

1 General

1.1 Customer Information

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

1.2 Well Information

| | | | |
|-----------------------------|--------------------------------------|-----------------|--------------|
| Well | SG 631-23 | Wellbore No. | |
| Well Name | SG 631-23 | Common Name | SG 631-23 |
| Project | SG 23-07S-096W | Site | GV 18-23 Pad |
| Vertical Section Azimuth | 82.43 (°) | North Reference | |
| Origin N/S | | Origin E/W | |
| Spud Date | 3/8/2012 | UWI | SG 631-23 |
| Active Datum | KB @5,158.0ft (above Mean Sea Level) | | |

2 Survey Name

2.1 Survey Name: Survey #1

| | | | |
|--------------|-----------|----------|--|
| Survey Name | Survey #1 | Company | |
| Date Started | 3/8/2012 | 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

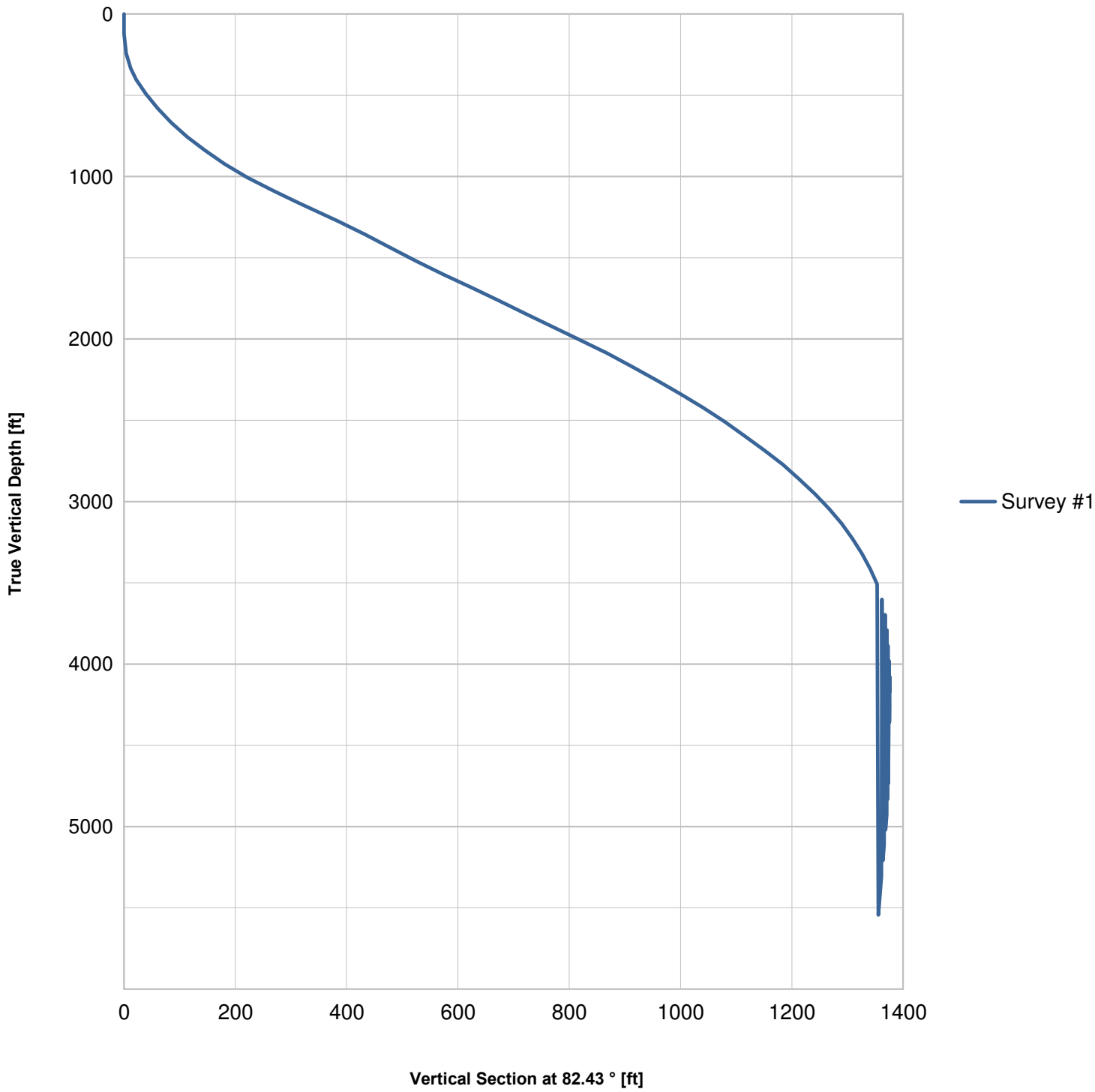
| Date | Type | MD (ft) | Inc (°) | Azi (°) | TVD (ft) | N/S (ft) | E/W (ft) | V. Sec (ft) | DLS (°/100ft) | Build Rate (°/100ft) | Turn (°/100ft) | TFace (°) |
|----------|--------|------------|------------|------------|-------------|-------------|-------------|----------------|------------------|-------------------------|-------------------|--------------|
| 3/8/2012 | Tie On | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3/8/2012 | NORMAL | 122.0 | 0.35 | 0.44 | 122.00 | 0.37 | 0.00 | 0.05 | 0.29 | 0.29 | 0.00 | 0.44 |
| | NORMAL | 243.0 | 3.61 | 69.70 | 242.92 | 2.06 | 3.58 | 3.82 | 2.89 | 2.69 | 57.24 | 74.62 |
| | NORMAL | 335.0 | 6.69 | 85.34 | 334.54 | 3.50 | 11.64 | 12.00 | 3.65 | 3.35 | 17.00 | 32.43 |
| | NORMAL | 405.0 | 9.83 | 88.35 | 403.80 | 4.01 | 21.68 | 22.02 | 4.53 | 4.49 | 4.30 | 9.33 |
