

**1 General****1.1 Customer Information**

Company	PICEANCE VLY
Representative	
Address	

**1.2 Well Information**

Well	RWF 12-35	Wellbore No.	
Well Name	RWF 12-35	Common Name	RWF 12-35
Project	RU 35-06S-094W	Site	RMV 15-35 Pad
Vertical Section Azimuth	17.28 (°)	North Reference	True
Origin N/S		Origin E/W	
Spud Date	5/14/2012	UWI	RWF 12-35
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	5/14/2012	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 (°)
5/14/2012	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/14/2012	NORMAL	50.0			50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5/15/2012	NORMAL	100.0			100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**2.2 Survey Name: Survey #2**

Survey Name	Survey #2	Company	
Date Started	5/15/2012	Ended	
Tool Name	MWD	Engineer	

**2.2.1 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

**2.2.2 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 (°)
5/15/2012	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## 2.2.2 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 (°)
5/15/2012	NORMAL	249.0	4.33	16.46	248.76	9.02	2.66	9.40	1.74	1.74	0.00	16.46
	NORMAL	340.0	5.01	20.72	339.46	16.03	5.04	16.80	0.84	0.75	4.68	29.16
5/16/2012	NORMAL	249.0	4.33	16.46	248.76	9.02	2.66	9.40	0.00	0.00	0.00	0.00
	NORMAL	340.0	5.01	20.72	339.46	16.03	5.04	16.80	0.00	0.00	0.00	0.00
	NORMAL	432.0	5.58	16.76	431.07	24.07	7.76	25.29	0.74	0.62	-4.30	325.35
	NORMAL	522.0	5.94	15.86	520.61	32.74	10.29	34.32	0.41	0.40	-1.00	345.47
	NORMAL	613.0	6.24	13.95	611.10	42.07	12.77	43.96	0.40	0.33	-2.10	325.01
	NORMAL	704.0	6.49	14.70	701.54	51.84	15.27	54.04	0.29	0.27	0.82	18.77
	NORMAL	795.0	6.77	10.08	791.93	62.10	17.51	64.50	0.66	0.31	-5.08	295.39
	NORMAL	887.0	6.22	16.95	883.34	72.21	19.91	74.86	1.03	-0.60	7.47	128.67
	NORMAL	978.0	6.69	13.78	973.76	82.07	22.61	85.08	0.65	0.52	-3.48	321.25
	NORMAL	1,073.0	6.67	21.29	1,068.12	92.58	25.93	96.11	0.92	-0.02	7.91	95.04
5/17/2012	NORMAL	1,166.0	8.09	20.45	1,160.35	103.75	30.18	108.03	1.53	1.53	-0.90	355.24
	NORMAL	1,257.0	6.68	18.88	1,250.59	114.76	34.13	119.72	1.57	-1.55	-1.73	187.37
	NORMAL	1,352.0	6.95	19.93	1,344.92	125.39	37.88	130.98	0.31	0.28	1.11	25.29
	NORMAL	1,448.0	5.69	19.92	1,440.34	135.32	41.48	141.54	1.31	-1.31	-0.01	180.05
	NORMAL	1,544.0	5.72	21.52	1,535.86	144.25	44.86	151.06	0.17	0.03	1.67	80.12
	NORMAL	1,640.0	5.54	18.96	1,631.40	153.08	48.12	160.46	0.32	-0.19	-2.67	233.10
	NORMAL	1,734.0	4.84	16.59	1,725.01	161.17	50.72	168.97	0.78	-0.74	-2.52	195.85
	NORMAL	1,828.0	6.33	19.05	1,818.56	169.87	53.55	178.11	1.61	1.59	2.62	10.35
	NORMAL	1,924.0	5.80	19.93	1,914.02	179.43	56.93	188.25	0.56	-0.55	0.92	170.49
	NORMAL	2,020.0	6.07	17.73	2,009.51	188.83	60.13	198.17	0.37	0.28	-2.29	318.79
