

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\

Method File : VL100225AIR.M

Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022

Last Update : Fri Oct 03 08:23:34 2025

Response Via : Initial Calibration

Calibration Files

0.03=VL043037.D 0.1 =VL043036.D 0.5 =VL043031.D 1 =VL043034.D 2 =VL043033.D 10 =VL043032.D 15 =VL043038.D

Compound	0.03	0.1	0.5	1	2	10	15	Avg	%RSD

1) I Bromochloromethane	-----ISTD-----								
2) T Dichlorodifluo...			1.748	1.803	1.698	1.587	1.591	1.685	5.66
3) Chlorodifluoro...			1.726	1.701	1.684	1.527	1.513	1.630	6.23
4) Chloromethane			0.644	0.663	0.614	0.577	0.580	0.616	6.17
5) T Vinyl Chloride	0.573	0.687	0.605	0.573	0.564	0.539	0.548	0.584	8.59
6) T Bromomethane			0.260	0.283	0.270	0.248	0.252	0.263	5.35
7) Chloroethane			0.259	0.257	0.256	0.223	0.224	0.244	7.62
8) T Dichlorotetra...			1.429	1.430	1.438	1.301	1.307	1.381	5.09
9) T Propene			0.657	0.691	0.697	0.633	0.609	0.657	5.69
10) T Heptane			1.331	1.565	1.650	1.760	1.776	1.616	11.19
11) T Trichlorofluor...			1.770	1.866	1.761	1.621	1.642	1.732	5.83
12) T 1,1,2-Trichlor...			1.449	1.410	1.392	1.284	1.286	1.364	5.50
13) Ethanol			0.085	0.049	0.041	0.027	0.026	0.045#	52.72
14) T Bromoethene			0.507	0.499	0.501	0.469	0.469	0.489	3.80
15) T Acetone			1.669	1.561	1.472	1.143	1.155	1.400	17.12
16) T 1,3-Butadiene			0.609	0.587	0.611	0.536	0.543	0.577	6.17
17) tert-Butyl alc...			1.663	1.586	1.437	1.377	1.344	1.481	9.28
18) T 1,1-Dichloroet...			0.607	0.626	0.610	0.575	0.572	0.598	3.90
19) T Isopropyl Alcohol			0.768	0.727	0.667	0.603	0.589	0.671	11.56
20) T Methylene Chlo...			0.809	0.684	0.577	0.490	0.496	0.611	22.19
21) T Allyl Chloride			0.982	0.888	0.920	0.843	0.852	0.897	6.32
22) T trans-1,2-Dich...			0.723	0.713	0.676	0.635	0.648	0.679	5.74
23) T Vinyl Acetate			0.388	0.316	0.308	0.244	0.231	0.297	21.19
24) T 1,1-Dichloroet...			1.347	1.365	1.295	1.206	1.221	1.287	5.57
25) T Ethyl Acetate			3.265	3.663	3.644	3.520	3.471	3.513	4.56
26) T Hexane			1.261	1.271	1.413	1.401	1.411	1.351	5.80
27) T Carbon Disulfide			1.681	1.655	1.576	1.521	1.543	1.595	4.37
28) T Methyl tert-Bu...			0.853	0.872	0.868	0.823	0.813	0.846	3.14
29) T Chloroform			2.393	2.395	2.326	2.206	2.199	2.304	4.19
30) T Cyclohexane			0.947	1.068	1.145	1.191	1.200	1.110	9.46
31) T cis-1,2-Dichlo...			1.329	1.390	1.436	1.403	1.388	1.389	2.79
32) T 1,1,1-Trichlor...	2.543	2.098	2.204	2.216	2.255	2.170	2.186	2.239	6.38

