

1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well Information

Well	RWF 42-34	Wellbore No.	
Well Name	RWF 42-34	Common Name	RWF 42-34
Project	RU 35-06S-094W	Site	RMV 15-35 Pad
Vertical Section Azimuth	296.93 (°)	North Reference	True
Origin N/S		Origin E/W	
Spud Date	6/1/2012	UWI	RWF 42-34
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	6/1/2012	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 (°)
6/1/2012	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6/1/2012	NORMAL	85.0	0.18	144.76	85.00	-0.11	0.08	-0.12	0.21	0.21	0.00	144.76
	NORMAL	178.0	2.46	259.98	177.97	-0.58	-1.80	1.35	2.73	2.45	123.89	118.89
	NORMAL	269.0	4.66	275.71	268.79	-0.55	-7.41	6.36	2.62	2.42	17.29	31.93
	NORMAL	360.0	6.69	284.06	359.34	1.11	-16.23	14.97	2.40	2.23	9.18	26.33
6/2/2012	NORMAL	450.0	9.50	291.53	448.44	5.11	-28.22	27.48	3.33	3.12	8.30	24.25
	NORMAL	541.0	12.93	299.09	537.69	12.82	-44.11	45.13	4.09	3.77	8.31	26.95
	NORMAL	632.0	15.84	302.26	625.83	24.40	-63.52	67.68	3.31	3.20	3.48	16.68
	NORMAL	703.0	18.11	298.53	693.74	34.84	-81.41	88.36	3.54	3.20	-5.25	332.58
	NORMAL	794.0	20.25	298.44	779.68	49.10	-107.68	118.24	2.35	2.35	-0.10	359.17
	NORMAL	886.0	21.51	297.75	865.64	64.54	-136.61	151.03	1.40	1.37	-0.75	348.63
	NORMAL	977.0	22.78	296.17	949.92	80.07	-167.19	185.33	1.54	1.40	-1.74	334.14
	NORMAL	1,073.0	21.42	298.46	1,038.87	96.63	-199.28	221.44	1.68	-1.42	2.39	148.70
	NORMAL	1,103.0	21.44	298.75	1,066.80	101.87	-208.91	232.39	0.36	0.07	0.97	79.45
6/3/2012	NORMAL	1,196.0	23.39	297.12	1,152.77	118.47	-240.24	267.84	2.20	2.10	-1.75	341.57
	NORMAL	1,257.0	22.83	296.14	1,208.87	129.20	-261.64	291.78	1.11	-0.92	-1.61	214.03
	NORMAL	1,353.0	21.19	298.18	1,297.87	145.60	-293.66	327.76	1.88	-1.71	2.13	155.95
	NORMAL	1,448.0	21.54	297.29	1,386.34	161.70	-324.29	362.36	0.50	0.37	-0.94	316.77
	NORMAL	1,544.0	21.04	295.42	1,475.79	177.18	-355.52	397.21	0.88	-0.52	-1.95	232.76
	NORMAL	1,640.0	20.71	297.31	1,565.49	192.37	-386.17	431.41	0.78	-0.34	1.97	116.99
	NORMAL	1,735.0	20.75	296.68	1,654.34	207.63	-416.13	465.04	0.24	0.04	-0.66	279.87

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 (°)
6/3/2012	NORMAL	1,829.0	20.02	299.58	1,742.46	223.05	-445.00	497.76	1.33	-0.78	3.09	127.21
	NORMAL	1,924.0	20.22	299.32	1,831.66	239.12	-473.46	530.41	0.23	0.21	-0.27	335.78
	NORMAL	2,020.0	20.31	298.70	1,921.72	255.24	-502.54	563.64	0.24	0.09	-0.65	292.45
	NORMAL	2,116.0	20.58	298.70	2,011.67	271.34	-531.95	597.16	0.28	0.28	0.00	0.00
	NORMAL	2,211.0	20.75	296.16	2,100.56	286.78	-561.70	630.67	0.96	0.18	-2.67	279.55
6/4/2012	NORMAL	2,307.0	21.08	295.32	2,190.23	301.66	-592.57	664.94	0.46	0.34	-0.88	317.35
	NORMAL	2,402.0	21.29	294.63	2,278.81	316.16	-623.69	699.25	0.34	0.22	-0.73	309.78
	NORMAL	2,498.0	20.92	296.99	2,368.38	331.20	-654.81	733.80	0.97	-0.39	2.46	114.63
	NORMAL	2,593.0	21.17	296.32	2,457.04	346.50	-685.30	767.92	0.37	0.26	-0.71	315.78
	NORMAL	2,689.0	21.87	296.48	2,546.35	362.16	-716.84	803.13	0.73	0.73	0.17	4.87
	NORMAL	2,785.0	21.19	298.44	2,635.65	378.40	-748.10	838.35	1.03	-0.71	2.04	134.30
	NORMAL	2,879.0	21.70	298.73	2,723.14	394.84	-778.28	872.71	0.55	0.54	0.31	11.88
	NORMAL	2,974.0	22.03	298.63	2,811.31	411.82	-809.32	908.07	0.35	0.35	-0.11	353.51
	NORMAL	3,069.0	20.42	297.67	2,899.86	428.05	-839.63	942.45	1.73	-1.69	-1.01	191.73
	NORMAL	3,164.0	20.66	297.39	2,988.82	443.46	-869.19	975.78	0.27	0.25	-0.29	337.61
	NORMAL	3,257.0	19.97	296.81	3,076.04	458.17	-897.93	1,008.07	0.77	-0.74	-0.62	196.00
	NORMAL	3,353.0	19.84	296.39	3,166.30	472.81	-927.16	1,040.75	0.20	-0.14	-0.44	227.53
	NORMAL	3,447.0	20.31	296.95	3,254.59	487.29	-955.99	1,073.02	0.54	0.50	0.60	22.51
	NORMAL	3,543.0	19.83	295.77	3,344.76	501.92	-985.51	1,105.96	0.65	-0.50	-1.23	219.60
	NORMAL	3,638.0	20.42	296.19	3,433.96	516.24	-1,014.89	1,138.64	0.64	0.62	0.44	13.96
	NORMAL	3,734.0	20.36	295.68	3,523.94	530.87	-1,044.97	1,172.08	0.20	-0.06	-0.53	251.10
	NORMAL	3,829.0	20.94	296.19	3,612.84	545.52	-1,075.09	1,205.58	0.64	0.61	0.54	17.47
	NORMAL	3,925.0	19.66	296.89	3,702.88	560.40	-1,104.89	1,238.88	1.36	-1.33	0.73	169.58
	NORMAL	4,020.0	17.76	298.88	3,792.85	574.63	-1,131.83	1,269.35	2.11	-2.00	2.09	162.37
	NORMAL	4,130.0	17.59	299.50	3,897.66	590.91	-1,160.99	1,302.72	0.23	-0.15	0.56	132.38
	NORMAL	4,210.0	15.92	299.76	3,974.26	602.31	-1,181.04	1,325.75	2.09	-2.09	0.33	177.55
	NORMAL	4,305.0	14.47	299.01	4,065.94	614.54	-1,202.73	1,350.63	1.54	-1.53	-0.79	187.36
	NORMAL	4,400.0	13.37	298.18	4,158.15	625.48	-1,222.79	1,373.47	1.18	-1.16	-0.87	189.89
	NORMAL	4,496.0	11.61	297.91	4,251.87	635.24	-1,241.11	1,394.23	1.83	-1.83	-0.28	181.77
	NORMAL	4,591.0	10.76	298.02	4,345.07	643.88	-1,257.39	1,412.65	0.90	-0.89	0.12	178.62
	NORMAL	4,687.0	10.12	299.05	4,439.48	652.19	-1,272.67	1,430.04	0.69	-0.67	1.07	164.25
6/5/2012	NORMAL	4,782.0	8.68	301.33	4,533.20	659.97	-1,286.09	1,445.53	1.57	-1.52	2.40	166.62
	NORMAL	4,877.0	7.21	301.25	4,627.28	666.79	-1,297.31	1,458.62	1.55	-1.55	-0.08	180.39
	NORMAL	4,972.0	6.07	298.88	4,721.64	672.31	-1,306.81	1,469.59	1.23	-1.20	-2.49	192.34
	NORMAL	5,066.0	5.06	304.11	4,815.20	677.03	-1,314.59	1,478.67	1.20	-1.07	5.56	155.92
	NORMAL	5,161.0	3.30	304.84	4,909.94	680.95	-1,320.31	1,485.54	1.85	-1.85	0.77	178.63
	NORMAL	5,257.0	3.34	297.65	5,005.78	683.82	-1,325.05	1,491.07	0.44	0.04	-7.49	271.89
