

Deviation Summary

PICEANCE VLY

1 General

1.1 Customer Information

| | |
|----------------|--------------|
| Company | PICEANCE VLY |
| Representative | |
| Address | |

1.2 Well/Wellbore Information

| | | | |
|--------------------------|--------------------------------------|----------------------|---------------|
| Well | RWF 533-25 | Wellbore No. | 00 |
| Wellbore Legal Name | RWF 533-25 | Common Wellbore Name | RWF 533-25 |
| Project | RU 25-06S-094W | Site | RWF 43-25 Pad |
| Vertical Section Azimuth | 315.68 (°) | North reference | True |
| Origin N/S | | Origin E/W | |
| Spud date | 7/25/2014 | UWI | RWF 533-25 |
| 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 | 7/25/2014 | 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 (°) |
|-----------|--------|---------|----------|----------|----------|----------|----------|--------------|-----------------|------------------------|------------------|-----------|
| 7/25/2014 | Tie On | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7/25/2014 | NORMAL | 106.0 | 0.09 | 252.86 | 106.00 | -0.02 | -0.08 | 0.04 | 0.08 | 0.08 | 0.00 | 252.86 |
| | NORMAL | 136.0 | 0.62 | 350.60 | 136.00 | 0.13 | -0.13 | 0.18 | 2.13 | 1.77 | 325.80 | 105.77 |
| 7/26/2014 | NORMAL | 166.0 | 1.50 | 357.36 | 165.99 | 0.68 | -0.17 | 0.61 | 2.96 | 2.93 | 22.53 | 11.48 |
| | NORMAL | 197.0 | 2.20 | 348.22 | 196.98 | 1.67 | -0.31 | 1.41 | 2.44 | 2.26 | -29.48 | 332.53 |
| | NORMAL | 227.0 | 2.20 | 342.77 | 226.96 | 2.78 | -0.60 | 2.41 | 0.70 | 0.00 | -18.17 | 267.28 |
| | NORMAL | 257.0 | 2.55 | 340.93 | 256.93 | 3.96 | -0.99 | 3.53 | 1.19 | 1.17 | -6.13 | 346.79 |
| | NORMAL | 287.0 | 2.55 | 325.46 | 286.90 | 5.14 | -1.59 | 4.79 | 2.29 | 0.00 | -51.57 | 262.27 |
| | NORMAL | 318.0 | 2.90 | 327.30 | 317.87 | 6.37 | -2.40 | 6.24 | 1.16 | 1.13 | 5.94 | 14.95 |
| | NORMAL | 348.0 | 3.61 | 329.68 | 347.82 | 7.83 | -3.29 | 7.90 | 2.41 | 2.37 | 7.93 | 11.97 |
| | NORMAL | 378.0 | 4.22 | 320.36 | 377.75 | 9.49 | -4.47 | 9.91 | 2.93 | 2.03 | -31.07 | 309.08 |
| | NORMAL | 408.0 | 4.05 | 314.56 | 407.67 | 11.08 | -5.93 | 12.07 | 1.50 | -0.57 | -19.33 | 245.00 |
| | NORMAL | 438.0 | 4.31 | 307.71 | 437.59 | 12.52 | -7.57 | 14.25 | 1.87 | 0.87 | -22.83 | 294.06 |
| | NORMAL | 510.0 | 4.88 | 305.28 | 509.36 | 15.94 | -12.22 | 19.94 | 0.84 | 0.79 | -3.38 | 339.93 |
| | NORMAL | 601.0 | 4.01 | 304.71 | 600.08 | 19.99 | -17.99 | 26.87 | 0.96 | -0.96 | -0.63 | 182.62 |
| | NORMAL | 661.0 | 3.93 | 315.52 | 659.94 | 22.65 | -21.16 | 30.99 | 1.25 | -0.13 | 18.02 | 101.48 |
| | NORMAL | 691.0 | 3.54 | 322.84 | 689.88 | 24.12 | -22.44 | 32.93 | 2.05 | -1.30 | 24.40 | 132.89 |
| | NORMAL | 782.0 | 4.22 | 325.31 | 780.67 | 29.11 | -26.04 | 39.02 | 0.77 | 0.75 | 2.71 | 15.04 |
| | NORMAL | 873.0 | 4.92 | 324.69 | 871.38 | 35.05 | -30.20 | 46.18 | 0.77 | 0.77 | -0.68 | 355.65 |
| | NORMAL | 969.0 | 5.89 | 324.96 | 966.95 | 42.44 | -35.41 | 55.10 | 1.01 | 1.01 | 0.28 | 1.64 |
| | NORMAL | 1,063.0 | 5.98 | 306.24 | 1,060.46 | 49.29 | -42.13 | 64.70 | 2.05 | 0.10 | -19.91 | 263.33 |

