

100ppm C3H8 Linearity Test Certificate



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INSTRUMENTATION

| Instrument Details | Serial No. | Range FS |
|--------------------|------------|----------|
| 3010MFP | 20318 | 100 |

TRACEABILITY

| Gas Divider Details | Serial No. | Calibration Date |
|---------------------|------------|------------------|
| 821s | 15213 | 06/09/2018 |

| Analytical Traceability | | | | |
|-------------------------|--------------|----------|-----------------|-------------|
| | Cylinder No. | Gas type | Gas value (ppm) | Balance gas |
| Span Gas Mixture | EU66MWU | C3H8 | 99.9 | AIR |
| Diluent gas | | AIR | | |

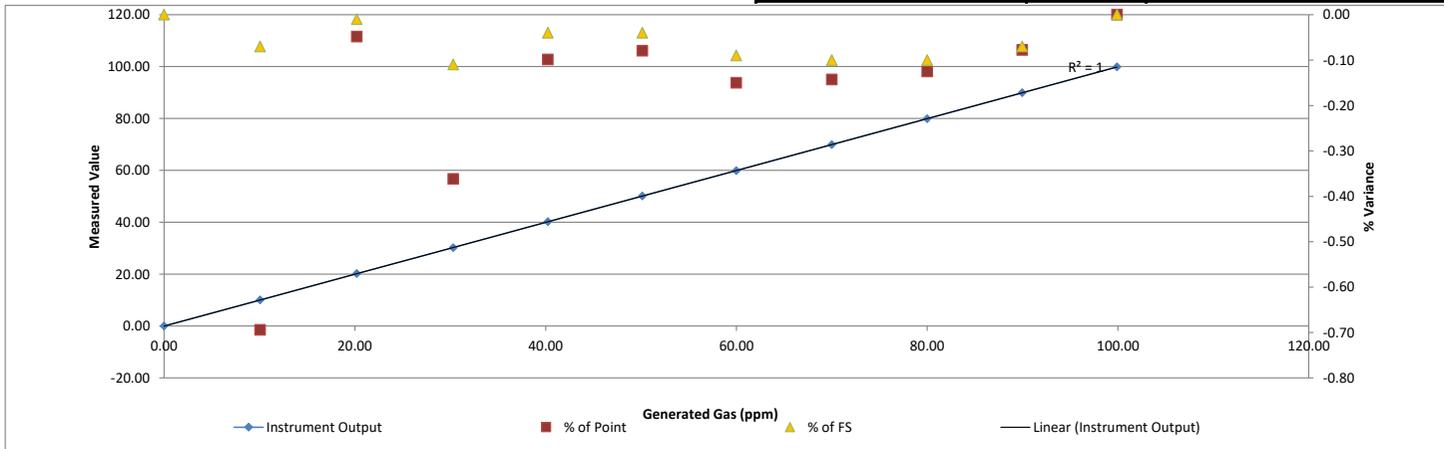
LINEARITY

| Gas Divider Point | Actual | Measured | Regression fit | | | | | | Variance | | | |
|-------------------|--------|----------|----------------|---------------------|----------------------------------|-------------------------------------|----------------|--------------------|------------|----------------|-----------|-------|
| | ppm | ppm | y | (c _i -c) | (c _i -c) ² | x _i *(c _i -c) | d _c | d _{c,rel} | (ppm or %) | (% of reading) | (% of FS) | |
| 100 | 99.90 | 99.90 | 99.829 | 49.825 | 2482.498 | 4977.485 | 0.071 | 0.071 | 0.00 | 0.00 | 0.00 | |
| 90.06 | 89.97 | 89.90 | 89.902 | 39.895 | 1591.580 | 3586.526 | 0.068 | 0.068 | -0.07 | -0.08 | -0.07 | |
| 80.08 | 80.00 | 79.90 | 79.935 | 29.925 | 895.481 | 2390.975 | 0.065 | 0.065 | -0.10 | -0.12 | -0.10 | |
| 70.07 | 70.00 | 69.90 | 69.937 | 19.925 | 396.990 | 1392.730 | 0.063 | 0.063 | -0.10 | -0.14 | -0.10 | |
| 60.05 | 59.99 | 59.90 | 59.930 | 9.915 | 98.300 | 593.886 | 0.060 | 0.060 | -0.09 | -0.15 | -0.09 | |
| 50.19 | 50.14 | 50.10 | 50.083 | 0.064 | 0.004 | 3.230 | 0.057 | 0.057 | -0.04 | -0.08 | -0.04 | |
| 40.28 | 40.24 | 40.20 | 40.185 | -9.836 | 96.739 | -395.391 | 0.054 | 0.054 | -0.04 | -0.10 | -0.04 | |
| 30.34 | 30.31 | 30.20 | 30.258 | -19.766 | 390.682 | -596.923 | 0.052 | 0.052 | -0.11 | -0.36 | -0.11 | |
| 20.23 | 20.21 | 20.20 | 20.161 | -29.866 | 891.952 | -603.284 | 0.049 | 0.049 | -0.01 | -0.05 | -0.01 | |
| 10.08 | 10.07 | 10.00 | 10.024 | -40.005 | 1600.433 | -400.054 | 0.046 | 0.046 | -0.07 | -0.69 | -0.07 | |
| 0 | 0.00 | 0.00 | -0.043 | -50.075 | 2507.539 | 0.000 | 0.043 | 0.043 | 0.00 | 0.00 | 0.00 | |
| Average | 50.08 | 50.02 | Sums (Σ) | 0.000 | 10952.196 | 10949.178 | | | Average | -0.06 | -0.18 | -0.06 |
| | | | Slope | | B= | 1.000 | | | Maximum | -0.11 | -0.69 | -0.11 |
| | | | Offset | | A= | -0.043 | | | | | | |

EN14181 spec: dcrel <2%

Pass/Fail

PASS



Calibrated by:

Signed:

Date: