

## 1 General

### 1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

### 1.2 Well/Wellbore Information

Well	RWF 323-25	Wellbore No.	00
Wellbore Legal Name	RWF 323-25	Common Wellbore Name	RWF 323-25
Project	RU 25-06S-094W	Site	RWF 23-25 Pad
Vertical Section Azimuth	354.32 (°)	North reference	True
Origin N/S		Origin EW	
Spud date	4/13/2014	UWI	RWF 323-25
Active datum	KB @6,122.0ft (above Mean Sea Level)		

## 2 Survey Name

### 2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	
Date Started	4/13/2014	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

6308

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 (°)
4/13/2014	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/14/2014	NORMAL	102.0	0.53	334.78	102.00	0.43	-0.20	0.44	0.52	0.52	0.00	334.78
	NORMAL	163.0	1.85	10.11	162.98	1.65	-0.15	1.66	2.38	2.16	57.92	47.53
	NORMAL	254.0	2.99	9.32	253.90	5.44	0.49	5.36	1.25	1.25	-0.87	357.93
	NORMAL	344.0	3.87	12.22	343.74	10.72	1.52	10.52	1.00	0.98	3.22	12.60
	NORMAL	435.0	4.40	11.51	434.50	17.15	2.86	16.78	0.59	0.58	-0.78	354.13
	NORMAL	526.0	4.93	12.66	525.20	24.38	4.42	23.83	0.59	0.58	1.26	10.58
	NORMAL	616.0	5.81	9.14	614.81	32.65	5.99	31.80	1.04	0.98	-3.91	337.72
	NORMAL	707.0	6.07	0.70	705.32	42.01	6.78	41.13	1.00	0.29	-9.27	282.35
	NORMAL	797.0	6.33	353.14	794.79	51.70	6.24	50.82	0.95	0.29	-8.40	283.88
	NORMAL	889.0	7.48	351.30	886.12	62.65	4.73	61.87	1.27	1.25	-2.00	348.20
	NORMAL	980.0	6.42	353.67	976.45	73.56	3.28	72.88	1.21	-1.16	2.60	166.04
	NORMAL	1,076.0	5.19	357.63	1,071.96	83.24	2.50	82.58	1.35	-1.28	4.13	163.93
	NORMAL	1,172.0	6.33	357.28	1,167.47	92.86	2.07	92.20	1.19	1.19	-0.36	358.06
4/15/2014	NORMAL	1,267.0	6.46	356.64	1,261.88	103.43	1.51	102.77	0.16	0.14	-0.67	330.94
	NORMAL	1,363.0	6.86	356.64	1,357.24	114.54	0.86	113.89	0.42	0.42	0.00	0.00
	NORMAL	1,458.0	5.76	342.58	1,451.66	124.76	-0.90	124.23	1.99	-1.16	-14.80	227.70
	NORMAL	1,554.0	5.76	342.66	1,547.18	133.95	-3.78	133.67	0.01	0.00	0.08	90.04
	NORMAL	1,649.0	5.45	355.94	1,641.73	143.00	-5.52	142.85	1.40	-0.33	13.98	109.99
	NORMAL	1,745.0	5.19	355.50	1,737.32	151.88	-6.18	151.74	0.27	-0.27	-0.46	188.70
	NORMAL	1,840.0	5.23	352.33	1,831.92	160.45	-7.10	160.37	0.31	0.04	-3.34	276.33