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 (°) |
|-----------|--------|------------|-------------|-------------|-------------|-------------|-------------|-----------------|--------------------|---------------------------|---------------------|--------------|
| 7/26/2014 | NORMAL | 1,093.0 | 5.80 | 306.50 | 1,090.30 | 51.11 | -44.61 | 67.73 | 0.61 | -0.60 | 0.87 | 171.70 |
| | NORMAL | 1,175.0 | 5.45 | 300.88 | 1,171.90 | 55.58 | -51.28 | 75.59 | 0.80 | -0.43 | -6.85 | 234.79 |
| 7/27/2014 | NORMAL | 1,272.0 | 5.19 | 313.01 | 1,268.49 | 60.93 | -58.44 | 84.42 | 1.19 | -0.27 | 12.51 | 109.01 |
| | NORMAL | 1,367.0 | 4.57 | 311.51 | 1,363.14 | 66.37 | -64.42 | 92.49 | 0.67 | -0.65 | -1.58 | 190.88 |
| | NORMAL | 1,462.0 | 4.88 | 312.04 | 1,457.82 | 71.59 | -70.25 | 100.30 | 0.33 | 0.33 | 0.56 | 8.28 |
| | NORMAL | 1,556.0 | 5.01 | 313.18 | 1,551.47 | 77.07 | -76.21 | 108.39 | 0.17 | 0.14 | 1.21 | 37.65 |
| | NORMAL | 1,652.0 | 5.14 | 314.24 | 1,647.10 | 82.94 | -82.35 | 116.88 | 0.17 | 0.14 | 1.10 | 36.33 |
| | NORMAL | 1,747.0 | 5.45 | 311.60 | 1,741.69 | 88.91 | -88.77 | 125.63 | 0.41 | 0.33 | -2.78 | 320.52 |
| | NORMAL | 1,843.0 | 5.41 | 308.70 | 1,837.26 | 94.76 | -95.71 | 134.67 | 0.29 | -0.04 | -3.02 | 260.27 |
| | NORMAL | 1,933.0 | 4.75 | 301.58 | 1,926.91 | 99.37 | -102.20 | 142.50 | 1.01 | -0.73 | -7.91 | 220.18 |
| | NORMAL | 2,029.0 | 4.13 | 313.53 | 2,022.62 | 103.83 | -108.09 | 149.81 | 1.16 | -0.65 | 12.45 | 129.69 |
| | NORMAL | 2,125.0 | 4.13 | 313.36 | 2,118.37 | 108.58 | -113.11 | 156.71 | 0.01 | 0.00 | -0.18 | 269.92 |
| | NORMAL | 2,220.0 | 4.26 | 306.76 | 2,213.12 | 113.04 | -118.43 | 163.62 | 0.53 | 0.14 | -6.95 | 281.76 |
| 7/28/2014 | NORMAL | 2,316.0 | 3.82 | 323.46 | 2,308.88 | 117.75 | -123.19 | 170.31 | 1.30 | -0.46 | 17.40 | 118.70 |
| | NORMAL | 2,411.0 | 3.78 | 326.72 | 2,403.67 | 122.91 | -126.79 | 176.52 | 0.23 | -0.04 | 3.43 | 102.11 |
| | NORMAL | 2,507.0 | 3.78 | 326.36 | 2,499.47 | 128.19 | -130.28 | 182.73 | 0.02 | 0.00 | -0.38 | 269.82 |
| | NORMAL | 2,602.0 | 3.60 | 326.72 | 2,594.27 | 133.29 | -133.65 | 188.74 | 0.19 | -0.19 | 0.38 | 172.85 |
