1% C3H8 Linearity Test Certificate

INSTRUMENTATION

Instrument Details	Serial No.	Range FS
3010MFP	20318	10000

TRACEABILITY

Gas Divider Details	Serial No.	Calibration Date
821s	15213	06/08/2018

Analytical Traceability				
	Cylinder No.	Gas type	Gas value (ppm)	Balance gas
Span Gas Mixture	AB88EDG	C3H8	10010	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	10010.00	10010.00	10015.002	4992.351	24923568.507	49973433.510	-5.002	-0.050	0.00	0.00	0.00
90.06	9015.01	9010.00	9019.661	3997.357	15978862.985	36016186.570	-4.653	-0.046	-5.01	-0.06	-0.05
80.08	8016.01	8020.00	8020.314	2998.359	8990156.693	24046839.180	-4.307	-0.043	3.99	0.05	0.04
70.08	7015.01	7030.00	7018.965	1997.359	3989442.975	14041433.770	-3.962	-0.040	14.99	0.21	0.15
60.05	6011.01	6020.00	6014.612	993.356	986756.143	5980003.120	-3.610	-0.036	9.00	0.15	0.09
50.19	5024.02	5030.00	5027.281	6.370	40.577	32041.100	-3.264	-0.033	5.98	0.12	0.06
40.28	4032.03	4040.00	4034.944	-985.621	971448.756	-3981908.840	-2.919	-0.029	7.97	0.20	0.08
30.34	3037.03	3040.00	3039.603	-1980.615	3922835.778	-6021069.600	-2.570	-0.026	2.97	0.10	0.03
20.23	2025.02	2030.00	2027.239	-2992.626	8955810.376	-6075030.780	-2.218	-0.022	4.98	0.25	0.05
10.08	1009.01	1000.00	1010.870	-4008.641	16069202.667	-4008641.000	-1.859	-0.019	-9.01	-0.89	-0.09
0	0.00	0.00	1.510	-5017.649	25176801.487	0.000	-1.510	-0.015	0.00		0.00
Average	5017.65	5020.91	Sums (∑)	0.000	109964926.944	110003287.030		Average	3.26	0.01	0.04
			Slope		B=	1.000		Maximum	14.99	-0.89	0.15
			Offset		A=	1.510					

EN14181 spec: dcrel <2%	Pass/Fail	**PASS**
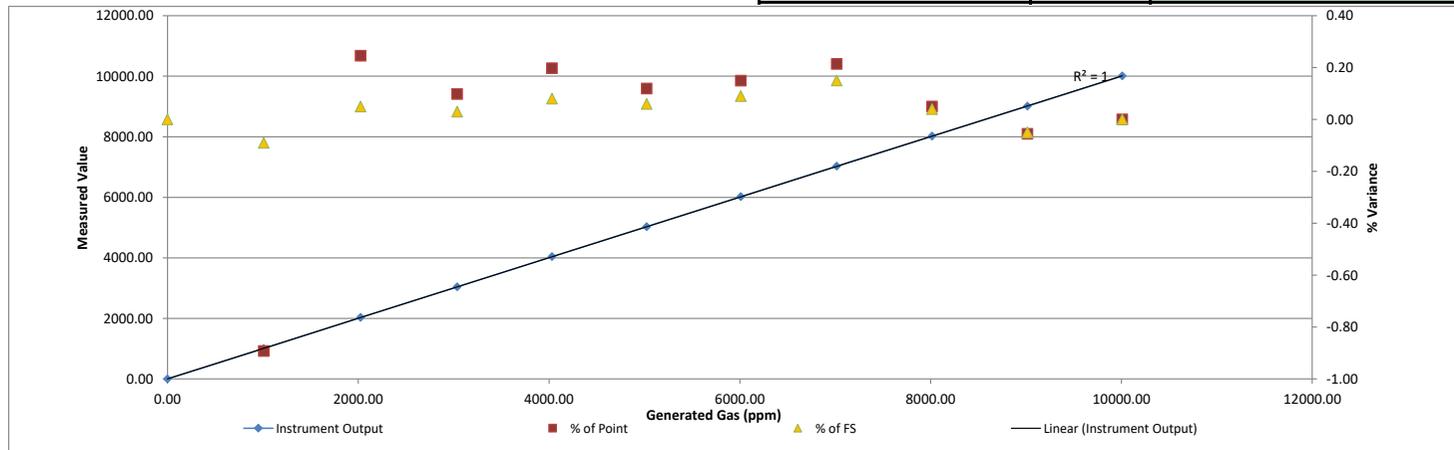
Calibrated by: Signed: Date: