

Method Path : Z:\voasrv\HPCHEM1\MSVOA_U\Method\
 Method File : 524U123021DW.M
 Title : METHOD 524.2 VOLATILES DRINKING WATER
 Last Update : Thu Dec 30 12:44:59 2021
 Response Via : Initial Calibration

Calibration Files

0.5 =VU046640.D 1 =VU046641.D 2 =VU046642.D 5 =VU046643.D 10 =VU046644.D 15 =VU046645.D

Compound		0.5	1	2	5	10	15	Avg	%RSD

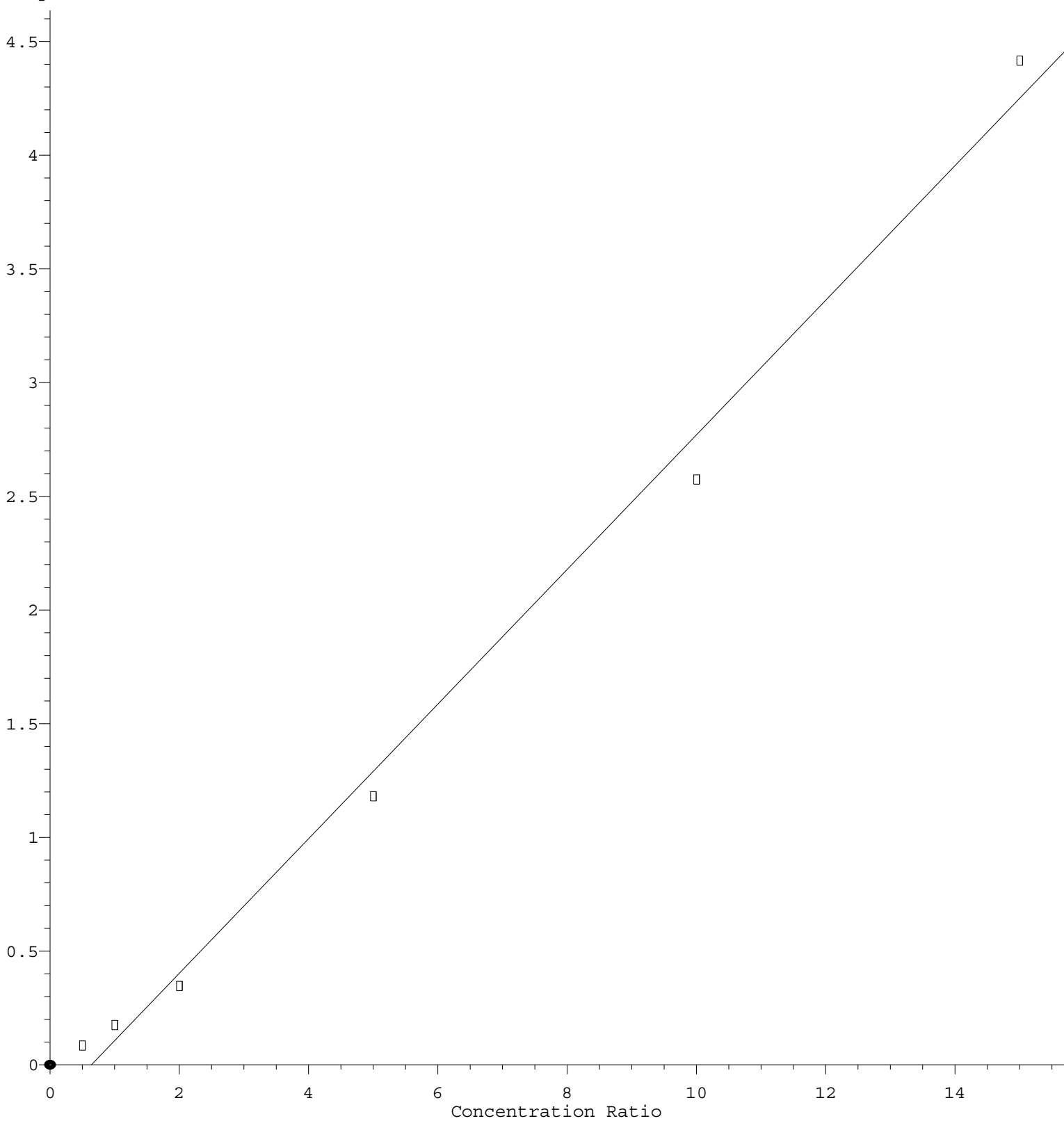
1) i	Fluorobenzene	-----ISTD-----							
2) T	Dichlorodifluo...	0.419	0.402	0.359	0.393	0.343	0.385	0.383	7.30
3) t	Chloromethane	0.388	0.359	0.319	0.335	0.305	0.328	0.339	8.84
4) Rt	Vinyl Chloride	0.408	0.384	0.335	0.366	0.337	0.356	0.364	7.68
5) T	Bromomethane	0.212	0.199	0.175	0.179	0.177	0.199	0.190	8.06
6) T	Chloroethane	0.251	0.229	0.198	0.217	0.193	0.210	0.216	9.83
7) T	Trichlorofluor...	0.542	0.537	0.494	0.520	0.459	0.510	0.510	6.00
8)	1,1,2-Trichlor...	0.309	0.302	0.265	0.286	0.253	0.288	0.284	7.48
9) Rt	1,1-Dichloroet...	0.312	0.271	0.244	0.263	0.243	0.267	0.267	9.46
10) t	Iodomethane	0.170	0.174	0.173	0.236	0.257	0.294	0.218	24.28
11) t	Allyl Chloride	0.377	0.332	0.304	0.343	0.316	0.346	0.336	7.66
12) t	Acrylonitrile	0.074	0.073	0.063	0.073	0.068	0.076	0.071	6.47
13) T	Acetone	0.075	0.071	0.056	0.064	0.054	0.064	0.064	12.87
14) T	Carbon Disulfide	0.993	0.897	0.795	0.827	0.772	0.830	0.852	9.49
15) RT	Methylene Chlo...	0.503	0.364	0.301	0.311	0.276	0.301	0.343	24.48
16) RT	trans-1,2-Dich...	0.308	0.274	0.262	0.280	0.265	0.283	0.279	5.88
17) t	1,1-Dichloroet...	0.587	0.534	0.483	0.524	0.477	0.513	0.520	7.68
18) T	2-Butanone	0.107	0.097	0.088	0.092	0.088	0.103	0.096	8.36
19)	Cyclohexane	0.332	0.329	0.298	0.355	0.336	0.393	0.340	9.31
20)	Methylcyclohexane	0.363	0.362	0.350	0.433	0.411	0.494	0.402	13.81
21) T	2,2-Dichloropr...	0.492	0.455	0.399	0.441	0.412	0.458	0.443	7.60
22) RT	cis-1,2-Dichlo...	0.316	0.294	0.267	0.312	0.287	0.313	0.298	6.42
23) t	Diethyl Ether	0.215	0.210	0.191	0.203	0.180	0.196	0.199	6.57
24) t	tert-Butyl Alc...	0.010	0.016	0.021	0.023	0.021	0.023	0.019	28.22
25) t	Methyl tert-Bu...	0.666	0.611	0.581	0.662	0.641	0.707	0.645	6.87
26) t	Bromochloromet...	0.160	0.151	0.144	0.148	0.134	0.148	0.148	5.61
