82 14-di-Cl-Bz 146 148	9029	69544	305231	644124	1193857	2207723	-1	0.0000	1.6699	0.0000	0.0524
81 sec-butylbenzene 105 134	19695	163551	797663	1465228	2859247	5499576	-1	0.0000	3.9831	0.0000	0.0835
77 4-iso-Pr-toluene 119 134	14306	119820	572630	1085210	2064029	3804782	-1	0.0000	2.8739	0.0000	0.0804
84 12-di-Cl-benzene 146 148	5444	45355	219614	410082	812246	1524040	-1	0.0000	1.1088	0.0000	0.0849
85 n-butylbenzene 91 134	17944	117913	579573	1096665	2099124	3991637	-1	0.0000	3.0116	0.0000	0.0128
86 12-diBr-3-Cl-Pra 157 155	-1	2498	14611	31395	62914	120318	-1	0.0000	0.0813	0.0000	0.1395
87 124-tri-Cl-Bz 180 182	3158	29532	158333	322231	604462	1187497	-1	-0.0539	0.9002	0.0000	0.9995
88 naphthalene 128 129	4753	21798	116373	245906	459400	922945	-1	0.0000	0.6651	0.0000	0.1268
90 123-tri-Cl-Bz 180 182	2940	22060	121207	239739	448256	845940	-1	0.0000	0.6042	0.0000	0.1029
89 hx-Cl-butadiene 225 260	2553	24644	130257	244690	466707	859594	-1	0.0135	0.6525	0.0000	0.9999

Quantitation Report: **Applied P &Ch Lab** EPA 524.2

960

Data Filename: C:\HPCHEM\1\DATA\03G1044\3-0003.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Jan 10 14:27 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Jan 13 09:28 2003
Print Time : Mon Jan 13 10:41 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

ID	Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
Internal Standards										Dev(Min)	
1	1 Fluorobenzene I1	9.04	9.04	0.000	96	70	765.834	10.00		0.00	
47	47 Cl-benzene-d5, I2	12.67	12.66	0.000	82	119	226.795	10.00		0.01	
62	62 1,4-DCB-d4 150 15	15.16	15.16	0.000	152	150	197.143	10.00		0.00	
System Monitoring Compounds (Surrogate)										%Recovery	
27	27 Di-Br-F-Methane (	7.45	7.44	0.000	111	113	13.867	0.45	0.5	2.26%	
29	29 1,2-di-Cl-ethane-	8.03	8.03	0.000	65	102	10.557	0.64	0.6	3.22%	
55	55 toluene-d8(S2)	11.16	11.15	0.000	100	99	18.222	0.43	0.4	2.17%	
70	70 4-Br-1-F-Bz (S3)	13.91	13.90	0.000	174	95	9.453	0.47	0.5	2.37%	
Target Compounds										Qvalue	
<<< I1 : ISTD ID = 1 >>>											
3	3 di-Cl-di-F-methan	2.60	2.60	0.000	85	87	9.202	0.39	0.4	63	#
4	4 Chloromethane	2.79	2.79	0.000	50	52	4.751	0.25	0.3	55	#?
9	9 F114 85 135	2.82	2.84	-0.003	85	135	8.035	0.33	0.3	69	?
5	5 vinyl chloride	2.97	2.97	0.000	62	64	4.990	0.28	0.3	54	#
6	6 bromomethane	3.39	3.38	0.000	94	96	5.861	0.34	0.3	97	
7	7 Chloroethane	3.52	3.54	-0.002	64	66	3.629	0.28	0.3	56	#
8	8 tri-Cl-F-methane	4.16	4.16	0.000	101	103	7.295	0.25	0.2	76	
111	111 isopropyl alcoho	4.31	4.28	0.003	45	43	1.236	3.99	4.0	60	#
100	100 ethyl ether x5	4.45	4.45	0.000	59	74	20.361	1.87	1.9	77	
102	102 Acrolein x10	4.19	4.17	0.002	56	55	3.234	3.71	3.7	70	
119	119 methyl acetate	5.08	5.07	0.000	43	74	4.062	0.81	0.8	56	#?
104	104 Carbon disulfide	5.20	5.19	0.000	76	78	21.121	0.33	0.3	78	#
103	103 Acrylonitrilex10	4.94	4.91	0.004	53	52	4.569	2.49	2.5	66	m
95	95 Acetone x10	4.24	4.33	-0.009	43	58	0.989	0.67	0.7	98	?
108	108 F-113	5.04	5.05	-0.001	151	101	5.327	0.26	0.3	67	#
13	13 11-dichloroethene	4.78	4.78	0.000	61	96	8.641	0.29	0.3	80	?
101	101 Acetonnitrilex10	4.23	4.22	0.001	41	40	2.063	5.25	5.2	1	#?
109	109 Iodomethane	4.79	4.82	-0.003	142	127	3.901	0.16	0.2	53	#?
113	113 Tert butyl alcoh	4.83	4.87	-0.004	59	57	2.556	3.73	3.7	1	#

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

1/13/03

Quantitation Report: **Applied P &Ch Lab** EPA 524.2

Data Filename: C:\HPCHEM\1\DATA\03G1044\3-0003.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Jan 10 14:27 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Jan 13 09:28 2003
Print Time : Mon Jan 13 10:41 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

961

ID	Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
18	18 methylene chlorid	4.98	4.98	0.000	84	49	28.023	0.81	0.8	89	
	112 Allyl chloride	5.08	5.08	0.000	41	76	11.807	0.44	0.4	72	#?
200	200 Nitro methane x1	5.83	5.83	0.000	61	46	10.089	3.02	3.0	92	#?
10	10 t-Bu-Me-ether	6.02	6.01	0.001	73	57	19.344	0.51	0.5	98	
19	19 t-12-di-Cl-ethene	5.82	5.82	0.000	96	61	7.446	0.32	0.3	93	?
98	98 Vinyl acetate x5	6.41	6.41	0.000	43	86	35.861	1.71	1.7	93	#
21	21 11-dichloroethane	6.16	6.16	0.000	63	83	11.490	0.29	0.3	98	
91	91 2-butanone MEKx10	6.86	6.84	0.002	43	72	23.960	4.00	4.0	84	#
115	115 Di isoprop ether	6.65	6.85	-0.023	45	87	2.475	0.03	0.0	99	
22	22 c-12-di-Cl-ethene	6.98	6.97	0.000	96	61	6.875	0.30	0.3	96	
23	23 22-Dichloropropan	7.36	7.35	0.000	77	97	13.155	0.38	0.4	98	?
24	24 Br-Cl-methane	7.21	7.19	0.002	128	130	0.956	0.13	0.1	0	m
25	25 chloroform	7.28	7.27	0.000	83	85	14.881	0.46	0.5	96	
201	201 Ethyl acetate x2	7.34	7.31	0.003	43	61	5.585	0.53	0.5	43	#? 1/13/03
116	116 ETBE	7.41	7.40	0.000	59	87	20.917	0.34	0.3	99	
117	117 Iso-butyl alcoho	7.34	7.31	0.003	43	42	5.582	2.89	2.9	1	#?
26	26 tetrahydrofuranx5	7.73	7.71	0.002	72	42	1.945	2.48	2.5	22	#
34	34 111-tri-Cl-ethane	8.24	8.23	0.000	97	99	12.459	0.37	0.4	95	
30	30 12-dichloroethane	8.16	8.13	0.003	62	64	0.549	0.04	0.0	77	
35	35 11-Di-Cl-propene	8.48	8.48	0.000	75	110	9.488	0.32	0.3	88	
36	36 benzene	8.76	8.76	0.000	78	52	19.613	0.29	0.3	92	
37	37 CCl4	8.68	8.69	0.000	117	119	7.832	0.31	0.3	92	
97	97 thiophene	8.90	8.89	0.000	84	58	10.129	0.31	0.3	94	
118	118 TAME	8.93	9.01	-0.008	73	43	4.367	0.10	0.1	99	
39	39 12-di-Cl-propane	9.51	9.50	0.001	63	76	5.869	0.30	0.3	63	#
40	40 trichloroethene	9.56	9.55	0.001	130	132	5.805	0.28	0.3	94	
96	96 Me-methacrylate	9.85	9.85	0.000	69	100	1.472	0.20	0.2	33	#
42	42 Br-di-Cl-methane	9.60	9.62	-0.002	83	85	10.138	0.46	0.5	98	
41	41 dibromomethane	9.46	9.45	0.001	174	172	2.292	0.24	0.2	28	#
45	45 c-13-di-Cl-propen	10.37	10.37	0.000	75	110	7.832	0.33	0.3	60	#
92	92 2-ClEt-Vi-ether10	10.15	10.15	0.000	63	43	10.352	2.52	2.5	75	#
56	56 toluene	11.24	11.23	0.000	91	92	21.278	0.34	0.3	87	

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Quantitation Report: **Applied P &Ch Lab** EPA 524.2

962

Data Filename: C:\HPCHEM\1\DATA\03G1044\3-0003.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Jan 10 14:27 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Jan 13 09:28 2003
Print Time : Mon Jan 13 10:41 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

ID	Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
107	107 Et methacrylate	11.51	11.37	0.016	69	99	0.955	0.08	0.1	83	?
93	93 2-Hexanone x5	11.49	11.49	0.000	43	58	10.744	3.07	3.1	92	?
48	48 112-tri-Cl-Et	11.03	11.03	0.000	97	83	5.203	0.62	0.6	70	
58	58 1,2-di-br-ethane	11.84	11.83	0.001	107	109	1.144	0.13	0.1	16	#
51	51 di-Br-Cl-methane	11.59	11.57	0.002	129	127	2.693	0.22	0.2	97	
46	46 t-13-di-cl-propen	10.89	10.86	0.003	75	110	4.584	0.30	0.3	66	#
105	105 1-Chlorohexane	12.65	12.64	0.001	55	93	12.961	0.77	0.8	41	?
<<< I2 : ISTD ID = 47 >>>											
54	54 MIBK	10.47	10.52	-0.004	43	58	1.407	0.28	0.3	94	
49	49 1,3-di-cl-propane	11.31	11.29	0.002	76	78	4.247	0.29	0.3	42	#
59	59 tetra-Cl-ethene	12.01	12.01	0.000	166	168	5.221	0.26	0.3	99	
60	60 chlorobenzene	12.70	12.70	0.000	112	77	9.971	0.36	0.4	48	#
61	61 1112-tetra-Cl-Et	12.63	12.63	0.000	131	133	3.219	0.24	0.2	98	?
64	64 ethylbenzene	12.91	12.91	0.000	91	106	21.430	0.25	0.2	84	
65	65 m/p-Xylenes x2	13.11	13.11	0.000	91	106	31.419	0.65	0.6	89	
99	99 1-4-di-Cl-butane	13.48	13.46	0.002	55	41	5.503	0.46	0.5	59	#?
52	52 bromoform	13.26	13.23	0.003	173	175	0.806	0.13	0.1	30	m
66	66 styrene	13.43	13.43	0.000	104	78	10.850	0.32	0.3	85	
67	67 o-xylene	13.51	13.50	0.000	91	106	16.715	0.35	0.3	76	?
68	68 1122-Tetra-Cl-Et	13.53	13.50	0.002	83	85	2.658	0.44	0.4	87	?
110	110 t-1,4-dichloro-2	13.69	13.68	0.000	89	53	1.095	1.21	1.2	1	#
106	106 Cl-benzyl	15.13	15.13	0.000	91	126	6.053	0.62	0.6	61	#?
<<< I3 : ISTD ID = 62 >>>											
71	71 isopropylbenzene	13.87	13.85	0.001	105	120	16.442	0.25	0.3	87	
72	72 bromobenzene	14.11	14.10	0.000	156	158	3.119	0.22	0.2	98	
73	73 n-propylbenzene	14.29	14.28	0.000	120	78	4.297	0.23	0.2	56	#
74	74 2-Cl-Tl 126 1	14.40	14.38	0.001	126	128	3.821	0.33	0.3	39	m
75	75 4-Cl-Tl 126 1	14.46	14.45	0.000	126	128	4.042	0.31	0.3	43	m
76	76 135-tri-Me-Bz	14.57	14.56	0.000	105	120	14.680	0.28	0.3	84	
79	79 tert-butylbenzene	14.85	14.84	0.000	119	91	13.115	0.24	0.2	81	
78	78 124-tri-Me-Bz	14.94	14.94	0.000	105	120	11.184	0.25	0.3	97	
80	80 13-di-Cl-Bz 146	15.12	15.12	0.000	146	148	5.522	0.20	0.2	80	?

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

4/13/03

Quantitation Report: **Applied P &Ch Lab** EPA 524.2

963

Data Filename: C:\HPCHEM\1\DATA\03G1044\3-0003.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Jan 10 14:27 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Jan 13 09:28 2003
Print Time : Mon Jan 13 10:41 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

ID		Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
82	82	14-di-Cl-Bz 146	15.20	15.18	0.001	146	148	9.029	0.29	0.3	1	m?
81	81	sec-butylbenzene	15.06	15.05	0.000	105	134	19.695	0.28	0.3	70	#
77	77	4-iso-Pr-toluene	15.23	15.22	0.000	119	134	14.306	0.25	0.3	91	?
84	84	12-di-Cl-benzene	15.54	15.53	0.000	146	148	5.444	0.25	0.2	91	
85	85	n-butylbenzene	15.61	15.61	0.000	91	134	17.944	0.36	0.4	73	#
87	87	124-tri-Cl-Bz	17.25	17.26	0.000	180	182	3.158	0.20	0.2	85	#
88	88	naphthalene	17.52	17.50	0.002	128	129	4.753	0.59	0.6	81	~~#?~~
90	90	123-tri-Cl-Bz	17.67	17.69	-0.001	180	182	2.940	0.28	0.3	1	m
89	89	hx-Cl-butadiene	17.51	17.53	-0.001	225	260	2.553	0.22	0.2	44	m?

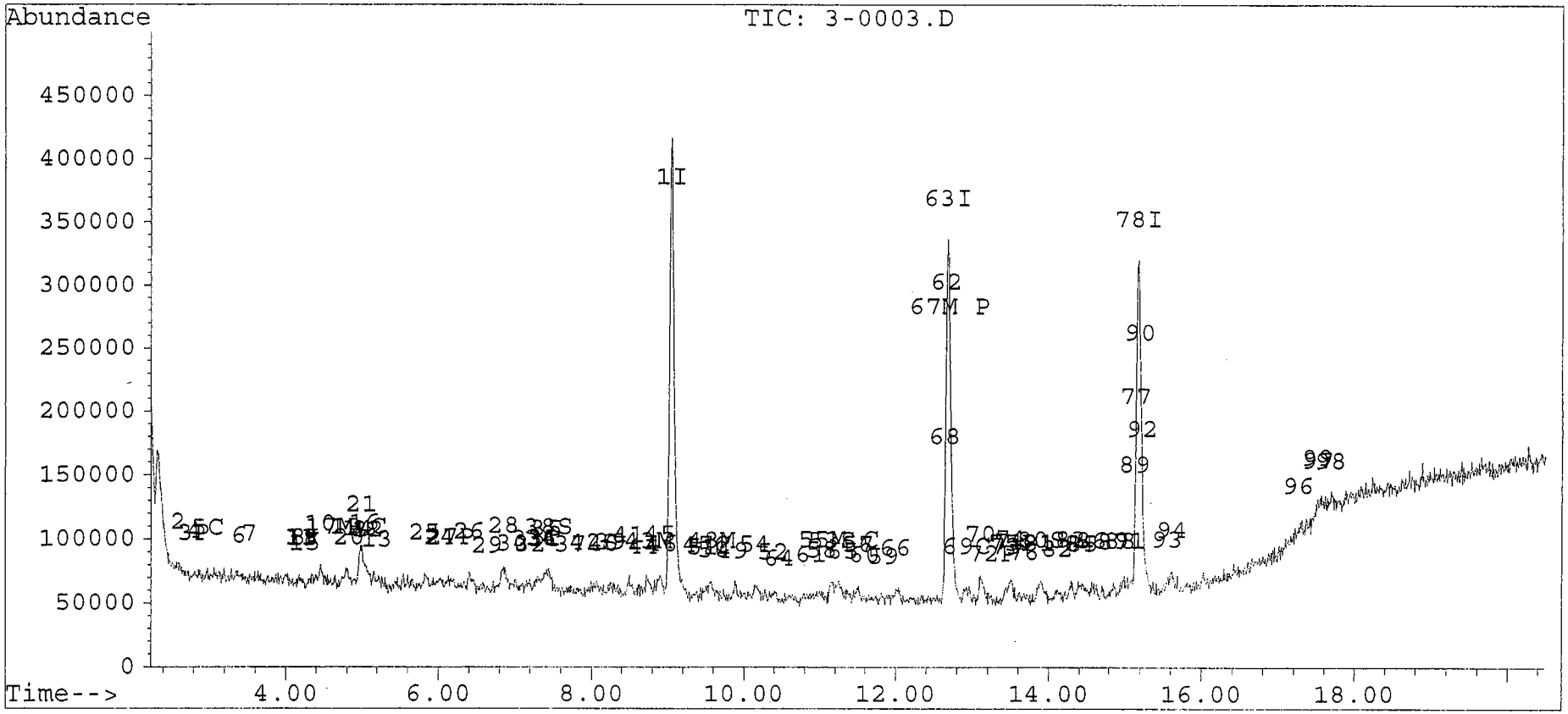
4/13/03

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Quantitation Report

Data File : C:\HPCHEM\1\DATA\03G1044\3-0003.D Vial: 16
Acq On : 10 Jan 03 2:27 pm Operator: Eddie
Sample : f=1 Inst : GCMS-G
Misc : Multiplr: 1.00
Quant Time: Jan 13 9:28 2003 Quant Results File: quant.res

Method : C:\HPCHEM\1\METHODS\E524G003.M
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Mon Jan 13 10:38:23 2003
Response via : Multiple Level Calibration



Quantitation Report: **Applied P &Ch Lab** EPA 524.2

Data Filename: C:\HPCHEM\1\DATA\03G1044\3-002.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Jan 10 15:26 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Jan 13 09:30 2003
Print Time : Mon Jan 13 10:42 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

