Average of 14.176 to 14.187 min.: 4B69309.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	1095	51.00	6813	68.00	11056	79.90	746
37.00	6145	52.05	241	69.00	10896	80.90	2598
38.00	5061	55.00	328	70.00	811	81.90	531
39.00	2050	56.00	1632	71.95	631	86.95	5191
39.95	87	57.00	2791	73.00	4705	87.95	5055
44.00	610	60.00	990	74.00	17528	91.00	403
45.00	1019	61.00	4782	75.00	53389	92.00	2869
47.00	1858	62.00	4614	76.00	4525	93.00	4456
48.00	708	63.00	3624	77.00	678	94.00	12398
49.00	4802	64.05	322	78.05	443	95.00	113928
50.00	21845	67.00	194	78.90	2517	96.00	7443

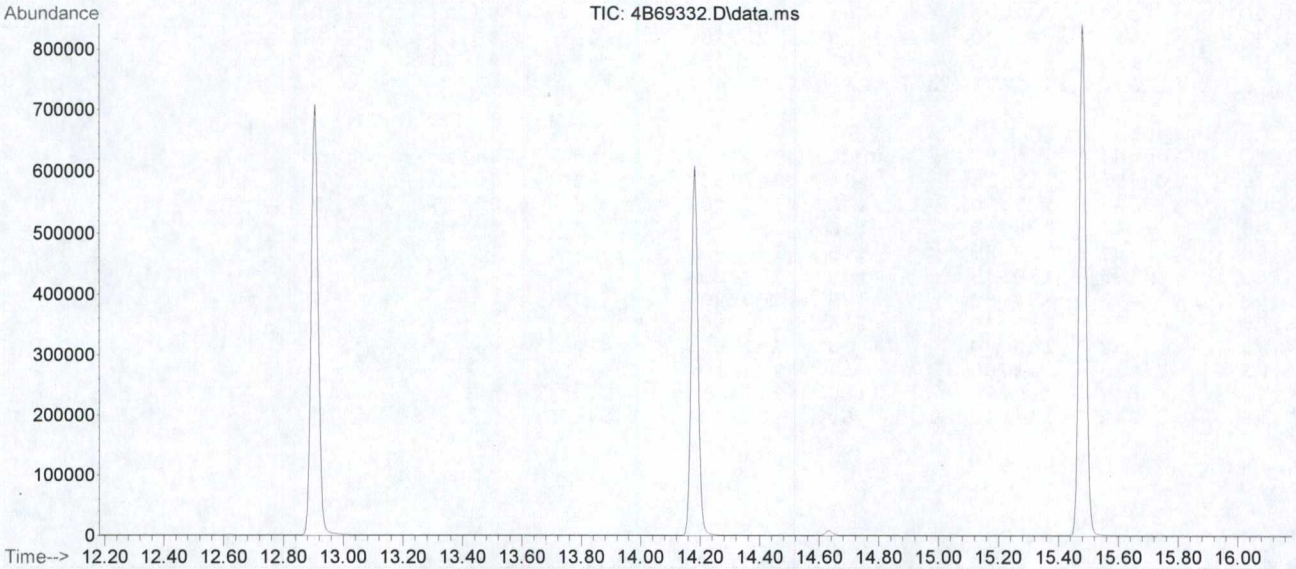
Average of 14.176 to 14.187 min.: 4B69309.D\data.ms
bfb
Modified:subtracted

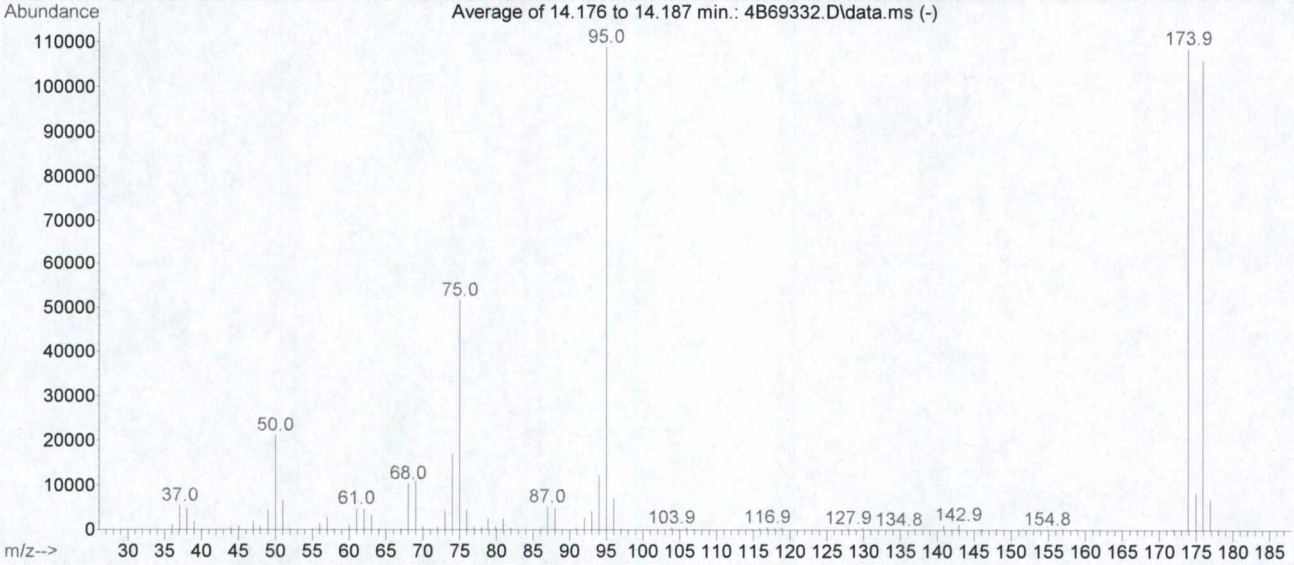
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
97.00	222	130.90	182	171.85	174		
103.90	466	134.90	209	173.90	111691		
104.90	51	136.90	150	174.90	8908		
105.90	400	140.90	974	175.90	109496		
115.90	314	141.80	58	176.90	7377		
116.90	698	142.90	1104	177.85	218		
117.90	314	145.90	153				
118.90	546	147.85	312				
127.85	408	154.85	309				
128.90	189	156.90	177				
129.85	406	160.80	55				

SW-846 Method 8260

Data File : C:\msdchem\1\data\4B\v4b2853-2854\4B69332.D Vial: 28
Acq On : 15 Feb 2017 9:06 pm Operator: Hueanht
Sample : bfb2 Inst : MS4B
Misc : MS12524,V4B2853,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4B2825.M (RTE Integrator)
Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um





AutoFind: Scans 2026, 2027, 2028; Background Corrected with Scan 2017

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.4	21128	PASS
75	95	30	60	47.5	51659	PASS
95	95	100	100	100.0	108789	PASS
96	95	5	9	6.5	7098	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	99.7	108499	PASS
175	174	5	9	7.6	8196	PASS
176	174	95	101	97.5	105749	PASS
177	176	5	9	6.4	6721	PASS

4B69332.D M4B2825.M Thu Feb 16 15:43:30 2017

Average of 14.176 to 14.187 min.: 4B69332.D\data.ms
bfb2
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	1121	51.00	6478	67.05	279	78.90	2589
37.05	5457	52.00	307	68.00	10366	79.95	765
38.05	4820	55.05	258	69.00	10949	80.90	2523
39.00	1936	56.00	1481	70.00	735	81.90	560
40.00	13	57.00	2818	72.00	681	86.10	59
44.00	517	57.90	55	73.00	4245	86.95	5149
45.05	932	60.00	1046	74.00	16774	88.00	4971
47.00	1845	61.00	4853	75.00	51659	90.90	385
47.95	639	62.00	4683	76.00	4517	92.00	2708
49.00	4510	63.00	3350	76.95	631	93.00	4201
50.00	21128	64.05	307	77.95	519	94.00	12240

Average of 14.176 to 14.187 min.: 4B69332.D\data.ms
bfb2
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.00	108789	118.85	524	147.95	226	176.90	6721
96.00	7098	127.90	442	153.70	53	177.95	158
97.00	212	128.85	186	154.85	240		
103.90	484	129.90	419	156.95	216		
104.85	195	130.85	109	158.80	63		
105.90	483	134.80	122	160.90	72		
106.90	55	136.90	214	171.80	171		
114.90	52	140.90	1068	171.95	204		
115.85	418	142.00	51	173.90	108499		
116.90	627	142.90	1166	174.95	8196		
117.90	342	146.00	60	175.90	105749		

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68756.D
Acq On : 27 Jan 2017 11:39 am
Operator : Hueanht
Sample : ic2825-2
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 27 17:27:54 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) tert butyl alcohol-d9	6.81	65	151706	500.00 ug/L	0.00
5) pentafluorobenzene	8.84	168	315614	50.00 ug/L	0.00
56) 1,4-difluorobenzene	9.72	114	430567	50.00 ug/L	0.00
88) chlorobenzene-d5	12.91	117	404913	50.00 ug/L	0.00
103) 1,4-dichlorobenzene-d4	15.48	152	234506	50.00 ug/L	0.00
System Monitoring Compounds					
49) dibromofluoromethane (s)	8.89	113	132621	49.29 ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 98.58%		
50) 1,2-dichloroethane-d4 (s)	9.29	65	145359	50.83 ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 101.66%		
80) toluene-d8 (s)	11.31	98	498921	50.09 ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 100.18%		
105) 4-bromofluorobenzene (s)	14.18	95	192724	50.34 ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.68%		

Target Compounds					Qvalue
2) tertiary butyl alcohol	6.92	59	3700	9.66 ug/L	88
7) chlorodifluoromethane	3.86	51	10300	2.02 ug/L	95
8) dichlorodifluoromethane	3.82	85	8651	1.90 ug/L	93
10) chloromethane	4.18	52	4879	2.19 ug/L	90
11) vinyl chloride	4.39	62	11449	1.98 ug/L	96
12) bromomethane	4.99	94	6211	2.34 ug/L	96
13) chloroethane	5.16	64	5113	1.98 ug/L	95
14) vinyl bromide	5.46	106	7316	1.98 ug/L #	93
15) trichlorofluoromethane	5.52	101	9850	1.96 ug/L	97
16) 1,3-butadiene	4.47	54	7191	1.52 ug/L #	89
19) ethyl ether	5.88	74	3510	1.92 ug/L	97
20) 2-chloropropane	6.07	39	2497	2.08 ug/L	83
21) acrolein	6.09	56	14242	20.75 ug/L	100
22) 1,1-dichloroethene	6.26	96	5735	1.93 ug/L	86
23) acetone	6.26	58	3584	10.22 ug/L #	77
24) allyl chloride	6.71	76	6782	2.62 ug/L #	61
25) acetonitrile	6.63	40	3832	20.15 ug/L	87
26) iodomethane	6.49	142	9720	1.65 ug/L	99
27) carbon disulfide	6.61	76	15292	1.59 ug/L	93
28) methylene chloride	6.87	84	6460	1.97 ug/L	92
29) methyl acetate	6.65	74	797	1.67 ug/L #	65
31) methyl tert butyl ether	7.18	73	18288	2.04 ug/L	97
32) trans-1,2-dichloroethene	7.22	96	5797	1.97 ug/L	97
33) di-isopropyl ether	7.69	45	25297	2.10 ug/L	97
34) 2-butanone	8.32	72	3413	9.03 ug/L #	86
35) 1,1-dichloroethane	7.73	63	11675	2.00 ug/L	97
36) chloroprene	7.82	53	9537	1.98 ug/L	97
37) acrylonitrile	7.13	53	12070	9.67 ug/L	98
38) vinyl acetate	7.66	86	1031	1.76 ug/L #	37
39) ethyl tert-butyl ether	8.11	59	21053	2.01 ug/L	98
40) ethyl acetate	8.31	45	934	1.77 ug/L #	74
41) 2,2-dichloropropane	8.40	77	5744	1.98 ug/L	98
42) cis-1,2-dichloroethene	8.37	96	6551	1.98 ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68756.D
Acq On : 27 Jan 2017 11:39 am
Operator : Hueanht
Sample : ic2825-2
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 27 17:27:54 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
43) methylacrylate	8.40	85	786	1.71 ug/L #	53
44) propionitrile	8.39	54	9345	20.73 ug/L	97
45) bromochloromethane	8.65	128	3191	1.87 ug/L	96
46) tetrahydrofuran	8.66	42	2285	2.09 ug/L	89
47) chloroform	8.71	85	6803	1.98 ug/L	95
48) T-BUTYL FORMATE	8.74	59	5207	1.92 ug/L	86
52) methacrylonitrile	8.56	41	4609	2.05 ug/L	99
53) 1,1,1-trichloroethane	8.95	97	7509	1.79 ug/L	90
54) cyclohexane	9.06	84	6917	1.59 ug/L	96
57) epichlorohydrin	10.87	57	3333	9.95 ug/L	93
58) n-butyl alcohol	9.75	56	9030	97.96 ug/L	92
59) carbon tetrachloride	9.14	117	6822	1.85 ug/L	98
60) 1,1-dichloropropene	9.11	75	7865	1.91 ug/L	97
61) hexane	7.52	57	10609	2.02 ug/L	97
62) Tert Amyl alcohol	9.21	73	1657	11.53 ug/L	96
63) benzene	9.35	78	23812	2.01 ug/L	93
64) iso-octane	9.42	57	27719	2.05 ug/L	96
65) tert-amyl methyl ether	9.40	87	3911	2.01 ug/L #	81
66) heptane	9.56	57	6740	2.11 ug/L	91
67) isopropyl acetate	9.23	61	2534	1.95 ug/L #	74
68) 1,2-dichloroethane	9.37	62	8171	2.09 ug/L	99
69) trichloroethene	10.02	95	6034	1.95 ug/L	96
71) ethyl acrylate	9.99	55	7406	1.88 ug/L	99
72) 2-nitropropane	10.75	41	2322	1.91 ug/L #	81
73) 2-chloroethyl vinyl ether	10.77	63	20043	9.91 ug/L	97
74) methyl methacrylate	10.25	100	1607	1.83 ug/L #	83
75) 1,2-dichloropropane	10.30	63	7196	2.13 ug/L	95
76) dibromomethane	10.41	93	3845	1.97 ug/L	86
77) methylcyclohexane	10.30	83	11072	2.06 ug/L	96
78) bromodichloromethane	10.55	83	7814	1.90 ug/L	97
79) cis-1,3-dichloropropene	11.00	75	10600	1.91 ug/L	99
81) 4-methyl-2-pentanone	11.10	58	13642	10.49 ug/L	98
82) toluene	11.39	92	14726	1.96 ug/L	99
83) 3-methyl-1-butanol	11.09	55	5766	42.27 ug/L	86
84) trans-1,3-dichloropropene	11.57	75	8639	1.85 ug/L	92
85) ethyl methacrylate	11.56	69	7935	1.87 ug/L	99
86) 1,1,2-trichloroethane	11.81	83	4867	1.96 ug/L	97
87) 2-hexanone	11.97	58	14579	10.59 ug/L	93
89) tetrachloroethene	11.96	164	6298	1.99 ug/L	91
90) 1,3-dichloropropane	12.00	76	10107	2.09 ug/L	91
91) butyl acetate	12.05	56	4485	1.92 ug/L	99
92) 3,3-DIMETHYL-1-BUTANOL	12.17	57	5680	20.24 ug/L	93
93) dibromochloromethane	12.26	129	5756	1.70 ug/L	94
94) 1,2-dibromoethane	12.43	107	6368	1.92 ug/L	91
95) n-butyl ether	12.88	57	27314	1.87 ug/L #	72
96) chlorobenzene	12.94	112	17066	1.96 ug/L	93
97) 1,1,1,2-tetrachloroethane	13.01	131	6007	1.89 ug/L	94
98) ethylbenzene	13.00	91	29195	2.02 ug/L	95
99) m,p-xylene	13.13	106	22903	3.97 ug/L	90
100) o-xylene	13.57	106	11423	1.92 ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68756.D
Acq On : 27 Jan 2017 11:39 am
Operator : Hueanht
Sample : ic2825-2
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 27 17:27:54 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
101) styrene	13.59	104	19293	1.94 ug/L	94
102) bromoform	13.84	173	3637	1.47 ug/L	91
104) isopropylbenzene	13.95	105	28811	1.94 ug/L	98
106) cyclohexanone	14.11	55	15354	21.65 ug/L	98
107) bromobenzene	14.39	156	8650	2.01 ug/L	89
108) 1,1,2,2-tetrachloroethane	14.27	83	8161	1.96 ug/L	91
109) trans-1,4-dichloro-2-buten	14.30	53	1121	1.31 ug/L	80
110) 1,2,3-trichloropropane	14.37	110	2067	1.98 ug/L	78
111) n-propylbenzene	14.41	91	35778	2.04 ug/L	98
113) 2-chlorotoluene	14.57	126	7470	1.96 ug/L	99
114) 4-chlorotoluene	14.69	91	21916	2.02 ug/L	97
115) 1,3,5-trimethylbenzene	14.59	105	25354	2.05 ug/L	96
116) tert-butylbenzene	14.97	119	22526	1.97 ug/L	98
117) pentachloroethane	15.04	167	4841	1.87 ug/L	88
118) 1,2,4-trimethylbenzene	15.03	105	25808	2.02 ug/L	98
119) sec-butylbenzene	15.21	105	33551	1.95 ug/L	99
120) 1,3-dichlorobenzene	15.40	146	16782	2.05 ug/L	97
121) p-isopropyltoluene	15.36	119	28756	1.92 ug/L	99
122) 1,4-dichlorobenzene	15.51	146	16078	2.00 ug/L	96
123) benzyl chloride	15.62	91	13212	1.74 ug/L	99
124) 1,2-dichlorobenzene	15.93	146	16347	2.04 ug/L	97
126) n-butylbenzene	15.82	92	15021	1.89 ug/L	98
128) 1,2-dibromo-3-chloropropan	16.77	75	1186	1.67 ug/L	90
129) 1,3,5-TRICHLOROBENZENE	16.97	180	13710	1.91 ug/L	99
130) 1,2,4-trichlorobenzene	17.66	180	11503	1.80 ug/L	90
131) hexachlorobutadiene	17.77	225	7235	1.99 ug/L	90
132) naphthalene	17.97	128	21157	1.85 ug/L	99
133) 1,2,3-trichlorobenzene	18.21	180	10427	1.86 ug/L	95
134) hexachloroethane	16.25	201	5024	1.74 ug/L	90
135) 2-ethylhexyl acrylate	17.67	70	350	0.26 ug/L #	57

