

**GASBOL\_TGS\_C1****Default Initial Values Selected**

|             |          |
|-------------|----------|
| Pressure    | 87.906   |
| Flow        | 1505.750 |
| Temperature | 24.819   |
| % C1        | 89.200   |
| % C2        | 5.900    |
| % C3        | 1.810    |
| % IC4       | 0.290    |
| % NC4       | 0.400    |
| % IC5       | 0.120    |
| % NC5       | 0.080    |
| % C6        | 0.090    |
| % CO2       | 1.390    |
| % N2        | 0.710    |
| % O2        | 0.010    |

**Problem Size Report**

|                                 |     |
|---------------------------------|-----|
| Nodes                           | 466 |
| Pipes                           | 309 |
| Supplies                        | 3   |
| Deliveries                      | 50  |
| Energy Deliveries               | 0   |
| Fuel Deliveries                 | 15  |
| Leak Deliveries                 | 0   |
| Fixed Volume Storages           | 0   |
| Reservoirs                      | 0   |
| Block Valves                    | 112 |
| Check Valves                    | 0   |
| Centrifugal Compressors         | 0   |
| Generic Compressors             | 0   |
| Reciprocating Compressors       | 0   |
| Regulators                      | 2   |
| Resistances                     | 15  |
| Relief Valves                   | 0   |
| Heaters                         | 0   |
| Coolers                         | 15  |
| Stations                        | 15  |
| Banks                           | 15  |
| Centrifugal Bank<br>Compressors | 29  |

|                                  |    |
|----------------------------------|----|
| Generic Bank Compressors         | 0  |
| Reciprocating Bank Compressors   | 11 |
| Generic Drivers                  | 8  |
| Turbine Drivers                  | 3  |
| Centrifugal Performance Types    | 7  |
| Reciprocating Performance Types  | 7  |
| Generic Driver Performance Types | 3  |
| Turbine Driver Performance Types | 5  |
| Cylinder Types                   | 4  |
| Simple Fluids                    | 0  |
| Compositional Fluids             | 1  |

### Steady State Convergence Report

| Iteration Number | Tolerance Requested | Greatest Hydraulic Adjustment | Greatest Temperature Adjustment | Greatest Composition Adjustment | Associated Device |
|------------------|---------------------|-------------------------------|---------------------------------|---------------------------------|-------------------|
| 0                | 0.0001000           | 273.3222941                   | 0.0000000                       | 0.0000000                       | Flux N11-C0002    |
| 1                | 0.0001000           | 144.6413157                   | 0.0000000                       | 0.0000000                       | Flux N11-C0002    |
| 2                | 0.0001000           | 78.5125342                    | 0.0000000                       | 0.0000000                       | Flux N11-C0002    |
| 3                | 0.0001000           | 126.3593546                   | 0.0000000                       | 0.0000000                       | Flux N09-D0008    |
| 4                | 0.0001000           | 24.0194351                    | 0.0000000                       | 0.0000000                       | Flux N09-D0008    |

#### DPMX increased to 9764.86

|   |           |             |           |           |                |
|---|-----------|-------------|-----------|-----------|----------------|
| 5 | 0.0001000 | 116.2703608 | 0.0000000 | 0.0000000 | Flux N09-D0009 |
| 6 | 0.0001000 | 84.7971229  | 0.0000000 | 0.0000000 | Flux S02-G0004 |
| 7 | 0.0001000 | 274.7135928 | 0.0000000 | 0.0000000 | Flux S02-E0005 |
| 8 | 0.0001000 | 175.3317636 | 0.0000000 | 0.0000000 | Flux S02-E0005 |

#### Starting over with DPMX = 18.594942

|    |           |             |           |           |                |
|----|-----------|-------------|-----------|-----------|----------------|
| 9  | 0.0001000 | 439.6424645 | 0.0000000 | 0.0000000 | Flux N11-C0002 |
| 10 | 0.0001000 | 233.0814962 | 0.0000000 | 0.0000000 | Flux N11-C0002 |
| 11 | 0.0001000 | 144.7035653 | 0.0000000 | 0.0000000 | Flux N11-C0002 |
| 12 | 0.0001000 | 106.0719487 | 0.0000000 | 0.0000000 | Flux N05-B0002 |
| 13 | 0.0001000 | 398.2768010 | 0.0000000 | 0.0000000 | Flux N10-E0005 |

#### DPMX increased to 37.189884

|    |           |             |           |           |                |
|----|-----------|-------------|-----------|-----------|----------------|
| 14 | 0.0001000 | 249.6738430 | 0.0000000 | 0.0000000 | Flux N09-D0009 |
| 15 | 0.0001000 | 304.2772887 | 0.0000000 | 0.0000000 | Flux N05-B0003 |

|    |           |             |           |           |                |
|----|-----------|-------------|-----------|-----------|----------------|
| 16 | 0.0001000 | 168.8951144 | 0.0000000 | 0.0000000 | Flux N05-B0003 |
| 17 | 0.0001000 | 96.2698764  | 0.0000000 | 0.0000000 | Flux N05-B0003 |

**DPMX increased to 74.379767**

|    |           |            |           |           |                |
|----|-----------|------------|-----------|-----------|----------------|
| 18 | 0.0001000 | 65.8923982 | 0.0000000 | 0.0000000 | Flux N09-D0009 |
| 19 | 0.0001000 | 9.4486005  | 0.0000000 | 0.0000000 | Flux N05-B0003 |
| 20 | 0.0001000 | 0.1202148  | 0.0000000 | 0.0000000 | Flux N09-D0009 |

**DPMX increased to 148.759534**

|    |           |           |           |           |                     |
|----|-----------|-----------|-----------|-----------|---------------------|
| 21 | 0.0001000 | 0.0011420 | 0.0000000 | 0.0000000 | Node N05-D0002-RRP1 |
| 22 | 0.0001000 | 0.0000060 | 0.0000000 | 0.0000000 | Node N09-D0008      |

|    |                           |   |
|----|---------------------------|---|
| 23 | <b>Regulator ERP ARC</b>  | <b>FROM: MaximumDownstreamPressure TO: Closed</b> |
| 23 | <b>Compressor CBA-B</b>   | <b>FROM: BankControl TO: Closed</b>               |
| 23 | <b>Compressor MRD-B</b>   | <b>FROM: BankControl TO: Closed</b>               |
| 23 | <b>Compressor MRD-A</b>   | <b>FROM: BankControl TO: MinimumSpeed</b>         |
| 23 | <b>Compressor ANT-B</b>   | <b>FROM: BankControl TO: Closed</b>               |
| 23 | <b>Compressor ANT-A</b>   | <b>FROM: BankControl TO: MinimumSpeed</b>         |
| 23 | <b>Compressor CGR-D</b>   | <b>FROM: BankControl TO: Closed</b>               |
| 23 | <b>Compressor CGR-C</b>   | <b>FROM: BankControl TO: Closed</b>               |
| 23 | <b>Compressor CGR-A</b>   | <b>FROM: BankControl TO: Stonewall</b>            |
| 23 | <b>Compressor RRP-B</b>   | <b>FROM: BankControl TO: Closed</b>               |
| 23 | <b>Compressor RRP-A</b>   | <b>FROM: BankControl TO: MinimumSpeed</b>         |
| 23 | <b>Compressor TLG-A</b>   | <b>FROM: BankControl TO: MinimumSpeed</b>         |
| 23 | <b>Compressor TLG-B</b>   | <b>FROM: BankControl TO: None</b>                 |
| 23 | <b>Compressor MIR-B</b>   | <b>FROM: BankControl TO: Closed</b>               |
| 23 | <b>Compressor MIR-A</b>   | <b>FROM: BankControl TO: MinimumSpeed</b>         |
| 23 | <b>Compressor PEN-D</b>   | <b>FROM: BankControl TO: Closed</b>               |
| 23 | <b>Compressor PEN-C</b>   | <b>FROM: BankControl TO: Closed</b>               |
| 23 | <b>Compressor PEN-B</b>   | <b>FROM: BankControl TO: Closed</b>               |
| 23 | <b>Compressor PEN-A</b>   | <b>FROM: BankControl TO: Closed</b>               |
| 23 | <b>Compressor IAC-B</b>   | <b>FROM: BankControl TO: Closed</b>               |
| 23 | <b>Compressor IAC-A</b>   | <b>FROM: BankControl TO: MinimumSpeed</b>         |
| 23 | <b>Compressor SCA-B</b>   | <b>FROM: BankControl TO: Closed</b>               |
| 23 | <b>Compressor SCA-A</b>   | <b>FROM: BankControl TO: MinimumSpeed</b>         |
| 23 | <b>Compressor ARC_MCD</b> | <b>FROM: BankControl TO: Closed</b>               |
| 23 | <b>Compressor ARC_MCC</b> | <b>FROM: BankControl TO: Closed</b>               |
| 23 | <b>Compressor ARC_MCB</b> | <b>FROM: BankControl TO: Closed</b>               |
| 23 | <b>Compressor ARC_MCA</b> | <b>FROM: BankControl TO: Closed</b>               |
| 23 | <b>Compressor PLN-A</b>   | <b>FROM: BankControl TO: Closed</b>               |
| 23 | <b>Compressor CBO-B</b>   | <b>FROM: BankControl TO: Closed</b>               |
| 23 | <b>Compressor CBO-A</b>   | <b>FROM: BankControl TO: Closed</b>               |
| 23 | <b>Compressor SID_MCC</b> | <b>FROM: BankControl TO: Closed</b>               |

|    |           |           |           |           |                  |
|----|-----------|-----------|-----------|-----------|------------------|
| 23 | 0.0001000 | 2.8949045 | 0.0000000 | 0.0000000 | Equip 40_VES_270 |
|----|-----------|-----------|-----------|-----------|------------------|

**DPMX increased to 297.519068**

|    |           |           |           |           |                |
|----|-----------|-----------|-----------|-----------|----------------|
| 24 | 0.0001000 | 0.4496044 | 0.0000000 | 0.0000000 | Pipe S03-B001  |
| 25 | 0.0001000 | 0.0027157 | 0.0000000 | 0.0000000 | Node S03-A0001 |
| 26 | 0.0001000 | 0.0001457 | 0.0000000 | 0.0000000 | Node S02-F0009 |

**DPMX increased to 595.038136**

|    |           |           |           |           |                     |
|----|-----------|-----------|-----------|-----------|---------------------|
| 27 | 0.0001000 | 0.0000004 | 0.0000000 | 0.0000000 | Node S02-J0003-ARC4 |
|----|-----------|-----------|-----------|-----------|---------------------|

28 Compressor MRD-A FROM: MinimumSpeed TO: BankControl  
 28 Compressor ANT-B FROM: Closed TO: MinimumSpeed  
 28 Compressor ANT-A FROM: MinimumSpeed TO: BankControl  
 28 Compressor CGR-C FROM: Closed TO: None  
 28 Compressor CGR-B FROM: BankControl TO: MinimumSpeed  
 28 Compressor RRP-A FROM: MinimumSpeed TO: BankControl  
 28 Compressor TLG-A FROM: MinimumSpeed TO: BankControl  
 28 Compressor TLG-B FROM: None TO: Closed  
 28 Compressor MIR-B FROM: Closed TO: MinimumSpeed  
 28 Compressor MIR-A FROM: MinimumSpeed TO: BankControl  
 28 Compressor IAC-A FROM: MinimumSpeed TO: BankControl  
 28 Compressor SCA-B FROM: Closed TO: MinimumSpeed  
 28 Compressor SCA-A FROM: MinimumSpeed TO: BankControl

|    |           |           |           |           |                      |
|----|-----------|-----------|-----------|-----------|----------------------|
| 28 | 0.0001000 | 0.0266928 | 0.0000000 | 0.0000000 | Xreg COMB_ANT        |
| 29 | 0.0001000 | 0.0000138 | 0.0006539 | 0.0000000 | TNode S02-J0003-ARC4 |

**DPMX increased to 1190.076272**

|    |           |           |           |           |                     |
|----|-----------|-----------|-----------|-----------|---------------------|
| 30 | 0.0001000 | 1.6954320 | 0.0006539 | 0.0000000 | Flux N01-A0001      |
| 31 | 0.0001000 | 0.0009713 | 0.0006539 | 0.0000000 | Flux N01-B0002      |
| 32 | 0.0001000 | 0.0009137 | 0.0006539 | 0.0000000 | Node N02-E0002-MRD1 |

**DPMX increased to 2380.152544**

|    |           |           |           |           |                      |
|----|-----------|-----------|-----------|-----------|----------------------|
| 33 | 0.0001000 | 0.0000007 | 0.0006539 | 0.0000000 | Node S02-J0004-PERPR |
|----|-----------|-----------|-----------|-----------|----------------------|

34 Compressor MRD-B FROM: Closed TO: BankControl  
 34 Compressor MRD-A FROM: BankControl TO: MinimumSpeed  
 34 Compressor CGR-C FROM: None TO: BankControl  
 34 Compressor CGR-A FROM: Stonewall TO: MinimumSpeed  
 34 Compressor RRP-B FROM: Closed TO: BankControl  
 34 Compressor RRP-A FROM: BankControl TO: MinimumSpeed  
 34 Compressor TLG-B FROM: Closed TO: BankControl

|    |           |           |           |           |                      |
|----|-----------|-----------|-----------|-----------|----------------------|
| 34 | 0.0001000 | 0.0208417 | 0.0006539 | 0.0000000 | Xreg COMB_TLG        |
| 35 | 0.0001000 | 0.0000058 | 0.0000981 | 0.0000000 | TNode S02-J0003-ARC3 |

**DPMX increased to 4760.305089**

|    |           |           |           |           |                      |
|----|-----------|-----------|-----------|-----------|----------------------|
| 36 | 0.0001000 | 0.0885679 | 0.0000981 | 0.0000000 | Flux N03-A0001       |
| 37 | 0.0001000 | 0.0000051 | 0.0000981 | 0.0000000 | Node S02-J0004-PERPR |

|                                       |                  |                                    |           |           |                              |
|---------------------------------------|------------------|------------------------------------|-----------|-----------|------------------------------|
| 38                                    | Compressor ANT-B | FROM: MinimumSpeed TO: BankControl |           |           |                              |
| 38                                    | Compressor ANT-A | FROM: BankControl TO: MinimumSpeed |           |           |                              |
| 38                                    | 0.0001000        | 0.0001080                          | 0.0000981 | 0.0000000 | Xreg<br>COMB_TLG             |
| <b>DPMX increased to 9520.610178</b>  |                  |                                    |           |           |                              |
| 39                                    | 0.0001000        | 0.0000000                          | 0.0000981 | 0.0000000 | Node S02-<br>J0004-<br>PERPR |
| 40                                    | Compressor ANT-B | FROM: BankControl TO: MinimumSpeed |           |           |                              |
| 40                                    | Compressor MIR-A | FROM: BankControl TO: MinimumSpeed |           |           |                              |
| 40                                    | Compressor SCA-A | FROM: BankControl TO: MinimumSpeed |           |           |                              |
| 40                                    | 0.0001000        | 0.0000118                          | 0.0000719 | 0.0000000 | TNode S02-<br>J0003-ARC3     |
| 41                                    | 0.0001000        | 0.0057118                          | 0.0000719 | 0.0000000 | Flux N04-<br>A0001           |
| <b>DPMX increased to 19041.220356</b> |                  |                                    |           |           |                              |
| 42                                    | 0.0001000        | 0.0000004                          | 0.0000719 | 0.0000000 | Node S02-<br>J0004-<br>PERPR |
| 43                                    | Compressor MRD-B | FROM: BankControl TO: MinimumSpeed |           |           |                              |
| 43                                    | Compressor CGR-C | FROM: BankControl TO: MinimumSpeed |           |           |                              |
| 43                                    | Compressor CGR-B | FROM: MinimumSpeed TO: BankControl |           |           |                              |
| 43                                    | Compressor CGR-A | FROM: MinimumSpeed TO: BankControl |           |           |                              |
| 43                                    | Compressor RRP-B | FROM: BankControl TO: MinimumSpeed |           |           |                              |
| 43                                    | 0.0001000        | 0.0000081                          | 0.0000719 | 0.0000000 | Xreg<br>COMB_TLG             |
| 44                                    | Compressor CGR-B | FROM: BankControl TO: MinimumSpeed |           |           |                              |
| 44                                    | Compressor CGR-A | FROM: BankControl TO: MinimumSpeed |           |           |                              |
| 44                                    | 0.0001000        | 0.0000010                          | 0.0000615 | 0.0000000 | TNode S02-<br>J0003-ARC3     |
| <b>DPMX increased to 38082.440712</b> |                  |                                    |           |           |                              |
| 45                                    | 0.0001000        | 0.0003746                          | 0.0000615 | 0.0000000 | Equip<br>COOL_RRP            |
| 46                                    | Compressor CGR-C | FROM: MinimumSpeed TO: BankControl |           |           |                              |
| 46                                    | Compressor CGR-B | FROM: MinimumSpeed TO: BankControl |           |           |                              |
| 46                                    | Compressor CGR-A | FROM: MinimumSpeed TO: BankControl |           |           |                              |
| 46                                    | 0.0001000        | 0.0000006                          | 0.0000615 | 0.0000000 | Xreg<br>COMB_TLG             |
| 47                                    | Compressor CGR-C | FROM: BankControl TO: MinimumSpeed |           |           |                              |
| 47                                    | Compressor CGR-B | FROM: BankControl TO: MinimumSpeed |           |           |                              |
| 47                                    | Compressor CGR-A | FROM: BankControl TO: MinimumSpeed |           |           |                              |
| 47                                    | 0.0001000        | 0.0000000                          | 0.0000525 | 0.0000000 | TNode S02-<br>J0003-ARC3     |
| 48                                    | 0.0001000        | 0.0000257                          | 0.0000383 | 0.0000000 | TNode S02-<br>J0003-ARC3     |

**GASBOL\_TGS\_C1 : 0.000 hours**

### Reference Conditions Report

|                       |              |
|-----------------------|--------------|
| Reference Pressure    | 0.00 kg/cm2g |
| Reference Temperature | 20.00 Deg C  |

### Network Flow Balance Report : 0.000 hours

| Network Flow Balance |            |                  |
|----------------------|------------|------------------|
|                      | Mass Units | Volumetric Units |
|                      | Tonn/h     | kSm3/d           |
| Total Input Flow     | 879.518    | 27717.344        |
| Total Output Flow    | 879.518    | 27717.352        |
| Network Flow Balance | 0.000      | -0.008           |

### Node Mass Balance Report : 0.000 hours

| Node Mass Balance - Threshold = 0.010000 |                    |
|--|--------------------|
| Node Name                                | Mass Balance Error |
|  | kSm3/d             |
| No Mass Balance Errors Above Threshold   |                    |

### Pipe Hydraulic Summary Report : 0.000 hours

| Pipe Summary |          |       |           |           |           |             |       |
|--------------|----------|-------|-----------|-----------|-----------|-------------|-------|
| Pipe Name    | Pressure |       | Flow      |           | Line Pack | Temperature |       |
|              | kg/cm2g  |       | kSm3/d    |           | KPM3      | Deg C       |       |
|              | Head     | Tail  | Head      | Tail      |           | Head        | Tail  |
| N01-A001     | 85.00    | 82.17 | 20429.481 | 20429.481 | 1173.9582 | 51.70       | 45.34 |
| N01-B001     | 82.17    | 79.99 | 20429.481 | 20429.481 | 793.9007  | 45.34       | 41.73 |
| N02-A001     | 100.00   | 99.14 | 20370.061 | 20370.061 | 666.3115  | 48.00       | 45.63 |
| N02-B001     | 99.14    | 96.90 | 20370.061 | 20370.061 | 1254.8571 | 45.63       | 41.50 |
|              |          |       |           |           |           |             |       |

|          |        |        |           |           |           |       |       |
|----------|--------|--------|-----------|-----------|-----------|-------|-------|
| N02-C001 | 96.90  | 94.43  | 20370.061 | 20370.061 | 1395.3009 | 41.50 | 37.88 |
| N02-D001 | 94.43  | 91.85  | 20370.061 | 20370.061 | 1370.0025 | 37.88 | 35.00 |
| N02-E001 | 91.85  | 89.00  | 20370.061 | 20370.061 | 1526.0093 | 35.00 | 32.53 |
| N03-A001 | 100.00 | 97.92  | 20297.681 | 20297.681 | 1223.0066 | 42.00 | 38.80 |
| N03-B001 | 97.92  | 95.37  | 20297.681 | 20297.681 | 1334.4972 | 38.80 | 35.82 |
| N03-C001 | 95.37  | 92.71  | 20297.681 | 20297.681 | 1117.6452 | 35.82 | 33.47 |
| N03-D001 | 92.71  | 90.81  | 20297.681 | 20297.681 | 1391.8887 | 33.47 | 31.93 |
| N03-E001 | 90.81  | 88.90  | 20297.681 | 20297.681 | 1073.4857 | 31.93 | 30.71 |
| N04-A001 | 100.00 | 98.39  | 20224.806 | 20224.805 | 570.5929  | 40.25 | 38.45 |
| N04-A002 | 98.39  | 98.46  | 20224.805 | 20224.806 | 411.7591  | 38.45 | 38.01 |
| N04-A003 | 98.46  | 97.93  | 20224.806 | 20224.806 | 85.6139   | 38.01 | 37.58 |
| N04-B001 | 97.93  | 95.00  | 20224.806 | 20224.806 | 1421.9202 | 37.58 | 34.56 |
| N04-C001 | 95.00  | 95.04  | 20224.806 | 20224.806 | 447.6348  | 34.56 | 34.35 |
| N04-C002 | 95.04  | 93.25  | 20224.806 | 20224.806 | 512.7964  | 34.35 | 32.99 |
| N04-C003 | 93.25  | 92.70  | 20224.806 | 20224.806 | 633.6784  | 32.99 | 32.48 |
| N04-D001 | 92.70  | 88.24  | 20224.806 | 20224.806 | 1415.1562 | 32.48 | 29.62 |
| N05-A001 | 100.00 | 96.41  | 20171.049 | 20171.049 | 1776.9529 | 40.59 | 36.19 |
| N05-B001 | 96.41  | 96.00  | 20171.049 | 20171.049 | 718.0183  | 36.19 | 35.37 |
| N05-B002 | 96.00  | 94.49  | 20171.049 | 20171.049 | 376.7716  | 35.37 | 34.18 |
| N05-B003 | 94.49  | 95.06  | 20171.049 | 20171.050 | 302.3656  | 34.18 | 34.39 |
| N05-B004 | 95.06  | 93.48  | 20171.050 | 20171.049 | 345.8905  | 34.39 | 33.22 |
| N05-C001 | 93.48  | 91.32  | 20171.049 | 20171.050 | 1758.1230 | 33.22 | 31.52 |
| N05-D001 | 91.32  | 89.63  | 20171.050 | 20171.050 | 1425.5580 | 31.52 | 30.53 |
| N06-A001 | 100.00 | 100.50 | 20099.700 | 20099.700 | 107.4660  | 39.48 | 39.64 |
| N06-A002 | 100.50 | 96.79  | 20099.700 | 20099.700 | 1404.9143 | 39.64 | 35.78 |
| N06-B001 | 96.79  | 96.94  | 20099.700 | 20099.700 | 633.1238  | 35.78 | 35.39 |
| N06-B002 | 96.94  | 94.73  | 20099.700 | 20099.700 | 1111.7337 | 35.39 | 33.39 |
| N06-C001 | 94.73  | 93.21  | 20099.700 | 20099.700 | 1272.0548 | 33.39 | 32.09 |
| N06-D001 | 93.21  | 91.00  | 20099.700 | 20099.700 | 1010.6852 | 32.09 | 30.64 |
| N06-E001 | 91.00  | 89.38  | 20099.700 | 20099.700 | 1227.6270 | 30.64 | 29.83 |
| N07-A001 | 100.00 | 97.82  | 20025.466 | 20025.466 | 1534.7352 | 39.04 | 36.03 |
| N07-B001 | 97.82  | 96.15  | 20025.466 | 20025.466 | 621.0360  | 36.03 | 34.54 |
| N07-B002 | 96.15  | 95.41  | 20025.466 | 20025.466 | 665.4906  | 34.54 | 33.51 |
| N07-C001 | 95.41  | 95.24  | 18620.466 | 18620.466 | 638.1825  | 33.51 | 32.86 |
| N07-C002 | 95.24  | 93.26  | 18620.466 | 18620.466 | 1089.9678 | 32.86 | 30.92 |
| N07-D001 | 93.26  | 90.98  | 18620.466 | 18620.467 | 1154.3886 | 30.92 | 29.13 |
| N07-E001 | 90.98  | 89.15  | 18620.467 | 18620.467 | 1094.0294 | 29.13 | 27.96 |
| N08-A001 | 100.00 | 98.11  | 18548.105 | 18548.105 | 1653.4088 | 37.26 | 33.98 |
| N08-B001 | 98.11  | 96.51  | 18548.105 | 18548.105 | 1277.2958 | 33.98 | 31.96 |
| N08-B002 | 96.51  | 95.18  | 18548.105 | 18548.105 | 415.1766  | 31.96 | 30.90 |
| N08-C001 | 95.18  | 94.76  | 18548.105 | 18548.105 | 889.1557  | 30.90 | 30.29 |
| N08-C002 | 94.76  | 93.38  | 18548.105 | 18548.105 | 525.1201  | 30.29 | 29.28 |
| N08-D001 | 93.38  | 93.25  | 18548.105 | 18548.105 | 541.6909  | 29.28 | 29.13 |
| N08-D002 | 93.25  | 92.86  | 18548.105 | 18548.105 | 55.8927   | 29.13 | 28.88 |
| N08-D003 | 92.86  | 91.33  | 18548.105 | 18548.106 | 960.0395  | 28.88 | 27.91 |
| N10-A001 |        |        |           |           |           |       |       |

|          |        |        |           |           |           |       |       |
|----------|--------|--------|-----------|-----------|-----------|-------|-------|
|          | 100.00 | 100.26 | 18496.648 | 18496.647 | 207.1689  | 40.92 | 40.61 |
| N10-A002 | 100.26 | 98.93  | 18496.647 | 18496.647 | 273.1110  | 40.61 | 39.20 |
| N10-A003 | 98.93  | 98.59  | 18496.647 | 18496.647 | 664.2450  | 39.20 | 37.76 |
| N10-B001 | 97.95  | 96.26  | 18496.648 | 18496.648 | 1350.8004 | 36.87 | 34.08 |
| N10-C001 | 96.26  | 96.19  | 18496.648 | 18496.648 | 208.2484  | 34.08 | 33.82 |
| N10-C002 | 96.19  | 94.49  | 18496.648 | 18496.648 | 289.5401  | 33.82 | 32.49 |
| N10-C003 | 94.49  | 93.95  | 18496.648 | 18496.648 | 324.7726  | 32.49 | 31.91 |
| N10-C004 | 93.95  | 93.29  | 18496.648 | 18496.648 | 280.5358  | 31.91 | 31.32 |
| N10-C005 | 93.29  | 94.02  | 18496.648 | 18496.648 | 226.4698  | 31.32 | 31.68 |
| N10-C006 | 94.02  | 93.70  | 18496.648 | 18496.648 | 31.6362   | 31.68 | 31.45 |
| N10-D001 | 93.70  | 89.58  | 18496.648 | 18496.648 | 1607.2211 | 31.45 | 28.36 |
| N10-E001 | 89.58  | 90.19  | 18496.648 | 18496.648 | 113.7107  | 28.36 | 28.83 |
| N10-E002 | 90.19  | 89.10  | 18496.648 | 18496.648 | 138.2160  | 28.83 | 28.15 |
| N10-E003 | 89.10  | 90.31  | 18496.648 | 18496.648 | 113.7173  | 28.15 | 29.02 |
| N10-E004 | 90.31  | 88.37  | 18496.648 | 18496.648 | 352.3490  | 29.02 | 27.87 |
| N11-A001 | 100.00 | 98.74  | 18424.498 | 18424.498 | 405.0215  | 37.78 | 36.50 |
| N11-A002 | 98.74  | 98.77  | 18424.498 | 18424.498 | 103.1796  | 36.50 | 36.41 |
| N11-A003 | 98.77  | 99.63  | 17479.498 | 17479.498 | 242.0538  | 36.41 | 36.64 |
| N11-A004 | 99.63  | 97.83  | 17479.498 | 17479.498 | 725.4476  | 36.64 | 34.74 |
| N11-B001 | 97.83  | 97.06  | 17479.498 | 17479.498 | 156.9635  | 34.74 | 34.13 |
| N11-B002 | 97.06  | 99.03  | 17479.498 | 17479.498 | 222.9604  | 34.13 | 35.16 |
| N11-B003 | 99.03  | 98.56  | 17479.498 | 17479.498 | 659.4083  | 35.16 | 34.29 |
| N11-B004 | 98.56  | 97.95  | 17479.498 | 17479.498 | 211.6559  | 34.29 | 33.75 |
| N11-C001 | 97.95  | 98.24  | 17479.498 | 17479.498 | 69.4029   | 33.75 | 33.85 |
| N11-C002 | 98.24  | 97.96  | 17479.498 | 17479.498 | 12.8346   | 33.85 | 33.66 |
| N11-C003 | 97.96  | 97.77  | 17479.498 | 17479.498 | 641.1899  | 33.66 | 32.91 |
| N11-C004 | 97.77  | 95.44  | 17000.998 | 17000.998 | 524.2721  | 32.91 | 31.03 |
| N11-C005 | 95.44  | 96.13  | 17000.998 | 17000.998 | 288.2365  | 31.03 | 31.29 |
| N11-D001 | 96.13  | 96.16  | 17000.998 | 17000.998 | 212.2230  | 31.29 | 31.17 |
| N11-D002 | 96.16  | 96.68  | 15200.998 | 15200.998 | 160.6787  | 31.17 | 31.36 |
| N11-D003 | 96.68  | 95.45  | 15200.998 | 15200.998 | 296.7947  | 31.36 | 30.36 |
| N11-D004 | 95.45  | 95.29  | 15200.998 | 15200.998 | 607.7571  | 30.36 | 29.89 |
| N11-E001 | 95.29  | 95.44  | 15200.998 | 15200.998 | 130.4867  | 29.89 | 29.91 |
| N11-E002 | 95.44  | 95.76  | 13400.998 | 13400.998 | 256.2127  | 29.91 | 29.93 |
| N11-E003 | 95.76  | 94.75  | 13400.998 | 13400.998 | 295.5518  | 29.93 | 29.10 |
| N11-E004 | 94.75  | 94.44  | 13400.998 | 13400.998 | 438.5162  | 29.10 | 28.69 |
| S01-A002 | 94.22  | 93.89  | 6400.998  | 6400.998  | 259.7539  | 28.28 | 27.75 |
| S01-B001 | 93.89  | 93.65  | 6400.998  | 6400.998  | 154.8788  | 27.75 | 27.47 |
| S01-B002 | 93.65  | 93.12  | 6400.998  | 6400.998  | 135.2091  | 27.47 | 27.05 |
| S01-C001 | 93.12  | 92.93  | 6400.998  | 6400.998  | 239.9329  | 27.05 | 26.85 |
| S01-C002 | 92.93  | 93.25  | 5493.498  | 5493.498  | 75.6919   | 26.85 | 27.02 |
| S01-D001 | 93.25  | 92.19  | 5493.498  | 5493.498  | 420.7598  | 27.02 | 26.23 |
| S01-E002 | 92.26  | 92.36  | 5060.998  | 5060.998  | 566.9398  | 25.66 | 25.99 |
| S01-F001 | 92.36  | 91.67  | 5060.998  | 5060.998  | 484.3393  | 25.99 | 25.76 |
| S01-G001 | 91.18  | 91.56  | 5060.998  | 5060.998  | 142.1047  | 24.71 | 25.15 |
| S01-G002 |        |        |           |           |           |       |       |



