

1 General

1.1 Customer Information

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

1.2 Well Information

| | | | |
|--------------------------|--------------------------------------|-----------------|-------------|
| Well | PA 544-5 | Wellbore No. | OH |
| Well Name | PA 544-5 | Common Name | PA 544-5 |
| Project | PA 04-07S-095W | Site | GV 80-4 Pad |
| Vertical Section Azimuth | 240.36 (°) | North Reference | |
| Origin N/S | | Origin E/W | |
| Spud Date | 11/19/2012 | UWI | PA 544-5 |
| Active Datum | KB @5,612.0ft (above Mean Sea Level) | | |

2 Survey Name

2.1 Survey Name: Survey #1

| | | | |
|--------------|------------|----------|--------|
| Survey Name | Survey #1 | Company | MOSTAR |
| Date Started | 11/18/2012 | 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 (°) |
|------------|--------|---------|---------|---------|----------|----------|----------|-------------|---------------|----------------------|----------------|-----------|
| 11/18/2012 | Tie On | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11/19/2012 | NORMAL | 103.0 | 0.53 | 196.61 | 103.00 | -0.46 | -0.14 | 0.34 | 0.51 | 0.51 | 0.00 | 196.61 |
| | NORMAL | 163.0 | 1.67 | 218.94 | 162.99 | -1.40 | -0.77 | 1.36 | 1.99 | 1.90 | 37.22 | 32.01 |
| | NORMAL | 254.0 | 4.84 | 244.51 | 253.83 | -4.09 | -5.06 | 6.42 | 3.75 | 3.48 | 28.10 | 37.75 |
| | NORMAL | 344.0 | 9.15 | 239.77 | 343.14 | -9.33 | -14.68 | 17.37 | 4.83 | 4.79 | -5.27 | 350.01 |
| | NORMAL | 436.0 | 12.67 | 236.25 | 433.47 | -18.62 | -29.39 | 34.75 | 3.89 | 3.83 | -3.83 | 347.55 |
| | NORMAL | 527.0 | 14.69 | 245.21 | 521.89 | -29.00 | -48.17 | 56.21 | 3.21 | 2.22 | 9.85 | 50.78 |
| | NORMAL | 617.0 | 17.16 | 241.00 | 608.43 | -40.23 | -70.15 | 80.86 | 3.03 | 2.74 | -4.68 | 332.90 |
| | NORMAL | 692.0 | 21.80 | 242.11 | 679.12 | -52.11 | -92.14 | 105.86 | 6.21 | 6.19 | 1.48 | 5.09 |
| | NORMAL | 783.0 | 24.53 | 241.41 | 762.77 | -69.06 | -123.67 | 141.64 | 3.02 | 3.00 | -0.77 | 353.92 |
| | NORMAL | 874.0 | 26.15 | 240.62 | 845.02 | -87.94 | -157.74 | 180.58 | 1.82 | 1.78 | -0.87 | 347.85 |
| 11/20/2012 | NORMAL | 965.0 | 29.10 | 240.53 | 925.63 | -108.67 | -194.48 | 222.77 | 3.24 | 3.24 | -0.10 | 359.15 |
| | NORMAL | 1,060.0 | 32.88 | 241.15 | 1,007.06 | -132.48 | -237.20 | 271.68 | 3.99 | 3.98 | 0.65 | 5.09 |
| | NORMAL | 1,156.0 | 36.79 | 240.97 | 1,085.84 | -159.02 | -285.17 | 326.50 | 4.07 | 4.07 | -0.19 | 358.42 |
| | NORMAL | 1,187.0 | 37.89 | 240.27 | 1,110.49 | -168.24 | -301.56 | 345.30 | 3.80 | 3.55 | -2.26 | 338.62 |
| 11/21/2012 | NORMAL | 1,251.0 | 38.86 | 240.62 | 1,160.66 | -187.84 | -336.12 | 385.03 | 1.55 | 1.52 | 0.55 | 12.76 |
| | NORMAL | 1,346.0 | 36.31 | 240.18 | 1,235.94 | -216.45 | -386.50 | 442.97 | 2.70 | -2.68 | -0.46 | 185.83 |
| | NORMAL | 1,441.0 | 35.60 | 240.18 | 1,312.84 | -244.19 | -434.89 | 498.75 | 0.75 | -0.75 | 0.00 | 180.00 |
| | NORMAL | 1,536.0 | 36.40 | 240.36 | 1,389.69 | -271.88 | -483.38 | 554.59 | 0.85 | 0.84 | 0.19 | 7.61 |
| | NORMAL | 1,632.0 | 36.97 | 240.62 | 1,466.68 | -300.13 | -533.29 | 611.94 | 0.62 | 0.59 | 0.27 | 15.35 |
| | NORMAL | 1,727.0 | 37.49 | 242.11 | 1,542.32 | -327.67 | -583.74 | 669.40 | 1.10 | 0.55 | 1.57 | 60.62 |