(#) = qualifier out of range (m) = manual integration (+) = signals summed

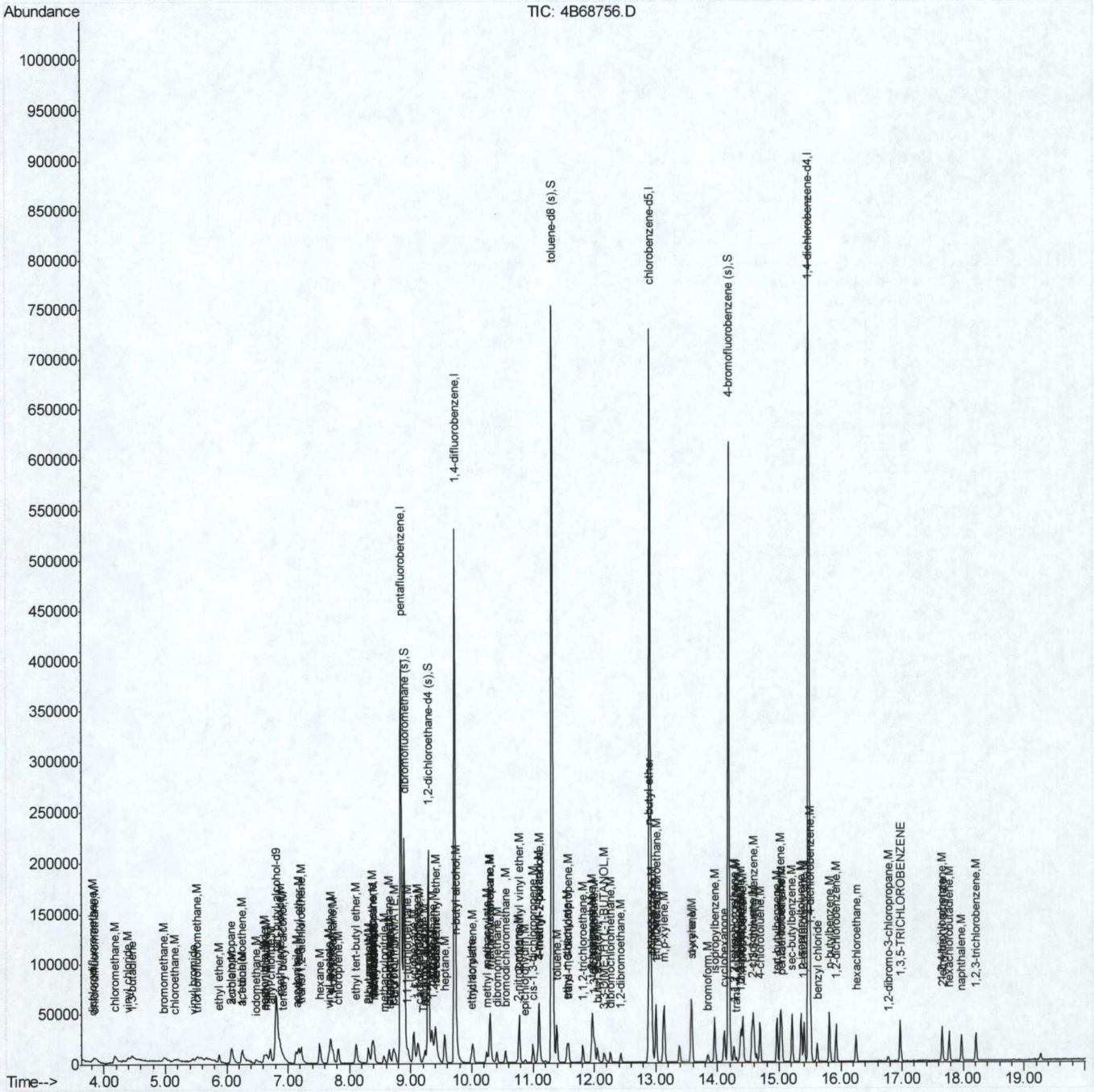
7.7.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68756.D
Acq On : 27 Jan 2017 11:39 am
Operator : Hueanht
Sample : ic2825-2
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jan 27 17:27:54 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68757.D
Acq On : 27 Jan 2017 12:07 pm
Operator : Hueanht
Sample : ic2825-20
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 27 16:16:22 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.80	65	136918	500.00	ug/L	0.00
5) pentafluorobenzene	8.84	168	299326	50.00	ug/L	0.00
56) 1,4-difluorobenzene	9.72	114	416382	50.00	ug/L	0.00
88) chlorobenzene-d5	12.90	117	393778	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	15.48	152	231659	50.00	ug/L	0.00
System Monitoring Compounds						
49) dibromofluoromethane (s)	8.89	113	127522	49.97	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 99.94%			
50) 1,2-dichloroethane-d4 (s)	9.29	65	136960	50.50	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 101.00%			
80) toluene-d8 (s)	11.31	98	479936	49.82	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.64%			
105) 4-bromofluorobenzene (s)	14.18	95	188700	49.90	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 99.80%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	6.91	59	35090	101.52	ug/L	98
3) 1,4-dioxane	10.35	88	15588	531.77	ug/L	98
7) chlorodifluoromethane	3.87	51	96818	20.01	ug/L	99
8) dichlorodifluoromethane	3.83	85	84479	19.59	ug/L	95
10) chloromethane	4.17	52	41769	19.77	ug/L	93
11) vinyl chloride	4.39	62	110824	20.17	ug/L	98
12) bromomethane	4.98	94	49953	19.85	ug/L	97
13) chloroethane	5.16	64	50388	20.59	ug/L	99
14) vinyl bromide	5.44	106	71228	20.37	ug/L	99
15) trichlorofluoromethane	5.53	101	95844	20.06	ug/L	96
16) 1,3-butadiene	4.47	54	103542	23.08	ug/L	99
19) ethyl ether	5.87	74	36523	21.10	ug/L	95
20) 2-chloropropane	6.08	39	24715	21.67	ug/L	99
21) acrolein	6.09	56	134047	205.96	ug/L	97
22) 1,1-dichloroethene	6.25	96	58993	20.97	ug/L	99
23) acetone	6.26	58	35774	107.56	ug/L	93
24) allyl chloride	6.72	76	43325	17.67	ug/L	92
25) acetonitrile	6.63	40	37742	209.29	ug/L	95
26) iodomethane	6.49	142	120706	21.59	ug/L	99
27) carbon disulfide	6.62	76	199848	21.98	ug/L	99
28) methylene chloride	6.87	84	65112	20.89	ug/L	94
29) methyl acetate	6.65	74	9717	21.49	ug/L	91
31) methyl tert butyl ether	7.18	73	177867	20.89	ug/L	99
32) trans-1,2-dichloroethene	7.22	96	58756	21.02	ug/L	97
33) di-isopropyl ether	7.69	45	240544	21.08	ug/L	98
34) 2-butanone	8.31	72	38368	107.03	ug/L	95
35) 1,1-dichloroethane	7.73	63	117188	21.18	ug/L	99
36) chloroprene	7.82	53	95303	20.86	ug/L	99
37) acrylonitrile	7.13	53	126117	106.55	ug/L	96
38) vinyl acetate	7.66	86	11429	20.62	ug/L	94
39) ethyl tert-butyl ether	8.11	59	206367	20.74	ug/L	99
40) ethyl acetate	8.31	45	10762	21.48	ug/L	93
41) 2,2-dichloropropane	8.39	77	60868	22.18	ug/L	100

7.7.2 7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68757.D
Acq On : 27 Jan 2017 12:07 pm
Operator : Hueanht
Sample : ic2825-20
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 27 16:16:22 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
42) cis-1,2-dichloroethene	8.37	96	65747	20.93 ug/L	100
43) methylacrylate	8.39	85	9309	21.41 ug/L #	92
44) propionitrile	8.39	54	91601	214.29 ug/L	100
45) bromochloromethane	8.65	128	33973	21.00 ug/L	94
46) tetrahydrofuran	8.66	42	21810	21.06 ug/L	99
47) chloroform	8.71	85	68637	21.06 ug/L	99
48) T-BUTYL FORMATE	8.74	59	53397	20.77 ug/L	94
51) freon 113	6.26	151	50695	22.01 ug/L	97
52) methacrylonitrile	8.56	41	43228	20.25 ug/L	99
53) 1,1,1-trichloroethane	8.95	97	83587	21.04 ug/L	98
54) cyclohexane	9.06	84	87935	21.36 ug/L	98
57) epichlorohydrin	10.87	57	33522	103.53 ug/L	95
58) n-butyl alcohol	9.75	56	100512	1127.55 ug/L	98
59) carbon tetrachloride	9.14	117	75301	21.12 ug/L	100
60) 1,1-dichloropropene	9.11	75	84730	21.29 ug/L	98
61) hexane	7.52	57	103470	20.33 ug/L	99
62) Tert Amyl alcohol	9.21	73	15702	112.97 ug/L	97
63) benzene	9.35	78	239692	20.88 ug/L	100
64) iso-octane	9.42	57	265234	20.28 ug/L	99
65) tert-amyl methyl ether	9.40	87	39060	20.75 ug/L	94
66) heptane	9.56	57	61786	19.98 ug/L	98
67) isopropyl acetate	9.23	61	25690	20.48 ug/L	94
68) 1,2-dichloroethane	9.37	62	79009	20.94 ug/L	98
69) trichloroethene	10.02	95	63065	21.13 ug/L	97
71) ethyl acrylate	9.99	55	79431	20.84 ug/L	100
72) 2-nitropropane	10.75	41	24851	21.18 ug/L #	56
73) 2-chloroethyl vinyl ether	10.77	63	204514	104.61 ug/L	99
74) methyl methacrylate	10.24	100	17504	20.61 ug/L	95
75) 1,2-dichloropropane	10.30	63	68995	21.10 ug/L	98
76) dibromomethane	10.41	93	38898	20.59 ug/L	94
77) methylcyclohexane	10.30	83	106124	20.37 ug/L	98
78) bromodichloromethane	10.55	83	81882	20.58 ug/L	99
79) cis-1,3-dichloropropene	11.00	75	111447	20.75 ug/L	96
81) 4-methyl-2-pentanone	11.09	58	134497	106.96 ug/L	94
82) toluene	11.39	92	150368	20.70 ug/L	97
83) 3-methyl-1-butanol	11.09	55	57451	435.55 ug/L	94
84) trans-1,3-dichloropropene	11.57	75	94532	20.99 ug/L	95
85) ethyl methacrylate	11.55	69	85501	20.81 ug/L	99
86) 1,1,2-trichloroethane	11.81	83	49059	20.48 ug/L	99
87) 2-hexanone	11.97	58	140613	105.65 ug/L	97
89) tetrachloroethene	11.96	164	62023	20.19 ug/L	96
90) 1,3-dichloropropane	12.00	76	94990	20.23 ug/L	98
91) butyl acetate	12.05	56	46251	20.36 ug/L	97
92) 3,3-DIMETHYL-1-BUTANOL	12.16	57	56222	206.02 ug/L	98
93) dibromochloromethane	12.26	129	65496	19.83 ug/L	98
94) 1,2-dibromoethane	12.43	107	63815	19.83 ug/L	100
95) n-butyl ether	12.88	57	292462	20.56 ug/L	99
96) chlorobenzene	12.94	112	172031	20.27 ug/L	99
97) 1,1,1,2-tetrachloroethane	13.01	131	62377	20.20 ug/L	97
98) ethylbenzene	13.00	91	287271	20.46 ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68757.D
Acq On : 27 Jan 2017 12:07 pm
Operator : Hueanht
Sample : ic2825-20
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 27 16:16:22 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
99) m,p-xylene	13.13	106	224981	40.09 ug/L	96
100) o-xylene	13.57	106	116151	20.10 ug/L	98
101) styrene	13.58	104	196755	20.39 ug/L	99
102) bromoform	13.84	173	45527	18.97 ug/L	97
104) isopropylbenzene	13.95	105	306029	20.91 ug/L	100
106) cyclohexanone	14.11	55	151199	215.81 ug/L	100
107) bromobenzene	14.38	156	86204	20.31 ug/L	99
108) 1,1,2,2-tetrachloroethane	14.27	83	83797	20.42 ug/L	100
109) trans-1,4-dichloro-2-buten	14.30	53	14347	16.92 ug/L	99
110) 1,2,3-trichloropropane	14.37	110	21354	20.72 ug/L	98
111) n-propylbenzene	14.41	91	359218	20.74 ug/L	99
113) 2-chlorotoluene	14.56	126	76584	20.37 ug/L	97
114) 4-chlorotoluene	14.69	91	220148	20.50 ug/L	99
115) 1,3,5-trimethylbenzene	14.59	105	253652	20.73 ug/L	100
116) tert-butylbenzene	14.96	119	234160	20.72 ug/L	97
117) pentachloroethane	15.04	167	52369	20.51 ug/L	98
118) 1,2,4-trimethylbenzene	15.02	105	264305	20.96 ug/L	99
119) sec-butylbenzene	15.21	105	355365	20.88 ug/L	99
120) 1,3-dichlorobenzene	15.40	146	166651	20.64 ug/L	99
121) p-isopropyltoluene	15.36	119	314684	21.22 ug/L	99
122) 1,4-dichlorobenzene	15.51	146	163199	20.53 ug/L	99
123) benzyl chloride	15.61	91	156423	20.82 ug/L	99
124) 1,2-dichlorobenzene	15.93	146	167009	21.07 ug/L	99
126) n-butylbenzene	15.82	92	167627	21.32 ug/L	98
128) 1,2-dibromo-3-chloropropan	16.77	75	14459	20.65 ug/L	95
129) 1,3,5-TRICHLOROBENZENE	16.97	180	154179	21.69 ug/L	99
130) 1,2,4-trichlorobenzene	17.66	180	136912	21.63 ug/L	97
131) hexachlorobutadiene	17.77	225	77420	21.56 ug/L	98
132) naphthalene	17.97	128	237940	21.09 ug/L	100
133) 1,2,3-trichlorobenzene	18.21	180	117091	21.13 ug/L	100
134) hexachloroethane	16.25	201	57208	20.11 ug/L	98
135) 2-ethylhexyl acrylate	17.66	70	4324	3.29 ug/L	84
136) 2-methylnaphthalene	19.27	142	53604	19.99 ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