ID	Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
Internal Standards										Dev(Min)	
1	1 Fluorobenzene I1	9.04	9.04	0.000	96	70	768.596	10.00		0.00	
47	47 Cl-benzene-d5, I2	12.67	12.66	0.000	82	119	229.493	10.00		0.00	
62	62 1,4-DCB-d4 150 15	15.16	15.16	0.000	152	150	197.148	10.00		0.00	
System Monitoring Compounds (Surrogate)										%Recovery	
27	27 Di-Br-F-Methane (	7.43	7.44	0.000	111	113	59.189	1.93	1.9	9.63%	
29	29 1,2-di-Cl-ethane-	8.04	8.03	0.000	65	102	26.643	1.62	1.6	8.09%	
55	55 toluene-d8(S2)	11.15	11.15	0.000	100	99	78.299	1.86	1.9	9.29%	
70	70 4-Br-1-F-Bz (S3)	13.90	13.90	0.000	174	95	36.886	1.85	1.9	9.25%	
Target Compounds										Qvalue	
<<< I1 : ISTD ID = 1 >>>											
3	3 di-Cl-di-F-methan	2.60	2.60	0.000	85	87	44.272	1.87	1.9	95	
4	4 Chloromethane	2.79	2.79	0.000	50	52	30.836	1.65	1.6	91	
9	9 F114 85 135	2.83	2.84	-0.002	85	135	46.094	1.87	1.9	82	
5	5 vinyl chloride	2.97	2.97	0.000	62	64	35.625	2.01	2.0	100	
6	6 bromomethane	3.39	3.38	0.000	94	96	43.488	2.52	2.5	82	
7	7 Chloroethane	3.53	3.54	-0.001	64	66	27.223	2.07	2.1	99	
8	8 tri-Cl-F-methane	4.16	4.16	0.000	101	103	56.379	1.91	1.9	87	m
111	111 isopropyl alcoho	4.26	4.28	-0.002	45	43	8.181	26.30	26.3	1	# 1/13/03
100	100 ethyl ether x5	4.45	4.45	0.000	59	74	108.089	9.87	9.9	99	
102	102 Acrolein x10	4.17	4.17	0.000	56	55	15.074	17.25	17.2	78	?
119	119 methyl acetate	5.07	5.07	0.000	43	74	15.788	3.14	3.1	100	?
104	104 Carbon disulfide	5.20	5.19	0.000	76	78	133.095	2.06	2.1	100	
103	103 Acrylonitrilex10	4.91	4.91	0.000	53	52	37.044	20.10	20.1	100	
95	95 Acetone x10	4.31	4.33	-0.002	43	58	41.993	28.37	28.4	90	
108	108 F-113	5.04	5.05	-0.001	151	101	41.068	2.00	2.0	97	
13	13 11-dichloroethene	4.78	4.78	0.000	61	96	61.263	2.03	2.0	95	
101	101 Acetonnitrilex10	4.21	4.22	0.000	41	40	1.527	3.87	3.9	1	#
109	109 Iodomethane	4.81	4.82	-0.001	142	127	55.824	2.32	2.3	97	
113	113 Tert butyl alcoh	4.86	4.87	-0.001	59	57	18.436	26.84	26.8	87	#

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Quantitation Report: **Applied P &Ch Lab** EPA 524.2

Data Filename: C:\HPCHEM\1\DATA\03G1044\3-002.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Jan 10 15:26 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Jan 13 09:30 2003
Print Time : Mon Jan 13 10:42 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

ID	Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
18	18 methylene chlorid	4.98	4.98	0.000	84	49	111.315	3.20	3.2	97	
	112 Allyl chloride	5.08	5.08	0.000	41	76	73.643	2.71	2.7	92	?
200	200 Nitro methane x1	5.82	5.83	0.000	61	46	68.361	20.39	20.4	97	#?
10	10 t-Bu-Me-ether	6.01	6.01	0.000	73	57	73.627	1.95	1.9	94	
19	19 t-12-di-Cl-ethene	5.82	5.82	0.000	96	61	45.222	1.96	2.0	94	?
98	98 Vinyl acetate x5	6.40	6.41	0.000	43	86	233.914	11.10	11.1	100	
21	21 11-dichloroethane	6.16	6.16	0.000	63	83	83.925	2.08	2.1	97	
91	91 2-butanone MEKx10	6.84	6.84	0.000	43	72	146.366	24.33	24.3	95	?
115	115 Di isoprop ether	6.85	6.85	0.000	45	87	206.054	2.36	2.4	97	?
22	22 c-12-di-Cl-ethene	6.97	6.97	0.000	96	61	46.067	2.04	2.0	95	
23	23 22-Dichloropropan	7.35	7.35	0.000	77	97	71.811	2.06	2.1	93	
24	24 Br-Cl-methane	7.19	7.19	0.000	128	130	15.248	2.10	2.1	93	
25	25 chloroform	7.27	7.27	0.000	83	85	81.604	2.50	2.5	97	
201	201 Ethyl acetate x2	7.32	7.31	0.000	43	61	44.403	4.20	4.2	88	?
116	116 ETBE	7.41	7.40	0.000	59	87	124.488	2.01	2.0	100	
117	117 Iso-butyl alcoho	7.32	7.31	0.000	43	42	44.403	22.93	22.9	1	#?
26	26 tetrahydrofuranx5	7.71	7.71	0.000	72	42	8.407	10.67	10.7	92	
34	34 111-tri-Cl-ethane	8.23	8.23	0.000	97	99	65.859	1.96	2.0	100	
30	30 12-dichloroethane	8.12	8.13	-0.002	62	64	31.555	2.35	2.3	93	
35	35 11-Di-Cl-propene	8.49	8.48	0.000	75	110	58.117	1.98	2.0	99	
36	36 benzene	8.75	8.76	-0.001	78	52	138.554	2.07	2.1	100	
37	37 CCl4	8.70	8.69	0.002	117	119	47.773	1.86	1.9	96	
97	97 thiophene	8.90	8.89	0.000	84	58	70.133	2.11	2.1	98	
118	118 TAME	9.00	9.01	0.000	73	43	97.622	2.29	2.3	92	
39	39 12-di-Cl-propane	9.50	9.50	0.000	63	76	38.931	1.99	2.0	100	
40	40 trichloroethene	9.56	9.55	0.000	130	132	41.064	1.98	2.0	94	
96	96 Me-methacrylate	9.86	9.85	0.001	69	100	19.691	2.68	2.7	78	
42	42 Br-di-Cl-methane	9.62	9.62	0.000	83	85	55.994	2.55	2.6	94	
41	41 dibromomethane	9.46	9.45	0.000	174	172	17.911	1.90	1.9	95	
45	45 c-13-di-Cl-propen	10.38	10.37	0.000	75	110	48.533	2.02	2.0	93	
92	92 2-ClEt-Vi-ether10	10.15	10.15	0.000	63	43	80.060	19.39	19.4	93	
56	56 toluene	11.22	11.23	0.000	91	92	126.101	2.01	2.0	95	

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Quantitation Report: **Applied P &Ch Lab** EPA 524.2

967

Data Filename: C:\HPCHEM\1\DATA\03G1044\3-002.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Jan 10 15:26 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Jan 13 09:30 2003
Print Time : Mon Jan 13 10:42 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

ID	Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
107	107 Et methacrylate	11.36	11.37	0.000	69	99	35.707	3.06	3.1	93	
93	93 2-Hexanone x5	11.49	11.49	0.000	43	58	47.646	13.58	13.6	91	
48	48 112-tri-Cl-Et	11.04	11.03	0.001	97	83	21.908	2.62	2.6	95	
58	58 1,2-di-br-ethane	11.84	11.83	0.002	107	109	19.207	2.19	2.2	88	
51	51 di-Br-Cl-methane	11.58	11.57	0.001	129	127	27.173	2.20	2.2	96	
46	46 t-13-di-cl-propen	10.87	10.86	0.000	75	110	30.276	1.95	2.0	99	
105	105 1-Chlorohexane	12.65	12.64	0.002	55	93	43.864	2.59	2.6	88	?
<<< I2 : ISTD ID = 47 >>>											
54	54 MIBK	10.53	10.52	0.000	43	58	13.676	2.73	2.7	96	
49	49 1,3-di-cl-propane	11.30	11.29	0.000	76	78	30.516	2.04	2.0	98	
59	59 tetra-Cl-ethene	12.01	12.01	0.000	166	168	40.927	2.03	2.0	96	
60	60 chlorobenzene	12.70	12.70	0.000	112	77	71.440	2.54	2.5	90	
61	61 1112-tetra-Cl-Et	12.63	12.63	0.000	131	133	28.400	2.11	2.1	100	?
64	64 ethylbenzene	12.91	12.91	0.000	91	106	140.640	1.61	1.6	97	
65	65 m/p-Xylenes x2	13.11	13.11	0.000	91	106	213.036	4.35	4.4	100	
99	99 1-4-di-Cl-butane	13.45	13.46	0.000	55	41	32.572	2.72	2.7	94	?
52	52 bromoform	13.20	13.23	-0.002	173	175	13.982	2.28	2.3	97	
66	66 styrene	13.43	13.43	0.000	104	78	75.317	2.17	2.2	97	?
67	67 o-xylene	13.49	13.50	0.000	91	106	110.603	2.29	2.3	94	?
68	68 1122-Tetra-Cl-Et	13.49	13.50	0.000	83	85	21.540	3.55	3.6	99	?
110	110 t-1,4-dichloro-2	13.66	13.68	-0.001	89	53	7.032	7.71	7.7	31	#?
106	106 Cl-benzyl	15.11	15.13	-0.001	91	126	24.517	2.48	2.5	96	?
<<< I3 : ISTD ID = 62 >>>											
69	69 123-tri-Cl-Pr	13.64	13.64	0.000	110	97	4.401	1.83	1.8	93	?
71	71 isopropylbenzene	13.86	13.85	0.000	105	120	135.584	2.09	2.1	99	
72	72 bromobenzene	14.10	14.10	0.000	156	158	27.613	1.94	1.9	96	
73	73 n-propylbenzene	14.28	14.28	0.000	120	78	36.443	1.99	2.0	94	
74	74 2-Cl-Tl 126 1	14.38	14.38	0.000	126	128	23.738	2.05	2.0	88	
75	75 4-Cl-Tl 126 1	14.45	14.45	0.000	126	128	32.882	2.54	2.5	95	m
76	76 135-tri-Me-Bz	14.56	14.56	0.000	105	120	107.323	2.05	2.1	100	
79	79 tert-butylbenzene	14.84	14.84	0.000	119	91	113.211	2.10	2.1	96	
78	78 124-tri-Me-Bz	14.95	14.94	0.000	105	120	96.787	2.18	2.2	98	

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

4/13/03

Quantitation Report: **Applied P &Ch Lab** EPA 524.2

Data Filename: C:\HPCHEM\1\DATA\03G1044\3-002.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Jan 10 15:26 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Jan 13 09:30 2003
Print Time : Mon Jan 13 10:42 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

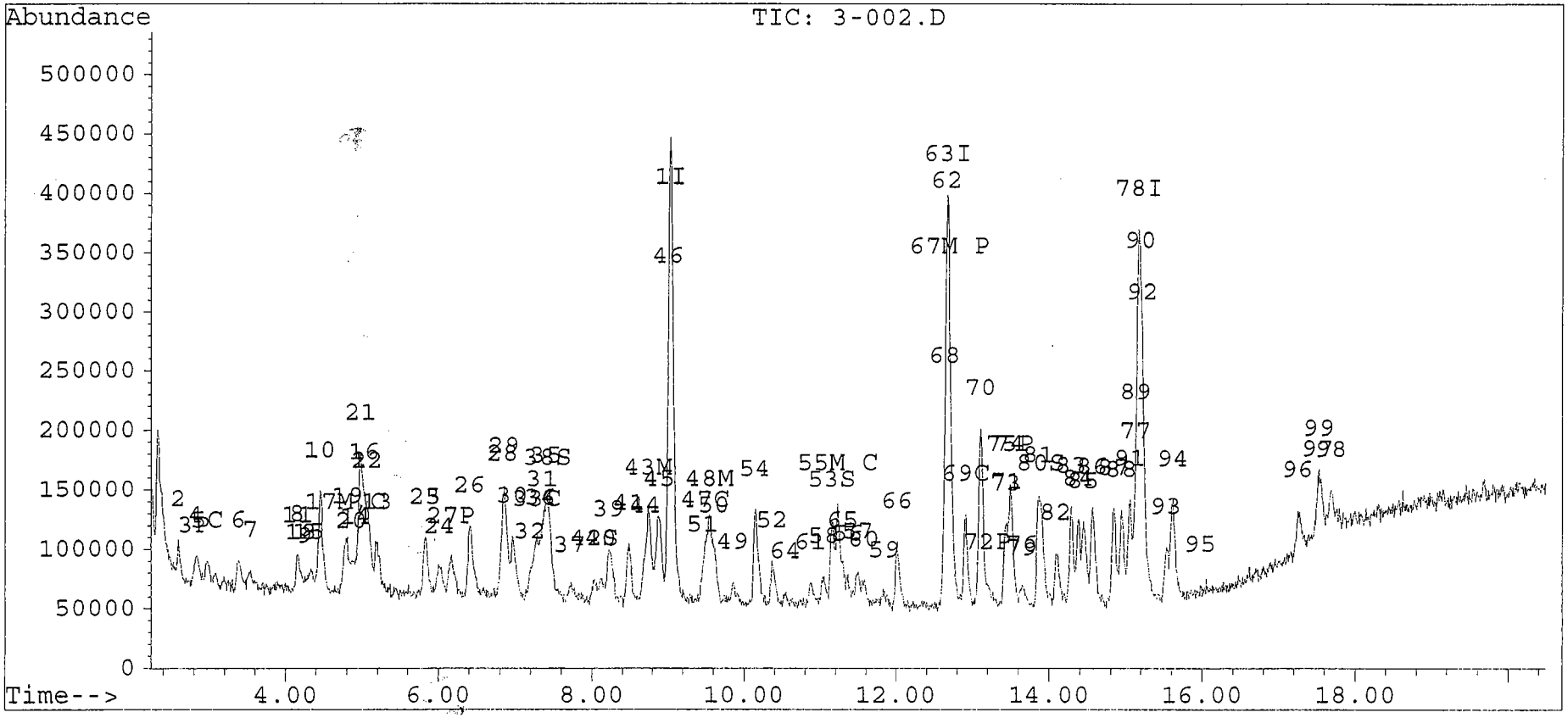
ID		Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
80	80	13-di-Cl-Bz 146	15.12	15.12	0.000	146	148	45.648	1.67	1.7	96	?
82	82	14-di-Cl-Bz 146	15.19	15.18	0.000	146	148	69.544	2.26	2.3	95	?
81	81	sec-butylbenzene	15.04	15.05	0.000	105	134	163.551	2.35	2.4	95	
77	77	4-iso-Pr-toluene	15.22	15.22	0.000	119	134	119.820	2.11	2.1	99	?
84	84	12-di-Cl-benzene	15.53	15.53	0.000	146	148	45.355	2.07	2.1	100	
85	85	n-butylbenzene	15.61	15.61	0.000	91	134	117.913	2.33	2.3	95	
86	86	12-diBr-3-Cl-Pra	15.98	16.00	-0.001	157	155	2.498	1.56	1.6	29	#
87	87	124-tri-Cl-Bz	17.26	17.26	0.000	180	182	29.532	1.89	1.9	93	
88	88	naphthalene	17.50	17.50	0.000	128	129	21.798	2.70	2.7	82	#
90	90	123-tri-Cl-Bz	17.70	17.69	0.000	180	182	22.060	2.11	2.1	99	
89	89	hx-Cl-butadiene	17.54	17.53	0.000	225	260	24.644	2.11	2.1	84	#

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Quantitation Report

Data File : C:\HPCHEM\1\DATA\03G1044\3-002.D Vial: 2
Acq On : 10 Jan 03 3:26 pm Operator: Eddie
Sample : f=1 Inst : GCMS-G
Misc : Multiplr: 1.00
Quant Time: Jan 13 9:30 2003 Quant Results File: quant.res

Method : C:\HPCHEM\1\METHODS\E524G003.M
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Mon Jan 13 10:38:23 2003
Response via : Multiple Level Calibration



Quantitation Report: **Applied P &Ch Lab** EPA 524.2

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Data Filename: C:\HPCHEM\1\DATA\03G1044\3-010.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Jan 10 15:55 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Jan 13 09:33 2003
Print Time : Mon Jan 13 10:43 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

ID	Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
Internal Standards										Dev(Min)	
1	1 Fluorobenzene I1	9.03	9.04	0.000	96	70	755.237	10.00		0.00	
47	47 Cl-benzene-d5, I2	12.67	12.66	0.000	82	119	225.971	10.00		0.01	
62	62 1,4-DCB-d4 150 15	15.16	15.16	0.000	152	150	188.831	10.00		0.00	
System Monitoring Compounds (Surrogate)										%Recovery	
27	27 Di-Br-F-Methane (	7.44	7.44	0.000	111	113	265.788	8.80	8.8	43.99%	
29	29 1,2-di-Cl-ethane-	8.02	8.03	0.000	65	102	124.715	7.71	7.7	38.53%	
55	55 toluene-d8(S2)	11.15	11.15	0.000	100	99	377.922	9.13	9.1	45.65%	
70	70 4-Br-1-F-Bz (S3)	13.90	13.90	0.000	174	95	165.570	8.67	8.7	43.37%	
Target Compounds										Qvalue	
<<< I1 : ISTD ID = 1 >>>											
3	3 di-Cl-di-F-methan	2.61	2.60	0.000	85	87	235.359	10.11	10.1	99	
4	4 Chloromethane	2.79	2.79	0.000	50	52	163.038	8.87	8.9	98	
9	9 F114 85 135	2.83	2.84	-0.001	85	135	252.154	10.44	10.4	98	
5	5 vinyl chloride	2.98	2.97	0.000	62	64	183.259	10.52	10.5	99	
6	6 bromomethane	3.38	3.38	0.000	94	96	181.174	10.70	10.7	98	m
7	7 Chloroethane	3.53	3.54	-0.001	64	66	133.510	10.35	10.3	99	
8	8 tri-Cl-F-methane	4.17	4.16	0.000	101	103	326.202	11.26	11.3	99	?
111	111 isopropyl alcoho	4.28	4.28	0.000	45	43	34.708	113.56	113.6	1	#
100	100 ethyl ether x5	4.45	4.45	0.000	59	74	509.174	47.30	47.3	99	
102	102 Acrolein x10	4.17	4.17	0.000	56	55	75.489	87.90	87.9	95	?
119	119 methyl acetate	5.06	5.07	-0.001	43	74	82.815	16.77	16.8	90	?
104	104 Carbon disulfide	5.19	5.19	0.000	76	78	626.926	9.87	9.9	100	
103	103 Acrylonitrilex10	4.90	4.91	0.000	53	52	178.667	98.65	98.7	100	
95	95 Acetone x10	4.33	4.33	0.000	43	58	128.289	88.19	88.2	92	
108	108 F-113	5.04	5.05	-0.001	151	101	259.145	12.84	12.8	99	?
13	13 11-dichloroethene	4.78	4.78	0.000	61	96	309.126	10.41	10.4	99	
101	101 Acetonnitrilex10	4.23	4.22	0.002	41	40	53.569	138.16	138.2	59	#
109	109 Iodomethane	4.82	4.82	0.000	142	127	290.992	12.33	12.3	99	
113	113 Tert butyl alcoh	4.87	4.87	0.000	59	57	60.720	89.96	90.0	91	#

m 1/13/03

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Quantitation Report: **Applied P &Ch Lab** EPA 524.2

971

Data Filename: C:\HPCHEM\1\DATA\03G1044\3-010.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Jan 10 15:55 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Jan 13 09:33 2003
Print Time : Mon Jan 13 10:43 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

ID	Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
18	18 methylene chlorid	4.98	4.98	0.000	84	49	375.753	10.99	11.0	100	
	112 Allyl chloride	5.09	5.08	0.000	41	76	318.868	11.96	12.0	95	?
200	200 Nitro methane x1	5.82	5.83	-0.001	61	46	334.791	101.61	101.6	95	#?
10	10 t-Bu-Me-ether	6.01	6.01	0.000	73	57	300.489	8.08	8.1	98	
19	19 t-12-di-Cl-ethene	5.83	5.82	0.000	96	61	225.516	9.93	9.9	97	?
98	98 Vinyl acetate x5	6.41	6.41	0.000	43	86	1080.092	52.17	52.2	99	
21	21 11-dichloroethane	6.17	6.16	0.000	63	83	403.704	10.17	10.2	99	
91	91 2-butanone MEKx10	6.83	6.84	-0.001	43	72	680.153	115.05	115.1	99	?
115	115 Di isoprop ether	6.85	6.85	0.000	45	87	993.426	11.60	11.6	99	?
22	22 c-12-di-Cl-ethene	6.98	6.97	0.000	96	61	219.592	9.88	9.9	99	
23	23 22-Dichloropropan	7.36	7.35	0.000	77	97	330.092	9.65	9.6	99	
24	24 Br-Cl-methane	7.20	7.19	0.000	128	130	78.733	11.05	11.0	100	
25	25 chloroform	7.27	7.27	0.000	83	85	372.529	11.61	11.6	100	
201	201 Ethyl acetate x2	7.32	7.31	0.000	43	61	206.670	19.88	19.9	91	?
116	116 ETBE	7.40	7.40	0.000	59	87	594.002	9.75	9.7	98	
117	117 Iso-butyl alcoho	7.32	7.31	0.000	43	42	221.032	116.16	116.2	62	#?
26	26 tetrahydrofuranx5	7.72	7.71	0.000	72	42	36.840	47.60	47.6	80	
34	34 111-tri-Cl-ethane	8.23	8.23	0.000	97	99	315.664	9.56	9.6	98	
30	30 12-dichloroethane	8.14	8.13	0.000	62	64	154.021	11.67	11.7	98	
35	35 11-Di-Cl-propene	8.49	8.48	0.000	75	110	286.388	9.92	9.9	100	
36	36 benzene	8.75	8.76	-0.001	78	52	661.631	10.08	10.1	98	
37	37 CCl4	8.69	8.69	0.000	117	119	267.339	10.57	10.6	100	
97	97 thiophene	8.90	8.89	0.000	84	58	323.713	9.89	9.9	98	
118	118 TAME	9.00	9.01	0.000	73	43	406.861	9.72	9.7	98	
39	39 12-di-Cl-propane	9.50	9.50	0.000	63	76	190.695	9.93	9.9	99	
40	40 trichloroethene	9.55	9.55	0.000	130	132	207.771	10.22	10.2	98	
96	96 Me-methacrylate	9.85	9.85	0.000	69	100	65.318	9.06	9.1	99	
42	42 Br-di-Cl-methane	9.61	9.62	0.000	83	85	256.691	11.91	11.9	100	
41	41 dibromomethane	9.45	9.45	0.000	174	172	96.884	10.46	10.5	100	
45	45 c-13-di-Cl-propen	10.38	10.37	0.000	75	110	229.072	9.69	9.7	99	
92	92 2-ClEt-Vi-ether10	10.15	10.15	0.000	63	43	410.701	101.25	101.3	99	
56	56 toluene	11.23	11.23	0.000	91	92	601.438	9.74	9.7	99	

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Quantitation Report: **Applied P &Ch Lab** EPA 524.2

Data Filename: C:\HPCHEM\1\DATA\03G1044\3-010.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Jan 10 15:55 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Jan 13 09:33 2003
Print Time : Mon Jan 13 10:43 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

972

ID	Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
107	107 Et methacrylate	11.36	11.37	0.000	69	99	132.945	11.60	11.6	99	
93	93 2-Hexanone x5	11.49	11.49	0.000	43	58	218.029	63.26	63.3	93	
48	48 112-tri-Cl-Et	11.04	11.03	0.001	97	83	90.597	11.03	11.0	98	
58	58 1,2-di-br-ethane	11.84	11.83	0.001	107	109	94.012	10.89	10.9	98	
51	51 di-Br-Cl-methane	11.57	11.57	0.000	129	127	125.300	10.31	10.3	99	
46	46 t-13-di-cl-propen	10.88	10.86	0.001	75	110	155.530	10.21	10.2	96	
105	105 1-Chlorohexane	12.64	12.64	0.000	55	93	205.359	12.34	12.3	99	?
<<< I2 : ISTD ID = 47 >>>											
54	54 MIBK	10.53	10.52	0.000	43	58	74.160	15.03	15.0	95	
49	49 1,3-di-cl-propane	11.30	11.29	0.001	76	78	157.929	10.71	10.7	96	
59	59 tetra-Cl-ethene	12.01	12.01	0.000	166	168	216.892	10.91	10.9	98	
60	60 chlorobenzene	12.70	12.70	0.000	112	77	352.480	12.72	12.7	100	
61	61 1112-tetra-Cl-Et	12.63	12.63	0.000	131	133	138.607	10.48	10.5	98	?
64	64 ethylbenzene	12.90	12.91	0.000	91	106	637.777	7.42	7.4	99	
65	65 m/p-Xylenes x2	13.10	13.11	0.000	91	106	1000.145	20.75	20.8	98	
99	99 1-4-di-Cl-butane	13.46	13.46	0.000	55	41	146.606	12.42	12.4	99	?
52	52 bromoform	13.22	13.23	0.000	173	175	71.698	11.86	11.9	98	
66	66 styrene	13.43	13.43	0.000	104	78	352.645	10.32	10.3	99	?
67	67 o-xylene	13.50	13.50	0.000	91	106	485.194	10.18	10.2	99	?
68	68 1122-Tetra-Cl-Et	13.51	13.50	0.000	83	85	91.096	15.26	15.3	95	?
110	110 t-1,4-dichloro-2	13.68	13.68	0.000	89	53	17.679	19.68	19.7	81	#
106	106 Cl-benzyl	15.13	15.13	0.000	91	126	121.704	12.48	12.5	99	?
<<< I3 : ISTD ID = 62 >>>											
69	69 123-tri-Cl-Pr	13.65	13.64	0.000	110	97	21.971	9.56	9.6	95	
71	71 isopropylbenzene	13.85	13.85	0.000	105	120	641.793	10.34	10.3	100	
72	72 bromobenzene	14.10	14.10	0.000	156	158	143.515	10.54	10.5	95	
73	73 n-propylbenzene	14.28	14.28	0.000	120	78	173.970	9.90	9.9	99	
74	74 2-Cl-Tl 126 1	14.38	14.38	0.000	126	128	106.793	9.61	9.6	93	
75	75 4-Cl-Tl 126 1	14.44	14.45	0.000	126	128	163.598	13.21	13.2	100	m
76	76 135-tri-Me-Bz	14.56	14.56	0.000	105	120	509.842	10.18	10.2	98	
79	79 tert-butylbenzene	14.83	14.84	0.000	119	91	533.176	10.35	10.3	99	
78	78 124-tri-Me-Bz	14.94	14.94	0.000	105	120	424.953	9.98	10.0	96	

1/13/03

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Quantitation Report: **Applied P &Ch Lab** EPA 524.2

973

Data Filename: C:\HPCHEM\1\DATA\03G1044\3-010.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Jan 10 15:55 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Jan 13 09:33 2003
Print Time : Mon Jan 13 10:43 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

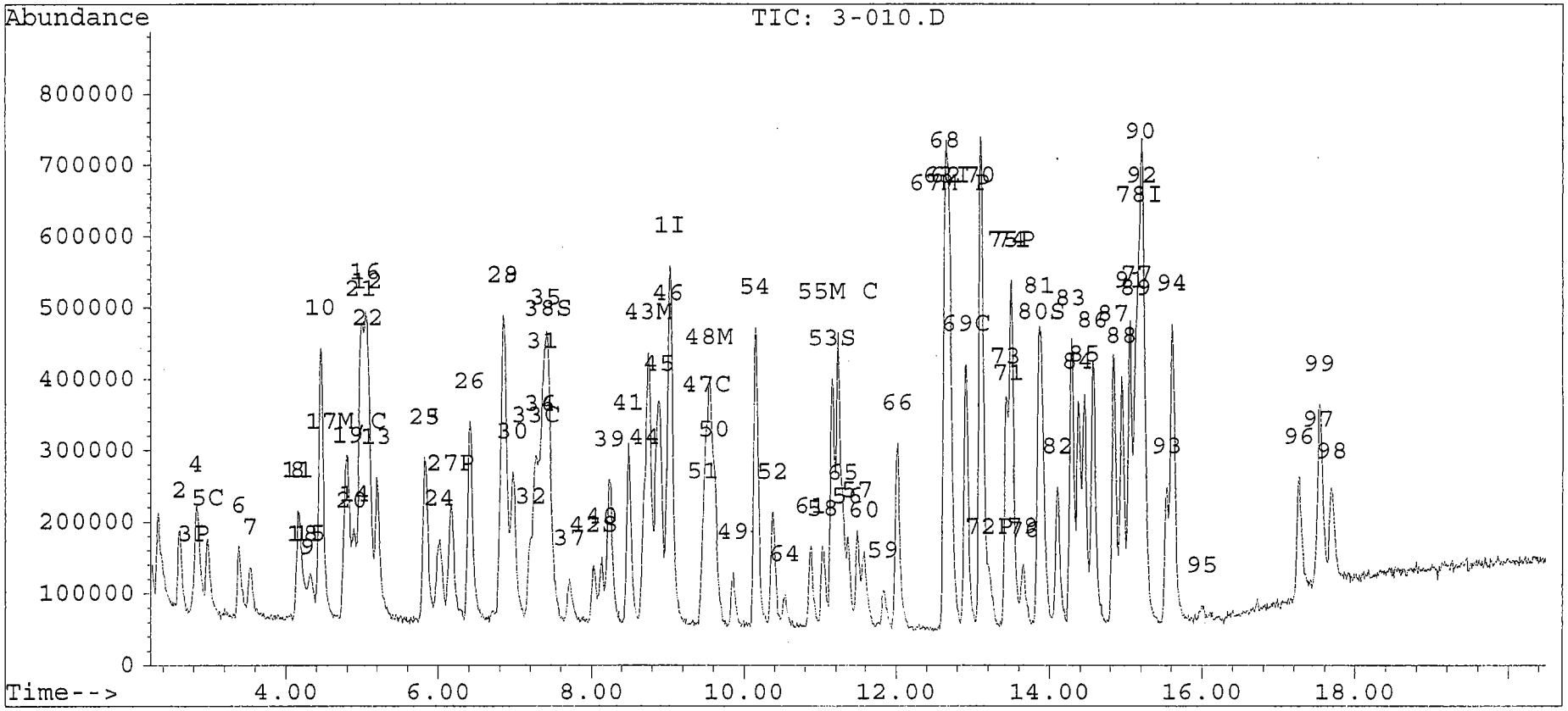
ID		Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
80	80	13-di-Cl-Bz 146	15.12	15.12	0.000	146	148	238.597	9.11	9.1	94	?
82	82	14-di-Cl-Bz 146	15.18	15.18	0.000	146	148	305.231	10.34	10.3	92	
81	81	sec-butylbenzene	15.05	15.05	0.000	105	134	797.663	11.98	12.0	97	
77	77	4-iso-Pr-toluene	15.22	15.22	0.000	119	134	572.630	10.55	10.6	100	
84	84	12-di-Cl-benzene	15.53	15.53	0.000	146	148	219.614	10.49	10.5	99	
85	85	n-butylbenzene	15.61	15.61	0.000	91	134	579.573	11.97	12.0	100	
86	86	12-diBr-3-Cl-Pra	15.99	16.00	0.000	157	155	14.611	9.52	9.5	93	
87	87	124-tri-Cl-Bz	17.26	17.26	0.000	180	182	158.333	10.59	10.6	97	
88	88	naphthalene	17.50	17.50	0.000	128	129	116.373	15.07	15.1	99	
90	90	123-tri-Cl-Bz	17.70	17.69	0.000	180	182	121.207	12.12	12.1	97	
89	89	hx-Cl-butadiene	17.54	17.53	0.000	225	260	130.257	11.63	11.6	98	

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Quantitation Report

Data File : C:\HPCHEM\1\DATA\03G1044\3-010.D Vial: 3
Acq On : 10 Jan 03 3:55 pm Operator: Eddie
Sample : f=1 Inst : GCMS-G
Misc : Multiplr: 1.00
Quant Time: Jan 13 9:33 2003 Quant Results File: quant.res

Method : C:\HPCHEM\1\METHODS\E524G003.M
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Mon Jan 13 10:38:23 2003
Response via : Multiple Level Calibration



Quantitation Report: **Applied P &Ch Lab** EPA 524.2

975

Data Filename: C:\HPCHEM\1\DATA\03G1044\3-020.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Jan 10 16:24 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Jan 13 09:35 2003
Print Time : Mon Jan 13 10:43 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

ID	Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
Internal Standards									Dev(Min)		
1	1 Fluorobenzene I1	9.04	9.04	0.000	96	70	739.905	10.00		0.00	
47	47 Cl-benzene-d5, I2	12.66	12.66	0.000	82	119	224.981	10.00		0.00	
62	62 1,4-DCB-d4 150 15	15.16	15.16	0.000	152	150	184.633	10.00		0.00	
System Monitoring Compounds (Surrogate)									%Recovery		
27	27 Di-Br-F-Methane (	7.44	7.44	0.000	111	113	517.816	17.49	17.5	87.47%	
29	29 1,2-di-Cl-ethane-	8.03	8.03	0.000	65	102	242.470	15.29	15.3	76.47%	
55	55 toluene-d8(S2)	11.15	11.15	0.000	100	99	725.871	17.90	17.9	89.50%	
70	70 4-Br-1-F-Bz (S3)	13.90	13.90	0.000	174	95	327.081	17.52	17.5	87.62%	
Target Compounds										Qvalue	
<<< I1 : ISTD ID = 1 >>>											
3	3 di-Cl-di-F-methan	2.60	2.60	0.000	85	87	427.426	18.74	18.7	100	
4	4 Chloromethane	2.79	2.79	0.000	50	52	374.044	20.77	20.8	100	
9	9 F114 85 135	2.84	2.84	0.000	85	135	462.947	19.56	19.6	100	
5	5 vinyl chloride	2.97	2.97	0.000	62	64	344.227	20.16	20.2	100	
6	6 bromomethane	3.38	3.38	0.000	94	96	281.305	16.95	17.0	100	
7	7 Chloroethane	3.54	3.54	0.000	64	66	250.119	19.79	19.8	100	
8	8 tri-Cl-F-methane	4.16	4.16	0.000	101	103	612.174	21.57	21.6	100	?
111	111 isopropyl alcoho	4.28	4.28	0.000	45	43	55.395	185.00	185.0	98	
100	100 ethyl ether x5	4.45	4.45	0.000	59	74	980.952	93.02	93.0	100	
102	102 Acrolein x10	4.17	4.17	0.000	56	55	215.710	256.38	256.4	100	?
119	119 methyl acetate	5.07	5.07	0.000	43	74	187.169	38.69	38.7	100	?
104	104 Carbon disulfide	5.19	5.19	0.000	76	78	1173.322	18.86	18.9	99	
103	103 Acrylonitrilex10	4.91	4.91	0.000	53	52	348.877	196.63	196.6	100	
95	95 Acetone x10	4.33	4.33	0.000	43	58	268.909	188.68	188.7	100	
108	108 F-113	5.05	5.05	0.000	151	101	480.691	24.32	24.3	100	?
13	13 11-dichloroethene	4.78	4.78	0.000	61	96	575.822	19.79	19.8	99	
101	101 Acetonnitrilex10	4.22	4.22	0.000	41	40	97.490	256.65	256.7	100	
109	109 Iodomethane	4.82	4.82	0.000	142	127	473.953	20.50	20.5	100	
113	113 Tert butyl alcoh	4.87	4.87	0.000	59	57	133.851	202.41	202.4	99	

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Quantitation Report: **Applied P &Ch Lab** EPA 524.2

976

Data Filename: C:\HPCHEM\1\DATA\03G1044\3-020.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Jan 10 16:24 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Jan 13 09:35 2003
Print Time : Mon Jan 13 10:44 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