27) t	Chloroform	0.694	0.609	0.530	0.564	0.514	0.549	0.577	11.46
28) RT	1,1,1-Trichlor...	0.573	0.523	0.450	0.494	0.455	0.490	0.498	9.20
29) T	1,1-Dichloropr...	0.386	0.382	0.355	0.413	0.386	0.426	0.392	6.43
30) RT	Carbon Tetrach...	0.506	0.479	0.421	0.450	0.415	0.453	0.454	7.58
31) t	Isopropyl Ether	0.658	0.612	0.570	0.662	0.658	0.723	0.647	7.99
32)	Ethyl-t-butyl ...	0.662	0.604	0.557	0.652	0.645	0.717	0.640	8.46
33)	Tert-Amyl meth...	0.618	0.561	0.533	0.654	0.630	0.701	0.616	9.94
34) t	Propionitrile	0.029	0.029	0.028	0.030	0.025	0.029	0.028	5.81
35) RT	Benzene	1.188	1.117	1.016	1.173	1.071	1.148	1.119	5.88
36) RT	1,2-Dichloroet...	0.414	0.385	0.364	0.394	0.361	0.383	0.384	5.05
37) RT	Trichloroethene	0.319	0.290	0.263	0.287	0.268	0.288	0.286	6.92
38) Rt	1,2-Dichloropr...	0.308	0.302	0.268	0.310	0.285	0.305	0.296	5.51
39) t	Methacrylonitrile	0.084	0.096	0.084	0.102	0.095	0.108	0.095	10.04
40) t	Methyl acrylate	0.162	0.122	0.141	0.178	0.187	0.209	0.167	18.98
41) t	Tetrahydrofuran	0.046	0.042	0.039	0.052	0.052	0.058	0.048	14.28
42) t	1-Chlorobutane	0.518	0.478	0.467	0.549	0.515	0.559	0.514	7.12
43) T	Dibromomethane	0.188	0.177	0.167	0.180	0.166	0.175	0.175	4.67
44) T	Bromodichlorom...	0.491	0.464	0.405	0.431	0.403	0.425	0.436	7.91
45) T	4-Methyl-2-Pen...	0.183	0.169	0.161	0.204	0.195	0.213	0.187	10.71
46) t	t-1,4-Dichloro...	0.111	0.088	0.082	0.097	0.109	0.119	0.101	14.20
47) t	Methyl methacr...	0.125	0.129	0.126	0.155	0.153	0.168	0.143	13.01
48) t	Ethyl methacry...	0.229	0.220	0.219	0.268	0.276	0.314	0.254	15.04
49) Rt	Toluene	0.610	0.584	0.600	0.715	0.685	0.733	0.655	9.84
50) T	t-1,3-Dichloro...	0.360	0.365	0.339	0.398	0.376	0.417	0.376	7.51
51) T	cis-1,3-Dichlo...	0.424	0.404	0.370	0.418	0.415	0.452	0.414	6.46
52) RT	1,1,2-Trichlor...	0.265	0.251	0.229	0.249	0.228	0.241	0.244	5.94
53) t	1,3-Dichloropr...	0.437	0.433	0.380	0.424	0.399	0.426	0.416	5.31
54) t	2-Hexanone	0.127	0.118	0.119	0.148	0.147	0.163	0.137	13.46
55) t	Dibromochlorom...	0.333	0.306	0.287	0.316	0.285	0.302	0.305	5.89
56) T	1,2-Dibromoethane	0.252	0.231	0.216	0.239	0.221	0.235	0.232	5.54
57) S	4-Bromofluorob...	0.324	0.337	0.353	0.383	0.355	0.383	0.356	6.64