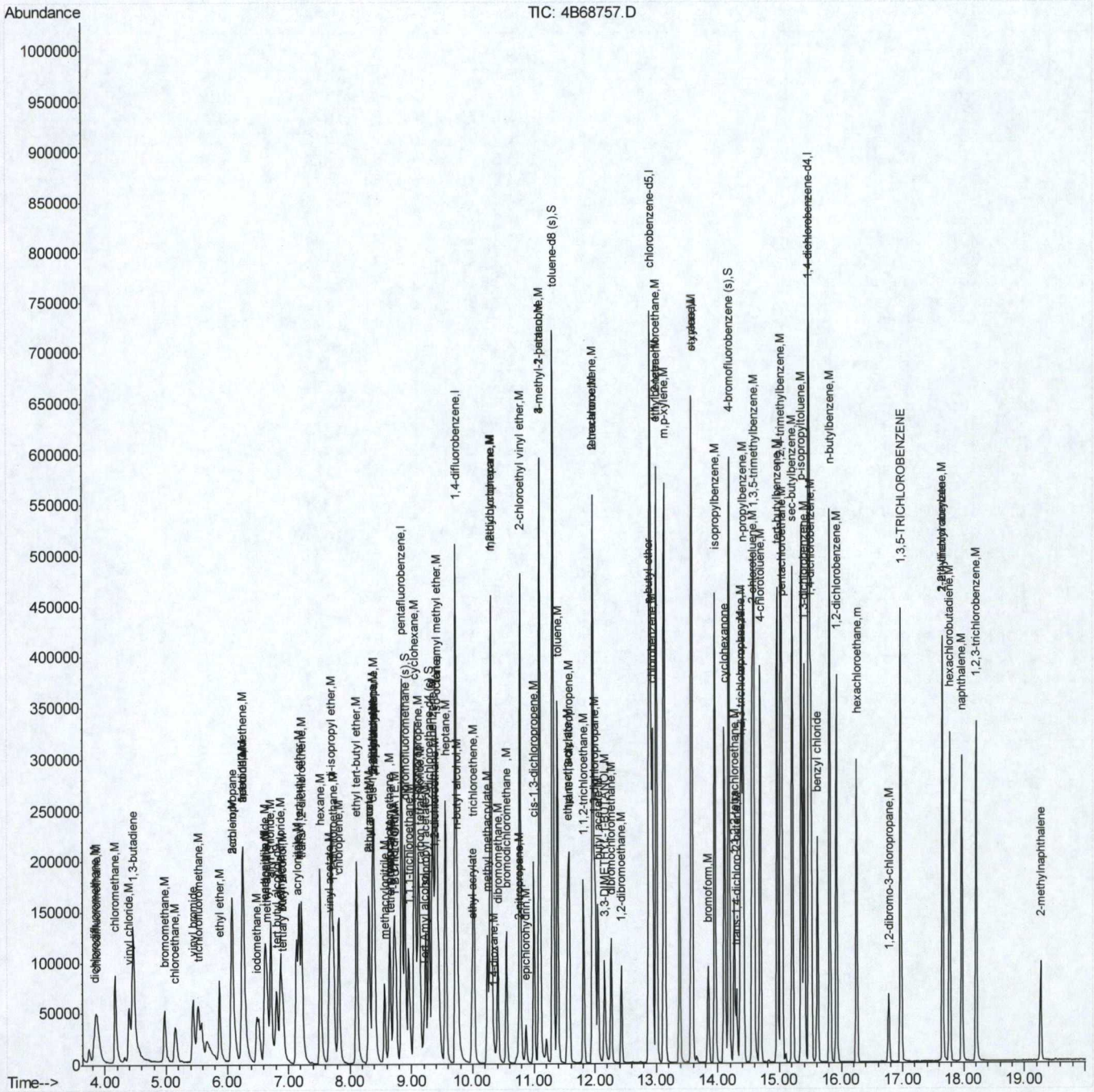
7.7.2

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68757.D
Acq On : 27 Jan 2017 12:07 pm
Operator : Hueanht
Sample : ic2825-20
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jan 27 16:16:22 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68758.D
Acq On : 27 Jan 2017 12:35 pm
Operator : Hueanht
Sample : icc2825-50
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 27 16:08:22 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) tert butyl alcohol-d9	6.80	65	120386	500.00 ug/L	0.00
5) pentafluorobenzene	8.84	168	293509	50.00 ug/L	0.00
56) 1,4-difluorobenzene	9.72	114	413869	50.00 ug/L	0.00
88) chlorobenzene-d5	12.90	117	382133	50.00 ug/L	0.00
103) 1,4-dichlorobenzene-d4	15.48	152	230264	50.00 ug/L	0.00

System Monitoring Compounds					
49) dibromofluoromethane (s)	8.89	113	125928	50.32 ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.64%		
50) 1,2-dichloroethane-d4 (s)	9.29	65	132810	49.94 ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 99.88%		
80) toluene-d8 (s)	11.31	98	477998	49.92 ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.84%		
105) 4-bromofluorobenzene (s)	14.18	95	186327	49.57 ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 99.14%		

Target Compounds					Qvalue
2) tertiary butyl alcohol	6.90	59	78467	258.20 ug/L	99
3) 1,4-dioxane	10.34	88	35068	1360.61 ug/L	100
7) chlorodifluoromethane	3.87	51	239254	50.43 ug/L	100
8) dichlorodifluoromethane	3.83	85	221009	52.28 ug/L	100
10) chloromethane	4.17	52	102536	49.50 ug/L	100
11) vinyl chloride	4.40	62	277944	51.58 ug/L	100
12) bromomethane	4.97	94	127909	51.84 ug/L	100
13) chloroethane	5.15	64	126732	52.81 ug/L	100
14) vinyl bromide	5.44	106	176969	51.61 ug/L	100
15) trichlorofluoromethane	5.53	101	245977	52.50 ug/L	100
16) 1,3-butadiene	4.47	54	243695	55.39 ug/L	100
19) ethyl ether	5.88	74	87926	51.81 ug/L	100
20) 2-chloropropane	6.08	39	57618	51.52 ug/L	100
21) acrolein	6.09	56	325959	510.75 ug/L	100
22) 1,1-dichloroethene	6.26	96	143508	52.03 ug/L	100
23) acetone	6.26	58	83352	255.58 ug/L	100
24) allyl chloride	6.71	76	112199	46.65 ug/L	100
25) acetonitrile	6.62	40	91530	517.61 ug/L	100
26) iodomethane	6.51	142	293302	53.51 ug/L	100
27) carbon disulfide	6.62	76	489322	54.88 ug/L	100
28) methylene chloride	6.87	84	156646	51.25 ug/L	100
29) methyl acetate	6.65	74	23889	53.89 ug/L	100
31) methyl tert butyl ether	7.17	73	426217	51.05 ug/L	100
32) trans-1,2-dichloroethene	7.22	96	141692	51.69 ug/L	100
33) di-isopropyl ether	7.69	45	566065	50.60 ug/L	100
34) 2-butanone	8.31	72	92253	262.44 ug/L	100
35) 1,1-dichloroethane	7.73	63	280346	51.66 ug/L	100
36) chloroprene	7.82	53	231290	51.64 ug/L	100
37) acrylonitrile	7.13	53	297374	256.23 ug/L	100
38) vinyl acetate	7.66	86	28974	53.32 ug/L	100
39) ethyl tert-butyl ether	8.11	59	497837	51.03 ug/L	100
40) ethyl acetate	8.31	45	26519	53.98 ug/L	100
41) 2,2-dichloropropane	8.39	77	142254	52.86 ug/L	100

7.7.3 7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68758.D
Acq On : 27 Jan 2017 12:35 pm
Operator : Hueanht
Sample : icc2825-50
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 27 16:08:22 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
42) cis-1,2-dichloroethene	8.37	96	159728	51.86 ug/L	100
43) methylacrylate	8.39	85	22788	53.46 ug/L	100
44) propionitrile	8.39	54	208875	498.32 ug/L	100
45) bromochloromethane	8.65	128	82650	52.11 ug/L	100
46) tetrahydrofuran	8.66	42	50880	50.09 ug/L	100
47) chloroform	8.71	85	164174	51.38 ug/L	100
48) T-BUTYL FORMATE	8.75	59	129830	51.50 ug/L	100
51) freon 113	6.26	151	126412	55.96 ug/L	100
52) methacrylonitrile	8.56	41	107182	51.20 ug/L	100
53) 1,1,1-trichloroethane	8.95	97	207779	53.33 ug/L	100
54) cyclohexane	9.06	84	225306	55.82 ug/L	100
57) epichlorohydrin	10.87	57	79207	246.11 ug/L	100
58) n-butyl alcohol	9.75	56	211422	2386.15 ug/L	100
59) carbon tetrachloride	9.14	117	185725	52.41 ug/L	100
60) 1,1-dichloropropene	9.11	75	207096	52.35 ug/L	100
61) hexane	7.52	57	261788	51.74 ug/L	100
62) Tert Amyl alcohol	9.21	73	34538	250.00 ug/L	100
63) benzene	9.35	78	586984	51.45 ug/L	100
64) iso-octane	9.42	57	659965	50.77 ug/L	100
65) tert-amyl methyl ether	9.40	87	94954	50.76 ug/L	100
66) heptane	9.56	57	157355	51.18 ug/L	100
67) isopropyl acetate	9.23	61	64982	52.13 ug/L	100
68) 1,2-dichloroethane	9.37	62	190378	50.77 ug/L	100
69) trichloroethene	10.02	95	153833	51.85 ug/L	100
71) ethyl acrylate	9.99	55	197535	52.15 ug/L	100
72) 2-nitropropane	10.75	41	60236	51.66 ug/L	100
73) 2-chloroethyl vinyl ether	10.77	63	501392	258.02 ug/L	100
74) methyl methacrylate	10.24	100	44514	52.74 ug/L	100
75) 1,2-dichloropropane	10.30	63	164195	50.52 ug/L	100
76) dibromomethane	10.41	93	96724	51.52 ug/L	100
77) methylcyclohexane	10.30	83	264745	51.13 ug/L	100
78) bromodichloromethane	10.55	83	206252	52.14 ug/L	100
79) cis-1,3-dichloropropene	11.00	75	278457	52.16 ug/L	100
81) 4-methyl-2-pentanone	11.09	58	313618	250.92 ug/L	100
82) toluene	11.39	92	372559	51.61 ug/L	100
83) 3-methyl-1-butanol	11.08	55	126072	961.59 ug/L	100
84) trans-1,3-dichloropropene	11.58	75	235398	52.58 ug/L	100
85) ethyl methacrylate	11.55	69	213408	52.26 ug/L	100
86) 1,1,2-trichloroethane	11.81	83	122279	51.34 ug/L	100
87) 2-hexanone	11.97	58	329043	248.72 ug/L	100
89) tetrachloroethene	11.96	164	154471	51.82 ug/L	100
90) 1,3-dichloropropane	12.00	76	228709	50.20 ug/L	100
91) butyl acetate	12.05	56	111807	50.72 ug/L	100
92) 3,3-DIMETHYL-1-BUTANOL	12.16	57	127861	482.82 ug/L	100
93) dibromochloromethane	12.26	129	171211	53.43 ug/L	100
94) 1,2-dibromoethane	12.43	107	160978	51.54 ug/L	100
95) n-butyl ether	12.88	57	724357	52.48 ug/L	100
96) chlorobenzene	12.94	112	422971	51.36 ug/L	100
97) 1,1,1,2-tetrachloroethane	13.01	131	155866	52.00 ug/L	100
98) ethylbenzene	13.00	91	696825	51.15 ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68758.D
Acq On : 27 Jan 2017 12:35 pm
Operator : Hueanht
Sample : icc2825-50
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 27 16:08:22 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
99) m,p-xylene	13.13	106	555366	101.97 ug/L	100
100) o-xylene	13.57	106	290521	51.82 ug/L	100
101) styrene	13.58	104	482007	51.48 ug/L	100
102) bromoform	13.84	173	127746	54.85 ug/L	100
104) isopropylbenzene	13.95	105	757335	52.06 ug/L	100
106) cyclohexanone	14.11	55	350384	503.14 ug/L	100
107) bromobenzene	14.38	156	216101	51.23 ug/L	100
108) 1,1,2,2-tetrachloroethane	14.27	83	210514	51.62 ug/L	100
109) trans-1,4-dichloro-2-buten	14.30	53	42953	50.96 ug/L	100
110) 1,2,3-trichloropropane	14.37	110	51703	50.48 ug/L	100
111) n-propylbenzene	14.41	91	878247	51.01 ug/L	100
113) 2-chlorotoluene	14.57	126	192548	51.53 ug/L	100
114) 4-chlorotoluene	14.69	91	547975	51.32 ug/L	100
115) 1,3,5-trimethylbenzene	14.59	105	623794	51.28 ug/L	100
116) tert-butylbenzene	14.97	119	584618	52.03 ug/L	100
117) pentachloroethane	15.04	167	129875	51.17 ug/L	100
118) 1,2,4-trimethylbenzene	15.02	105	649054	51.77 ug/L	100
119) sec-butylbenzene	15.21	105	886910	52.44 ug/L	100
120) 1,3-dichlorobenzene	15.40	146	410105	51.11 ug/L	100
121) p-isopropyltoluene	15.36	119	778040	52.79 ug/L	100
122) 1,4-dichlorobenzene	15.51	146	407781	51.62 ug/L	100
123) benzyl chloride	15.61	91	402260	53.88 ug/L	100
124) 1,2-dichlorobenzene	15.93	146	405001	51.40 ug/L	100
126) n-butylbenzene	15.82	92	418847	53.61 ug/L	100
128) 1,2-dibromo-3-chloropropan	16.77	75	38060	54.70 ug/L	100
129) 1,3,5-TRICHLOROBENZENE	16.97	180	372033	52.66 ug/L	100
130) 1,2,4-trichlorobenzene	17.66	180	336923	53.55 ug/L	100
131) hexachlorobutadiene	17.77	225	184076	51.56 ug/L	100
132) naphthalene	17.97	128	593060	52.88 ug/L	100
133) 1,2,3-trichlorobenzene	18.21	180	290084	52.67 ug/L	100
134) hexachloroethane	16.25	201	152982	54.11 ug/L	100
135) 2-ethylhexyl acrylate	17.66	70	14093	10.80 ug/L	100
136) 2-methylnaphthalene	19.27	142	151506	56.83 ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

