

1 General

1.1 Customer Information

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

1.2 Well Information

| | | | |
|--------------------------|--------------------------------------|-----------------|--------------|
| Well | SG 11-23 | Wellbore No. | |
| Well Name | SG 11-23 | Common Name | SG 11-23 |
| Project | SG 23-07S-096W | Site | GV 18-23 Pad |
| Vertical Section Azimuth | 311.62 (°) | North Reference | |
| Origin N/S | | Origin E/W | |
| Spud Date | 2/22/2012 | UWI | SG 11-23 |
| Active Datum | KB @5,158.0ft (above Mean Sea Level) | | |

2 Survey Name

2.1 Survey Name: Survey #1

| | | | |
|--------------|-----------|----------|--------|
| Survey Name | Survey #1 | Company | MOSTAR |
| Date Started | 2/22/2012 | 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

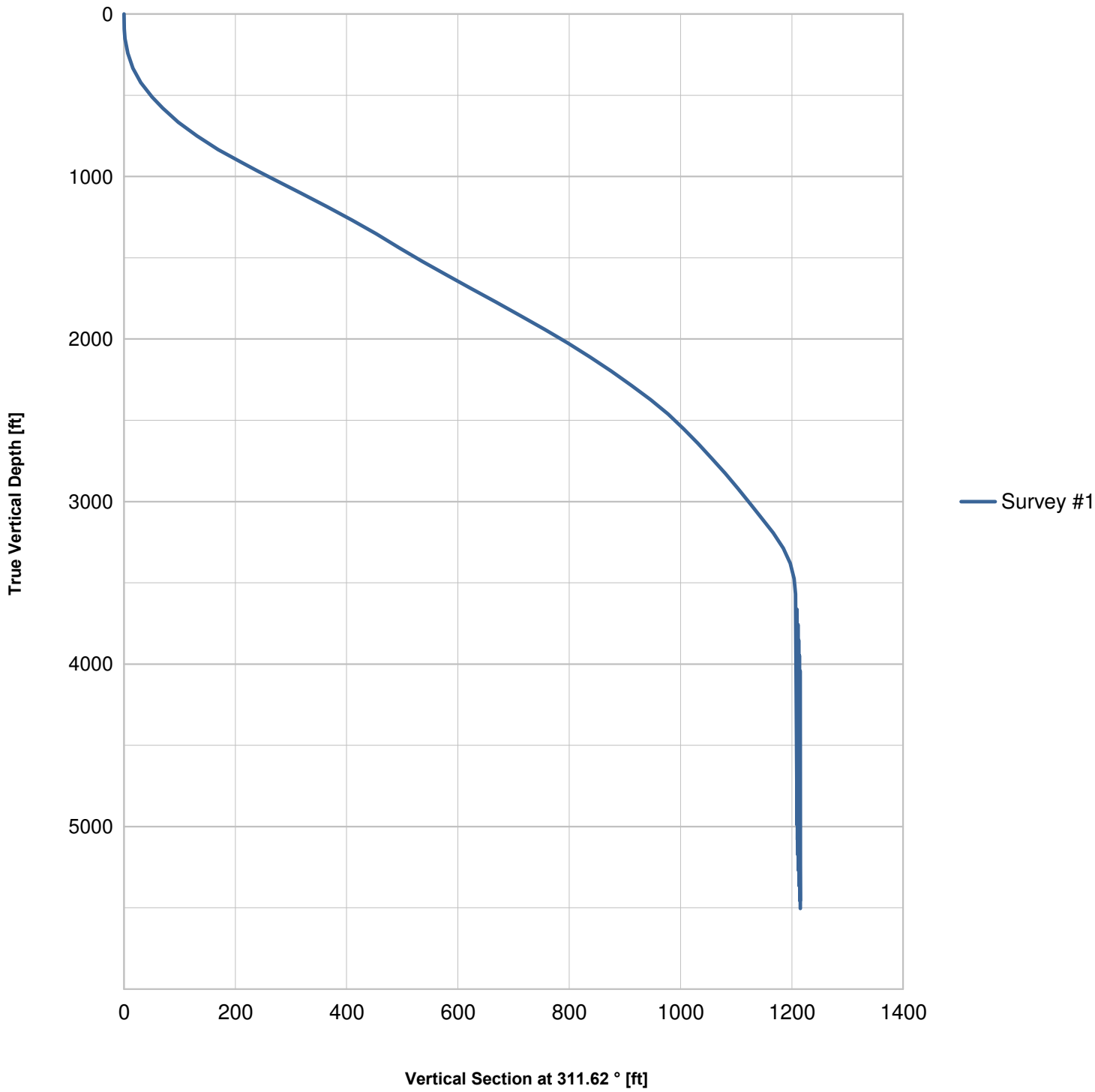
| Date | Type | MD (ft) | Inc (°) | Azi (°) | TVD (ft) | N/S (ft) | E/W (ft) | V. Sec (ft) | DLS (°/100ft) | Build Rate (°/100ft) | Turn (°/100ft) | TFace (°) |
|-----------|--------|---------|---------|---------|----------|----------|----------|-------------|---------------|----------------------|----------------|-----------|
| 2/22/2012 | Tie On | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2/22/2012 | NORMAL | 92.0 | 0.88 | 280.20 | 92.00 | 0.13 | -0.70 | 0.60 | 0.96 | 0.96 | 0.00 | 280.20 |
| | NORMAL | 152.0 | 2.11 | 288.19 | 151.97 | 0.55 | -2.20 | 2.01 | 2.07 | 2.05 | 13.32 | 13.63 |
| | NORMAL | 243.0 | 4.22 | 297.10 | 242.83 | 2.60 | -6.77 | 6.79 | 2.37 | 2.32 | 9.79 | 17.60 |
| | NORMAL | 334.0 | 7.48 | 304.80 | 333.35 | 7.51 | -14.62 | 15.91 | 3.68 | 3.58 | 8.46 | 17.39 |