| | NORMAL | 2,697.0 | 3.47 | 326.72 | 2,689.09 | 138.19 | -136.86 | 194.49 | 0.14 | -0.14 | 0.00 | 180.00 |
| | NORMAL | 2,793.0 | 3.52 | 311.95 | 2,784.91 | 142.58 | -140.65 | 200.28 | 0.94 | 0.05 | -15.39 | 265.79 |
| | NORMAL | 2,889.0 | 3.60 | 309.75 | 2,880.73 | 146.48 | -145.16 | 206.22 | 0.16 | 0.08 | -2.29 | 299.25 |
| | NORMAL | 2,984.0 | 3.38 | 306.59 | 2,975.55 | 150.06 | -149.70 | 211.95 | 0.31 | -0.23 | -3.33 | 219.60 |
| | NORMAL | 3,079.0 | 3.60 | 324.08 | 3,070.38 | 154.14 | -153.70 | 217.67 | 1.14 | 0.23 | 18.41 | 87.14 |
| | NORMAL | 3,175.0 | 3.60 | 322.85 | 3,166.19 | 158.99 | -157.29 | 223.64 | 0.08 | 0.00 | -1.28 | 269.39 |
| | NORMAL | 3,270.0 | 3.52 | 324.08 | 3,261.01 | 163.73 | -160.80 | 229.48 | 0.12 | -0.08 | 1.29 | 136.94 |
| | NORMAL | 3,363.0 | 4.09 | 317.66 | 3,353.80 | 168.49 | -164.71 | 235.62 | 0.76 | 0.61 | -6.90 | 319.99 |
| | NORMAL | 3,458.0 | 3.96 | 317.84 | 3,448.57 | 173.42 | -169.19 | 242.29 | 0.14 | -0.14 | 0.19 | 174.54 |
| | NORMAL | 3,554.0 | 5.01 | 314.50 | 3,544.27 | 178.82 | -174.41 | 249.79 | 1.13 | 1.09 | -3.48 | 344.36 |
| | NORMAL | 3,649.0 | 5.05 | 313.71 | 3,638.91 | 184.62 | -180.39 | 256.12 | 0.08 | 0.04 | -0.83 | 299.61 |
| | NORMAL | 3,744.0 | 5.14 | 317.14 | 3,733.53 | 190.63 | -186.31 | 266.55 | 0.33 | 0.09 | 3.61 | 75.25 |
| | NORMAL | 3,840.0 | 5.28 | 317.40 | 3,829.13 | 197.03 | -192.22 | 275.26 | 0.15 | 0.15 | 0.27 | 9.70 |
| | NORMAL | 3,935.0 | 5.45 | 317.66 | 3,923.72 | 203.58 | -198.22 | 284.14 | 0.18 | 0.18 | 0.27 | 8.27 |
| | NORMAL | 4,030.0 | 5.41 | 315.91 | 4,018.29 | 210.13 | -204.37 | 293.13 | 0.18 | -0.04 | -1.84 | 255.55 |
| | NORMAL | 4,126.0 | 5.50 | 313.27 | 4,113.86 | 216.54 | -210.87 | 302.25 | 0.28 | 0.09 | -2.75 | 288.41 |
| | NORMAL | 4,221.0 | 5.28 | 313.71 | 4,208.44 | 222.68 | -217.35 | 311.17 | 0.24 | -0.23 | 0.46 | 169.58 |
| | NORMAL | 4,317.0 | 5.23 | 312.13 | 4,304.03 | 228.66 | -223.78 | 319.95 | 0.16 | -0.05 | -1.65 | 250.15 |
| | NORMAL | 4,411.0 | 5.10 | 310.89 | 4,397.65 | 234.27 | -230.12 | 328.39 | 0.18 | -0.14 | -1.32 | 220.04 |
| | NORMAL | 4,506.0 | 4.92 | 308.96 | 4,492.29 | 239.60 | -236.48 | 336.64 | 0.26 | -0.19 | -2.03 | 222.16 |