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58) RT	Tetrachloroethene	0.276	0.248	0.245	0.255	0.236	0.257	0.253	5.45	
59) Rt	Chlorobenzene	0.723	0.680	0.638	0.735	0.697	0.766	0.707	6.36	
60) T	1,1,1,2-Tetrac...	0.344	0.298	0.270	0.300	0.273	0.296	0.297	8.94	
61) t	Pentachloroethane	0.268	0.241	0.224	0.282	0.221	0.247	0.247	9.79	
62) t	Hexachloroethane	0.254	0.249	0.234	0.256	0.233	0.262	0.248	4.90	
63) Rt	Ethyl Benzene	1.013	1.002	1.009	1.245	1.266	1.423	1.160	15.29	
64) RT	m/p-Xylenes	0.378	0.387	0.400	0.530	0.506	0.561	0.460	17.63	
65) RT	o-Xylene	0.378	0.374	0.381	0.478	0.470	0.531	0.435	15.27	
66) RT	Styrene	0.615	0.647	0.636	0.868	0.851	0.948	0.761	19.03	
67) t	Bromoform	0.189	0.184	0.173	0.190	0.169	0.191	0.183	5.16	
68) S	1,2-Dichlorobe...	0.378	0.358	0.386	0.383	0.385	0.421	0.385	5.28	
69) T	Isopropylbenzene	0.965	0.987	1.009	1.265	1.236	1.419	1.147	16.24	
70) T	1,1,2,2-Tetrac...	0.349	0.325	0.310	0.335	0.306	0.333	0.326	4.99	
71) T	1,2,3-Trichlor...	0.229	0.199	0.171	0.219	0.197	0.238	0.209	11.72	
72) t	Bromobenzene	0.301	0.295	0.278	0.320	0.301	0.335	0.305	6.55	
73) t	n-propylbenzene	0.269	0.295	0.276	0.371	0.349	0.402	0.327	16.69	
74) t	2-Chlorotoluene	0.243	0.257	0.256	0.314	0.296	0.330	0.283	12.58	
75) t	1,3,5-Trimethy...	0.741	0.806	0.850	1.135	1.100	1.252	0.981	21.22	
76) t	4-Chlorotoluene	0.240	0.267	0.279	0.343	0.319	0.356	0.301	15.26	
77) t	tert-Butylbenzene	0.804	0.863	0.857	1.065	1.053	1.206	0.975	16.10	
78) t	1,2,4-Trimethy...	0.743	0.817	0.859	1.169	1.132	1.279	1.000	22.07	
79) t	sec-Butylbenzene	1.054	1.107	1.191	1.493	1.437	1.645	1.321	17.99	
80)	Nitrobenzene	0.009	0.011	0.011	0.015	0.016	0.020	0.013	30.35	
81) t	p-Isopropyltol...	0.828	0.895	0.934	1.238	1.217	1.407	1.087	21.36	
82) t	1,3-Dichlorobe...	0.598	0.610	0.588	0.665	0.607	0.682	0.625	6.20	
83) Rt	1,4-Dichlorobe...	0.606	0.590	0.581	0.665	0.618	0.691	0.625	7.01	
84) t	n-Butylbenzene	0.854	0.895	0.881	1.142	1.141	1.327	1.040	18.42	
85) Rt	1,2-Dichlorobe...	0.588	0.588	0.549	0.626	0.585	0.659	0.599	6.37	
86) t	1,2-Dibromo-3-...	0.051	0.062	0.057	0.065	0.061	0.065	0.060	8.77	
87) Rt	1,2,4-Trichlor...	0.313	0.329	0.320	0.383	0.382	0.452	0.363	14.59	
88) t	Hexachlorobuta...	0.228	0.219	0.202	0.229	0.209	0.256	0.224	8.48	
89) t	Naphthalene	0.531	0.517	0.519	0.718	0.798	0.957	0.673	27.11	
90) t	1,2,3-Trichlor...	0.312	0.310	0.305	0.383	0.386	0.429	0.354	14.68	