|          |       |       |          |          |          |       |       |
|----------|-------|-------|----------|----------|----------|-------|-------|
|          | 91.56 | 90.48 | 5060.998 | 5060.998 | 433.4148 | 25.15 | 25.00 |
| S01-H001 | 90.48 | 90.35 | 5060.998 | 5060.998 | 652.9742 | 25.00 | 25.59 |
| S01-I001 | 90.35 | 90.35 | 5060.998 | 5060.998 | 79.6664  | 25.59 | 25.64 |
| S01-I002 | 90.35 | 89.22 | 5060.998 | 5060.998 | 83.3023  | 25.64 | 24.99 |
| S01-I003 | 89.22 | 89.28 | 5060.998 | 5060.999 | 504.2285 | 24.99 | 25.58 |
| S01-J001 | 89.28 | 89.24 | 5060.999 | 5060.999 | 175.7251 | 25.58 | 25.68 |
| S01-J002 | 89.24 | 87.63 | 5060.999 | 5060.999 | 466.4531 | 25.68 | 25.08 |
| S01-J003 | 87.63 | 87.90 | 5060.999 | 5060.999 | 256.5257 | 25.08 | 25.55 |
| S01-K001 | 87.90 | 88.54 | 5060.999 | 5060.999 | 283.5201 | 25.55 | 26.12 |
| S01-K002 | 88.54 | 87.32 | 5060.999 | 5060.999 | 577.4340 | 26.12 | 25.60 |
| S02-A001 | 87.21 | 85.03 | 5060.999 | 5060.999 | 574.5419 | 25.58 | 23.90 |
| S02-B001 | 85.03 | 85.57 | 5060.999 | 5060.999 | 65.4389  | 23.90 | 24.30 |
| S02-B002 | 85.57 | 84.42 | 5060.999 | 5060.999 | 74.4862  | 24.30 | 23.53 |
| S02-B003 | 84.42 | 85.52 | 5060.999 | 5060.999 | 235.6784 | 23.53 | 24.40 |
| S02-B004 | 85.52 | 83.89 | 5060.999 | 5060.999 | 107.2717 | 24.40 | 23.31 |
| S02-B005 | 83.89 | 84.08 | 5060.999 | 5060.999 | 137.8549 | 23.31 | 23.60 |
| S02-C001 | 84.08 | 84.79 | 5060.999 | 5060.999 | 195.8185 | 23.60 | 24.19 |
| S02-C002 | 84.79 | 83.18 | 5060.999 | 5060.999 | 104.0244 | 24.19 | 23.14 |
| S02-C003 | 83.18 | 83.73 | 5060.999 | 5060.999 | 27.7241  | 23.14 | 23.58 |
| S02-C004 | 83.73 | 82.56 | 5060.999 | 5060.999 | 74.0277  | 23.58 | 22.83 |
| S02-C005 | 82.56 | 82.97 | 5060.999 | 5060.999 | 139.7414 | 22.83 | 23.34 |
| S02-D001 | 82.97 | 83.02 | 5060.999 | 5060.999 | 782.7858 | 23.34 | 23.98 |
| S02-E002 | 85.64 | 84.01 | 5060.999 | 5060.999 | 82.9280  | 24.97 | 23.82 |
| S02-E003 | 84.01 | 84.65 | 5060.999 | 5060.999 | 47.8034  | 23.82 | 24.29 |
| S02-E004 | 84.65 | 82.50 | 5060.999 | 5060.999 | 244.8434 | 24.29 | 22.97 |
| S02-E005 | 82.50 | 84.20 | 5060.999 | 5060.999 | 38.9722  | 22.97 | 24.24 |
| S02-E006 | 84.20 | 83.25 | 5060.999 | 5060.999 | 148.9003 | 24.24 | 23.63 |
| S02-G001 | 82.96 | 84.66 | 5060.999 | 5061.000 | 280.6007 | 22.03 | 23.72 |
| S02-G002 | 84.66 | 81.87 | 5061.000 | 5061.000 | 268.4745 | 23.72 | 22.18 |
| S02-G003 | 81.87 | 83.19 | 5061.000 | 5061.000 | 21.8655  | 22.18 | 23.20 |
| S02-G004 | 83.19 | 81.80 | 5061.000 | 5061.000 | 54.8790  | 23.20 | 22.29 |
| S02-G005 | 81.80 | 80.36 | 5061.000 | 5061.000 | 217.1053 | 22.29 | 21.85 |
| S02-H001 | 80.36 | 82.15 | 5061.000 | 5061.000 | 95.7786  | 21.85 | 23.38 |
| S02-H002 | 82.15 | 79.27 | 5061.000 | 5061.000 | 369.9113 | 23.38 | 22.05 |
| S02-H003 | 79.27 | 80.12 | 5061.000 | 5061.000 | 225.4689 | 22.05 | 23.19 |
| S02-H004 | 80.12 | 79.14 | 5061.000 | 5061.000 | 114.8200 | 23.19 | 22.66 |
| S02-I001 | 79.14 | 77.73 | 5061.000 | 5061.000 | 307.1550 | 22.66 | 22.35 |
| S02-I002 | 77.73 | 77.76 | 5061.000 | 5061.000 | 237.9217 | 22.35 | 22.93 |
| S02-J001 | 77.76 | 77.49 | 5061.000 | 5061.000 | 468.9743 | 22.93 | 23.48 |
| S02-J002 | 77.49 | 77.49 | 5061.000 | 5061.000 | 49.8720  | 23.48 | 23.53 |
| S03-A001 | 66.56 | 66.50 | 0.000    | 0.000    | 11.1024  | 21.00 | 21.00 |
| S03-A002 | 66.50 | 66.81 | 0.000    | 0.000    | 115.4802 | 21.00 | 21.00 |
| S03-A003 | 66.81 | 66.63 | 0.000    | 0.000    | 57.7356  | 21.00 | 21.00 |
| S03-B001 | 66.63 | 66.56 | 0.000    | 0.000    | 392.9310 | 21.00 | 21.00 |
| S03-C001 | 66.56 | 66.57 | 0.000    | 0.000    | 150.6222 | 21.00 | 21.00 |
| S03-C002 |       |       |          |          |          |       |       |

|          |       |       |          |          |          |       |       |
|----------|-------|-------|----------|----------|----------|-------|-------|
|          | 66.57 | 67.13 | 0.000    | 0.000    | 130.9372 | 21.00 | 21.00 |
| S03-D001 | 67.13 | 72.00 | 0.000    | 0.000    | 385.3629 | 21.00 | 21.00 |
| S03-E001 | 72.00 | 70.53 | 4487.864 | 4487.864 | 391.7219 | 20.00 | 20.24 |
| S03-F001 | 70.53 | 70.00 | 4487.864 | 4487.864 | 43.4372  | 20.24 | 19.96 |
| S03-F002 | 70.00 | 69.28 | 4487.864 | 4487.864 | 278.5748 | 19.96 | 20.41 |
| S03-F003 | 69.28 | 68.46 | 4487.864 | 4487.864 | 133.4901 | 20.41 | 20.21 |
| S03-F004 | 68.46 | 68.52 | 4487.864 | 4487.864 | 25.5481  | 20.21 | 20.36 |
| S03-G001 | 68.52 | 65.08 | 4487.864 | 4487.864 | 341.7469 | 20.36 | 19.19 |
| S03-G002 | 65.08 | 65.84 | 4487.864 | 4487.864 | 25.1312  | 19.19 | 20.06 |
| S03-H001 | 65.84 | 65.25 | 4487.864 | 4487.864 | 8.7821   | 20.06 | 19.55 |
| S03-H002 | 65.25 | 65.75 | 4487.864 | 4487.864 | 134.7092 | 19.55 | 20.67 |
| S03-H003 | 65.75 | 62.97 | 4487.864 | 4487.864 | 127.0898 | 20.67 | 18.83 |
| S03-H004 | 62.97 | 64.11 | 4487.864 | 4487.864 | 72.1782  | 18.83 | 20.40 |
| S03-H005 | 64.11 | 62.87 | 4487.864 | 4487.864 | 20.7754  | 20.40 | 19.33 |
| S03-H006 | 62.87 | 64.53 | 4487.864 | 4487.864 | 87.3115  | 19.33 | 21.32 |
| S03-I001 | 64.53 | 64.52 | 3934.364 | 3934.364 | 12.9196  | 21.32 | 21.33 |
| S03-I002 | 64.52 | 62.85 | 3934.364 | 3934.364 | 134.5018 | 21.33 | 20.15 |
| S03-I003 | 62.85 | 63.31 | 3934.364 | 3934.364 | 103.9089 | 20.15 | 20.98 |
| S03-J001 | 63.31 | 63.22 | 3934.364 | 3934.364 | 72.7502  | 20.98 | 21.06 |
| S03-J002 | 63.22 | 62.73 | 3679.364 | 3679.364 | 106.5470 | 21.06 | 20.82 |
| S03-L001 | 62.73 | 60.18 | 3679.364 | 3679.364 | 93.9803  | 20.82 | 18.90 |
| S03-L002 | 60.18 | 61.98 | 3679.364 | 3679.364 | 82.7141  | 18.90 | 21.14 |
| S03-L003 | 61.98 | 60.40 | 3679.364 | 3679.364 | 18.5917  | 21.14 | 19.64 |
| S03-L004 | 60.40 | 61.78 | 3679.364 | 3679.364 | 23.0280  | 19.64 | 21.12 |
| S03-L005 | 61.78 | 61.04 | 3679.364 | 3679.364 | 58.4551  | 21.12 | 20.56 |
| S03-L006 | 61.04 | 61.49 | 3679.364 | 3679.364 | 104.8975 | 20.56 | 21.26 |
| S03-M001 | 61.49 | 59.78 | 3246.864 | 3246.864 | 269.6397 | 21.26 | 20.34 |
| S03-M002 | 59.78 | 60.41 | 3246.864 | 3246.864 | 88.5231  | 20.34 | 21.21 |
| S03-M003 | 60.41 | 60.26 | 3246.864 | 3246.864 | 26.6603  | 21.21 | 21.10 |
| S04-A001 | 75.00 | 73.07 | 3237.806 | 3237.806 | 139.3445 | 38.22 | 29.91 |
| S04-A002 | 73.07 | 72.15 | 3237.806 | 3237.806 | 43.0960  | 29.91 | 27.90 |
| S04-A003 | 72.15 | 73.50 | 3237.806 | 3237.806 | 108.6090 | 27.90 | 26.69 |
| S04-A004 | 73.50 | 70.30 | 3237.806 | 3237.806 | 62.9545  | 26.69 | 23.21 |
| S04-A005 | 70.30 | 72.22 | 3237.806 | 3237.806 | 36.9590  | 23.21 | 24.53 |
| S04-B001 | 72.22 | 69.28 | 3237.806 | 3237.806 | 35.7272  | 24.53 | 21.82 |
| S04-B002 | 69.28 | 69.58 | 3237.806 | 3237.806 | 58.4850  | 21.82 | 22.03 |
| S04-B003 | 69.58 | 67.97 | 3237.806 | 3237.806 | 21.2331  | 22.03 | 20.63 |
| S04-B004 | 67.97 | 70.11 | 3237.806 | 3237.806 | 78.4879  | 20.63 | 22.53 |
| S04-B005 | 70.11 | 67.61 | 3237.806 | 3237.806 | 73.1369  | 22.53 | 20.42 |
| S04-B006 | 67.61 | 68.81 | 3237.806 | 3237.806 | 18.2414  | 20.42 | 21.56 |
| S04-B007 | 68.81 | 67.26 | 3237.806 | 3237.806 | 23.4958  | 21.56 | 20.25 |
| S04-B008 | 67.26 | 68.22 | 3237.806 | 3237.806 | 33.9871  | 20.25 | 21.24 |
| S04-B009 | 68.22 | 66.37 | 3237.806 | 3237.806 | 20.2327  | 21.24 | 19.66 |
| S04-B010 | 66.37 | 66.86 | 3237.806 | 3237.806 | 4.1907   | 19.66 | 20.14 |
| S04-C001 | 66.86 | 67.78 | 3237.806 | 3237.806 | 42.4803  | 20.14 | 21.16 |
| S04-C002 |       |       |          |          |          |       |       |

|          |       |       |          |          |          |       |       |
|----------|-------|-------|----------|----------|----------|-------|-------|
|          | 67.78 | 66.70 | 3237.806 | 3237.806 | 29.1382  | 21.16 | 20.31 |
| S04-C003 | 66.70 | 67.69 | 3237.806 | 3237.806 | 79.4077  | 20.31 | 21.46 |
| S04-C004 | 67.69 | 66.11 | 3237.806 | 3237.806 | 113.1558 | 21.46 | 20.43 |
| S04-C005 | 66.11 | 67.28 | 3237.806 | 3237.806 | 118.0005 | 20.43 | 21.79 |
| S04-D001 | 67.28 | 67.29 | 3237.806 | 3237.806 | 146.6550 | 21.79 | 21.77 |
| S04-D002 | 67.29 | 65.93 | 3237.806 | 3237.806 | 53.9776  | 21.77 | 20.67 |
| S04-D003 | 65.93 | 66.58 | 3237.806 | 3237.806 | 100.5978 | 20.67 | 21.53 |
| S04-E001 | 66.58 | 65.39 | 3237.806 | 3237.806 | 17.5076  | 21.53 | 20.48 |
| S04-E002 | 65.39 | 66.50 | 3237.806 | 3237.806 | 17.9939  | 20.48 | 21.57 |
| S04-E003 | 66.50 | 65.25 | 3237.806 | 3237.806 | 33.1950  | 21.57 | 20.53 |
| S04-E004 | 65.25 | 66.25 | 3237.806 | 3237.806 | 18.8404  | 20.53 | 21.52 |
| S04-E005 | 66.25 | 64.46 | 3237.806 | 3237.806 | 90.7121  | 21.52 | 20.24 |
| S04-E006 | 64.46 | 65.12 | 3237.806 | 3237.806 | 81.4876  | 20.24 | 21.23 |
| S04-E007 | 65.12 | 65.06 | 3237.806 | 3237.806 | 2.2141   | 21.23 | 21.18 |
| S04-F001 | 65.06 | 62.48 | 3237.806 | 3237.806 | 50.2524  | 21.18 | 19.12 |
| S04-F002 | 62.48 | 63.11 | 3237.806 | 3237.806 | 23.2981  | 19.12 | 19.98 |
| S04-F003 | 63.11 | 62.07 | 3237.806 | 3237.806 | 25.0963  | 19.98 | 19.23 |
| S04-G001 | 62.07 | 62.57 | 3237.806 | 3237.806 | 100.0293 | 19.23 | 20.59 |
| S04-G002 | 62.57 | 60.85 | 3237.806 | 3237.806 | 54.0393  | 20.59 | 19.39 |
| S04-G003 | 60.85 | 62.83 | 3237.806 | 3237.806 | 51.7593  | 19.39 | 21.65 |
| S04-H001 | 62.83 | 62.06 | 3237.806 | 3237.806 | 43.3392  | 21.65 | 21.01 |
| S04-H002 | 62.06 | 60.52 | 2846.306 | 2846.306 | 92.7449  | 21.01 | 20.07 |
| S04-H003 | 60.52 | 61.18 | 2846.306 | 2846.306 | 17.7024  | 20.07 | 20.84 |
| S04-H004 | 61.18 | 60.62 | 2846.306 | 2846.306 | 13.7280  | 20.84 | 20.35 |
| S05-A001 | 74.50 | 74.78 | 2841.500 | 2841.500 | 19.7804  | 36.45 | 35.12 |
| S05-A002 | 74.78 | 73.74 | 2841.500 | 2841.500 | 24.3203  | 35.12 | 32.62 |
| S05-A003 | 73.74 | 74.70 | 2841.500 | 2841.500 | 63.8498  | 32.62 | 30.12 |
| S05-A004 | 74.70 | 73.82 | 2409.000 | 2409.000 | 165.1126 | 30.12 | 24.21 |
| S05-B001 | 73.82 | 72.15 | 2409.000 | 2409.000 | 77.2821  | 24.21 | 22.09 |
| S05-B002 | 72.15 | 72.17 | 2409.000 | 2409.000 | 114.9240 | 22.09 | 21.81 |
| S05-B003 | 72.17 | 70.53 | 2409.000 | 2409.000 | 15.6741  | 21.81 | 20.46 |
| S05-B004 | 70.53 | 71.69 | 2409.000 | 2409.000 | 26.6037  | 20.46 | 21.52 |
| S05-C001 | 71.69 | 70.12 | 2409.000 | 2409.000 | 115.3410 | 21.52 | 20.61 |
| S05-C002 | 70.12 | 63.82 | 2409.000 | 2409.000 | 43.6703  | 20.61 | 16.06 |
| S05-D001 | 63.82 | 63.90 | 2409.000 | 2409.000 | 208.5461 | 16.06 | 20.40 |
| S05-D002 | 63.90 | 62.57 | 2409.000 | 2409.000 | 54.3102  | 20.40 | 19.78 |
| S05-E001 | 62.57 | 62.88 | 2409.000 | 2409.000 | 17.0890  | 19.78 | 20.29 |
| S05-E002 | 62.88 | 61.87 | 2409.000 | 2409.000 | 85.5841  | 20.29 | 20.24 |
| S05-E003 | 61.87 | 62.54 | 2409.000 | 2409.000 | 15.1658  | 20.24 | 21.02 |
| S05-E004 | 62.54 | 61.46 | 2409.000 | 2409.000 | 43.7788  | 21.02 | 20.32 |
| S05-F001 | 61.46 | 61.29 | 2409.000 | 2409.000 | 38.9625  | 20.32 | 20.54 |
| S05-F002 | 61.29 | 61.38 | 2409.000 | 2409.000 | 74.0146  | 20.54 | 21.11 |
| S05-F003 | 61.38 | 59.30 | 2409.000 | 2409.000 | 134.1462 | 21.11 | 20.26 |
| S05-G001 | 59.30 | 58.77 | 2409.000 | 2409.000 | 141.2591 | 20.26 | 20.97 |
| S05-G002 | 58.77 | 57.10 | 2409.000 | 2409.000 | 108.3372 | 20.97 | 20.35 |
| S05-H001 |       |       |          |          |          |       |       |

|          |       |       |           |           |          |       |       |
|----------|-------|-------|-----------|-----------|----------|-------|-------|
|          | 57.10 | 59.95 | 2409.000  | 2409.000  | 88.2945  | 20.35 | 23.19 |
| S05-H002 | 59.95 | 57.98 | 2409.000  | 2409.000  | 30.7675  | 23.19 | 21.09 |
| S05-H003 | 57.98 | 59.50 | 2409.000  | 2409.000  | 22.2441  | 21.09 | 22.65 |
| S05-H004 | 59.50 | 57.32 | 2409.000  | 2409.000  | 52.0759  | 22.65 | 20.51 |
| S05-H005 | 57.32 | 58.84 | 2409.000  | 2409.000  | 53.5819  | 20.51 | 22.28 |
| S05-H006 | 58.84 | 58.61 | 2409.000  | 2409.000  | 20.2102  | 22.28 | 21.98 |
| S05-I001 | 58.61 | 58.07 | 2409.000  | 2409.000  | 10.5278  | 21.98 | 21.42 |
| S05-I002 | 58.07 | 57.80 | 2409.000  | 2409.000  | 81.4077  | 21.42 | 21.41 |
| S05-I003 | 57.80 | 57.43 | 2409.000  | 2409.000  | 25.6985  | 21.41 | 21.13 |
| S05-I004 | 57.43 | 56.90 | 2409.000  | 2409.000  | 53.6060  | 21.13 | 20.95 |
| S05-J001 | 56.90 | 55.39 | 2409.000  | 2409.000  | 65.8338  | 20.95 | 20.12 |
| S05-J002 | 55.39 | 55.79 | 2409.000  | 2409.000  | 20.7276  | 20.12 | 20.81 |
| S05-J003 | 55.79 | 54.82 | 2409.000  | 2409.000  | 29.2916  | 20.81 | 20.13 |
| S05-L001 | 54.82 | 54.63 | 2409.000  | 2409.000  | 3.1234   | 20.13 | 19.96 |
| S05-L002 | 54.63 | 54.86 | 2409.000  | 2409.000  | 54.4286  | 19.96 | 20.93 |
| S05-L003 | 54.86 | 54.34 | 2409.000  | 2409.000  | 41.1223  | 20.93 | 20.77 |
| P01-A001 | 75.00 | 74.94 | 7000.000  | 7000.000  | 137.5954 | 20.74 | 21.27 |
| P01-A002 | 74.94 | 74.27 | 7000.000  | 7000.000  | 85.1427  | 21.27 | 21.07 |
| P01-B001 | 74.27 | 74.40 | 7000.000  | 7000.000  | 52.3919  | 21.07 | 21.38 |
| P01-B002 | 74.40 | 73.18 | 7000.000  | 7000.000  | 203.8239 | 21.38 | 21.22 |
| P01-B003 | 73.18 | 72.61 | 7000.000  | 7000.000  | 80.4470  | 21.22 | 21.08 |
| P01-C001 | 72.61 | 73.15 | 7000.000  | 7000.000  | 38.2411  | 21.08 | 21.69 |
| P01-C002 | 73.15 | 71.90 | 7000.000  | 7000.000  | 249.0085 | 21.69 | 21.59 |
| P01-D001 | 71.90 | 71.96 | 7000.000  | 7000.000  | 24.0064  | 21.59 | 21.74 |
| P01-D002 | 71.96 | 70.30 | 7000.000  | 7000.000  | 293.0193 | 21.74 | 21.52 |
| P01-E001 | 70.30 | 69.07 | 7000.000  | 7000.000  | 473.6709 | 21.52 | 22.27 |
| P01-F001 | 69.07 | 68.18 | 7000.000  | 7000.000  | 314.1916 | 22.27 | 22.59 |
| P01-G001 | 68.18 | 67.88 | 7000.000  | 7000.000  | 95.3860  | 22.59 | 22.64 |
| P01-G002 | 67.88 | 65.89 | 7000.000  | 7000.000  | 173.0385 | 22.64 | 21.53 |
| P01-G003 | 65.89 | 66.53 | 7000.000  | 7000.000  | 33.1608  | 21.53 | 22.28 |
| P01-H001 | 66.53 | 66.43 | 7000.000  | 7000.000  | 134.0388 | 22.28 | 22.68 |
| P01-H002 | 66.43 | 65.14 | 7000.000  | 7000.000  | 79.4410  | 22.68 | 21.80 |
| P01-H003 | 65.14 | 66.26 | 7000.000  | 7000.000  | 247.4808 | 21.80 | 23.70 |
| P01-H004 | 66.26 | 65.35 | 7000.000  | 7000.000  | 41.3147  | 23.70 | 22.96 |
| P01-I001 | 65.35 | 64.94 | 7000.000  | 7000.000  | 91.4870  | 22.96 | 22.88 |
| P01-I002 | 64.94 | 64.59 | 7000.000  | 7000.000  | 267.7753 | 22.88 | 23.41 |
| P01-J001 | 64.59 | 64.27 | 7000.000  | 7000.000  | 31.4793  | 23.41 | 23.20 |
| P01-J002 | 64.27 | 64.48 | 7000.000  | 7000.000  | 153.3235 | 23.20 | 23.82 |
| P01-J003 | 64.48 | 64.23 | 7000.000  | 7000.000  | 28.6735  | 23.82 | 23.65 |
| P01-L001 | 64.23 | 63.35 | 7000.000  | 7000.000  | 126.0392 | 23.65 | 23.17 |
| S01-F002 | 91.67 | 91.18 | 5060.998  | 5060.998  | 176.1258 | 25.76 | 24.71 |
| S01-A001 | 94.25 | 94.22 | 6400.998  | 6400.998  | 60.7934  | 28.66 | 28.28 |
| N10-A004 | 98.59 | 97.95 | 18496.647 | 18496.647 | 295.0052 | 37.76 | 36.87 |
| S01-E001 | 92.19 | 92.26 | 5493.498  | 5493.498  | 137.6546 | 26.23 | 25.66 |
| S02-E001 | 83.02 | 85.64 | 5060.999  | 5060.999  | 232.6555 | 23.98 | 24.97 |
| S02-F002 |       |       |           |           |          |       |       |

|          |       |       |           |           |          |       |       |
|----------|-------|-------|-----------|-----------|----------|-------|-------|
|          | 82.75 | 84.59 | 5060.999  | 5060.999  | 63.1437  | 22.04 | 23.26 |
| S02-F001 | 83.25 | 84.24 | 5060.999  | 5060.999  | 60.3006  | 23.63 | 24.16 |
| S02-F002 | 84.24 | 81.35 | 5060.999  | 5060.999  | 230.8246 | 24.16 | 21.66 |
| S02-F003 | 81.35 | 83.59 | 5060.999  | 5060.999  | 236.5313 | 21.66 | 22.99 |
| S02-F004 | 83.59 | 82.38 | 5060.999  | 5060.999  | 91.2809  | 22.99 | 22.00 |
| S02-F005 | 82.38 | 83.64 | 5060.999  | 5060.999  | 97.3616  | 22.00 | 22.78 |
| S02-F006 | 83.64 | 82.21 | 5060.999  | 5060.999  | 45.9603  | 22.78 | 21.70 |
| S02-F007 | 82.21 | 82.75 | 5060.999  | 5060.999  | 76.1013  | 21.70 | 22.04 |
| S02-F009 | 84.59 | 82.96 | 5060.999  | 5060.999  | 37.6451  | 23.26 | 22.03 |
| N09_A001 | 91.32 | 91.63 | 18548.106 | 18548.106 | 123.6516 | 27.91 | 28.12 |
| N09_A002 | 91.63 | 90.17 | 18548.106 | 18548.106 | 361.0641 | 28.12 | 27.23 |
| N09_A003 | 90.17 | 90.23 | 18548.106 | 18548.106 | 616.2433 | 27.23 | 27.42 |
| N09_A004 | 90.23 | 89.75 | 18548.106 | 18548.106 | 81.5992  | 27.42 | 27.12 |
| N09_A005 | 89.75 | 89.80 | 18548.106 | 18548.106 | 108.1147 | 27.12 | 27.19 |
| N09_B001 | 89.80 | 89.81 | 18548.106 | 18548.106 | 132.0129 | 27.19 | 27.23 |
| N09_B002 | 89.81 | 88.89 | 18548.106 | 18548.106 | 217.2660 | 27.23 | 26.68 |
| N09_B003 | 88.89 | 89.31 | 18548.106 | 18548.106 | 100.0186 | 26.68 | 27.01 |
| N09_B004 | 89.31 | 88.69 | 18548.106 | 18548.106 | 121.8872 | 27.01 | 26.64 |
| N09_B005 | 88.69 | 88.80 | 18548.106 | 18548.106 | 194.2441 | 26.64 | 26.79 |
| N09_B006 | 88.80 | 87.55 | 18548.106 | 18548.106 | 333.3803 | 26.79 | 26.09 |
| N09_B007 | 87.55 | 87.18 | 18548.106 | 18548.106 | 429.0725 | 26.09 | 26.08 |
| N09_C001 | 87.18 | 87.26 | 18548.106 | 18548.106 | 285.1102 | 26.08 | 26.29 |
| N09_C002 | 87.26 | 85.45 | 18548.106 | 18548.106 | 460.6780 | 26.29 | 25.32 |
| N09_C003 | 85.45 | 85.72 | 18548.106 | 18548.107 | 269.7338 | 25.32 | 25.70 |
| N09_C004 | 85.72 | 84.81 | 18548.107 | 18548.107 | 125.9560 | 25.70 | 25.15 |
| N09_C005 | 84.81 | 84.03 | 18548.107 | 18548.107 | 801.7117 | 25.15 | 25.24 |
| N09_D001 | 84.03 | 84.08 | 18548.107 | 18548.107 | 143.1732 | 25.24 | 25.39 |
| N09_D002 | 84.08 | 83.37 | 18548.107 | 18548.107 | 77.8209  | 25.39 | 24.95 |
| N09_D003 | 83.37 | 83.74 | 18548.107 | 18548.107 | 237.2235 | 24.95 | 25.41 |
| N09_D004 | 83.74 | 82.83 | 18548.107 | 18548.107 | 167.2904 | 25.41 | 24.89 |
| N09_D005 | 82.83 | 83.17 | 18548.107 | 18548.107 | 89.1609  | 24.89 | 25.22 |
| N09_D006 | 83.17 | 82.16 | 18548.107 | 18548.107 | 175.0094 | 25.22 | 24.64 |
| N09_D007 | 82.16 | 82.63 | 18548.107 | 18548.107 | 136.6504 | 24.64 | 25.12 |
| N09_D008 | 82.63 | 81.75 | 18548.107 | 18548.107 | 129.1140 | 25.12 | 24.59 |
| N09_D009 | 81.75 | 81.78 | 18548.107 | 18548.107 | 125.6338 | 24.59 | 24.74 |