| | NORMAL | 496.0 | 12.59 | 89.63 | 493.06 | 4.30 | 39.36 | 39.59 | 3.05 | 3.03 | 1.41 | 5.78 |
| | NORMAL | 587.0 | 14.20 | 82.65 | 581.59 | 5.79 | 60.35 | 60.59 | 2.50 | 1.77 | -7.67 | 311.44 |
| | NORMAL | 678.0 | 17.10 | 79.01 | 669.20 | 9.77 | 84.56 | 85.11 | 3.36 | 3.19 | -4.00 | 339.53 |
| | NORMAL | 769.0 | 19.46 | 78.12 | 755.61 | 15.44 | 112.53 | 113.59 | 2.61 | 2.59 | -0.98 | 352.83 |
| | NORMAL | 859.0 | 21.90 | 80.78 | 839.80 | 21.22 | 143.78 | 145.32 | 2.90 | 2.71 | 2.96 | 22.31 |
| | NORMAL | 950.0 | 24.37 | 84.47 | 923.48 | 25.75 | 179.22 | 181.05 | 3.15 | 2.71 | 4.05 | 32.12 |
| | NORMAL | 1,042.0 | 27.66 | 84.47 | 1,006.15 | 29.63 | 219.38 | 221.38 | 3.58 | 3.58 | 0.00 | 0.00 |
| | NORMAL | 1,136.0 | 31.12 | 83.01 | 1,088.04 | 34.69 | 265.23 | 267.48 | 3.76 | 3.68 | -1.55 | 347.66 |
| | NORMAL | 1,225.0 | 32.53 | 82.95 | 1,163.66 | 40.43 | 311.80 | 314.41 | 1.58 | 1.58 | -0.07 | 358.69 |
| 3/9/2012 | NORMAL | 1,356.0 | 32.00 | 82.40 | 1,274.43 | 49.34 | 381.17 | 384.34 | 0.46 | -0.40 | -0.42 | 208.75 |
| | NORMAL | 1,451.0 | 29.10 | 84.70 | 1,356.24 | 54.81 | 429.13 | 432.61 | 3.29 | -3.05 | 2.42 | 159.03 |
| | NORMAL | 1,545.0 | 29.20 | 82.90 | 1,438.33 | 59.75 | 474.64 | 478.38 | 0.94 | 0.11 | -1.91 | 275.72 |
| | NORMAL | 1,640.0 | 30.00 | 80.60 | 1,520.94 | 66.50 | 521.07 | 525.29 | 1.46 | 0.84 | -2.42 | 304.15 |
| | NORMAL | 1,734.0 | 31.60 | 81.70 | 1,601.68 | 73.89 | 568.63 | 573.41 | 1.80 | 1.70 | 1.17 | 19.87 |
| | NORMAL | 1,829.0 | 32.20 | 80.10 | 1,682.33 | 81.84 | 618.20 | 623.59 | 1.09 | 0.63 | -1.68 | 304.68 |
| | NORMAL | 1,924.0 | 30.60 | 81.30 | 1,763.42 | 89.85 | 667.03 | 673.06 | 1.81 | -1.68 | 1.26 | 159.17 |