(#) = Out of Range

Iodomethane

Response Ratio



$$\text{Response} = 2.960\text{e-}001 * \text{Amt} - 1.900\text{e-}001$$

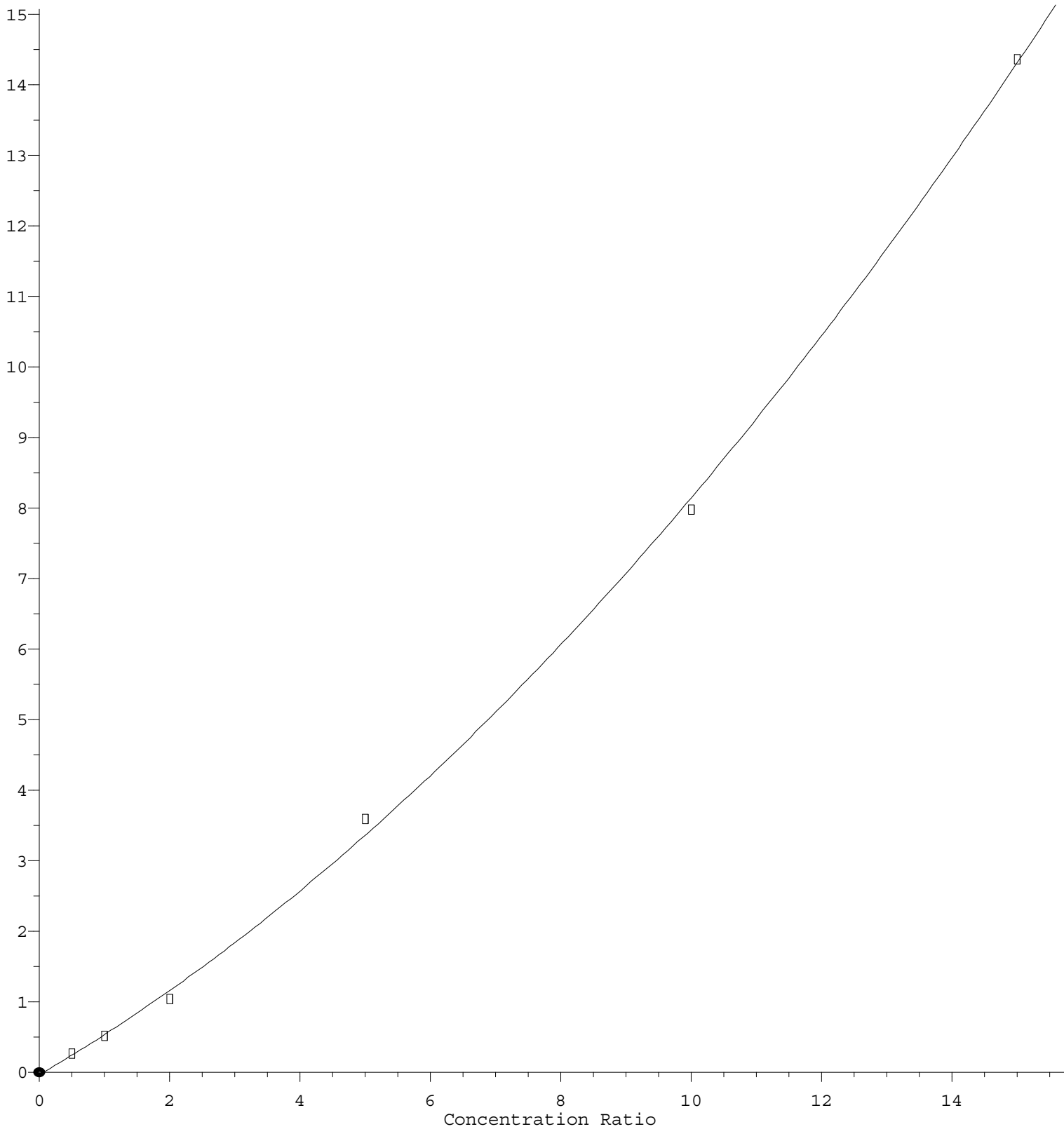
Coef of Det (r^2) = 0.993130 Curve Fit: Linear