### Pipe Quality Summary Report : 0.000 hours

| Pipe Quality Summary |                  |               |             |
|----------------------|------------------|---------------|-------------|
| Pipe Name            | Specific Gravity | Heating Value | Wobbe Index |
|                      |                  | MJ/m3         | MJ/m3       |
|                      |                  |               |             |

|          | Head   | Tail   | Head    | Tail    | Head   | Tail   |
|----------|--------|--------|---------|---------|--------|--------|
| N01-A001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N01-B001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N02-A001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N02-B001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N02-C001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N02-D001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N02-E001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N03-A001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N03-B001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N03-C001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N03-D001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N03-E001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N04-A001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N04-A002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N04-A003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N04-B001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N04-C001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N04-C002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N04-C003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N04-D001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N05-A001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N05-B001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N05-B002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N05-B003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N05-B004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N05-C001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N05-D001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N06-A001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N06-A002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N06-B001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N06-B002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N06-C001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N06-D001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N06-E001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N07-A001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N07-B001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N07-B002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N07-C001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N07-C002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N07-D001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N07-E001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N08-A001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N08-B001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N08-B002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |

|          |        |        |         |         |        |        |
|----------|--------|--------|---------|---------|--------|--------|
| N08-C001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N08-C002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N08-D001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N08-D002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N08-D003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N10-A001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N10-A002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N10-A003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N10-B001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N10-C001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N10-C002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N10-C003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N10-C004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N10-C005 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N10-C006 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N10-D001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N10-E001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N10-E002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N10-E003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N10-E004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N11-A001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N11-A002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N11-A003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N11-A004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N11-B001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N11-B002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N11-B003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N11-B004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N11-C001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N11-C002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N11-C003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N11-C004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N11-C005 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N11-D001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N11-D002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N11-D003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N11-D004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N11-E001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N11-E002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N11-E003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N11-E004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S01-A002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S01-B001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S01-B002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S01-C001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S01-C002 |        |        |         |         |        |        |

|          |        |        |         |         |        |        |
|----------|--------|--------|---------|---------|--------|--------|
|          | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S01-D001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S01-E002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S01-F001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S01-G001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S01-G002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S01-H001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S01-I001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S01-I002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S01-I003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S01-J001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S01-J002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S01-J003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S01-K001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S01-K002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-A001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-B001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-B002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-B003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-B004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-B005 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-C001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-C002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-C003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-C004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-C005 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-D001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-E002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-E003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-E004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-E005 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-E006 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-G001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-G002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-G003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-G004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-G005 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-H001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-H002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-H003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-H004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-I001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-I002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-J001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-J002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-K001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |



|          |        |        |         |         |        |        |
|----------|--------|--------|---------|---------|--------|--------|
|          | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-A002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-A003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-B001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-C001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-C002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-D001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-E001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-F001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-F002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-F003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-F004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-G001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-G002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-H001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-H002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-H003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-H004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-H005 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-H006 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-I001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-I002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-I003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-J001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-J002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-L001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-L002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-L003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-L004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-L005 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-L006 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-M001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-M002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S03-M003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-A001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-A002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-A003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-A004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-A005 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-B001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-B002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-B003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-B004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-B005 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-B006 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-B007 |        |        |         |         |        |        |

|          |        |        |         |         |        |        |
|----------|--------|--------|---------|---------|--------|--------|
|          | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-B008 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-B009 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-B010 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-C001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-C002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-C003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-C004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-C005 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-D001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-D002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-D003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-E001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-E002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-E003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-E004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-E005 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-E006 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-E007 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-F001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-F002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-F003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-G001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-G002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-G003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-H001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-H002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-H003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S04-H004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-A001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-A002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-A003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-A004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-B001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-B002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-B003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-B004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-C001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-C002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-D001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-D002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-E001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-E002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-E003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-E004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-E004 |        |        |         |         |        |        |

|          |        |        |         |         |        |        |
|----------|--------|--------|---------|---------|--------|--------|
|          | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-F002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-F003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-G001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-G002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-H001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-H002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-H003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-H004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-H005 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-H006 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-I001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-I002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-I003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-I004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-J001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-J002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-J003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-L001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-L002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-L003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| P01-A001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| P01-A002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| P01-B001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| P01-B002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| P01-B003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| P01-C001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| P01-C002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| P01-D001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| P01-D002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| P01-E001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| P01-F001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| P01-G001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| P01-G002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| P01-G003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| P01-H001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| P01-H002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| P01-H003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| P01-H004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| P01-I001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| P01-I002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| P01-J001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| P01-J002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| P01-J003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| P01-L001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S05-F003 |        |        |         |         |        |        |

|          |        |        |         |         |        |        |
|----------|--------|--------|---------|---------|--------|--------|
|          | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S01-A001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N10-A004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S01-E001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-E001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-F008 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-F001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-F002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-F003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-F004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-F005 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-F006 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-F007 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| S02-F009 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_A001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_A002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_A003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_A004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_A005 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_B001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_B002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_B003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_B004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_B005 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_B006 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_B007 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_C001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_C002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_C003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_C004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_C005 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_D001 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_D002 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_D003 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_D004 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_D005 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_D006 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_D007 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_D008 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |
| N09_D009 | 0.6325 | 0.6325 | 35.9734 | 35.9734 | 0.0000 | 0.0000 |

| Pipe Quality Summary |    |    |    |
|----------------------|----|----|----|
| Pipe Name            | C1 | C2 | C3 |
|                      | %  | %  | %  |

|          | Head  | Tail  | Head | Tail | Head | Tail |
|----------|-------|-------|------|------|------|------|
| N01-A001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N01-B001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N02-A001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N02-B001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N02-C001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N02-D001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N02-E001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N03-A001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N03-B001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N03-C001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N03-D001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N03-E001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N04-A001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N04-A002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N04-A003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N04-B001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N04-C001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N04-C002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N04-C003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N04-D001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N05-A001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N05-B001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N05-B002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N05-B003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N05-B004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N05-C001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N05-D001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N06-A001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N06-A002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N06-B001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N06-B002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N06-C001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N06-D001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N06-E001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N07-A001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N07-B001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N07-B002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N07-C001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N07-C002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N07-D001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N07-E001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N08-A001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N08-B001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N08-B002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |

|          |       |       |      |      |      |      |
|----------|-------|-------|------|------|------|------|
| N08-C001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N08-C002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N08-D001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N08-D002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N08-D003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N10-A001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N10-A002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N10-A003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N10-B001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N10-C001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N10-C002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N10-C003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N10-C004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N10-C005 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N10-C006 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N10-D001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N10-E001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N10-E002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N10-E003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N10-E004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N11-A001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N11-A002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N11-A003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N11-A004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N11-B001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N11-B002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N11-B003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N11-B004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N11-C001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N11-C002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N11-C003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N11-C004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N11-C005 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N11-D001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N11-D002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N11-D003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N11-D004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N11-E001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N11-E002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N11-E003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N11-E004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S01-A002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S01-B001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S01-B002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S01-C001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S01-C002 |       |       |      |      |      |      |

|          |       |       |      |      |      |      |
|----------|-------|-------|------|------|------|------|
|          | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S01-D001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S01-E002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S01-F001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S01-G001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S01-G002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S01-H001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S01-I001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S01-I002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S01-I003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S01-J001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S01-J002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S01-J003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S01-K001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S01-K002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-A001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-B001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-B002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-B003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-B004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-B005 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-C001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-C002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-C003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-C004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-C005 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-D001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-E002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-E003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-E004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-E005 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-E006 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-G001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-G002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-G003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-G004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-G005 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-H001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-H002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-H003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-H004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-I001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-I002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-J001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-J002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-K001 |       |       |      |      |      |      |

|          |       |       |      |      |      |      |
|----------|-------|-------|------|------|------|------|
|          | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-A002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-A003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-B001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-C001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-C002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-D001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-E001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-F001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-F002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-F003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-F004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-G001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-G002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-H001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-H002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-H003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-H004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-H005 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-H006 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-I001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-I002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-I003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-J001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-J002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-L001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-L002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-L003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-L004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-L005 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-L006 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-M001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-M002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S03-M003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-A001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-A002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-A003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-A004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-A005 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-B001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-B002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-B003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-B004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-B005 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-B006 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-B007 |       |       |      |      |      |      |



|          |       |       |      |      |      |      |
|----------|-------|-------|------|------|------|------|
|          | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-B008 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-B009 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-B010 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-C001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-C002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-C003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-C004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-C005 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-D001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-D002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-D003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-E001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-E002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-E003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-E004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-E005 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-E006 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-E007 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-F001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-F002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-F003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-G001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-G002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-G003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-H001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-H002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-H003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-H004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-A001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-A002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-A003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-A004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-B001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-B002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-B003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-B004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-C001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-C002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-D001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-D002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-E001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-E002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-E003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-E004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-E004 |       |       |      |      |      |      |

|          |       |       |      |      |      |      |
|----------|-------|-------|------|------|------|------|
|          | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-F002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-F003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-G001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-G002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-H001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-H002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-H003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-H004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-H005 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-H006 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-I001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-I002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-I003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-I004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-J001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-J002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-J003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-L001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-L002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S05-L003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| P01-A001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| P01-A002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| P01-B001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| P01-B002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| P01-B003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| P01-C001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| P01-C002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| P01-D001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| P01-D002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| P01-E001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| P01-F001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| P01-G001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| P01-G002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| P01-G003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| P01-H001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| P01-H002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| P01-H003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| P01-H004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| P01-I001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| P01-I002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| P01-J001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| P01-J002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| P01-J003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| P01-L001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S04-F003 |       |       |      |      |      |      |

|          |       |       |      |      |      |      |
|----------|-------|-------|------|------|------|------|
|          | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S01-A001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N10-A004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S01-E001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-E001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-F008 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-F001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-F002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-F003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-F004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-F005 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-F006 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-F007 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| S02-F009 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_A001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_A002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_A003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_A004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_A005 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_B001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_B002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_B003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_B004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_B005 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_B006 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_B007 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_C001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_C002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_C003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_C004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_C005 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_D001 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_D002 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_D003 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_D004 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_D005 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_D006 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_D007 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_D008 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |
| N09_D009 | 89.20 | 89.20 | 5.90 | 5.90 | 1.81 | 1.81 |

| Pipe Quality Summary |     |     |     |
|----------------------|-----|-----|-----|
| Pipe Name            | IC4 | NC4 | IC5 |
|                      | %   | %   | %   |

|          | Head | Tail | Head | Tail | Head | Tail |
|----------|------|------|------|------|------|------|
| N01-A001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N01-B001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N02-A001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N02-B001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N02-C001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N02-D001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N02-E001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N03-A001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N03-B001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N03-C001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N03-D001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N03-E001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N04-A001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N04-A002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N04-A003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N04-B001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N04-C001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N04-C002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N04-C003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N04-D001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N05-A001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N05-B001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N05-B002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N05-B003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N05-B004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N05-C001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N05-D001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N06-A001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N06-A002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N06-B001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N06-B002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N06-C001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N06-D001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N06-E001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N07-A001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N07-B001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N07-B002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N07-C001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N07-C002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N07-D001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N07-E001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N08-A001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N08-B001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N08-B002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |

|          |      |      |      |      |      |      |
|----------|------|------|------|------|------|------|
| N08-C001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N08-C002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N08-D001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N08-D002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N08-D003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N10-A001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N10-A002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N10-A003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N10-B001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N10-C001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N10-C002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N10-C003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N10-C004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N10-C005 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N10-C006 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N10-D001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N10-E001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N10-E002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N10-E003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N10-E004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N11-A001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N11-A002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N11-A003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N11-A004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N11-B001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N11-B002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N11-B003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N11-B004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N11-C001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N11-C002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N11-C003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N11-C004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N11-C005 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N11-D001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N11-D002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N11-D003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N11-D004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N11-E001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N11-E002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N11-E003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N11-E004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S01-A002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S01-B001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S01-B002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S01-C001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S01-C002 |      |      |      |      |      |      |

|          |      |      |      |      |      |      |
|----------|------|------|------|------|------|------|
|          | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S01-D001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S01-E002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S01-F001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S01-G001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S01-G002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S01-H001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S01-I001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S01-I002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S01-I003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S01-J001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S01-J002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S01-J003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S01-K001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S01-K002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-A001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-B001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-B002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-B003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-B004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-B005 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-C001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-C002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-C003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-C004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-C005 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-D001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-E002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-E003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-E004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-E005 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-E006 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-G001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-G002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-G003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-G004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-G005 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-H001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-H002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-H003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-H004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-I001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-I002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-J001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-J002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-K001 |      |      |      |      |      |      |

|          |      |      |      |      |      |      |
|----------|------|------|------|------|------|------|
|          | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-A002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-A003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-B001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-C001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-C002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-D001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-E001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-F001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-F002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-F003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-F004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-G001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-G002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-H001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-H002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-H003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-H004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-H005 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-H006 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-I001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-I002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-I003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-J001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-J002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-L001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-L002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-L003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-L004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-L005 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-L006 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-M001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-M002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S03-M003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-A001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-A002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-A003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-A004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-A005 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-B001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-B002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-B003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-B004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-B005 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-B006 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-B007 |      |      |      |      |      |      |

|          |      |      |      |      |      |      |
|----------|------|------|------|------|------|------|
|          | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-B008 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-B009 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-B010 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-C001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-C002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-C003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-C004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-C005 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-D001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-D002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-D003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-E001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-E002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-E003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-E004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-E005 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-E006 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-E007 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-F001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-F002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-F003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-G001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-G002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-G003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-H001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-H002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-H003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S04-H004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-A001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-A002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-A003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-A004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-B001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-B002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-B003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-B004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-C001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-C002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-D001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-D002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-E001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-E002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-E003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-E004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-E004 |      |      |      |      |      |      |



|          |      |      |      |      |      |      |
|----------|------|------|------|------|------|------|
|          | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-F002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-F003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-G001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-G002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-H001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-H002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-H003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-H004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-H005 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-H006 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-I001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-I002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-I003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-I004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-J001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-J002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-J003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-L001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-L002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S05-L003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| P01-A001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| P01-A002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| P01-B001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| P01-B002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| P01-B003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| P01-C001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| P01-C002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| P01-D001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| P01-D002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| P01-E001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| P01-F001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| P01-G001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| P01-G002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| P01-G003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| P01-H001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| P01-H002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| P01-H003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| P01-H004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| P01-I001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| P01-I002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| P01-J001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| P01-J002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| P01-J003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| P01-L001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S01-F003 |      |      |      |      |      |      |

|          |      |      |      |      |      |      |
|----------|------|------|------|------|------|------|
|          | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S01-A001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N10-A004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S01-E001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-E001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-F008 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-F001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-F002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-F003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-F004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-F005 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-F006 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-F007 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| S02-F009 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_A001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_A002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_A003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_A004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_A005 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_B001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_B002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_B003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_B004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_B005 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_B006 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_B007 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_C001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_C002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_C003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_C004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_C005 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_D001 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_D002 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_D003 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_D004 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_D005 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_D006 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_D007 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_D008 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |
| N09_D009 | 0.29 | 0.29 | 0.40 | 0.40 | 0.12 | 0.12 |

| Pipe Quality Summary |     |    |     |
|----------------------|-----|----|-----|
| Pipe Name            | NC5 | C6 | CO2 |
|                      | %   | %  | %   |

|          | Head | Tail | Head | Tail | Head | Tail |
|----------|------|------|------|------|------|------|
| N01-A001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N01-B001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N02-A001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N02-B001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N02-C001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N02-D001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N02-E001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N03-A001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N03-B001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N03-C001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N03-D001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N03-E001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N04-A001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N04-A002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N04-A003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N04-B001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N04-C001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N04-C002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N04-C003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N04-D001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N05-A001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N05-B001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N05-B002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N05-B003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N05-B004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N05-C001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N05-D001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N06-A001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N06-A002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N06-B001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N06-B002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N06-C001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N06-D001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N06-E001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N07-A001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N07-B001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N07-B002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N07-C001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N07-C002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N07-D001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N07-E001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N08-A001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N08-B001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N08-B002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |

|          |      |      |      |      |      |      |
|----------|------|------|------|------|------|------|
| N08-C001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N08-C002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N08-D001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N08-D002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N08-D003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N10-A001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N10-A002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N10-A003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N10-B001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N10-C001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N10-C002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N10-C003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N10-C004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N10-C005 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N10-C006 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N10-D001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N10-E001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N10-E002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N10-E003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N10-E004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N11-A001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N11-A002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N11-A003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N11-A004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N11-B001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N11-B002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N11-B003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N11-B004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N11-C001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N11-C002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N11-C003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N11-C004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N11-C005 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N11-D001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N11-D002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N11-D003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N11-D004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N11-E001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N11-E002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N11-E003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N11-E004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S01-A002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S01-B001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S01-B002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S01-C001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S01-C002 |      |      |      |      |      |      |

|          |      |      |      |      |      |      |
|----------|------|------|------|------|------|------|
|          | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S01-D001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S01-E002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S01-F001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S01-G001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S01-G002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S01-H001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S01-I001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S01-I002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S01-I003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S01-J001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S01-J002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S01-J003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S01-K001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S01-K002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-A001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-B001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-B002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-B003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-B004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-B005 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-C001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-C002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-C003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-C004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-C005 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-D001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-E002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-E003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-E004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-E005 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-E006 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-G001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-G002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-G003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-G004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-G005 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-H001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-H002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-H003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-H004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-I001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-I002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-J001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-J002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-K001 |      |      |      |      |      |      |

|          |      |      |      |      |      |      |
|----------|------|------|------|------|------|------|
|          | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-A002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-A003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-B001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-C001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-C002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-D001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-E001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-F001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-F002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-F003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-F004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-G001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-G002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-H001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-H002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-H003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-H004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-H005 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-H006 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-I001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-I002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-I003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-J001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-J002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-L001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-L002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-L003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-L004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-L005 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-L006 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-M001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-M002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S03-M003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-A001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-A002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-A003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-A004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-A005 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-B001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-B002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-B003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-B004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-B005 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-B006 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-B007 |      |      |      |      |      |      |

|          |      |      |      |      |      |      |
|----------|------|------|------|------|------|------|
|          | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-B008 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-B009 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-B010 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-C001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-C002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-C003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-C004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-C005 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-D001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-D002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-D003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-E001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-E002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-E003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-E004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-E005 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-E006 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-E007 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-F001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-F002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-F003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-G001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-G002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-G003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-H001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-H002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-H003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S04-H004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-A001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-A002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-A003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-A004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-B001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-B002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-B003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-B004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-C001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-C002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-D001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-D002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-E001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-E002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-E003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-E004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-E004 |      |      |      |      |      |      |

|          |      |      |      |      |      |      |
|----------|------|------|------|------|------|------|
|          | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-F002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-F003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-G001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-G002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-H001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-H002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-H003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-H004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-H005 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-H006 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-I001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-I002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-I003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-I004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-J001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-J002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-J003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-L001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-L002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S05-L003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| P01-A001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| P01-A002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| P01-B001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| P01-B002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| P01-B003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| P01-C001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| P01-C002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| P01-D001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| P01-D002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| P01-E001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| P01-F001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| P01-G001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| P01-G002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| P01-G003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| P01-H001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| P01-H002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| P01-H003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| P01-H004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| P01-I001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| P01-I002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| P01-J001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| P01-J002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| P01-J003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| P01-L001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S01-F003 |      |      |      |      |      |      |



|          |      |      |      |      |      |      |
|----------|------|------|------|------|------|------|
|          | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S01-A001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N10-A004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S01-E001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-E001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-F008 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-F001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-F002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-F003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-F004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-F005 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-F006 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-F007 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| S02-F009 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_A001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_A002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_A003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_A004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_A005 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_B001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_B002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_B003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_B004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_B005 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_B006 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_B007 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_C001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_C002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_C003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_C004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_C005 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_D001 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_D002 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_D003 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_D004 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_D005 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_D006 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_D007 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_D008 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |
| N09_D009 | 0.08 | 0.08 | 0.09 | 0.09 | 1.39 | 1.39 |

| Pipe Quality Summary |    |    |
|----------------------|----|----|
| Pipe Name            | N2 | O2 |
|                      | %  | %  |

|          | Head | Tail | Head | Tail |
|----------|------|------|------|------|
| N01-A001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N01-B001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N02-A001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N02-B001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N02-C001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N02-D001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N02-E001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N03-A001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N03-B001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N03-C001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N03-D001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N03-E001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N04-A001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N04-A002 | 0.71 | 0.71 | 0.01 | 0.01 |
| N04-A003 | 0.71 | 0.71 | 0.01 | 0.01 |
| N04-B001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N04-C001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N04-C002 | 0.71 | 0.71 | 0.01 | 0.01 |
| N04-C003 | 0.71 | 0.71 | 0.01 | 0.01 |
| N04-D001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N05-A001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N05-B001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N05-B002 | 0.71 | 0.71 | 0.01 | 0.01 |
| N05-B003 | 0.71 | 0.71 | 0.01 | 0.01 |
| N05-B004 | 0.71 | 0.71 | 0.01 | 0.01 |
| N05-C001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N05-D001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N06-A001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N06-A002 | 0.71 | 0.71 | 0.01 | 0.01 |
| N06-B001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N06-B002 | 0.71 | 0.71 | 0.01 | 0.01 |
| N06-C001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N06-D001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N06-E001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N07-A001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N07-B001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N07-B002 | 0.71 | 0.71 | 0.01 | 0.01 |
| N07-C001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N07-C002 | 0.71 | 0.71 | 0.01 | 0.01 |
| N07-D001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N07-E001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N08-A001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N08-B001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N08-B002 | 0.71 | 0.71 | 0.01 | 0.01 |

|          |      |      |      |      |
|----------|------|------|------|------|
| N08-C001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N08-C002 | 0.71 | 0.71 | 0.01 | 0.01 |
| N08-D001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N08-D002 | 0.71 | 0.71 | 0.01 | 0.01 |
| N08-D003 | 0.71 | 0.71 | 0.01 | 0.01 |
| N10-A001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N10-A002 | 0.71 | 0.71 | 0.01 | 0.01 |
| N10-A003 | 0.71 | 0.71 | 0.01 | 0.01 |
| N10-B001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N10-C001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N10-C002 | 0.71 | 0.71 | 0.01 | 0.01 |
| N10-C003 | 0.71 | 0.71 | 0.01 | 0.01 |
| N10-C004 | 0.71 | 0.71 | 0.01 | 0.01 |
| N10-C005 | 0.71 | 0.71 | 0.01 | 0.01 |
| N10-C006 | 0.71 | 0.71 | 0.01 | 0.01 |
| N10-D001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N10-E001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N10-E002 | 0.71 | 0.71 | 0.01 | 0.01 |
| N10-E003 | 0.71 | 0.71 | 0.01 | 0.01 |
| N10-E004 | 0.71 | 0.71 | 0.01 | 0.01 |
| N11-A001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N11-A002 | 0.71 | 0.71 | 0.01 | 0.01 |
| N11-A003 | 0.71 | 0.71 | 0.01 | 0.01 |
| N11-A004 | 0.71 | 0.71 | 0.01 | 0.01 |
| N11-B001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N11-B002 | 0.71 | 0.71 | 0.01 | 0.01 |
| N11-B003 | 0.71 | 0.71 | 0.01 | 0.01 |
| N11-B004 | 0.71 | 0.71 | 0.01 | 0.01 |
| N11-C001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N11-C002 | 0.71 | 0.71 | 0.01 | 0.01 |
| N11-C003 | 0.71 | 0.71 | 0.01 | 0.01 |
| N11-C004 | 0.71 | 0.71 | 0.01 | 0.01 |
| N11-C005 | 0.71 | 0.71 | 0.01 | 0.01 |
| N11-D001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N11-D002 | 0.71 | 0.71 | 0.01 | 0.01 |
| N11-D003 | 0.71 | 0.71 | 0.01 | 0.01 |
| N11-D004 | 0.71 | 0.71 | 0.01 | 0.01 |
| N11-E001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N11-E002 | 0.71 | 0.71 | 0.01 | 0.01 |
| N11-E003 | 0.71 | 0.71 | 0.01 | 0.01 |
| N11-E004 | 0.71 | 0.71 | 0.01 | 0.01 |
| S01-A002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S01-B001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S01-B002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S01-C001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S01-C002 |      |      |      |      |

|          |      |      |      |      |
|----------|------|------|------|------|
|          | 0.71 | 0.71 | 0.01 | 0.01 |
| S01-D001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S01-E002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S01-F001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S01-G001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S01-G002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S01-H001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S01-I001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S01-I002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S01-I003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S01-J001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S01-J002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S01-J003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S01-K001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S01-K002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-A001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-B001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-B002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-B003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-B004 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-B005 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-C001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-C002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-C003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-C004 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-C005 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-D001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-E002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-E003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-E004 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-E005 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-E006 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-G001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-G002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-G003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-G004 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-G005 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-H001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-H002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-H003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-H004 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-I001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-I002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-J001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-J002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-A004 |      |      |      |      |

|          |      |      |      |      |
|----------|------|------|------|------|
|          | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-A002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-A003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-B001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-C001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-C002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-D001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-E001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-F001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-F002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-F003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-F004 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-G001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-G002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-H001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-H002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-H003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-H004 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-H005 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-H006 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-I001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-I002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-I003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-J001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-J002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-L001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-L002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-L003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-L004 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-L005 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-L006 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-M001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-M002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S03-M003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-A001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-A002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-A003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-A004 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-A005 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-B001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-B002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-B003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-B004 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-B005 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-B006 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-B007 |      |      |      |      |

|          |      |      |      |      |
|----------|------|------|------|------|
|          | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-B008 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-B009 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-B010 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-C001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-C002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-C003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-C004 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-C005 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-D001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-D002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-D003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-E001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-E002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-E003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-E004 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-E005 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-E006 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-E007 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-F001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-F002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-F003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-G001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-G002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-G003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-H001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-H002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-H003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S04-H004 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-A001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-A002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-A003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-A004 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-B001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-B002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-B003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-B004 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-C001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-C002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-D001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-D002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-E001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-E002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-E003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-E004 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-F001 |      |      |      |      |

|          |      |      |      |      |
|----------|------|------|------|------|
|          | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-F002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-F003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-G001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-G002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-H001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-H002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-H003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-H004 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-H005 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-H006 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-I001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-I002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-I003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-I004 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-J001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-J002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-J003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-L001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-L002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S05-L003 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-A001 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-A002 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-B001 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-B002 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-B003 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-C001 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-C002 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-D001 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-D002 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-E001 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-F001 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-G001 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-G002 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-G003 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-H001 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-H002 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-H003 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-H004 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-I001 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-I002 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-J001 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-J002 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-J003 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-L001 | 0.71 | 0.71 | 0.01 | 0.01 |
| P01-F002 |      |      |      |      |

|          |      |      |      |      |
|----------|------|------|------|------|
|          | 0.71 | 0.71 | 0.01 | 0.01 |
| S01-A001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N10-A004 | 0.71 | 0.71 | 0.01 | 0.01 |
| S01-E001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-E001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-F008 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-F001 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-F002 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-F003 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-F004 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-F005 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-F006 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-F007 | 0.71 | 0.71 | 0.01 | 0.01 |
| S02-F009 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_A001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_A002 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_A003 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_A004 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_A005 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_B001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_B002 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_B003 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_B004 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_B005 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_B006 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_B007 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_C001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_C002 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_C003 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_C004 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_C005 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_D001 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_D002 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_D003 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_D004 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_D005 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_D006 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_D007 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_D008 | 0.71 | 0.71 | 0.01 | 0.01 |
| N09_D009 | 0.71 | 0.71 | 0.01 | 0.01 |