| 7/29/2014 | NORMAL | 4,601.0 | 5.01 | 307.38 | 4,586.93 | 244.68 | -242.94 | 344.79 | 0.17 | 0.09 | -1.66 | 302.56 |
| | NORMAL | 4,696.0 | 4.97 | 307.29 | 4,681.57 | 249.69 | -249.51 | 352.97 | 0.04 | -0.04 | -0.09 | 191.03 |
| | NORMAL | 4,791.0 | 4.97 | 308.52 | 4,776.22 | 254.75 | -256.01 | 361.12 | 0.11 | 0.00 | 1.29 | 90.61 |
| 7/30/2014 | NORMAL | 4,891.0 | 4.92 | 302.63 | 4,875.85 | 259.76 | -263.01 | 369.60 | 0.51 | -0.05 | -5.89 | 261.45 |
| | NORMAL | 4,987.0 | 4.66 | 322.50 | 4,971.52 | 265.07 | -268.85 | 377.48 | 1.74 | -0.27 | 20.70 | 108.72 |
| | NORMAL | 5,082.0 | 4.26 | 327.51 | 5,066.23 | 271.11 | -273.09 | 384.77 | 0.59 | -0.42 | 5.27 | 138.23 |
| | NORMAL | 5,178.0 | 3.82 | 320.74 | 5,161.99 | 276.59 | -277.03 | 391.44 | 0.68 | -0.46 | -7.05 | 223.97 |
| | NORMAL | 5,272.0 | 3.38 | 313.71 | 5,255.81 | 280.93 | -281.02 | 397.33 | 0.66 | -0.47 | -7.48 | 221.62 |
| | NORMAL | 5,366.0 | 2.90 | 310.46 | 5,349.67 | 284.39 | -284.83 | 402.47 | 0.54 | -0.51 | -3.46 | 198.73 |
| | NORMAL | 5,462.0 | 2.64 | 296.92 | 5,445.56 | 286.97 | -288.65 | 406.98 | 0.73 | -0.27 | -14.10 | 241.66 |
| | NORMAL | 5,558.0 | 1.50 | 280.22 | 5,541.49 | 288.19 | -291.86 | 410.10 | 1.33 | -1.19 | -17.40 | 199.71 |
| | NORMAL | 5,653.0 | 1.19 | 315.29 | 5,636.47 | 289.11 | -293.77 | 412.09 | 0.91 | -0.33 | 36.92 | 127.57 |
| | NORMAL | 5,748.0 | 1.05 | 292.35 | 5,731.45 | 290.14 | -295.27 | 413.88 | 0.49 | -0.15 | -24.15 | 241.41 |
| 7/31/2014 | NORMAL | 5,843.0 | 1.27 | 344.64 | 5,826.43 | 291.49 | -296.36 | 415.60 | 1.10 | 0.23 | 55.04 | 105.21 |
| | NORMAL | 5,939.0 | 1.05 | 346.05 | 5,922.41 | 293.37 | -296.85 | 417.29 | 0.23 | -0.23 | 1.47 | 173.31 |
| | NORMAL | 6,034.0 | 0.79 | 305.36 | 6,017.40 | 294.59 | -297.60 | 418.69 | 0.72 | -0.27 | -42.83 | 228.60 |
| | NORMAL | 6,130.0 | 0.79 | 353.26 | 6,113.39 | 295.63 | -298.21 | 419.86 | 0.67 | 0.00 | 49.90 | 113.95 |
| | NORMAL | 6,225.0 | 0.92 | 24.37 | 6,208.38 | 296.98 | -297.97 | 420.66 | 0.50 | 0.14 | 32.75 | 90.28 |
| | NORMAL | 6,320.0 | 1.93 | 48.19 | 6,303.35 | 298.74 | -296.47 | 420.86 | 1.21 | 1.06 | 25.07 | 42.66 |