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 (°) |
|-----------|--------|------------|------------|------------|-------------|-------------|-------------|----------------|------------------|-------------------------|-------------------|--------------|
| 3/9/2012 | NORMAL | 2,018.0 | 31.30 | 81.50 | 1,844.03 | 97.07 | 714.83 | 721.39 | 0.75 | 0.74 | 0.21 | 8.45 |
| | NORMAL | 2,113.0 | 30.90 | 81.70 | 1,925.38 | 104.24 | 763.38 | 770.46 | 0.43 | -0.42 | 0.21 | 165.60 |
| | NORMAL | 2,207.0 | 31.30 | 81.30 | 2,005.87 | 111.42 | 811.40 | 819.01 | 0.48 | 0.43 | -0.43 | 332.51 |
| | NORMAL | 2,302.0 | 29.70 | 82.90 | 2,087.72 | 118.06 | 859.15 | 867.21 | 1.89 | -1.68 | 1.68 | 153.78 |
| | NORMAL | 2,396.0 | 27.90 | 83.60 | 2,170.09 | 123.39 | 904.12 | 912.49 | 1.95 | -1.91 | 0.74 | 169.69 |
| | NORMAL | 2,491.0 | 27.80 | 84.50 | 2,254.09 | 127.99 | 948.26 | 956.85 | 0.45 | -0.11 | 0.95 | 103.78 |
| | NORMAL | 2,585.0 | 26.30 | 80.80 | 2,337.81 | 133.42 | 990.64 | 999.58 | 2.40 | -1.60 | -3.94 | 226.65 |
| | NORMAL | 2,680.0 | 25.30 | 80.60 | 2,423.34 | 140.10 | 1,031.44 | 1,040.91 | 1.06 | -1.05 | -0.21 | 184.88 |
| | NORMAL | 2,774.0 | 22.80 | 81.80 | 2,509.17 | 145.98 | 1,069.29 | 1,079.20 | 2.71 | -2.66 | 1.28 | 169.48 |
| | NORMAL | 2,869.0 | 22.00 | 82.00 | 2,597.00 | 151.09 | 1,105.13 | 1,115.40 | 0.85 | -0.84 | 0.21 | 174.65 |
| | NORMAL | 2,963.0 | 21.50 | 83.20 | 2,684.31 | 155.58 | 1,139.67 | 1,150.23 | 0.71 | -0.53 | 1.28 | 138.91 |
| | NORMAL | 3,058.0 | 19.80 | 81.10 | 2,773.20 | 160.13 | 1,172.86 | 1,183.73 | 1.95 | -1.79 | -2.21 | 202.56 |
| | NORMAL | 3,152.0 | 17.30 | 83.40 | 2,862.32 | 164.20 | 1,202.47 | 1,213.62 | 2.77 | -2.66 | 2.45 | 164.77 |
| 3/10/2012 | NORMAL | 3,247.0 | 16.70 | 84.30 | 2,953.16 | 167.18 | 1,230.09 | 1,241.39 | 0.69 | -0.63 | 0.95 | 156.75 |
| | NORMAL | 3,341.0 | 14.40 | 82.20 | 3,043.72 | 170.10 | 1,255.11 | 1,266.58 | 2.52 | -2.45 | -2.23 | 192.74 |
| | NORMAL | 3,436.0 | 13.10 | 79.40 | 3,135.99 | 173.69 | 1,277.40 | 1,289.15 | 1.54 | -1.37 | -2.95 | 205.75 |
| | NORMAL | 3,530.0 | 11.30 | 79.70 | 3,227.87 | 177.29 | 1,296.93 | 1,308.98 | 1.92 | -1.91 | 0.32 | 178.13 |
| | NORMAL | 3,625.0 | 9.60 | 75.30 | 3,321.29 | 180.97 | 1,313.75 | 1,326.14 | 1.98 | -1.79 | -4.63 | 203.00 |
| | NORMAL | 3,719.0 | 8.40 | 77.40 | 3,414.13 | 184.46 | 1,328.04 | 1,340.76 | 1.32 | -1.28 | 2.23 | 165.73 |
| | NORMAL | 3,814.0 | 6.50 | 73.40 | 3,508.33 | 187.51 | 1,339.96 | 1,352.98 | 2.07 | -2.00 | -4.21 | 193.29 |