ID	Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
18	18 methylene chlorid	4.98	4.98	0.000	84	49	602.942	18.01	18.0	100	
	112 Allyl chloride	5.08	5.08	0.000	41	76	616.004	23.57	23.6	100	?
200	200 Nitro methane x1	5.83	5.83	0.000	61	46	633.827	196.35	196.3	100	?
10	10 t-Bu-Me-ether	6.01	6.01	0.000	73	57	618.307	16.97	17.0	99	
19	19 t-12-di-Cl-ethene	5.82	5.82	0.000	96	61	438.020	19.68	19.7	100	?
98	98 Vinyl acetate x5	6.41	6.41	0.000	43	86	1161.950	57.29	57.3	100	
21	21 11-dichloroethane	6.16	6.16	0.000	63	83	780.313	20.06	20.1	100	
91	91 2-butanone MEKx10	6.84	6.84	0.000	43	72	1296.553	223.87	223.9	100	?
115	115 Di isoprop ether	6.85	6.85	0.000	45	87	1953.682	23.28	23.3	100	?
22	22 c-12-di-Cl-ethene	6.97	6.97	0.000	96	61	430.734	19.78	19.8	100	
23	23 22-Dichloropropan	7.35	7.35	0.000	77	97	619.878	18.49	18.5	100	
24	24 Br-Cl-methane	7.19	7.19	0.000	128	130	153.832	22.03	22.0	100	
25	25 chloroform	7.27	7.27	0.000	83	85	722.194	22.98	23.0	100	
201	201 Ethyl acetate x2	7.31	7.31	0.000	43	61	296.783	29.13	29.1	99	?
116	116 ETBE	7.40	7.40	0.000	59	87	1154.600	19.34	19.3	100	
117	117 Iso-butyl alcoho	7.31	7.31	0.000	43	42	297.076	159.36	159.4	100	?
26	26 tetrahydrofuranx5	7.71	7.71	0.000	72	42	75.144	99.10	99.1	100	
34	34 111-tri-Cl-ethane	8.23	8.23	0.000	97	99	604.949	18.69	18.7	100	
30	30 12-dichloroethane	8.13	8.13	0.000	62	64	298.086	23.05	23.1	100	
35	35 11-Di-Cl-propene	8.48	8.48	0.000	75	110	549.558	19.43	19.4	100	
36	36 benzene	8.76	8.76	0.000	78	52	1277.049	19.85	19.9	100	
37	37 CCl4	8.69	8.69	0.000	117	119	493.900	19.94	19.9	100	
97	97 thiophene	8.89	8.89	0.000	84	58	623.624	19.45	19.5	98	
118	118 TAME	9.01	9.01	0.000	73	43	792.558	19.33	19.3	99	
39	39 12-di-Cl-propane	9.50	9.50	0.000	63	76	376.101	19.98	20.0	100	
40	40 trichloroethene	9.55	9.55	0.000	130	132	403.682	20.26	20.3	100	
96	96 Me-methacrylate	9.85	9.85	0.000	69	100	123.371	17.47	17.5	100	
42	42 Br-di-Cl-methane	9.62	9.62	0.000	83	85	484.084	22.93	22.9	99	
41	41 dibromomethane	9.45	9.45	0.000	174	172	194.764	21.46	21.5	100	
45	45 c-13-di-Cl-propen	10.37	10.37	0.000	75	110	445.153	19.23	19.2	100	
92	92 2-ClEt-Vi-ether10	10.15	10.15	0.000	63	43	820.365	206.44	206.4	100	
56	56 toluene	11.23	11.23	0.000	91	92	1149.709	19.01	19.0	100	

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Quantitation Report: **Applied P &Ch Lab** EPA 524.2

977

Data Filename: C:\HPCHEM\1\DATA\03G1044\3-020.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Jan 10 16:24 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Jan 13 09:35 2003
Print Time : Mon Jan 13 10:44 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

ID	Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
107	107 Et methacrylate	11.37	11.37	0.000	69	99	165.590	14.75	14.8	100	
93	93 2-Hexanone x5	11.49	11.49	0.000	43	58	368.204	109.05	109.1	99	
48	48 112-tri-Cl-Et	11.03	11.03	0.000	97	83	172.036	21.38	21.4	100	
58	58 1,2-di-br-ethane	11.83	11.83	0.000	107	109	191.133	22.61	22.6	100	
51	51 di-Br-Cl-methane	11.57	11.57	0.000	129	127	243.477	20.44	20.4	100	
46	46 t-13-di-cl-propen	10.86	10.86	0.000	75	110	301.394	20.19	20.2	100	
105	105 1-Chlorohexane	12.64	12.64	0.000	55	93	374.248	22.95	22.9	100	?
<<< I2 : ISTD ID = 47 >>>											
54	54 MIBK	10.52	10.52	0.000	43	58	143.757	29.26	29.3	99	
49	49 1,3-di-cl-propane	11.29	11.29	0.000	76	78	310.529	21.15	21.1	100	
59	59 tetra-Cl-ethene	12.01	12.01	0.000	166	168	417.298	21.08	21.1	100	
60	60 chlorobenzene	12.70	12.70	0.000	112	77	668.143	24.21	24.2	100	
61	61 1112-tetra-Cl-Et	12.63	12.63	0.000	131	133	283.855	21.56	21.6	100	?
64	64 ethylbenzene	12.91	12.91	0.000	91	106	1239.073	14.48	14.5	98	
65	65 m/p-Xylenes x2	13.11	13.11	0.000	91	106	1911.139	39.83	39.8	100	
99	99 1-4-di-Cl-butane	13.46	13.46	0.000	55	41	276.558	23.53	23.5	99	?
52	52 bromoform	13.23	13.23	0.000	173	175	143.599	23.85	23.8	100	
66	66 styrene	13.43	13.43	0.000	104	78	677.932	19.93	19.9	100	?
67	67 o-xylene	13.50	13.50	0.000	91	106	915.641	19.30	19.3	100	?
68	68 1122-Tetra-Cl-Et	13.50	13.50	0.000	83	85	173.152	29.14	29.1	100	?
110	110 t-1,4-dichloro-2	13.68	13.68	0.000	89	53	27.009	30.20	30.2	94	
106	106 Cl-benzyl	15.13	15.13	0.000	91	126	238.713	24.59	24.6	99	?
<<< I3 : ISTD ID = 62 >>>											
69	69 123-tri-Cl-Pr	13.64	13.64	0.000	110	97	45.443	20.21	20.2	100	
71	71 isopropylbenzene	13.85	13.85	0.000	105	120	1217.921	20.07	20.1	100	
72	72 bromobenzene	14.10	14.10	0.000	156	158	285.095	21.41	21.4	100	
73	73 n-propylbenzene	14.28	14.28	0.000	120	78	335.858	19.55	19.5	100	
74	74 2-Cl-Tl 126 1	14.38	14.38	0.000	126	128	201.349	18.53	18.5	100	
75	75 4-Cl-Tl 126 1	14.45	14.45	0.000	126	128	289.530	23.91	23.9	93	m
76	76 135-tri-Me-Bz	14.56	14.56	0.000	105	120	969.387	19.79	19.8	100	
79	79 tert-butylbenzene	14.84	14.84	0.000	119	91	1020.985	20.26	20.3	99	
78	78 124-tri-Me-Bz	14.94	14.94	0.000	105	120	847.796	20.36	20.4	100	

m 1/13/03

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Quantitation Report: **Applied P &Ch Lab** EPA 524.2

978

Data Filename: C:\HPCHEM\1\DATA\03G1044\3-020.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Jan 10 16:24 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Jan 13 09:35 2003
Print Time : Mon Jan 13 10:44 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

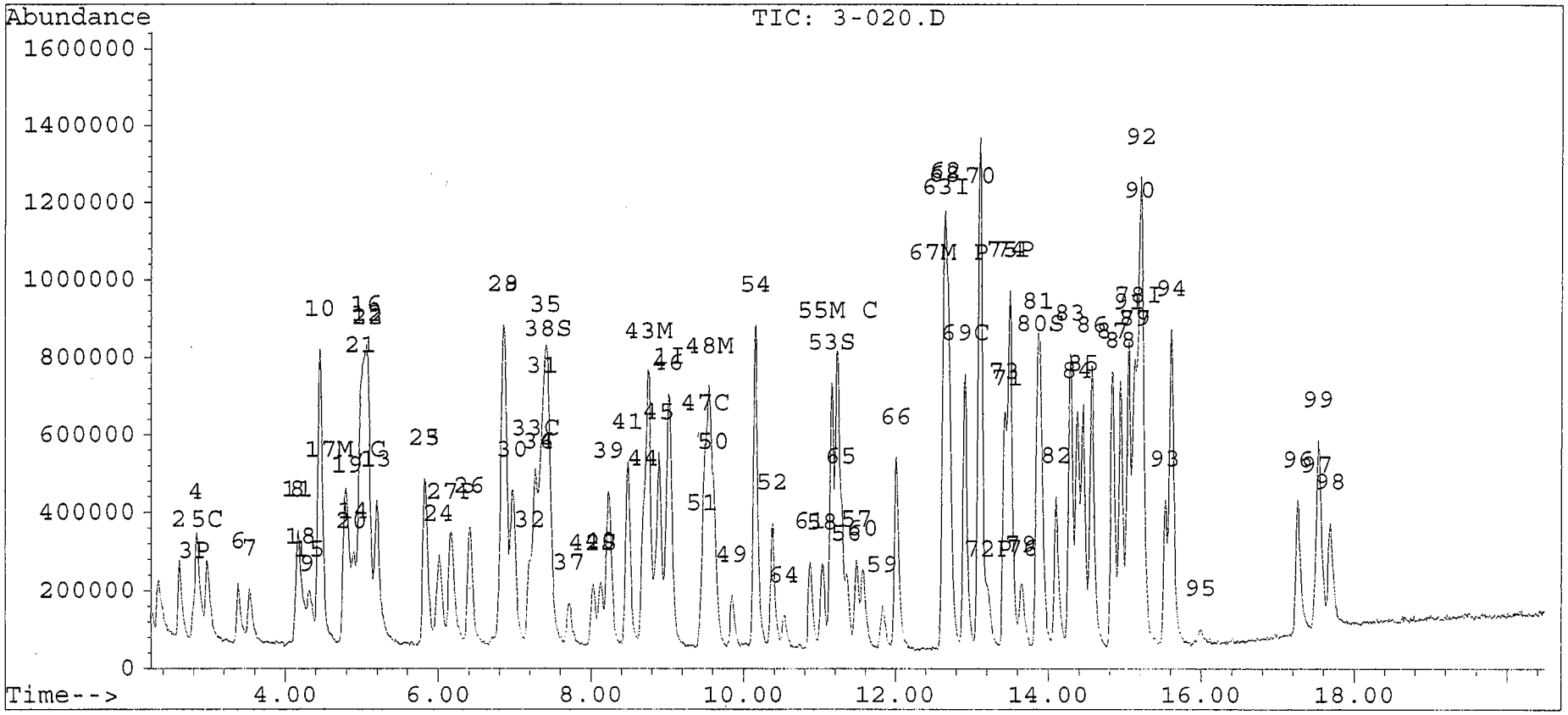
ID	Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
80	80 13-di-Cl-Bz 146	15.12	15.12	0.000	146	148	400.250	15.63	15.6	84	?
82	82 14-di-Cl-Bz 146	15.18	15.18	0.000	146	148	644.124	22.31	22.3	100	
81	81 sec-butylbenzene	15.05	15.05	0.000	105	134	1465.228	22.51	22.5	97	
77	77 4-iso-Pr-toluene	15.22	15.22	0.000	119	134	1085.210	20.45	20.5	100	
84	84 12-di-Cl-benzene	15.53	15.53	0.000	146	148	410.082	20.03	20.0	100	
85	85 n-butylbenzene	15.61	15.61	0.000	91	134	1096.665	23.17	23.2	100	
86	86 12-diBr-3-Cl-Pra	16.00	16.00	0.000	157	155	31.395	20.93	20.9	100	
87	87 124-tri-Cl-Bz	17.26	17.26	0.000	180	182	322.231	22.03	22.0	100	
88	88 naphthalene	17.50	17.50	0.000	128	129	245.906	32.56	32.6	100	
90	90 123-tri-Cl-Bz	17.69	17.69	0.000	180	182	239.739	24.52	24.5	100	
89	89 hx-Cl-butadiene	17.53	17.53	0.000	225	260	244.690	22.34	22.3	100	

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Quantitation Report

Data File : C:\HPCHEM\1\DATA\03G1044\3-020.D Vial: 4
Acq On : 10 Jan 03 4:24 pm Operator: Eddie
Sample : f=1 Inst : GCMS-G
Misc : Multiplr: 1.00
Quant Time: Jan 13 9:35 2003 Quant Results File: quant.res

Method : C:\HPCHEM\1\METHODS\E524G003.M
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Mon Jan 13 10:38:23 2003
Response via : Multiple Level Calibration



Quantitation Report: **Applied P &Ch Lab** EPA 524.2

Data Filename: C:\HPCHEM\1\DATA\03G1044\3-040.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Jan 10 16:54 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Jan 13 09:38 2003
Print Time : Mon Jan 13 10:44 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

080

ID	Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
Internal Standards										Dev(Min)	
1	1 Fluorobenzene I1	9.04	9.04	0.000	96	70	721.219	10.00		0.00	
47	47 Cl-benzene-d5, I2	12.67	12.66	0.001	82	119	233.528	10.00		0.01	
62	62 1,4-DCB-d4 150 15	15.18	15.16	0.001	152	150	176.207	10.00		0.02	
System Monitoring Compounds (Surrogate)										%Recovery	
27	27 Di-Br-F-Methane (	7.44	7.44	0.000	111	113	1038.870	36.01	36.0	180.04%	
29	29 1,2-di-Cl-ethane-	8.02	8.03	0.000	65	102	475.685	30.78	30.8	153.91%	
55	55 toluene-d8(S2)	11.15	11.15	0.000	100	99	1455.135	36.81	36.8	184.07%	
70	70 4-Br-1-F-Bz (S3)	13.90	13.90	0.000	174	95	627.145	35.21	35.2	176.03%	
Target Compounds										Qvalue	
<<< I1 : ISTD ID = 1 >>>											
3	3 di-Cl-di-F-methan	2.60	2.60	0.000	85	87	820.884	36.93	36.9	99	
4	4 Chloromethane	2.79	2.79	0.000	50	52	803.175	45.76	45.8	100	
9	9 F114 85 135	2.83	2.84	-0.002	85	135	909.235	39.41	39.4	94	
5	5 vinyl chloride	2.97	2.97	0.000	62	64	682.967	41.04	41.0	99	
6	6 bromomethane	3.37	3.38	0.000	94	96	570.773	35.29	35.3	96	
7	7 Chloroethane	3.52	3.54	-0.002	64	66	505.034	40.99	41.0	99	
8	8 tri-Cl-F-methane	4.16	4.16	0.000	101	103	1192.828	43.11	43.1	100	?
111	111 isopropyl alcoho	4.26	4.28	-0.002	45	43	131.600	450.89	450.9	1	#
100	100 ethyl ether x5	4.45	4.45	0.000	59	74	1975.186	192.15	192.1	99	
102	102 Acrolein x10	4.17	4.17	0.000	56	55	340.415	415.08	415.1	92	?
119	119 methyl acetate	5.07	5.07	0.000	43	74	271.933	57.66	57.7	96	?
104	104 Carbon disulfide	5.19	5.19	0.000	76	78	2357.195	38.87	38.9	100	
103	103 Acrylonitrilex10	4.90	4.91	0.000	53	52	701.313	405.50	405.5	98	
95	95 Acetone x10	4.32	4.33	0.000	43	58	465.240	334.90	334.9	98	
108	108 F-113	5.03	5.05	-0.002	151	101	925.581	48.03	48.0	100	
13	13 11-dichloroethene	4.77	4.78	0.000	61	96	1147.783	40.46	40.5	99	
101	101 Acetonnitrilex10	4.22	4.22	0.000	41	40	189.257	511.14	511.1	80	#
109	109 Iodomethane	4.81	4.82	0.000	142	127	954.242	42.35	42.3	99	
113	113 Tert butyl alcoh	4.87	4.87	0.000	59	57	240.444	373.03	373.0	96	

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Quantitation Report: **Applied P &Ch Lab** EPA 524.2

Data Filename: C:\HPCHEM\1\DATA\03G1044\3-040.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Jan 10 16:54 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Jan 13 09:38 2003
Print Time : Mon Jan 13 10:44 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

ID	Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
18	18 methylene chlorid	4.98	4.98	0.000	84	49	1052.979	32.26	32.3	100	
	112 Allyl chloride	5.08	5.08	0.000	41	76	1168.854	45.89	45.9	99	?
200	200 Nitro methane x1	5.82	5.83	0.000	61	46	1264.975	402.01	402.0	100	?
10	10 t-Bu-Me-ether	6.01	6.01	0.000	73	57	1211.982	34.13	34.1	98	
19	19 t-12-di-Cl-ethene	5.82	5.82	0.000	96	61	867.973	40.01	40.0	99	?
98	98 Vinyl acetate x5	6.41	6.41	0.000	43	86	4543.111	229.80	229.8	99	
21	21 11-dichloroethane	6.15	6.16	0.000	63	83	1539.657	40.61	40.6	98	
91	91 2-butanone MEKx10	6.84	6.84	0.000	43	72	2708.302	479.74	479.7	99	?
115	115 Di isoprop ether	6.85	6.85	0.000	45	87	3898.884	47.66	47.7	100	?
22	22 c-12-di-Cl-ethene	6.97	6.97	0.000	96	61	857.123	40.38	40.4	99	
23	23 22-Dichloropropan	7.36	7.35	0.001	77	97	1207.116	36.94	36.9	99	
24	24 Br-Cl-methane	7.19	7.19	0.000	128	130	312.235	45.88	45.9	99	
25	25 chloroform	7.27	7.27	0.000	83	85	1453.363	47.45	47.4	99	
201	201 Ethyl acetate x2	7.31	7.31	0.000	43	61	873.148	87.93	87.9	83	#?
116	116 ETBE	7.40	7.40	0.000	59	87	2264.664	38.92	38.9	99	
117	117 Iso-butyl alcoho	7.31	7.31	0.000	43	42	880.890	484.77	484.8	63	#?
26	26 tetrahydrofuranx5	7.71	7.71	0.000	72	42	146.600	198.35	198.3	94	
34	34 111-tri-Cl-ethane	8.24	8.23	0.000	97	99	1193.974	37.85	37.8	97	
30	30 12-dichloroethane	8.13	8.13	0.000	62	64	600.265	47.63	47.6	99	
35	35 11-Di-Cl-propene	8.48	8.48	0.000	75	110	1091.787	39.61	39.6	99	
36	36 benzene	8.75	8.76	0.000	78	52	2547.937	40.64	40.6	100	
37	37 CCl4	8.69	8.69	0.000	117	119	981.263	40.64	40.6	100	
97	97 thiophene	8.90	8.89	0.000	84	58	1239.916	39.68	39.7	99	
118	118 TAME	9.01	9.01	0.000	73	43	1521.011	38.05	38.1	100	
39	39 12-di-Cl-propane	9.50	9.50	0.000	63	76	741.594	40.42	40.4	100	
40	40 trichloroethene	9.55	9.55	0.000	130	132	804.090	41.41	41.4	100	
96	96 Me-methacrylate	9.85	9.85	0.000	69	100	250.724	36.43	36.4	97	
42	42 Br-di-Cl-methane	9.61	9.62	0.000	83	85	955.698	46.44	46.4	98	
41	41 dibromomethane	9.45	9.45	0.000	174	172	383.350	43.33	43.3	99	
45	45 c-13-di-Cl-propen	10.37	10.37	0.000	75	110	890.451	39.45	39.5	99	
92	92 2-ClEt-Vi-ether10	10.15	10.15	0.000	63	43	1655.105	427.28	427.3	98	
56	56 toluene	11.23	11.23	0.000	91	92	2291.459	38.88	38.9	99	