2.1.2 Survey Stations (Continued)

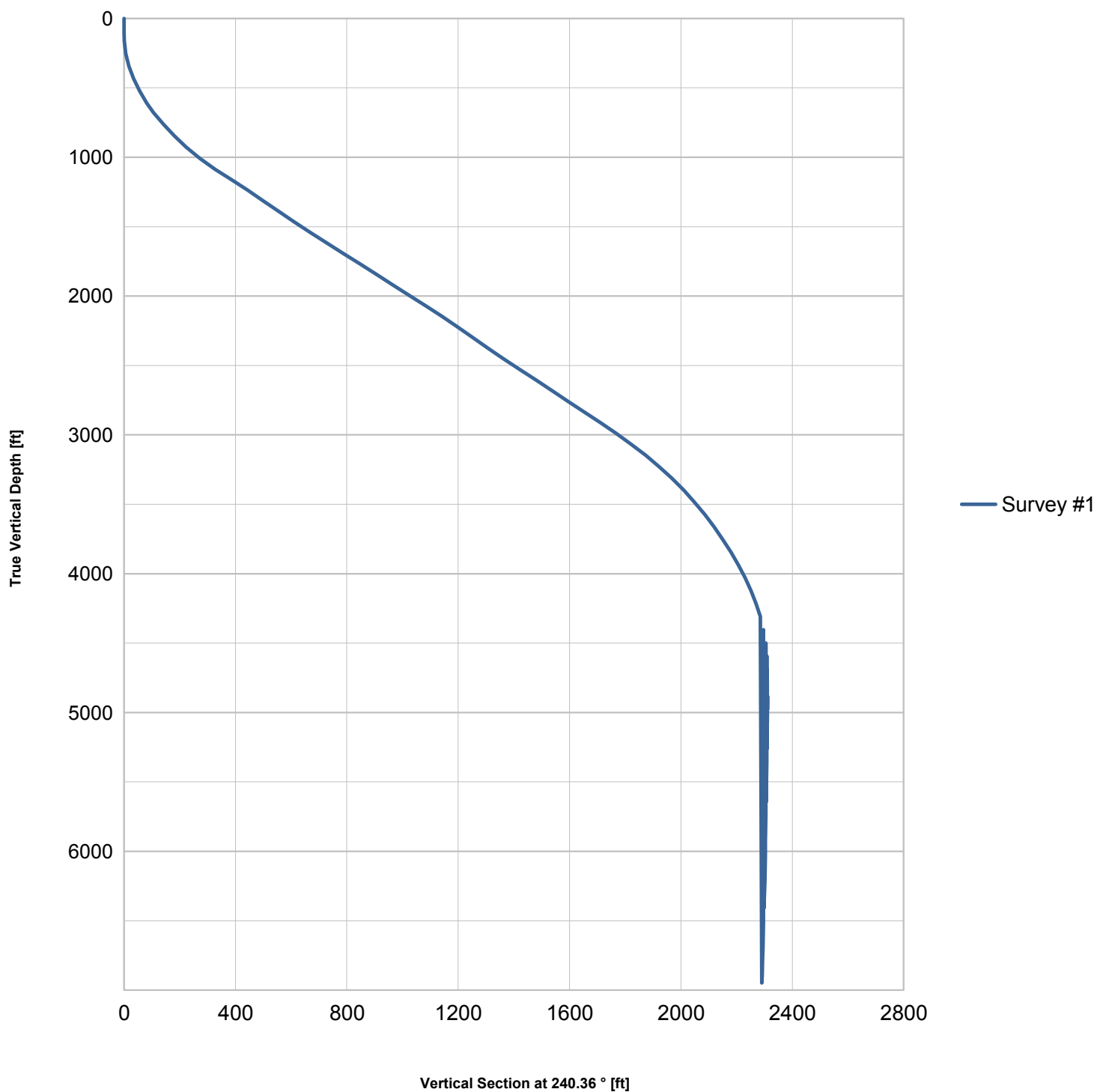
| Date | Type | MD (ft) | Inc (°) | Azi (°) | TVD (ft) | N/S (ft) | E/W (ft) | V. Sec (ft) | DLS (°/100ft) | Build Rate (°/100ft) | Turn (°/100ft) | TFace (°) |
|------------|--------|------------|------------|------------|-------------|-------------|-------------|----------------|------------------|-------------------------|-------------------|--------------|
| 11/21/2012 | NORMAL | 1,823.0 | 38.29 | 238.77 | 1,618.09 | -356.76 | -635.00 | 728.34 | 2.29 | 0.83 | -3.48 | 289.98 |
| | NORMAL | 1,919.0 | 38.20 | 238.16 | 1,693.49 | -387.84 | -685.65 | 787.74 | 0.40 | -0.09 | -0.64 | 256.35 |
| | NORMAL | 2,014.0 | 38.42 | 237.72 | 1,768.03 | -419.10 | -735.56 | 846.58 | 0.37 | 0.23 | -0.46 | 308.72 |
| | NORMAL | 2,110.0 | 37.98 | 240.44 | 1,843.48 | -449.60 | -786.48 | 905.92 | 1.81 | -0.46 | 2.83 | 105.73 |
| | NORMAL | 2,205.0 | 38.15 | 239.48 | 1,918.27 | -478.92 | -837.18 | 964.48 | 0.65 | 0.18 | -1.01 | 285.65 |
| | NORMAL | 2,301.0 | 37.76 | 240.62 | 1,993.97 | -508.40 | -888.33 | 1,023.53 | 0.84 | -0.41 | 1.19 | 119.53 |
| | NORMAL | 2,396.0 | 38.02 | 239.21 | 2,068.94 | -537.65 | -938.81 | 1,081.86 | 0.95 | 0.27 | -1.48 | 286.16 |
| | NORMAL | 2,492.0 | 36.88 | 241.85 | 2,145.16 | -566.38 | -989.62 | 1,140.23 | 2.05 | -1.19 | 2.75 | 126.42 |
| | NORMAL | 2,588.0 | 36.22 | 240.53 | 2,222.28 | -593.92 | -1,039.71 | 1,197.39 | 1.07 | -0.69 | -1.38 | 229.45 |
| | NORMAL | 2,684.0 | 35.47 | 240.18 | 2,300.10 | -621.73 | -1,088.57 | 1,253.60 | 0.81 | -0.78 | -0.36 | 195.14 |
| | NORMAL | 2,779.0 | 35.60 | 240.27 | 2,377.40 | -649.15 | -1,136.49 | 1,308.82 | 0.15 | 0.14 | 0.09 | 21.95 |
| | NORMAL | 2,875.0 | 36.62 | 241.32 | 2,454.96 | -676.74 | -1,185.88 | 1,365.39 | 1.24 | 1.06 | 1.09 | 31.67 |
| | NORMAL | 2,970.0 | 37.67 | 241.76 | 2,530.69 | -704.08 | -1,236.31 | 1,422.74 | 1.14 | 1.11 | 0.46 | 14.38 |
| | NORMAL | 3,066.0 | 37.36 | 240.88 | 2,606.83 | -732.13 | -1,287.60 | 1,481.19 | 0.64 | -0.32 | -0.92 | 239.60 |
| | NORMAL | 3,161.0 | 36.66 | 240.27 | 2,682.69 | -760.22 | -1,337.41 | 1,538.38 | 0.83 | -0.74 | -0.64 | 207.44 |
| | NORMAL | 3,257.0 | 36.97 | 241.06 | 2,759.55 | -788.41 | -1,387.56 | 1,595.90 | 0.59 | 0.32 | 0.82 | 57.10 |
| | NORMAL | 3,353.0 | 37.01 | 241.50 | 2,836.23 | -816.16 | -1,438.21 | 1,653.65 | 0.28 | 0.04 | 0.46 | 81.58 |
