4,491.13	161.50	109.56	195.15	0.08	-0.06	-1.20	217.47
6/13/2012	NORMAL	4,591.0	2.01	46.10	4,586.07	163.94	112.18	198.63	0.32	-0.32	-1.95	192.16
	NORMAL	4,687.0	2.20	39.08	4,682.00	166.54	114.56	202.11	0.33	0.20	-7.31	302.84
	NORMAL	4,782.0	1.83	59.19	4,776.94	168.73	117.01	205.29	0.83	-0.39	21.17	127.43
	NORMAL	4,876.0	2.00	61.52	4,870.89	170.28	119.74	208.09	0.20	0.18	2.48	25.78
	NORMAL	4,971.0	0.88	30.55	4,965.86	171.70	121.57	210.29	1.39	-1.18	-32.60	199.98
	NORMAL	5,065.0	0.35	5.77	5,059.86	172.61	121.97	211.26	0.62	-0.56	-26.36	194.62
	NORMAL	5,161.0	0.55	27.21	5,155.85	173.31	122.21	211.98	0.27	0.21	22.33	51.15
	NORMAL	5,257.0	0.09	308.99	5,251.85	173.77	122.36	212.44	0.56	-0.48	-81.48	189.41
	NORMAL	5,352.0	0.08	112.48	5,346.85	173.79	122.36	212.46	0.18	-0.01	172.09	172.23
	NORMAL	5,448.0	0.45	243.42	5,442.85	173.60	122.09	212.15	0.53	0.39	136.40	137.80
	NORMAL	5,544.0	0.58	24.02	5,538.85	173.87	121.95	212.30	1.01	0.14	146.46	157.71
	NORMAL	5,638.0	0.89	31.62	5,632.84	174.93	122.52	213.50	0.34	0.33	8.09	21.28
	NORMAL	5,732.0	0.79	59.03	5,726.83	175.88	123.46	214.82	0.44	-0.11	29.16	117.42
	NORMAL	5,826.0	0.62	69.66	5,820.82	176.39	124.49	215.81	0.23	-0.18	11.31	147.66
	NORMAL	5,921.0	0.18	133.91	5,915.82	176.47	125.08	216.20	0.60	-0.46	67.63	163.34
6/14/2012	NORMAL	6,017.0	0.18	15.87	6,011.82	176.51	125.23	216.32	0.32	0.00	-122.96	210.98
	NORMAL	6,112.0	0.53	151.75	6,106.82	176.26	125.48	216.25	0.71	0.37	143.03	146.64
	NORMAL	6,208.0	0.26	148.24	6,202.82	175.69	125.81	215.95	0.28	-0.28	-3.66	183.37
	NORMAL	6,301.0	0.55	147.79	6,295.82	175.13	126.16	215.68	0.31	0.31	-0.48	359.15
	NORMAL	6,396.0	0.28	129.81	6,390.81	174.60	126.58	215.47	0.31	-0.28	-18.93	196.95
	NORMAL	6,491.0	1.15	250.87	6,485.81	174.14	125.85	214.68	1.39	0.92	127.43	131.56
	NORMAL	6,587.0	1.53	247.65	6,581.78	173.33	123.76	212.86	0.40	0.40	-3.35	347.18
	NORMAL	6,682.0	1.14	261.79	6,676.76	172.71	121.65	211.18	0.53	-0.41	14.88	146.74
	NORMAL	6,778.0	0.88	269.61	6,772.74	172.57	119.97	210.13	0.31	-0.27	8.15	155.94
	NORMAL	6,872.0	0.62	338.34	6,866.73	173.04	119.06	210.01	0.93	-0.28	73.12	138.59
	NORMAL	6,967.0	0.77	334.66	6,961.73	174.10	118.60	210.64	0.16	0.16	-3.87	341.58
	NORMAL	7,063.0	0.53	260.56	7,057.72	174.61	117.88	210.67	0.84	-0.25	-77.19	219.21
	NORMAL	7,158.0	1.84	241.66	7,152.70	173.81	116.11	209.02	1.42	1.38	-19.89	333.79
	NORMAL	7,254.0	3.52	237.36	7,248.59	171.49	112.27	204.96	1.76	1.75	-4.48	351.02

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 (°)
6/14/2012	NORMAL	7,349.0	3.34	234.90	7,343.42	168.32	107.55	199.72	0.24	-0.19	-2.59	218.05
6/15/2012	NORMAL	7,538.0	3.96	234.72	7,532.04	161.39	97.72	188.50	0.33	0.33	-0.10	358.85
	NORMAL	7,634.0	4.13	236.39	7,627.80	157.56	92.13	182.22	0.22	0.18	1.74	35.55
6/16/2012	NORMAL	7,721.0	4.13	236.39	7,714.57	154.09	86.91	176.45	0.00	0.00	0.00	0.00