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Data Filename: C:\HPCHEM\1\DATA\03G1044\3-040.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Jan 10 16:54 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Jan 13 09:38 2003
Print Time : Mon Jan 13 10:44 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

982

ID	Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
107	107 Et methacrylate	11.37	11.37	0.000	69	99	512.644	46.85	46.8	99	
93	93 2-Hexanone x5	11.48	11.49	-0.001	43	58	831.419	252.62	252.6	99	
48	48 112-tri-Cl-Et	11.04	11.03	0.000	97	83	347.876	44.36	44.4	94	
58	58 1,2-di-br-ethane	11.84	11.83	0.001	107	109	371.448	45.07	45.1	100	
51	51 di-Br-Cl-methane	11.58	11.57	0.000	129	127	489.254	42.14	42.1	100	
46	46 t-13-di-cl-propen	10.87	10.86	0.000	75	110	594.704	40.88	40.9	96	
105	105 1-Chlorohexane	12.64	12.64	0.000	55	93	719.249	45.24	45.2	99	?
<<< I2 : ISTD ID = 47 >>>											
54	54 MIBK	10.53	10.52	0.000	43	58	303.184	59.45	59.4	96	
49	49 1,3-di-cl-propane	11.30	11.29	0.000	76	78	604.220	39.64	39.6	100	
59	59 tetra-Cl-ethene	12.01	12.01	0.000	166	168	825.820	40.18	40.2	99	
60	60 chlorobenzene	12.71	12.70	0.000	112	77	1330.525	46.45	46.4	99	
61	61 1112-tetra-Cl-Et	12.63	12.63	0.000	131	133	562.377	41.15	41.1	100	?
64	64 ethylbenzene	12.90	12.91	0.000	91	106	2446.417	27.53	27.5	98	
65	65 m/p-Xylenes x2	13.10	13.11	0.000	91	106	3754.507	75.38	75.4	99	
99	99 1-4-di-Cl-butane	13.46	13.46	0.000	55	41	532.573	43.66	43.7	96	
52	52 bromoform	13.22	13.23	0.000	173	175	281.887	45.10	45.1	96	
66	66 styrene	13.43	13.43	0.000	104	78	1346.269	38.14	38.1	98	
67	67 o-xylene	13.50	13.50	0.000	91	106	1764.503	35.83	35.8	100	?
68	68 1122-Tetra-Cl-Et	13.51	13.50	0.000	83	85	326.262	52.90	52.9	100	?
110	110 t-1,4-dichloro-2	13.67	13.68	0.000	89	53	54.200	58.39	58.4	95	?
106	106 Cl-benzyl	15.13	15.13	0.000	91	126	457.227	45.37	45.4	99	?
<<< I3 : ISTD ID = 62 >>>											
69	69 123-tri-Cl-Pr	13.65	13.64	0.000	110	97	89.331	41.64	41.6	94	?
71	71 isopropylbenzene	13.86	13.85	0.000	105	120	2372.165	40.96	41.0	99	
72	72 bromobenzene	14.11	14.10	0.000	156	158	554.412	43.62	43.6	98	
73	73 n-propylbenzene	14.29	14.28	0.000	120	78	643.879	39.27	39.3	98	
74	74 2-Cl-Tl 126 1	14.38	14.38	0.000	126	128	427.470	41.22	41.2	95	
75	75 4-Cl-Tl 126 1	14.45	14.45	0.000	126	128	594.245	51.42	51.4	98	m 4/13/03
76	76 135-tri-Me-Bz	14.57	14.56	0.000	105	120	1885.346	40.33	40.3	99	
79	79 tert-butylbenzene	14.84	14.84	0.000	119	91	1994.231	41.47	41.5	88	
78	78 124-tri-Me-Bz	14.94	14.94	0.000	105	120	1639.260	41.24	41.2	99	

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Quantitation Report: **Applied P &Ch Lab** EPA 524.2

983

Data Filename: C:\HPCHEM\1\DATA\03G1044\3-040.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Jan 10 16:54 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Jan 13 09:38 2003
Print Time : Mon Jan 13 10:44 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

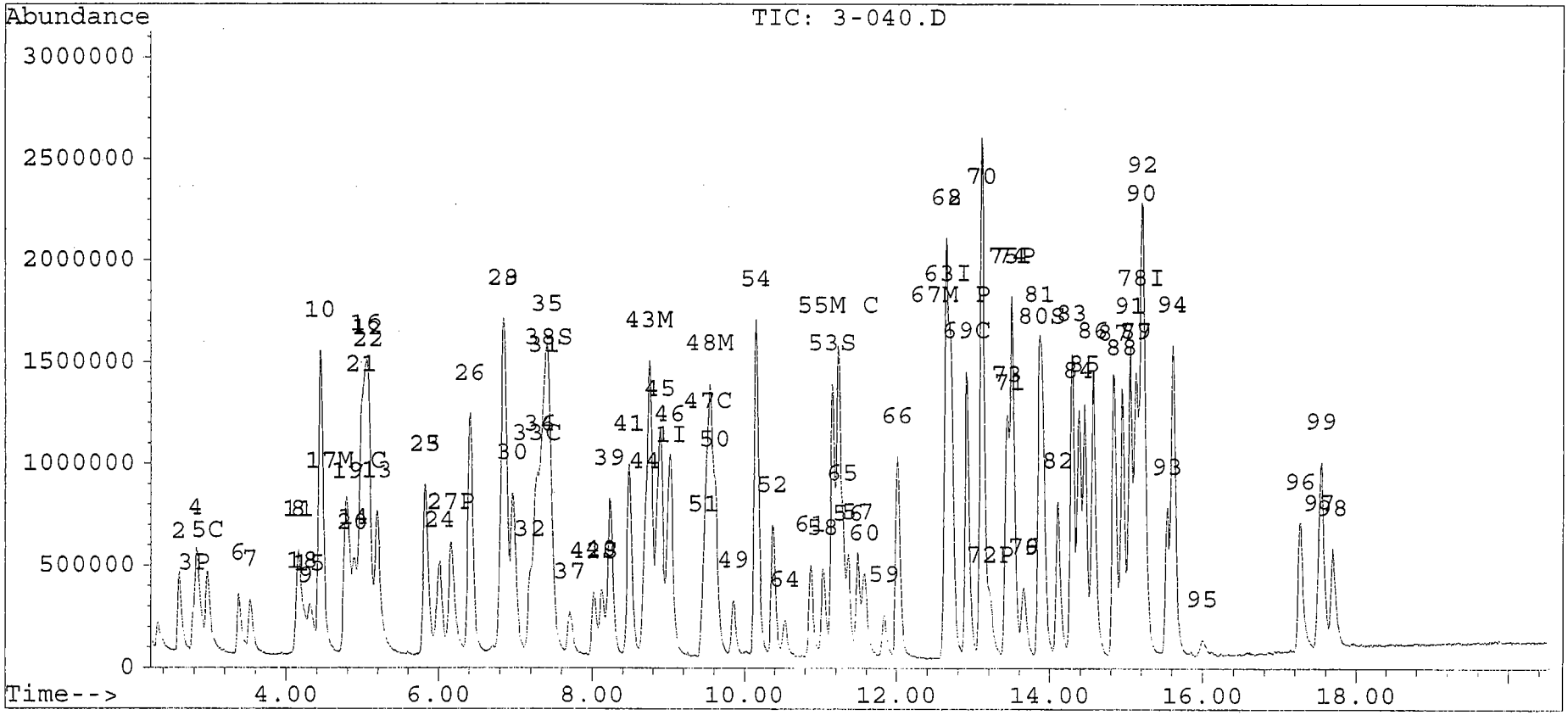
ID	Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
80	80 13-di-Cl-Bz 146	15.13	15.12	0.000	146	148	844.281	34.55	34.6	94	?
82	82 14-di-Cl-Bz 146	15.19	15.18	0.000	146	148	1193.857	43.33	43.3	92	
81	81 sec-butylbenzene	15.05	15.05	0.000	105	134	2859.247	46.03	46.0	96	
77	77 4-iso-Pr-toluene	15.22	15.22	0.000	119	134	2064.029	40.76	40.8	99	
84	84 12-di-Cl-benzene	15.54	15.53	0.000	146	148	812.246	41.57	41.6	97	
85	85 n-butylbenzene	15.61	15.61	0.000	91	134	2099.124	46.47	46.5	99	
86	86 12-diBr-3-Cl-Pra	15.99	16.00	0.000	157	155	62.914	43.94	43.9	93	
87	87 124-tri-Cl-Bz	17.27	17.26	0.000	180	182	604.462	43.31	43.3	100	
88	88 naphthalene	17.50	17.50	0.000	128	129	459.400	63.75	63.7	100	
90	90 123-tri-Cl-Bz	17.69	17.69	0.000	180	182	448.256	48.03	48.0	98	
89	89 hx-Cl-butadiene	17.55	17.53	0.001	225	260	466.707	44.65	44.6	99	

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Quantitation Report

Data File : C:\HPCHEM\1\DATA\03G1044\3-040.D Vial: 5
Acq On : 10 Jan 03 4:54 pm Operator: Eddie
Sample : f=1 Inst : GCMS-G
Misc : Multiplr: 1.00
Quant Time: Jan 13 9:38 2003 Quant Results File: quant.res

Method : C:\HPCHEM\1\METHODS\E524G003.M
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Mon Jan 13 10:38:23 2003
Response via : Multiple Level Calibration



Quantitation Report: **Applied P &Ch Lab** EPA 524.2

985

Data Filename: C:\HPCHEM\1\DATA\03G1044\3-080.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Jan 10 17:23 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Jan 13 09:39 2003
Print Time : Mon Jan 13 10:45 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

ID	Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
Internal Standards										Dev(Min)	
1	1 Fluorobenzene I1	9.04	9.04	0.000	96	70	703.721	10.00		0.00	
47	47 Cl-benzene-d5, I2	12.67	12.66	0.000	82	119	241.678	10.00		0.01	
62	62 1,4-DCB-d4 150 15	15.18	15.16	0.002	152	150	164.785	10.00		0.02	
System Monitoring Compounds (Surrogate)										%Recovery	
27	27 Di-Br-F-Methane (	7.44	7.44	0.000	111	113	1963.588	69.75	69.8	348.75%	
29	29 1,2-di-Cl-ethane-	8.02	8.03	0.000	65	102	894.560	59.33	59.3	296.64%	
55	55 toluene-d8(S2)	11.16	11.15	0.000	100	99	2774.904	71.95	71.9	359.74%	
70	70 4-Br-1-F-Bz (S3)	13.91	13.90	0.000	174	95	1159.540	69.60	69.6	348.02%	
Target Compounds										Qvalue	
<<< I1 : ISTD ID = 1 >>>											
3	3 di-Cl-di-F-methan	2.60	2.60	0.000	85	87	1551.879	71.55	71.6	99	
4	4 Chloromethane	2.78	2.79	-0.002	50	52	1514.667	88.45	88.5	97	
9	9 F114 85 135	2.83	2.84	-0.002	85	135	1714.061	76.15	76.2	97	
5	5 vinyl chloride	2.96	2.97	0.000	62	64	1258.237	77.49	77.5	99	
6	6 bromomethane	3.38	3.38	0.000	94	96	1116.110	70.72	70.7	96	
7	7 Chloroethane	3.52	3.54	-0.002	64	66	952.606	79.23	79.2	100	
8	8 tri-Cl-F-methane	4.15	4.16	0.000	101	103	2238.212	82.90	82.9	100	?
111	111 isopropyl alcoho	4.27	4.28	0.000	45	43	244.204	857.50	857.5	59	#
100	100 ethyl ether x5	4.44	4.45	-0.001	59	74	3742.221	373.10	373.1	100	
102	102 Acrolein x10	4.17	4.17	0.000	56	55	601.157	751.24	751.2	90	?
119	119 methyl acetate	5.07	5.07	0.000	43	74	696.519	151.37	151.4	95	?
104	104 Carbon disulfide	5.18	5.19	0.000	76	78	4372.134	73.88	73.9	100	
103	103 Acrylonitrilex10	4.90	4.91	0.000	53	52	1341.637	795.03	795.0	98	?
95	95 Acetone x10	4.32	4.33	0.000	43	58	912.905	673.49	673.5	97	
108	108 F-113	5.03	5.05	-0.002	151	101	1749.444	93.05	93.0	100	
13	13 11-dichloroethene	4.78	4.78	0.000	61	96	2146.767	77.56	77.6	99	
101	101 Acetonnitrilex10	4.21	4.22	0.000	41	40	353.648	978.88	978.9	83	#
109	109 Iodomethane	4.81	4.82	-0.001	142	127	1666.625	75.80	75.8	99	
113	113 Tert butyl alcoh	4.87	4.87	0.000	59	57	485.913	772.60	772.6	85	#?

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Quantitation Report: **Applied P &Ch Lab** EPA 524.2

Data Filename: C:\HPCHEM\1\DATA\03G1044\3-080.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Jan 10 17:23 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Jan 13 09:39 2003
Print Time : Mon Jan 13 10:45 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

986

ID	Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
18	18 methylene chlorid	4.98	4.98	0.000	84	49	1493.871	46.91	46.9	100	
	112 Allyl chloride	5.08	5.08	0.000	41	76	2056.270	82.74	82.7	98	?
200	200 Nitro methane x1	5.82	5.83	0.000	61	46	2385.881	777.09	777.1	99	?
10	10 t-Bu-Me-ether	6.01	6.01	0.000	73	57	2415.631	69.73	69.7	98	
19	19 t-12-di-Cl-ethene	5.82	5.82	0.000	96	61	1629.626	76.99	77.0	98	?
98	98 Vinyl acetate x5	6.40	6.41	0.000	43	86	6984.572	362.07	362.1	100	
21	21 11-dichloroethane	6.16	6.16	0.000	63	83	2853.804	77.14	77.1	98	
91	91 2-butanone MEKx10	6.84	6.84	0.000	43	72	5159.574	936.67	936.7	98	?
115	115 Di isoprop ether	6.85	6.85	0.000	45	87	7414.434	92.88	92.9	100	?
22	22 c-12-di-Cl-ethene	6.98	6.97	0.000	96	61	1613.152	77.88	77.9	99	
23	23 22-Dichloropropan	7.36	7.35	0.000	77	97	2269.373	71.18	71.2	100	
24	24 Br-Cl-methane	7.19	7.19	0.000	128	130	593.248	89.34	89.3	100	
25	25 chloroform	7.27	7.27	0.000	83	85	2739.754	91.67	91.7	100	
201	201 Ethyl acetate x2	7.32	7.31	0.000	43	61	1526.995	157.60	157.6	87	?
116	116 ETBE	7.41	7.40	0.000	59	87	4329.036	76.24	76.2	99	
117	117 Iso-butyl alcoho	7.32	7.31	0.000	43	42	1546.333	872.13	872.1	70	#?
26	26 tetrahydrofuranx5	7.71	7.71	0.000	72	42	287.877	399.18	399.2	97	
34	34 111-tri-Cl-ethane	8.24	8.23	0.000	97	99	2324.189	75.51	75.5	99	
30	30 12-dichloroethane	8.13	8.13	0.000	62	64	1155.412	93.96	94.0	99	
35	35 11-Di-Cl-propene	8.48	8.48	0.000	75	110	2099.663	78.07	78.1	99	
36	36 benzene	8.75	8.76	-0.001	78	52	4710.056	76.99	77.0	100	
37	37 CCl4	8.69	8.69	0.000	117	119	1852.391	78.63	78.6	100	
97	97 thiophene	8.89	8.89	0.000	84	58	2337.761	76.68	76.7	98	
118	118 TAME	9.01	9.01	0.000	73	43	3045.504	78.09	78.1	100	
39	39 12-di-Cl-propane	9.50	9.50	0.000	63	76	1426.638	79.70	79.7	100	
40	40 trichloroethene	9.55	9.55	0.000	130	132	1515.012	79.96	80.0	99	
96	96 Me-methacrylate	9.85	9.85	0.000	69	100	519.513	77.36	77.4	98	
42	42 Br-di-Cl-methane	9.61	9.62	0.000	83	85	1823.535	90.81	90.8	99	
41	41 dibromomethane	9.46	9.45	0.000	174	172	714.384	82.76	82.8	98	
45	45 c-13-di-Cl-propen	10.38	10.37	0.000	75	110	1727.952	78.47	78.5	100	
92	92 2-ClEt-Vi-ether10	10.16	10.15	0.000	63	43	3234.891	855.88	855.9	97	
56	56 toluene	11.23	11.23	0.000	91	92	4425.814	76.96	77.0	98	

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Quantitation Report: **Applied P &Ch Lab** EPA 524.2

Data Filename: C:\HPCHEM\1\DATA\03G1044\3-080.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Jan 10 17:23 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Jan 13 09:39 2003
Print Time : Mon Jan 13 10:45 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