| | NORMAL | 3,448.0 | 36.70 | 242.20 | 2,912.24 | -843.04 | -1,488.45 | 1,710.61 | 0.55 | -0.33 | 0.74 | 126.72 |
| 11/22/2012 | NORMAL | 3,544.0 | 35.87 | 240.18 | 2,989.63 | -870.41 | -1,538.23 | 1,767.41 | 1.52 | -0.86 | -2.10 | 234.42 |
| | NORMAL | 3,639.0 | 34.07 | 240.00 | 3,067.47 | -897.56 | -1,585.43 | 1,821.86 | 1.90 | -1.89 | -0.19 | 183.21 |
| | NORMAL | 3,735.0 | 31.43 | 241.32 | 3,148.21 | -923.02 | -1,630.68 | 1,873.79 | 2.85 | -2.75 | 1.38 | 165.42 |
| | NORMAL | 3,830.0 | 29.89 | 241.15 | 3,229.93 | -946.33 | -1,673.15 | 1,922.22 | 1.62 | -1.62 | -0.18 | 183.15 |
| | NORMAL | 3,924.0 | 27.78 | 238.33 | 3,312.27 | -969.14 | -1,712.31 | 1,967.54 | 2.67 | -2.24 | -3.00 | 211.58 |
| | NORMAL | 4,020.0 | 25.19 | 240.18 | 3,398.19 | -991.05 | -1,749.08 | 2,010.34 | 2.83 | -2.70 | 1.93 | 163.16 |
| | NORMAL | 4,116.0 | 23.08 | 237.19 | 3,485.79 | -1,011.40 | -1,782.63 | 2,049.56 | 2.54 | -2.20 | -3.11 | 208.73 |
| | NORMAL | 4,212.0 | 21.85 | 240.09 | 3,574.51 | -1,030.51 | -1,813.93 | 2,086.22 | 1.72 | -1.28 | 3.02 | 139.32 |
| | NORMAL | 4,307.0 | 19.52 | 239.74 | 3,663.38 | -1,047.32 | -1,842.97 | 2,119.77 | 2.46 | -2.45 | -0.37 | 182.87 |
| | NORMAL | 4,403.0 | 18.29 | 241.67 | 3,754.20 | -1,062.56 | -1,870.08 | 2,150.87 | 1.44 | -1.28 | 2.01 | 153.96 |
| 11/23/2012 | NORMAL | 4,498.0 | 16.97 | 242.82 | 3,844.74 | -1,075.96 | -1,895.54 | 2,179.62 | 1.44 | -1.39 | 1.21 | 165.77 |
| | NORMAL | 4,594.0 | 15.69 | 242.29 | 3,936.86 | -1,088.40 | -1,919.49 | 2,206.59 | 1.34 | -1.33 | -0.55 | 186.39 |
| | NORMAL | 4,689.0 | 13.76 | 237.89 | 4,028.74 | -1,100.38 | -1,940.44 | 2,230.72 | 2.35 | -2.03 | -4.63 | 207.98 |
| | NORMAL | 4,785.0 | 11.91 | 240.97 | 4,122.34 | -1,111.26 | -1,958.77 | 2,252.04 | 2.05 | -1.93 | 3.21 | 161.20 |
| | NORMAL | 4,880.0 | 9.89 | 238.95 | 4,215.62 | -1,120.22 | -1,974.34 | 2,270.00 | 2.16 | -2.13 | -2.13 | 189.72 |
| | NORMAL | 4,975.0 | 8.18 | 242.11 | 4,309.44 | -1,127.59 | -1,987.30 | 2,284.91 | 1.87 | -1.80 | 3.33 | 165.37 |
| | NORMAL | 5,070.0 | 6.20 | 239.48 | 4,403.69 | -1,133.36 | -1,997.69 | 2,296.80 | 2.11 | -2.08 | -2.77 | 188.14 |
| | NORMAL | 5,166.0 | 3.65 | 240.44 | 4,499.33 | -1,137.50 | -2,004.82 | 2,305.04 | 2.66 | -2.66 | 1.00 | 178.63 |
| | NORMAL | 5,261.0 | 0.97 | 282.54 | 4,594.24 | -1,138.82 | -2,008.23 | 2,308.66 | 3.16 | -2.82 | 44.32 | 167.48 |
