

Deviation Summary

PICEANCE VLY

1 General

1.1 Customer Information

Company	PICEANCE VLY
Representative	
Address	

1.2 Well/Wellbore Information

Well	RWF 444-25	Wellbore No.	00
Wellbore Legal Name	RWF 444-25	Common Wellbore Name	RWF 444-25
Project	RU 25-06S-094W	Site	RWF 43-25 Pad
Vertical Section Azimuth	136.90 (°)	North reference	True
Origin N/S		Origin E/W	
Spud date	8/26/2014	UWI	RWF 444-25
Active datum	KB @6,259.0ft (above Mean Sea Level)		

2 Survey Name

2.1 Survey Name: Survey #1

Survey Name	Survey #1	Company	
Date Started	8/26/2014	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

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 (°)
8/26/2014	Tie On	0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/26/2014	NORMAL	148.0	1.54	132.56	147.98	-1.35	1.46	1.98	1.04	1.04	0.00	132.56
	NORMAL	179.0	2.37	129.48	178.96	-2.03	2.27	3.03	2.70	2.68	-9.94	351.24
	NORMAL	209.0	2.99	135.98	208.93	-2.99	3.29	4.43	2.30	2.07	21.67	29.39
	NORMAL	239.0	3.30	131.41	238.89	-4.13	4.48	6.07	1.33	1.03	-15.23	318.74
	NORMAL	269.0	4.04	134.67	268.82	-5.44	5.88	7.99	2.56	2.47	10.87	17.38
	NORMAL	300.0	4.35	134.49	299.74	-7.03	7.49	10.25	1.00	1.00	-0.58	357.48
	NORMAL	330.0	4.75	136.42	329.65	-8.73	9.16	12.63	1.43	1.33	6.43	21.91
	NORMAL	360.0	5.63	137.57	359.52	-10.71	11.01	15.35	2.95	2.93	3.83	7.31
	NORMAL	390.0	6.46	140.99	389.36	-13.11	13.07	18.50	3.01	2.77	11.40	25.16
	NORMAL	420.0	7.30	140.55	419.14	-15.89	15.34	22.09	2.81	2.80	-1.47	356.19
	NORMAL	451.0	7.65	140.29	449.88	-19.00	17.91	26.11	1.13	1.13	-0.84	354.35
8/27/2014	NORMAL	481.0	7.78	139.67	479.61	-22.09	20.50	30.13	0.51	0.43	-2.07	327.06
	NORMAL	511.0	8.09	138.97	509.32	-25.23	23.20	34.27	1.08	1.03	-2.33	342.34
	NORMAL	541.0	8.18	138.36	539.02	-28.41	26.00	38.52	0.42	0.30	-2.03	315.89
	NORMAL	602.0	9.32	138.44	599.31	-35.35	32.16	47.79	1.87	1.87	0.13	0.65
	NORMAL	692.0	10.42	138.88	687.97	-46.94	42.35	63.21	1.23	1.22	0.49	4.14
	NORMAL	783.0	10.37	133.26	777.48	-58.75	53.73	79.61	1.12	-0.05	-6.18	264.42
	NORMAL	874.0	11.16	134.58	866.88	-70.55	65.97	96.58	0.91	0.87	1.45	17.98
	NORMAL	965.0	12.18	134.40	956.00	-83.44	79.10	114.97	1.12	1.12	-0.20	357.87
	NORMAL	1,059.0	11.87	137.13	1,047.94	-97.47	92.76	134.55	0.69	-0.33	2.90	119.92