987

ID	Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
107	107 Et methacrylate	11.37	11.37	0.000	69	99	828.103	77.56	77.6	98	
93	93 2-Hexanone x5	11.49	11.49	0.000	43	58	1601.350	498.66	498.7	98	
48	48 112-tri-Cl-Et	11.04	11.03	0.000	97	83	664.699	86.86	86.9	92	
58	58 1,2-di-br-ethane	11.83	11.83	0.000	107	109	723.238	89.94	89.9	100	
51	51 di-Br-Cl-methane	11.57	11.57	0.000	129	127	967.601	85.41	85.4	99	
46	46 t-13-di-cl-propen	10.88	10.86	0.001	75	110	1109.294	78.14	78.1	96	
105	105 1-Chlorohexane	12.65	12.64	0.001	55	93	1336.615	86.16	86.2	99	?
<<< I2 : ISTD ID = 47 >>>											
54	54 MIBK	10.53	10.52	0.000	43	58	587.112	111.24	111.2	97	
49	49 1,3-di-cl-propane	11.30	11.29	0.001	76	78	1155.285	73.25	73.2	99	
59	59 tetra-Cl-ethene	12.01	12.01	0.000	166	168	1643.233	77.26	77.3	99	
60	60 chlorobenzene	12.70	12.70	0.000	112	77	2470.738	83.34	83.3	99	
61	61 1112-tetra-Cl-Et	12.64	12.63	0.000	131	133	1108.773	78.39	78.4	99	?
64	64 ethylbenzene	12.91	12.91	0.000	91	106	4804.958	52.25	52.3	97	
65	65 m/p-Xylenes x2	13.11	13.11	0.000	91	106	7222.435	140.12	140.1	99	
99	99 1-4-di-Cl-butane	13.47	13.46	0.001	55	41	1001.628	79.35	79.3	98	
52	52 bromoform	13.24	13.23	0.000	173	175	544.898	84.24	84.2	95	
66	66 styrene	13.44	13.43	0.000	104	78	2563.056	70.16	70.2	100	
67	67 o-xylene	13.51	13.50	0.001	91	106	3287.299	64.50	64.5	100	?
68	68 1122-Tetra-Cl-Et	13.51	13.50	0.000	83	85	625.224	97.95	98.0	98	?
110	110 t-1,4-dichloro-2	13.68	13.68	0.000	89	53	103.110	107.34	107.3	94	?
106	106 Cl-benzyl	15.14	15.13	0.001	91	126	866.531	83.08	83.1	99	?
<<< I3 : ISTD ID = 62 >>>											
69	69 123-tri-Cl-Pr	13.65	13.64	0.000	110	97	172.722	86.09	86.1	95	?
71	71 isopropylbenzene	13.87	13.85	0.001	105	120	4528.346	83.61	83.6	99	
72	72 bromobenzene	14.11	14.10	0.000	156	158	1030.644	86.70	86.7	98	
73	73 n-propylbenzene	14.30	14.28	0.001	120	78	1212.584	79.08	79.1	97	
74	74 2-Cl-Tl 126 1	14.39	14.38	0.000	126	128	745.993	76.92	76.9	99	
75	75 4-Cl-Tl 126 1	14.46	14.45	0.000	126	128	1075.809	99.53	99.5	92	
76	76 135-tri-Me-Bz	14.58	14.56	0.001	105	120	3580.223	81.88	81.9	99	
79	79 tert-butylbenzene	14.85	14.84	0.000	119	91	3739.615	83.15	83.2	99	
78	78 124-tri-Me-Bz	14.96	14.94	0.001	105	120	3054.447	82.17	82.2	99	

m 1/13/03

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Quantitation Report: **Applied P &Ch Lab** EPA 524.2

888

Data Filename: C:\HPCHEM\1\DATA\03G1044\3-080.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Jan 10 17:23 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Jan 13 09:39 2003
Print Time : Mon Jan 13 10:45 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

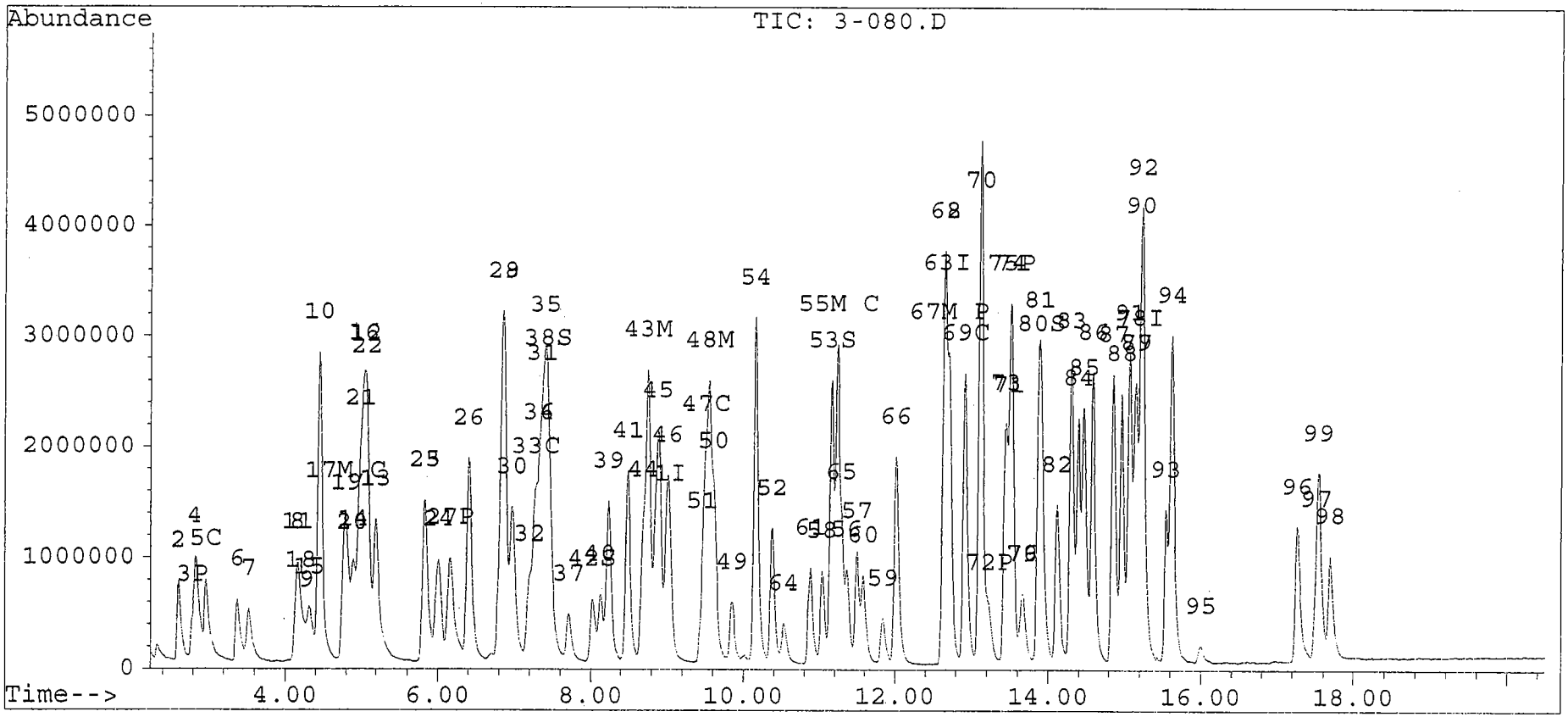
ID		Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
80	80	13-di-Cl-Bz 146	15.14	15.12	0.002	146	148	1658.291	72.57	72.6	95	?
82	82	14-di-Cl-Bz 146	15.20	15.18	0.001	146	148	2207.723	85.68	85.7	93	
81	81	sec-butylbenzene	15.06	15.05	0.000	105	134	5499.576	94.67	94.7	96	
77	77	4-iso-Pr-toluene	15.23	15.22	0.001	119	134	3804.782	80.34	80.3	100	
84	84	12-di-Cl-benzene	15.54	15.53	0.000	146	148	1524.040	83.41	83.4	99	
85	85	n-butylbenzene	15.61	15.61	0.000	91	134	3991.637	94.49	94.5	99	
86	86	12-diBr-3-Cl-Pra	15.99	16.00	0.000	157	155	120.318	89.86	89.9	91	
87	87	124-tri-Cl-Bz	17.26	17.26	0.000	180	182	1187.497	90.98	91.0	100	
88	88	naphthalene	17.50	17.50	0.000	128	129	922.945	136.94	136.9	100	
90	90	123-tri-Cl-Bz	17.69	17.69	0.000	180	182	845.940	96.93	96.9	100	
89	89	hx-Cl-butadiene	17.54	17.53	0.000	225	260	859.594	87.93	87.9	98	

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Quantitation Report

Data File : C:\HPCHEM\1\DATA\03G1044\3-080.D Vial: 6
Acq On : 10 Jan 03 5:23 pm Operator: Eddie
Sample : f=1 Inst : GCMS-G
Misc : Multiplr: 1.00
Quant Time: Jan 13 9:39 2003 Quant Results File: quant.res

Method : C:\HPCHEM\1\METHODS\E524G003.M
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Mon Jan 13 10:38:23 2003
Response via : Multiple Level Calibration

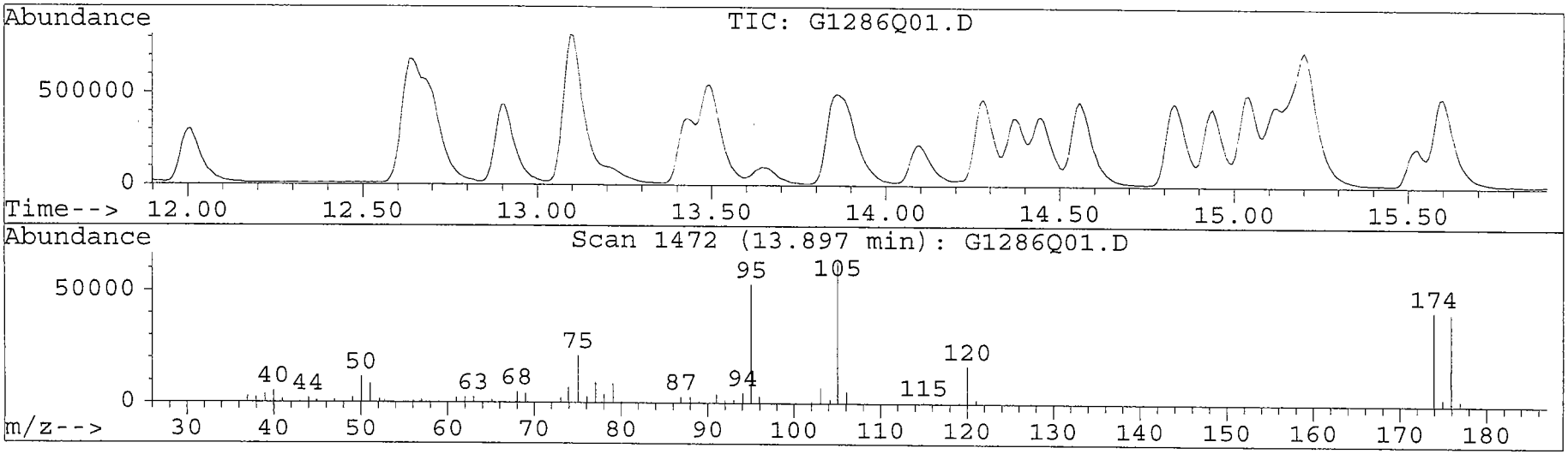


BFB

Data File : C:\HPCHEM\1\DATA\03G1286\G1286Q01.D
Acq On : 3 Feb 03 10:29 am
Sample : f=1
Misc :

Vial: 17
Operator: Eddie
Inst : GCMS-G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\E524G003.M
Title : **Applied P &Ch Lab** EPA 524.2



Peak Apex is scan: 1472

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.0	11673	PASS
75	95	30	60	39.9	21192	PASS
95	95	100	100	100.0	53160	PASS
96	95	5	9	6.0	3164	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	78.9	41968	PASS
175	174	5	9	7.5	3155	PASS
176	174	95	101	97.6	40952	PASS
177	176	5	9	6.4	2627	PASS

G1286Q01.D E524G003.M Mon Feb 03 14:05:28 2003

FORM-5A

Applied P & Ch Laboratory

Volatile Organic Instrument Performance Check for Method 524.2

Bromofluorobenzene (BFB), Part II

Client Name:	GEOFON, Inc.	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	031402
Project ID:	JPL	BFB Inj. Date:	02/03/03	Batch No:	03G1286
		BFB Inj. Time:	10:29	Sequence No:	03G1286
Project No:	04-4428.10	Instrument ID:	G	GC Column:	DB-VEX
Data File Name:	G1286Q01	Heated Purge: (Y/N)	N	Column ID:	0.45 mm

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

#	Client Sample No	Lab Sample ID	Data File Name	Date Analyzed	Time Analyzed
1	03G1286-CCV-01	03G1286-CCV-01	G1286Q01	02/03/03	10:29
2	03G1286-LCS-01	03G1286-LCS-01	G1286L01	02/03/03	10:58
3	MW-20-3MS	03-1402-5MS	G1286M01	02/03/03	11:27
4	MW-20-3MSD	03-1402-5MSD	G1286N01	02/03/03	11:55
5	03G1286-MB-01	03G1286-MB-01	G1286K02	02/03/03	13:21
6	DUPE-1-1Q03	03-1402-1	1402-01	02/03/03	17:50
7	EB-2-1/30/03	03-1402-2	1402-02	02/03/03	18:19
8	MW-20-1	03-1402-3	1402-03	02/03/03	18:48
9	MW-20-2	03-1402-4	1402-04	02/03/03	19:16
10	MW-20-3	03-1402-5	1402-05	02/03/03	19:45
11	MW-20-4	03-1402-6	1402-06	02/03/03	20:15
12	MW-20-5	03-1402-7	1402-07	02/03/03	20:43
13	TB-2-1/30/03	03-1402-8	1402-08	02/03/03	21:11
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\03G1286\G1286Q01.D Vial: 17
Acq On : 3 Feb 03 10:29 am Operator: Eddie
Sample : f=1 Inst : GCMS-G
Misc : Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\E524G003.M
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Mon Jan 13 10:38:23 2003
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 35% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1 Fluorobenzene I1 1	1.000	1.000	0.0	61	0.00
2		3 di-Cl-di-F-methane 85 8	0.308	0.289	6.3	61	0.00
3	P	4 Chloromethane 50 5	0.243	0.243	0.2	59	0.00
4		9 F114 85 135	0.319	0.349	-9.4	68	0.00
5	C	5 vinyl chloride 62 6	0.231	0.239	-3.4	63	0.00
6		6 bromomethane 94 9	0.227	0.215	5.3	69	0.00
7		7 Chloroethane 64 66	0.171	0.176	-3.1	64	0.00
8		8 tri-Cl-F-methane 101 10	0.390	0.441	-13.0	65	0.00
9		111 isopropyl alcohol x10	0.005	0.004#	17.4	61	0.00
10		100 ethyl ether x5	0.143	0.127	10.9	59	0.00
11		102 Acrolein x10	0.011	0.008#	32.4#	32#	0.00
12		119 methyl acetate	0.128	0.095	25.7#	46	0.00
13		104 Carbon disulfide	0.834	0.803	3.7	62	0.00
14		103 Acrylonitrilex10	0.024	0.022#	6.8	58	0.00
15		95 Acetone x10	0.019	0.016#	13.2	55	0.00
16		108 F-113	0.300	0.338	-12.7	64	0.00
17	M,C	13 11-dichloroethene 61 9	0.392	0.423	-7.8	66	0.00
18		101 Acetonnitrilex10	0.006	0.007#	-16.5	66	0.00
19		109 Iodomethane	0.311	0.353	-13.5	67	0.00
20		113 Tert butyl alcohol x10	0.009	0.008#	15.8	52	0.00
21		18 methylene chloride 49 8	0.643	0.298	53.6#	45	0.00
22		112 Allyl chloride	0.434	0.447	-3.1	66	0.00
23		200 Nitro methane x10	0.044	0.044#	-2.0	64	0.00
24		10 t-Bu-Me-ether 73 57	0.498	0.385	22.6#	56	0.00
25		19 t-12-di-Cl-ethene 96 6	0.301	0.299	0.6	62	0.00
26		98 Vinyl acetate x5	0.270	0.291	-7.7	113	0.00
27	P	21 11-dichloroethane 63 8	0.525	0.562	-7.1	65	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\03G1286\G1286Q01.D Vial: 17
Acq On : 3 Feb 03 10:29 am Operator: Eddie
Sample : f=1 Inst : GCMS-G
Misc : Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\E524G003.M
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Mon Jan 13 10:38:23 2003
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 35% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
28		91 2-butanone MEKx10	0.094	0.085	9.7	59	0.00
29		115 Di isoprop ether	1.125	1.260	-11.9	58	0.00
30		22 c-12-di-Cl-ethene 96 6	0.294	0.277	5.7	58	0.00
31		23 22-Dichloropropane 77 9	0.453	0.447	1.2	65	0.00
32		24 Br-Cl-methane 128 13	0.094	0.097	-3.7	57	0.00
33	C	25 chloroform 83 8	0.525	0.482	8.2	60	0.00
34		201 Ethyl acetate x2	0.134	0.130	2.9	79	0.00
35		116 ETBE	0.807	0.703	12.8	55	0.00
36		117 Iso-butyl alcohol X10	0.027	0.026#	2.3	80	0.00
37		26 tetrahydrofuranx5	0.010	0.009#	17.0	51	0.00
38	S	27 Di-Br-F-Methane (S1) 11	0.400	0.332	17.0	58	0.00
39		34 111-tri-Cl-ethane 97 9	0.437	0.416	4.9	62	0.00
40		30 12-dichloroethane 64 6	0.175	0.185	-6.1	56	0.00
41		35 11-Di-Cl-propene 75 11	0.382	0.371	2.9	61	0.00
42	S	29 1,2-di-Cl-ethane-d4 [Sur	0.165	0.145	12.3	54	0.00
43	M	36 benzene 78 5	0.869	0.863	0.7	61	0.00
44		37 CCl4 117 11	0.335	0.347	-3.6	64	0.00
45		97 thiophene	0.432	0.399	7.8	58	0.00
46		118 TAME	0.556	0.474	14.7	54	0.00
47	C	39 12-di-Cl-propane 63 7	0.254	0.238	6.2	57	0.00
48	M	40 trichloroethene 130 13	0.269	0.273	-1.5	61	0.00
49		96 Me-methacrylate	0.095	0.074	22.7#	54	0.00
50		42 Br-di-Cl-methane 83 8	0.355	0.308	13.2	58	0.00
51		41 dibromomethane 174 17	0.123	0.117	4.5	54	0.00
52		45 c-13-di-Cl-propene 75 11	0.313	0.274	12.3	56	0.00
53	S	55 toluene-d8(S2) 100	0.500	0.496	0.7	62	0.00
54		92 2-ClEt-Vi-ether10	0.054	0.044#	18.5	48	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\03G1286\G1286Q01.D Vial: 17
Acq On : 3 Feb 03 10:29 am Operator: Eddie
Sample : f=1 Inst : GCMS-G
Misc : Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\E524G003.M
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Mon Jan 13 10:38:23 2003
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 35% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
55	M C	56 toluene 91 9	0.817	0.773	5.4	61	0.00
56		107 Et methacrylate	0.169	0.157	7.4	86	0.00
57		93 2-Hexanone x5	0.057	0.049#	13.1	61	0.00
58		48 112-tri-Cl-Et 97 8	0.141	0.108	23.4#	57	0.00
59		58 1,2-di-br-ethane 107 109	0.114	0.117	-2.2	55	0.00
60		51 di-Br-Cl-methane 129 12	0.161	0.154	4.6	57	0.00
61		46 t-13-di-cl-propene 75 11	0.202	0.191	5.0	57	0.00
62		105 1-Chlorohexane	0.310	0.260	16.3	63	0.00
63	I	47 Cl-benzene-d5, I2	1.000	1.000	0.0	58	0.00
64		54 MIBK	0.297	0.299	-0.8	54	0.00
65		49 1,3-di-cl-propane 76 78	0.654	0.663	-1.4	56	0.00
66		59 tetra-Cl-ethene 166 16	0.880	0.946	-7.5	59	0.00
67	M P	60 chlorobenzene 112 7	1.461	1.554	-6.3	61	0.00
68		61 1112-tetra-Cl-Et 131 13	0.585	0.624	-6.6	57	0.00
69	C	64 ethylbenzene 91 10	2.816	2.875	-2.1	61	0.00
70		65 m/p-Xylenes x2	2.141	2.229	-4.1	61	0.00
71		99 1-4-di-Cl-butane	0.645	0.594	7.9	56	0.00
72	P	52 bromoform 173 17	0.274	0.295	-7.6	54	0.00
73		66 styrene 104 7	1.512	1.577	-4.3	61	0.00
74		67 o-xylene 91 10	2.106	2.137	-1.4	61	0.00
75	P	68 1122-Tetra-Cl-Et 83 8	0.387	0.365	5.7	55	0.00
76		110 t-1,4-dichloro-2-butene	0.081	0.066	17.9	64	0.00
77		106 Cl-benzyl	0.572	0.546	4.4	60	0.00
78	I	62 1,4-DCB-d4 150 152 I3	1.000	1.000	0.0	57	0.00
79		69 123-tri-Cl-Pr 110 9	0.122	0.116	4.8	54	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\03G1286\G1286Q01.D
Acq On : 3 Feb 03 10:29 am
Sample : f=1
Misc :