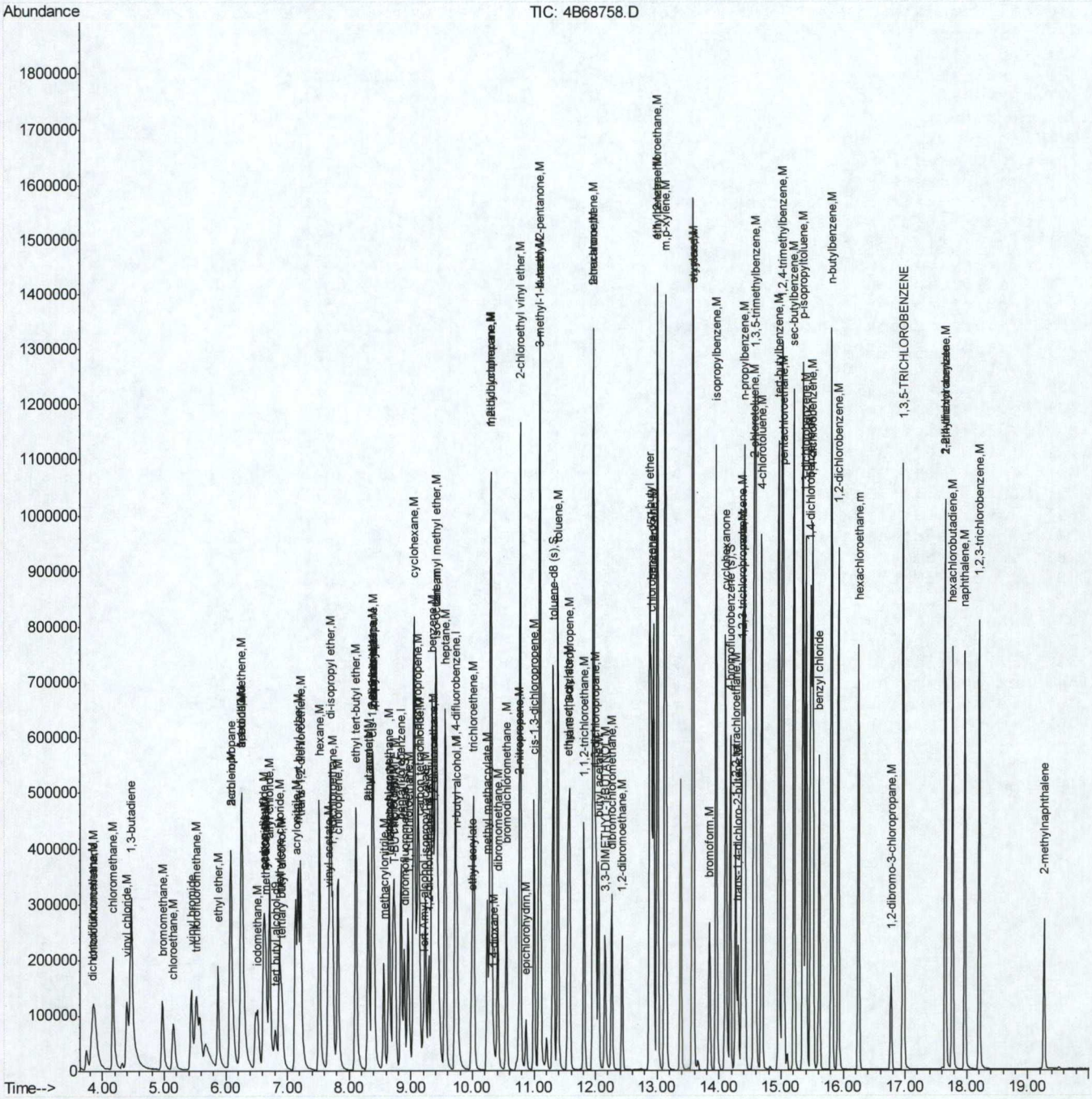
7.7.3

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68758.D
Acq On : 27 Jan 2017 12:35 pm
Operator : Hueanht
Sample : icc2825-50
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jan 27 16:08:22 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration



SGS ACCUTEST JC37024

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68759.D
Acq On : 27 Jan 2017 1:03 pm
Operator : Hueanht
Sample : ic2825-200
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 27 16:16:47 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) tert butyl alcohol-d9	6.82	65	117695	500.00 ug/L	0.02
5) pentafluorobenzene	8.84	168	281126	50.00 ug/L	0.00
56) 1,4-difluorobenzene	9.72	114	397934	50.00 ug/L	0.00
88) chlorobenzene-d5	12.91	117	360023	50.00 ug/L	0.00
103) 1,4-dichlorobenzene-d4	15.48	152	229018	50.00 ug/L	0.00
System Monitoring Compounds					
49) dibromofluoromethane (s)	8.89	113	120856	50.42 ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.84%		
50) 1,2-dichloroethane-d4 (s)	9.29	65	124126	48.73 ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 97.46%		
80) toluene-d8 (s)	11.31	98	461918	50.17 ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 100.34%		
105) 4-bromofluorobenzene (s)	14.18	95	187654	50.19 ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.38%		
Target Compounds					Qvalue
2) tertiary butyl alcohol	6.92	59	292190	983.43 ug/L	94
3) 1,4-dioxane	10.35	88	130726	5188.01 ug/L	95
7) chlorodifluoromethane	3.86	51	891674	196.24 ug/L	98
8) dichlorodifluoromethane	3.82	85	828657	204.65 ug/L	99
10) chloromethane	4.17	52	367670	185.30 ug/L	97
11) vinyl chloride	4.40	62	1003305	194.40 ug/L	98
12) bromomethane	4.96	94	378050	159.98 ug/L	98
13) chloroethane	5.14	64	424694	184.76 ug/L	98
14) vinyl bromide	5.43	106	628677	191.43 ug/L	100
15) trichlorofluoromethane	5.52	101	869932	193.87 ug/L	99
16) 1,3-butadiene	4.47	54	824347	195.63 ug/L	100
19) ethyl ether	5.88	74	307945	189.43 ug/L	99
20) 2-chloropropane	6.08	39	181598	169.54 ug/L	91
21) acrolein	6.09	56	1113828	1822.14 ug/L	99
22) 1,1-dichloroethene	6.25	96	498924	188.84 ug/L	97
23) acetone	6.26	58	274928	880.13 ug/L	100
24) allyl chloride	6.71	76	401893	174.48 ug/L	91
25) acetonitrile	6.63	40	308508	1821.48 ug/L	97
26) iodomethane	6.51	142	1076862	205.12 ug/L	99
27) carbon disulfide	6.62	76	1718755	201.24 ug/L	100
28) methylene chloride	6.87	84	554903	189.55 ug/L	95
29) methyl acetate	6.65	74	85923	202.35 ug/L	94
31) methyl tert butyl ether	7.18	73	1455418	181.99 ug/L	100
32) trans-1,2-dichloroethene	7.21	96	489213	186.34 ug/L	99
33) di-isopropyl ether	7.70	45	1890808	176.46 ug/L	97
34) 2-butanone	8.31	72	328935	976.99 ug/L #	91
35) 1,1-dichloroethane	7.73	63	943492	181.52 ug/L	99
36) chloroprene	7.81	53	801378	186.80 ug/L	99
37) acrylonitrile	7.13	53	1047575	942.39 ug/L	99
38) vinyl acetate	7.66	86	106216	204.07 ug/L	95
39) ethyl tert-butyl ether	8.11	59	1753646	187.66 ug/L	98
40) ethyl acetate	8.31	45	90568	192.47 ug/L	98
41) 2,2-dichloropropane	8.39	77	433864	168.31 ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68759.D
Acq On : 27 Jan 2017 1:03 pm
Operator : Hueanht
Sample : ic2825-200
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 27 16:16:47 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
42) cis-1,2-dichloroethene	8.37	96	546857	185.39 ug/L	98
43) methylacrylate	8.39	85	81888	200.56 ug/L #	90
44) propionitrile	8.39	54	718818	1790.46 ug/L	99
45) bromochloromethane	8.65	128	295467	194.48 ug/L	93
46) tetrahydrofuran	8.66	42	174851	179.73 ug/L	96
47) chloroform	8.71	85	568840	185.86 ug/L	99
48) T-BUTYL FORMATE	8.75	59	469092	194.26 ug/L	97
51) freon 113	6.25	151	458773	212.05 ug/L	100
52) methacrylonitrile	8.56	41	376981	188.00 ug/L	98
53) 1,1,1-trichloroethane	8.95	97	735467	197.08 ug/L	99
54) cyclohexane	9.06	84	787416	203.69 ug/L	93
57) epichlorohydrin	10.87	57	304724	984.76 ug/L	98
58) n-butyl alcohol	9.75	56	799425	9383.75 ug/L	98
59) carbon tetrachloride	9.14	117	661399	194.11 ug/L	98
60) 1,1-dichloropropene	9.11	75	709854	186.62 ug/L	98
61) hexane	7.52	57	912324	187.54 ug/L	98
62) Tert Amyl alcohol	9.21	73	133717	1006.66 ug/L	95
63) benzene	9.35	78	2026423	184.74 ug/L	99
64) iso-octane	9.43	57	2363068	189.08 ug/L	98
65) tert-amyl methyl ether	9.40	87	338919	188.44 ug/L	97
66) heptane	9.56	57	546303	184.80 ug/L	98
67) isopropyl acetate	9.24	61	229256	191.27 ug/L	95
68) 1,2-dichloroethane	9.37	62	641768	178.01 ug/L	99
69) trichloroethene	10.02	95	530203	185.86 ug/L	96
71) ethyl acrylate	9.99	55	710277	195.03 ug/L	99
72) 2-nitropropane	10.75	41	213114	190.09 ug/L #	82
73) 2-chloroethyl vinyl ether	10.77	63	1738283	930.36 ug/L	98
74) methyl methacrylate	10.25	100	162208	199.88 ug/L	88
75) 1,2-dichloropropane	10.30	63	544238	174.14 ug/L	98
76) dibromomethane	10.41	93	345072	191.15 ug/L	94
77) methylcyclohexane	10.30	83	926735	186.16 ug/L	97
78) bromodichloromethane	10.55	83	744592	195.78 ug/L	99
79) cis-1,3-dichloropropene	11.00	75	990745	193.01 ug/L	99
81) 4-methyl-2-pentanone	11.10	58	1054556	877.53 ug/L	91
82) toluene	11.39	92	1321949	190.45 ug/L	95
83) 3-methyl-1-butanol	11.09	55	448595	3558.58 ug/L	96
84) trans-1,3-dichloropropene	11.58	75	836633	194.35 ug/L	98
85) ethyl methacrylate	11.55	69	769550	196.01 ug/L	98
86) 1,1,2-trichloroethane	11.81	83	442936	193.43 ug/L	99
87) 2-hexanone	11.97	58	1131273	889.36 ug/L	93
89) tetrachloroethene	11.96	164	537424	191.37 ug/L	98
90) 1,3-dichloropropane	12.00	76	804926	187.52 ug/L	93
91) butyl acetate	12.05	56	418638	201.56 ug/L	99
92) 3,3-DIMETHYL-1-BUTANOL	12.16	57	495090	1984.33 ug/L	97
93) dibromochloromethane	12.27	129	659451	218.43 ug/L	100
94) 1,2-dibromoethane	12.43	107	597885	203.17 ug/L	99
95) n-butyl ether	12.88	57	2570972	197.71 ug/L	99
96) chlorobenzene	12.94	112	1522675	196.26 ug/L	98
97) 1,1,1,2-tetrachloroethane	13.01	131	567236	200.88 ug/L	98
98) ethylbenzene	13.00	91	2420630	188.58 ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68759.D
Acq On : 27 Jan 2017 1:03 pm
Operator : Hueanht
Sample : ic2825-200
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 27 16:16:47 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
99) m,p-xylene	13.13	106	2023780	394.40 ug/L	97
100) o-xylene	13.57	106	1053203	199.39 ug/L	95
101) styrene	13.59	104	1726057	195.68 ug/L	93
102) bromoform	13.84	173	534424	243.55 ug/L	98
104) isopropylbenzene	13.95	105	2723589	188.23 ug/L	98
106) cyclohexanone	14.11	55	1152837	1664.44 ug/L	98
107) bromobenzene	14.39	156	799666	190.60 ug/L	94
108) 1,1,2,2-tetrachloroethane	14.27	83	782115	192.82 ug/L	98
109) trans-1,4-dichloro-2-buten	14.30	53	190295	226.99 ug/L	95
110) 1,2,3-trichloropropane	14.37	110	196333	192.72 ug/L	100
111) n-propylbenzene	14.41	91	3160440	184.56 ug/L	98
113) 2-chlorotoluene	14.57	126	720285	193.82 ug/L	97
114) 4-chlorotoluene	14.69	91	1998394	188.19 ug/L	98
115) 1,3,5-trimethylbenzene	14.59	105	2213958	182.98 ug/L	97
116) tert-butylbenzene	14.97	119	2099045	187.84 ug/L	99
117) pentachloroethane	15.05	167	512338	202.95 ug/L	97
118) 1,2,4-trimethylbenzene	15.03	105	2259526	181.21 ug/L	97
119) sec-butylbenzene	15.21	105	3139005	186.61 ug/L	98
120) 1,3-dichlorobenzene	15.41	146	1466195	183.73 ug/L	99
121) p-isopropyltoluene	15.36	119	2712223	185.03 ug/L	98
122) 1,4-dichlorobenzene	15.51	146	1480123	188.37 ug/L	99
123) benzyl chloride	15.62	91	1503774	202.50 ug/L	99
124) 1,2-dichlorobenzene	15.93	146	1411199	180.06 ug/L	99
126) n-butylbenzene	15.82	92	1426375	183.55 ug/L	97
128) 1,2-dibromo-3-chloropropan	16.77	75	143473	207.31 ug/L	98
129) 1,3,5-TRICHLOROBENZENE	16.97	180	1278411	181.93 ug/L	99
130) 1,2,4-trichlorobenzene	17.66	180	1188689	189.96 ug/L	98
131) hexachlorobutadiene	17.77	225	636285	179.20 ug/L	98
132) naphthalene	17.97	128	2144996	192.31 ug/L	99
133) 1,2,3-trichlorobenzene	18.21	180	1052201	192.09 ug/L	97
134) hexachloroethane	16.25	201	584899	207.99 ug/L	97
135) 2-ethylhexyl acrylate	17.66	70	74593	57.49 ug/L	89
136) 2-methylnaphthalene	19.27	142	617745	232.98 ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