## 2.1.2 Survey Stations (Continued)

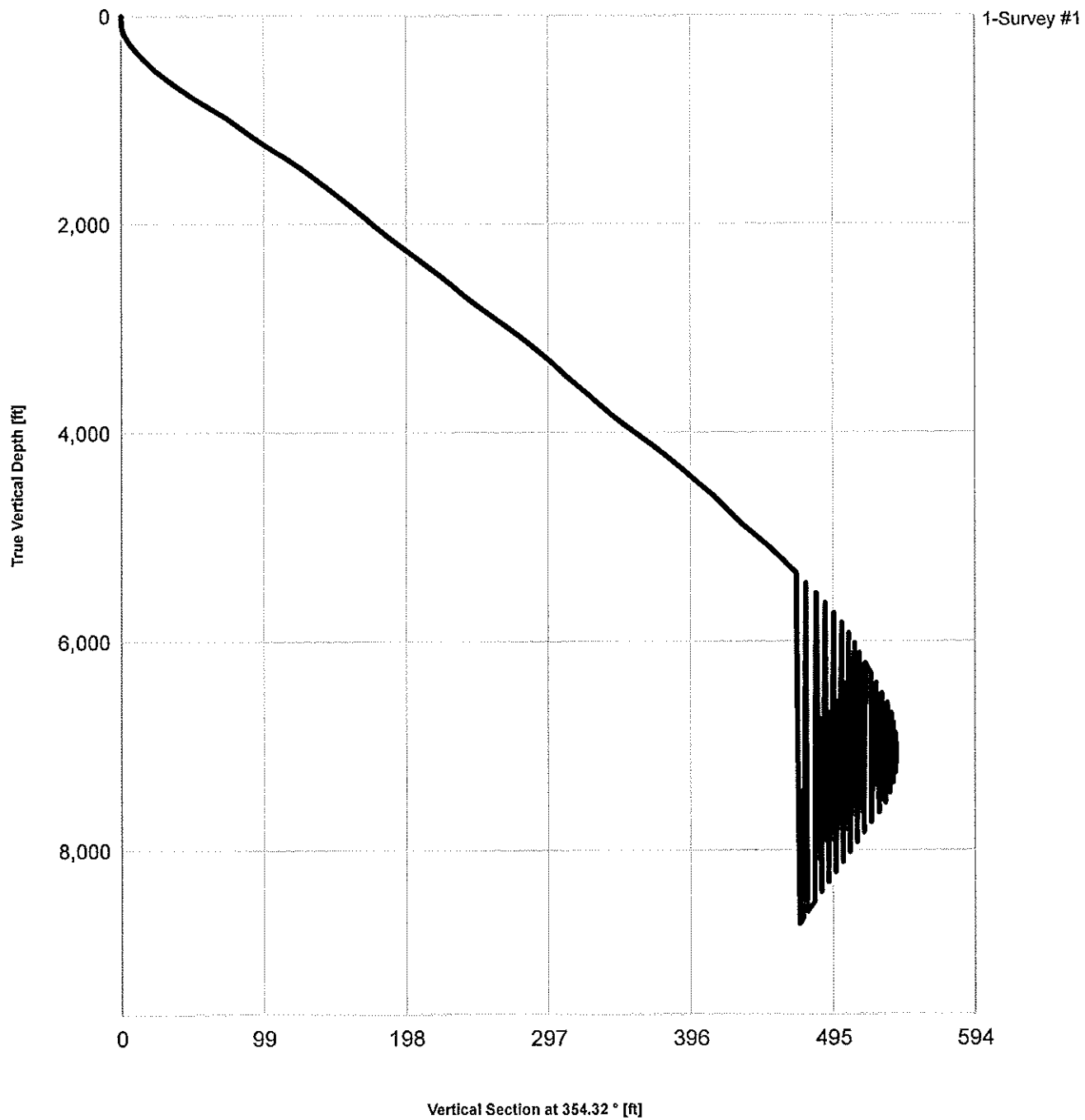
Date	Type	MD (ft)	Inc. (°)	Azi. (°)	TVD (ft)	N/S (ft)	E/W (ft)	V. sec. (ft)	DLS (°/100usft)	Build Rate (°/100usft)	Turn (°/100usft)	Tface (°)
4/15/2014	NORMAL	1,936.0	4.92	349.17	1,927.55	168.83	-8.45	168.84	0.43	-0.32	-3.29	220.47
	NORMAL	2,031.0	4.75	348.67	2,022.21	176.69	-9.99	176.81	0.18	-0.18	-0.53	193.67
	NORMAL	2,126.0	5.54	357.39	2,116.83	185.13	-10.97	185.30	1.17	0.83	9.18	49.11
	NORMAL	2,222.0	5.67	357.08	2,212.37	194.49	-11.43	194.67	0.14	0.14	-0.32	346.73
	NORMAL	2,318.0	5.36	353.30	2,307.92	203.68	-12.19	203.89	0.50	-0.32	-3.94	227.65
	NORMAL	2,413.0	5.58	351.72	2,402.49	212.66	-13.37	212.94	0.28	0.23	-1.66	324.82
4/16/2014	NORMAL	2,509.0	5.32	349.70	2,498.06	221.66	-14.84	222.04	0.34	-0.27	-2.10	215.42
	NORMAL	2,604.0	5.10	349.08	2,592.66	230.14	-16.43	230.63	0.24	-0.23	-0.65	194.05
	NORMAL	2,699.0	4.88	347.85	2,687.30	238.23	-18.08	238.85	0.26	-0.23	-1.29	205.32
	NORMAL	2,795.0	5.76	351.19	2,782.89	246.99	-19.68	247.72	0.97	0.92	3.48	21.06
	NORMAL	2,890.0	5.93	351.45	2,877.40	256.55	-21.14	257.38	0.18	0.18	0.27	8.98
	NORMAL	2,986.0	5.80	351.28	2,972.89	266.25	-22.61	267.18	0.14	-0.14	-0.18	187.53
	NORMAL	3,081.0	5.28	350.22	3,067.45	275.30	-24.08	276.33	0.56	-0.55	-1.12	190.61
	NORMAL	3,177.0	5.28	350.57	3,163.04	284.01	-25.55	285.14	0.03	0.00	0.36	90.17
	NORMAL	3,273.0	5.05	349.78	3,258.65	292.53	-27.03	293.76	0.25	-0.24	-0.82	196.79
	NORMAL	3,368.0	4.44	347.23	3,353.33	300.23	-28.58	301.58	0.68	-0.64	-2.68	197.81
	NORMAL	3,464.0	4.66	353.65	3,449.02	307.73	-29.84	309.17	0.58	0.23	6.69	69.86
	NORMAL	3,559.0	5.10	355.14	3,543.68	315.77	-30.62	317.25	0.48	0.46	1.57	16.81
	NORMAL	3,655.0	4.84	353.65	3,639.32	324.05	-31.43	325.57	0.30	-0.27	-1.55	205.66
	NORMAL	3,750.0	4.57	352.60	3,734.00	331.78	-32.36	333.36	0.30	-0.28	-1.11	197.17
	NORMAL	3,846.0	5.10	351.54	3,829.66	339.80	-33.48	341.44	0.56	0.55	-1.10	349.90
	NORMAL	3,941.0	5.67	353.04	3,924.24	348.63	-34.67	350.35	0.62	0.60	1.58	14.62
	NORMAL	4,037.0	5.76	355.06	4,019.76	358.14	-35.66	359.91	0.23	0.09	2.10	66.90
	NORMAL	4,132.0	5.54	354.00	4,114.30	367.45	-36.55	369.28	0.26	-0.23	-1.12	204.85
	NORMAL	4,227.0	5.19	350.22	4,208.88	376.24	-37.76	378.13	0.52	-0.37	-3.98	223.41
	NORMAL	4,323.0	5.01	348.82	4,304.50	384.63	-39.31	386.64	0.23	-0.19	-1.46	213.96
	NORMAL	4,418.0	4.88	348.29	4,399.15	392.66	-40.93	394.78	0.15	-0.14	-0.56	199.10