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 (°)
8/27/2014	NORMAL	1,098.0	12.13	137.13	1,086.08	-103.41	98.28	142.66	0.67	0.67	0.00	0.00
8/28/2014	NORMAL	1,170.0	12.40	137.04	1,156.44	-114.61	108.69	157.95	0.38	0.38	-0.12	355.91
	NORMAL	1,266.0	12.97	138.18	1,250.10	-130.18	122.90	179.03	0.65	0.59	1.19	24.27
	NORMAL	1,362.0	11.21	135.98	1,343.96	-144.92	136.57	199.13	1.89	-1.83	-2.29	193.60
	NORMAL	1,456.0	9.89	136.95	1,436.37	-157.39	148.43	216.34	1.42	-1.40	1.03	172.81
	NORMAL	1,552.0	9.28	135.72	1,531.03	-168.96	159.46	232.32	0.67	-0.64	-1.28	197.95
	NORMAL	1,647.0	9.41	133.52	1,624.77	-179.79	170.44	247.74	0.40	0.14	-2.32	288.91
	NORMAL	1,742.0	9.49	133.00	1,718.48	-190.48	181.80	263.30	0.12	0.08	-0.55	312.88
	NORMAL	1,838.0	9.14	138.18	1,813.22	-201.56	192.67	278.82	0.95	-0.36	5.40	115.20
	NORMAL	1,932.0	9.28	140.90	1,906.01	-213.01	202.43	293.84	0.49	0.15	2.89	73.52
8/29/2014	NORMAL	2,027.0	8.92	138.88	1,999.81	-224.50	212.10	308.85	0.51	-0.38	-2.13	220.59
	NORMAL	2,123.0	8.92	137.65	2,094.65	-235.61	222.01	323.73	0.20	0.00	-1.28	269.39
	NORMAL	2,218.0	10.07	136.07	2,188.35	-247.03	232.74	339.40	1.24	1.21	-1.66	346.45
	NORMAL	2,314.0	9.89	134.05	2,282.90	-258.81	244.49	356.02	0.41	-0.19	-2.10	241.80
	NORMAL	2,410.0	11.03	137.65	2,377.30	-271.33	256.60	373.44	1.37	1.19	3.75	31.60
	NORMAL	2,505.0	11.34	138.71	2,470.50	-285.06	268.88	391.86	0.39	0.33	1.12	34.08
	NORMAL	2,601.0	11.39	136.86	2,564.62	-299.07	281.59	410.78	0.38	0.05	-1.93	276.90
	NORMAL	2,696.0	11.43	138.97	2,657.74	-313.02	294.19	429.56	0.44	0.04	2.22	85.56
	NORMAL	2,792.0	11.21	136.86	2,751.87	-327.00	306.81	448.40	0.49	-0.23	-2.20	240.99
	NORMAL	2,887.0	11.25	139.24	2,845.05	-340.76	319.18	466.89	0.49	0.04	2.51	86.24
	NORMAL	2,983.0	11.25	137.04	2,939.21	-354.71	331.67	485.62	0.45	0.00	-2.29	268.92
	NORMAL	3,078.0	11.08	136.95	3,032.41	-368.16	344.22	504.01	0.18	-0.18	-0.09	185.81
	NORMAL	3,174.0	10.81	138.80	3,126.67	-381.67	356.45	522.23	0.46	-0.28	1.93	128.45
	NORMAL	3,269.0	10.81	140.11	3,219.98	-395.21	368.03	540.03	0.26	0.00	1.38	90.64
	NORMAL	3,365.0	12.18	135.19	3,314.06	-409.31	380.94	559.14	1.75	1.43	-5.13	321.98
	NORMAL	3,460.0	12.40	134.84	3,406.88	-423.61	395.23	579.36	0.24	0.23	-0.37	341.12
	NORMAL	3,555.0	12.31	135.54	3,499.68	-438.03	409.56	599.67	0.18	-0.09	0.74	121.34
	NORMAL	3,649.0	11.87	135.28	3,591.59	-452.05	423.38	619.35	0.47	-0.47	-0.28	186.93
