

## 1 General

### 1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

### 1.2 Well Information

Well	RWF 22-35	Wellbore No.	
Well Name	RWF 22-35	Common Name	RWF 22-35
Project	RU 35-06S-094W	Site	RMV 15-35 Pad
Vertical Section Azimuth	88.74 (°)	North Reference	True
Origin N/S		Origin E/W	
Spud Date	6/24/2012	UWI	RWF 22-35
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	6/24/2012	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

5683

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 (°)
6/24/2012	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6/24/2012	NORMAL	87.0	0.44	71.89	87.00	0.10	0.32	0.32	0.51	0.51	0.00	71.89
	NORMAL	179.0	2.99	103.80	178.95	-0.36	2.98	2.98	2.86	2.77	34.68	36.99
6/25/2012	NORMAL	270.0	4.84	85.78	269.74	-0.64	9.12	9.10	2.42	2.03	-19.80	317.16
	NORMAL	362.0	6.69	90.88	361.27	-0.44	18.35	18.33	2.08	2.01	5.54	18.03
	NORMAL	453.0	10.12	88.86	451.28	-0.36	31.65	31.63	3.78	3.77	-2.22	354.08
	NORMAL	544.0	12.93	89.38	540.44	-0.09	49.82	49.81	3.09	3.09	0.57	2.37
	NORMAL	613.0	14.82	87.61	607.42	0.36	66.36	66.35	2.81	2.74	-2.57	346.48
	NORMAL	704.0	18.07	85.83	694.69	1.87	92.07	92.09	3.61	3.57	-1.96	350.33
	NORMAL	796.0	19.96	86.89	781.66	3.76	121.98	122.04	2.09	2.05	1.15	10.86
	NORMAL	887.0	19.43	89.44	867.34	4.75	152.63	152.70	1.11	-0.58	2.80	122.86
	NORMAL	978.0	20.40	89.03	952.90	5.17	183.62	183.69	1.08	1.07	-0.45	351.61
	NORMAL	1,074.0	19.69	90.73	1,043.08	5.25	216.52	216.59	0.96	-0.74	1.77	141.42
6/26/2012	NORMAL	1,165.0	20.62	88.86	1,128.51	5.37	247.87	247.93	1.24	1.02	-2.05	324.40
	NORMAL	1,257.0	21.25	89.68	1,214.44	5.78	280.74	280.80	0.76	0.68	0.89	25.33
	NORMAL	1,352.0	18.83	88.52	1,303.68	6.28	313.29	313.35	2.58	-2.55	-1.22	188.78
	NORMAL	1,448.0	19.08	85.75	1,394.47	7.84	344.43	344.51	0.97	0.26	-2.89	284.22
	NORMAL	1,544.0	18.83	86.39	1,485.27	9.98	375.53	375.66	0.34	-0.26	0.67	140.56
	NORMAL	1,640.0	19.35	86.36	1,575.99	11.96	406.87	407.03	0.54	0.54	-0.03	358.90
	NORMAL	1,734.0	19.25	87.30	1,664.71	13.68	437.89	438.08	0.35	-0.11	1.00	108.29
	NORMAL	1,828.0	20.01	89.55	1,753.24	14.54	469.45	469.66	1.14	0.81	2.39	45.91