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 (°) |
|----------|--------|------------|-------------|-------------|-------------|-------------|-------------|-----------------|--------------------|---------------------------|---------------------|--------------|
| 8/1/2014 | NORMAL | 6,416.0 | 2.55 | 51.35 | 6,399.28 | 301.15 | -293.59 | 420.58 | 0.66 | 0.65 | 3.29 | 12.85 |
| | NORMAL | 6,512.0 | 2.37 | 54.52 | 6,495.19 | 303.64 | -290.31 | 420.07 | 0.23 | -0.19 | 3.30 | 144.49 |
| | NORMAL | 6,608.0 | 2.33 | 65.50 | 6,591.11 | 305.60 | -286.92 | 419.10 | 0.47 | -0.04 | 11.44 | 100.55 |
| | NORMAL | 6,703.0 | 2.29 | 68.93 | 6,686.04 | 307.08 | -283.39 | 417.70 | 0.15 | -0.04 | 3.61 | 107.85 |
| | NORMAL | 6,799.0 | 1.93 | 71.31 | 6,781.97 | 308.29 | -280.07 | 416.24 | 0.39 | -0.38 | 2.48 | 167.51 |
| | NORMAL | 6,895.0 | 1.54 | 77.90 | 6,877.93 | 309.08 | -277.28 | 414.85 | 0.46 | -0.41 | 6.86 | 156.17 |
| | NORMAL | 6,991.0 | 1.27 | 57.86 | 6,973.90 | 309.91 | -275.11 | 413.94 | 0.58 | -0.28 | -20.88 | 231.44 |
| | NORMAL | 7,087.0 | 2.37 | 32.02 | 7,069.85 | 312.16 | -273.16 | 414.19 | 1.40 | 1.15 | -26.92 | 309.89 |
| | NORMAL | 7,183.0 | 1.98 | 31.14 | 7,165.78 | 315.27 | -271.25 | 415.07 | 0.41 | -0.41 | -0.92 | 184.45 |
| | NORMAL | 7,278.0 | 1.54 | 29.03 | 7,260.74 | 317.79 | -269.78 | 415.85 | 0.47 | -0.46 | -2.22 | 187.32 |
| | NORMAL | 7,374.0 | 0.75 | 21.73 | 7,356.72 | 319.50 | -268.92 | 416.47 | 0.84 | -0.82 | -7.60 | 186.83 |
| | NORMAL | 7,468.0 | 1.01 | 25.34 | 7,450.71 | 320.82 | -268.34 | 417.01 | 0.28 | 0.28 | 3.84 | 13.85 |
| | NORMAL | 7,563.0 | 0.88 | 14.70 | 7,545.69 | 322.28 | -267.80 | 417.68 | 0.23 | -0.14 | -11.20 | 228.23 |
| | NORMAL | 7,658.0 | 1.14 | 33.51 | 7,640.68 | 323.77 | -267.09 | 418.25 | 0.44 | 0.27 | 19.80 | 61.55 |
| 8/2/2014 | NORMAL | 7,754.0 | 0.97 | 44.41 | 7,736.66 | 325.15 | -266.00 | 418.47 | 0.27 | -0.18 | 11.35 | 135.63 |
| | NORMAL | 7,849.0 | 0.40 | 75.79 | 7,831.66 | 325.81 | -265.11 | 418.32 | 0.70 | -0.60 | 33.03 | 161.66 |
| | NORMAL | 7,943.0 | 0.13 | 144.34 | 7,925.66 | 325.80 | -264.73 | 418.05 | 0.40 | -0.29 | 72.93 | 161.05 |
| | NORMAL | 8,038.0 | 0.40 | 251.83 | 8,020.65 | 325.61 | -264.98 | 418.09 | 0.48 | 0.28 | 113.15 | 123.26 |
| | NORMAL | 8,133.0 | 1.05 | 268.36 | 8,115.65 | 325.48 | -266.17 | 418.83 | 0.71 | 0.68 | 17.40 | 26.22 |
| | NORMAL | 8,228.0 | 1.63 | 262.29 | 8,210.62 | 325.28 | -268.38 | 420.22 | 0.63 | 0.61 | -6.39 | 343.20 |
| 8/3/2014 | NORMAL | 8,324.0 | 1.67 | 258.16 | 8,306.58 | 324.81 | -271.10 | 421.79 | 0.13 | 0.04 | -4.30 | 286.52 |
| | NORMAL | 8,419.0 | 1.98 | 241.11 | 8,401.53 | 323.73 | -273.89 | 422.97 | 0.65 | 0.33 | -17.95 | 291.02 |
| | NORMAL | 8,515.0 | 2.55 | 235.13 | 8,497.46 | 321.71 | -277.10 | 423.76 | 0.64 | 0.59 | -6.23 | 334.47 |
| | NORMAL | 8,610.0 | 2.68 | 232.23 | 8,592.36 | 319.14 | -280.59 | 424.36 | 0.20 | 0.14 | -3.05 | 313.04 |
| | NORMAL | 8,705.0 | 2.73 | 233.64 | 8,687.25 | 316.44 | -284.16 | 424.93 | 0.09 | 0.05 | 1.48 | 53.78 |
| | NORMAL | 8,769.0 | 2.64 | 235.49 | 8,751.18 | 314.70 | -286.60 | 425.39 | 0.20 | -0.14 | 2.89 | 137.00 |
| | NORMAL | 8,814.0 | 2.64 | 235.49 | 8,796.12 | 313.52 | -288.31 | 425.74 | 0.00 | 0.00 | 0.00 | 0.00 |