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Naphthalene

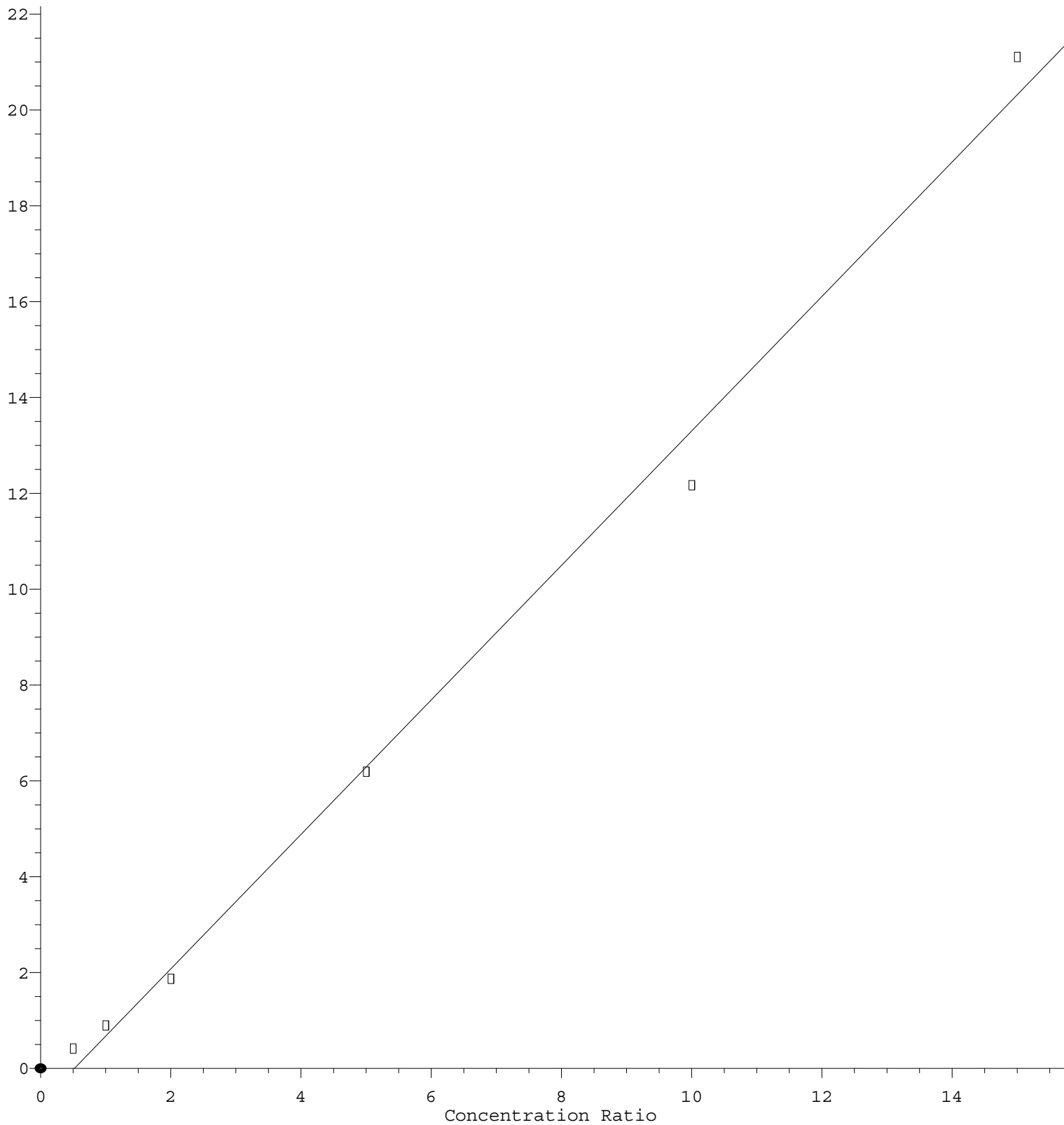
Response Ratio



$R = 2.771e-002 A^2 + 5.407e-001 A - 3.423e-002$
 Coef of Det (r^2) = 0.999372 Curve Fit: Quadratic
 Method Name: Z:\voasrv\HPCHEM1\MSVOA U\Method\524U123021DW.M
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p-Isopropyltoluene

Response Ratio



$$\text{Response} = 1.403e+000 * \text{Amt} - 7.257e-001$$

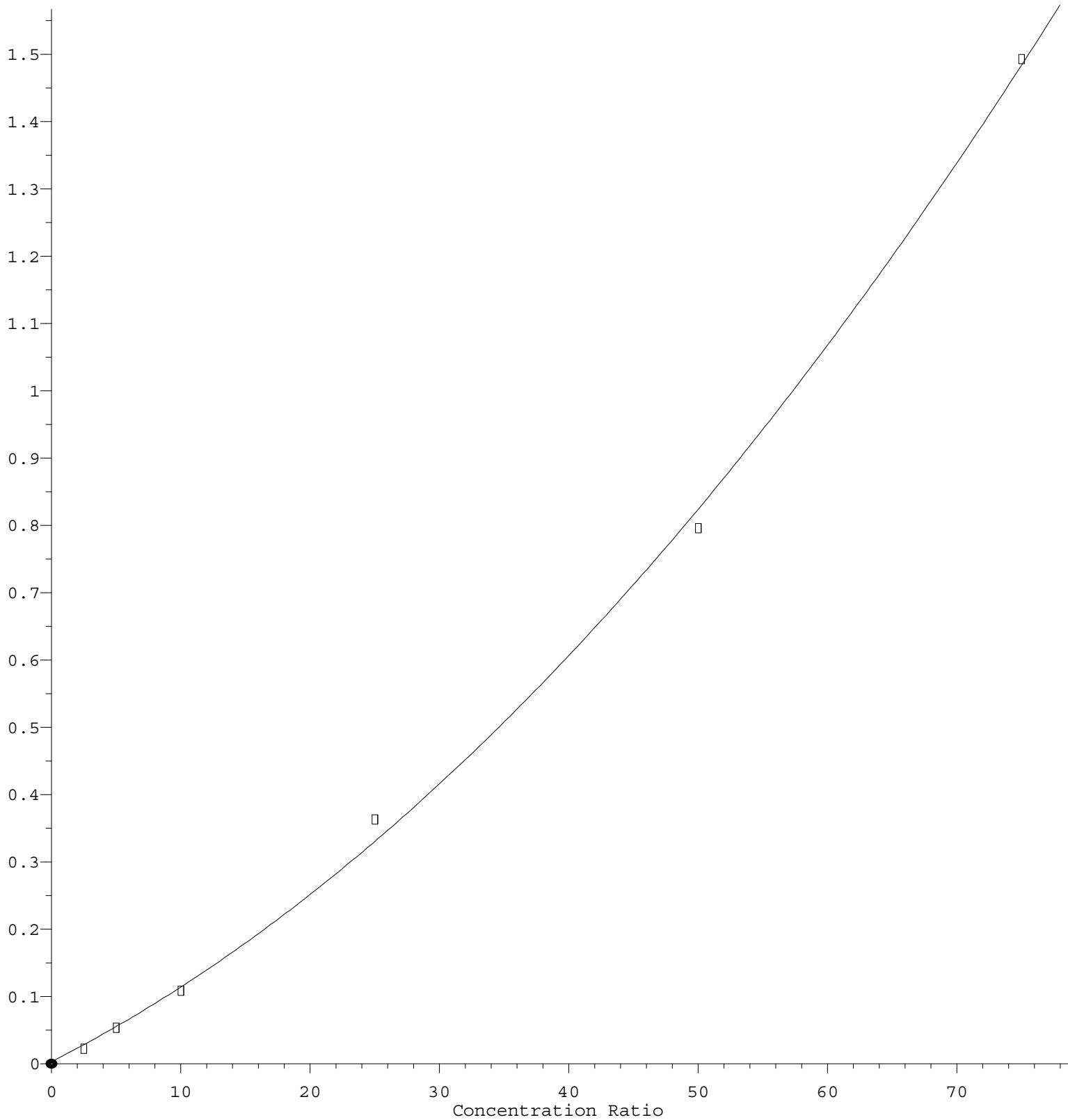
Coef of Det (r^2) = 0.993393 Curve Fit: Linear