| | NORMAL | 5,357.0 | 0.92 | 305.75 | 4,690.23 | -1,138.19 | -2,009.65 | 2,309.58 | 0.40 | -0.05 | 24.18 | 108.94 |
| | NORMAL | 5,452.0 | 0.88 | 301.62 | 4,785.22 | -1,137.36 | -2,010.89 | 2,310.25 | 0.08 | -0.04 | -4.35 | 236.29 |
| | NORMAL | 5,548.0 | 0.88 | 303.29 | 4,881.21 | -1,136.57 | -2,012.14 | 2,310.94 | 0.03 | 0.00 | 1.74 | 90.83 |
| | NORMAL | 5,643.0 | 0.40 | 36.80 | 4,976.20 | -1,135.91 | -2,012.55 | 2,310.97 | 1.04 | -0.51 | 98.43 | 156.18 |
| | NORMAL | 5,739.0 | 0.53 | 26.34 | 5,072.20 | -1,135.24 | -2,012.15 | 2,310.29 | 0.16 | 0.14 | -10.90 | 321.55 |
| 11/25/2012 | NORMAL | 5,835.0 | 0.48 | 36.27 | 5,168.20 | -1,134.52 | -2,011.72 | 2,309.56 | 0.10 | -0.05 | 10.34 | 124.64 |
| | NORMAL | 5,930.0 | 0.57 | 29.51 | 5,263.19 | -1,133.79 | -2,011.25 | 2,308.79 | 0.11 | 0.09 | -7.12 | 322.05 |
| | NORMAL | 6,026.0 | 0.40 | 35.22 | 5,359.19 | -1,133.10 | -2,010.82 | 2,308.07 | 0.18 | -0.18 | 5.95 | 166.97 |
| | NORMAL | 6,122.0 | 0.53 | 29.95 | 5,455.19 | -1,132.44 | -2,010.40 | 2,307.39 | 0.14 | 0.14 | -5.49 | 339.14 |
| | NORMAL | 6,217.0 | 0.48 | 57.28 | 5,550.18 | -1,131.84 | -2,009.85 | 2,306.61 | 0.26 | -0.05 | 28.77 | 115.17 |
| | NORMAL | 6,313.0 | 0.53 | 64.14 | 5,646.18 | -1,131.43 | -2,009.11 | 2,305.77 | 0.08 | 0.05 | 7.15 | 53.87 |
| | NORMAL | 6,408.0 | 0.53 | 81.19 | 5,741.18 | -1,131.17 | -2,008.28 | 2,304.92 | 0.17 | 0.00 | 17.95 | 98.52 |
| | NORMAL | 6,503.0 | 0.35 | 71.87 | 5,836.17 | -1,131.01 | -2,007.57 | 2,304.22 | 0.20 | -0.19 | -9.81 | 197.07 |
| | NORMAL | 6,599.0 | 0.35 | 51.74 | 5,932.17 | -1,130.74 | -2,007.06 | 2,303.65 | 0.13 | 0.00 | -20.97 | 259.94 |
| | NORMAL | 6,695.0 | 0.44 | 75.82 | 6,028.17 | -1,130.47 | -2,006.48 | 2,303.00 | 0.19 | 0.09 | 25.08 | 73.93 |
| | NORMAL | 6,790.0 | 0.48 | 89.45 | 6,123.17 | -1,130.38 | -2,005.72 | 2,302.30 | 0.12 | 0.04 | 14.35 | 76.82 |
| | NORMAL | 6,886.0 | 0.97 | 82.15 | 6,219.16 | -1,130.26 | -2,004.52 | 2,301.20 | 0.52 | 0.51 | -7.60 | 345.66 |
| | NORMAL | 6,982.0 | 1.10 | 68.70 | 6,315.14 | -1,129.82 | -2,002.85 | 2,299.53 | 0.29 | 0.14 | -14.01 | 291.32 |
| | NORMAL | 7,077.0 | 0.97 | 56.31 | 6,410.13 | -1,129.04 | -2,001.33 | 2,297.82 | 0.27 | -0.14 | -13.04 | 233.75 |
| | NORMAL | 7,173.0 | 0.66 | 47.61 | 6,506.12 | -1,128.22 | -2,000.25 | 2,296.47 | 0.35 | -0.32 | -9.06 | 197.45 |

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 (°) |
|------------|--------|------------|------------|------------|-------------|-------------|-------------|----------------|------------------|-------------------------|-------------------|--------------|
| 11/25/2012 | NORMAL | 7,269.0 | 0.57 | 35.15 | 6,602.11 | -1,127.45 | -1,999.57 | 2,295.50 | 0.17 | -0.09 | -12.98 | 229.94 |
| | NORMAL | 7,365.0 | 0.83 | 40.76 | 6,698.10 | -1,126.53 | -1,998.84 | 2,294.42 | 0.28 | 0.27 | 5.84 | 17.58 |
| | NORMAL | 7,460.0 | 0.88 | 31.88 | 6,793.09 | -1,125.39 | -1,998.00 | 2,293.13 | 0.15 | 0.05 | -9.35 | 286.20 |
| | NORMAL | 7,556.0 | 0.97 | 35.22 | 6,889.08 | -1,124.10 | -1,997.15 | 2,291.74 | 0.11 | 0.09 | 3.48 | 32.60 |
| | NORMAL | 7,615.0 | 0.97 | 35.22 | 6,948.07 | -1,123.29 | -1,996.57 | 2,290.84 | 0.00 | 0.00 | 0.00 | 0.00 |

3 Charts

3.1 Vertical Section View



3.2 Plan View