## 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 (°)
6/26/2012	NORMAL	1,924.0	20.49	86.98	1,843.31	15.55	502.65	502.87	1.05	0.50	-2.68	297.14
	NORMAL	2,020.0	19.05	90.49	1,933.65	16.30	535.10	535.33	1.94	-1.50	3.66	142.14
	NORMAL	2,116.0	19.52	91.63	2,024.27	15.71	566.80	567.01	0.63	0.49	1.19	39.24
	NORMAL	2,211.0	19.35	92.34	2,113.85	14.62	598.39	598.57	0.31	-0.18	0.75	126.07
6/27/2012	NORMAL	2,306.0	19.97	88.64	2,203.32	14.36	630.34	630.50	1.46	0.65	-3.89	294.73
	NORMAL	2,402.0	20.02	88.79	2,293.53	15.10	663.15	663.33	0.07	0.05	0.16	45.80
	NORMAL	2,498.0	18.94	88.57	2,384.04	15.83	695.16	695.34	1.13	-1.13	-0.23	183.78
	NORMAL	2,593.0	19.39	87.22	2,473.77	16.98	726.32	726.52	0.66	0.47	-1.42	314.80
	NORMAL	2,689.0	18.73	88.21	2,564.51	18.24	757.65	757.86	0.77	-0.69	1.03	154.37
	NORMAL	2,785.0	18.82	87.42	2,655.40	19.42	788.52	788.76	0.28	0.09	-0.82	289.12
	NORMAL	2,878.0	18.62	87.08	2,743.48	20.85	818.33	818.59	0.24	-0.22	-0.37	208.46
	NORMAL	2,973.0	18.39	85.88	2,833.57	22.70	848.43	848.72	0.47	-0.24	-1.26	238.30
	NORMAL	3,068.0	19.85	86.10	2,923.32	24.87	879.47	879.80	1.54	1.54	0.23	2.93
	NORMAL	3,163.0	20.06	86.21	3,012.62	27.04	911.82	912.19	0.22	0.22	0.12	10.19
	NORMAL	3,257.0	19.25	91.58	3,101.15	27.68	943.40	943.78	2.10	-0.86	5.71	116.67
	NORMAL	3,353.0	18.82	91.90	3,191.90	26.73	974.69	975.04	0.46	-0.45	0.33	166.51
	NORMAL	3,447.0	19.55	87.47	3,280.68	26.92	1,005.56	1,005.91	1.73	0.78	-4.71	294.53
	NORMAL	3,542.0	19.64	89.58	3,370.18	27.74	1,037.40	1,037.76	0.75	0.09	2.22	83.75
	NORMAL	3,638.0	19.32	88.63	3,460.69	28.24	1,069.41	1,069.77	0.47	-0.33	-0.99	224.27
	NORMAL	3,734.0	19.28	88.27	3,551.29	29.10	1,101.13	1,101.50	0.13	-0.04	-0.38	251.25
	NORMAL	3,829.0	18.82	88.21	3,641.09	30.05	1,132.12	1,132.51	0.48	-0.48	-0.06	182.41
	NORMAL	3,925.0	18.88	87.67	3,731.94	31.17	1,163.12	1,163.52	0.19	0.06	-0.56	288.72
	NORMAL	4,020.0	17.41	87.95	3,822.22	32.30	1,192.68	1,193.10	1.55	-1.55	0.29	176.74
6/28/2012	NORMAL	4,115.0	15.29	86.91	3,913.37	33.48	1,219.40	1,219.84	2.25	-2.23	-1.09	187.36
	NORMAL	4,210.0	15.21	89.41	4,005.02	34.29	1,244.36	1,244.82	0.70	-0.08	2.63	98.14
	NORMAL	4,305.0	13.54	86.51	4,097.05	35.09	1,267.93	1,268.39	1.91	-1.76	-3.05	201.92
	NORMAL	4,400.0	13.32	85.57	4,189.45	36.61	1,289.94	1,290.43	0.33	-0.23	-0.99	224.32
	NORMAL	4,496.0	11.50	86.43	4,283.20	38.07	1,310.52	1,311.04	1.91	-1.90	0.90	174.62
	NORMAL	4,591.0	10.71	90.12	4,376.43	38.64	1,328.80	1,329.33	1.12	-0.83	3.88	139.82
	NORMAL	4,687.0	9.15	90.40	4,470.98	38.56	1,345.35	1,345.87	1.63	-1.63	0.29	178.37
	NORMAL	4,782.0	8.35	90.05	4,564.88	38.51	1,359.80	1,360.32	0.84	-0.84	-0.37	183.63
	NORMAL	4,876.0	7.56	87.42	4,657.97	38.78	1,372.81	1,373.33	0.93	-0.84	-2.80	203.44
	NORMAL	4,972.0	5.45	96.82	4,753.35	38.52	1,383.64	1,384.15	2.45	-2.20	9.79	157.84