Method Name: Z:\voasrv\HPCHEM1\MSVOA U\Method\524U123021DW.M

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Nitrobenzene

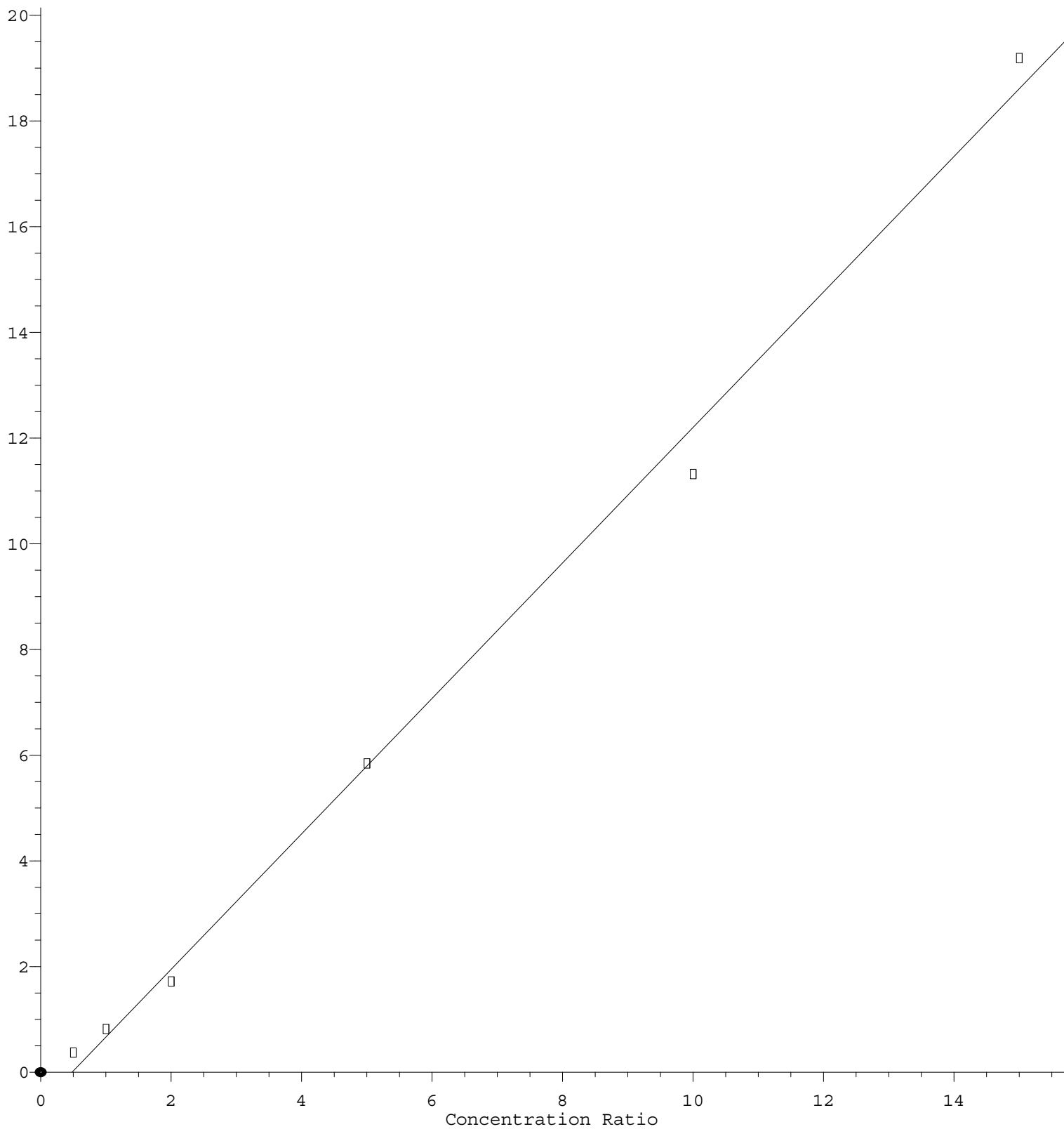
Response Ratio



$R = 1.329e-004 A^2 + 9.774e-003 A + 3.044e-003$
 Coef of Det (r^2) = 0.998797 Curve Fit: Quadratic
 Method Name: Z:\voasrv\HPCHEM1\MSVOA U\Method\524U123021DW.M
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1,2,4-Trimethylbenzene