| | NORMAL | 3,908.0 | 4.40 | 75.00 | 3,601.90 | 189.96 | 1,348.54 | 1,361.82 | 2.24 | -2.23 | 1.70 | 176.66 |
| | NORMAL | 4,003.0 | 2.40 | 84.70 | 3,696.72 | 191.09 | 1,354.05 | 1,367.42 | 2.18 | -2.11 | 10.21 | 168.76 |
| | NORMAL | 4,097.0 | 1.50 | 102.20 | 3,790.67 | 191.01 | 1,357.21 | 1,370.54 | 1.14 | -0.96 | 18.62 | 155.05 |
| | NORMAL | 4,192.0 | 1.10 | 102.10 | 3,885.64 | 190.56 | 1,359.31 | 1,372.57 | 0.42 | -0.42 | -0.11 | 180.27 |
| | NORMAL | 4,287.0 | 1.10 | 102.60 | 3,980.63 | 190.17 | 1,361.10 | 1,374.29 | 0.01 | 0.00 | 0.53 | 90.25 |
| | NORMAL | 4,381.0 | 0.70 | 138.80 | 4,074.62 | 189.54 | 1,362.36 | 1,375.45 | 0.72 | -0.43 | 38.51 | 142.31 |
| 3/11/2012 | NORMAL | 4,476.0 | 0.80 | 176.90 | 4,169.61 | 188.44 | 1,362.77 | 1,375.72 | 0.52 | 0.11 | 40.11 | 98.12 |
| | NORMAL | 4,570.0 | 1.50 | 186.80 | 4,263.59 | 186.56 | 1,362.66 | 1,375.36 | 0.77 | 0.74 | 10.53 | 20.83 |
| | NORMAL | 4,665.0 | 0.50 | 226.50 | 4,358.57 | 185.04 | 1,362.22 | 1,374.72 | 1.22 | -1.05 | 41.79 | 164.02 |
| | NORMAL | 4,759.0 | 1.00 | 248.70 | 4,452.57 | 184.46 | 1,361.15 | 1,373.59 | 0.61 | 0.53 | 23.62 | 41.58 |
| | NORMAL | 4,854.0 | 0.20 | 97.10 | 4,547.56 | 184.14 | 1,360.55 | 1,372.95 | 1.24 | -0.84 | -159.58 | 184.63 |
| | NORMAL | 4,948.0 | 0.10 | 266.20 | 4,641.56 | 184.11 | 1,360.63 | 1,373.02 | 0.32 | -0.11 | 179.89 | 176.37 |
| | NORMAL | 5,043.0 | 0.50 | 218.80 | 4,736.56 | 183.78 | 1,360.28 | 1,372.64 | 0.46 | 0.42 | -49.89 | 302.94 |
| | NORMAL | 5,137.0 | 1.10 | 216.50 | 4,830.55 | 182.74 | 1,359.49 | 1,371.72 | 0.64 | 0.64 | -2.45 | 355.79 |
| | NORMAL | 5,232.0 | 1.40 | 213.30 | 4,925.53 | 181.04 | 1,358.31 | 1,370.32 | 0.32 | 0.32 | -3.37 | 345.30 |
| | NORMAL | 5,326.0 | 1.70 | 256.00 | 5,019.50 | 179.74 | 1,356.33 | 1,368.18 | 1.24 | 0.32 | 45.43 | 97.44 |
| | NORMAL | 5,421.0 | 1.40 | 248.30 | 5,114.46 | 178.97 | 1,353.88 | 1,365.66 | 0.38 | -0.32 | -8.11 | 210.96 |
| | NORMAL | 5,515.0 | 1.50 | 252.30 | 5,208.43 | 178.17 | 1,351.64 | 1,363.33 | 0.15 | 0.11 | 4.26 | 47.36 |
| | NORMAL | 5,610.0 | 1.40 | 260.80 | 5,303.40 | 177.61 | 1,349.31 | 1,360.95 | 0.25 | -0.11 | 8.95 | 119.14 |
| 3/12/2012 | NORMAL | 5,704.0 | 1.30 | 243.60 | 5,397.38 | 176.95 | 1,347.22 | 1,358.79 | 0.44 | -0.11 | -18.30 | 247.64 |
| | NORMAL | 5,799.0 | 1.70 | 243.70 | 5,492.34 | 175.85 | 1,345.00 | 1,356.44 | 0.42 | 0.42 | 0.11 | 0.42 |
| | NORMAL | 5,851.0 | 1.70 | 243.70 | 5,544.32 | 175.16 | 1,343.61 | 1,354.98 | 0.00 | 0.00 | 0.00 | 0.00 |

3 Charts

3.1 Vertical Section View



3.2 Plan View