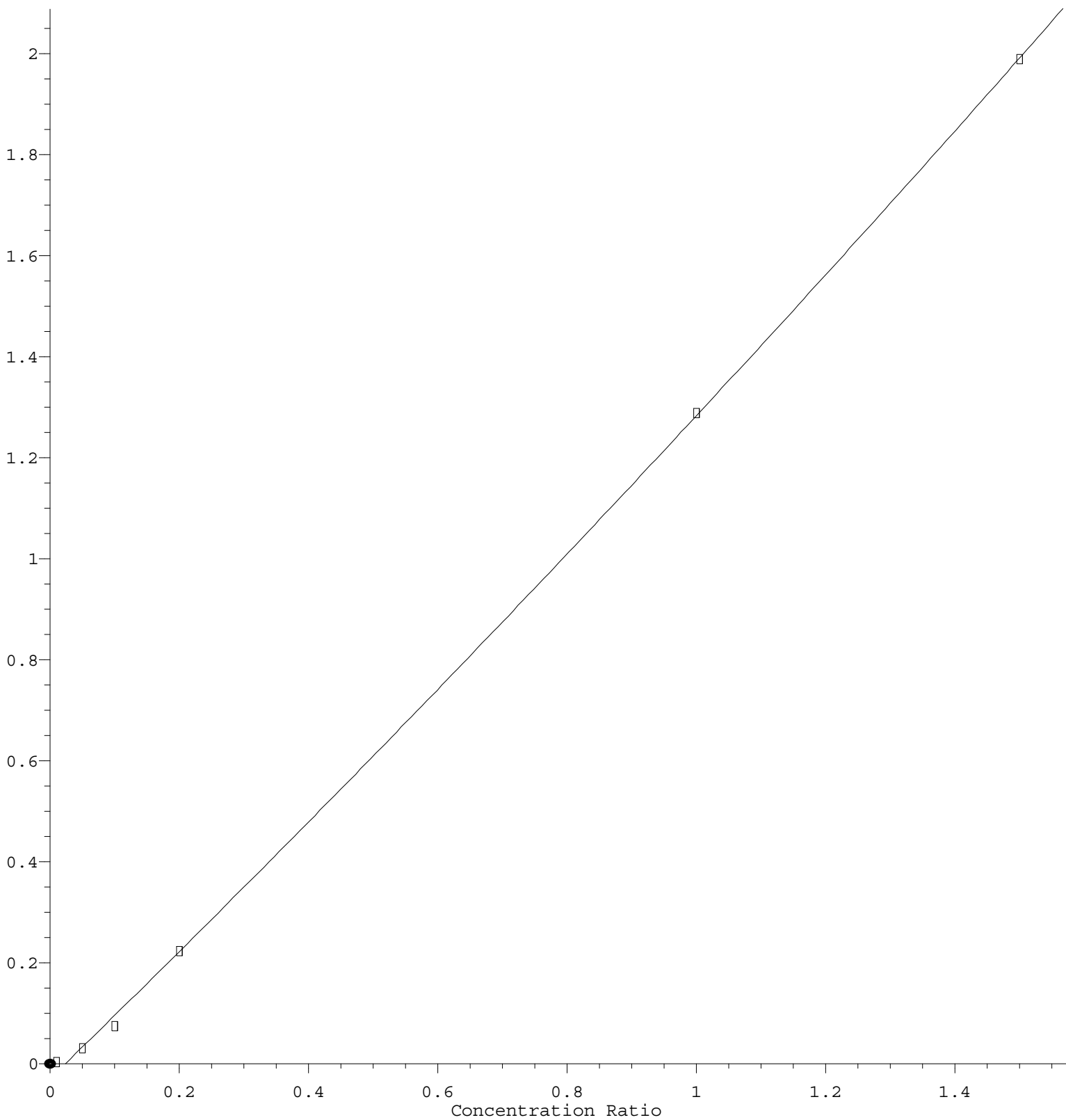
33) I 1,4-Difluorobenzene	-----ISTD-----								
34) T 2-Butanone			0.704	0.685	0.695	0.655	0.654	0.679	3.42
35) T Carbon Tetrach...	1.006	0.828	0.816	0.805	0.770	0.761	0.773	0.823	10.30
36) T Benzene			0.901	0.984	0.971	0.964	0.957	0.955	3.32
37) T 1,2-Dichloroet...			0.584	0.577	0.570	0.547	0.551	0.566	2.79
38) T Trichloroethene	0.355	0.386	0.404	0.424	0.402	0.409	0.407	0.398	5.58
39) T 1,2-Dichloropr...			0.360	0.362	0.354	0.350	0.345	0.354	2.02