Vial: 17
Operator: Eddie
Inst : GCMS-G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\E524G003.M
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Mon Jan 13 10:38:23 2003
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 35% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
80	S	70 4-Br-1-F-Bz (S3)	174 9	0.893	0.877	1.9	57	0.00
81		71 isopropylbenzene	105 12	3.286	3.653	-11.2	63	0.00
82		72 bromobenzene	156 15	0.721	0.757	-4.9	56	0.00
83		73 n-propylbenzene	120 7	0.886	0.991	-11.9	62	0.00
84		74 2-Cl-Tl	126 128	0.589	0.580	1.5	61	0.00
85		75 4-Cl-Tl	126 128	0.804	0.826	-2.7	60	0.00
86		76 135-tri-Me-Bz	105 12	2.653	2.922	-10.1	64	0.00
87		79 tert-butylbenzene	119 9	2.724	2.994	-9.9	62	0.00
88		78 124-tri-Me-Bz	105 12	2.256	2.390	-5.9	60	0.00
89		80 13-di-Cl-Bz	146 148	1.149	1.104	3.9	58	0.00
90		82 14-di-Cl-Bz	146 148	1.670	1.727	-3.4	57	0.00
91		81 sec-butylbenzene	105 13	3.983	4.530	-13.7	65	0.00
92		77 4-iso-Pr-toluene	119 13	2.874	3.283	-14.2	64	0.00
93		84 12-di-Cl-benzene	146 14	1.109	1.085	2.2	56	0.00
94		85 n-butylbenzene	91 13	3.012	3.169	-5.2	61	0.00
95		86 12-diBr-3-Cl-Pra	157 15	0.081	0.075	7.7	51	0.00
96		87 124-tri-Cl-Bz	180 18	0.792	0.837	-5.7	55	0.00
97		88 naphthalene	128 12	0.665	0.653	1.9	56	0.00
98		90 123-tri-Cl-Bz	180 18	0.604	0.606	-0.3	54	0.00
99		89 hx-Cl-butadiene	225 26	0.621	0.753	-21.3#	65	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Continuing Calibration Concentration Summary

Data File G1286Q01.D
Method File E524G003

Compound Name	Amount	Actual	Units	%Dev	Target Response
1 Fluorobenzene I1 1	10	10.00	ppb	0.00	452540
3 di-Cl-di-F-methane 85 87	20	20.31	ppb	1.57	261414
4 Chloromethane 50 52	20	19.96	ppb	0.19	219813
9 F114 85 135	20	21.87	ppb	9.35	316045
5 vinyl chloride 62 64	20	20.68	ppb	3.39	215911
6 bromomethane 94 96	20	21.33	ppb	6.63	194925
7 Chloroethane 64 66	20	20.62	ppb	3.11	159444
8 tri-Cl-F-methane 101 103	20	22.61	ppb	13.05	399197
111 isopropyl alcohol x10	200	165.21	ppb	17.39	33735
100 ethyl ether x5	100	89.08	ppb	10.92	574581
102 Acrolein x10	200	135.22	ppb	32.39	69583
119 methyl acetate	20	15.57	ppb	22.14	86020
104 Carbon disulfide	20	19.27	ppb	3.66	726897
103 Acrylonitrilex10	200	186.34	ppb	6.83	201490
95 Acetone x10	200	192.73	ppb	3.64	148950
108 F-113	20	22.54	ppb	12.71	305786
13 11-dichloroethene 61 96	20	21.56	ppb	7.80	382493
101 Acetonnitrilex10	200	221.65	ppb	10.82	64113
109 Iodomethane	20	22.23	ppb	11.17	319397
113 Tert butyl alcohol x10	200	179.27	ppb	10.37	70164
18 methylene chloride 49 84	20	14.60	ppb	26.98	269655
112 Allyl chloride	20	20.62	ppb	3.09	404618
200 Nitro methane x10	200	203.99	ppb	2.00	402760
10 t-Bu-Me-ether 73 57	20	18.20	ppb	8.98	348747
19 t-12-di-Cl-ethene 96 61	20	19.87	ppb	0.63	270285
98 Vinyl acetate x5	100	107.65	ppb	7.65	1317545
21 11-dichloroethane 63 83	20	21.42	ppb	7.11	508716
91 2-butanone MEKx10	200	180.69	ppb	9.65	766869
115 Di isoprop ether	20	19.02	ppb	4.91	1140144
22 c-12-di-Cl-ethene 96 61	20	18.86	ppb	5.72	250940
23 22-Dichloropropane 77 97	20	19.76	ppb	1.20	404964
24 Br-Cl-methane 128 130	20	18.43	ppb	7.85	88024
25 chloroform 83 85	20	18.35	ppb	8.24	436047
201 Ethyl acetate x2	40	38.83	ppb	2.92	234941
116 ETBE	20	17.44	ppb	12.82	636643
117 Iso-butyl alcohol X10	200	195.46	ppb	2.27	236651
26 tetrahydrofuranx5	100	83.02	ppb	16.98	38501
27 Di-Br-F-Methane (S1) 111 1	20	18.73	ppb	6.35	300416
34 111-tri-Cl-ethane 97 99	20	19.02	ppb	4.89	376514
30 12-dichloroethane 64 62	20	18.11	ppb	9.44	167735
35 11-Di-Cl-propene 75 110	20	19.42	ppb	2.92	335806
29 1,2-di-Cl-ethane-d4 [Surr] 10	20	17.54	ppb	12.28	131175
36 benzene 78 52	20	19.85	ppb	0.74	780673
37 CCl4 117 119	20	20.71	ppb	3.57	313807

97 thiophene	20	18.45	ppb	7.76	360676
118 TAME	20	17.07	ppb	14.66	429098
39 12-di-Cl-propane 63 76	20	18.75	ppb	6.24	215801
40 trichloroethene 130 132	20	20.29	ppb	1.46	247256
96 Me-methacrylate	20	16.77	ppb	16.13	66783
42 Br-di-Cl-methane 83 85	20	17.37	ppb	13.15	278743
41 dibromomethane 174 172	20	19.09	ppb	4.54	105971
45 c-13-di-Cl-propene 75 110	20	17.55	ppb	12.27	248307
55 toluene-d8(S2) 100 99	20	19.86	ppb	0.71	448901
92 2-ClEt-Vi-ether10	200	163.00	ppb	18.50	395617

Compound Name	Amount	Actual	Units	%Dev	Target Response
56 toluene 91 92	20	18.93	ppb	5.36	699593
107 Et methacrylate	20	18.53	ppb	7.37	141689
93 2-Hexanone x5	100	86.89	ppb	13.11	223349
48 112-tri-Cl-Et 97 83	20	18.00	ppb	9.99	97469
58 1,2-di-br-ethane 107 109	20	18.25	ppb	8.74	105668
51 di-Br-Cl-methane 129 127	20	19.08	ppb	4.59	139016
46 t-13-di-cl-propene 75 110	20	18.99	ppb	5.03	173239
105 1-Chlorohexane	20	20.92	ppb	4.62	234998
47 Cl-benzene-d5, I2	10	10.00	ppb	0.00	130529
54 MIBK	20	19.00	ppb	4.99	78131
49 1,3-di-cl-propane 76 78	20	20.27	ppb	1.37	173008
59 tetra-Cl-ethene 166 168	20	21.50	ppb	7.52	247019
60 chlorobenzene 112 77	20	21.26	ppb	6.30	405572
61 1112-tetra-Cl-Et 131 133	20	21.31	ppb	6.55	162804
64 ethylbenzene 91 106	20	20.42	ppb	2.10	750524

Compound Name	Amount	Actual	Units	%Dev	Target Response
65 m/p-Xylenes x2	40	41.65	ppb	4.13	1163772
99 1-4-di-Cl-butane	20	18.42	ppb	7.89	155107
52 bromoform 173 175	20	19.81	ppb	0.97	76943
66 styrene 104 78	20	20.86	ppb	4.32	411683
67 o-xylene 91 106	20	20.29	ppb	1.44	557799
68 1122-Tetra-Cl-Et 83 85	20	18.86	ppb	5.72	95189
110 t-1,4-dichloro-2-butene	20	21.46	ppb	7.32	17263
106 Cl-benzyl	20	22.70	ppb	13.50	142646
62 1,4-DCB-d4 150 152 I3	10	10.00	ppb	0.00	105835
69 123-tri-Cl-Pr 110 97	20	19.05	ppb	4.75	24548
70 4-Br-1-F-Bz (S3) 174 95	20	19.62	ppb	1.88	185572
71 isopropylbenzene 105 120	20	22.23	ppb	11.16	773203
72 bromobenzene 156 158	20	20.98	ppb	4.92	160207
73 n-propylbenzene 120 78	20	22.38	ppb	11.91	209838
74 2-Cl-TI 126 128	20	19.71	ppb	1.45	122767
75 4-Cl-TI 126 128	20	20.54	ppb	2.68	174850
76 135-tri-Me-Bz 105 120	20	22.02	ppb	10.11	618394
79 tert-butylbenzene 119 91	20	21.98	ppb	9.92	633768
78 124-tri-Me-Bz 105 120	20	21.19	ppb	5.94	505826
80 13-di-Cl-Bz 146 148	20	19.22	ppb	3.92	233701
82 14-di-Cl-Bz 146 148	20	20.69	ppb	3.44	365652
81 sec-butylbenzene 105 134	20	22.75	ppb	13.74	958957

77 4-iso-Pr-toluene	119 134	20	22.84	ppb	14.22	694818
84 12-di-Cl-benzene	146 148	20	19.57	ppb	2.17	229608
85 n-butylbenzene	91 134	20	21.05	ppb	5.24	670846
86 12-diBr-3-Cl-Pra	157 155	20	18.47	ppb	7.67	15881
87 124-tri-Cl-Bz	180 182	20	19.19	ppb	4.03	177161
88 naphthalene	128 129	20	19.62	ppb	1.89	138127
90 123-tri-Cl-Bz	180 182	20	20.07	ppb	0.33	128316
				Ave.% Dev	7.11	

Quantitation Report: **Applied P &Ch Lab** EPA 524.2

999

Data Filename: C:\HPCHEM\1\DATA\03G1286\G1286Q01.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Feb 3 10:29 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Feb 03 14:06 2003
Print Time : Mon Feb 03 14:07 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

ID	Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
Internal Standards										Dev(Min)	
1	1 Fluorobenzene I1	9.03	9.03	0.000	96	70	452.540	10.00		0.00	
47	47 Cl-benzene-d5, I2	12.67	12.66	0.000	82	119	130.529	10.00		0.01	
62	62 1,4-DCB-d4 150 15	15.15	15.15	0.000	152	150	105.835	10.00		0.00	
System Monitoring Compounds (Surrogate)										%Recovery	
27	27 Di-Br-F-Methane (	7.43	7.44	0.000	111	113	300.416	18.73	18.7	93.65%	
29	29 1,2-di-Cl-ethane-	8.02	8.02	0.000	65	102	131.175	17.54	17.5	87.72%	
55	55 toluene-d8(S2)	11.15	11.15	0.000	100	99	448.901	19.86	19.9	99.29%	
70	70 4-Br-1-F-Bz (S3)	13.90	13.90	0.000	174	95	185.572	19.62	19.6	98.12%	
Target Compounds										Qvalue	
<<< I1 : ISTD ID = 1 >>>											
3	3 di-Cl-di-F-methan	2.59	2.60	0.000	85	87	261.414	20.31	20.3	99	
4	4 Chloromethane	2.78	2.78	0.000	50	52	219.813	19.96	20.0	100	
9	9 F114 85 135	2.82	2.83	0.000	85	135	316.045	21.87	21.9	92	
5	5 vinyl chloride	2.96	2.96	0.000	62	64	215.911	20.68	20.7	97	
6	6 bromomethane	3.36	3.37	-0.001	94	96	194.925	21.33	21.3	100	
7	7 Chloroethane	3.52	3.52	0.000	64	66	159.444	20.62	20.6	100	
8	8 tri-Cl-F-methane	4.15	4.14	0.000	101	103	399.197	22.61	22.6	99	?
111	111 isopropyl alcoho	4.25	4.27	-0.002	45	43	33.735	165.21	165.2	1	#
100	100 ethyl ether x5	4.44	4.44	0.000	59	74	574.581	89.08	89.1	99	
102	102 Acrolein x10	4.16	4.15	0.001	56	55	69.583	135.22	135.2	98	?
119	119 methyl acetate	5.06	5.06	0.000	43	74	86.020	15.57	15.6	93	?
104	104 Carbon disulfide	5.19	5.18	0.000	76	78	726.897	19.27	19.3	100	
103	103 Acrylonitrilex10	4.89	4.89	0.000	53	52	201.490	186.34	186.3	99	
95	95 Acetone x10	4.31	4.31	0.000	43	58	148.950	192.73	192.7	94	
108	108 F-113	5.02	5.02	0.000	151	101	305.786	22.54	22.5	97	
13	13 11-dichloroethene	4.77	4.76	0.000	61	96	382.493	21.56	21.6	97	
101	101 Acetonnitrilex10	4.21	4.20	0.001	41	40	64.113	221.65	221.6	62	#
109	109 Iodomethane	4.80	4.80	0.000	142	127	319.397	22.23	22.2	99	
113	113 Tert butyl alcoh	4.85	4.86	-0.001	59	57	70.164	179.27	179.3	96	

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Quantitation Report: **Applied P &Ch Lab** EPA 524.2

Data Filename: C:\HPCHEM\1\DATA\03G1286\G1286Q01.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Feb 3 10:29 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Feb 03 14:06 2003
Print Time : Mon Feb 03 14:07 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

1000

ID	Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
18	18 methylene chlorid	4.96	4.97	0.000	84	49	269.655	14.60	14.6	98	
	112 Allyl chloride	5.07	5.07	0.000	41	76	404.618	20.62	20.6	96	?
200	200 Nitro methane x1	5.81	5.82	0.000	61	46	402.760	203.99	204.0	99	?
10	10 t-Bu-Me-ether	6.00	6.00	0.000	73	57	348.747	18.20	18.2	96	
19	19 t-12-di-Cl-ethene	5.81	5.82	0.000	96	61	270.285	19.87	19.9	97	?
98	98 Vinyl acetate x5	6.40	6.41	0.000	43	86	1317.545	107.65	107.7	99	
21	21 11-dichloroethane	6.15	6.15	0.000	63	83	508.716	21.42	21.4	99	
91	91 2-butanone MEKx10	6.83	6.83	0.000	43	72	766.869	180.69	180.7	100	?
115	115 Di isoprop ether	6.85	6.85	0.000	45	87	1140.144	19.02	19.0	100	?
22	22 c-12-di-Cl-ethene	6.96	6.97	0.000	96	61	250.940	18.86	18.9	96	
23	23 22-Dichloropropan	7.36	7.35	0.001	77	97	404.964	19.76	19.8	100	
24	24 Br-Cl-methane	7.20	7.18	0.002	128	130	88.024	18.43	18.4	98	
25	25 chloroform	7.26	7.27	0.000	83	85	436.047	18.35	18.4	99	
201	201 Ethyl acetate x2	7.32	7.31	0.001	43	61	234.941	38.83	38.8	95	?
116	116 ETBE	7.40	7.40	0.000	59	87	636.643	17.44	17.4	99	
117	117 Iso-butyl alcoho	7.32	7.31	0.001	43	42	236.651	195.46	195.5	72	#?
26	26 tetrahydrofuranx5	7.71	7.71	0.000	72	42	38.501	83.02	83.0	83	
34	34 111-tri-Cl-ethane	8.23	8.23	0.000	97	99	376.514	19.02	19.0	99	
30	30 12-dichloroethane	8.12	8.13	0.000	62	64	167.735	18.11	18.1	98	
35	35 11-Di-Cl-propene	8.48	8.48	0.000	75	110	335.806	19.42	19.4	100	
36	36 benzene	8.74	8.75	0.000	78	52	780.673	19.85	19.9	99	
37	37 CCl4	8.68	8.68	0.000	117	119	313.807	20.71	20.7	100	
97	97 thiophene	8.89	8.89	0.000	84	58	360.676	18.45	18.4	97	
118	118 TAME	9.00	9.00	0.000	73	43	429.098	17.07	17.1	98	
39	39 12-di-Cl-propane	9.49	9.49	0.000	63	76	215.801	18.75	18.8	100	
40	40 trichloroethene	9.55	9.54	0.000	130	132	247.256	20.29	20.3	99	
96	96 Me-methacrylate	9.84	9.85	-0.001	69	100	66.783	16.77	16.8	99	
42	42 Br-di-Cl-methane	9.61	9.61	0.000	83	85	278.743	17.37	17.4	99	
41	41 dibromomethane	9.45	9.45	0.000	174	172	105.971	19.09	19.1	100	
45	45 c-13-di-Cl-propen	10.37	10.37	0.000	75	110	248.307	17.55	17.5	99	
92	92 2-ClEt-Vi-ether10	10.14	10.15	0.000	63	43	395.617	163.00	163.0	98	
56	56 toluene	11.22	11.23	0.000	91	92	699.593	18.93	18.9	99	

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Quantitation Report: **Applied P &Ch Lab** EPA 524.2

1001

Data Filename: C:\HPCHEM\1\DATA\03G1286\G1286Q01.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Feb 3 10:29 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Feb 03 14:06 2003
Print Time : Mon Feb 03 14:07 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

ID	Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
107	107 Et methacrylate	11.36	11.36	0.000	69	99	141.689	18.53	18.5	99	
93	93 2-Hexanone x5	11.48	11.48	0.000	43	58	223.349	86.89	86.9	94	
48	48 112-tri-Cl-Et	11.03	11.03	0.000	97	83	97.469	18.00	18.0	94	
58	58 1,2-di-br-ethane	11.83	11.82	0.001	107	109	105.668	18.25	18.3	99	
51	51 di-Br-Cl-methane	11.57	11.57	0.000	129	127	139.016	19.08	19.1	99	
46	46 t-13-di-cl-propen	10.86	10.87	-0.001	75	110	173.239	18.99	19.0	97	
105	105 1-Chlorohexane	12.63	12.64	0.000	55	93	234.998	20.92	20.9	98	?
<<< I2 : ISTD ID = 47 >>>											
54	54 MIBK	10.53	10.52	0.000	43	58	78.131	19.00	19.0	96	
49	49 1,3-di-cl-propane	11.29	11.29	0.000	76	78	173.008	20.27	20.3	98	
59	59 tetra-Cl-ethene	12.00	12.00	0.000	166	168	247.019	21.50	21.5	99	
60	60 chlorobenzene	12.70	12.70	0.000	112	77	405.572	21.26	21.3	99	
61	61 1112-tetra-Cl-Et	12.63	12.62	0.000	131	133	162.804	21.31	21.3	99	?
64	64 ethylbenzene	12.90	12.90	0.000	91	106	750.524	20.42	20.4	99	
65	65 m/p-Xylenes x2	13.10	13.10	0.000	91	106	1163.772	41.65	41.7	97	
99	99 1-4-di-Cl-butane	13.45	13.46	0.000	55	41	155.107	18.42	18.4	98	
52	52 bromoform	13.21	13.22	0.000	173	175	76.943	19.81	19.8	96	
66	66 styrene	13.42	13.43	0.000	104	78	411.683	20.86	20.9	99	
67	67 o-xylene	13.49	13.50	0.000	91	106	557.799	20.29	20.3	98	?
68	68 1122-Tetra-Cl-Et	13.50	13.51	0.000	83	85	95.189	18.86	18.9	95	?
110	110 t-1,4-dichloro-2	13.66	13.67	0.000	89	53	17.263	21.46	21.5	82	?
106	106 Cl-benzyl	15.12	15.12	0.000	91	126	142.646	22.70	22.7	100	?
<<< I3 : ISTD ID = 62 >>>											
69	69 123-tri-Cl-Pr	13.64	13.64	0.000	110	97	24.548	19.05	19.0	92	?
71	71 isopropylbenzene	13.85	13.86	0.000	105	120	773.203	22.23	22.2	99	
72	72 bromobenzene	14.10	14.10	0.000	156	158	160.207	20.98	21.0	98	
73	73 n-propylbenzene	14.28	14.29	0.000	120	78	209.838	22.38	22.4	98	
74	74 2-Cl-Tl 126 1	14.37	14.37	0.000	126	128	122.767	19.71	19.7	97	
75	75 4-Cl-Tl 126 1	14.45	14.45	0.000	126	128	174.850	20.54	20.5	96	
76	76 135-tri-Me-Bz	14.56	14.57	0.000	105	120	618.394	22.02	22.0	99	
79	79 tert-butylbenzene	14.83	14.84	0.000	119	91	633.768	21.98	22.0	98	
78	78 124-tri-Me-Bz	14.94	14.94	0.000	105	120	505.826	21.19	21.2	96	

m 2/3/03

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Quantitation Report: **Applied P &Ch Lab** EPA 524.2

1002

Data Filename: C:\HPCHEM\1\DATA\03G1286\G1286Q01.D
Method : C:\HPCHEM\1\METHODS\E524G003.M
Acq. Time : Feb 3 10:29 2003
Method Update: Mon Jan 13 10:38 2003
Quant. Time : Feb 03 14:06 2003
Print Time : Mon Feb 03 14:07 2003
Miscleneous :

Sample : f=1
Inst. : GCMS-G
RF via : Multiple Level Calibration
Operator: Eddie
Multiplr: 1.000000

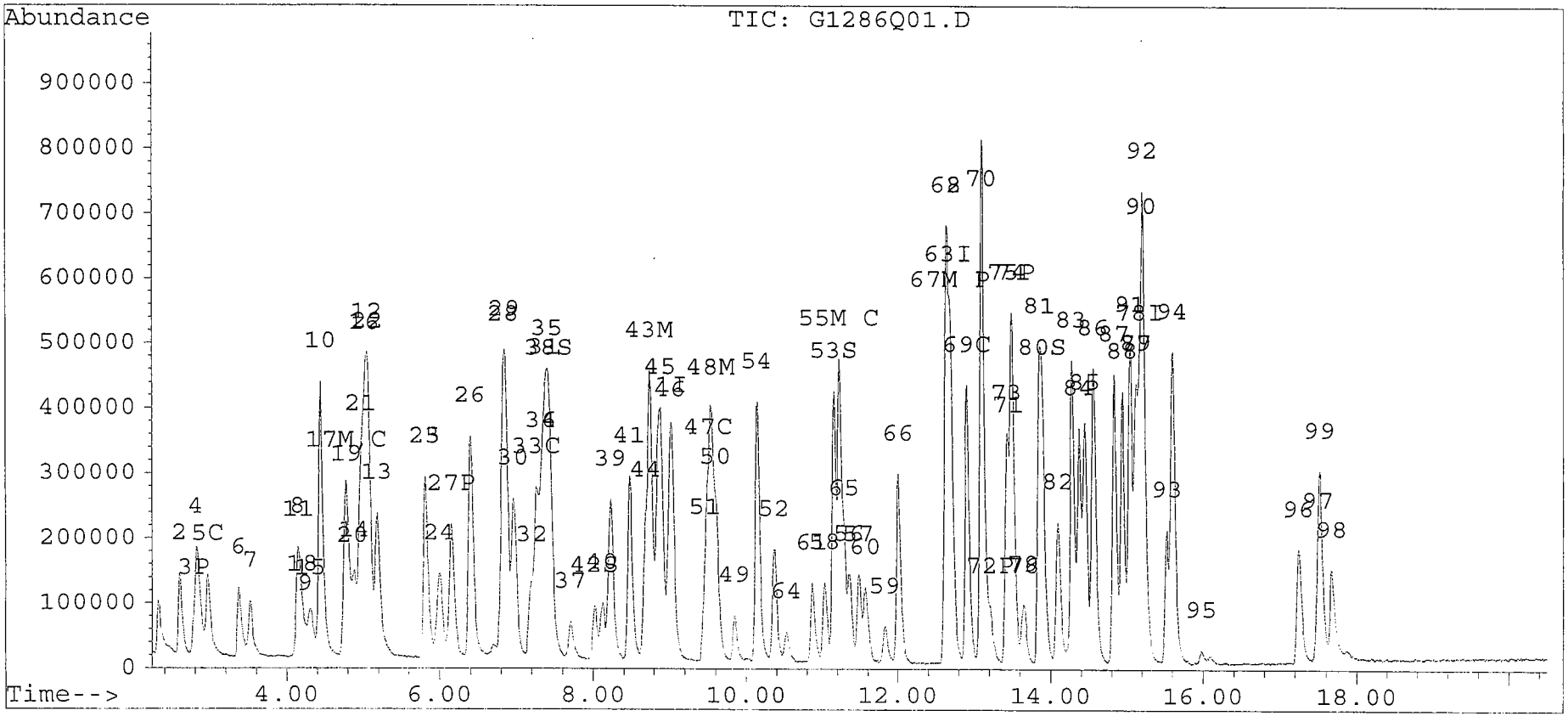
ID		Component Name	R.T.	RT0	DRRT	QIon	Q1	RF/1000	C0,ppb	C,ppb	Quality	Note
80	80	13-di-Cl-Bz 146	15.11	15.11	0.000	146	148	233.701	19.22	19.2	92	?
82	82	14-di-Cl-Bz 146	15.18	15.19	0.000	146	148	365.652	20.69	20.7	91	
81	81	sec-butylbenzene	15.04	15.04	0.000	105	134	958.957	22.75	22.7	99	
77	77	4-iso-Pr-toluene	15.21	15.22	0.000	119	134	694.818	22.84	22.8	99	
84	84	12-di-Cl-benzene	15.53	15.52	0.000	146	148	229.608	19.57	19.6	98	
85	85	n-butylbenzene	15.60	15.60	0.000	91	134	670.846	21.05	21.0	99	
86	86	12-diBr-3-Cl-Pra	15.97	15.97	0.000	157	155	15.881	18.47	18.5	90	
87	87	124-tri-Cl-Bz	17.25	17.24	0.000	180	182	177.161	19.19	19.2	99	
88	88	naphthalene	17.48	17.49	0.000	128	129	138.127	19.62	19.6	99	
90	90	123-tri-Cl-Bz	17.67	17.68	0.000	180	182	128.316	20.07	20.1	99	
89	89	hx-Cl-butadiene	17.52	17.52	0.000	225	260	159.298	22.86	22.9	98	

= qualifier out of range, m = manual integration, ? = RT coelution, * = DRRT > 0.06

Quantitation Report

Data File : C:\HPCHEM\1\DATA\03G1286\G1286Q01.D Vial: 17
Acq On : 3 Feb 03 10:29 am Operator: Eddie
Sample : f=1 Inst : GCMS-G
Misc : Multiplr: 1.00
Quant Time: Feb 3 14:06 2003 Quant Results File: quant.res

Method : C:\HPCHEM\1\METHODS\E524G003.M
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Mon Jan 13 10:38:23 2003
Response via : Multiple Level Calibration



FORM-8A

Applied P & Ch Laboratory

Internal Standard Area and RT Summary for Method 524.2

Client Name:	GEOFON, Inc.	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	031402
Project ID:	JPL	Project No:	04-4428.10	Sample Matrix:	Water
		CCV Data File:	G1286Q01	Instrument ID:	G

Batch No: 03G1286

#	Client Sample No	Lab Sample ID	Analysis Date & Time	IS-1 Area #	IS-1 RT #	IS-2 Area #	IS-2 RT #	IS-3 Area #	IS-3 RT #
12 Hour CCV STD			02/03/03 10:29	452540	9.03	130529	12.67	105835	15.15
CCV Upper Limit				905080	9.53	261058	13.17	211670	15.65
CCV Lower Limit				226270	8.53	65264	12.17	52917	14.65
1	03G1286-LCS-01	03G1286-LCS-01	02/03/03 10:58	445418	9.03	128019	12.67	107203	15.15
2	MW-20-3MS	03-1402-5MS	02/03/03 11:27	462471	9.03	129231	12.66	105873	15.16
3	MW-20-3MSD	03-1402-5MSD	02/03/03 11:55	464737	9.03	136301	12.66	115983	15.16
4	03G1286-MB-01	03G1286-MB-01	02/03/03 13:21	410431	9.02	114762	12.67	96341	15.16
5	DUPE-1-1Q03	03-1402-1	02/03/03 17:50	633053	9.03	177260	12.66	143589	15.15
6	EB-2-1/30/03	03-1402-2	02/03/03 18:19	578175	9.02	166187	12.66	138121	15.16
7	MW-20-1	03-1402-3	02/03/03 18:48	598204	9.02	173432	12.66	142482	15.16
8	MW-20-2	03-1402-4	02/03/03 19:16	640477	9.02	188285	12.66	152035	15.15
9	MW-20-3	03-1402-5	02/03/03 19:45	586769	9.02	179475	12.66	145951	15.16
10	MW-20-4	03-1402-6	02/03/03 20:15	612717	9.02	170771	12.66	139002	15.14
11	MW-20-5	03-1402-7	02/03/03 20:43	566222	9.02	162774	12.66	138644	15.14
12	TB-2-1/30/03	03-1402-8	02/03/03 21:11	633600	9.02	181454	12.66	147651	15.14
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

IS-1 = FLUOROBENZENE
IS-2 = CHLOROBENZENE-D5
IS-3 = 1,4-DICHLOROBENZENE-D4

Area Upper Limit = +100% of CCV internal standard area
Area Lower Limit = - 50% of CCV internal standard area
RT Upper Limit = +0.50 minutes of CCV internal standard RT
RT Lower Limit = - 0.50 minutes of CCV internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits

Applied P & Ch Laboratory
[illegible] Magnolia Ave. Chino CA 91710
(909) 590-1828 Fax: (909) 590-1498

VOC-044

VOC Analysis General Logbook

Sequence # 0361044 Batch # 0361044 Matrix: W Date: 1/10/03 Analyst: E. Lin

IS/Surrogate: GC14507/14508 Methanol(mark-*M*): _____ PEG (mark-*PEG*): _____ Defoaming(mark-*DF*): _____

☐ Calib. + Ini. Batch ☐ Initial Batch; ☐ Middle Batch; ☐ Final Batch. ☐ Internal Study Datafile Path: _____

#	Type	Sample ID	Method	$V/X=f_1$	$V_f/V_i=f_2$	$V_{spg}/V_{inj}=f_3$	F	A-#	Datafile	Note	pH
2377	SP	G1044P01	E524G-003	25/25=1	/ =	/ =	1		G1044P01	1/10/03 1:5 lpm	
2378	Calib	3-0003		/ =	/ =	/ =			3-0003	GC14720	
2379	↓	3-002	↓	/ =	/ =	/ =	↓		3-002	↓	
2380		3-010		/ =	/ =	/ =			3-010		
2381		3-020		/ =	/ =	/ =			3-020		
2382		3-040		/ =	/ =	/ =			3-040		
2383	↓	3-080		/ =	/ =	/ =			3-080		
2384	CCV	G1044Q01		/ =	/ =	/ =			G1044Q01	CCV/ICV/LFB	
2385	MS	M01		/ =	/ =	/ =			M01	S1011-03	C2
2386	LCS	L01		/ =	/ =	/ =			L01		
2387	MSD	N01		/ =	/ =	/ =			N01	S1011-03	C2
2388	MB	K01		/ =	/ =	/ =			K01		
2389	Sample	1084-03		/ =	/ =	/ =			1084-03		C2
2390		6844-02A		/ =	/ =	/ =			6844-02A		
2391		6844-01A		/ =	/ =	/ =			↓ -01A		
2392		1017-1		/ =	/ =	/ =			1017-1		
2393		1011-02		/ =	/ =	/ =			1011-02		
2394		↓ 3		/ =	/ =	/ =			3		
2395		4		/ =	/ =	/ =			4		
2396		5		/ =	/ =	/ =			↓ 5		
2397		1047-01		/ =	/ =	/ =			1047-01		
2398		↓ -02		/ =	/ =	/ =			↓ -02		
2399		1051-2		/ =	/ =	/ =			1051-02		
2400		↓ 3		/ =	/ =	/ =			↓ 3		
2401		1084-1		/ =	/ =	/ =			1084-01		
2402		↓ 2		/ =	/ =	/ =			2		
2403		↓ 4		/ =	/ =	/ =	↓		↓ 4		↓
2404				/ =	/ =	/ =					
2405				/ =	/ =	/ =					
2406				/ =	1/10/03	/ =					
2407				/ =	/ =	/ =					
2408				/ =	/ =	/ =					

Type	Op #	STD Lot #	$C_{std}(ng/\mu L)\times V_{std}(\mu L)/X(g \text{ or } mL)=T$	Op #	STD Lot #	$C_{std}(ng/\mu L)\times V_{std}(\mu L)/X(g \text{ or } mL)=T$
LCS/LCSD	2386	GC-	500 × 2.5 /X= 50 ppb		GC-	× /X= ppb
MS/MSD	2385/2387	GC-14721	× /X= ppb		GC-	× /X= ppb

Footnote/Anomaly:

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Magnolia Ave. Chino CA 91710
(909) 590-1828 Fax: (909) 590-1498

VOC Analysis General Logbook

Lab # 03G1286 Batch # 03G1286 Matrix: W Date: 2-3-03 Analyst: Eddie

IS/Surrogate: GC- 14507/14508 Methanol(mark-M): _____ PEG (mark-PEG): _____ Defoaming(mark-DF): _____

Ini. Batch ☐ Initial Batch; ☐ Middle Batch; ☐ Final Batch. ☐ Internal Study Datafile Path: _____

Type	Sample ID	Method	$V/X=f_1$	$V_f/V_i=f_2$	$V_{spg}/V_{inj}=f_3$	F	A-#	Datafile	Note	pH
SP	G1286P01	E524G	25125 = 1	/ =	/ =	1		G1286P01		
CW	Q01	003	/ =	/ =	/ =			Q01	2-3-03 10:29AM	G4489
MS	L01		/ =	/ =	/ =			L01		
MS	M01		/ =	/ =	/ =			M01	$1402-05	<2
MSD	N01		/ =	/ =	/ =			N01	$1402-05	<2
MB	K01		/ =	/ =	/ =			K01		
MB	K02		/ =	/ =	/ =			K02		
sample	1369-01A		/ =	/ =	/ =			1369-01A		<2
	02A		/ =	/ =	/ =			02A		
	03A		/ =	/ =	/ =			03A		
	04A		/ =	/ =	/ =			04A		
	05A		/ =	/ =	/ =			05A		
	06A		/ =	/ =	/ =			06A		
	07B		/ =	/ =	/ =			07B		
	08A		/ =	/ =	/ =			08A		
	1402-01		/ =	/ =	/ =			1402-01		
	02		/ =	/ =	/ =			02		
	03		/ =	/ =	/ =			03		
	04		/ =	/ =	/ =			04		
	05		/ =	/ =	/ =			05	MS	
	06		/ =	/ =	/ =			06		
	07		/ =	/ =	/ =			07		
	08		/ =	/ =	/ =			08		
	1369-05B		/ =	/ =	/ =			1369-05B		
			/ =	/ =	/ =					
			/ =	/ =	/ =					
			/ =	/ =	/ =					
			/ =	/ =	/ =					
			/ =	/ =	/ =					
			/ =	/ =	/ =					
			/ =	/ =	/ =					
			/ =	/ =	/ =					

2/5/03

	Op #	STD Lot #	$C_{std}(ng/\mu L)\times V_{std}(\mu L)/X(g \text{ or } mL)=T$	Op #	STD Lot #	$C_{std}(ng/\mu L)\times V_{std}(\mu L)/X(g \text{ or } mL)=T$
SD	2635	GC- 14802	× /X= ppb		GC-	× /X= ppb
SD	2636/2637	GC-	200 × 2.5 /X= ~~50~~ ppb		GC-	× /X= ppb

Anomaly:

20

AL 2-5-03

100