

Vent Measurements: 19th April 2011

Mass Emission is calculated from Ideal Gas Law

mass emission mg/min = ppm x flow rate x molecular weight x P /RT

$n = PV/RT$

V = measured flow rate (m3/min)	
P = 101325 Pa (760 mm Mercury)	101325
T = 293 K	293
R = molar gas constant 8.314 (m3Pa/mol K)	8.314
Molecular weight for solvent = 90	90
R x T	2436.002
P/RxT	41.595

		Solvent Tank to Mixer	Homogenisation Tank to Tank	Mixer to Buk Tank
		ST1 to SS	BT4 to BT1	SS to BT7
Mean ppm	ppm	0.00	7.10	45.31
Flow Volume	m3/min	3.20	3.20	3.20
Emission rate	gm/min	0.00000	0.08518	0.54364
Emission Rate MR	kg/min	0.00000	0.00009	0.00054
Prebalanced Rate (PBR)	kg/min	0.18000	0.18000	0.04400
MR/PBR		0.00000	0.00047	0.01236
Efficiency 1-MR/PBR		1.00000	0.99953	0.98764
EFFICIENCY PERCENT	%	100.000	99.953	98.764

Vent Measurements: 07 October 2011

Mass Emission is calculated from Ideal Gas Law

mass emission mg/min = ppm x flow rate x molecular weight x P /RT

$n = PV/RT$

V = measured flow rate (m3/min)	
P = 101325 Pa (760 mm Mercury)	101325
T = 293 K	293
R = molar gas constant 8.314 (m3Pa/mol K)	8.314
Molecular weight for solvent = 90	90
R x T	2436.002
P/RxT	41.595

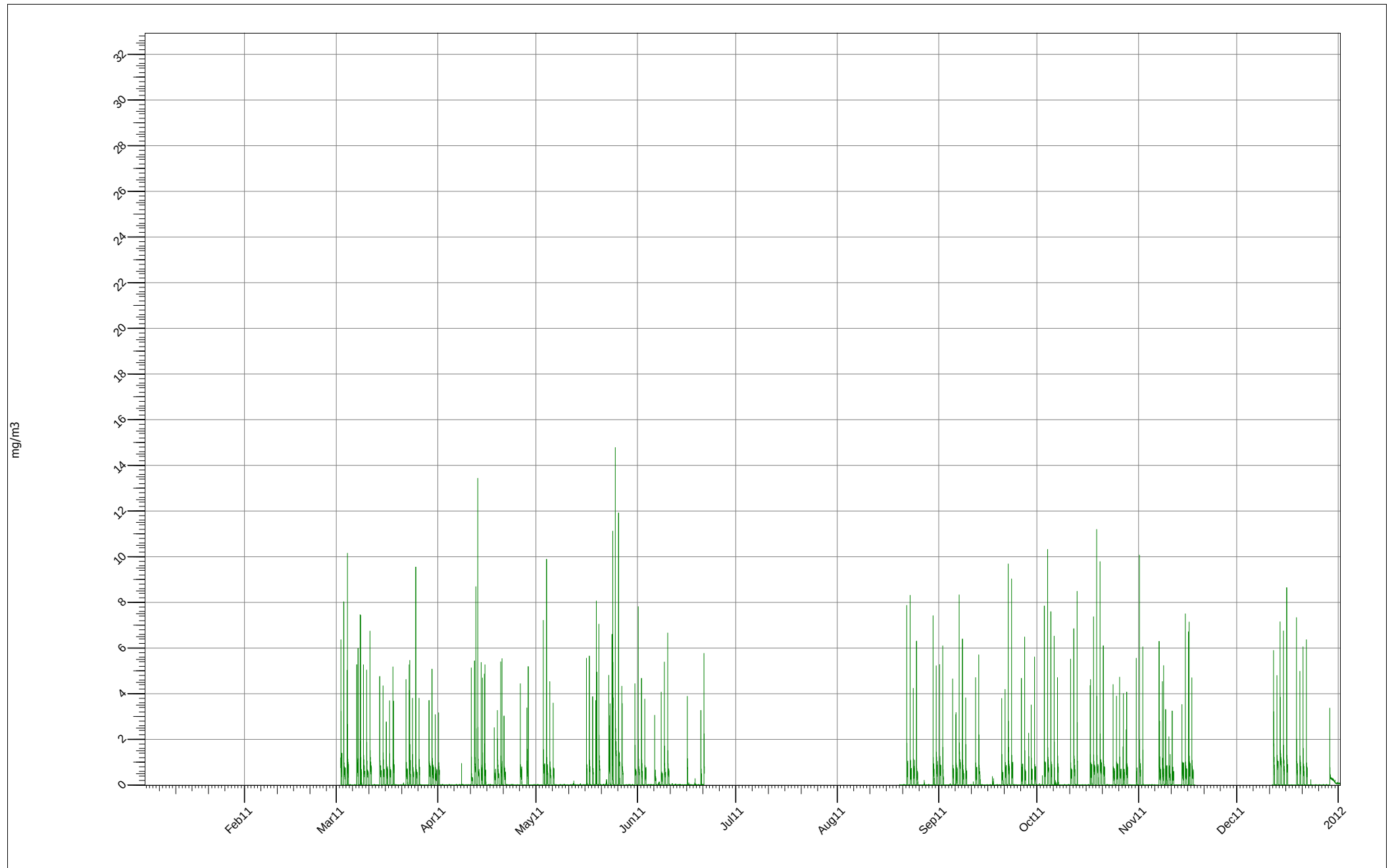
		Solvent Tank to Mixer	Homogenisation Tank to Tank	Mixer to Buk Tank
		ST1 to SS	BT4 to BT1	SS to BT7
Mean ppm	ppm	0.00	30.99	1.59
Flow Volume	m3/min	3.20	3.20	3.20
Emission rate	gm/min	0.00000	0.37176	0.01904
Emission Rate MR	kg/min	0.00000	0.00037	0.00002
Prebalanced Rate (PBR)	kg/min	0.18000	0.18000	0.04400
MR/PBR		0.00000	0.00207	0.00043
Efficiency 1-MR/PBR		1.00000	0.99793	0.99957
EFFICIENCY PERCENT	%	100.000	99.793	99.957

Emission Report

Company:DAREX UK LTD Contact:GLENN DRAPER

From:01 Jan 11 15:15:00 To:01 Jan 12 15:15:00

Device 0 : --- Channel 2 Cal Factor: 7.22 (constant) Average:0.195 Averaging Period:10 mins Maximum:14.79



Emission Report

Company:DAREX UK LTD Contact:GLENN DRAPER

From:01 Jan 11 15:15:00 To:01 Jan 12 13:30:00

Device 0 : --- Channel 1 Cal Factor: 0.36 (constant) Average:0.099 Averaging Period:10 mins Maximum:2.240