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40)	T	1,4-Dioxane			0.146	0.151	0.152	0.157	0.154	0.152	2.71
41)	T	Tetrahydrofuran			0.297	0.338	0.365	0.376	0.378	0.351	9.74
42)	T	Bromodichlorom...			0.818	0.805	0.791	0.788	0.793	0.799	1.55
43)		Methyl Methacr...			0.281	0.286	0.308	0.353	0.358	0.317	11.50
44)	T	2,2,4-Trimethy...			1.388	1.494	1.589	1.593	1.601	1.533	6.01
45)	T	t-1,3-Dichloro...			0.268	0.268	0.279	0.314	0.322	0.290	8.91
46)	T	cis-1,3-Dichlo...			0.374	0.386	0.396	0.440	0.449	0.409	8.23
47)	T	1,1,2-Trichlor...			0.414	0.405	0.395	0.376	0.379	0.394	4.18
48)	T	Dibromochlorom...			0.610	0.644	0.644	0.661	0.655	0.643	3.10
49)	T	Bromoform			0.492	0.516	0.542	0.560	0.575	0.537	6.24
50)	T	4-Methyl-2-Pen...			0.719	0.763	0.820	0.910	0.926	0.827	10.90
51)	T	2-Hexanone			0.438	0.515	0.578	0.693	0.720	0.589	20.15
52)	T	Tetrachloroethene	0.424	0.328	0.339	0.343	0.352	0.345	0.346	0.354	9.02
53)	T	Toluene			0.790	0.881	0.966	1.087	1.099	0.965	13.74
54)	T	1,2-Dibromoethane		0.445	0.448	0.472	0.471	0.481	0.484	0.467	3.56
-----ISTD-----											
55)	I	Chlorobenzene-d5									
56)		1,1,1,2-Tetrac...			0.631	0.623	0.614	0.591	0.590	0.610	3.04
57)	T	Chlorobenzene			1.088	1.096	1.086	1.015	1.002	1.057	4.24
58)	T	Ethyl Benzene			1.232	1.379	1.598	1.759	1.778	1.549	15.41
59)	T	m/p-Xylene			1.012	1.231	1.401	1.443	1.446	1.307	14.29
60)	T	o-Xylene			1.020	1.216	1.385	1.439	1.448	1.302	14.07
61)	T	Styrene			0.398	0.449	0.523	0.666	0.691	0.545	23.81
62)		Isopropylbenzene			1.675	1.919	2.082	2.141	2.174	1.998	10.30
63)	T	1,1,2,2-Tetrac...	1.080	0.884	0.919	0.949	0.949	0.870	0.886	0.934	7.66
64)		n-propylbenzene			0.384	0.491	0.540	0.562	0.579	0.511	15.38
65)		tert-Butylbenzene			1.384	1.730	1.932	1.928	1.918	1.778	13.28
66)	T	Benzyl Chloride			0.064	0.066	0.066	0.069	0.075	0.068	6.61
67)		sec-Butylbenzene			1.912	2.476	2.742	2.652	2.626	2.482	13.41
68)	S	1-Bromo-4-Fluo...	0.688	0.692	0.727	0.726	0.732	0.735	0.743	0.720	3.00
69)		p-Isopropyltol...			1.499	1.879	2.234	2.250	2.231	2.019	16.33
70)		n-Butylbenzene			1.361	1.776	2.148	2.222	2.212	1.944	19.22
71)		2-Chlorotoluene			1.156	1.348	1.522	1.583	1.621	1.446	13.34
72)	T	4-Ethyltoluene			1.145	1.426	1.647	1.751	1.778	1.549	17.12
73)	T	1,3,5-Trimethy...			1.041	1.271	1.423	1.470	1.496	1.340	14.06
74)	T	1,2,4-Trimethy...			1.133	1.492	1.676	1.633	1.630	1.513	14.77
75)	T	1,3-Dichlorobe...			0.932	0.986	1.031	0.976	0.994	0.984	3.60
76)	T	1,4-Dichlorobe...			0.825	0.929	0.990	0.967	0.980	0.938	7.20
77)	T	1,2-Dichlorobe...			0.951	1.037	1.036	0.930	0.945	0.980	5.35
78)	T	Hexachloro-1,3...			0.683	0.705	0.731	0.645	0.650	0.683	5.29
79)	T	Naphthalene		0.333	0.611	0.746	1.115	1.288	1.326	0.903	44.50
80)	T	Naphthalene,2-...			0.645	0.167	0.278	0.567	0.629	0.457	48.04
81)	T	1,2,4-Trichlor...			0.383	0.476	0.629	0.696	0.731	0.583	25.49