	NORMAL	5,065.0	4.63	83.83	4,845.99	38.40	1,391.76	1,392.27	1.51	-0.88	-13.97	227.95
	NORMAL	5,161.0	4.46	82.11	4,941.69	39.33	1,399.31	1,399.84	0.23	-0.18	-1.79	217.87
	NORMAL	5,257.0	2.53	80.05	5,037.51	40.21	1,405.09	1,405.64	2.01	-2.01	-2.15	182.70
6/29/2012	NORMAL	5,352.0	2.24	78.86	5,132.43	40.93	1,408.98	1,409.54	0.31	-0.31	-1.25	189.10
	NORMAL	5,448.0	2.46	85.39	5,228.35	41.46	1,412.88	1,413.45	0.36	0.23	6.80	53.88
	NORMAL	5,544.0	0.70	36.70	5,324.31	42.09	1,415.28	1,415.86	2.15	-1.83	-50.72	194.75
6/30/2012	NORMAL	5,639.0	0.70	73.18	5,419.30	42.73	1,416.18	1,416.78	0.46	0.00	38.40	108.24
	NORMAL	5,732.0	0.34	105.57	5,512.30	42.82	1,416.99	1,417.59	0.49	-0.39	34.83	156.20
	NORMAL	5,826.0	0.14	130.61	5,606.30	42.67	1,417.35	1,417.94	0.24	-0.21	26.64	164.46
	NORMAL	5,922.0	0.18	94.62	5,702.30	42.58	1,417.59	1,418.18	0.11	0.04	-37.49	273.05
	NORMAL	6,017.0	0.44	210.08	5,797.30	42.25	1,417.55	1,418.14	0.57	0.27	121.54	132.90
	NORMAL	6,113.0	0.60	190.22	5,893.29	41.44	1,417.28	1,417.85	0.25	0.17	-20.69	301.38
	NORMAL	6,208.0	0.70	185.99	5,988.29	40.37	1,417.13	1,417.67	0.12	0.11	-4.45	332.24
	NORMAL	6,301.0	0.88	166.96	6,081.28	39.11	1,417.23	1,417.75	0.34	0.19	-20.46	294.69
	NORMAL	6,396.0	0.18	175.48	6,176.27	38.25	1,417.41	1,417.91	0.74	-0.74	8.97	177.82
	NORMAL	6,491.0	0.55	182.51	6,271.27	37.65	1,417.40	1,417.88	0.39	0.39	7.40	10.42
	NORMAL	6,587.0	0.70	322.26	6,367.27	37.65	1,417.02	1,417.51	1.22	0.16	145.57	157.36
	NORMAL	6,682.0	0.76	353.84	6,462.26	38.73	1,416.60	1,417.11	0.42	0.06	33.24	97.52
	NORMAL	6,778.0	0.90	329.58	6,558.25	40.02	1,416.15	1,416.69	0.39	0.15	-25.27	279.30
	NORMAL	6,872.0	0.62	350.56	6,652.24	41.16	1,415.69	1,416.25	0.42	-0.30	22.32	145.34
	NORMAL	6,967.0	0.44	310.57	6,747.24	41.90	1,415.33	1,415.91	0.42	-0.19	-42.09	224.99
7/1/2012	NORMAL	7,950.0	1.85	212.66	7,730.12	34.68	1,409.73	1,410.15	0.00	0.00	0.00	0.00
7/1/2012	NORMAL	7,063.0	0.70	301.49	6,843.23	42.45	1,414.55	1,415.14	0.29	0.27	-9.46	336.26
	NORMAL	7,159.0	0.35	290.27	6,939.23	42.85	1,413.77	1,414.37	0.38	-0.36	-11.69	190.81

## 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 (°)
7/1/2012	NORMAL	7,254.0	0.26	323.58	7,034.23	43.13	1,413.37	1,413.98	0.21	-0.09	35.06	132.91
	NORMAL	7,349.0	0.35	233.40	7,129.23	43.13	1,413.01	1,413.62	0.46	0.09	-94.93	233.28
	NORMAL	7,444.0	0.20	184.42	7,224.23	42.79	1,412.77	1,413.37	0.28	-0.16	-51.56	214.60
	NORMAL	7,538.0	0.35	115.54	7,318.23	42.50	1,413.01	1,413.61	0.36	0.16	-73.28	257.25
	NORMAL	7,634.0	0.88	200.18	7,414.22	41.68	1,413.02	1,413.60	0.95	0.55	88.17	106.99
	NORMAL	7,729.0	1.14	186.56	7,509.21	40.06	1,412.66	1,413.20	0.37	0.27	-14.34	310.34
	NORMAL	7,825.0	1.62	212.41	7,605.18	37.97	1,411.83	1,412.32	0.81	0.50	26.93	65.76
	NORMAL	7,893.0	1.85	212.66	7,673.15	36.23	1,410.72	1,411.18	0.34	0.34	0.37	2.01