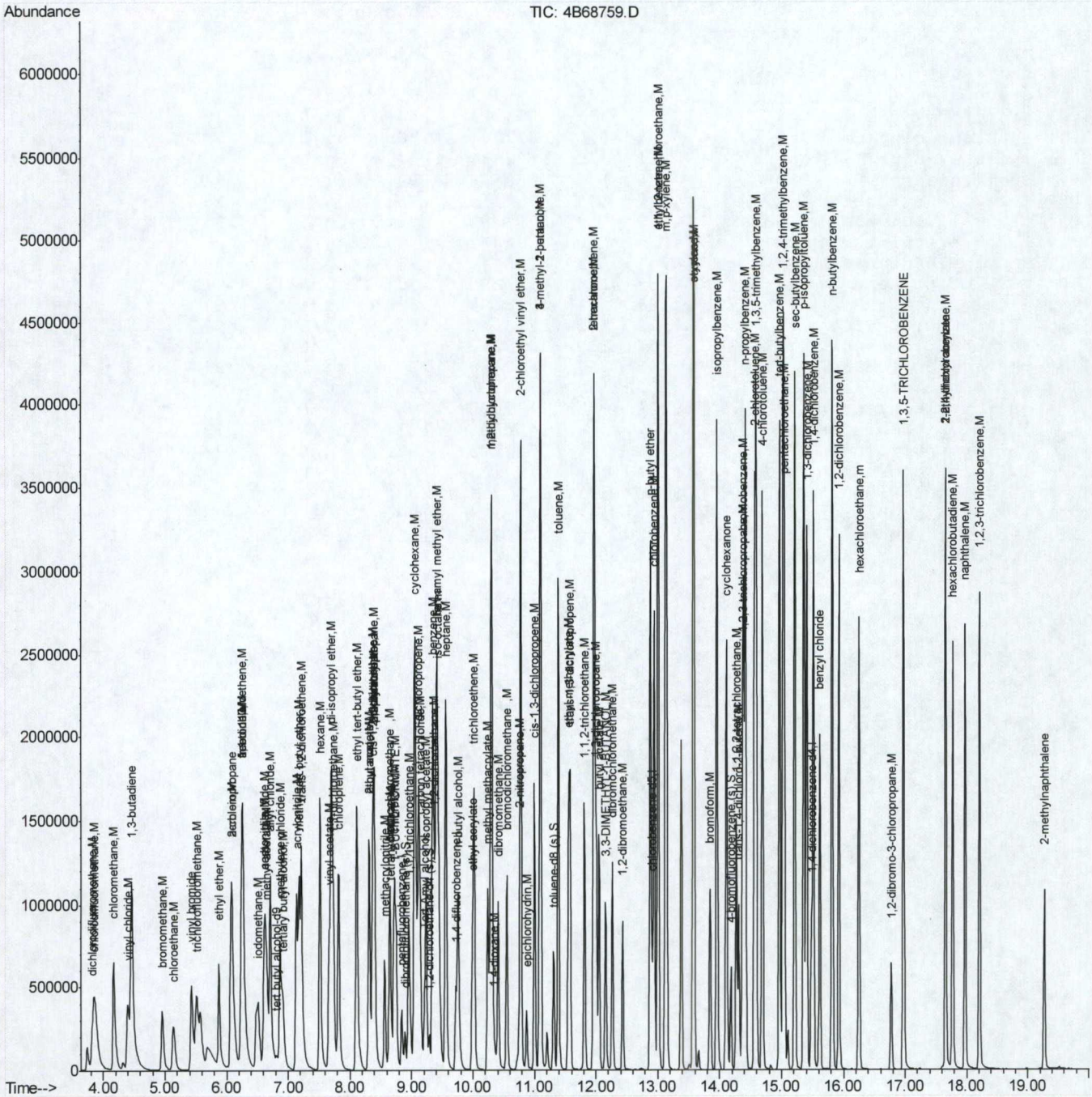
7.7.4

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68759.D
Acq On : 27 Jan 2017 1:03 pm
Operator : Hueanht
Sample : ic2825-200
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 27 16:16:47 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68762.D
Acq On : 27 Jan 2017 2:30 pm
Operator : Hueanht
Sample : ic2825-0.2
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 27 17:25:11 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) tert butyl alcohol-d9	6.81	65	148836	500.00 ug/L	0.00
5) pentafluorobenzene	8.84	168	319000	50.00 ug/L	0.00
56) 1,4-difluorobenzene	9.72	114	432372	50.00 ug/L	0.00
88) chlorobenzene-d5	12.91	117	407648	50.00 ug/L	0.00
103) 1,4-dichlorobenzene-d4	15.48	152	237277	50.00 ug/L	0.00

System Monitoring Compounds					
49) dibromofluoromethane (s)	8.89	113	132827	48.84 ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 97.68%		
50) 1,2-dichloroethane-d4 (s)	9.29	65	144205	49.89 ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 99.78%		
80) toluene-d8 (s)	11.31	98	500588	50.04 ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 100.08%		
105) 4-bromofluorobenzene (s)	14.18	95	195400	50.45 ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.90%		

Target Compounds					Qvalue
10) chloromethane	4.17	52	368	0.16 ug/L #	24
11) vinyl chloride	4.39	62	1125	0.19 ug/L	92
14) vinyl bromide	5.46	106	704	0.19 ug/L #	85
26) iodomethane	6.53	142	1344	0.23 ug/L	84
31) methyl tert butyl ether	7.17	73	1860	0.20 ug/L	92
32) trans-1,2-dichloroethene	7.22	96	586	0.20 ug/L #	53
33) di-isopropyl ether	7.69	45	2960	0.24 ug/L	87
35) 1,1-dichloroethane	7.73	63	1355	0.23 ug/L	82
36) chloroprene	7.82	53	1046	0.21 ug/L	92
37) acrylonitrile	7.14	53	1374	1.09 ug/L	79
39) ethyl tert-butyl ether	8.11	59	2208	0.21 ug/L	90
41) 2,2-dichloropropane	8.39	77	627	0.21 ug/L	67
45) bromochloromethane	8.65	128	295	0.17 ug/L #	81
53) 1,1,1-trichloroethane	8.96	97	837	0.20 ug/L #	71
59) carbon tetrachloride	9.13	117	755	0.20 ug/L	73
60) 1,1-dichloropropene	9.11	75	897	0.22 ug/L #	69
61) hexane	7.52	57	988	0.19 ug/L	81
63) benzene	9.34	78	2995	0.25 ug/L	99
64) iso-octane	9.41	57	2803	0.21 ug/L	95
65) tert-amyl methyl ether	9.40	87	310	0.16 ug/L #	26
68) 1,2-dichloroethane	9.37	62	754	0.19 ug/L	83
69) trichloroethene	10.02	95	626	0.20 ug/L	81
73) 2-chloroethyl vinyl ether	10.77	63	2549	1.26 ug/L	97
75) 1,2-dichloropropane	10.30	63	582	0.17 ug/L	91
76) dibromomethane	10.42	93	431	0.22 ug/L	86
77) methylcyclohexane	10.30	83	974	0.18 ug/L	94
78) bromodichloromethane	10.55	83	688	0.17 ug/L	85
79) cis-1,3-dichloropropene	11.00	75	944	0.17 ug/L	90
81) 4-methyl-2-pentanone	11.09	58	1489	1.14 ug/L	96
82) toluene	11.39	92	1918	0.25 ug/L	88
84) trans-1,3-dichloropropene	11.58	75	1017	0.22 ug/L #	67
89) tetrachloroethene	11.96	164	750	0.24 ug/L	88
90) 1,3-dichloropropane	12.00	76	1083	0.22 ug/L	84

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68762.D
Acq On : 27 Jan 2017 2:30 pm
Operator : Hueanht
Sample : ic2825-0.2
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 27 17:25:11 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
93) dibromochloromethane	12.27	129	540	0.16 ug/L	66
94) 1,2-dibromoethane	12.44	107	667	0.20 ug/L	98
95) n-butyl ether	12.88	57	3696	0.25 ug/L #	1
96) chlorobenzene	12.94	112	2090	0.24 ug/L	96
97) 1,1,1,2-tetrachloroethane	13.01	131	633	0.20 ug/L	95
98) ethylbenzene	13.00	91	3689	0.25 ug/L	99
99) m,p-xylene	13.13	106	2738	0.47 ug/L	97
100) o-xylene	13.57	106	1152	0.19 ug/L	86
101) styrene	13.59	104	2502	0.25 ug/L	84
104) isopropylbenzene	13.95	105	3673	0.25 ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

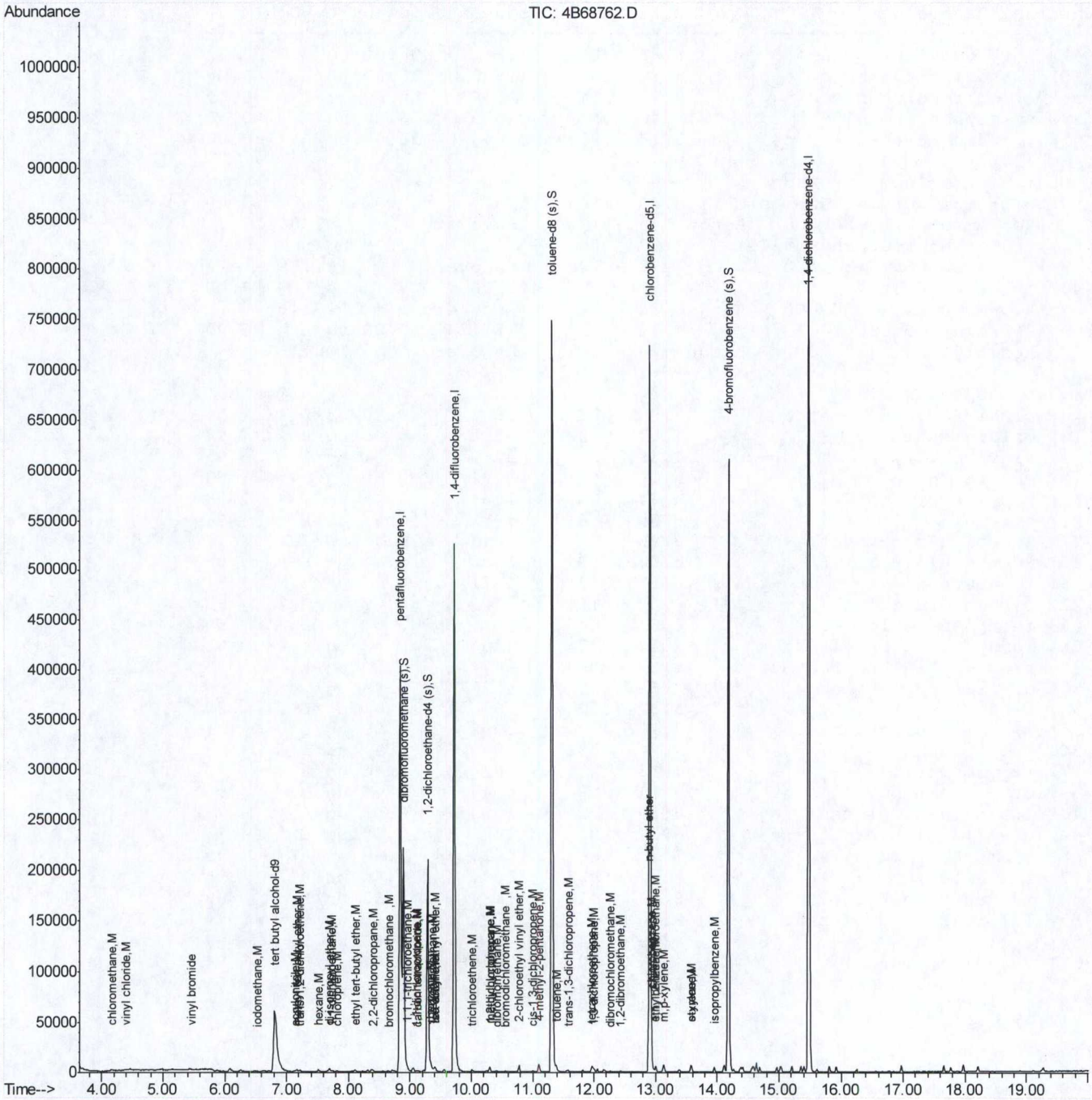
7.7.5

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68762.D
Acq On : 27 Jan 2017 2:30 pm
Operator : Hueanht
Sample : ic2825-0.2
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jan 27 17:25:11 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration



SGS ACCUTEST JC37024

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68763.D
Acq On : 27 Jan 2017 2:58 pm
Operator : Hueanht
Sample : ic2825-0.5
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 27 17:26:21 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) tert butyl alcohol-d9	6.81	65	151861	500.00 ug/L	0.00
5) pentafluorobenzene	8.84	168	315390	50.00 ug/L	0.00
56) 1,4-difluorobenzene	9.72	114	432204	50.00 ug/L	0.00
88) chlorobenzene-d5	12.90	117	405339	50.00 ug/L	0.00
103) 1,4-dichlorobenzene-d4	15.48	152	237698	50.00 ug/L	0.00
System Monitoring Compounds					
49) dibromofluoromethane (s)	8.89	113	131819	49.02 ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 98.04%		
50) 1,2-dichloroethane-d4 (s)	9.29	65	145141	50.79 ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 101.58%		
80) toluene-d8 (s)	11.31	98	497216	49.73 ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.46%		
105) 4-bromofluorobenzene (s)	14.18	95	194311	50.08 ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.16%		

Target Compounds					Qvalue
8) dichlorodifluoromethane	3.83	85	1802	0.40 ug/L #	50
10) chloromethane	4.17	52	992	0.45 ug/L	94
11) vinyl chloride	4.39	62	2939	0.51 ug/L	95
13) chloroethane	5.16	64	1292	0.50 ug/L	63
14) vinyl bromide	5.44	106	1634	0.44 ug/L #	88
21) acrolein	6.09	56	4272	6.23 ug/L	94
22) 1,1-dichloroethene	6.25	96	1245	0.42 ug/L #	76
25) acetonitrile	6.63	40	1066	5.61 ug/L #	63
26) iodomethane	6.51	142	3321	0.56 ug/L	81
27) carbon disulfide	6.63	76	4781	0.50 ug/L	85
28) methylene chloride	6.87	84	1631	0.50 ug/L #	69
31) methyl tert butyl ether	7.17	73	4266	0.48 ug/L	95
32) trans-1,2-dichloroethene	7.22	96	1474	0.50 ug/L	85
33) di-isopropyl ether	7.69	45	5731	0.48 ug/L	91
34) 2-butanone	8.31	72	871	2.31 ug/L #	20
35) 1,1-dichloroethane	7.73	63	2901	0.50 ug/L	84
36) chloroprene	7.82	53	1990	0.41 ug/L	87
37) acrylonitrile	7.13	53	3026	2.43 ug/L	92
39) ethyl tert-butyl ether	8.11	59	4944	0.47 ug/L	95
41) 2,2-dichloropropane	8.39	77	1532	0.53 ug/L	78
42) cis-1,2-dichloroethene	8.37	96	1472	0.44 ug/L	93
45) bromochloromethane	8.65	128	713	0.42 ug/L	92
47) chloroform	8.72	85	2071	0.60 ug/L	94
52) methacrylonitrile	8.57	41	1184	0.53 ug/L	88
53) 1,1,1-trichloroethane	8.96	97	2020	0.48 ug/L #	74
54) cyclohexane	9.05	84	2152	0.50 ug/L	97
57) epichlorohydrin	10.87	57	678	2.02 ug/L	54
59) carbon tetrachloride	9.14	117	1669	0.45 ug/L	95
60) 1,1-dichloropropene	9.11	75	2269	0.55 ug/L	90
61) hexane	7.52	57	1991	0.38 ug/L	96
63) benzene	9.35	78	6230	0.52 ug/L	100
64) iso-octane	9.41	57	5632	0.41 ug/L	90
65) tert-amyl methyl ether	9.40	87	916	0.47 ug/L #	78