	NORMAL	3,743.0	11.78	135.72	3,683.60	-465.79	436.88	638.61	0.14	-0.10	0.47	135.16
	NORMAL	3,839.0	12.13	135.72	3,777.52	-480.02	450.77	658.49	0.36	0.36	0.00	0.00
	NORMAL	3,934.0	12.00	136.07	3,870.42	-494.28	464.59	678.35	0.16	-0.14	0.37	150.80
	NORMAL	4,029.0	11.30	137.21	3,963.46	-508.23	477.76	697.53	0.78	-0.74	1.20	162.35
8/30/2014	NORMAL	4,125.0	11.03	135.46	4,057.64	-521.67	490.59	716.12	0.45	-0.28	-1.82	230.60
	NORMAL	4,221.0	10.59	135.28	4,151.94	-534.49	503.24	734.11	0.46	-0.46	-0.19	184.30
	NORMAL	4,316.0	10.77	139.06	4,245.30	-547.40	515.20	751.71	0.76	0.19	3.98	77.45
	NORMAL	4,411.0	10.59	138.53	4,338.65	-560.64	526.80	769.31	0.22	-0.19	-0.56	208.36
	NORMAL	4,506.0	10.33	136.42	4,432.07	-573.35	538.45	786.55	0.49	-0.27	-2.22	234.80
	NORMAL	4,602.0	10.20	136.51	4,526.54	-585.76	550.23	803.66	0.14	-0.14	0.09	173.01
	NORMAL	4,698.0	10.11	135.81	4,619.06	-597.71	561.71	820.23	0.16	-0.10	-0.74	233.56
	NORMAL	4,791.0	9.85	137.83	4,712.63	-609.71	572.98	836.69	0.46	-0.27	2.13	127.59
	NORMAL	4,887.0	9.19	137.92	4,807.30	-621.49	583.63	852.58	0.69	-0.69	0.09	178.75
	NORMAL	4,982.0	9.01	141.87	4,901.11	-632.97	593.31	867.56	0.68	-0.19	4.16	108.02
	NORMAL	5,077.0	8.70	142.75	4,994.98	-644.54	602.25	882.12	0.36	-0.33	0.93	156.83
	NORMAL	5,172.0	8.48	144.07	5,088.91	-655.93	610.71	896.22	0.31	-0.23	1.39	138.79
8/31/2014	NORMAL	5,268.0	8.22	143.72	5,183.89	-667.19	618.92	910.05	0.28	-0.27	-0.36	190.89
	NORMAL	5,363.0	7.91	145.21	5,277.96	-678.04	626.67	923.26	0.39	-0.33	1.57	146.74
	NORMAL	5,459.0	7.25	140.73	5,373.12	-688.15	634.27	935.85	0.92	-0.69	-4.67	219.64
	NORMAL	5,554.0	6.24	136.16	5,467.46	-696.52	641.64	946.99	1.20	-1.06	-4.81	205.73
	NORMAL	5,648.0	5.41	118.49	5,560.98	-702.32	649.08	956.30	2.09	-0.88	-18.80	236.55
	NORMAL	5,744.0	5.10	105.31	5,656.58	-705.60	657.17	964.23	1.30	-0.32	-13.73	249.10
	NORMAL	5,840.0	3.96	88.43	5,752.28	-706.64	664.60	970.06	1.82	-1.19	-17.58	221.26
	NORMAL	5,934.0	3.52	96.43	5,846.08	-706.87	670.71	974.41	0.73	-0.47	8.51	134.08
	NORMAL	6,029.0	3.34	97.93	5,940.91	-707.58	676.35	978.78	0.21	-0.19	1.58	154.25
9/1/2014	NORMAL	6,125.0	2.81	97.93	6,036.78	-708.29	681.45	982.79	0.55	-0.55	0.00	180.00
	NORMAL	6,220.0	2.77	98.72	6,131.66	-708.96	686.03	986.40	0.06	-0.04	0.83	136.52
	NORMAL	6,315.0	2.24	89.58	6,226.57	-709.29	690.15	989.46	0.70	-0.56	-9.62	212.50