**Pipe Wall Temperature Summary Report : 0.000  
hours**



| Pipe Wall Temperature Summary |      |            |                 |                 |              |
|-------------------------------|------|------------|-----------------|-----------------|--------------|
| Pipe Name                     |      | Fluid Temp | Inner Wall Temp | Outer Wall Temp | Ambient Temp |
|                               |      | Deg C      | Deg C           | Deg C           | Deg C        |
| N01-A001                      | Head | 51.70      | 51.70           | 51.60           | 28.00        |
|                               | Tail | 45.34      | 45.34           | 45.27           | 28.00        |
| N01-B001                      | Head | 45.34      | 45.34           | 45.27           | 28.00        |
|                               | Tail | 41.73      | 41.73           | 41.67           | 28.00        |
| N02-A001                      | Head | 48.00      | 48.00           | 47.92           | 28.00        |
|                               | Tail | 45.63      | 45.63           | 45.56           | 28.00        |
| N02-B001                      | Head | 45.63      | 45.63           | 45.56           | 28.00        |
|                               | Tail | 41.50      | 41.50           | 41.45           | 28.00        |
| N02-C001                      | Head | 41.50      | 41.50           | 41.45           | 28.00        |
|                               | Tail | 37.88      | 37.88           | 37.85           | 28.00        |
| N02-D001                      | Head | 37.88      | 37.88           | 37.85           | 28.00        |
|                               | Tail | 35.00      | 35.00           | 34.97           | 28.00        |
| N02-E001                      | Head | 35.00      | 35.00           | 34.97           | 28.00        |
|                               | Tail | 32.53      | 32.53           | 32.51           | 28.00        |
| N03-A001                      | Head | 42.00      | 42.00           | 41.95           | 28.00        |
|                               | Tail | 38.80      | 38.80           | 38.75           | 28.00        |
| N03-B001                      | Head | 38.80      | 38.80           | 38.75           | 28.00        |
|                               | Tail | 35.82      | 35.82           | 35.79           | 28.00        |
| N03-C001                      | Head | 35.82      | 35.82           | 35.79           | 28.00        |
|                               | Tail | 33.47      | 33.47           | 33.45           | 28.00        |
| N03-D001                      | Head | 33.47      | 33.47           | 33.45           | 28.00        |
|                               | Tail | 31.93      | 31.93           | 31.92           | 28.00        |
| N03-E001                      | Head | 31.93      | 31.93           | 31.92           | 28.00        |
|                               | Tail | 30.71      | 30.71           | 30.70           | 28.00        |
| N04-A001                      | Head | 40.25      | 40.25           | 40.20           | 28.00        |
|                               | Tail | 38.45      | 38.45           | 38.41           | 28.00        |
| N04-A002                      | Head | 38.45      | 38.45           | 38.41           | 28.00        |
|                               | Tail | 38.01      | 38.01           | 37.97           | 28.00        |
| N04-A003                      | Head | 38.01      | 38.01           | 37.97           | 28.00        |
|                               | Tail | 37.58      | 37.58           | 37.54           | 28.00        |
| N04-B001                      | Head | 37.58      | 37.58           | 37.54           | 28.00        |
|                               | Tail | 34.56      | 34.56           | 34.54           | 28.00        |
| N04-C001                      | Head | 34.56      | 34.56           | 34.54           | 28.00        |
|                               | Tail | 34.35      | 34.35           | 34.32           | 28.00        |
| N04-C002                      | Head | 34.35      | 34.35           | 34.32           | 28.00        |
|                               | Tail | 32.99      | 32.99           | 32.97           | 28.00        |
| N04-C003                      | Head | 32.99      | 32.99           | 32.97           | 28.00        |
|                               | Tail | 32.48      | 32.48           | 32.46           | 28.00        |
| N04-D001                      | Head | 32.48      | 32.48           | 32.46           | 28.00        |
|                               |      |            |                 |                 |              |

|          |      |       |       |       |       |
|----------|------|-------|-------|-------|-------|
|          | Tail | 29.62 | 29.62 | 29.61 | 28.00 |
| N05-A001 | Head | 40.59 | 40.59 | 40.54 | 28.00 |
|          | Tail | 36.19 | 36.19 | 36.16 | 28.00 |
| N05-B001 | Head | 36.19 | 36.19 | 36.16 | 28.00 |
|          | Tail | 35.37 | 35.37 | 35.34 | 28.00 |
| N05-B002 | Head | 35.37 | 35.37 | 35.34 | 28.00 |
|          | Tail | 34.18 | 34.18 | 34.15 | 28.00 |
| N05-B003 | Head | 34.18 | 34.18 | 34.15 | 28.00 |
|          | Tail | 34.39 | 34.39 | 34.36 | 28.00 |
| N05-B004 | Head | 34.39 | 34.39 | 34.36 | 28.00 |
|          | Tail | 33.22 | 33.22 | 33.20 | 28.00 |
| N05-C001 | Head | 33.22 | 33.22 | 33.20 | 28.00 |
|          | Tail | 31.52 | 31.52 | 31.50 | 28.00 |
| N05-D001 | Head | 31.52 | 31.52 | 31.50 | 28.00 |
|          | Tail | 30.53 | 30.53 | 30.52 | 28.00 |
| N06-A001 | Head | 39.48 | 39.48 | 39.43 | 28.00 |
|          | Tail | 39.64 | 39.64 | 39.59 | 28.00 |
| N06-A002 | Head | 39.64 | 39.64 | 39.59 | 28.00 |
|          | Tail | 35.78 | 35.78 | 35.74 | 28.00 |
| N06-B001 | Head | 35.78 | 35.78 | 35.74 | 28.00 |
|          | Tail | 35.39 | 35.39 | 35.37 | 28.00 |
| N06-B002 | Head | 35.39 | 35.39 | 35.37 | 28.00 |
|          | Tail | 33.39 | 33.39 | 33.36 | 28.00 |
| N06-C001 | Head | 33.39 | 33.39 | 33.36 | 28.00 |
|          | Tail | 32.09 | 32.09 | 32.08 | 28.00 |
| N06-D001 | Head | 32.09 | 32.09 | 32.08 | 28.00 |
|          | Tail | 30.64 | 30.64 | 30.63 | 28.00 |
| N06-E001 | Head | 30.64 | 30.64 | 30.63 | 28.00 |
|          | Tail | 29.83 | 29.83 | 29.83 | 28.00 |
| N07-A001 | Head | 39.04 | 39.04 | 39.00 | 28.00 |
|          | Tail | 36.03 | 36.03 | 36.00 | 28.00 |
| N07-B001 | Head | 36.03 | 36.03 | 36.00 | 28.00 |
|          | Tail | 34.54 | 34.54 | 34.51 | 28.00 |
| N07-B002 | Head | 34.54 | 34.54 | 34.50 | 26.00 |
|          | Tail | 33.51 | 33.51 | 33.48 | 26.00 |
| N07-C001 | Head | 33.51 | 33.51 | 33.48 | 26.00 |
|          | Tail | 32.86 | 32.86 | 32.84 | 26.00 |
| N07-C002 | Head | 32.86 | 32.86 | 32.84 | 26.00 |
|          | Tail | 30.92 | 30.92 | 30.90 | 26.00 |
| N07-D001 | Head | 30.92 | 30.92 | 30.90 | 26.00 |
|          | Tail | 29.13 | 29.13 | 29.12 | 26.00 |
| N07-E001 | Head | 29.13 | 29.13 | 29.12 | 26.00 |
|          | Tail | 27.96 | 27.96 | 27.95 | 26.00 |
| N08-A001 | Head | 37.26 | 37.26 | 37.21 | 26.00 |
|          | Tail | 33.98 | 33.98 | 33.95 | 26.00 |
|          |      |       |       |       |       |

|          |      |       |       |       |       |
|----------|------|-------|-------|-------|-------|
| N08-B001 | Head | 33.98 | 33.98 | 33.95 | 26.00 |
|          | Tail | 31.96 | 31.96 | 31.93 | 26.00 |
| N08-B002 | Head | 31.96 | 31.96 | 31.93 | 26.00 |
|          | Tail | 30.90 | 30.90 | 30.88 | 26.00 |
| N08-C001 | Head | 30.90 | 30.90 | 30.88 | 26.00 |
|          | Tail | 30.29 | 30.29 | 30.27 | 26.00 |
| N08-C002 | Head | 30.29 | 30.29 | 30.27 | 26.00 |
|          | Tail | 29.28 | 29.28 | 29.27 | 26.00 |
| N08-D001 | Head | 29.28 | 29.28 | 29.27 | 26.00 |
|          | Tail | 29.13 | 29.13 | 29.12 | 26.00 |
| N08-D002 | Head | 29.13 | 29.13 | 29.12 | 26.00 |
|          | Tail | 28.88 | 28.88 | 28.87 | 26.00 |
| N08-D003 | Head | 28.88 | 28.88 | 28.87 | 26.00 |
|          | Tail | 27.91 | 27.91 | 27.90 | 26.00 |
| N10-A001 | Head | 40.92 | 40.92 | 40.86 | 26.00 |
|          | Tail | 40.61 | 40.61 | 40.55 | 26.00 |
| N10-A002 | Head | 40.61 | 40.61 | 40.55 | 26.00 |
|          | Tail | 39.20 | 39.20 | 39.14 | 26.00 |
| N10-A003 | Head | 39.20 | 39.20 | 39.14 | 26.00 |
|          | Tail | 37.76 | 37.76 | 37.70 | 26.00 |
| N10-B001 | Head | 36.87 | 36.87 | 36.83 | 26.00 |
|          | Tail | 34.08 | 34.08 | 34.04 | 26.00 |
| N10-C001 | Head | 34.08 | 34.08 | 34.04 | 26.00 |
|          | Tail | 33.82 | 33.82 | 33.79 | 26.00 |
| N10-C002 | Head | 33.82 | 33.82 | 33.79 | 26.00 |
|          | Tail | 32.49 | 32.49 | 32.46 | 26.00 |
| N10-C003 | Head | 32.49 | 32.49 | 32.46 | 26.00 |
|          | Tail | 31.91 | 31.91 | 31.89 | 26.00 |
| N10-C004 | Head | 31.91 | 31.91 | 31.89 | 26.00 |
|          | Tail | 31.32 | 31.32 | 31.30 | 26.00 |
| N10-C005 | Head | 31.32 | 31.32 | 31.30 | 26.00 |
|          | Tail | 31.68 | 31.68 | 31.66 | 26.00 |
| N10-C006 | Head | 31.68 | 31.68 | 31.66 | 26.00 |
|          | Tail | 31.45 | 31.45 | 31.43 | 26.00 |
| N10-D001 | Head | 31.45 | 31.45 | 31.43 | 26.00 |
|          | Tail | 28.36 | 28.36 | 28.35 | 26.00 |
| N10-E001 | Head | 28.36 | 28.36 | 28.36 | 28.00 |
|          | Tail | 28.83 | 28.83 | 28.82 | 28.00 |
| N10-E002 | Head | 28.83 | 28.83 | 28.82 | 28.00 |
|          | Tail | 28.15 | 28.15 | 28.15 | 28.00 |
| N10-E003 | Head | 28.15 | 28.15 | 28.15 | 28.00 |
|          | Tail | 29.02 | 29.02 | 29.01 | 28.00 |
| N10-E004 | Head | 29.02 | 29.02 | 29.01 | 28.00 |
|          | Tail | 27.87 | 27.87 | 27.87 | 28.00 |
| N11-A001 | Head | 37.78 | 37.78 | 37.74 | 28.00 |
|          |      |       |       |       |       |

|          |      |       |       |       |       |
|----------|------|-------|-------|-------|-------|
|          | Tail | 36.50 | 36.50 | 36.46 | 28.00 |
| N11-A002 | Head | 36.50 | 36.50 | 36.46 | 28.00 |
|          | Tail | 36.41 | 36.41 | 36.37 | 28.00 |
| N11-A003 | Head | 36.41 | 36.41 | 36.37 | 28.00 |
|          | Tail | 36.64 | 36.64 | 36.60 | 28.00 |
| N11-A004 | Head | 36.64 | 36.64 | 36.60 | 28.00 |
|          | Tail | 34.74 | 34.74 | 34.71 | 28.00 |
| N11-B001 | Head | 34.74 | 34.74 | 34.71 | 28.00 |
|          | Tail | 34.13 | 34.13 | 34.10 | 28.00 |
| N11-B002 | Head | 34.13 | 34.13 | 34.10 | 28.00 |
|          | Tail | 35.16 | 35.16 | 35.13 | 28.00 |
| N11-B003 | Head | 35.16 | 35.16 | 35.13 | 28.00 |
|          | Tail | 34.29 | 34.29 | 34.26 | 28.00 |
| N11-B004 | Head | 34.29 | 34.29 | 34.26 | 28.00 |
|          | Tail | 33.75 | 33.75 | 33.72 | 28.00 |
| N11-C001 | Head | 33.75 | 33.75 | 33.71 | 26.00 |
|          | Tail | 33.85 | 33.85 | 33.82 | 26.00 |
| N11-C002 | Head | 33.85 | 33.85 | 33.82 | 26.00 |
|          | Tail | 33.66 | 33.66 | 33.63 | 26.00 |
| N11-C003 | Head | 33.66 | 33.66 | 33.63 | 26.00 |
|          | Tail | 32.91 | 32.91 | 32.88 | 26.00 |
| N11-C004 | Head | 32.91 | 32.91 | 32.88 | 26.00 |
|          | Tail | 31.03 | 31.03 | 31.01 | 26.00 |
| N11-C005 | Head | 31.03 | 31.03 | 31.01 | 26.00 |
|          | Tail | 31.29 | 31.29 | 31.26 | 26.00 |
| N11-D001 | Head | 31.29 | 31.29 | 31.26 | 26.00 |
|          | Tail | 31.17 | 31.17 | 31.15 | 26.00 |
| N11-D002 | Head | 31.17 | 31.17 | 31.14 | 26.00 |
|          | Tail | 31.36 | 31.36 | 31.33 | 26.00 |
| N11-D003 | Head | 31.36 | 31.36 | 31.33 | 26.00 |
|          | Tail | 30.36 | 30.36 | 30.33 | 26.00 |
| N11-D004 | Head | 30.36 | 30.36 | 30.33 | 26.00 |
|          | Tail | 29.89 | 29.89 | 29.87 | 26.00 |
| N11-E001 | Head | 29.89 | 29.89 | 29.87 | 26.00 |
|          | Tail | 29.91 | 29.91 | 29.89 | 26.00 |
| N11-E002 | Head | 29.91 | 29.91 | 29.89 | 26.00 |
|          | Tail | 29.93 | 29.93 | 29.91 | 26.00 |
| N11-E003 | Head | 29.93 | 29.93 | 29.91 | 26.00 |
|          | Tail | 29.10 | 29.10 | 29.08 | 26.00 |
| N11-E004 | Head | 29.10 | 29.10 | 29.08 | 26.00 |
|          | Tail | 28.69 | 28.69 | 28.68 | 26.00 |
| S01-A002 | Head | 28.28 | 28.28 | 28.27 | 26.00 |
|          | Tail | 27.75 | 27.75 | 27.74 | 26.00 |
| S01-B001 | Head | 27.75 | 27.75 | 27.74 | 26.00 |
|          | Tail | 27.47 | 27.47 | 27.46 | 26.00 |
|          |      |       |       |       |       |

|          |      |       |       |       |       |
|----------|------|-------|-------|-------|-------|
| S01-B002 | Head | 27.47 | 27.47 | 27.46 | 26.00 |
|          | Tail | 27.05 | 27.05 | 27.04 | 26.00 |
| S01-C001 | Head | 27.05 | 27.05 | 27.04 | 26.00 |
|          | Tail | 26.85 | 26.85 | 26.84 | 26.00 |
| S01-C002 | Head | 26.85 | 26.85 | 26.84 | 26.00 |
|          | Tail | 27.02 | 27.02 | 27.01 | 26.00 |
| S01-D001 | Head | 27.02 | 27.02 | 27.01 | 26.00 |
|          | Tail | 26.23 | 26.23 | 26.23 | 26.00 |
| S01-E002 | Head | 25.66 | 25.66 | 25.66 | 26.00 |
|          | Tail | 25.99 | 25.99 | 25.99 | 26.00 |
| S01-F001 | Head | 25.99 | 25.99 | 25.99 | 26.00 |
|          | Tail | 25.76 | 25.76 | 25.76 | 26.00 |
| S01-G001 | Head | 24.71 | 24.71 | 24.72 | 26.00 |
|          | Tail | 25.15 | 25.15 | 25.16 | 26.00 |
| S01-G002 | Head | 25.15 | 25.15 | 25.16 | 26.00 |
|          | Tail | 25.00 | 25.00 | 25.01 | 26.00 |
| S01-H001 | Head | 25.00 | 25.00 | 25.01 | 26.00 |
|          | Tail | 25.59 | 25.59 | 25.59 | 26.00 |
| S01-I001 | Head | 25.59 | 25.59 | 25.59 | 26.00 |
|          | Tail | 25.64 | 25.64 | 25.65 | 26.00 |
| S01-I002 | Head | 25.64 | 25.64 | 25.65 | 26.00 |
|          | Tail | 24.99 | 24.99 | 24.99 | 26.00 |
| S01-I003 | Head | 24.99 | 24.99 | 24.99 | 26.00 |
|          | Tail | 25.58 | 25.58 | 25.58 | 26.00 |
| S01-J001 | Head | 25.58 | 25.58 | 25.58 | 26.00 |
|          | Tail | 25.68 | 25.68 | 25.68 | 26.00 |
| S01-J002 | Head | 25.68 | 25.68 | 25.68 | 26.00 |
|          | Tail | 25.08 | 25.08 | 25.09 | 26.00 |
| S01-J003 | Head | 25.08 | 25.08 | 25.09 | 26.00 |
|          | Tail | 25.55 | 25.55 | 25.55 | 26.00 |
| S01-K001 | Head | 25.55 | 25.55 | 25.55 | 26.00 |
|          | Tail | 26.12 | 26.12 | 26.12 | 26.00 |
| S01-K002 | Head | 26.12 | 26.12 | 26.12 | 26.00 |
|          | Tail | 25.60 | 25.60 | 25.60 | 26.00 |
| S02-A001 | Head | 25.58 | 25.58 | 25.57 | 24.00 |
|          | Tail | 23.90 | 23.90 | 23.90 | 24.00 |
| S02-B001 | Head | 23.90 | 23.90 | 23.90 | 24.00 |
|          | Tail | 24.30 | 24.30 | 24.30 | 24.00 |
| S02-B002 | Head | 24.30 | 24.30 | 24.30 | 24.00 |
|          | Tail | 23.53 | 23.53 | 23.54 | 24.00 |
| S02-B003 | Head | 23.53 | 23.53 | 23.54 | 24.00 |
|          | Tail | 24.40 | 24.40 | 24.40 | 24.00 |
| S02-B004 | Head | 24.40 | 24.40 | 24.40 | 24.00 |
|          | Tail | 23.31 | 23.31 | 23.32 | 24.00 |
| S02-B005 | Head | 23.31 | 23.31 | 23.32 | 24.00 |
|          |      |       |       |       |       |

|          |      |       |       |       |       |
|----------|------|-------|-------|-------|-------|
|          | Tail | 23.60 | 23.60 | 23.60 | 24.00 |
| S02-C001 | Head | 23.60 | 23.60 | 23.60 | 24.00 |
|          | Tail | 24.19 | 24.19 | 24.19 | 24.00 |
| S02-C002 | Head | 24.19 | 24.19 | 24.19 | 24.00 |
|          | Tail | 23.14 | 23.14 | 23.15 | 24.00 |
| S02-C003 | Head | 23.14 | 23.14 | 23.15 | 24.00 |
|          | Tail | 23.58 | 23.58 | 23.58 | 24.00 |
| S02-C004 | Head | 23.58 | 23.58 | 23.58 | 24.00 |
|          | Tail | 22.83 | 22.83 | 22.84 | 24.00 |
| S02-C005 | Head | 22.83 | 22.83 | 22.84 | 24.00 |
|          | Tail | 23.34 | 23.34 | 23.35 | 24.00 |
| S02-D001 | Head | 23.34 | 23.34 | 23.35 | 24.00 |
|          | Tail | 23.98 | 23.98 | 23.98 | 24.00 |
| S02-E002 | Head | 24.97 | 24.97 | 24.96 | 24.00 |
|          | Tail | 23.82 | 23.82 | 23.82 | 24.00 |
| S02-E003 | Head | 23.82 | 23.82 | 23.82 | 24.00 |
|          | Tail | 24.29 | 24.29 | 24.29 | 24.00 |
| S02-E004 | Head | 24.29 | 24.29 | 24.29 | 24.00 |
|          | Tail | 22.97 | 22.97 | 22.98 | 24.00 |
| S02-E005 | Head | 22.97 | 22.97 | 22.98 | 24.00 |
|          | Tail | 24.24 | 24.24 | 24.24 | 24.00 |
| S02-E006 | Head | 24.24 | 24.24 | 24.24 | 24.00 |
|          | Tail | 23.63 | 23.63 | 23.64 | 24.00 |
| S02-G001 | Head | 22.03 | 22.03 | 22.05 | 24.00 |
|          | Tail | 23.72 | 23.72 | 23.72 | 24.00 |
| S02-G002 | Head | 23.72 | 23.72 | 23.72 | 24.00 |
|          | Tail | 22.18 | 22.18 | 22.19 | 24.00 |
| S02-G003 | Head | 22.18 | 22.18 | 22.19 | 24.00 |
|          | Tail | 23.20 | 23.20 | 23.20 | 24.00 |
| S02-G004 | Head | 23.20 | 23.20 | 23.20 | 24.00 |
|          | Tail | 22.29 | 22.29 | 22.31 | 24.00 |
| S02-G005 | Head | 22.29 | 22.29 | 22.31 | 24.00 |
|          | Tail | 21.85 | 21.85 | 21.87 | 24.00 |
| S02-H001 | Head | 21.85 | 21.85 | 21.87 | 24.00 |
|          | Tail | 23.38 | 23.38 | 23.38 | 24.00 |
| S02-H002 | Head | 23.38 | 23.38 | 23.38 | 24.00 |
|          | Tail | 22.05 | 22.05 | 22.07 | 24.00 |
| S02-H003 | Head | 22.05 | 22.05 | 22.07 | 24.00 |
|          | Tail | 23.19 | 23.19 | 23.20 | 24.00 |
| S02-H004 | Head | 23.19 | 23.19 | 23.20 | 24.00 |
|          | Tail | 22.66 | 22.66 | 22.67 | 24.00 |
| S02-I001 | Head | 22.66 | 22.66 | 22.67 | 24.00 |
|          | Tail | 22.35 | 22.35 | 22.36 | 24.00 |
| S02-I002 | Head | 22.35 | 22.35 | 22.36 | 24.00 |
|          | Tail | 22.93 | 22.93 | 22.94 | 24.00 |
|          |      |       |       |       |       |

|          |      |       |       |       |       |
|----------|------|-------|-------|-------|-------|
| S02-J001 | Head | 22.93 | 22.93 | 22.94 | 24.00 |
|          | Tail | 23.48 | 23.48 | 23.48 | 24.00 |
| S02-J002 | Head | 23.48 | 23.48 | 23.48 | 24.00 |
|          | Tail | 23.53 | 23.53 | 23.54 | 24.00 |
| S03-A001 | Head | 21.00 | 21.00 | 21.00 | 21.00 |
|          | Tail | 21.00 | 21.00 | 21.00 | 21.00 |
| S03-A002 | Head | 21.00 | 21.00 | 21.00 | 21.00 |
|          | Tail | 21.00 | 21.00 | 21.00 | 21.00 |
| S03-A003 | Head | 21.00 | 21.00 | 21.00 | 21.00 |
|          | Tail | 21.00 | 21.00 | 21.00 | 21.00 |
| S03-B001 | Head | 21.00 | 21.00 | 21.00 | 21.00 |
|          | Tail | 21.00 | 21.00 | 21.00 | 21.00 |
| S03-C001 | Head | 21.00 | 21.00 | 21.00 | 21.00 |
|          | Tail | 21.00 | 21.00 | 21.00 | 21.00 |
| S03-C002 | Head | 21.00 | 21.00 | 21.00 | 21.00 |
|          | Tail | 21.00 | 21.00 | 21.00 | 21.00 |
| S03-D001 | Head | 21.00 | 21.00 | 21.00 | 21.00 |
|          | Tail | 21.00 | 21.00 | 21.00 | 21.00 |
| S03-E001 | Head | 20.00 | 20.00 | 20.01 | 21.00 |
|          | Tail | 20.24 | 20.24 | 20.24 | 21.00 |
| S03-F001 | Head | 20.24 | 20.24 | 20.24 | 21.00 |
|          | Tail | 19.96 | 19.96 | 19.97 | 21.00 |
| S03-F002 | Head | 19.96 | 19.96 | 19.97 | 21.00 |
|          | Tail | 20.41 | 20.41 | 20.41 | 21.00 |
| S03-F003 | Head | 20.41 | 20.41 | 20.41 | 21.00 |
|          | Tail | 20.21 | 20.21 | 20.21 | 21.00 |
| S03-F004 | Head | 20.21 | 20.21 | 20.21 | 21.00 |
|          | Tail | 20.36 | 20.36 | 20.37 | 21.00 |
| S03-G001 | Head | 20.36 | 20.36 | 20.37 | 21.00 |
|          | Tail | 19.19 | 19.19 | 19.20 | 21.00 |
| S03-G002 | Head | 19.19 | 19.19 | 19.20 | 21.00 |
|          | Tail | 20.06 | 20.06 | 20.06 | 21.00 |
| S03-H001 | Head | 20.06 | 20.06 | 20.06 | 21.00 |
|          | Tail | 19.55 | 19.55 | 19.56 | 21.00 |
| S03-H002 | Head | 19.55 | 19.55 | 19.56 | 21.00 |
|          | Tail | 20.67 | 20.67 | 20.67 | 21.00 |
| S03-H003 | Head | 20.67 | 20.67 | 20.67 | 21.00 |
|          | Tail | 18.83 | 18.83 | 18.85 | 21.00 |
| S03-H004 | Head | 18.83 | 18.83 | 18.85 | 21.00 |
|          | Tail | 20.40 | 20.40 | 20.40 | 21.00 |
| S03-H005 | Head | 20.40 | 20.40 | 20.40 | 21.00 |
|          | Tail | 19.33 | 19.33 | 19.34 | 21.00 |
| S03-H006 | Head | 19.33 | 19.33 | 19.34 | 21.00 |
|          | Tail | 21.32 | 21.32 | 21.32 | 21.00 |
| S03-I001 | Head | 21.32 | 21.32 | 21.32 | 21.00 |
|          |      |       |       |       |       |

|          |      |       |       |       |       |
|----------|------|-------|-------|-------|-------|
|          | Tail | 21.33 | 21.33 | 21.33 | 21.00 |
| S03-I002 | Head | 21.33 | 21.33 | 21.33 | 21.00 |
|          | Tail | 20.15 | 20.15 | 20.16 | 21.00 |
| S03-I003 | Head | 20.15 | 20.15 | 20.16 | 21.00 |
|          | Tail | 20.98 | 20.98 | 20.98 | 21.00 |
| S03-J001 | Head | 20.98 | 20.98 | 20.98 | 21.00 |
|          | Tail | 21.06 | 21.06 | 21.06 | 21.00 |
| S03-J002 | Head | 21.06 | 21.06 | 21.06 | 21.00 |
|          | Tail | 20.82 | 20.82 | 20.82 | 21.00 |
| S03-L001 | Head | 20.82 | 20.82 | 20.82 | 21.00 |
|          | Tail | 18.90 | 18.90 | 18.92 | 21.00 |
| S03-L002 | Head | 18.90 | 18.90 | 18.92 | 21.00 |
|          | Tail | 21.14 | 21.14 | 21.14 | 21.00 |
| S03-L003 | Head | 21.14 | 21.14 | 21.14 | 21.00 |
|          | Tail | 19.64 | 19.64 | 19.65 | 21.00 |
| S03-L004 | Head | 19.64 | 19.64 | 19.65 | 21.00 |
|          | Tail | 21.12 | 21.12 | 21.12 | 21.00 |
| S03-L005 | Head | 21.12 | 21.12 | 21.12 | 21.00 |
|          | Tail | 20.56 | 20.56 | 20.56 | 21.00 |
| S03-L006 | Head | 20.56 | 20.56 | 20.56 | 21.00 |
|          | Tail | 21.26 | 21.26 | 21.26 | 21.00 |
| S03-M001 | Head | 21.26 | 21.26 | 21.26 | 21.00 |
|          | Tail | 20.34 | 20.34 | 20.34 | 21.00 |
| S03-M002 | Head | 20.34 | 20.34 | 20.34 | 21.00 |
|          | Tail | 21.21 | 21.21 | 21.21 | 21.00 |
| S03-M003 | Head | 21.21 | 21.21 | 21.21 | 21.00 |
|          | Tail | 21.10 | 21.10 | 21.09 | 21.00 |
| S04-A001 | Head | 38.22 | 38.22 | 38.07 | 21.00 |
|          | Tail | 29.91 | 29.91 | 29.84 | 21.00 |
| S04-A002 | Head | 29.91 | 29.91 | 29.84 | 21.00 |
|          | Tail | 27.90 | 27.90 | 27.85 | 21.00 |
| S04-A003 | Head | 27.90 | 27.90 | 27.85 | 21.00 |
|          | Tail | 26.69 | 26.69 | 26.64 | 21.00 |
| S04-A004 | Head | 26.69 | 26.69 | 26.64 | 21.00 |
|          | Tail | 23.21 | 23.21 | 23.19 | 21.00 |
| S04-A005 | Head | 23.21 | 23.21 | 23.19 | 21.00 |
|          | Tail | 24.53 | 24.53 | 24.50 | 21.00 |
| S04-B001 | Head | 24.53 | 24.53 | 24.50 | 21.00 |
|          | Tail | 21.82 | 21.82 | 21.81 | 21.00 |
| S04-B002 | Head | 21.82 | 21.82 | 21.81 | 21.00 |
|          | Tail | 22.03 | 22.03 | 22.02 | 21.00 |
| S04-B003 | Head | 22.03 | 22.03 | 22.02 | 21.00 |
|          | Tail | 20.63 | 20.63 | 20.64 | 21.00 |
| S04-B004 | Head | 20.63 | 20.63 | 20.64 | 21.00 |
|          | Tail | 22.53 | 22.53 | 22.52 | 21.00 |
|          |      |       |       |       |       |



|          |      |       |       |       |       |
|----------|------|-------|-------|-------|-------|
| S04-B005 | Head | 22.53 | 22.53 | 22.52 | 21.00 |
|          | Tail | 20.42 | 20.42 | 20.43 | 21.00 |
| S04-B006 | Head | 20.42 | 20.42 | 20.43 | 21.00 |
|          | Tail | 21.56 | 21.56 | 21.55 | 21.00 |
| S04-B007 | Head | 21.56 | 21.56 | 21.55 | 21.00 |
|          | Tail | 20.25 | 20.25 | 20.25 | 21.00 |
| S04-B008 | Head | 20.25 | 20.25 | 20.25 | 21.00 |
|          | Tail | 21.24 | 21.24 | 21.24 | 21.00 |
| S04-B009 | Head | 21.24 | 21.24 | 21.24 | 21.00 |
|          | Tail | 19.66 | 19.66 | 19.67 | 21.00 |
| S04-B010 | Head | 19.66 | 19.66 | 19.67 | 21.00 |
|          | Tail | 20.14 | 20.14 | 20.15 | 21.00 |
| S04-C001 | Head | 20.14 | 20.14 | 20.15 | 21.00 |
|          | Tail | 21.16 | 21.16 | 21.16 | 21.00 |
| S04-C002 | Head | 21.16 | 21.16 | 21.16 | 21.00 |
|          | Tail | 20.31 | 20.31 | 20.31 | 21.00 |
| S04-C003 | Head | 20.31 | 20.31 | 20.31 | 21.00 |
|          | Tail | 21.46 | 21.46 | 21.46 | 21.00 |
| S04-C004 | Head | 21.46 | 21.46 | 21.46 | 21.00 |
|          | Tail | 20.43 | 20.43 | 20.44 | 21.00 |
| S04-C005 | Head | 20.43 | 20.43 | 20.44 | 21.00 |
|          | Tail | 21.79 | 21.79 | 21.78 | 21.00 |
| S04-D001 | Head | 21.79 | 21.79 | 21.78 | 21.00 |
|          | Tail | 21.77 | 21.77 | 21.76 | 21.00 |
| S04-D002 | Head | 21.77 | 21.77 | 21.76 | 21.00 |
|          | Tail | 20.67 | 20.67 | 20.67 | 21.00 |
| S04-D003 | Head | 20.67 | 20.67 | 20.67 | 21.00 |
|          | Tail | 21.53 | 21.53 | 21.52 | 21.00 |
| S04-E001 | Head | 21.53 | 21.53 | 21.52 | 21.00 |
|          | Tail | 20.48 | 20.48 | 20.49 | 21.00 |
| S04-E002 | Head | 20.48 | 20.48 | 20.49 | 21.00 |
|          | Tail | 21.57 | 21.57 | 21.56 | 21.00 |
| S04-E003 | Head | 21.57 | 21.57 | 21.56 | 21.00 |
|          | Tail | 20.53 | 20.53 | 20.53 | 21.00 |
| S04-E004 | Head | 20.53 | 20.53 | 20.53 | 21.00 |
|          | Tail | 21.52 | 21.52 | 21.51 | 21.00 |
| S04-E005 | Head | 21.52 | 21.52 | 21.51 | 21.00 |
|          | Tail | 20.24 | 20.24 | 20.24 | 21.00 |
| S04-E006 | Head | 20.24 | 20.24 | 20.24 | 21.00 |
|          | Tail | 21.23 | 21.23 | 21.23 | 21.00 |
| S04-E007 | Head | 21.23 | 21.23 | 21.23 | 21.00 |
|          | Tail | 21.18 | 21.18 | 21.18 | 21.00 |
| S04-F001 | Head | 21.18 | 21.18 | 21.18 | 21.00 |
|          | Tail | 19.12 | 19.12 | 19.14 | 21.00 |
| S04-F002 | Head | 19.12 | 19.12 | 19.14 | 21.00 |
|          |      |       |       |       |       |

