CERTIFICATE OF CALIBRATION

ISSUED BY H & D FITZGERALD LTD.

DATE OF ISSUE **05 January 2020** CERTIFICATE NUMBER **12345**

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Approved signatory

Client **ABC Plastics company, Some Rd, Anytown, AB12 3CD**

End user

Order number **9876XYZ** Calibrated **1 January 2020**

Item **Density gradient column floats**

The floats were calibrated by immersing them in liquid at **23 ± 0.010°C,** and adjusting the density of the liquid until the floats were at neutral buoyancy.

Liquid density was determined using equipment traceable to the SI system of units and/ or to National Standards.

Float serial number	Identification	Density kgm^{-3}	Mass mg
743	Red 743	1700.5	181.53
531	Black 5, blue 3, red 1	1717.9	190.42
013	Green 01, blue 3	1736.9	169.95
74	Black 7, green 4	1754.2	170.31
601	Green 6, blue 0, red 1	1771.3	190.52
983	Blue 9, red 8, blue 3	1790.6	175.41
071	Green 0, blue 71	1807.9	222.68
632	Blue 6, black 3, red 2	1825.9	189.84
200	Black 200	1840.5	199.85

Uncertainty of the quoted density **±0.15** kgm^{-3} Uncertainty of the quoted mass **± 0.05** mg

Since the floats are not manufactured from homogeneous material, and slight damage would therefore cause a change in float density, the mass of each float has been quoted.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor $k = 2$, providing a level of confidence of about 95%.

The evaluation of the uncertainty has been carried out in accordance with UKAS requirements.