(#) = Out of Range

Naphthalene

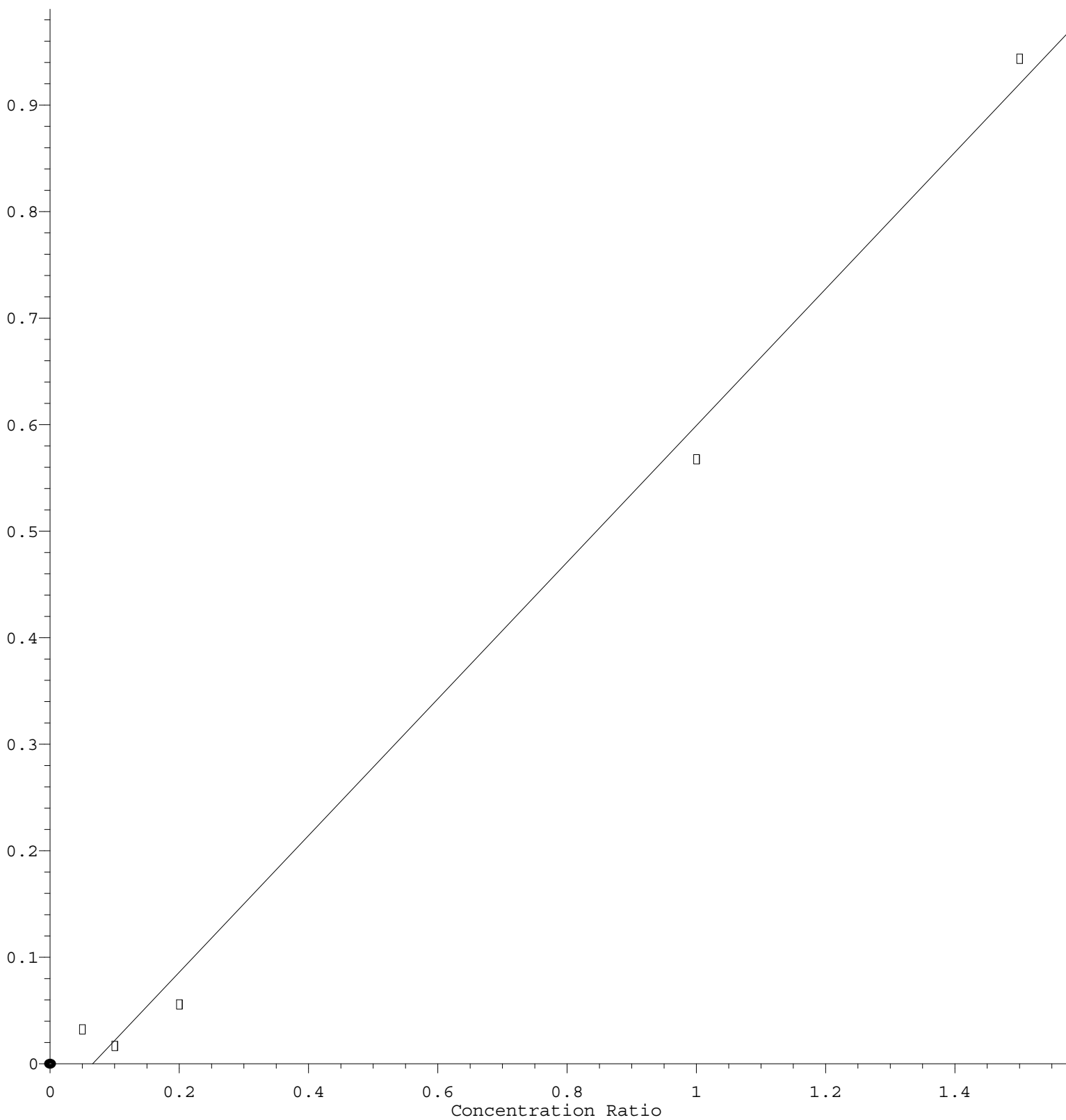
Response Ratio



$R = 6.981e-002 A^2 + 1.242e+000 A - 2.912e-002$
 Coef of Det (r^2) = 0.999745 Curve Fit: Quadratic
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Naphthalene, 2-methyl-