|          |      |       |       |       |       |
|----------|------|-------|-------|-------|-------|
|          | Tail | 19.98 | 19.98 | 19.99 | 21.00 |
| S04-F003 | Head | 19.98 | 19.98 | 19.99 | 21.00 |
|          | Tail | 19.23 | 19.23 | 19.24 | 21.00 |
| S04-G001 | Head | 19.23 | 19.23 | 19.24 | 21.00 |
|          | Tail | 20.59 | 20.59 | 20.59 | 21.00 |
| S04-G002 | Head | 20.59 | 20.59 | 20.59 | 21.00 |
|          | Tail | 19.39 | 19.39 | 19.40 | 21.00 |
| S04-G003 | Head | 19.39 | 19.39 | 19.40 | 21.00 |
|          | Tail | 21.65 | 21.65 | 21.64 | 21.00 |
| S04-H001 | Head | 21.65 | 21.65 | 21.64 | 21.00 |
|          | Tail | 21.01 | 21.01 | 21.01 | 21.00 |
| S04-H002 | Head | 21.01 | 21.01 | 21.01 | 21.00 |
|          | Tail | 20.07 | 20.07 | 20.08 | 21.00 |
| S04-H003 | Head | 20.07 | 20.07 | 20.08 | 21.00 |
|          | Tail | 20.84 | 20.84 | 20.84 | 21.00 |
| S04-H004 | Head | 20.84 | 20.84 | 20.84 | 21.00 |
|          | Tail | 20.35 | 20.35 | 20.36 | 21.00 |
| S05-A001 | Head | 36.45 | 36.45 | 36.33 | 21.00 |
|          | Tail | 35.12 | 35.12 | 35.01 | 21.00 |
| S05-A002 | Head | 35.12 | 35.12 | 35.01 | 21.00 |
|          | Tail | 32.62 | 32.62 | 32.53 | 21.00 |
| S05-A003 | Head | 32.62 | 32.62 | 32.53 | 21.00 |
|          | Tail | 30.12 | 30.12 | 30.05 | 21.00 |
| S05-A004 | Head | 30.12 | 30.12 | 30.04 | 21.00 |
|          | Tail | 24.21 | 24.21 | 24.18 | 21.00 |
| S05-B001 | Head | 24.21 | 24.21 | 24.18 | 21.00 |
|          | Tail | 22.09 | 22.09 | 22.08 | 21.00 |
| S05-B002 | Head | 22.09 | 22.09 | 22.08 | 21.00 |
|          | Tail | 21.81 | 21.81 | 21.80 | 21.00 |
| S05-B003 | Head | 21.81 | 21.81 | 21.80 | 21.00 |
|          | Tail | 20.46 | 20.46 | 20.46 | 21.00 |
| S05-B004 | Head | 20.46 | 20.46 | 20.46 | 21.00 |
|          | Tail | 21.52 | 21.52 | 21.52 | 21.00 |
| S05-C001 | Head | 21.52 | 21.52 | 21.52 | 21.00 |
|          | Tail | 20.61 | 20.61 | 20.61 | 21.00 |
| S05-C002 | Head | 20.61 | 20.61 | 20.61 | 21.00 |
|          | Tail | 16.06 | 16.06 | 16.11 | 21.00 |
| S05-D001 | Head | 16.06 | 16.06 | 16.11 | 21.00 |
|          | Tail | 20.40 | 20.40 | 20.41 | 21.00 |
| S05-D002 | Head | 20.40 | 20.40 | 20.41 | 21.00 |
|          | Tail | 19.78 | 19.78 | 19.79 | 21.00 |
| S05-E001 | Head | 19.78 | 19.78 | 19.79 | 21.00 |
|          | Tail | 20.29 | 20.29 | 20.29 | 21.00 |
| S05-E002 | Head | 20.29 | 20.29 | 20.29 | 21.00 |
|          | Tail | 20.24 | 20.24 | 20.25 | 21.00 |
|          |      |       |       |       |       |

|          |      |       |       |       |       |
|----------|------|-------|-------|-------|-------|
| S05-E003 | Head | 20.24 | 20.24 | 20.25 | 21.00 |
|          | Tail | 21.02 | 21.02 | 21.02 | 21.00 |
| S05-E004 | Head | 21.02 | 21.02 | 21.02 | 21.00 |
|          | Tail | 20.32 | 20.32 | 20.33 | 21.00 |
| S05-F001 | Head | 20.32 | 20.32 | 20.33 | 21.00 |
|          | Tail | 20.54 | 20.54 | 20.54 | 21.00 |
| S05-F002 | Head | 20.54 | 20.54 | 20.54 | 21.00 |
|          | Tail | 21.11 | 21.11 | 21.11 | 21.00 |
| S05-F003 | Head | 21.11 | 21.11 | 21.11 | 21.00 |
|          | Tail | 20.26 | 20.26 | 20.27 | 21.00 |
| S05-G001 | Head | 20.26 | 20.26 | 20.27 | 21.00 |
|          | Tail | 20.97 | 20.97 | 20.97 | 21.00 |
| S05-G002 | Head | 20.97 | 20.97 | 20.97 | 21.00 |
|          | Tail | 20.35 | 20.35 | 20.36 | 21.00 |
| S05-H001 | Head | 20.35 | 20.35 | 20.36 | 21.00 |
|          | Tail | 23.19 | 23.19 | 23.17 | 21.00 |
| S05-H002 | Head | 23.19 | 23.19 | 23.17 | 21.00 |
|          | Tail | 21.09 | 21.09 | 21.09 | 21.00 |
| S05-H003 | Head | 21.09 | 21.09 | 21.09 | 21.00 |
|          | Tail | 22.65 | 22.65 | 22.63 | 21.00 |
| S05-H004 | Head | 22.65 | 22.65 | 22.63 | 21.00 |
|          | Tail | 20.51 | 20.51 | 20.52 | 21.00 |
| S05-H005 | Head | 20.51 | 20.51 | 20.52 | 21.00 |
|          | Tail | 22.28 | 22.28 | 22.27 | 21.00 |
| S05-H006 | Head | 22.28 | 22.28 | 22.27 | 21.00 |
|          | Tail | 21.98 | 21.98 | 21.97 | 21.00 |
| S05-I001 | Head | 21.98 | 21.98 | 21.97 | 21.00 |
|          | Tail | 21.42 | 21.42 | 21.42 | 21.00 |
| S05-I002 | Head | 21.42 | 21.42 | 21.42 | 21.00 |
|          | Tail | 21.41 | 21.41 | 21.40 | 21.00 |
| S05-I003 | Head | 21.41 | 21.41 | 21.40 | 21.00 |
|          | Tail | 21.13 | 21.13 | 21.13 | 21.00 |
| S05-I004 | Head | 21.13 | 21.13 | 21.13 | 21.00 |
|          | Tail | 20.95 | 20.95 | 20.95 | 21.00 |
| S05-J001 | Head | 20.95 | 20.95 | 20.95 | 21.00 |
|          | Tail | 20.12 | 20.12 | 20.13 | 21.00 |
| S05-J002 | Head | 20.12 | 20.12 | 20.13 | 21.00 |
|          | Tail | 20.81 | 20.81 | 20.81 | 21.00 |
| S05-J003 | Head | 20.81 | 20.81 | 20.81 | 21.00 |
|          | Tail | 20.13 | 20.13 | 20.13 | 21.00 |
| S05-L001 | Head | 20.13 | 20.13 | 20.13 | 21.00 |
|          | Tail | 19.96 | 19.96 | 19.97 | 21.00 |
| S05-L002 | Head | 19.96 | 19.96 | 19.97 | 21.00 |
|          | Tail | 20.93 | 20.93 | 20.93 | 21.00 |
| S05-L003 | Head | 20.93 | 20.93 | 20.93 | 21.00 |
|          |      |       |       |       |       |

|          |      |       |       |       |       |
|----------|------|-------|-------|-------|-------|
|          | Tail | 20.77 | 20.77 | 20.78 | 21.00 |
| P01-A001 | Head | 20.74 | 20.74 | 20.76 | 24.00 |
|          | Tail | 21.27 | 21.27 | 21.28 | 24.00 |
| P01-A002 | Head | 21.27 | 21.27 | 21.28 | 24.00 |
|          | Tail | 21.07 | 21.07 | 21.09 | 24.00 |
| P01-B001 | Head | 21.07 | 21.07 | 21.09 | 24.00 |
|          | Tail | 21.38 | 21.38 | 21.40 | 24.00 |
| P01-B002 | Head | 21.38 | 21.38 | 21.40 | 24.00 |
|          | Tail | 21.22 | 21.22 | 21.24 | 24.00 |
| P01-B003 | Head | 21.22 | 21.22 | 21.24 | 24.00 |
|          | Tail | 21.08 | 21.08 | 21.10 | 24.00 |
| P01-C001 | Head | 21.08 | 21.08 | 21.10 | 24.00 |
|          | Tail | 21.69 | 21.69 | 21.70 | 24.00 |
| P01-C002 | Head | 21.69 | 21.69 | 21.70 | 24.00 |
|          | Tail | 21.59 | 21.59 | 21.61 | 24.00 |
| P01-D001 | Head | 21.59 | 21.59 | 21.61 | 24.00 |
|          | Tail | 21.74 | 21.74 | 21.75 | 24.00 |
| P01-D002 | Head | 21.74 | 21.74 | 21.75 | 24.00 |
|          | Tail | 21.52 | 21.52 | 21.53 | 24.00 |
| P01-E001 | Head | 21.52 | 21.52 | 21.53 | 24.00 |
|          | Tail | 22.27 | 22.27 | 22.28 | 24.00 |
| P01-F001 | Head | 22.27 | 22.27 | 22.28 | 24.00 |
|          | Tail | 22.59 | 22.59 | 22.60 | 24.00 |
| P01-G001 | Head | 22.59 | 22.59 | 22.60 | 24.00 |
|          | Tail | 22.64 | 22.64 | 22.65 | 24.00 |
| P01-G002 | Head | 22.64 | 22.64 | 22.65 | 24.00 |
|          | Tail | 21.53 | 21.53 | 21.55 | 24.00 |
| P01-G003 | Head | 21.53 | 21.53 | 21.55 | 24.00 |
|          | Tail | 22.28 | 22.28 | 22.29 | 24.00 |
| P01-H001 | Head | 22.28 | 22.28 | 22.29 | 24.00 |
|          | Tail | 22.68 | 22.68 | 22.69 | 24.00 |
| P01-H002 | Head | 22.68 | 22.68 | 22.69 | 24.00 |
|          | Tail | 21.80 | 21.80 | 21.82 | 24.00 |
| P01-H003 | Head | 21.80 | 21.80 | 21.82 | 24.00 |
|          | Tail | 23.70 | 23.70 | 23.70 | 24.00 |
| P01-H004 | Head | 23.70 | 23.70 | 23.70 | 24.00 |
|          | Tail | 22.96 | 22.96 | 22.97 | 24.00 |
| P01-I001 | Head | 22.96 | 22.96 | 22.97 | 24.00 |
|          | Tail | 22.88 | 22.88 | 22.89 | 24.00 |
| P01-I002 | Head | 22.88 | 22.88 | 22.89 | 24.00 |
|          | Tail | 23.41 | 23.41 | 23.41 | 24.00 |
| P01-J001 | Head | 23.41 | 23.41 | 23.41 | 24.00 |
|          | Tail | 23.20 | 23.20 | 23.21 | 24.00 |
| P01-J002 | Head | 23.20 | 23.20 | 23.21 | 24.00 |
|          | Tail | 23.82 | 23.82 | 23.82 | 24.00 |
|          |      |       |       |       |       |

|          |      |       |       |       |       |
|----------|------|-------|-------|-------|-------|
| P01-J003 | Head | 23.82 | 23.82 | 23.82 | 24.00 |
|          | Tail | 23.65 | 23.65 | 23.65 | 24.00 |
| P01-L001 | Head | 23.65 | 23.65 | 23.65 | 24.00 |
|          | Tail | 23.17 | 23.17 | 23.17 | 24.00 |
| S01-F002 | Head | 25.76 | 25.76 | 25.72 | 21.00 |
|          | Tail | 24.71 | 24.71 | 24.68 | 21.00 |
| S01-A001 | Head | 28.66 | 28.66 | 28.61 | 21.00 |
|          | Tail | 28.28 | 28.28 | 28.23 | 21.00 |
| N10-A004 | Head | 37.76 | 37.76 | 37.70 | 26.00 |
|          | Tail | 36.87 | 36.87 | 36.83 | 26.00 |
| S01-E001 | Head | 26.23 | 26.23 | 26.20 | 21.00 |
|          | Tail | 25.66 | 25.66 | 25.63 | 21.00 |
| S02-E001 | Head | 23.98 | 23.98 | 23.95 | 21.00 |
|          | Tail | 24.97 | 24.97 | 24.94 | 21.00 |
| S02-F008 | Head | 22.04 | 22.04 | 22.04 | 21.00 |
|          | Tail | 23.26 | 23.26 | 23.24 | 21.00 |
| S02-F001 | Head | 23.63 | 23.63 | 23.61 | 21.00 |
|          | Tail | 24.16 | 24.16 | 24.14 | 21.00 |
| S02-F002 | Head | 24.16 | 24.16 | 24.14 | 21.00 |
|          | Tail | 21.66 | 21.66 | 21.66 | 21.00 |
| S02-F003 | Head | 21.66 | 21.66 | 21.66 | 21.00 |
|          | Tail | 22.99 | 22.99 | 22.98 | 21.00 |
| S02-F004 | Head | 22.99 | 22.99 | 22.98 | 21.00 |
|          | Tail | 22.00 | 22.00 | 21.99 | 21.00 |
| S02-F005 | Head | 22.00 | 22.00 | 21.99 | 21.00 |
|          | Tail | 22.78 | 22.78 | 22.76 | 21.00 |
| S02-F006 | Head | 22.78 | 22.78 | 22.76 | 21.00 |
|          | Tail | 21.70 | 21.70 | 21.69 | 21.00 |
| S02-F007 | Head | 21.70 | 21.70 | 21.69 | 21.00 |
|          | Tail | 22.04 | 22.04 | 22.04 | 21.00 |
| S02-F009 | Head | 23.26 | 23.26 | 23.24 | 21.00 |
|          | Tail | 22.03 | 22.03 | 22.03 | 21.00 |
| N09_A001 | Head | 27.91 | 27.91 | 27.90 | 26.00 |
|          | Tail | 28.12 | 28.12 | 28.11 | 26.00 |
| N09_A002 | Head | 28.12 | 28.12 | 28.11 | 26.00 |
|          | Tail | 27.23 | 27.23 | 27.22 | 26.00 |
| N09_A003 | Head | 27.23 | 27.23 | 27.22 | 26.00 |
|          | Tail | 27.42 | 27.42 | 27.41 | 26.00 |
| N09_A004 | Head | 27.42 | 27.42 | 27.41 | 26.00 |
|          | Tail | 27.12 | 27.12 | 27.12 | 26.00 |
| N09_A005 | Head | 27.12 | 27.12 | 27.12 | 26.00 |
|          | Tail | 27.19 | 27.19 | 27.19 | 26.00 |
| N09_B001 | Head | 27.19 | 27.19 | 27.19 | 26.00 |
|          | Tail | 27.23 | 27.23 | 27.23 | 26.00 |
| N09_B002 | Head | 27.23 | 27.23 | 27.23 | 26.00 |
|          |      |       |       |       |       |

|          |      |       |       |       |       |
|----------|------|-------|-------|-------|-------|
|          | Tail | 26.68 | 26.68 | 26.68 | 26.00 |
| N09_B003 | Head | 26.68 | 26.68 | 26.68 | 26.00 |
|          | Tail | 27.01 | 27.01 | 27.00 | 26.00 |
| N09_B004 | Head | 27.01 | 27.01 | 27.00 | 26.00 |
|          | Tail | 26.64 | 26.64 | 26.63 | 26.00 |
| N09_B005 | Head | 26.64 | 26.64 | 26.63 | 26.00 |
|          | Tail | 26.79 | 26.79 | 26.78 | 26.00 |
| N09_B006 | Head | 26.79 | 26.79 | 26.78 | 26.00 |
|          | Tail | 26.09 | 26.09 | 26.09 | 26.00 |
| N09_B007 | Head | 26.09 | 26.09 | 26.09 | 26.00 |
|          | Tail | 26.08 | 26.08 | 26.08 | 26.00 |
| N09_C001 | Head | 26.08 | 26.08 | 26.08 | 26.00 |
|          | Tail | 26.29 | 26.29 | 26.29 | 26.00 |
| N09_C002 | Head | 26.29 | 26.29 | 26.29 | 26.00 |
|          | Tail | 25.32 | 25.32 | 25.32 | 26.00 |
| N09_C003 | Head | 25.32 | 25.32 | 25.32 | 26.00 |
|          | Tail | 25.70 | 25.70 | 25.70 | 26.00 |
| N09_C004 | Head | 25.70 | 25.70 | 25.70 | 26.00 |
|          | Tail | 25.15 | 25.15 | 25.16 | 26.00 |
| N09_C005 | Head | 25.15 | 25.15 | 25.16 | 26.00 |
|          | Tail | 25.24 | 25.24 | 25.25 | 26.00 |
| N09_D001 | Head | 25.24 | 25.24 | 25.25 | 26.00 |
|          | Tail | 25.39 | 25.39 | 25.40 | 26.00 |
| N09_D002 | Head | 25.39 | 25.39 | 25.40 | 26.00 |
|          | Tail | 24.95 | 24.95 | 24.95 | 26.00 |
| N09_D003 | Head | 24.95 | 24.95 | 24.95 | 26.00 |
|          | Tail | 25.41 | 25.41 | 25.41 | 26.00 |
| N09_D004 | Head | 25.41 | 25.41 | 25.41 | 26.00 |
|          | Tail | 24.89 | 24.89 | 24.89 | 26.00 |
| N09_D005 | Head | 24.89 | 24.89 | 24.89 | 26.00 |
|          | Tail | 25.22 | 25.22 | 25.22 | 26.00 |
| N09_D006 | Head | 25.22 | 25.22 | 25.22 | 26.00 |
|          | Tail | 24.64 | 24.64 | 24.64 | 26.00 |
| N09_D007 | Head | 24.64 | 24.64 | 24.64 | 26.00 |
|          | Tail | 25.12 | 25.12 | 25.12 | 26.00 |
| N09_D008 | Head | 25.12 | 25.12 | 25.12 | 26.00 |
|          | Tail | 24.59 | 24.59 | 24.60 | 26.00 |
| N09_D009 | Head | 24.59 | 24.59 | 24.60 | 26.00 |
|          | Tail | 24.74 | 24.74 | 24.75 | 26.00 |

**Equipment Hydraulic Summary Report : 0.000  
hours**

| Equipment Summary |                 |          |       |           |             |       |                  |               |
|-------------------|-----------------|----------|-------|-----------|-------------|-------|------------------|---------------|
| Equipment Name    | Mode of Control | Pressure |       | Flow      | Temperature |       | Specific Gravity | Heating Value |
|                   |                 | kg/cm2g  |       | kSm3/d    | Deg C       |       |                  | MJ/m3         |
|                   |                 | Up       | Down  |           | Up          | Down  |                  |               |
| 10_VES_060        | PercentOpen     | 99.14    | 99.14 | 20370.061 | 45.63       | 45.63 | 0.6325           | 35.97         |
| 10_VES_070        | PercentOpen     | 96.90    | 96.90 | 20370.061 | 41.50       | 41.50 | 0.6325           | 35.97         |
| 10_VES_080        | PercentOpen     | 94.43    | 94.43 | 20370.061 | 37.88       | 37.88 | 0.6325           | 35.97         |
| 10_VES_090        | PercentOpen     | 91.85    | 91.85 | 20370.061 | 35.00       | 35.00 | 0.6325           | 35.97         |
| 10_VES_140        | PercentOpen     | 97.92    | 97.92 | 20297.681 | 38.80       | 38.80 | 0.6325           | 35.97         |
| 10_VES_150        | PercentOpen     | 95.37    | 95.37 | 20297.681 | 35.82       | 35.82 | 0.6325           | 35.97         |
| 10_VES_160        | PercentOpen     | 92.71    | 92.71 | 20297.681 | 33.47       | 33.47 | 0.6325           | 35.97         |
| 10_VES_170        | PercentOpen     | 90.81    | 90.81 | 20297.681 | 31.93       | 31.93 | 0.6325           | 35.97         |
| 10_VES_190        | PercentOpen     | 97.93    | 97.93 | 20224.806 | 37.58       | 37.58 | 0.6325           | 35.97         |
| 10_VES_200        | PercentOpen     | 95.00    | 95.00 | 20224.806 | 34.56       | 34.56 | 0.6325           | 35.97         |
| 10_VES_280        | PercentOpen     | 96.41    | 96.41 | 20171.049 | 36.19       | 36.19 | 0.6325           | 35.97         |
| 10_VES_290        | PercentOpen     | 93.48    | 93.48 | 20171.050 | 33.22       | 33.22 | 0.6325           | 35.97         |
| 10_VES_300        | PercentOpen     | 91.32    | 91.32 | 20171.050 | 31.52       | 31.52 | 0.6325           | 35.97         |
| 10_VES_320        | PercentOpen     | 96.79    | 96.79 | 20099.700 | 35.78       | 35.78 | 0.6325           | 35.97         |
| 10_VES_330        | PercentOpen     | 94.73    | 94.73 | 20099.700 | 33.39       | 33.39 | 0.6325           | 35.97         |
| 10_VES_340        | PercentOpen     | 93.21    | 93.21 | 20099.700 | 32.09       | 32.09 | 0.6325           | 35.97         |
| 10_VES_350        | PercentOpen     | 91.00    | 91.00 | 20099.700 | 30.64       | 30.64 | 0.6325           | 35.97         |
| 10_VES_400        | PercentOpen     | 97.82    | 97.82 | 20025.466 | 36.03       | 36.03 | 0.6325           | 35.97         |
| 10_VES_420        | PercentOpen     | 93.26    | 93.26 | 18620.466 | 30.92       | 30.92 | 0.6325           | 35.97         |
| 10_VES_430        | PercentOpen     | 90.98    | 90.98 | 18620.467 | 29.13       | 29.13 | 0.6325           | 35.97         |
| 10_VES_450        | PercentOpen     | 98.11    | 98.11 | 18548.105 | 33.98       | 33.98 | 0.6325           | 35.97         |
| 10_VES_460        | PercentOpen     | 95.18    | 95.18 | 18548.106 | 30.90       | 30.90 | 0.6325           | 35.97         |
| 10_VES_470        | PercentOpen     | 93.38    | 93.38 | 18548.106 | 29.28       | 29.28 | 0.6325           | 35.97         |
| 10_VES_540        | PercentOpen     | 89.80    | 89.80 | 18548.106 | 27.19       | 27.19 | 0.6325           | 35.97         |
| 10_VES_550        | PercentOpen     | 87.18    | 87.18 | 18548.106 | 26.08       | 26.08 | 0.6325           | 35.97         |
| 10_VES_560        | PercentOpen     | 84.03    | 84.03 | 18548.107 | 25.24       | 25.24 | 0.6325           | 35.97         |
| 10_VES_580        | PercentOpen     | 97.95    | 97.95 | 18496.648 | 36.87       | 36.87 | 0.6325           | 35.97         |
| 10_VES_590        | PercentOpen     | 96.26    | 96.26 | 18496.648 | 34.08       | 34.08 | 0.6325           | 35.97         |
| 10_VES_610        | PercentOpen     | 89.58    | 89.58 | 18496.648 | 28.36       | 28.36 | 0.6325           | 35.97         |
| 10_VES_660        | PercentOpen     | 97.83    | 97.83 | 17479.498 | 34.74       | 34.74 | 0.6325           | 35.97         |
| 10_VES_670        | PercentOpen     | 97.95    | 97.95 | 17479.498 | 33.75       | 33.75 | 0.6325           | 35.97         |
| 10_VES_680        | PercentOpen     | 96.13    | 96.13 | 17000.998 | 31.29       | 31.29 | 0.6325           | 35.97         |
| 10_VES_690        | PercentOpen     | 95.29    | 95.29 | 15200.998 | 29.89       | 29.89 | 0.6325           | 35.97         |
| 40_VES_040        | PercentOpen     | 93.89    | 93.89 | 6400.998  | 27.75       | 27.75 | 0.6325           | 35.97         |
| 40_VES_050        | PercentOpen     | 93.12    | 93.12 | 6400.998  | 27.05       | 27.05 | 0.6325           | 35.97         |
| 40_VES_060        | PercentOpen     | 93.25    | 93.25 | 5493.498  | 27.02       | 27.02 | 0.6325           | 35.97         |
| 40_VES_070        | PercentOpen     | 92.19    | 92.19 | 5493.498  | 26.23       | 26.23 | 0.6325           | 35.97         |
| 40_VES_080        | PercentOpen     | 92.36    | 92.36 | 5060.998  | 25.99       | 25.99 | 0.6325           | 35.97         |
| 40_VES_090        | PercentOpen     | 91.18    | 91.18 | 5060.998  | 24.71       | 24.71 | 0.6325           | 35.97         |