	NORMAL	4,513.0	4.84	347.94	4,493.81	400.54	-42.59	402.78	0.05	-0.04	-0.37	216.38
	NORMAL	4,609.4	5.00	351.34	4,589.83	408.66	-44.07	411.02	0.34	0.16	3.53	63.53
	NORMAL	4,608.0	4.44	346.71	4,588.46	408.55	-44.05	410.90	0.00	40.33	335.84	212.11
	NORMAL	4,704.0	4.35	345.74	4,684.18	415.69	-45.80	418.19	0.12	-0.09	-1.01	219.07
	NORMAL	4,799.0	3.87	344.69	4,778.93	422.28	-47.54	424.91	0.51	-0.51	-1.11	188.39
	NORMAL	4,895.0	4.62	345.56	4,874.67	429.15	-49.36	431.93	0.78	0.78	0.91	5.34
4/17/2014	NORMAL	4,990.0	5.38	352.48	4,969.31	437.27	-50.89	440.16	1.02	0.80	7.28	41.92
	NORMAL	5,085.0	4.70	353.30	5,063.94	445.55	-51.93	448.50	0.72	-0.72	0.86	174.36
	NORMAL	5,179.0	4.26	351.37	5,157.65	452.83	-52.90	455.84	0.49	-0.47	-2.05	197.95
	NORMAL	5,274.0	4.26	351.89	5,252.39	459.81	-53.93	462.89	0.04	0.00	0.55	90.26
	NORMAL	5,370.0	3.78	351.28	5,348.15	466.46	-54.91	469.61	0.50	-0.50	-0.64	184.79
	NORMAL	5,466.0	4.22	349.17	5,443.92	473.06	-56.06	476.29	0.48	0.46	-2.20	340.45
	NORMAL	5,562.0	4.09	348.47	5,539.67	479.89	-57.40	483.21	0.15	-0.14	-0.73	200.96
	NORMAL	5,657.0	3.74	348.73	5,634.44	486.24	-58.69	489.66	0.37	-0.37	0.27	177.23
	NORMAL	5,752.0	3.47	346.97	5,729.26	492.08	-59.94	495.60	0.31	-0.28	-1.85	201.41
	NORMAL	5,848.0	3.25	342.05	5,825.09	497.50	-61.43	501.14	0.38	-0.23	-5.13	230.22
	NORMAL	5,944.0	2.77	336.86	5,920.96	502.22	-63.18	506.01	0.57	-0.50	-5.41	207.01
	NORMAL	6,040.0	2.42	333.00	6,016.86	506.16	-65.02	510.11	0.41	-0.36	-4.02	204.61
4/19/2014	NORMAL	6,135.0	2.20	323.94	6,111.78	509.42	-67.00	513.55	0.45	-0.23	-9.54	234.46
	NORMAL	6,231.0	2.73	359.10	6,207.70	513.20	-68.12	517.42	1.64	0.55	36.63	88.82
	NORMAL	6,327.0	2.24	15.62	6,303.61	517.29	-67.65	521.45	0.90	-0.51	17.21	132.44
	NORMAL	6,422.0	2.90	29.86	6,398.51	521.17	-65.95	525.13	0.96	0.69	14.99	51.31
	NORMAL	6,518.0	2.86	25.99	6,494.39	525.42	-63.70	529.15	0.21	-0.04	-4.03	256.45
	NORMAL	6,613.0	2.64	29.25	6,589.28	529.46	-61.59	532.96	0.28	-0.23	3.43	146.21
	NORMAL	6,708.0	3.30	66.60	6,684.16	532.46	-58.01	535.59	2.11	0.69	39.32	90.45
	NORMAL	6,804.0	2.90	66.34	6,780.02	534.53	-53.25	537.18	0.42	-0.42	-0.27	181.88
	NORMAL	6,900.0	2.50	68.69	6,875.92	536.29	-49.08	538.51	0.43	-0.42	1.82	169.23
	NORMAL	6,995.0	2.29	78.82	6,970.83	537.43	-45.30	539.27	0.52	-0.22	11.29	120.39
	NORMAL	7,091.0	1.76	83.47	7,066.77	537.97	-41.95	539.48	0.58	-0.55	4.84	165.09