Response Ratio



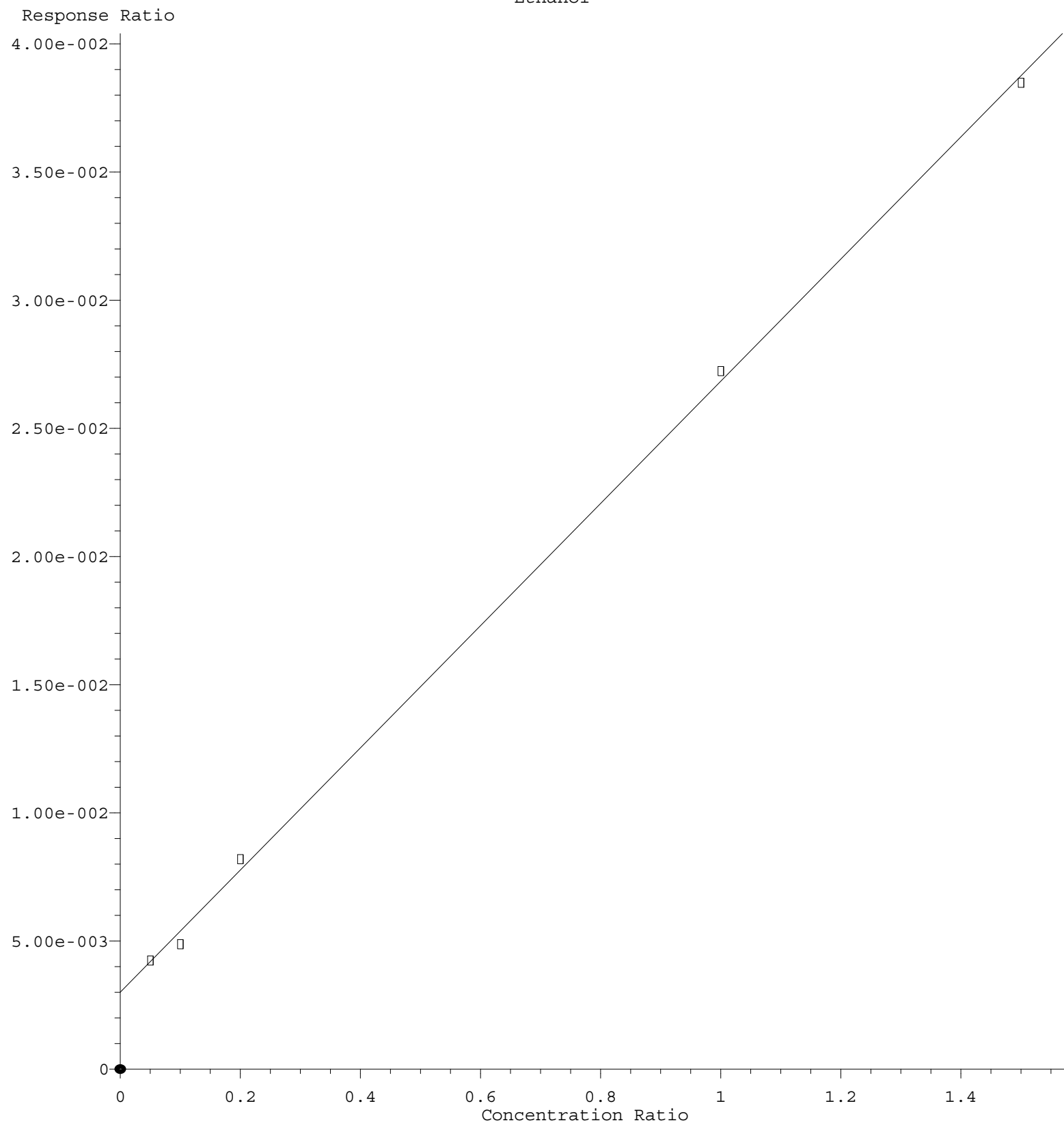
$$\text{Response} = 6.413\text{e-}001 * \text{Amt} - 4.246\text{e-}002$$

Coef of Det (r^2) = 0.993798 Curve Fit: Linear

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Ethanol



Response = 2.382e-002 * Amt + 3.025e-003
 Coef of Det (r^2) = 0.999298 Curve Fit: Linear
 Method Name: Z:\voasrv\HPCHEM1\MSVOA L\methods\VL100225AIR.M
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