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68763.D
Acq On : 27 Jan 2017 2:58 pm
Operator : Hueanht
Sample : ic2825-0.5
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 27 17:26:21 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
68) 1,2-dichloroethane	9.38	62	2057	0.53 ug/L	93
69) trichloroethene	10.01	95	1508	0.49 ug/L	86
71) ethyl acrylate	9.99	55	2200	0.56 ug/L #	68
73) 2-chloroethyl vinyl ether	10.77	63	4647	2.29 ug/L	96
75) 1,2-dichloropropane	10.30	63	1632	0.48 ug/L	82
76) dibromomethane	10.40	93	980	0.50 ug/L #	81
77) methylcyclohexane	10.30	83	2098	0.39 ug/L	97
78) bromodichloromethane	10.55	83	2117	0.51 ug/L	92
79) cis-1,3-dichloropropene	11.00	75	2545	0.46 ug/L	97
81) 4-methyl-2-pentanone	11.10	58	3804	2.91 ug/L	93
82) toluene	11.39	92	4095	0.54 ug/L	93
83) 3-methyl-1-butanol	11.09	55	1418	10.36 ug/L	80
84) trans-1,3-dichloropropene	11.57	75	2337	0.50 ug/L #	65
89) tetrachloroethene	11.96	164	1737	0.55 ug/L	92
90) 1,3-dichloropropane	12.00	76	3180	0.66 ug/L	83
91) butyl acetate	12.05	56	982	0.42 ug/L #	78
92) 3,3-DIMETHYL-1-BUTANOL	12.17	57	1463	5.21 ug/L	96
93) dibromochloromethane	12.26	129	1632	0.48 ug/L	98
94) 1,2-dibromoethane	12.43	107	1950	0.59 ug/L	95
95) n-butyl ether	12.88	57	8280	0.57 ug/L #	13
96) chlorobenzene	12.94	112	4951	0.57 ug/L	96
97) 1,1,1,2-tetrachloroethane	13.01	131	1901	0.60 ug/L	93
98) ethylbenzene	13.00	91	7821	0.54 ug/L	96
99) m,p-xylene	13.14	106	6151	1.06 ug/L	98
100) o-xylene	13.57	106	3104	0.52 ug/L	98
101) styrene	13.59	104	5777	0.58 ug/L	93
102) bromoform	13.84	173	1160	0.47 ug/L	93
104) isopropylbenzene	13.95	105	8040	0.54 ug/L	93
107) bromobenzene	14.38	156	2705	0.62 ug/L	90
113) 2-chlorotoluene	14.56	126	2123	0.55 ug/L	95
115) 1,3,5-trimethylbenzene	14.59	105	6927	0.55 ug/L	98
116) tert-butylbenzene	14.96	119	6456	0.56 ug/L	100
123) benzyl chloride	15.61	91	3222	0.42 ug/L #	94
126) n-butylbenzene	15.82	92	4225	0.52 ug/L	89
131) hexachlorobutadiene	17.77	225	2159	0.59 ug/L	87

(#) = qualifier out of range (m) = manual integration (+) = signals summed

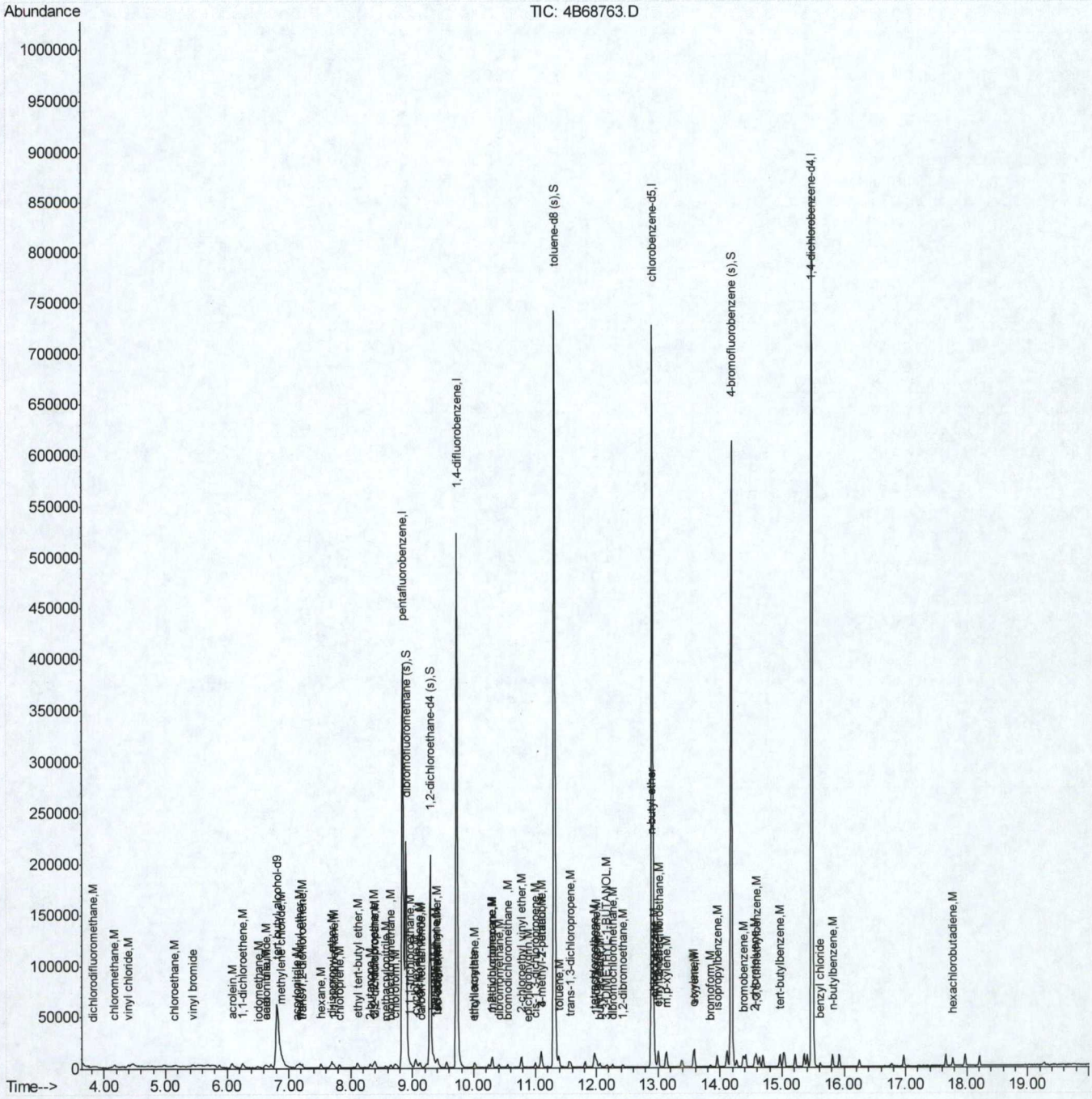
7.7.6

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68763.D
Acq On : 27 Jan 2017 2:58 pm
Operator : Hueanht
Sample : ic2825-0.5
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jan 27 17:26:21 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration



SGS ACCUTEST JC37024

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68764.D
Acq On : 27 Jan 2017 3:26 pm
Operator : Hueanht
Sample : ic2825-1
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 31 17:19:48 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) tert butyl alcohol-d9	6.82	65	156767	500.00 ug/L	0.01
5) pentafluorobenzene	8.84	168	318206	50.00 ug/L	0.00
56) 1,4-difluorobenzene	9.72	114	433559	50.00 ug/L	0.00
88) chlorobenzene-d5	12.90	117	408946	50.00 ug/L	0.00
103) 1,4-dichlorobenzene-d4	15.48	152	238344	50.00 ug/L	0.00

System Monitoring Compounds					
49) dibromofluoromethane (s)	8.89	113	132268	48.75 ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 97.50%		
50) 1,2-dichloroethane-d4 (s)	9.29	65	148631	51.55 ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 103.10%		
80) toluene-d8 (s)	11.31	98	501254	49.97 ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.94%		
105) 4-bromofluorobenzene (s)	14.18	95	197365	50.72 ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 101.44%		

Target Compounds					Qvalue
2) tertiary butyl alcohol	6.93	59	2271	5.74 ug/L	82
7) chlorodifluoromethane	3.86	51	4281	0.83 ug/L	85
8) dichlorodifluoromethane	3.85	85	4021	0.88 ug/L	94
10) chloromethane	4.17	52	2116	0.94 ug/L	95
11) vinyl chloride	4.39	62	5539	0.95 ug/L	89
12) bromomethane	4.98	94	2634	0.98 ug/L	89
13) chloroethane	5.16	64	2582	0.99 ug/L	85
14) vinyl bromide	5.45	106	3416	0.92 ug/L #	95
15) trichlorofluoromethane	5.52	101	4436	0.87 ug/L	89
16) 1,3-butadiene	4.47	54	5052	1.06 ug/L	95
19) ethyl ether	5.87	74	1482	0.81 ug/L	90
20) 2-chloropropane	6.08	39	1390	1.15 ug/L	95
21) acrolein	6.09	56	8004	11.57 ug/L	93
22) 1,1-dichloroethene	6.25	96	2807	0.94 ug/L	89
23) acetone	6.27	58	1456	4.12 ug/L #	41
25) acetonitrile	6.64	40	2324	12.12 ug/L	97
26) iodomethane	6.48	142	6136	1.03 ug/L	91
27) carbon disulfide	6.62	76	8440	0.87 ug/L	94
28) methylene chloride	6.87	84	3224	0.97 ug/L	83
31) methyl tert butyl ether	7.18	73	8677	0.96 ug/L	94
32) trans-1,2-dichloroethene	7.22	96	2742	0.92 ug/L	94
33) di-isopropyl ether	7.69	45	13045	1.08 ug/L	93
34) 2-butanone	8.32	72	1813	4.76 ug/L #	89
35) 1,1-dichloroethane	7.74	63	5370	0.91 ug/L	92
36) chloroprene	7.82	53	4841	1.00 ug/L	96
37) acrylonitrile	7.13	53	6279	4.99 ug/L	93
39) ethyl tert-butyl ether	8.11	59	10935	1.03 ug/L	96
41) 2,2-dichloropropane	8.40	77	2908	1.00 ug/L	98
42) cis-1,2-dichloroethene	8.37	96	3259	0.98 ug/L	96
44) propionitrile	8.40	54	5000	11.00 ug/L	94
45) bromochloromethane	8.65	128	1544	0.90 ug/L	91
46) tetrahydrofuran	8.67	42	1102	1.00 ug/L #	68
47) chloroform	8.72	85	3751	1.08 ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68764.D
Acq On : 27 Jan 2017 3:26 pm
Operator : Hueanht
Sample : ic2825-1
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 31 17:19:48 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
48) T-BUTYL FORMATE	8.75	59	2331	0.85 ug/L #	79
52) methacrylonitrile	8.56	41	2472	1.09 ug/L	97
53) 1,1,1-trichloroethane	8.95	97	4137	0.98 ug/L	90
54) cyclohexane	9.06	84	4451	1.02 ug/L #	78
57) epichlorohydrin	10.87	57	1798	5.33 ug/L	91
59) carbon tetrachloride	9.14	117	3265	0.88 ug/L	97
60) 1,1-dichloropropene	9.11	75	4017	0.97 ug/L	92
61) hexane	7.52	57	4698	0.89 ug/L	96
62) Tert Amyl alcohol	9.22	73	915	6.32 ug/L	78
63) benzene	9.35	78	11867	0.99 ug/L	98
64) iso-octane	9.41	57	13133	0.96 ug/L	97
65) tert-amyl methyl ether	9.39	87	1976	1.01 ug/L #	67
66) heptane	9.56	57	3024	0.94 ug/L	94
67) isopropyl acetate	9.23	61	1221	0.93 ug/L #	53
68) 1,2-dichloroethane	9.37	62	3932	1.00 ug/L	95
69) trichloroethene	10.01	95	2959	0.95 ug/L	88
71) ethyl acrylate	10.00	55	3870	0.98 ug/L	87
72) 2-nitropropane	10.76	41	1355	1.11 ug/L #	1
73) 2-chloroethyl vinyl ether	10.77	63	10539	5.18 ug/L	100
74) methyl methacrylate	10.25	100	757	0.86 ug/L #	82
75) 1,2-dichloropropane	10.30	63	3412	1.00 ug/L	93
76) dibromomethane	10.41	93	1963	1.00 ug/L	92
77) methylcyclohexane	10.30	83	5190	0.96 ug/L	91
78) bromodichloromethane	10.55	83	3622	0.87 ug/L	87
79) cis-1,3-dichloropropene	11.00	75	5101	0.91 ug/L	97
81) 4-methyl-2-pentanone	11.09	58	7064	5.40 ug/L	91
82) toluene	11.39	92	7506	0.99 ug/L	99
83) 3-methyl-1-butanol	11.09	55	3109	22.64 ug/L #	68
84) trans-1,3-dichloropropene	11.58	75	3943	0.84 ug/L	92
85) ethyl methacrylate	11.55	69	3953	0.92 ug/L	85
86) 1,1,2-trichloroethane	11.81	83	2356	0.94 ug/L	90
87) 2-hexanone	11.98	58	7198	5.19 ug/L	96
89) tetrachloroethene	11.96	164	3388	1.06 ug/L	90
90) 1,3-dichloropropane	12.00	76	5104	1.05 ug/L	85
91) butyl acetate	12.05	56	2692	1.14 ug/L #	77
92) 3,3-DIMETHYL-1-BUTANOL	12.16	57	3363	11.87 ug/L	93
93) dibromochloromethane	12.26	129	2424	0.71 ug/L	97
94) 1,2-dibromoethane	12.44	107	3185	0.95 ug/L	92
95) n-butyl ether	12.88	57	14359	0.97 ug/L #	53
96) chlorobenzene	12.94	112	8618	0.98 ug/L	98
97) 1,1,1,2-tetrachloroethane	13.01	131	2864	0.89 ug/L	87
98) ethylbenzene	13.00	91	14669	1.01 ug/L	92
99) m,p-xylene	13.14	106	10882	1.87 ug/L	92
100) o-xylene	13.57	106	5450	0.91 ug/L #	75
101) styrene	13.59	104	9405	0.94 ug/L	93
102) bromoform	13.84	173	1430	0.57 ug/L	78
104) isopropylbenzene	13.95	105	14585	0.97 ug/L	98
106) cyclohexanone	14.11	55	8129	11.28 ug/L	96
107) bromobenzene	14.38	156	4351	1.00 ug/L	93
108) 1,1,2,2-tetrachloroethane	14.27	83	4031	0.95 ug/L	90