|            |             |       |       |          |       |       |        |       |
|------------|-------------|-------|-------|----------|-------|-------|--------|-------|
| 40_VES_100 | PercentOpen | 90.48 | 90.48 | 5060.998 | 25.00 | 25.00 | 0.6325 | 35.97 |
| 40_VES_110 | PercentOpen | 90.35 | 90.35 | 5060.998 | 25.59 | 25.59 | 0.6325 | 35.97 |
| 40_VES_120 | PercentOpen | 89.28 | 89.28 | 5060.998 | 25.58 | 25.58 | 0.6325 | 35.97 |
| 40_VES_130 | PercentOpen | 87.90 | 87.90 | 5060.999 | 25.55 | 25.55 | 0.6325 | 35.97 |
| 40_VES_160 | PercentOpen | 87.32 | 87.32 | 5060.999 | 25.60 | 25.60 | 0.6325 | 35.97 |
| 40_VES_140 | PercentOpen | 85.03 | 85.03 | 5060.999 | 23.90 | 23.90 | 0.6325 | 35.97 |
| 40_VES_150 | PercentOpen | 84.08 | 84.08 | 5060.999 | 23.60 | 23.60 | 0.6325 | 35.97 |
| 40_VES_200 | PercentOpen | 82.97 | 82.97 | 5060.999 | 23.34 | 23.34 | 0.6325 | 35.97 |
| 40_VES_210 | PercentOpen | 83.02 | 83.02 | 5060.999 | 23.98 | 23.98 | 0.6325 | 35.97 |
| 40_VES_220 | PercentOpen | 83.25 | 83.25 | 5060.999 | 23.63 | 23.63 | 0.6325 | 35.97 |
| 40_VES_230 | PercentOpen | 82.96 | 82.96 | 5060.999 | 22.03 | 22.03 | 0.6325 | 35.97 |
| 40_VES_240 | PercentOpen | 80.36 | 80.36 | 5061.000 | 21.85 | 21.85 | 0.6325 | 35.97 |
| 40_VES_250 | PercentOpen | 79.14 | 79.14 | 5061.000 | 22.66 | 22.66 | 0.6325 | 35.97 |
| 40_VES_260 | PercentOpen | 77.76 | 77.76 | 5061.000 | 22.93 | 22.93 | 0.6325 | 35.97 |
| 40_VES_270 | PercentOpen | 77.49 | 77.49 | 0.000    | 23.53 | 23.54 | 0.6325 | 35.97 |
| 60_VES_040 | PercentOpen | 66.63 | 66.63 | 0.000    | 21.00 | 21.00 | 0.6325 | 35.97 |
| 60_VES_050 | PercentOpen | 66.56 | 66.56 | 0.000    | 21.00 | 21.00 | 0.6325 | 35.97 |
| 60_VES_060 | PercentOpen | 67.13 | 67.13 | 0.000    | 21.00 | 21.00 | 0.6325 | 35.97 |
| 60_VES_070 | PercentOpen | 72.00 | 72.00 | 4487.864 | 20.00 | 20.00 | 0.6325 | 35.97 |
| 60_VES_080 | PercentOpen | 70.53 | 70.53 | 4487.864 | 20.24 | 20.24 | 0.6325 | 35.97 |
| 60_VES_090 | PercentOpen | 68.52 | 68.52 | 4487.864 | 20.36 | 20.36 | 0.6325 | 35.97 |
| 60_VES_100 | PercentOpen | 65.84 | 65.84 | 4487.864 | 20.06 | 20.06 | 0.6325 | 35.97 |
| 60_VES_110 | PercentOpen | 64.53 | 64.53 | 3934.364 | 21.32 | 21.32 | 0.6325 | 35.97 |
| 60_VES_120 | PercentOpen | 63.31 | 63.31 | 3934.364 | 20.98 | 20.98 | 0.6325 | 35.97 |
| 60_VES_270 | PercentOpen | 62.73 | 62.73 | 3679.364 | 20.82 | 20.82 | 0.6325 | 35.97 |
| 60_VES_320 | PercentOpen | 61.49 | 61.49 | 3246.864 | 21.26 | 21.26 | 0.6325 | 35.97 |
| 60_VES_190 | PercentOpen | 72.22 | 72.22 | 3237.806 | 24.53 | 24.53 | 0.6325 | 35.97 |
| 60_VES_200 | PercentOpen | 66.86 | 66.86 | 3237.806 | 20.14 | 20.14 | 0.6325 | 35.97 |
| 60_VES_210 | PercentOpen | 67.28 | 67.28 | 3237.806 | 21.79 | 21.79 | 0.6325 | 35.97 |
| 60_VES_220 | PercentOpen | 66.58 | 66.58 | 3237.806 | 21.53 | 21.53 | 0.6325 | 35.97 |
| 60_VES_230 | PercentOpen | 65.06 | 65.06 | 3237.806 | 21.18 | 21.18 | 0.6325 | 35.97 |
| 60_VES_240 | PercentOpen | 62.07 | 62.07 | 3237.806 | 19.23 | 19.23 | 0.6325 | 35.97 |
| 60_VES_250 | PercentOpen | 62.83 | 62.83 | 3237.806 | 21.65 | 21.65 | 0.6325 | 35.97 |
| 60_VES_290 | PercentOpen | 74.50 | 74.50 | 2841.500 | 36.45 | 36.45 | 0.6325 | 35.97 |
| 80_VES_020 | PercentOpen | 73.82 | 73.82 | 2409.000 | 24.21 | 24.21 | 0.6325 | 35.97 |
| 80_VES_030 | PercentOpen | 71.69 | 71.69 | 2409.000 | 21.52 | 21.52 | 0.6325 | 35.97 |
| 80_VES_040 | PercentOpen | 63.82 | 63.82 | 2409.000 | 16.06 | 16.06 | 0.6325 | 35.97 |
| 80_VES_050 | PercentOpen | 62.57 | 62.57 | 2409.000 | 19.78 | 19.78 | 0.6325 | 35.97 |
| 80_VES_060 | PercentOpen | 61.46 | 61.46 | 2409.000 | 20.32 | 20.32 | 0.6325 | 35.97 |
| 80_VES_070 | PercentOpen | 59.30 | 59.30 | 2409.000 | 20.26 | 20.26 | 0.6325 | 35.97 |
| 80_VES_080 | PercentOpen | 57.10 | 57.10 | 2409.000 | 20.35 | 20.35 | 0.6325 | 35.97 |
| 80_VES_090 | PercentOpen | 58.61 | 58.61 | 2409.000 | 21.98 | 21.98 | 0.6325 | 35.97 |
| 80_VES_100 | PercentOpen | 56.90 | 56.90 | 2409.000 | 20.95 | 20.95 | 0.6325 | 35.97 |
| 80_VES_110 | PercentOpen | 54.82 | 54.82 | 2409.000 | 20.13 | 20.13 | 0.6325 | 35.97 |
| 10_VES_050 | PercentOpen | 72.61 | 72.61 | 7000.000 | 21.08 | 21.08 | 0.6325 | 35.97 |
| 60_VES_060 |             |       |       |          |       |       |        |       |



|            |                           |       |       |           |       |       |        |       |
|------------|---------------------------|-------|-------|-----------|-------|-------|--------|-------|
|            | PercentOpen               | 71.90 | 71.90 | 7000.000  | 21.59 | 21.59 | 0.6325 | 35.97 |
| 90_VES_070 | PercentOpen               | 70.30 | 70.30 | 7000.000  | 21.52 | 21.52 | 0.6325 | 35.97 |
| 90_VES_080 | PercentOpen               | 69.07 | 69.07 | 7000.000  | 22.27 | 22.27 | 0.6325 | 35.97 |
| 90_VES_090 | PercentOpen               | 68.18 | 68.18 | 7000.000  | 22.59 | 22.59 | 0.6325 | 35.97 |
| 90_VES_100 | PercentOpen               | 66.53 | 66.53 | 7000.000  | 22.28 | 22.28 | 0.6325 | 35.97 |
| 90_VES_110 | PercentOpen               | 65.35 | 65.35 | 7000.000  | 22.96 | 22.96 | 0.6325 | 35.97 |
| 90_VES_120 | PercentOpen               | 64.59 | 64.59 | 7000.000  | 23.41 | 23.41 | 0.6325 | 35.97 |
| 90_VES_130 | PercentOpen               | 64.23 | 64.23 | 7000.000  | 23.65 | 23.65 | 0.6325 | 35.97 |
| MTN        | PercentOpen               | 85.00 | 85.00 | 20429.481 | 51.70 | 51.70 | 0.6325 | 35.97 |
| 10_VES_040 | PercentOpen               | 82.17 | 82.17 | 20429.481 | 45.34 | 45.34 | 0.6325 | 35.97 |
| 10_VES_210 | PercentOpen               | 92.70 | 92.70 | 20224.806 | 32.48 | 32.48 | 0.6325 | 35.97 |
| 10_VES_410 | PercentOpen               | 95.41 | 95.41 | 18620.466 | 33.51 | 33.51 | 0.6325 | 35.97 |
| 10_VES_600 | PercentOpen               | 93.70 | 93.70 | 18496.648 | 31.45 | 31.45 | 0.6325 | 35.97 |
| 90_VES_040 | PercentOpen               | 74.27 | 74.27 | 7000.000  | 21.07 | 21.07 | 0.6325 | 35.97 |
| 60_VES_140 | PercentOpen               | 75.00 | 75.00 | 3237.806  | 38.22 | 38.22 | 0.6325 | 35.97 |
| HUB7       | PercentOpen               | 65.00 | 65.00 | 2800.000  | 25.00 | 25.00 | 0.6325 | 35.97 |
| HUB8       | PercentOpen               | 65.00 | 65.00 | -2800.000 | 25.00 | 25.00 | 0.6325 | 35.97 |
| ARA1       | PercentOpen               | 77.49 | 77.49 | 2500.500  | 23.53 | 23.53 | 0.6325 | 35.97 |
| CAN1       | PercentOpen               | 54.34 | 54.34 | 0.000     | 20.77 | 20.77 | 0.6325 | 35.97 |
| CAN2       | PercentOpen               | 54.34 | 54.34 | 0.000     | 20.77 | 20.77 | 0.6325 | 35.97 |
| HUB1       | PercentOpen               | 94.44 | 94.44 | 7000.000  | 28.69 | 28.69 | 0.6325 | 35.97 |
| HUB2       | PercentOpen               | 94.44 | 65.00 | 0.000     | 28.69 | 25.00 | 0.6325 | 35.97 |
| HUB3       | PercentOpen               | 65.00 | 94.44 | 0.000     | 25.00 | 28.69 | 0.6325 | 35.97 |
| HUB4       | PercentOpen               | 94.44 | 65.00 | 0.000     | 28.69 | 25.00 | 0.6325 | 35.97 |
| HUB5       | PercentOpen               | 94.44 | 94.44 | 7000.000  | 28.69 | 28.69 | 0.6325 | 35.97 |
| HUB6       | PercentOpen               | 65.00 | 65.00 | 300.000   | 25.00 | 25.00 | 0.6325 | 35.97 |
| HUB9       | PercentOpen               | 94.44 | 65.00 | 0.000     | 28.69 | 25.00 | 0.6325 | 35.97 |
| HUB10      | PercentOpen               | 94.44 | 94.44 | 6400.998  | 28.69 | 28.69 | 0.6325 | 35.97 |
| RES_CBA    | Resistance                | 79.99 | 79.98 | 20429.481 | 41.73 | 41.73 | 0.6325 | 35.97 |
| RES_MRD    | Resistance                | 89.00 | 89.00 | 20370.061 | 32.53 | 32.53 | 0.6325 | 35.97 |
| RES_ANT    | Resistance                | 88.90 | 88.90 | 20297.681 | 30.71 | 30.71 | 0.6325 | 35.97 |
| RES_CGR    | Resistance                | 88.24 | 88.23 | 20224.806 | 29.62 | 29.62 | 0.6325 | 35.97 |
| RES_RRP    | Resistance                | 89.63 | 89.63 | 20171.050 | 30.53 | 30.53 | 0.6325 | 35.97 |
| RES_TLG    | Resistance                | 89.38 | 89.37 | 20099.701 | 29.83 | 29.83 | 0.6325 | 35.97 |
| RES_MIR    | Resistance                | 89.15 | 89.15 | 18620.467 | 27.96 | 27.96 | 0.6325 | 35.97 |
| RES_PEN    | Resistance                | 91.33 | 91.32 | 18548.106 | 27.91 | 27.91 | 0.6325 | 35.97 |
| RES_IAC    | Resistance                | 81.78 | 81.78 | 18548.107 | 24.74 | 24.74 | 0.6325 | 35.97 |
| RES_SCA    | Resistance                | 88.37 | 88.37 | 18496.648 | 27.87 | 27.86 | 0.6325 | 35.97 |
| RES_BIG    | Resistance                | 60.26 | 60.26 | 3246.864  | 21.10 | 21.10 | 0.6325 | 35.97 |
| RES_SID    | Resistance                | 60.62 | 60.62 | 2846.306  | 20.35 | 20.35 | 0.6325 | 35.97 |
| RES_ARC    | Resistance                | 77.49 | 77.49 | 0.000     | 23.54 | 23.54 | 0.6325 | 35.97 |
| RES_PLN    | Resistance                | 94.44 | 94.34 | 6400.998  | 28.69 | 28.66 | 0.6325 | 35.97 |
| RES_CBO    | Resistance                | 87.32 | 87.27 | 5060.999  | 25.60 | 25.58 | 0.6325 | 35.97 |
| ERP ARC    | Closed                    | 77.49 | 66.56 | 0.000     | 23.54 | 21.00 | 0.6325 | 35.97 |
| ERP PLN    | MaximumDownstreamPressure | 94.44 | 75.00 | 7000.000  | 28.69 | 20.74 | 0.6325 | 35.97 |
|            |                           |       |       |           |       |       |        |       |

|          |            |        |        |           |       |       |        |       |
|----------|------------|--------|--------|-----------|-------|-------|--------|-------|
|          | Resistance | 100.00 | 100.00 | 20370.061 | 60.61 | 48.00 | 0.6325 | 35.97 |
| COOL_MRD | Resistance | 100.00 | 100.00 | 20297.681 | 42.00 | 42.00 | 0.6325 | 35.97 |
| COOL_ANT | Resistance | 100.00 | 100.00 | 20224.806 | 40.25 | 40.25 | 0.6325 | 35.97 |
| COOL_CGR | Resistance | 100.00 | 100.00 | 20171.049 | 40.59 | 40.59 | 0.6325 | 35.97 |
| COOL_RRP | Resistance | 100.00 | 100.00 | 20099.700 | 39.48 | 39.48 | 0.6325 | 35.97 |
| COOL_TLG | Resistance | 100.00 | 100.00 | 20025.466 | 39.04 | 39.04 | 0.6325 | 35.97 |
| COOL_MIR | Resistance | 100.00 | 100.00 | 18548.105 | 37.26 | 37.26 | 0.6325 | 35.97 |
| COOL_PEN | Resistance | 91.32  | 91.32  | 18548.106 | 27.91 | 27.91 | 0.6325 | 35.97 |
| COOL_IAC | Resistance | 100.00 | 100.00 | 18496.648 | 40.92 | 40.92 | 0.6325 | 35.97 |
| COOL_SCA | Resistance | 100.00 | 100.00 | 18424.498 | 37.78 | 37.78 | 0.6325 | 35.97 |
| COOL_BIG | Resistance | 75.00  | 75.00  | 3237.806  | 38.22 | 38.22 | 0.6325 | 35.97 |
| COOL_ARC | Resistance | 77.49  | 77.49  | 0.000     | 23.54 | 23.54 | 0.6325 | 35.97 |
| COOL_PLN | Resistance | 94.34  | 94.25  | 6400.998  | 28.66 | 28.66 | 0.6325 | 35.97 |
| COOL_CBO | Resistance | 87.27  | 87.21  | 5060.999  | 25.58 | 25.58 | 0.6325 | 35.97 |
| COOL_SID | Resistance | 74.50  | 74.50  | 2841.500  | 36.45 | 36.45 | 0.6325 | 35.97 |

| Accumulated Volume Summary |                   |                    |             |
|----------------------------|-------------------|--------------------|-------------|
| Equipment Name             | Current Flow Rate | Accumulated Volume | Timer Value |
|                            | kSm3/d            | KPM3               | hours       |
| 10_VES_060                 | 20370.0608        | 0.0000             | 24.000      |
| 10_VES_070                 | 20370.0608        | 0.0000             | 24.000      |
| 10_VES_080                 | 20370.0609        | 0.0000             | 24.000      |
| 10_VES_090                 | 20370.0611        | 0.0000             | 24.000      |
| 10_VES_140                 | 20297.6809        | 0.0000             | 24.000      |
| 10_VES_150                 | 20297.6810        | 0.0000             | 24.000      |
| 10_VES_160                 | 20297.6811        | 0.0000             | 24.000      |
| 10_VES_170                 | 20297.6813        | 0.0000             | 24.000      |
| 10_VES_190                 | 20224.8059        | 0.0000             | 24.000      |
| 10_VES_200                 | 20224.8059        | 0.0000             | 24.000      |
| 10_VES_280                 | 20171.0495        | 0.0000             | 24.000      |
| 10_VES_290                 | 20171.0496        | 0.0000             | 24.000      |
| 10_VES_300                 | 20171.0499        | 0.0000             | 24.000      |
| 10_VES_320                 | 20099.6999        | 0.0000             | 24.000      |
| 10_VES_330                 | 20099.7000        | 0.0000             | 24.000      |
| 10_VES_340                 | 20099.7002        | 0.0000             | 24.000      |
| 10_VES_350                 | 20099.7004        | 0.0000             | 24.000      |
| 10_VES_400                 | 20025.4662        | 0.0000             | 24.000      |
| 10_VES_420                 | 18620.4665        | 0.0000             | 24.000      |
| 10_VES_430                 | 18620.4666        | 0.0000             | 24.000      |
| 10_VES_450                 | 18548.1054        | 0.0000             | 24.000      |
| 10_VES_460                 | 18548.1055        | 0.0000             | 24.000      |
| 10_VES_470                 | 18548.1056        | 0.0000             | 24.000      |
| 10_VES_540                 | 18548.1060        | 0.0000             | 24.000      |

|            |            |        |        |
|------------|------------|--------|--------|
| 10_VES_550 | 18548.1063 | 0.0000 | 24.000 |
| 10_VES_560 | 18548.1068 | 0.0000 | 24.000 |
| 10_VES_580 | 18496.6481 | 0.0000 | 24.000 |
| 10_VES_590 | 18496.6481 | 0.0000 | 24.000 |
| 10_VES_610 | 18496.6483 | 0.0000 | 24.000 |
| 10_VES_660 | 17479.4979 | 0.0000 | 24.000 |
| 10_VES_670 | 17479.4979 | 0.0000 | 24.000 |
| 10_VES_680 | 17000.9980 | 0.0000 | 24.000 |
| 10_VES_690 | 15200.9980 | 0.0000 | 24.000 |
| 40_VES_040 | 6400.9981  | 0.0000 | 24.000 |
| 40_VES_050 | 6400.9981  | 0.0000 | 24.000 |
| 40_VES_060 | 5493.4981  | 0.0000 | 24.000 |
| 40_VES_070 | 5493.4982  | 0.0000 | 24.000 |
| 40_VES_080 | 5060.9982  | 0.0000 | 24.000 |
| 40_VES_090 | 5060.9983  | 0.0000 | 24.000 |
| 40_VES_100 | 5060.9984  | 0.0000 | 24.000 |
| 40_VES_110 | 5060.9984  | 0.0000 | 24.000 |
| 40_VES_120 | 5060.9985  | 0.0000 | 24.000 |
| 40_VES_130 | 5060.9986  | 0.0000 | 24.000 |
| 40_VES_160 | 5060.9987  | 0.0000 | 24.000 |
| 40_VES_140 | 5060.9988  | 0.0000 | 24.000 |
| 40_VES_150 | 5060.9989  | 0.0000 | 24.000 |
| 40_VES_200 | 5060.9990  | 0.0000 | 24.000 |
| 40_VES_210 | 5060.9991  | 0.0000 | 24.000 |
| 40_VES_220 | 5060.9993  | 0.0000 | 24.000 |
| 40_VES_230 | 5060.9994  | 0.0000 | 24.000 |
| 40_VES_240 | 5060.9996  | 0.0000 | 24.000 |
| 40_VES_250 | 5060.9998  | 0.0000 | 24.000 |
| 40_VES_260 | 5060.9999  | 0.0000 | 24.000 |
| 40_VES_270 | 0.0000     | 0.0000 | 24.000 |
| 60_VES_040 | 0.0000     | 0.0000 | 24.000 |
| 60_VES_050 | 0.0000     | 0.0000 | 24.000 |
| 60_VES_060 | 0.0000     | 0.0000 | 24.000 |
| 60_VES_070 | 4487.8636  | 0.0000 | 24.000 |
| 60_VES_080 | 4487.8636  | 0.0000 | 24.000 |
| 60_VES_090 | 4487.8636  | 0.0000 | 24.000 |
| 60_VES_100 | 4487.8636  | 0.0000 | 24.000 |
| 60_VES_110 | 3934.3636  | 0.0000 | 24.000 |
| 60_VES_120 | 3934.3636  | 0.0000 | 24.000 |
| 60_VES_270 | 3679.3636  | 0.0000 | 24.000 |
| 60_VES_320 | 3246.8636  | 0.0000 | 24.000 |
| 60_VES_190 | 3237.8064  | 0.0000 | 24.000 |
| 60_VES_200 | 3237.8064  | 0.0000 | 24.000 |
| 60_VES_210 | 3237.8064  | 0.0000 | 24.000 |
| 60_VES_220 | 3237.8064  | 0.0000 | 24.000 |
| 60_VES_230 |            |        |        |

|            |            |        |        |
|------------|------------|--------|--------|
|            | 3237.8064  | 0.0000 | 24.000 |
| 60_VES_240 | 3237.8064  | 0.0000 | 24.000 |
| 60_VES_250 | 3237.8064  | 0.0000 | 24.000 |
| 60_VES_290 | 2841.5000  | 0.0000 | 24.000 |
| 80_VES_020 | 2409.0000  | 0.0000 | 24.000 |
| 80_VES_030 | 2409.0000  | 0.0000 | 24.000 |
| 80_VES_040 | 2409.0000  | 0.0000 | 24.000 |
| 80_VES_050 | 2409.0000  | 0.0000 | 24.000 |
| 80_VES_060 | 2409.0000  | 0.0000 | 24.000 |
| 80_VES_070 | 2409.0000  | 0.0000 | 24.000 |
| 80_VES_080 | 2409.0000  | 0.0000 | 24.000 |
| 80_VES_090 | 2409.0000  | 0.0000 | 24.000 |
| 80_VES_100 | 2409.0000  | 0.0000 | 24.000 |
| 80_VES_110 | 2409.0000  | 0.0000 | 24.000 |
| 10_VES_050 | 7000.0000  | 0.0000 | 24.000 |
| 90_VES_060 | 7000.0000  | 0.0000 | 24.000 |
| 90_VES_070 | 7000.0000  | 0.0000 | 24.000 |
| 90_VES_080 | 7000.0000  | 0.0000 | 24.000 |
| 90_VES_090 | 7000.0000  | 0.0000 | 24.000 |
| 90_VES_100 | 7000.0000  | 0.0000 | 24.000 |
| 90_VES_110 | 7000.0000  | 0.0000 | 24.000 |
| 90_VES_120 | 7000.0000  | 0.0000 | 24.000 |
| 90_VES_130 | 7000.0000  | 0.0000 | 24.000 |
| MTN        | 20429.4806 | 0.0000 | 24.000 |
| 10_VES_040 | 20429.4806 | 0.0000 | 24.000 |
| 10_VES_210 | 20224.8061 | 0.0000 | 24.000 |
| 10_VES_410 | 18620.4663 | 0.0000 | 24.000 |
| 10_VES_600 | 18496.6482 | 0.0000 | 24.000 |
| 90_VES_040 | 7000.0000  | 0.0000 | 24.000 |
| 60_VES_140 | 3237.8064  | 0.0000 | 24.000 |
| HUB7       | 2800.0000  | 0.0000 | 24.000 |
| HUB8       | -2800.0000 | 0.0000 | 24.000 |
| ARA1       | 2500.5000  | 0.0000 | 24.000 |
| CAN1       | 0.0000     | 0.0000 | 24.000 |
| CAN2       | 0.0000     | 0.0000 | 24.000 |
| HUB1       | 7000.0000  | 0.0000 | 24.000 |
| HUB2       | 0.0000     | 0.0000 | 24.000 |
| HUB3       | 0.0000     | 0.0000 | 24.000 |
| HUB4       | 0.0000     | 0.0000 | 24.000 |
| HUB5       | 7000.0000  | 0.0000 | 24.000 |
| HUB6       | 300.0000   | 0.0000 | 24.000 |
| HUB9       | 0.0000     | 0.0000 | 24.000 |
| HUB10      | 6400.9981  | 0.0000 | 24.000 |
| RES_CBA    | 20429.4806 | 0.0000 | 24.000 |
| RES_MRD    | 20370.0613 | 0.0000 | 24.000 |
| RES_ANT    |            |        |        |

|          |            |        |        |
|----------|------------|--------|--------|
|          | 20297.6815 | 0.0000 | 24.000 |
| RES_CGR  | 20224.8063 | 0.0000 | 24.000 |
| RES_RRP  | 20171.0502 | 0.0000 | 24.000 |
| RES_TLG  | 20099.7006 | 0.0000 | 24.000 |
| RES_MIR  | 18620.4668 | 0.0000 | 24.000 |
| RES_PEN  | 18548.1058 | 0.0000 | 24.000 |
| RES_IAC  | 18548.1072 | 0.0000 | 24.000 |
| RES_SCA  | 18496.6483 | 0.0000 | 24.000 |
| RES_BIG  | 3246.8636  | 0.0000 | 24.000 |
| RES_SID  | 2846.3064  | 0.0000 | 24.000 |
| RES_ARC  | 0.0000     | 0.0000 | 24.000 |
| RES_PLN  | 6400.9981  | 0.0000 | 24.000 |
| RES_CBO  | 5060.9987  | 0.0000 | 24.000 |
| ERP ARC  | 0.0000     | 0.0000 | 24.000 |
| ERP PLN  | 7000.0000  | 0.0000 | 24.000 |
| COOL_CBA | 20370.0608 | 0.0000 | 24.000 |
| COOL_MRD | 20297.6809 | 0.0000 | 24.000 |
| COOL_ANT | 20224.8058 | 0.0000 | 24.000 |
| COOL_CGR | 20171.0494 | 0.0000 | 24.000 |
| COOL_RRP | 20099.6999 | 0.0000 | 24.000 |
| COOL_TLG | 20025.4662 | 0.0000 | 24.000 |
| COOL_MIR | 18548.1054 | 0.0000 | 24.000 |
| COOL_PEN | 18548.1058 | 0.0000 | 24.000 |
| COOL_IAC | 18496.6481 | 0.0000 | 24.000 |
| COOL_SCA | 18424.4979 | 0.0000 | 24.000 |
| COOL_BIG | 3237.8064  | 0.0000 | 24.000 |
| COOL_ARC | 0.0000     | 0.0000 | 24.000 |
| COOL_PLN | 6400.9981  | 0.0000 | 24.000 |
| COOL_CBO | 5060.9987  | 0.0000 | 24.000 |
| COOL_SID | 2841.5000  | 0.0000 | 24.000 |

**Relief Valves Hydraulic Summary Report : 0.000  
hours**

**Xreg Hydraulic Summary Report : 0.000 hours**

| Xreg Summary  |                 |          |           |             |                  |               |
|---------------|-----------------|----------|-----------|-------------|------------------|---------------|
| Xreg Name     | Mode of Control | Pressure | Flow      | Temperature | Specific Gravity | Heating Value |
|               |                 | kg/cm2g  | kSm3/d    | Deg C       |                  | MJ/m3         |
| RGD           | MaximumPressure | 85.00    | 20429.481 | 51.70       | 0.6325           | 35.97         |
| EMED GASCAR_E | MaximumPressure | 65.00    | -2800.000 | 25.00       | 0.6325           | 35.97         |
| TGS           | MaximumPressure | 72.00    | -4487.864 | 20.00       | 0.6325           | 35.97         |
| PE CBA        | MaximumFlow     | 82.17    | 0.000     | 45.34       | 0.6325           | 35.97         |
| PE CGR        | MaximumFlow     | 88.24    | 0.000     | 29.62       | 0.6325           | 35.97         |
| UTE TLG       | MaximumFlow     | 95.41    | 0.000     | 33.51       | 0.6325           | 35.97         |
| PE BLC        | MaximumFlow     | 94.76    | 0.000     | 30.29       | 0.6325           | 35.97         |
| PE BSP        | MaximumFlow     | 93.70    | 0.000     | 31.45       | 0.6325           | 35.97         |
| PE SCA        | MaximumFlow     | 98.77    | 945.000   | 36.41       | 0.6325           | 35.97         |
| PE RCL        | MaximumFlow     | 97.77    | 478.500   | 32.91       | 0.6325           | 35.97         |
| PE LMR        | MaximumFlow     | 96.16    | 1800.000  | 31.17       | 0.6325           | 35.97         |
| PE AMR        | MaximumFlow     | 95.44    | 1800.000  | 29.91       | 0.6325           | 35.97         |
| PE RPL        | MaximumFlow     | 65.00    | 2500.000  | 25.00       | 0.6325           | 35.97         |
| PE SMR        | MaximumFlow     | 93.65    | 0.000     | 27.47       | 0.6325           | 35.97         |
| PE CMP        | MaximumFlow     | 92.93    | 907.500   | 26.85       | 0.6325           | 35.97         |
| PE ITU        | MaximumFlow     | 92.36    | 0.000     | 25.99       | 0.6325           | 35.97         |
| PE ACB        | MaximumFlow     | 90.48    | 0.000     | 25.00       | 0.6325           | 35.97         |
| PE CIC ARC    | MaximumFlow     | 77.49    | 0.000     | 23.48       | 0.6325           | 35.97         |
| PE RPR        | MaximumFlow     | 77.49    | 2500.500  | 23.53       | 0.6325           | 35.97         |
| PE JVL        | MaximumFlow     | 70.53    | 0.000     | 20.24       | 0.6325           | 35.97         |
| PE GMM        | MaximumFlow     | 68.52    | 0.000     | 20.36       | 0.6325           | 35.97         |
| PE GSP        | MaximumFlow     | 64.53    | 553.500   | 21.32       | 0.6325           | 35.97         |
| PE BRQ        | MaximumFlow     | 63.22    | 255.000   | 21.06       | 0.6325           | 35.97         |
| PE TJC        | MaximumFlow     | 61.49    | 432.500   | 21.26       | 0.6325           | 35.97         |
| PE SPA        | MaximumFlow     | 73.07    | 0.000     | 29.91       | 0.6325           | 35.97         |
| PE TBR        | MaximumFlow     | 65.06    | 0.000     | 21.18       | 0.6325           | 35.97         |
| PE URS        | MaximumFlow     | 62.06    | 391.500   | 21.01       | 0.6325           | 35.97         |
| PE NVZ        | MaximumFlow     | 74.70    | 432.500   | 30.12       | 0.6325           | 35.97         |
| PE VZC        | MaximumFlow     | 59.30    | 0.000     | 20.26       | 0.6325           | 35.97         |
| PE ARA        | MaximumFlow     | 57.43    | 0.000     | 21.13       | 0.6325           | 35.97         |
| PE CCH        | MaximumFlow     | 54.86    | 0.000     | 20.93       | 0.6325           | 35.97         |
| PE RFP        | MaximumFlow     | 54.34    | 0.000     | 20.77       | 0.6325           | 35.97         |
| PE CAN        | MaximumFlow     | 54.34    | 2409.000  | 20.77       | 0.6325           | 35.97         |
| PE JGN        | MaximumFlow     | 74.27    | 0.000     | 21.07       | 0.6325           | 35.97         |
| PE ITA        | MaximumFlow     | 70.30    | 0.000     | 21.52       | 0.6325           | 35.97         |
| PE GRM        | MaximumFlow     | 64.59    | 0.000     | 23.41       | 0.6325           | 35.97         |
| EMED GRM      | MaximumFlow     | 63.35    | 7000.000  | 23.17       | 0.6325           | 35.97         |
| PE IND        | MaximumFlow     | 92.26    | 432.500   | 25.66       | 0.6325           | 35.97         |
| UTE ARC       | MaximumFlow     | 77.49    | 2560.500  | 23.53       | 0.6325           | 35.97         |
| UTE CAN       | MaximumFlow     | 54.34    | 0.000     | 20.77       | 0.6325           | 35.97         |
| PE PFZ        | MaximumFlow     | 91.67    | 0.000     | 25.76       | 0.6325           | 35.97         |