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 (°)
9/1/2014	NORMAL	6,411.0	1.63	86.59	6,322.52	-709.20	693.39	991.61	0.64	-0.64	-3.11	187.91
	NORMAL	6,506.0	1.36	92.92	6,417.49	-709.18	695.87	993.28	0.33	-0.28	6.66	151.69
	NORMAL	6,601.0	1.41	121.04	6,512.46	-709.84	698.00	995.22	0.71	0.05	29.60	99.93
	NORMAL	6,697.0	0.97	103.64	6,608.44	-710.64	699.80	997.03	0.59	-0.46	-18.13	210.91
	NORMAL	6,793.0	0.40	117.44	6,704.43	-710.98	700.88	998.03	0.61	-0.59	14.38	170.68
9/2/2014	NORMAL	6,889.0	0.35	110.32	6,800.43	-711.24	701.46	998.61	0.07	-0.05	-7.42	219.46
	NORMAL	6,985.0	0.35	112.25	6,896.43	-711.45	702.00	999.14	0.01	0.00	2.01	90.96
	NORMAL	7,081.0	0.40	191.27	6,992.43	-711.89	702.21	999.60	0.50	0.05	82.31	124.89
	NORMAL	7,177.0	0.31	225.72	7,088.43	-712.40	701.96	999.80	0.24	-0.09	35.89	129.46
	NORMAL	7,273.0	0.75	33.24	7,184.42	-712.06	702.12	999.65	1.10	0.46	174.50	171.16
	NORMAL	7,368.0	0.97	28.32	7,279.41	-710.83	702.84	999.25	0.24	0.23	-5.18	338.97
	NORMAL	7,464.0	0.48	20.32	7,375.41	-709.74	703.36	998.81	0.52	-0.51	-8.33	187.69
	NORMAL	7,559.0	0.53	341.82	7,470.40	-708.95	703.36	998.24	0.35	0.05	-40.53	258.82
	NORMAL	7,655.0	0.40	338.92	7,566.40	-708.21	703.11	997.52	0.14	-0.14	-3.02	188.81
9/3/2014	NORMAL	7,749.0	0.66	300.16	7,660.40	-707.63	702.52	996.70	0.46	0.28	-41.23	285.51
	NORMAL	7,844.0	0.66	303.77	7,755.39	-707.06	701.59	995.64	0.04	0.00	3.80	91.80
	NORMAL	7,939.0	1.14	300.34	7,850.38	-706.27	700.32	994.21	0.51	0.51	-3.61	351.88
	NORMAL	8,035.0	1.27	281.97	7,946.36	-705.57	698.46	992.42	0.42	0.14	-19.14	279.27
	NORMAL	8,131.0	1.45	260.35	8,042.33	-705.55	696.22	990.88	0.56	0.19	-22.52	278.31
	NORMAL	8,225.0	1.50	239.17	8,136.30	-706.38	693.99	989.96	0.58	0.05	-22.53	264.59
9/4/2014	NORMAL	8,320.0	1.85	238.73	8,231.26	-707.82	691.61	989.38	0.37	0.37	-0.46	357.68
	NORMAL	8,414.0	1.98	239.52	8,325.21	-709.43	688.91	988.71	0.14	0.14	0.84	11.87
	NORMAL	8,510.0	2.07	238.90	8,421.15	-711.16	686.00	987.99	0.10	0.09	-0.65	346.01
	NORMAL	8,606.0	2.33	238.90	8,517.08	-713.07	682.84	987.23	0.27	0.27	0.00	0.00
	NORMAL	8,700.0	2.46	237.14	8,611.00	-715.15	679.51	986.47	0.16	0.14	-1.87	329.62
	NORMAL	8,796.0	2.64	233.10	8,706.90	-717.60	676.02	985.86	0.26	0.19	-4.21	313.01
	NORMAL	8,855.0	2.42	228.01	8,765.84	-719.24	674.00	985.69	0.53	-0.37	-8.63	223.08
	NORMAL	8,900.0	2.42	228.01	8,810.80	-720.52	672.59	985.66	0.00	0.00	0.00	0.00