	NORMAL	2,116.0	5.89	14.21	2,104.99	198.44	62.88	208.16	0.43	-0.19	-3.67	242.11
	NORMAL	2,211.0	5.54	13.51	2,199.52	207.62	65.15	217.60	0.38	-0.37	-0.74	190.92
	NORMAL	2,307.0	5.56	9.62	2,295.07	216.71	67.01	226.84	0.39	0.02	-4.05	271.11
5/18/2012	NORMAL	2,402.0	5.98	20.63	2,389.59	225.88	69.52	236.34	1.24	0.44	11.59	74.76
	NORMAL	2,498.0	5.98	19.49	2,485.06	235.28	72.95	246.33	0.12	0.00	-1.19	269.43
	NORMAL	2,593.0	5.89	19.31	2,579.56	244.54	76.21	256.14	0.10	-0.09	-0.19	191.59
	NORMAL	2,689.0	5.56	17.48	2,675.08	253.63	79.24	265.72	0.39	-0.34	-1.91	208.04
	NORMAL	2,785.0	5.59	19.74	2,770.62	262.46	82.22	275.04	0.23	0.03	2.35	83.34
	NORMAL	2,878.0	6.16	12.98	2,863.14	271.59	84.87	284.54	0.96	0.61	-7.27	306.09
	NORMAL	2,973.0	6.16	11.58	2,957.59	281.55	87.04	294.70	0.16	0.00	-1.47	269.30
	NORMAL	3,068.0	6.46	17.54	3,052.01	291.64	89.67	305.11	0.76	0.32	6.27	68.37
	NORMAL	3,164.0	6.24	14.74	3,147.42	301.83	92.62	315.72	0.40	-0.23	-2.92	233.22
	NORMAL	3,257.0	6.16	17.38	3,239.88	311.48	95.40	325.76	0.32	-0.09	2.84	106.98
	NORMAL	3,353.0	5.98	19.75	3,335.34	321.11	98.63	335.91	0.32	-0.19	2.47	126.86
	NORMAL	3,447.0	5.70	16.97	3,428.85	330.18	101.65	345.47	0.42	-0.30	-2.96	223.91
	NORMAL	3,543.0	6.48	18.41	3,524.31	339.88	104.75	355.65	0.83	0.81	1.50	11.80
	NORMAL	3,638.0	6.18	19.17	3,618.73	349.80	108.12	366.12	0.33	-0.32	0.80	164.77
	NORMAL	3,734.0	6.41	16.61	3,714.15	359.81	111.35	376.65	0.38	0.24	-2.67	308.05
	NORMAL	3,829.0	5.78	15.45	3,808.62	369.50	114.14	386.73	0.68	-0.66	-1.22	190.49
	NORMAL	3,925.0	6.36	17.04	3,904.08	379.25	116.99	396.88	0.63	0.60	1.66	16.96
	NORMAL	4,020.0	6.16	17.38	3,998.51	389.14	120.05	407.24	0.21	-0.21	0.36	169.67
	NORMAL	4,115.0	5.72	16.50	4,093.00	398.55	122.92	417.07	0.47	-0.46	-0.93	191.26
	NORMAL	4,210.0	6.16	15.18	4,187.49	408.00	125.60	426.90	0.48	0.46	-1.39	342.10
	NORMAL	4,305.0	5.89	17.29	4,281.97	417.58	128.38	436.86	0.37	-0.28	2.22	141.69
	NORMAL	4,400.0	5.36	18.08	4,376.51	426.45	131.21	446.18	0.56	-0.56	0.83	172.08
5/19/2012	NORMAL	4,496.0	5.04	16.33	4,472.11	434.76	133.78	454.88	0.37	-0.33	-1.82	205.50
	NORMAL	4,591.0	4.71	16.77	4,566.77	442.50	136.08	462.95	0.35	-0.35	0.46	173.75
	NORMAL	4,687.0	4.22	16.41	4,662.48	449.66	138.22	470.42	0.51	-0.51	-0.38	183.09
	NORMAL	4,782.0	4.13	19.22	4,757.22	456.24	140.33	477.33	0.24	-0.09	2.96	115.14
	NORMAL	4,877.0	2.46	22.30	4,852.06	461.36	142.23	482.78	1.77	-1.76	3.24	175.48
	NORMAL	4,972.0	2.55	27.17	4,946.97	465.13	143.97	486.90	0.24	0.09	5.13	69.52
	NORMAL	5,065.0	0.90	21.53	5,039.93	467.65	145.18	489.66	1.78	-1.77	-6.06	183.06
	NORMAL	5,161.0	0.69	42.44	5,135.92	468.77	145.85	490.94	0.37	-0.22	21.78	136.05
	NORMAL	5,257.0	0.31	75.25	5,231.92	469.27	146.49	491.60	0.48	-0.40	34.18	158.64
	NORMAL	5,352.0	0.50	68.97	5,326.91	469.48	147.12	491.99	0.21	0.20	-6.61	343.70