| | NORMAL | 424.0 | 10.91 | 309.00 | 422.18 | 16.21 | -26.05 | 30.24 | 3.88 | 3.81 | 4.67 | 13.15 |
| | NORMAL | 515.0 | 14.43 | 310.70 | 510.95 | 29.03 | -41.34 | 50.19 | 3.89 | 3.87 | 1.87 | 6.88 |
| | NORMAL | 586.0 | 16.66 | 310.22 | 579.35 | 41.37 | -55.82 | 69.21 | 3.15 | 3.14 | -0.68 | 356.47 |
| | NORMAL | 677.0 | 19.93 | 308.12 | 665.74 | 59.38 | -77.99 | 97.74 | 3.67 | 3.59 | -2.31 | 347.60 |
| | NORMAL | 768.0 | 23.01 | 309.59 | 750.41 | 80.29 | -103.91 | 131.00 | 3.44 | 3.38 | 1.62 | 10.59 |
| | NORMAL | 859.0 | 26.43 | 313.23 | 833.07 | 105.50 | -132.38 | 169.04 | 4.11 | 3.76 | 4.00 | 25.66 |
| | NORMAL | 950.0 | 28.39 | 313.46 | 913.85 | 134.26 | -162.84 | 210.91 | 2.16 | 2.15 | 0.25 | 3.19 |
| | NORMAL | 1,010.0 | 29.08 | 312.71 | 966.46 | 153.96 | -183.91 | 239.74 | 1.30 | 1.15 | -1.25 | 332.08 |
| 2/23/2012 | NORMAL | 1,073.0 | 29.90 | 314.90 | 1,021.30 | 175.43 | -206.28 | 270.73 | 2.15 | 1.30 | 3.48 | 53.70 |
| | NORMAL | 1,168.0 | 30.20 | 313.00 | 1,103.53 | 208.44 | -240.53 | 318.26 | 1.05 | 0.32 | -2.00 | 286.68 |
| | NORMAL | 1,262.0 | 28.70 | 314.20 | 1,185.38 | 240.30 | -274.00 | 364.44 | 1.71 | -1.60 | 1.28 | 159.05 |
| | NORMAL | 1,357.0 | 28.60 | 314.00 | 1,268.75 | 272.00 | -306.71 | 409.95 | 0.15 | -0.11 | -0.21 | 223.71 |
| | NORMAL | 1,451.0 | 26.10 | 312.30 | 1,352.24 | 301.55 | -338.20 | 453.11 | 2.79 | -2.66 | -1.81 | 196.60 |
| | NORMAL | 1,546.0 | 25.50 | 309.50 | 1,437.77 | 328.62 | -369.43 | 494.44 | 1.43 | -0.63 | -2.95 | 242.53 |
| | NORMAL | 1,640.0 | 27.00 | 307.20 | 1,522.08 | 354.39 | -402.04 | 535.94 | 1.93 | 1.60 | -2.45 | 324.82 |
| | NORMAL | 1,735.0 | 28.00 | 308.90 | 1,606.34 | 381.44 | -436.58 | 579.72 | 1.34 | 1.05 | 1.79 | 38.89 |