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68764.D
Acq On : 27 Jan 2017 3:26 pm
Operator : Hueanht
Sample : ic2825-1
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 31 17:19:48 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
110) 1,2,3-trichloropropane	14.37	110	951	0.90 ug/L	74
111) n-propylbenzene	14.41	91	17655	0.99 ug/L	97
113) 2-chlorotoluene	14.57	126	3704	0.96 ug/L	95
114) 4-chlorotoluene	14.69	91	11046	1.00 ug/L	99
115) 1,3,5-trimethylbenzene	14.59	105	12236	0.97 ug/L	95
116) tert-butylbenzene	14.97	119	11144	0.96 ug/L	91
117) pentachloroethane	15.05	167	2156	0.82 ug/L	86
118) 1,2,4-trimethylbenzene	15.03	105	12223	0.94 ug/L	95
119) sec-butylbenzene	15.21	105	16553	0.95 ug/L	97
120) 1,3-dichlorobenzene	15.40	146	8717	1.05 ug/L	94
121) p-isopropyltoluene	15.36	119	14047	0.92 ug/L	98
122) 1,4-dichlorobenzene	15.51	146	8261	1.01 ug/L	100
123) benzyl chloride	15.62	91	6727	0.87 ug/L	98
124) 1,2-dichlorobenzene	15.93	146	8214	1.01 ug/L	97
126) n-butylbenzene	15.82	92	7424	0.92 ug/L	91
129) 1,3,5-TRICHLOROBENZENE	16.97	180	6654	0.91 ug/L	99
130) 1,2,4-trichlorobenzene	17.66	180	5850	0.90 ug/L	93
131) hexachlorobutadiene	17.77	225	3637	0.98 ug/L	96
132) naphthalene	17.97	128	11239	0.97 ug/L	99
133) 1,2,3-trichlorobenzene	18.21	180	5286	0.93 ug/L	96

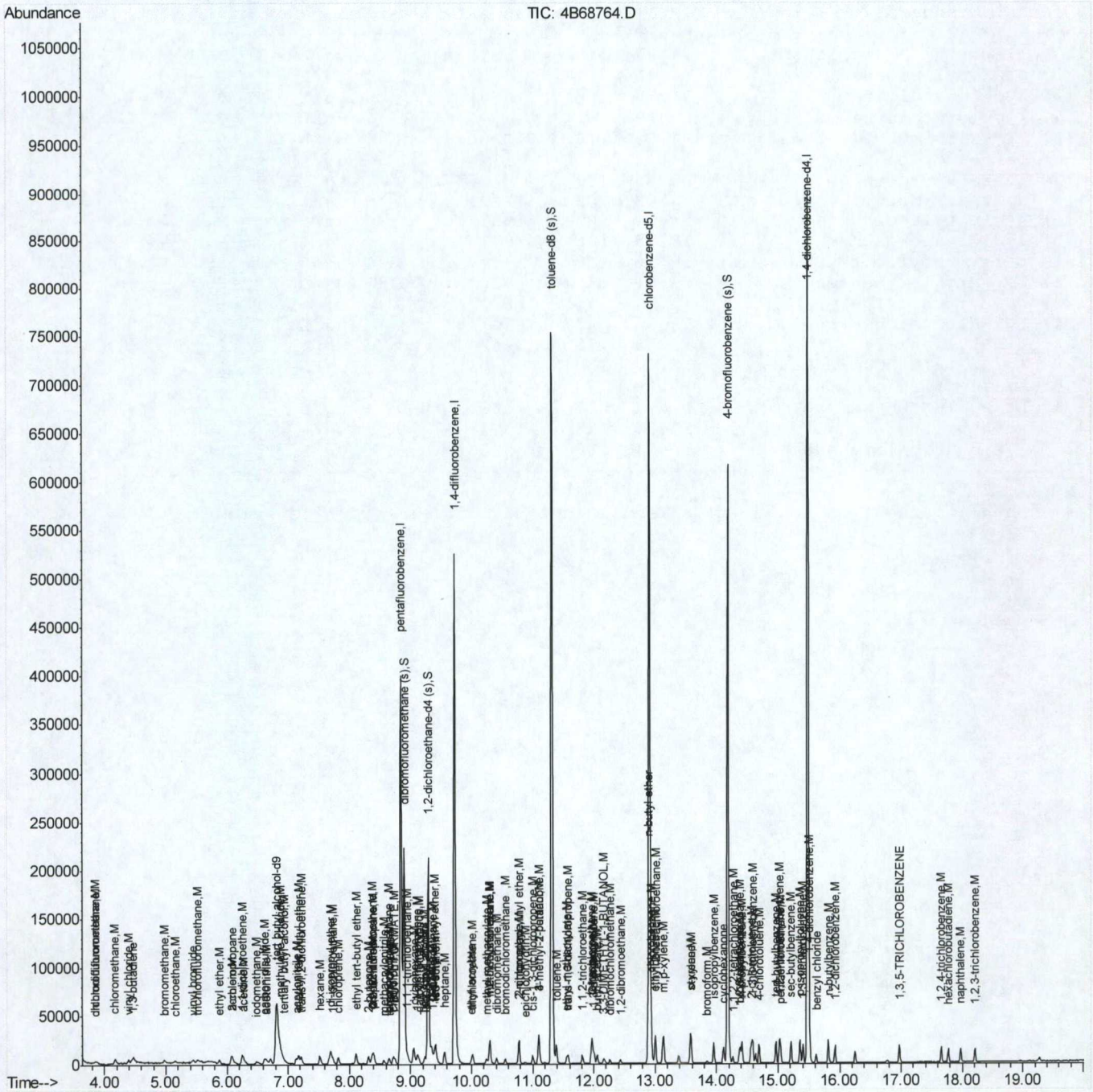
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.1.1 7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68764.D
Acq On : 27 Jan 2017 3:26 pm
Operator : Hueanht
Sample : ic2825-1
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jan 31 17:19:48 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68765.D
Acq On : 27 Jan 2017 3:57 pm
Operator : Hueanht
Sample : ic2825-5
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 27 16:29:07 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) tert butyl alcohol-d9	6.81	65	147519	500.00 ug/L	0.00
5) pentafluorobenzene	8.84	168	309679	50.00 ug/L	0.00
56) 1,4-difluorobenzene	9.72	114	425271	50.00 ug/L	0.00
88) chlorobenzene-d5	12.91	117	402095	50.00 ug/L	0.00
103) 1,4-dichlorobenzene-d4	15.48	152	228551	50.00 ug/L	0.00

System Monitoring Compounds					
49) dibromofluoromethane (s)	8.89	113	130094	49.27 ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 98.54%		
50) 1,2-dichloroethane-d4 (s)	9.29	65	144062	51.34 ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 102.68%		
80) toluene-d8 (s)	11.31	98	490379	49.84 ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.68%		
105) 4-bromofluorobenzene (s)	14.18	95	190151	50.96 ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 101.92%		

Target Compounds					Qvalue
2) tertiary butyl alcohol	6.91	59	9804	26.33 ug/L	96
3) 1,4-dioxane	10.34	88	3984	126.14 ug/L	90
7) chlorodifluoromethane	3.86	51	25750	5.14 ug/L	97
8) dichlorodifluoromethane	3.82	85	20959	4.70 ug/L	96
10) chloromethane	4.18	52	11877	5.43 ug/L	88
11) vinyl chloride	4.40	62	28208	4.96 ug/L	97
12) bromomethane	4.98	94	14060	5.40 ug/L	93
13) chloroethane	5.17	64	11500	4.54 ug/L	91
14) vinyl bromide	5.44	106	17734	4.90 ug/L	100
15) trichlorofluoromethane	5.51	101	23885	4.83 ug/L	96
16) 1,3-butadiene	4.47	54	18423	3.97 ug/L	97
19) ethyl ether	5.88	74	8686	4.85 ug/L	95
20) 2-chloropropane	6.08	39	5646	4.79 ug/L	97
21) acrolein	6.09	56	34454	51.17 ug/L	99
22) 1,1-dichloroethene	6.26	96	15245	5.24 ug/L	92
23) acetone	6.26	58	8983	26.11 ug/L	88
24) allyl chloride	6.72	76	24243	9.55 ug/L #	71
25) acetonitrile	6.63	40	10492	56.23 ug/L	97
26) iodomethane	6.49	142	23732	4.10 ug/L	97
27) carbon disulfide	6.62	76	35802	3.81 ug/L	97
28) methylene chloride	6.87	84	16176	5.02 ug/L	96
29) methyl acetate	6.66	74	2428	5.19 ug/L #	78
31) methyl tert butyl ether	7.18	73	46581	5.29 ug/L	98
32) trans-1,2-dichloroethene	7.22	96	15181	5.25 ug/L	98
33) di-isopropyl ether	7.70	45	63314	5.36 ug/L	99
34) 2-butanone	8.31	72	9527	25.69 ug/L	96
35) 1,1-dichloroethane	7.74	63	30366	5.30 ug/L	96
36) chloroprene	7.82	53	24549	5.19 ug/L	97
37) acrylonitrile	7.13	53	31791	25.96 ug/L	93
38) vinyl acetate	7.67	86	2708	4.72 ug/L	74
39) ethyl tert-butyl ether	8.11	59	52609	5.11 ug/L	99
40) ethyl acetate	8.32	45	2789	5.38 ug/L	74
41) 2,2-dichloropropane	8.40	77	14760	5.20 ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68765.D
Acq On : 27 Jan 2017 3:57 pm
Operator : Hueanht
Sample : ic2825-5
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 27 16:29:07 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
42) cis-1,2-dichloroethene	8.37	96	16612	5.11 ug/L	99
43) methylacrylate	8.40	85	2420	5.38 ug/L #	87
44) propionitrile	8.39	54	24751	55.97 ug/L	92
45) bromochloromethane	8.65	128	8362	5.00 ug/L	99
46) tetrahydrofuran	8.66	42	5764	5.38 ug/L	97
47) chloroform	8.72	85	17945	5.32 ug/L	99
48) T-BUTYL FORMATE	8.74	59	11447	4.30 ug/L	86
51) freon 113	6.26	151	9630	4.04 ug/L	94
52) methacrylonitrile	8.56	41	12311	5.57 ug/L	98
53) 1,1,1-trichloroethane	8.95	97	19543	4.75 ug/L	94
54) cyclohexane	9.06	84	17727	4.16 ug/L #	80
57) epichlorohydrin	10.87	57	8184	24.75 ug/L	96
58) n-butyl alcohol	9.75	56	32683	358.98 ug/L	98
59) carbon tetrachloride	9.14	117	18097	4.97 ug/L	99
60) 1,1-dichloropropene	9.12	75	21393	5.26 ug/L	99
61) hexane	7.52	57	24558	4.72 ug/L	97
62) Tert Amyl alcohol	9.21	73	4782	33.69 ug/L	92
63) benzene	9.35	78	61707	5.26 ug/L	100
64) iso-octane	9.41	57	65381	4.90 ug/L	96
65) tert-amyl methyl ether	9.40	87	10413	5.42 ug/L #	88
66) heptane	9.56	57	15428	4.88 ug/L	95
67) isopropyl acetate	9.24	61	6010	4.69 ug/L #	86
68) 1,2-dichloroethane	9.37	62	20425	5.30 ug/L	94
69) trichloroethene	10.02	95	15827	5.19 ug/L	99
71) ethyl acrylate	9.99	55	20354	5.23 ug/L	99
72) 2-nitropropane	10.75	41	6507	5.43 ug/L #	83
73) 2-chloroethyl vinyl ether	10.77	63	51253	25.67 ug/L	99
74) methyl methacrylate	10.24	100	4235	4.88 ug/L	92
75) 1,2-dichloropropane	10.30	63	18079	5.41 ug/L	98
76) dibromomethane	10.41	93	9991	5.18 ug/L	92
77) methylcyclohexane	10.30	83	26793	5.04 ug/L	95
78) bromodichloromethane	10.55	83	20826	5.12 ug/L	93
79) cis-1,3-dichloropropene	11.00	75	27584	5.03 ug/L	96
81) 4-methyl-2-pentanone	11.10	58	35504	27.64 ug/L	98
82) toluene	11.39	92	38156	5.14 ug/L	100
83) 3-methyl-1-butanol	11.09	55	14716	109.23 ug/L	89
84) trans-1,3-dichloropropene	11.58	75	23449	5.10 ug/L	98
85) ethyl methacrylate	11.55	69	22161	5.28 ug/L	95
86) 1,1,2-trichloroethane	11.81	83	13262	5.42 ug/L	95
87) 2-hexanone	11.97	58	37445	27.55 ug/L	95
89) tetrachloroethene	11.96	164	16876	5.38 ug/L	96
90) 1,3-dichloropropane	12.00	76	26494	5.53 ug/L	96
91) butyl acetate	12.05	56	12107	5.22 ug/L	90
92) 3,3-DIMETHYL-1-BUTANOL	12.16	57	14237	51.09 ug/L	95
93) dibromochloromethane	12.26	129	15624	4.63 ug/L	96
94) 1,2-dibromoethane	12.43	107	16137	4.91 ug/L	97
95) n-butyl ether	12.88	57	73509	5.06 ug/L	91
96) chlorobenzene	12.94	112	44644	5.15 ug/L	95
97) 1,1,1,2-tetrachloroethane	13.01	131	16067	5.09 ug/L	95
98) ethylbenzene	13.00	91	75694	5.28 ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68765.D
Acq On : 27 Jan 2017 3:57 pm
Operator : Hueanht
Sample : ic2825-5
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 27 16:29:07 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
99) m,p-xylene	13.13	106	59353	10.36 ug/L	97
100) o-xylene	13.57	106	29804	5.05 ug/L	94
101) styrene	13.58	104	51514	5.23 ug/L	99
102) bromoform	13.85	173	10256	4.18 ug/L	95
104) isopropylbenzene	13.95	105	78020	5.40 ug/L	99
106) cyclohexanone	14.11	55	45207	65.40 ug/L	99
107) bromobenzene	14.39	156	22672	5.41 ug/L	94
108) 1,1,2,2-tetrachloroethane	14.27	83	23332	5.76 ug/L	97
109) trans-1,4-dichloro-2-buten	14.30	53	3141	3.75 ug/L	90
110) 1,2,3-trichloropropane	14.37	110	5952	5.85 ug/L	91
111) n-propylbenzene	14.41	91	92180	5.39 ug/L	99
113) 2-chlorotoluene	14.57	126	19524	5.26 ug/L	97
114) 4-chlorotoluene	14.69	91	57124	5.39 ug/L	99
115) 1,3,5-trimethylbenzene	14.59	105	65174	5.40 ug/L	98
116) tert-butylbenzene	14.96	119	59169	5.31 ug/L	95
117) pentachloroethane	15.04	167	12009	4.77 ug/L	87
118) 1,2,4-trimethylbenzene	15.03	105	67220	5.40 ug/L	100
119) sec-butylbenzene	15.21	105	88031	5.24 ug/L	99
120) 1,3-dichlorobenzene	15.40	146	43531	5.47 ug/L	98
121) p-isopropyltoluene	15.36	119	77013	5.26 ug/L	98
122) 1,4-dichlorobenzene	15.51	146	41623	5.31 ug/L	95
123) benzyl chloride	15.62	91	32638	4.40 ug/L	97
124) 1,2-dichlorobenzene	15.93	146	41890	5.36 ug/L	99
126) n-butylbenzene	15.82	92	39133	5.05 ug/L	94
128) 1,2-dibromo-3-chloropropan	16.77	75	3549	5.14 ug/L	93
129) 1,3,5-TRICHLOROBENZENE	16.97	180	36032	5.14 ug/L	99
130) 1,2,4-trichlorobenzene	17.66	180	31528	5.05 ug/L	97
131) hexachlorobutadiene	17.77	225	18987	5.36 ug/L	95
132) naphthalene	17.97	128	58446	5.25 ug/L	98
133) 1,2,3-trichlorobenzene	18.21	180	28188	5.16 ug/L	98
134) hexachloroethane	16.25	201	12203	4.35 ug/L	92
135) 2-ethylhexyl acrylate	17.66	70	765	0.59 ug/L	85
136) 2-methylnaphthalene	19.27	142	10695	4.04 ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