|               |             |       |          |       |        |       |
|---------------|-------------|-------|----------|-------|--------|-------|
| PE CLG        | MaximumFlow | 77.76 | 0.000    | 22.93 | 0.6325 | 35.97 |
| PE GMN        | MaximumFlow | 94.22 | 0.000    | 28.28 | 0.6325 | 35.97 |
| EMED GASCAR_S | MaximumFlow | 65.00 | 0.000    | 25.00 | 0.6325 | 35.97 |
| PE IGR        | MaximumFlow | 58.84 | 0.000    | 22.28 | 0.6325 | 35.97 |
| EMED JCT      | MaximumFlow | 65.00 | 300.000  | 25.00 | 0.6325 | 35.97 |
| PE GUA        | MaximumFlow | 88.69 | 0.000    | 26.64 | 0.6325 | 35.97 |
| PE VLP        | MaximumFlow | 98.11 | 0.000    | 33.98 | 0.6325 | 35.97 |
| PE IAC        | MaximumFlow | 81.78 | 0.000    | 24.74 | 0.6325 | 35.97 |
| PE IBT        | MaximumFlow | 98.59 | 0.000    | 37.76 | 0.6325 | 35.97 |
| UFN TLG       | MaximumFlow | 95.41 | 1405.000 | 33.51 | 0.6325 | 35.97 |
| PE ITP        | MaximumFlow | 89.28 | 0.000    | 25.58 | 0.6325 | 35.97 |
| PE ITR        | MaximumFlow | 97.83 | 0.000    | 34.74 | 0.6325 | 35.97 |
| COM_CBA       | MaximumFlow | 79.98 | 59.420   | 41.73 | 0.6325 | 35.97 |
| COM_MRD       | MaximumFlow | 89.00 | 72.380   | 32.53 | 0.6325 | 35.97 |
| COMB_ANT      | MaximumFlow | 88.90 | 72.876   | 30.71 | 0.6325 | 35.97 |
| COMB_CGR      | MaximumFlow | 88.23 | 53.757   | 29.62 | 0.6325 | 35.97 |
| COMB_RRP      | MaximumFlow | 89.63 | 71.350   | 30.53 | 0.6325 | 35.97 |
| COMB_TLG      | MaximumFlow | 89.37 | 74.234   | 29.83 | 0.6325 | 35.97 |
| COMB_MIR      | MaximumFlow | 89.15 | 72.361   | 27.96 | 0.6325 | 35.97 |
| COMB_PEN      | MaximumFlow | 91.32 | 0.000    | 27.91 | 0.6325 | 35.97 |
| COMB_IAC      | MaximumFlow | 81.78 | 51.459   | 24.74 | 0.6325 | 35.97 |
| COMB_SCA      | MaximumFlow | 88.37 | 72.150   | 27.86 | 0.6325 | 35.97 |
| COMB_ARC      | MaximumFlow | 77.49 | 0.000    | 23.54 | 0.6325 | 35.97 |
| COMB_PLN      | MaximumFlow | 94.34 | 0.000    | 28.66 | 0.6325 | 35.97 |
| COMB_CBO      | MaximumFlow | 87.27 | 0.000    | 25.58 | 0.6325 | 35.97 |
| COMB_SID      | MaximumFlow | 60.62 | 4.806    | 20.35 | 0.6325 | 35.97 |
| COMB_BIG      | MaximumFlow | 60.26 | 9.057    | 21.10 | 0.6325 | 35.97 |

| Accumulated Volume Summary |                   |                    |             |
|----------------------------|-------------------|--------------------|-------------|
| Xreg Name                  | Current Flow Rate | Accumulated Volume | Timer Value |
|                            | kSm3/d            | KPM3               | hours       |
| RGD                        | -20429.4806       | 0.0000             | 24.000      |
| EMED GASCAR_E              | -2800.0000        | 0.0000             | 24.000      |
| TGS                        | -4487.8636        | 0.0000             | 24.000      |
| PE CBA                     | 0.0000            | 0.0000             | 24.000      |
| PE CGR                     | 0.0000            | 0.0000             | 24.000      |
| UTE TLG                    | 0.0000            | 0.0000             | 24.000      |
| PE BLC                     | 0.0000            | 0.0000             | 24.000      |
| PE BSP                     | 0.0000            | 0.0000             | 24.000      |
| PE SCA                     | 945.0000          | 0.0000             | 24.000      |
| PE RCL                     | 478.5000          | 0.0000             | 24.000      |
| PE LMR                     | 1800.0000         | 0.0000             | 24.000      |
|                            |                   |                    |             |

|               |           |        |        |
|---------------|-----------|--------|--------|
| PE AMR        | 1800.0000 | 0.0000 | 24.000 |
| PE RPL        | 2500.0000 | 0.0000 | 24.000 |
| PE SMR        | 0.0000    | 0.0000 | 24.000 |
| PE CMP        | 907.5000  | 0.0000 | 24.000 |
| PE ITU        | 0.0000    | 0.0000 | 24.000 |
| PE ACB        | 0.0000    | 0.0000 | 24.000 |
| PE CIC ARC    | 0.0000    | 0.0000 | 24.000 |
| PE RPR        | 2500.5000 | 0.0000 | 24.000 |
| PE JVL        | 0.0000    | 0.0000 | 24.000 |
| PE GMM        | 0.0000    | 0.0000 | 24.000 |
| PE GSP        | 553.5000  | 0.0000 | 24.000 |
| PE BRQ        | 255.0000  | 0.0000 | 24.000 |
| PE TJC        | 432.5000  | 0.0000 | 24.000 |
| PE SPA        | 0.0000    | 0.0000 | 24.000 |
| PE TBR        | 0.0000    | 0.0000 | 24.000 |
| PE URS        | 391.5000  | 0.0000 | 24.000 |
| PE NVZ        | 432.5000  | 0.0000 | 24.000 |
| PE VZC        | 0.0000    | 0.0000 | 24.000 |
| PE ARA        | 0.0000    | 0.0000 | 24.000 |
| PE CCH        | 0.0000    | 0.0000 | 24.000 |
| PE RFP        | 0.0000    | 0.0000 | 24.000 |
| PE CAN        | 2409.0000 | 0.0000 | 24.000 |
| PE JGN        | 0.0000    | 0.0000 | 24.000 |
| PE ITA        | 0.0000    | 0.0000 | 24.000 |
| PE GRM        | 0.0000    | 0.0000 | 24.000 |
| EMED GRM      | 7000.0000 | 0.0000 | 24.000 |
| PE IND        | 432.5000  | 0.0000 | 24.000 |
| UTE ARC       | 2560.5000 | 0.0000 | 24.000 |
| UTE CAN       | 0.0000    | 0.0000 | 24.000 |
| PE PFZ        | 0.0000    | 0.0000 | 24.000 |
| PE CLG        | 0.0000    | 0.0000 | 24.000 |
| PE GMN        | 0.0000    | 0.0000 | 24.000 |
| EMED GASCAR_S | 0.0000    | 0.0000 | 24.000 |
| PE IGR        | 0.0000    | 0.0000 | 24.000 |
| EMED JCT      | 300.0000  | 0.0000 | 24.000 |
| PE GUA        | 0.0000    | 0.0000 | 24.000 |
| PE VLP        | 0.0000    | 0.0000 | 24.000 |
| PE IAC        | 0.0000    | 0.0000 | 24.000 |
| PE IBT        | 0.0000    | 0.0000 | 24.000 |
| UFN TLG       | 1405.0000 | 0.0000 | 24.000 |
| PE ITP        | 0.0000    | 0.0000 | 24.000 |
| PE ITR        | 0.0000    | 0.0000 | 24.000 |
| COM_CBA       | 59.4199   | 0.0000 | 24.000 |
| COM_MRD       | 72.3805   | 0.0000 | 24.000 |
| COMB_ANT      | 72.8756   | 0.0000 | 24.000 |



|          |         |        |        |
|----------|---------|--------|--------|
| COMB_CGR | 53.7569 | 0.0000 | 24.000 |
| COMB_RRP | 71.3503 | 0.0000 | 24.000 |
| COMB_TLG | 74.2344 | 0.0000 | 24.000 |
| COMB_MIR | 72.3614 | 0.0000 | 24.000 |
| COMB_PEN | 0.0000  | 0.0000 | 24.000 |
| COMB_IAC | 51.4591 | 0.0000 | 24.000 |
| COMB_SCA | 72.1504 | 0.0000 | 24.000 |
| COMB_ARC | 0.0000  | 0.0000 | 24.000 |
| COMB_PLN | 0.0000  | 0.0000 | 24.000 |
| COMB_CBO | 0.0000  | 0.0000 | 24.000 |
| COMB_SID | 4.8064  | 0.0000 | 24.000 |
| COMB_BIG | 9.0572  | 0.0000 | 24.000 |

### Xreg Quality Summary Report : 0.000 hours

| Xreg Quality Summary |                  |               |             |
|----------------------|------------------|---------------|-------------|
| Xreg Name            | Specific Gravity | Heating Value | Wobbe Index |
|                      |                  | MJ/m3         | MJ/m3       |
| RGD                  | 0.6325           | 35.9734       | 0.0000      |
| EMED GASCAR_E        | 0.6325           | 35.9734       | 0.0000      |
| TGS                  | 0.6325           | 35.9734       | 0.0000      |
| PE CBA               | 0.6325           | 35.9734       | 0.0000      |
| PE CGR               | 0.6325           | 35.9734       | 0.0000      |
| UTE TLG              | 0.6325           | 35.9734       | 0.0000      |
| PE BLC               | 0.6325           | 35.9734       | 0.0000      |
| PE BSP               | 0.6325           | 35.9734       | 0.0000      |
| PE SCA               | 0.6325           | 35.9734       | 0.0000      |
| PE RCL               | 0.6325           | 35.9734       | 0.0000      |
| PE LMR               | 0.6325           | 35.9734       | 0.0000      |
| PE AMR               | 0.6325           | 35.9734       | 0.0000      |
| PE RPL               | 0.6325           | 35.9734       | 0.0000      |
| PE SMR               | 0.6325           | 35.9734       | 0.0000      |
| PE CMP               | 0.6325           | 35.9734       | 0.0000      |
| PE ITU               | 0.6325           | 35.9734       | 0.0000      |
| PE ACB               | 0.6325           | 35.9734       | 0.0000      |
| PE CIC ARC           | 0.6325           | 35.9734       | 0.0000      |
| PE RPR               | 0.6325           | 35.9734       | 0.0000      |
| PE JVL               | 0.6325           | 35.9734       | 0.0000      |
| PE GMM               | 0.6325           | 35.9734       | 0.0000      |
| PE GSP               | 0.6325           | 35.9734       | 0.0000      |
| PE BRQ               | 0.6325           | 35.9734       | 0.0000      |

|               |        |         |        |
|---------------|--------|---------|--------|
| PE TJC        | 0.6325 | 35.9734 | 0.0000 |
| PE SPA        | 0.6325 | 35.9734 | 0.0000 |
| PE TBR        | 0.6325 | 35.9734 | 0.0000 |
| PE URS        | 0.6325 | 35.9734 | 0.0000 |
| PE NVZ        | 0.6325 | 35.9734 | 0.0000 |
| PE VZC        | 0.6325 | 35.9734 | 0.0000 |
| PE ARA        | 0.6325 | 35.9734 | 0.0000 |
| PE CCH        | 0.6325 | 35.9734 | 0.0000 |
| PE RFP        | 0.6325 | 35.9734 | 0.0000 |
| PE CAN        | 0.6325 | 35.9734 | 0.0000 |
| PE JGN        | 0.6325 | 35.9734 | 0.0000 |
| PE ITA        | 0.6325 | 35.9734 | 0.0000 |
| PE GRM        | 0.6325 | 35.9734 | 0.0000 |
| EMED GRM      | 0.6325 | 35.9734 | 0.0000 |
| PE IND        | 0.6325 | 35.9734 | 0.0000 |
| UTE ARC       | 0.6325 | 35.9734 | 0.0000 |
| UTE CAN       | 0.6325 | 35.9734 | 0.0000 |
| PE PFZ        | 0.6325 | 35.9734 | 0.0000 |
| PE CLG        | 0.6325 | 35.9734 | 0.0000 |
| PE GMN        | 0.6325 | 35.9734 | 0.0000 |
| EMED GASCAR_S | 0.6325 | 35.9734 | 0.0000 |
| PE IGR        | 0.6325 | 35.9734 | 0.0000 |
| EMED JCT      | 0.6325 | 35.9734 | 0.0000 |
| PE GUA        | 0.6325 | 35.9734 | 0.0000 |
| PE VLP        | 0.6325 | 35.9734 | 0.0000 |
| PE IAC        | 0.6325 | 35.9734 | 0.0000 |
| PE IBT        | 0.6325 | 35.9734 | 0.0000 |
| UFN TLG       | 0.6325 | 35.9734 | 0.0000 |
| PE ITP        | 0.6325 | 35.9734 | 0.0000 |
| PE ITR        | 0.6325 | 35.9734 | 0.0000 |
| COM_CBA       | 0.6325 | 35.9734 | 0.0000 |
| COM_MRD       | 0.6325 | 35.9734 | 0.0000 |
| COMB_ANT      | 0.6325 | 35.9734 | 0.0000 |
| COMB_CGR      | 0.6325 | 35.9734 | 0.0000 |
| COMB_RRP      | 0.6325 | 35.9734 | 0.0000 |
| COMB_TLG      | 0.6325 | 35.9734 | 0.0000 |
| COMB_MIR      | 0.6325 | 35.9734 | 0.0000 |
| COMB_PEN      | 0.6325 | 35.9734 | 0.0000 |
| COMB_IAC      | 0.6325 | 35.9734 | 0.0000 |
| COMB_SCA      | 0.6325 | 35.9734 | 0.0000 |
| COMB_ARC      | 0.6325 | 35.9734 | 0.0000 |
| COMB_PLN      | 0.6325 | 35.9734 | 0.0000 |
| COMB_CBO      | 0.6325 | 35.9734 | 0.0000 |
| COMB_SID      | 0.6325 | 35.9734 | 0.0000 |
| COMB_BIG      | 0.6325 | 35.9734 | 0.0000 |

| Xreg Quality Summary |       |      |      |      |      |      |
|----------------------|-------|------|------|------|------|------|
| Xreg Name            | C1    | C2   | C3   | IC4  | NC4  | IC5  |
|                      | %     | %    | %    | %    | %    | %    |
| RGD                  | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| EMED GASCAR_E        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| TGS                  | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE CBA               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE CGR               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| UTE TLG              | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE BLC               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE BSP               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE SCA               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE RCL               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE LMR               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE AMR               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE RPL               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE SMR               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE CMP               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE ITU               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE ACB               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE CIC ARC           | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE RPR               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE JVL               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE GMM               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE GSP               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE BRQ               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE TJC               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE SPA               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE TBR               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE URS               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE NVZ               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE VZC               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE ARA               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE CCH               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE RFP               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE CAN               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE JGN               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE ITA               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE GRM               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| EMED GRM             | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE IND               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| UTE ARC              | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| UTE CAN              | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |

|               |       |      |      |      |      |      |
|---------------|-------|------|------|------|------|------|
| PE PFZ        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE CLG        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE GMN        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| EMED GASCAR_S | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE IGR        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| EMED JCT      | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE GUA        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE VLP        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE IAC        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE IBT        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| UFN TLG       | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE ITP        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE ITR        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COM_CBA       | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COM_MRD       | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_ANT      | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_CGR      | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_RRP      | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_TLG      | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_MIR      | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_PEN      | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_IAC      | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_SCA      | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_ARC      | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_PLN      | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_CBO      | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_SID      | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_BIG      | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |

| Xreg Quality Summary |      |      |      |      |      |
|----------------------|------|------|------|------|------|
| Xreg Name            | NC5  | C6   | CO2  | N2   | O2   |
|                      | %    | %    | %    | %    | %    |
| RGD                  | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| EMED GASCAR_E        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| TGS                  | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE CBA               | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE CGR               | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| UTE TLG              | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE BLC               | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE BSP               | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE SCA               | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE RCL               | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE LMR               | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE AMR               | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |

|               |      |      |      |      |      |
|---------------|------|------|------|------|------|
| PE RPL        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE SMR        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE CMP        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE ITU        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE ACB        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE CIC ARC    | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE RPR        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE JVL        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE GMM        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE GSP        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE BRQ        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE TJC        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE SPA        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE TBR        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE URS        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE NVZ        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE VZC        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE ARA        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE CCH        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE RFP        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE CAN        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE JGN        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE ITA        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE GRM        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| EMED GRM      | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE IND        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| UTE ARC       | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| UTE CAN       | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE PFZ        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE CLG        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE GMN        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| EMED GASCAR_S | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE IGR        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| EMED JCT      | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE GUA        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE VLP        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE IAC        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE IBT        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| UFN TLG       | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE ITP        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE ITR        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COM_CBA       | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COM_MRD       | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_ANT      | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_CGR      | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_DPP      |      |      |      |      |      |

|          |      |      |      |      |      |
|----------|------|------|------|------|------|
|          | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_TLG | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_MIR | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_PEN | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_IAC | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_SCA | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_ARC | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_PLN | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_CBO | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_SID | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_BIG | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |

### Supply Hydraulic Summary Report : 0.000 hours

| Supply Summary   |                 |          |           |             |                  |               |
|------------------|-----------------|----------|-----------|-------------|------------------|---------------|
| Supply Name      | Mode of Control | Pressure | Flow      | Temperature | Specific Gravity | Heating Value |
|                  |                 | kg/cm2g  | kSm3/d    | Deg C       |                  | MJ/m3         |
| RGD              | MaximumPressure | 85.00    | 20429.481 | 51.70       | 0.6325           | 35.97         |
| EMED<br>GASCAR_E | MaximumPressure | 65.00    | -2800.000 | 25.00       | 0.6325           | 35.97         |
| TGS              | MaximumPressure | 72.00    | -4487.864 | 20.00       | 0.6325           | 35.97         |

| Accumulated Volume Summary |                   |                    |             |
|----------------------------|-------------------|--------------------|-------------|
| Supply Name                | Current Flow Rate | Accumulated Volume | Timer Value |
|                            | kSm3/d            | KPM3               | hours       |
| RGD                        | -20429.4806       | 0.0000             | 24.000      |
| EMED<br>GASCAR_E           | -2800.0000        | 0.0000             | 24.000      |
| TGS                        | -4487.8636        | 0.0000             | 24.000      |

### Supply Quality Summary Report : 0.000 hours

| Supply Quality Summary |                  |               |             |
|------------------------|------------------|---------------|-------------|
| Supply Name            | Specific Gravity | Heating Value | Wobbe Index |
|                        |                  |               |             |

|               |        | MJ/m3   | MJ/m3  |
|---------------|--------|---------|--------|
| RGD           | 0.6325 | 35.9734 | 0.0000 |
| EMED GASCAR_E | 0.6325 | 35.9734 | 0.0000 |
| TGS           | 0.6325 | 35.9734 | 0.0000 |

| Supply Quality Summary |       |      |      |      |      |      |
|------------------------|-------|------|------|------|------|------|
| Supply Name            | C1    | C2   | C3   | IC4  | NC4  | IC5  |
|                        | %     | %    | %    | %    | %    | %    |
| RGD                    | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| EMED GASCAR_E          | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| TGS                    | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |

| Supply Quality Summary |      |      |      |      |      |
|------------------------|------|------|------|------|------|
| Supply Name            | NC5  | C6   | CO2  | N2   | O2   |
|                        | %    | %    | %    | %    | %    |
| RGD                    | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| EMED GASCAR_E          | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| TGS                    | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |

### Delivery Hydraulic Summary Report : 0.000 hours

| Delivery Summary |                 |          |          |             |                  |               |
|------------------|-----------------|----------|----------|-------------|------------------|---------------|
| Delivery Name    | Mode of Control | Pressure | Flow     | Temperature | Specific Gravity | Heating Value |
|                  |                 | kg/cm2g  | kSm3/d   | Deg C       |                  | MJ/m3         |
| PE CBA           | MaximumFlow     | 82.17    | 0.000    | 45.34       | 0.6325           | 35.97         |
| PE CGR           | MaximumFlow     | 88.24    | 0.000    | 29.62       | 0.6325           | 35.97         |
| UTE TLG          | MaximumFlow     | 95.41    | 0.000    | 33.51       | 0.6325           | 35.97         |
| PE BLC           | MaximumFlow     | 94.76    | 0.000    | 30.29       | 0.6325           | 35.97         |
| PE BSP           | MaximumFlow     | 93.70    | 0.000    | 31.45       | 0.6325           | 35.97         |
| PE SCA           | MaximumFlow     | 98.77    | 945.000  | 36.41       | 0.6325           | 35.97         |
| PE RCL           | MaximumFlow     | 97.77    | 478.500  | 32.91       | 0.6325           | 35.97         |
| PE LMR           | MaximumFlow     | 96.16    | 1800.000 | 31.17       | 0.6325           | 35.97         |
| PE AMR           | MaximumFlow     | 95.44    | 1800.000 | 29.91       | 0.6325           | 35.97         |
| PE RPL           | MaximumFlow     | 65.00    | 2500.000 | 25.00       | 0.6325           | 35.97         |
| PE SMR           | MaximumFlow     | 93.65    | 0.000    | 27.47       | 0.6325           | 35.97         |
| PE CMP           | MaximumFlow     | 92.93    | 907.500  | 26.85       | 0.6325           | 35.97         |
| PE ITU           | MaximumFlow     | 92.36    | 0.000    | 25.99       | 0.6325           | 35.97         |

|                  |             |       |          |       |        |       |
|------------------|-------------|-------|----------|-------|--------|-------|
| PE ACB           | MaximumFlow | 90.48 | 0.000    | 25.00 | 0.6325 | 35.97 |
| PE CIC<br>ARC    | MaximumFlow | 77.49 | 0.000    | 23.48 | 0.6325 | 35.97 |
| PE RPR           | MaximumFlow | 77.49 | 2500.500 | 23.53 | 0.6325 | 35.97 |
| PE JVL           | MaximumFlow | 70.53 | 0.000    | 20.24 | 0.6325 | 35.97 |
| PE GMM           | MaximumFlow | 68.52 | 0.000    | 20.36 | 0.6325 | 35.97 |
| PE GSP           | MaximumFlow | 64.53 | 553.500  | 21.32 | 0.6325 | 35.97 |
| PE BRQ           | MaximumFlow | 63.22 | 255.000  | 21.06 | 0.6325 | 35.97 |
| PE TJC           | MaximumFlow | 61.49 | 432.500  | 21.26 | 0.6325 | 35.97 |
| PE SPA           | MaximumFlow | 73.07 | 0.000    | 29.91 | 0.6325 | 35.97 |
| PE TBR           | MaximumFlow | 65.06 | 0.000    | 21.18 | 0.6325 | 35.97 |
| PE URS           | MaximumFlow | 62.06 | 391.500  | 21.01 | 0.6325 | 35.97 |
| PE NVZ           | MaximumFlow | 74.70 | 432.500  | 30.12 | 0.6325 | 35.97 |
| PE VZC           | MaximumFlow | 59.30 | 0.000    | 20.26 | 0.6325 | 35.97 |
| PE ARA           | MaximumFlow | 57.43 | 0.000    | 21.13 | 0.6325 | 35.97 |
| PE CCH           | MaximumFlow | 54.86 | 0.000    | 20.93 | 0.6325 | 35.97 |
| PE RFP           | MaximumFlow | 54.34 | 0.000    | 20.77 | 0.6325 | 35.97 |
| PE CAN           | MaximumFlow | 54.34 | 2409.000 | 20.77 | 0.6325 | 35.97 |
| PE JGN           | MaximumFlow | 74.27 | 0.000    | 21.07 | 0.6325 | 35.97 |
| PE ITA           | MaximumFlow | 70.30 | 0.000    | 21.52 | 0.6325 | 35.97 |
| PE GRM           | MaximumFlow | 64.59 | 0.000    | 23.41 | 0.6325 | 35.97 |
| EMED<br>GRM      | MaximumFlow | 63.35 | 7000.000 | 23.17 | 0.6325 | 35.97 |
| PE IND           | MaximumFlow | 92.26 | 432.500  | 25.66 | 0.6325 | 35.97 |
| UTE ARC          | MaximumFlow | 77.49 | 2560.500 | 23.53 | 0.6325 | 35.97 |
| UTE CAN          | MaximumFlow | 54.34 | 0.000    | 20.77 | 0.6325 | 35.97 |
| PE PFZ           | MaximumFlow | 91.67 | 0.000    | 25.76 | 0.6325 | 35.97 |
| PE CLG           | MaximumFlow | 77.76 | 0.000    | 22.93 | 0.6325 | 35.97 |
| PE GMN           | MaximumFlow | 94.22 | 0.000    | 28.28 | 0.6325 | 35.97 |
| EMED<br>GASCAR_S | MaximumFlow | 65.00 | 0.000    | 25.00 | 0.6325 | 35.97 |
| PE IGR           | MaximumFlow | 58.84 | 0.000    | 22.28 | 0.6325 | 35.97 |
| EMED JCT         | MaximumFlow | 65.00 | 300.000  | 25.00 | 0.6325 | 35.97 |
| PE GUA           | MaximumFlow | 88.69 | 0.000    | 26.64 | 0.6325 | 35.97 |
| PE VLP           | MaximumFlow | 98.11 | 0.000    | 33.98 | 0.6325 | 35.97 |
| PE IAC           | MaximumFlow | 81.78 | 0.000    | 24.74 | 0.6325 | 35.97 |
| PE IBT           | MaximumFlow | 98.59 | 0.000    | 37.76 | 0.6325 | 35.97 |
| UFN TLG          | MaximumFlow | 95.41 | 1405.000 | 33.51 | 0.6325 | 35.97 |
| PE ITP           | MaximumFlow | 89.28 | 0.000    | 25.58 | 0.6325 | 35.97 |
| PE ITR           | MaximumFlow | 97.83 | 0.000    | 34.74 | 0.6325 | 35.97 |

| Accumulated Volume Summary |                   |                    |             |
|----------------------------|-------------------|--------------------|-------------|
| Delivery Name              | Current Flow Rate | Accumulated Volume | Timer Value |
|                            | kSm3/d            | KPM3               | hours       |
| PE CBA                     | 0.0000            | 0.0000             | 24.000      |



|               |           |        |        |
|---------------|-----------|--------|--------|
| PE CGR        | 0.0000    | 0.0000 | 24.000 |
| UTE TLG       | 0.0000    | 0.0000 | 24.000 |
| PE BLC        | 0.0000    | 0.0000 | 24.000 |
| PE BSP        | 0.0000    | 0.0000 | 24.000 |
| PE SCA        | 945.0000  | 0.0000 | 24.000 |
| PE RCL        | 478.5000  | 0.0000 | 24.000 |
| PE LMR        | 1800.0000 | 0.0000 | 24.000 |
| PE AMR        | 1800.0000 | 0.0000 | 24.000 |
| PE RPL        | 2500.0000 | 0.0000 | 24.000 |
| PE SMR        | 0.0000    | 0.0000 | 24.000 |
| PE CMP        | 907.5000  | 0.0000 | 24.000 |
| PE ITU        | 0.0000    | 0.0000 | 24.000 |
| PE ACB        | 0.0000    | 0.0000 | 24.000 |
| PE CIC ARC    | 0.0000    | 0.0000 | 24.000 |
| PE RPR        | 2500.5000 | 0.0000 | 24.000 |
| PE JVL        | 0.0000    | 0.0000 | 24.000 |
| PE GMM        | 0.0000    | 0.0000 | 24.000 |
| PE GSP        | 553.5000  | 0.0000 | 24.000 |
| PE BRQ        | 255.0000  | 0.0000 | 24.000 |
| PE TJC        | 432.5000  | 0.0000 | 24.000 |
| PE SPA        | 0.0000    | 0.0000 | 24.000 |
| PE TBR        | 0.0000    | 0.0000 | 24.000 |
| PE URS        | 391.5000  | 0.0000 | 24.000 |
| PE NVZ        | 432.5000  | 0.0000 | 24.000 |
| PE VZC        | 0.0000    | 0.0000 | 24.000 |
| PE ARA        | 0.0000    | 0.0000 | 24.000 |
| PE CCH        | 0.0000    | 0.0000 | 24.000 |
| PE RFP        | 0.0000    | 0.0000 | 24.000 |
| PE CAN        | 2409.0000 | 0.0000 | 24.000 |
| PE JGN        | 0.0000    | 0.0000 | 24.000 |
| PE ITA        | 0.0000    | 0.0000 | 24.000 |
| PE GRM        | 0.0000    | 0.0000 | 24.000 |
| EMED GRM      | 7000.0000 | 0.0000 | 24.000 |
| PE IND        | 432.5000  | 0.0000 | 24.000 |
| UTE ARC       | 2560.5000 | 0.0000 | 24.000 |
| UTE CAN       | 0.0000    | 0.0000 | 24.000 |
| PE PFZ        | 0.0000    | 0.0000 | 24.000 |
| PE CLG        | 0.0000    | 0.0000 | 24.000 |
| PE GMN        | 0.0000    | 0.0000 | 24.000 |
| EMED GASCAR_S | 0.0000    | 0.0000 | 24.000 |
| PE IGR        | 0.0000    | 0.0000 | 24.000 |
| EMED JCT      | 300.0000  | 0.0000 | 24.000 |
| PE GUA        | 0.0000    | 0.0000 | 24.000 |
| PE VLP        | 0.0000    | 0.0000 | 24.000 |
| PE IAC        | 0.0000    | 0.0000 | 24.000 |

|         |           |        |        |
|---------|-----------|--------|--------|
| PE IBT  | 0.0000    | 0.0000 | 24.000 |
| UFN TLG | 1405.0000 | 0.0000 | 24.000 |
| PE ITP  | 0.0000    | 0.0000 | 24.000 |
| PE ITR  | 0.0000    | 0.0000 | 24.000 |