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 (°) |
|-----------|--------|------------|------------|------------|-------------|-------------|-------------|----------------|------------------|-------------------------|-------------------|--------------|
| 2/23/2012 | NORMAL | 1,830.0 | 28.30 | 311.10 | 1,690.11 | 410.25 | -470.90 | 624.51 | 1.14 | 0.32 | 2.32 | 74.85 |
| | NORMAL | 1,924.0 | 27.50 | 310.50 | 1,773.18 | 438.99 | -504.20 | 668.49 | 0.90 | -0.85 | -0.64 | 199.07 |
| | NORMAL | 2,019.0 | 28.30 | 315.10 | 1,857.15 | 469.19 | -536.77 | 712.90 | 2.42 | 0.84 | 4.84 | 71.65 |
| | NORMAL | 2,113.0 | 26.70 | 316.00 | 1,940.52 | 500.16 | -567.18 | 756.20 | 1.76 | -1.70 | 0.96 | 165.84 |
| | NORMAL | 2,208.0 | 25.10 | 315.40 | 2,025.98 | 529.87 | -596.15 | 797.59 | 1.71 | -1.68 | -0.63 | 189.03 |
| | NORMAL | 2,302.0 | 24.60 | 315.10 | 2,111.28 | 557.92 | -623.96 | 837.02 | 0.55 | -0.53 | -0.32 | 194.02 |
| | NORMAL | 2,397.0 | 23.00 | 315.10 | 2,198.19 | 585.08 | -651.02 | 875.28 | 1.68 | -1.68 | 0.00 | 180.00 |
| | NORMAL | 2,491.0 | 22.10 | 313.30 | 2,285.01 | 610.21 | -676.85 | 911.29 | 1.21 | -0.96 | -1.91 | 216.66 |
| | NORMAL | 2,586.0 | 20.80 | 314.40 | 2,373.43 | 634.27 | -701.91 | 946.00 | 1.43 | -1.37 | 1.16 | 163.32 |
| | NORMAL | 2,680.0 | 18.30 | 315.60 | 2,462.00 | 656.50 | -724.17 | 977.40 | 2.69 | -2.66 | 1.28 | 171.44 |
| | NORMAL | 2,775.0 | 16.30 | 313.00 | 2,552.70 | 676.25 | -744.35 | 1,005.61 | 2.26 | -2.11 | -2.74 | 199.90 |
| | NORMAL | 2,869.0 | 15.40 | 312.30 | 2,643.12 | 693.64 | -763.23 | 1,031.28 | 0.98 | -0.96 | -0.74 | 191.66 |
| | NORMAL | 2,963.0 | 15.00 | 311.20 | 2,733.84 | 710.06 | -781.62 | 1,055.92 | 0.52 | -0.43 | -1.17 | 215.26 |
| | NORMAL | 3,058.0 | 14.30 | 309.80 | 2,825.75 | 725.66 | -799.88 | 1,079.94 | 0.83 | -0.74 | -1.47 | 206.16 |
| | NORMAL | 3,153.0 | 13.50 | 307.20 | 2,917.97 | 739.88 | -817.73 | 1,102.72 | 1.07 | -0.84 | -2.74 | 216.72 |
| | NORMAL | 3,247.0 | 13.10 | 307.90 | 3,009.44 | 753.06 | -834.87 | 1,124.29 | 0.46 | -0.43 | 0.74 | 158.41 |
| 2/24/2012 | NORMAL | 3,342.0 | 13.10 | 310.90 | 3,101.97 | 766.72 | -851.51 | 1,145.80 | 0.72 | 0.00 | 3.16 | 91.46 |
| | NORMAL | 3,436.0 | 12.20 | 314.60 | 3,193.69 | 780.67 | -866.63 | 1,166.37 | 1.29 | -0.96 | 3.94 | 139.80 |
| | NORMAL | 3,531.0 | 9.80 | 319.30 | 3,286.94 | 793.85 | -879.05 | 1,184.41 | 2.69 | -2.53 | 4.95 | 161.81 |
| | NORMAL | 3,625.0 | 6.80 | 339.50 | 3,379.97 | 805.13 | -886.22 | 1,197.27 | 4.40 | -3.19 | 21.49 | 145.51 |
| | NORMAL | 3,720.0 | 2.80 | 356.90 | 3,474.62 | 812.72 | -888.32 | 1,203.87 | 4.43 | -4.21 | 18.32 | 168.53 |