Response Ratio



$$\text{Response} = 1.281\text{e}+000 * \text{Amt} - 6.098\text{e}-001$$

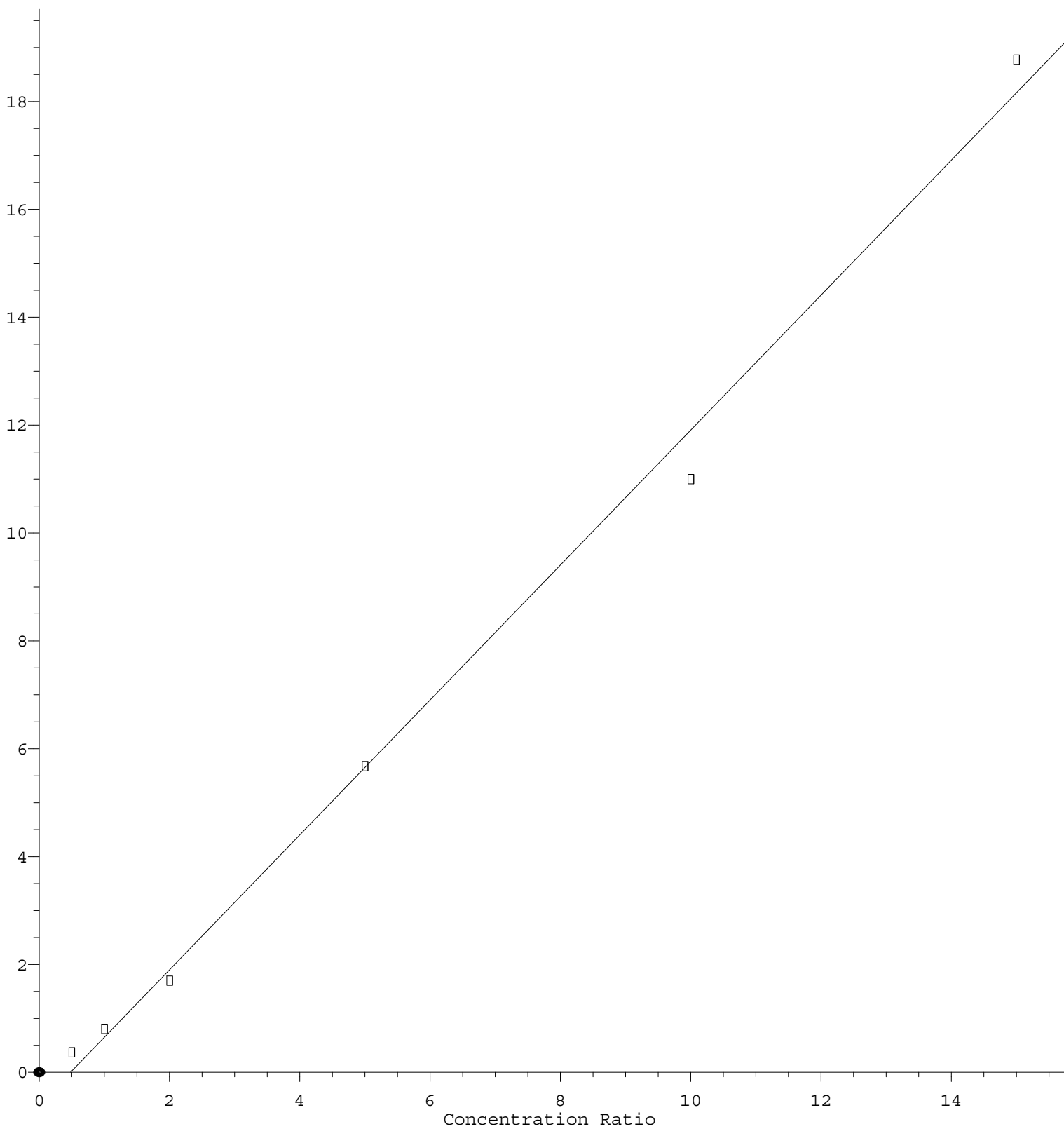
Coef of Det (r^2) = 0.995271 Curve Fit: Linear

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1,3,5-Trimethylbenzene

Response Ratio



$$\text{Response} = 1.251\text{e}+000 * \text{Amt} - 5.961\text{e}-001$$

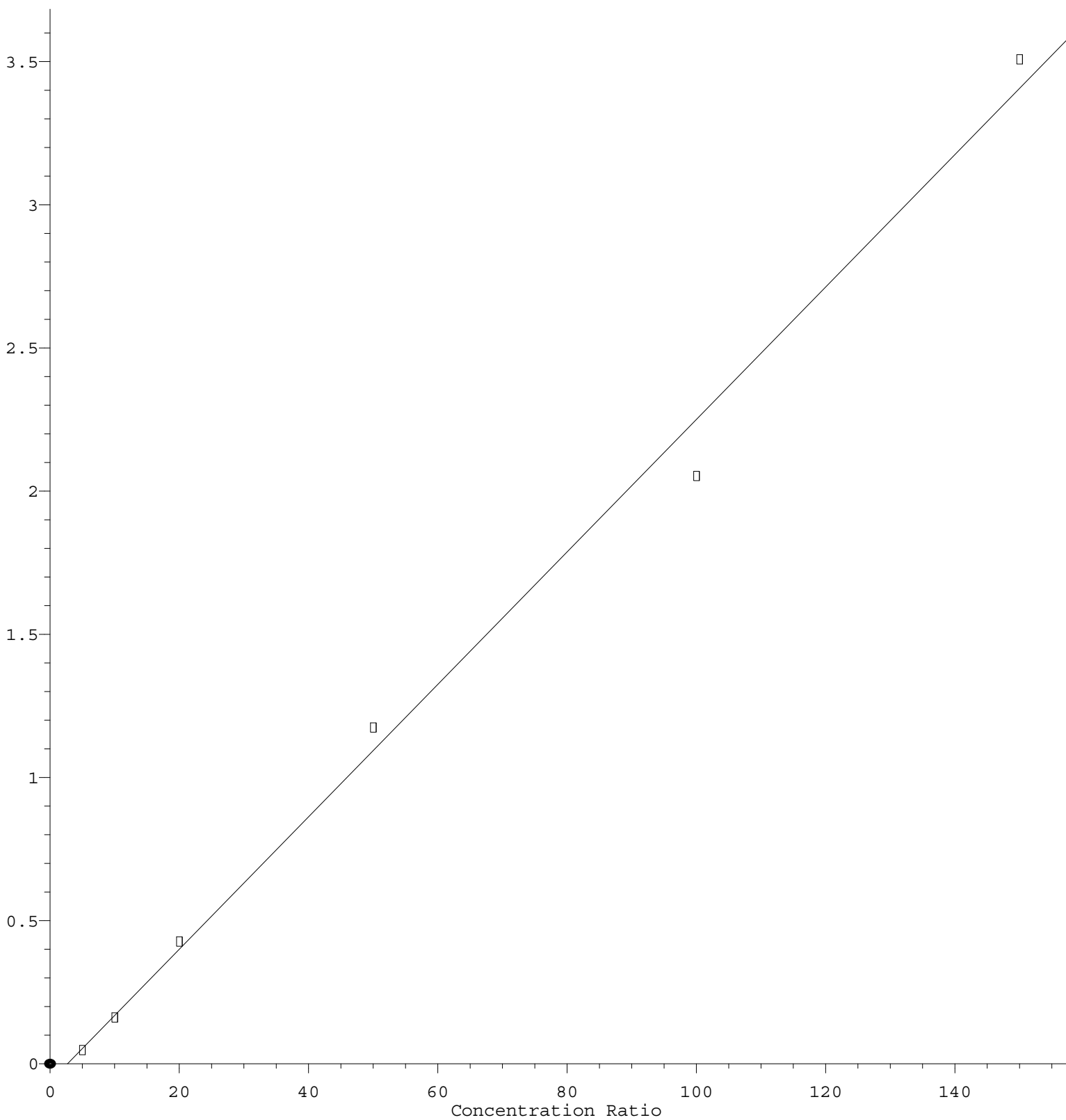
Coef of Det (r^2) = 0.994748 Curve Fit: Linear