	NORMAL	5,353.0	2.60	336.08	5,101.66	687.11	-1,328.41	1,495.55	2.16	-0.77	40.03	128.87
	NORMAL	5,448.0	1.16	352.81	5,196.61	690.04	-1,329.41	1,497.76	1.61	-1.52	17.61	167.36
6/6/2012	NORMAL	5,544.0	0.70	52.44	5,292.60	691.36	-1,329.06	1,498.06	1.05	-0.48	62.11	143.16
	NORMAL	5,639.0	0.53	42.59	5,387.59	692.03	-1,328.31	1,497.69	0.21	-0.18	-10.37	207.02
	NORMAL	5,732.0	0.93	29.58	5,480.59	693.01	-1,327.64	1,497.54	0.46	0.43	-13.99	330.90
	NORMAL	5,826.0	0.39	87.29	5,574.58	693.69	-1,326.95	1,497.22	0.84	-0.57	61.39	155.45
	NORMAL	5,922.0	0.50	108.10	5,670.58	693.57	-1,326.22	1,496.53	0.20	0.11	21.68	66.46
	NORMAL	6,017.0	1.05	107.31	5,765.57	693.18	-1,325.00	1,495.26	0.58	0.58	-0.83	358.49
	NORMAL	6,113.0	0.62	51.99	5,861.56	693.24	-1,323.75	1,494.17	0.90	-0.45	-57.63	216.18
	NORMAL	6,208.0	0.44	71.07	5,956.56	693.68	-1,323.00	1,493.70	0.26	-0.19	20.08	144.84
	NORMAL	6,301.0	0.71	61.86	6,049.55	694.06	-1,322.15	1,493.12	0.31	0.29	-9.90	336.46
	NORMAL	6,397.0	0.51	206.49	6,145.55	693.96	-1,321.82	1,492.78	1.21	-0.21	150.66	165.31
	NORMAL	6,492.0	1.05	202.99	6,240.54	692.78	-1,322.35	1,492.71	0.57	0.57	-3.68	353.21
	NORMAL	6,587.0	0.79	189.37	6,335.53	691.33	-1,322.79	1,492.46	0.36	-0.27	-14.34	213.39
	NORMAL	6,683.0	0.53	175.75	6,431.52	690.24	-1,322.87	1,492.03	0.31	-0.27	-14.19	204.42
	NORMAL	6,778.0	0.92	200.62	6,526.51	689.09	-1,323.10	1,491.72	0.52	0.41	26.18	51.78
	NORMAL	6,872.0	1.06	194.13	6,620.50	687.54	-1,323.58	1,491.44	0.19	0.15	-6.90	318.03
6/7/2012	NORMAL	6,968.0	0.88	220.75	6,716.49	686.12	-1,324.28	1,491.42	0.50	-0.19	27.73	124.72
	NORMAL	7,063.0	1.35	225.54	6,811.47	684.78	-1,325.55	1,491.95	0.50	0.49	5.04	13.62
6/8/2012	NORMAL	7,159.0	0.63	226.34	6,907.45	683.62	-1,326.74	1,492.49	0.75	-0.75	0.83	179.30

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 (°)
6/8/2012	NORMAL	7,254.0	0.84	268.97	7,002.45	683.25	-1,327.82	1,493.28	0.60	0.22	44.87	91.20
	NORMAL	7,350.0	1.43	259.82	7,098.43	683.03	-1,329.70	1,494.85	0.64	0.61	-9.53	338.31
	NORMAL	7,445.0	2.03	260.42	7,193.38	682.54	-1,332.53	1,497.15	0.63	0.63	0.63	2.03
	NORMAL	7,539.0	2.02	278.88	7,287.33	682.52	-1,335.80	1,500.06	0.69	-0.01	19.64	100.10
	NORMAL	7,634.0	2.27	252.35	7,382.26	682.20	-1,339.25	1,503.00	1.07	0.26	-27.93	270.63
	NORMAL	7,730.0	2.76	246.06	7,478.17	680.69	-1,343.18	1,505.81	0.59	0.51	-6.55	327.44
	NORMAL	7,825.0	3.43	237.53	7,573.03	678.24	-1,347.66	1,508.70	0.85	0.71	-8.98	321.19
	NORMAL	7,868.0	3.52	232.96	7,615.95	676.75	-1,349.80	1,509.93	0.68	0.21	-10.63	285.71
6/9/2012	NORMAL	7,925.0	3.52	232.96	7,672.84	674.64	-1,352.60	1,511.47	0.00	0.00	0.00	0.00