## 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)	Build Rate (°/100usft)	Turn (°/100usft)	Tface (°)
4/20/2014	NORMAL	7,186.0	1.71	96.39	7,161.73	537.98	-39.09	539.20	0.41	-0.05	13.60	103.71
	NORMAL	7,281.0	1.50	109.75	7,256.69	537.40	-36.52	538.37	0.45	-0.22	14.06	125.87
	NORMAL	7,376.0	1.45	135.59	7,351.66	536.12	-34.50	536.90	0.70	-0.05	27.20	107.14
4/21/2014	NORMAL	7,472.0	1.71	150.54	7,447.63	534.00	-32.95	534.64	0.51	0.27	15.57	65.38
	NORMAL	7,567.0	2.15	166.00	7,542.57	531.04	-31.82	531.58	0.71	0.46	16.27	57.70
	NORMAL	7,661.0	3.47	177.08	7,636.46	526.49	-31.25	527.00	1.51	1.40	11.79	27.96
	NORMAL	7,755.0	3.38	192.81	7,730.29	520.95	-31.72	521.53	1.00	-0.10	16.73	103.29
	NORMAL	7,851.0	3.12	203.71	7,826.14	515.79	-33.40	516.57	0.70	-0.27	11.35	118.20
	NORMAL	7,946.0	3.69	206.26	7,920.97	510.68	-35.79	511.72	0.62	0.60	2.68	16.16
	NORMAL	8,041.0	3.34	202.48	8,015.79	505.39	-38.20	506.69	0.44	-0.37	-3.98	211.63
	NORMAL	8,136.0	3.56	206.52	8,110.62	500.19	-40.58	501.75	0.35	0.23	4.25	49.89
	NORMAL	8,232.0	3.52	210.83	8,206.44	494.99	-43.42	496.86	0.28	-0.04	4.49	100.69
	NORMAL	8,328.0	3.56	205.56	8,302.25	489.77	-46.21	491.94	0.34	0.04	-5.49	274.37
	NORMAL	8,423.0	3.74	209.86	8,397.06	484.43	-49.03	486.90	0.34	0.19	4.53	58.83
	NORMAL	8,518.0	3.82	216.72	8,491.86	479.20	-52.46	482.04	0.48	0.08	7.22	83.40
4/22/2014	NORMAL	8,614.0	3.87	217.86	8,587.64	474.08	-56.36	477.33	0.10	0.05	1.19	57.38
	NORMAL	8,684.0	3.87	222.34	8,657.48	470.47	-59.40	474.04	0.43	0.00	6.40	92.23
	NORMAL	8,729.0	3.87	222.34	8,702.38	468.22	-61.45	472.01	0.00	0.00	0.00	0.00

### 3 Charts

#### 3.1 Vertical Section View



### 3.2 Plan View