## 2.2.2 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 (°)
5/19/2012	NORMAL	5,448.0	0.46	95.56	5,422.91	469.59	147.90	492.33	0.23	-0.04	27.70	113.29
	NORMAL	5,544.0	0.26	188.85	5,518.91	469.34	148.25	492.19	0.56	-0.21	97.18	151.34
	NORMAL	5,639.0	0.87	20.99	5,613.91	469.80	148.47	492.70	1.18	0.64	-176.69	189.36
	NORMAL	5,732.0	1.04	45.15	5,706.89	471.06	149.33	494.15	0.47	0.18	25.98	79.50
	NORMAL	5,826.0	0.44	36.89	5,800.89	471.95	150.15	495.25	0.65	-0.64	-8.79	185.97
	NORMAL	5,922.0	0.61	37.04	5,896.88	472.65	150.68	496.07	0.18	0.18	0.16	0.54
	NORMAL	6,017.0	0.64	41.81	5,991.88	473.45	151.33	497.03	0.06	0.03	5.02	62.43
	NORMAL	6,113.0	0.33	47.46	6,087.87	474.04	151.90	497.76	0.33	-0.32	5.89	174.05
	NORMAL	6,208.0	0.09	211.88	6,182.87	474.16	152.06	497.92	0.44	-0.25	173.07	176.68
5/20/2012	NORMAL	6,301.0	1.06	32.05	6,275.87	474.82	152.48	498.68	1.24	1.04	-193.37	180.16
	NORMAL	6,396.0	0.68	30.61	6,370.86	476.05	153.23	500.08	0.40	-0.40	-1.52	182.57
	NORMAL	6,492.0	0.30	42.51	6,466.85	476.73	153.69	500.86	0.41	-0.40	12.40	170.91
	NORMAL	6,587.0	0.26	352.94	6,561.85	477.13	153.83	501.29	0.25	-0.04	-52.18	236.42
	NORMAL	6,683.0	0.53	276.92	6,657.85	477.40	153.36	501.40	0.55	0.28	-79.19	255.61
	NORMAL	6,778.0	1.58	259.60	6,752.83	477.21	151.64	500.72	1.14	1.11	-18.23	334.32
	NORMAL	6,872.0	1.76	252.13	6,846.79	476.54	148.99	499.28	0.30	0.19	-7.95	305.81
5/21/2012	NORMAL	6,967.0	1.72	206.75	6,941.75	474.82	146.96	497.04	1.41	-0.04	-47.77	245.74
	NORMAL	7,063.0	1.28	168.22	7,037.72	472.48	146.53	494.68	1.12	-0.46	-40.14	227.97
	NORMAL	7,159.0	0.14	49.57	7,133.71	471.51	146.84	493.84	1.41	-1.19	-123.59	185.21
	NORMAL	7,254.0	0.78	202.47	7,228.71	470.98	146.68	493.30	0.95	0.67	160.95	156.93
	NORMAL	7,349.0	0.68	214.05	7,323.70	469.92	146.12	492.11	0.19	-0.11	12.19	129.83
	NORMAL	7,445.0	0.88	205.99	7,419.69	468.78	145.48	490.84	0.24	0.21	-8.40	327.18
	NORMAL	7,539.0	0.88	202.30	7,513.68	467.47	144.88	489.40	0.06	0.00	-3.93	268.16
	NORMAL	7,625.0	1.32	201.68	7,599.67	465.94	144.27	487.76	0.51	0.51	-0.72	358.14
5/23/2012	NORMAL	7,682.0	1.32	201.68	7,656.65	464.72	143.78	486.45	0.00	0.00	0.00	0.00