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tert-Butyl Alcohol

Response Ratio



$$\text{Response} = 2.313\text{e-}002 * \text{Amt} - 6.278\text{e-}002$$

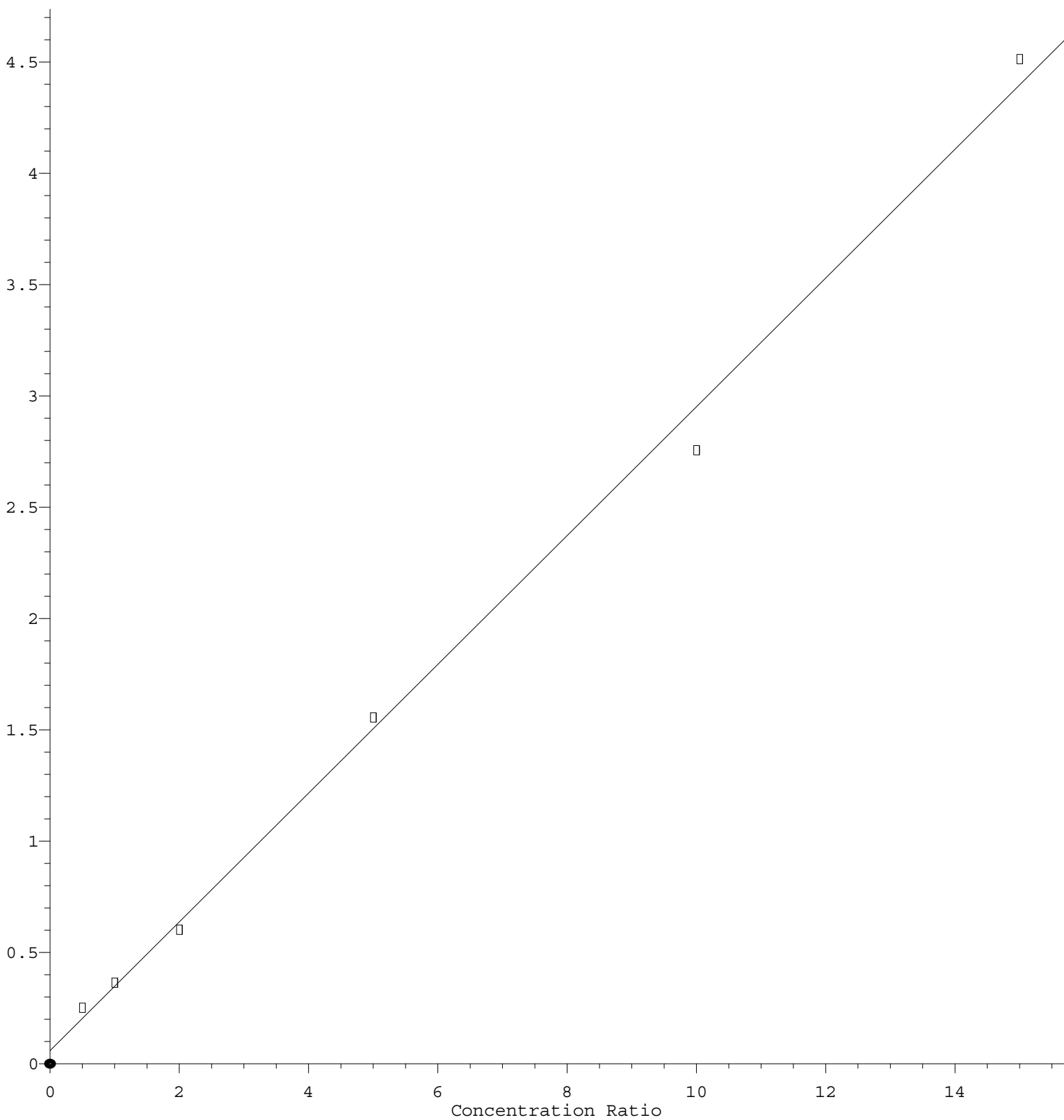
Coef of Det (r^2) = 0.993759 Curve Fit: Linear

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Methylene Chloride

Response Ratio



$$\text{Response} = 2.892\text{e-}001 * \text{Amt} + 5.853\text{e-}002$$

Coef of Det (r^2) = 0.995905 Curve Fit: Linear

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