### Delivery Quality Summary Report : 0.000 hours

| Delivery Quality Summary |                  |               |             |
|--------------------------|------------------|---------------|-------------|
| Delivery Name            | Specific Gravity | Heating Value | Wobbe Index |
|                          |                  | MJ/m3         | MJ/m3       |
| PE CBA                   | 0.6325           | 35.9734       | 0.0000      |
| PE CGR                   | 0.6325           | 35.9734       | 0.0000      |
| UTE TLG                  | 0.6325           | 35.9734       | 0.0000      |
| PE BLC                   | 0.6325           | 35.9734       | 0.0000      |
| PE BSP                   | 0.6325           | 35.9734       | 0.0000      |
| PE SCA                   | 0.6325           | 35.9734       | 0.0000      |
| PE RCL                   | 0.6325           | 35.9734       | 0.0000      |
| PE LMR                   | 0.6325           | 35.9734       | 0.0000      |
| PE AMR                   | 0.6325           | 35.9734       | 0.0000      |
| PE RPL                   | 0.6325           | 35.9734       | 0.0000      |
| PE SMR                   | 0.6325           | 35.9734       | 0.0000      |
| PE CMP                   | 0.6325           | 35.9734       | 0.0000      |
| PE ITU                   | 0.6325           | 35.9734       | 0.0000      |
| PE ACB                   | 0.6325           | 35.9734       | 0.0000      |
| PE CIC ARC               | 0.6325           | 35.9734       | 0.0000      |
| PE RPR                   | 0.6325           | 35.9734       | 0.0000      |
| PE JVL                   | 0.6325           | 35.9734       | 0.0000      |
| PE GMM                   | 0.6325           | 35.9734       | 0.0000      |
| PE GSP                   | 0.6325           | 35.9734       | 0.0000      |
| PE BRQ                   | 0.6325           | 35.9734       | 0.0000      |
| PE TJC                   | 0.6325           | 35.9734       | 0.0000      |
| PE SPA                   | 0.6325           | 35.9734       | 0.0000      |
| PE TBR                   | 0.6325           | 35.9734       | 0.0000      |
| PE URS                   | 0.6325           | 35.9734       | 0.0000      |
| PE NVZ                   | 0.6325           | 35.9734       | 0.0000      |
| PE VZC                   | 0.6325           | 35.9734       | 0.0000      |
| PE ARA                   | 0.6325           | 35.9734       | 0.0000      |
| PE CCH                   | 0.6325           | 35.9734       | 0.0000      |
| PE RFP                   | 0.6325           | 35.9734       | 0.0000      |
| PE CAN                   | 0.6325           | 35.9734       | 0.0000      |
| PE JGN                   | 0.6325           | 35.9734       | 0.0000      |

|               |        |         |        |
|---------------|--------|---------|--------|
| PE ITA        | 0.6325 | 35.9734 | 0.0000 |
| PE GRM        | 0.6325 | 35.9734 | 0.0000 |
| EMED GRM      | 0.6325 | 35.9734 | 0.0000 |
| PE IND        | 0.6325 | 35.9734 | 0.0000 |
| UTE ARC       | 0.6325 | 35.9734 | 0.0000 |
| UTE CAN       | 0.6325 | 35.9734 | 0.0000 |
| PE PFZ        | 0.6325 | 35.9734 | 0.0000 |
| PE CLG        | 0.6325 | 35.9734 | 0.0000 |
| PE GMN        | 0.6325 | 35.9734 | 0.0000 |
| EMED GASCAR_S | 0.6325 | 35.9734 | 0.0000 |
| PE IGR        | 0.6325 | 35.9734 | 0.0000 |
| EMED JCT      | 0.6325 | 35.9734 | 0.0000 |
| PE GUA        | 0.6325 | 35.9734 | 0.0000 |
| PE VLP        | 0.6325 | 35.9734 | 0.0000 |
| PE IAC        | 0.6325 | 35.9734 | 0.0000 |
| PE IBT        | 0.6325 | 35.9734 | 0.0000 |
| UFN TLG       | 0.6325 | 35.9734 | 0.0000 |
| PE ITP        | 0.6325 | 35.9734 | 0.0000 |
| PE ITR        | 0.6325 | 35.9734 | 0.0000 |

| Delivery Quality Summary |       |      |      |      |      |      |
|--------------------------|-------|------|------|------|------|------|
| Delivery Name            | C1    | C2   | C3   | IC4  | NC4  | IC5  |
|                          | %     | %    | %    | %    | %    | %    |
| PE CBA                   | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE CGR                   | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| UTE TLG                  | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE BLC                   | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE BSP                   | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE SCA                   | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE RCL                   | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE LMR                   | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE AMR                   | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE RPL                   | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE SMR                   | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE CMP                   | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE ITU                   | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE ACB                   | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE CIC ARC               | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE RPR                   | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE JVL                   | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE GMM                   | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE GSP                   | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE BRQ                   | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE TJC                   | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |

|               |       |      |      |      |      |      |
|---------------|-------|------|------|------|------|------|
| PE SPA        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE TBR        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE URS        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE NVZ        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE VZC        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE ARA        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE CCH        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE RFP        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE CAN        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE JGN        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE ITA        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE GRM        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| EMED GRM      | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE IND        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| UTE ARC       | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| UTE CAN       | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE PFZ        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE CLG        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE GMN        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| EMED GASCAR_S | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE IGR        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| EMED JCT      | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE GUA        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE VLP        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE IAC        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE IBT        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| UFN TLG       | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE ITP        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| PE ITR        | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |

| Delivery Quality Summary |      |      |      |      |      |
|--------------------------|------|------|------|------|------|
| Delivery Name            | NC5  | C6   | CO2  | N2   | O2   |
|                          | %    | %    | %    | %    | %    |
| PE CBA                   | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE CGR                   | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| UTE TLG                  | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE BLC                   | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE BSP                   | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE SCA                   | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE RCL                   | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE LMR                   | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE AMR                   | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE RPL                   | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE SMR                   | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |

|               |      |      |      |      |      |
|---------------|------|------|------|------|------|
| PE CMP        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE ITU        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE ACB        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE CIC ARC    | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE RPR        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE JVL        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE GMM        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE GSP        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE BRQ        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE TJC        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE SPA        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE TBR        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE URS        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE NVZ        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE VZC        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE ARA        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE CCH        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE RFP        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE CAN        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE JGN        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE ITA        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE GRM        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| EMED GRM      | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE IND        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| UTE ARC       | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| UTE CAN       | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE PFZ        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE CLG        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE GMN        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| EMED GASCAR_S | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE IGR        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| EMED JCT      | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE GUA        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE VLP        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE IAC        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE IBT        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| UFN TLG       | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE ITP        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| PE ITR        | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |

**Energy Delivery Hydraulic Summary Report :**  
**0.000 hours**

**Energy Delivery Quality Summary Report : 0.000  
hours**

**Fuel Delivery Hydraulic Summary Report : 0.000  
hours**

| Fuel Delivery Summary |                 |          |        |             |                  |               |
|-----------------------|-----------------|----------|--------|-------------|------------------|---------------|
| Fuel Delivery Name    | Mode of Control | Pressure | Flow   | Temperature | Specific Gravity | Heating Value |
|                       |                 | kg/cm2g  | kSm3/d | Deg C       |                  | MJ/m3         |
| COM_CBA               | MaximumFlow     | 79.98    | 59.420 | 41.73       | 0.6325           | 35.97         |
| COM_MRD               | MaximumFlow     | 89.00    | 72.380 | 32.53       | 0.6325           | 35.97         |
| COMB_ANT              | MaximumFlow     | 88.90    | 72.876 | 30.71       | 0.6325           | 35.97         |
| COMB_CGR              | MaximumFlow     | 88.23    | 53.757 | 29.62       | 0.6325           | 35.97         |
| COMB_RRP              | MaximumFlow     | 89.63    | 71.350 | 30.53       | 0.6325           | 35.97         |
| COMB_TLG              | MaximumFlow     | 89.37    | 74.234 | 29.83       | 0.6325           | 35.97         |
| COMB_MIR              | MaximumFlow     | 89.15    | 72.361 | 27.96       | 0.6325           | 35.97         |
| COMB_PEN              | MaximumFlow     | 91.32    | 0.000  | 27.91       | 0.6325           | 35.97         |
| COMB_IAC              | MaximumFlow     | 81.78    | 51.459 | 24.74       | 0.6325           | 35.97         |
| COMB_SCA              | MaximumFlow     | 88.37    | 72.150 | 27.86       | 0.6325           | 35.97         |
| COMB_ARC              | MaximumFlow     | 77.49    | 0.000  | 23.54       | 0.6325           | 35.97         |
| COMB_PLN              | MaximumFlow     | 94.34    | 0.000  | 28.66       | 0.6325           | 35.97         |
| COMB_CBO              | MaximumFlow     | 87.27    | 0.000  | 25.58       | 0.6325           | 35.97         |
| COMB_SID              | MaximumFlow     | 60.62    | 4.806  | 20.35       | 0.6325           | 35.97         |
| COMB_BIG              | MaximumFlow     | 60.26    | 9.057  | 21.10       | 0.6325           | 35.97         |

| Accumulated Volume Summary |                   |                    |             |
|----------------------------|-------------------|--------------------|-------------|
| Fuel Delivery Name         | Current Flow Rate | Accumulated Volume | Timer Value |
|                            | kSm3/d            | KPM3               | hours       |
| COM_CBA                    | 59.4199           | 0.0000             | 24.000      |
| COM_MRD                    | 72.3805           | 0.0000             | 24.000      |
| COMB_ANT                   | 72.8756           | 0.0000             | 24.000      |
| COMB_CGR                   | 53.7569           | 0.0000             | 24.000      |
| COMB_RRP                   | 71.3503           | 0.0000             | 24.000      |

|          |         |        |        |
|----------|---------|--------|--------|
| COMB_TLG | 74.2344 | 0.0000 | 24.000 |
| COMB_MIR | 72.3614 | 0.0000 | 24.000 |
| COMB_PEN | 0.0000  | 0.0000 | 24.000 |
| COMB_IAC | 51.4591 | 0.0000 | 24.000 |
| COMB_SCA | 72.1504 | 0.0000 | 24.000 |
| COMB_ARC | 0.0000  | 0.0000 | 24.000 |
| COMB_PLN | 0.0000  | 0.0000 | 24.000 |
| COMB_CBO | 0.0000  | 0.0000 | 24.000 |
| COMB_SID | 4.8064  | 0.0000 | 24.000 |
| COMB_BIG | 9.0572  | 0.0000 | 24.000 |

**Fuel Delivery Quality Summary Report : 0.000  
hours**

| Fuel Delivery Quality Summary |                  |               |             |
|-------------------------------|------------------|---------------|-------------|
| Fuel Delivery Name            | Specific Gravity | Heating Value | Wobbe Index |
|                               |                  | MJ/m3         | MJ/m3       |
| COM_CBA                       | 0.6325           | 35.9734       | 0.0000      |
| COM_MRD                       | 0.6325           | 35.9734       | 0.0000      |
| COMB_ANT                      | 0.6325           | 35.9734       | 0.0000      |
| COMB_CGR                      | 0.6325           | 35.9734       | 0.0000      |
| COMB_RRP                      | 0.6325           | 35.9734       | 0.0000      |
| COMB_TLG                      | 0.6325           | 35.9734       | 0.0000      |
| COMB_MIR                      | 0.6325           | 35.9734       | 0.0000      |
| COMB_PEN                      | 0.6325           | 35.9734       | 0.0000      |
| COMB_IAC                      | 0.6325           | 35.9734       | 0.0000      |
| COMB_SCA                      | 0.6325           | 35.9734       | 0.0000      |
| COMB_ARC                      | 0.6325           | 35.9734       | 0.0000      |
| COMB_PLN                      | 0.6325           | 35.9734       | 0.0000      |
| COMB_CBO                      | 0.6325           | 35.9734       | 0.0000      |
| COMB_SID                      | 0.6325           | 35.9734       | 0.0000      |
| COMB_BIG                      | 0.6325           | 35.9734       | 0.0000      |

| Fuel Delivery Quality Summary |       |      |      |      |      |      |
|-------------------------------|-------|------|------|------|------|------|
| Fuel Delivery Name            | C1    | C2   | C3   | IC4  | NC4  | IC5  |
|                               | %     | %    | %    | %    | %    | %    |
| COM_CBA                       | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COM_MRD                       | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_ANT                      | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |

|          |       |      |      |      |      |      |
|----------|-------|------|------|------|------|------|
| COMB_CGR | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_RRP | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_TLG | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_MIR | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_PEN | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_IAC | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_SCA | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_ARC | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_PLN | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_CBO | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_SID | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |
| COMB_BIG | 89.20 | 5.90 | 1.81 | 0.29 | 0.40 | 0.12 |

| Fuel Delivery Quality Summary |      |      |      |      |      |
|-------------------------------|------|------|------|------|------|
| Fuel Delivery Name            | NC5  | C6   | CO2  | N2   | O2   |
|                               | %    | %    | %    | %    | %    |
| COM_CBA                       | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COM_MRD                       | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_ANT                      | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_CGR                      | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_RRP                      | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_TLG                      | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_MIR                      | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_PEN                      | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_IAC                      | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_SCA                      | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_ARC                      | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_PLN                      | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_CBO                      | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_SID                      | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |
| COMB_BIG                      | 0.08 | 0.09 | 1.39 | 0.71 | 0.01 |

**Leak Delivery Hydraulic Summary Report : 0.000  
hours**

**Leak Delivery Quality Summary Report : 0.000**



**hours**

**Station Hydraulic Summary Report : 0.000 hours**

**Station C5**

**Station C6**

**Station C7**

**Station C8**

**Station C9**

**Station C10**

**Station C11**

**Station ECOMP\_PEN**

**Station C13**

**Station C14**

**Station C15**

|              |
|--------------|
| Station C-17 |
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|             |
|-------------|
| Station C18 |
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|                     |
|---------------------|
| Station Station0032 |
|---------------------|

|                     |
|---------------------|
| Station Station0033 |
|---------------------|

| Bank Summary |                           |          |        |           |             |       |                  |               |
|--------------|---------------------------|----------|--------|-----------|-------------|-------|------------------|---------------|
| Bank Name    | Mode of Control           | Pressure |        | Flow      | Temperature |       | Specific Gravity | Heating Value |
|              |                           | kg/cm2g  |        | kSm3/d    | Deg C       |       |                  |               |
|              |                           | Up       | Down   |           | Up          | Down  |                  |               |
| CBA          | MaximumDownstreamPressure | 79.98    | 100.00 | 20370.061 | 41.73       | 60.61 | 0.6325           | 35.97         |
| MRD          | MaximumDownstreamPressure | 89.00    | 100.00 | 20297.681 | 32.53       | 42.00 | 0.6325           | 35.97         |
| ANT          | MaximumDownstreamPressure | 88.90    | 100.00 | 20224.806 | 30.71       | 40.25 | 0.6325           | 35.97         |
| CGR          | MaximumDownstreamPressure | 88.23    | 100.00 | 20171.049 | 29.62       | 40.59 | 0.6325           | 35.97         |
| RRP          | MaximumDownstreamPressure | 89.63    | 100.00 | 20099.700 | 30.53       | 39.48 | 0.6325           | 35.97         |
| TLG          | MaximumDownstreamPressure | 89.37    | 100.00 | 20025.466 | 29.83       | 39.04 | 0.6325           | 35.97         |
| MIR          | MaximumDownstreamPressure | 89.15    | 100.00 | 18548.105 | 27.96       | 37.26 | 0.6325           | 35.97         |
| PEN          | Bypass                    | 91.32    | 91.32  | 18548.106 | 27.91       | 27.91 | 0.6325           | 35.97         |
| IAC          | MaximumDownstreamPressure | 81.78    | 100.00 | 18496.648 | 24.74       | 40.92 | 0.6325           | 35.97         |
| SCA          | MaximumDownstreamPressure | 88.37    | 100.00 | 18424.498 | 27.86       | 37.78 | 0.6325           | 35.97         |
| ARC          | Bypass                    | 77.49    | 77.49  | 0.000     | 23.54       | 23.54 | 0.6325           | 35.97         |
| PLN          | Bypass                    | 94.34    | 94.34  | 6400.998  | 28.66       | 28.66 | 0.6325           | 35.97         |
| CBO          | Bypass                    | 87.27    | 87.27  | 5060.999  | 25.58       | 25.58 | 0.6325           | 35.97         |
| SID_mod      | MaximumDownstreamPressure | 60.62    | 74.50  | 2841.500  | 20.35       | 36.45 | 0.6325           | 35.97         |
| BIG          | MaximumDownstreamPressure | 60.26    | 75.00  | 3237.806  | 21.10       | 38.22 | 0.6325           | 35.97         |

| Member Summary |                 |          |        |           |             |       |                  |               |
|----------------|-----------------|----------|--------|-----------|-------------|-------|------------------|---------------|
| Member Name    | Mode of Control | Pressure |        | Flow      | Temperature |       | Specific Gravity | Heating Value |
|                |                 | kg/cm2g  |        | kSm3/d    | Deg C       |       |                  |               |
|                |                 | Up       | Down   |           | Up          | Down  |                  |               |
| CBA-B          | Closed          | 79.98    | 100.00 | 0.000     | 41.73       | 60.61 | 0.6325           | 35.97         |
| CBA-A          | BankControl     | 79.98    | 100.00 | 20370.061 | 41.73       | 60.61 | 0.6325           | 35.97         |
| MRD-B          | MinimumSpeed    | 89.00    | 100.00 | 14861.728 | 32.53       | 42.00 | 0.6325           | 35.97         |

|         |              |       |        |           |       |       |        |       |
|---------|--------------|-------|--------|-----------|-------|-------|--------|-------|
| MRD-A   | MinimumSpeed | 89.00 | 100.00 | 14861.728 | 32.53 | 42.00 | 0.6325 | 35.97 |
| ANT-B   | MinimumSpeed | 88.90 | 100.00 | 15010.102 | 30.71 | 40.25 | 0.6325 | 35.97 |
| ANT-A   | MinimumSpeed | 88.90 | 100.00 | 15010.102 | 30.71 | 40.25 | 0.6325 | 35.97 |
| CGR-D   | Closed       | 88.23 | 100.00 | 0.000     | 29.62 | 40.59 | 0.6325 | 35.97 |
| CGR-C   | BankControl  | 88.23 | 100.00 | 7661.952  | 29.62 | 40.59 | 0.6325 | 35.97 |
| CGR-B   | BankControl  | 88.23 | 100.00 | 7661.952  | 29.62 | 40.59 | 0.6325 | 35.97 |
| CGR-A   | BankControl  | 88.23 | 100.00 | 7661.952  | 29.62 | 40.59 | 0.6325 | 35.97 |
| RRP-B   | MinimumSpeed | 89.63 | 100.00 | 15695.080 | 30.53 | 39.48 | 0.6325 | 35.97 |
| RRP-A   | MinimumSpeed | 89.63 | 100.00 | 15695.080 | 30.53 | 39.48 | 0.6325 | 35.97 |
| TLG-A   | BankControl  | 89.37 | 100.00 | 16333.088 | 29.83 | 39.04 | 0.6325 | 35.97 |
| TLG-B   | BankControl  | 89.37 | 100.00 | 16333.088 | 29.83 | 39.04 | 0.6325 | 35.97 |
| MIR-B   | MinimumSpeed | 89.15 | 100.00 | 15618.148 | 27.96 | 37.26 | 0.6325 | 35.97 |
| MIR-A   | MinimumSpeed | 89.15 | 100.00 | 15618.148 | 27.96 | 37.26 | 0.6325 | 35.97 |
| PEN-D   | Closed       | 87.91 | 87.91  | 0.000     | 27.91 | 27.91 | 0.6325 | 35.97 |
| PEN-C   | Closed       | 87.91 | 87.91  | 0.000     | 27.91 | 27.91 | 0.6325 | 35.97 |
| PEN-B   | Closed       | 87.91 | 87.91  | 0.000     | 27.91 | 27.91 | 0.6325 | 35.97 |
| PEN-A   | Closed       | 87.91 | 87.91  | 0.000     | 27.91 | 27.91 | 0.6325 | 35.97 |
| IAC-B   | Closed       | 81.78 | 100.00 | 0.000     | 24.74 | 40.92 | 0.6325 | 35.97 |
| IAC-A   | BankControl  | 81.78 | 100.00 | 18496.648 | 24.74 | 40.92 | 0.6325 | 35.97 |
| SCA-B   | MinimumSpeed | 88.37 | 100.00 | 14910.389 | 27.86 | 37.78 | 0.6325 | 35.97 |
| SCA-A   | MinimumSpeed | 88.37 | 100.00 | 14910.389 | 27.86 | 37.78 | 0.6325 | 35.97 |
| ARC_MCD | Closed       | 87.91 | 87.91  | 0.000     | 23.54 | 23.54 | 0.6325 | 35.97 |
| ARC_MCC | Closed       | 87.91 | 87.91  | 0.000     | 23.54 | 23.54 | 0.6325 | 35.97 |
| ARC_MCB | Closed       | 87.91 | 87.91  | 0.000     | 23.54 | 23.54 | 0.6325 | 35.97 |
| ARC_MCA | Closed       | 87.91 | 87.91  | 0.000     | 23.54 | 23.54 | 0.6325 | 35.97 |
| PLN-A   | Closed       | 87.91 | 87.91  | 0.000     | 28.66 | 28.66 | 0.6325 | 35.97 |
| PLN-B   | Closed       | 87.91 | 87.91  | 0.000     | 28.66 | 28.66 | 0.6325 | 35.97 |
| CBO-C   | Closed       | 87.91 | 87.91  | 0.000     | 25.58 | 25.58 | 0.6325 | 35.97 |
| CBO-B   | Closed       | 87.91 | 87.91  | 0.000     | 25.58 | 25.58 | 0.6325 | 35.97 |
| CBO-A   | Closed       | 87.91 | 87.91  | 0.000     | 25.58 | 25.58 | 0.6325 | 35.97 |
| SID_MCC | Closed       | 60.62 | 74.50  | 0.000     | 20.35 | 36.45 | 0.6325 | 35.97 |
| SID_MCB | BankControl  | 60.62 | 74.50  | 1420.750  | 20.35 | 36.45 | 0.6325 | 35.97 |
| SID_MCA | BankControl  | 60.62 | 74.50  | 1420.750  | 20.35 | 36.45 | 0.6325 | 35.97 |
| SID_MCD | Closed       | 60.62 | 74.50  | 0.000     | 20.35 | 36.45 | 0.6325 | 35.97 |
| BIG_MCB | BankControl  | 60.26 | 75.00  | 1079.269  | 21.10 | 38.22 | 0.6325 | 35.97 |
| BIG_MCA | BankControl  | 60.26 | 75.00  | 1079.269  | 21.10 | 38.22 | 0.6325 | 35.97 |
| BIG_MCC | BankControl  | 60.26 | 75.00  | 1079.269  | 21.10 | 38.22 | 0.6325 | 35.97 |

| Accumulated Volume Summary |                   |                    |             |
|----------------------------|-------------------|--------------------|-------------|
| Bank Name                  | Current Flow Rate | Accumulated Volume | Timer Value |
|                            | kSm3/d            | KPM3               | hours       |
| CBA                        | 20370.0608        | 0.0000             | 24.000      |
| MRD                        | 20297.6809        | 0.0000             | 24.000      |
|                            |                   |                    |             |

|         |            |        |        |
|---------|------------|--------|--------|
| ANT     | 20224.8058 | 0.0000 | 24.000 |
| CGR     | 20171.0494 | 0.0000 | 24.000 |
| RRP     | 20099.6999 | 0.0000 | 24.000 |
| TLG     | 20025.4662 | 0.0000 | 24.000 |
| MIR     | 18548.1054 | 0.0000 | 24.000 |
| PEN     | 18548.1058 | 0.0000 | 24.000 |
| IAC     | 18496.6481 | 0.0000 | 24.000 |
| SCA     | 18424.4979 | 0.0000 | 24.000 |
| ARC     | 0.0000     | 0.0000 | 24.000 |
| PLN     | 6400.9981  | 0.0000 | 24.000 |
| CBO     | 5060.9987  | 0.0000 | 24.000 |
| SID_mod | 2841.5000  | 0.0000 | 24.000 |
| BIG     | 3237.8064  | 0.0000 | 24.000 |

| Accumulated Volume Summary |                   |                    |             |
|----------------------------|-------------------|--------------------|-------------|
| Member Name                | Current Flow Rate | Accumulated Volume | Timer Value |
|                            | kSm3/d            | KPM3               | hours       |
| CBA-B                      | 0.0000            | 0.0000             | 24.000      |
| CBA-A                      | 20370.0608        | 0.0000             | 24.000      |
| MRD-B                      | 14861.7285        | 0.0000             | 24.000      |
| MRD-A                      | 14861.7285        | 0.0000             | 24.000      |
| ANT-B                      | 15010.1020        | 0.0000             | 24.000      |
| ANT-A                      | 15010.1020        | 0.0000             | 24.000      |
| CGR-D                      | 0.0000            | 0.0000             | 24.000      |
| CGR-C                      | 7661.9523         | 0.0000             | 24.000      |
| CGR-B                      | 7661.9523         | 0.0000             | 24.000      |
| CGR-A                      | 7661.9523         | 0.0000             | 24.000      |
| RRP-B                      | 15695.0803        | 0.0000             | 24.000      |
| RRP-A                      | 15695.0803        | 0.0000             | 24.000      |
| TLG-A                      | 16333.0877        | 0.0000             | 24.000      |
| TLG-B                      | 16333.0877        | 0.0000             | 24.000      |
| MIR-B                      | 15618.1483        | 0.0000             | 24.000      |
| MIR-A                      | 15618.1483        | 0.0000             | 24.000      |
| PEN-D                      | 0.0000            | 0.0000             | 24.000      |
| PEN-C                      | 0.0000            | 0.0000             | 24.000      |
| PEN-B                      | 0.0000            | 0.0000             | 24.000      |
| PEN-A                      | 0.0000            | 0.0000             | 24.000      |
| IAC-B                      | 0.0000            | 0.0000             | 24.000      |
| IAC-A                      | 18496.6481        | 0.0000             | 24.000      |
| SCA-B                      | 14910.3886        | 0.0000             | 24.000      |
| SCA-A                      | 14910.3886        | 0.0000             | 24.000      |
| ARC_MCD                    | 0.0000            | 0.0000             | 24.000      |
| ARC_MCC                    | 0.0000            | 0.0000             | 24.000      |

|         |           |        |        |
|---------|-----------|--------|--------|
| ARC_MCB | 0.0000    | 0.0000 | 24.000 |
| ARC_MCA | 0.0000    | 0.0000 | 24.000 |
| PLN-A   | 0.0000    | 0.0000 | 24.000 |
| PLN-B   | 0.0000    | 0.0000 | 24.000 |
| CBO-C   | 0.0000    | 0.0000 | 24.000 |
| CBO-B   | 0.0000    | 0.0000 | 24.000 |
| CBO-A   | 0.0000    | 0.0000 | 24.000 |
| SID_MCC | 0.0000    | 0.0000 | 24.000 |
| SID_MCB | 1420.7500 | 0.0000 | 24.000 |
| SID_MCA | 1420.7500 | 0.0000 | 24.000 |
| SID_MCD | 0.0000    | 0.0000 | 24.000 |
| BIG_MCB | 1079.2688 | 0.0000 | 24.000 |
| BIG_MCA | 1079.2688 | 0.0000 | 24.000 |
| BIG_MCC | 1079.2688 | 0.0000 | 24.000 |

**Pressure/Flow Violation Reports : 0.000 hours**

| Xreg Pressure/Flow Violation          |           |          |        |      |                  |
|---------------------------------------|-----------|----------|--------|------|------------------|
| Xreg Name                             | Node Name | Pressure | Flow   | Mode | Violation Status |
|                                       |           | kg/cm2g  | kSm3/d |      |                  |
| ALL XREGS FALL WITHIN PRESSURE BOUNDS |           |          |        |      |                  |

| Equipment Pressure/Flow Violation          |              |                |             |               |        |      |                  |
|--|--------------|----------------|-------------|---------------|--------|------|------------------|
| Equipment Name                             | Up Node Name | Down Node Name | Up Pressure | Down Pressure | Flow   | Mode | Violation Status |
|  |              |                | kg/cm2g     | kg/cm2g       | kSm3/d |      |                  |
| ALL EQUIPMENTS FALL WITHIN PRESSURE BOUNDS |              |                |             |               |        |      |                  |

| Bank Pressure/Flow Violation          |              |                |             |               |        |      |                  |
|---------------------------------------|--------------|----------------|-------------|---------------|--------|------|------------------|
| Bank Name                             | Up Node Name | Down Node Name | Up Pressure | Down Pressure | Flow   | Mode | Violation Status |
|                                       |              |                | kg/cm2g     | kg/cm2g       | kSm3/d |      |                  |
| ALL BANKS FALL WITHIN PRESSURE BOUNDS |              |                |             |               |        |      |                  |

| Pipe Pressure/Flow Violation |    |      |          |  |  |  |  |
|------------------------------|----|------|----------|--|--|--|--|
|                              | Up | Down | Distance |  |  |  |  |
|                              |    |      |          |  |  |  |  |

| Pipe Name                                      | Node Name | Node Name | From Head | Pressure | Flow   | Velocity | Violation Status |
|--|-----------|-----------|-----------|----------|--------|----------|------------------|
|  |           |           | km        | kg/cm2g  | kSm3/d | kSm3/d   |                  |
| ALL INTERNAL KNOTS FALL WITHIN PRESSURE BOUNDS |           |           |           |          |        |          |                  |

**Setpoint/Constraint Violation Reports : 0.000 hours**

| Xreg Setpoint/Constraint Violation          |      |                |                |                  |
|---|------|----------------|----------------|------------------|
| Xreg Name                                   | Mode | Setpoint Value | Computed Value | Mode Lock Status |
| ALL XREGS COMPLY WITH MONITORED CONSTRAINTS |      |                |                |                  |

| Equipment Setpoint/Constraint Violation          |      |                |                |                  |
|--|------|----------------|----------------|------------------|
| Equipment Name                                   | Mode | Setpoint Value | Computed Value | Mode Lock Status |
| ALL EQUIPMENTS COMPLY WITH MONITORED CONSTRAINTS |      |                |                |                  |

| Bank Setpoint/Constraint Violation          |      |                |                |                  |
|---|------|----------------|----------------|------------------|
| Bank Name                                   | Mode | Setpoint Value | Computed Value | Mode Lock Status |
| ALL BANKS COMPLY WITH MONITORED CONSTRAINTS |      |                |                |                  |

| Device Locked Modes |               |                 |
|---------------------|---------------|-----------------|
| Type                | Name          | Mode            |
| XREG                | EMED GASCAR_E | MaximumPressure |
| XREG                | TGS           | MaximumPressure |
| BANK                | PEN           | Bypass          |
| BANK                | ARC           | Bypass          |
| BANK                | PLN           | Bypass          |
| BANK                | CBO           | Bypass          |