| | NORMAL | 3,814.0 | 1.50 | 309.10 | 3,568.56 | 815.79 | -889.40 | 1,206.72 | 2.24 | -1.38 | -50.85 | 211.80 |
| | NORMAL | 3,909.0 | 1.60 | 292.80 | 3,663.52 | 817.08 | -891.58 | 1,209.21 | 0.47 | 0.11 | -17.16 | 274.55 |
| | NORMAL | 4,003.0 | 0.60 | 326.50 | 3,757.50 | 818.00 | -893.06 | 1,210.93 | 1.22 | -1.06 | 35.85 | 163.17 |
| | NORMAL | 4,098.0 | 0.70 | 311.10 | 3,852.50 | 818.80 | -893.78 | 1,211.99 | 0.21 | 0.11 | -16.21 | 291.94 |
| | NORMAL | 4,193.0 | 1.10 | 286.10 | 3,947.49 | 819.43 | -895.09 | 1,213.40 | 0.58 | 0.42 | -26.32 | 302.57 |
| | NORMAL | 4,287.0 | 0.70 | 278.40 | 4,041.47 | 819.77 | -896.52 | 1,214.69 | 0.44 | -0.43 | -8.19 | 193.00 |
| | NORMAL | 4,382.0 | 0.70 | 127.70 | 4,136.47 | 819.50 | -896.64 | 1,214.60 | 1.43 | 0.00 | -158.63 | 194.65 |
| | NORMAL | 4,476.0 | 0.70 | 157.10 | 4,230.46 | 818.62 | -895.96 | 1,213.51 | 0.38 | 0.00 | 31.28 | 104.70 |
| | NORMAL | 4,571.0 | 1.00 | 178.90 | 4,325.45 | 817.25 | -895.72 | 1,212.42 | 0.46 | 0.32 | 22.95 | 58.40 |
| | NORMAL | 4,665.0 | 1.10 | 224.90 | 4,419.44 | 815.80 | -896.34 | 1,211.92 | 0.88 | 0.11 | 48.94 | 106.60 |
| | NORMAL | 4,760.0 | 0.50 | 166.90 | 4,514.43 | 814.75 | -896.89 | 1,211.63 | 0.99 | -0.63 | -61.05 | 206.92 |
| | NORMAL | 4,854.0 | 0.80 | 197.70 | 4,608.43 | 813.72 | -897.00 | 1,211.03 | 0.48 | 0.32 | 32.77 | 65.44 |
| | NORMAL | 4,949.0 | 1.20 | 206.90 | 4,703.41 | 812.20 | -897.65 | 1,210.51 | 0.45 | 0.42 | 9.68 | 26.51 |
| | NORMAL | 5,043.0 | 1.60 | 202.60 | 4,797.38 | 810.11 | -898.60 | 1,209.83 | 0.44 | 0.43 | -4.57 | 343.13 |
| | NORMAL | 5,138.0 | 2.10 | 208.90 | 4,892.33 | 807.36 | -899.95 | 1,209.01 | 0.57 | 0.53 | 6.63 | 25.30 |
| | NORMAL | 5,232.0 | 1.10 | 249.70 | 4,986.30 | 805.54 | -901.63 | 1,209.06 | 1.55 | -1.06 | 43.40 | 150.44 |
| | NORMAL | 5,327.0 | 1.60 | 240.20 | 5,081.27 | 804.57 | -903.63 | 1,209.91 | 0.57 | 0.53 | -10.00 | 331.09 |
| 2/25/2012 | NORMAL | 5,421.0 | 2.20 | 238.80 | 5,175.22 | 802.98 | -906.32 | 1,210.86 | 0.64 | 0.64 | -1.49 | 354.88 |
| | NORMAL | 5,516.0 | 2.80 | 235.10 | 5,270.13 | 800.71 | -909.78 | 1,211.94 | 0.65 | 0.63 | -3.89 | 343.09 |
| | NORMAL | 5,610.0 | 3.20 | 235.80 | 5,364.00 | 797.92 | -913.83 | 1,213.12 | 0.43 | 0.43 | 0.74 | 5.58 |
| | NORMAL | 5,705.0 | 3.40 | 237.40 | 5,458.84 | 794.91 | -918.40 | 1,214.54 | 0.23 | 0.21 | 1.68 | 25.53 |
| | NORMAL | 5,750.0 | 3.40 | 237.40 | 5,503.76 | 793.47 | -920.65 | 1,215.26 | 0.00 | 0.00 | 0.00 | 0.00 |

3 Charts

3.1 Vertical Section View



3.2 Plan View