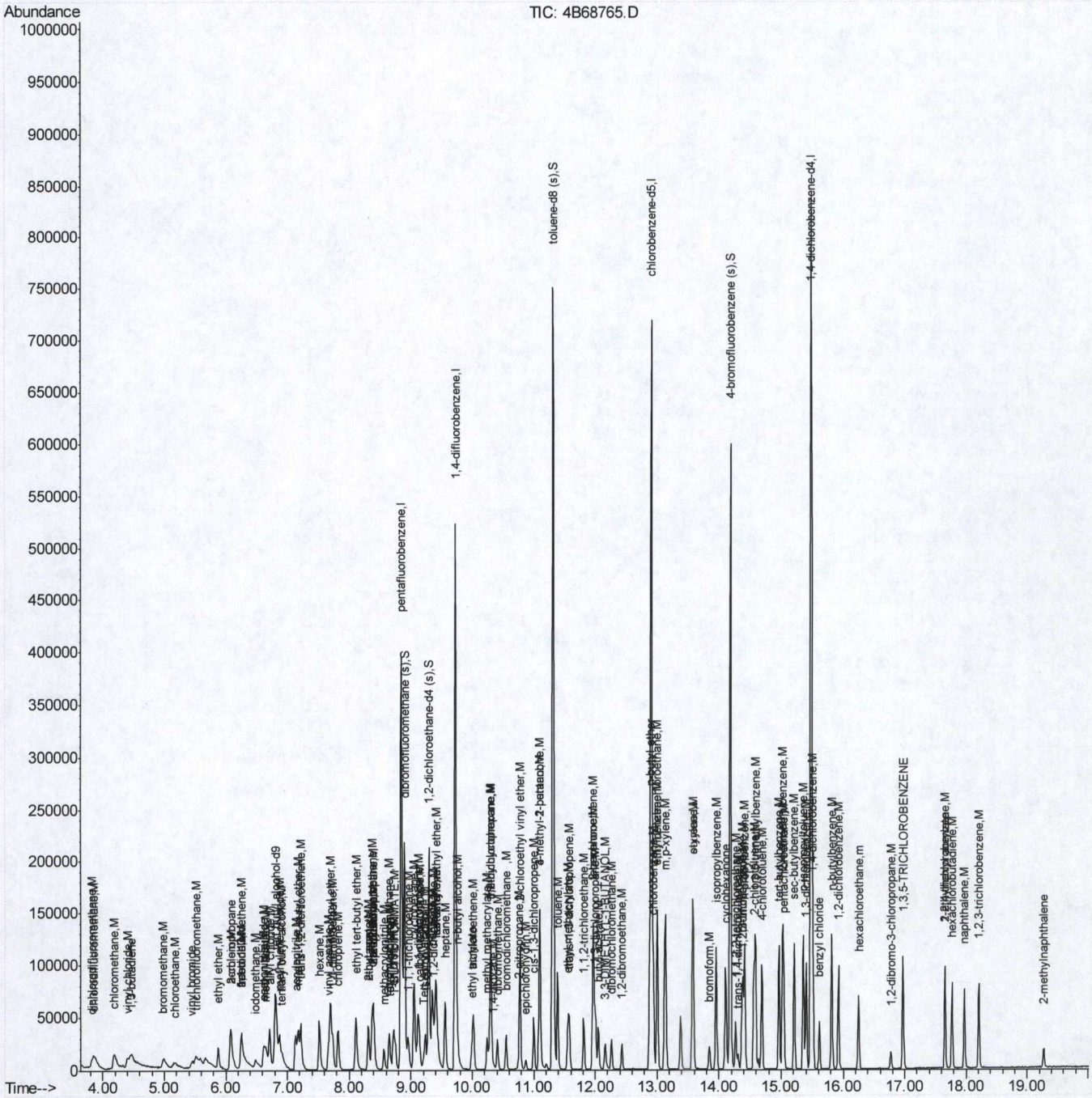
7.7.8

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68765.D
Acq On : 27 Jan 2017 3:57 pm
Operator : Hueanht
Sample : ic2825-5
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 27 16:29:07 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:06:55 2017
Response via : Initial Calibration



SGS ACCUTEST JC37024

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68766.D
Acq On : 27 Jan 2017 4:25 pm
Operator : Hueanht
Sample : ic2825-10
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 27 16:54:20 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:46:56 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) tert butyl alcohol-d9	6.80	65	147067	500.00 ug/L	0.00
5) pentafluorobenzene	8.84	168	306118	50.00 ug/L	0.00
56) 1,4-difluorobenzene	9.72	114	423959	50.00 ug/L	0.00
88) chlorobenzene-d5	12.90	117	399337	50.00 ug/L	0.00
103) 1,4-dichlorobenzene-d4	15.48	152	230795	50.00 ug/L	0.00
System Monitoring Compounds					
49) dibromofluoromethane (s)	8.89	113	128785	49.86 ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 99.72%		
50) 1,2-dichloroethane-d4 (s)	9.29	65	144468	51.62 ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 103.24%		
80) toluene-d8 (s)	11.31	98	489008	49.91 ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.82%		
105) 4-bromofluorobenzene (s)	14.18	95	189790	50.10 ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.20%		
Target Compounds					Qvalue
2) tertiary butyl alcohol	6.91	59	19682	51.32 ug/L	99
3) 1,4-dioxane	10.35	88	8412	266.68 ug/L	94
7) chlorodifluoromethane	3.86	51	47029	9.73 ug/L	98
8) dichlorodifluoromethane	3.83	85	42988	10.32 ug/L	99
10) chloromethane	4.17	52	21577	10.33 ug/L	99
11) vinyl chloride	4.40	62	58212	10.47 ug/L	98
12) bromomethane	4.98	94	25767	9.56 ug/L	97
13) chloroethane	5.16	64	26483	10.73 ug/L	98
14) vinyl bromide	5.44	106	37054	10.72 ug/L	99
15) trichlorofluoromethane	5.53	101	49997	10.94 ug/L	97
16) 1,3-butadiene	4.47	54	52266	11.64 ug/L	100
19) ethyl ether	5.88	74	18471	11.12 ug/L	98
20) 2-chloropropane	6.08	39	12275	10.35 ug/L	96
21) acrolein	6.09	56	66622	94.35 ug/L	99
22) 1,1-dichloroethene	6.26	96	29851	10.91 ug/L	98
23) acetone	6.26	58	18346	57.01 ug/L	98
24) allyl chloride	6.71	76	23674	8.93 ug/L	95
25) acetonitrile	6.63	40	20545	104.54 ug/L	91
26) iodomethane	6.52	142	61191	10.56 ug/L	98
27) carbon disulfide	6.62	76	96128	10.91 ug/L	99
28) methylene chloride	6.87	84	33125	10.44 ug/L	99
29) methyl acetate	6.65	74	5229	11.22 ug/L	96
31) methyl tert butyl ether	7.18	73	90614	10.42 ug/L	100
32) trans-1,2-dichloroethene	7.22	96	29830	10.49 ug/L	99
33) di-isopropyl ether	7.69	45	125520	10.35 ug/L	97
34) 2-butanone	8.31	72	19388	53.64 ug/L	92
35) 1,1-dichloroethane	7.74	63	61762	10.75 ug/L	99
36) chloroprene	7.82	53	48835	10.54 ug/L	98
37) acrylonitrile	7.13	53	64312	52.50 ug/L	98
38) vinyl acetate	7.66	86	5936	10.59 ug/L	97
39) ethyl tert-butyl ether	8.11	59	106088	10.37 ug/L	97
40) ethyl acetate	8.31	45	5620	11.19 ug/L	92
41) 2,2-dichloropropane	8.39	77	30586	10.67 ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68766.D
Acq On : 27 Jan 2017 4:25 pm
Operator : Hueanht
Sample : ic2825-10
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 27 16:54:20 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:46:56 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
42) cis-1,2-dichloroethene	8.37	96	34371	10.47 ug/L	97
43) methylacrylate	8.39	85	4857	10.76 ug/L #	91
44) propionitrile	8.39	54	48375	106.75 ug/L	97
45) bromochloromethane	8.65	128	17336	11.05 ug/L	98
46) tetrahydrofuran	8.66	42	11842	11.04 ug/L	94
47) chloroform	8.71	85	35137	10.04 ug/L	97
48) T-BUTYL FORMATE	8.74	59	24917	10.32 ug/L	88
51) freon 113	6.26	151	24944	11.27 ug/L	99
52) methacrylonitrile	8.56	41	23158	10.23 ug/L	98
53) 1,1,1-trichloroethane	8.96	97	41935	10.47 ug/L	97
54) cyclohexane	9.06	84	43575	10.59 ug/L	94
57) epichlorohydrin	10.87	57	16981	52.53 ug/L	99
58) n-butyl alcohol	9.75	56	57244	579.84 ug/L	92
59) carbon tetrachloride	9.14	117	37405	10.57 ug/L	96
60) 1,1-dichloropropene	9.11	75	43443	10.45 ug/L	97
61) hexane	7.52	57	49403	10.15 ug/L	98
62) Tert Amyl alcohol	9.22	73	8299	50.98 ug/L	99
63) benzene	9.35	78	123977	10.17 ug/L	98
64) iso-octane	9.42	57	131688	10.14 ug/L	98
65) tert-amyl methyl ether	9.40	87	20326	10.85 ug/L	98
66) heptane	9.56	57	29926	10.22 ug/L	98
67) isopropyl acetate	9.23	61	12703	10.16 ug/L	95
68) 1,2-dichloroethane	9.37	62	41239	10.64 ug/L	99
69) trichloroethene	10.02	95	32139	10.61 ug/L	99
71) ethyl acrylate	9.99	55	40116	10.15 ug/L #	78
72) 2-nitropropane	10.75	41	12033	9.76 ug/L	91
73) 2-chloroethyl vinyl ether	10.77	63	105443	51.47 ug/L	99
74) methyl methacrylate	10.24	100	8510	10.12 ug/L #	81
75) 1,2-dichloropropane	10.30	63	35632	10.83 ug/L	96
76) dibromomethane	10.41	93	20049	10.25 ug/L	99
77) methylcyclohexane	10.30	83	53210	10.50 ug/L	97
78) bromodichloromethane	10.55	83	40726	10.37 ug/L	99
79) cis-1,3-dichloropropene	11.00	75	55143	10.51 ug/L	97
81) 4-methyl-2-pentanone	11.09	58	69043	50.81 ug/L	92
82) toluene	11.39	92	76296	9.85 ug/L	98
83) 3-methyl-1-butanol	11.09	55	30240	217.19 ug/L	92
84) trans-1,3-dichloropropene	11.58	75	46838	10.28 ug/L	99
85) ethyl methacrylate	11.55	69	43070	9.79 ug/L	98
86) 1,1,2-trichloroethane	11.81	83	25107	9.96 ug/L	97
87) 2-hexanone	11.97	58	73557	49.86 ug/L	95
89) tetrachloroethene	11.96	164	34187	10.43 ug/L	95
90) 1,3-dichloropropane	12.00	76	48959	9.59 ug/L	97
91) butyl acetate	12.05	56	24160	9.95 ug/L	98
92) 3,3-DIMETHYL-1-BUTANOL	12.16	57	30740	107.25 ug/L	98
93) dibromochloromethane	12.26	129	31052	10.05 ug/L	99
94) 1,2-dibromoethane	12.43	107	32568	9.84 ug/L	100
95) n-butyl ether	12.88	57	146394	9.70 ug/L	96
96) chlorobenzene	12.94	112	87382	9.75 ug/L	98
97) 1,1,1,2-tetrachloroethane	13.01	131	31450	9.92 ug/L	97
98) ethylbenzene	13.00	91	146562	9.79 ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68766.D
Acq On : 27 Jan 2017 4:25 pm
Operator : Hueanht
Sample : ic2825-10
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 27 16:54:20 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:46:56 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
99) m,p-xylene	13.13	106	115441	19.76 ug/L	97
100) o-xylene	13.57	106	58804	10.13 ug/L	97
101) styrene	13.58	104	99473	9.68 ug/L	98
102) bromoform	13.84	173	20071	7.44 ug/L	98
104) isopropylbenzene	13.95	105	153993	10.12 ug/L	98
106) cyclohexanone	14.11	55	80952	108.12 ug/L	99
107) bromobenzene	14.38	156	44202	9.54 ug/L	97
108) 1,1,2,2-tetrachloroethane	14.27	83	41807	10.05 ug/L	98
109) trans-1,4-dichloro-2-buten	14.30	53	5360	6.77 ug/L	87
110) 1,2,3-trichloropropane	14.37	110	10717	10.32 ug/L	97
111) n-propylbenzene	14.41	91	181923	10.42 ug/L	100
113) 2-chlorotoluene	14.56	126	38731	10.32 ug/L	98
114) 4-chlorotoluene	14.69	91	111100	9.94 ug/L	99
115) 1,3,5-trimethylbenzene	14.59	105	127860	9.93 ug/L	98
116) tert-butylbenzene	14.96	119	116962	9.96 ug/L	98
117) pentachloroethane	15.04	167	23143	9.45 ug/L	94
118) 1,2,4-trimethylbenzene	15.03	105	132786	10.53 ug/L	98
119) sec-butylbenzene	15.21	105	177326	10.47 ug/L	100
120) 1,3-dichlorobenzene	15.40	146	85029	10.33 ug/L	99
121) p-isopropyltoluene	15.36	119	154668	10.52 ug/L	99
122) 1,4-dichlorobenzene	15.51	146	81120	10.12 ug/L	99
123) benzyl chloride	15.61	91	67931	9.65 ug/L	100
124) 1,2-dichlorobenzene	15.93	146	81391	10.17 ug/L	99
126) n-butylbenzene	15.82	92	81310	10.42 ug/L	98
128) 1,2-dibromo-3-chloropropan	16.77	75	7141	10.18 ug/L	98
129) 1,3,5-TRICHLOROBENZENE	16.97	180	73514	10.01 ug/L	99
130) 1,2,4-trichlorobenzene	17.66	180	65329	10.52 ug/L	96
131) hexachlorobutadiene	17.77	225	38366	10.38 ug/L	98
132) naphthalene	17.97	128	116561	10.34 ug/L	99
133) 1,2,3-trichlorobenzene	18.21	180	56791	10.36 ug/L	100
134) hexachloroethane	16.25	201	25871	9.37 ug/L	95
135) 2-ethylhexyl acrylate	17.66	70	1768	2.53 ug/L #	71
136) 2-methylnaphthalene	19.27	142	24504	8.93 ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

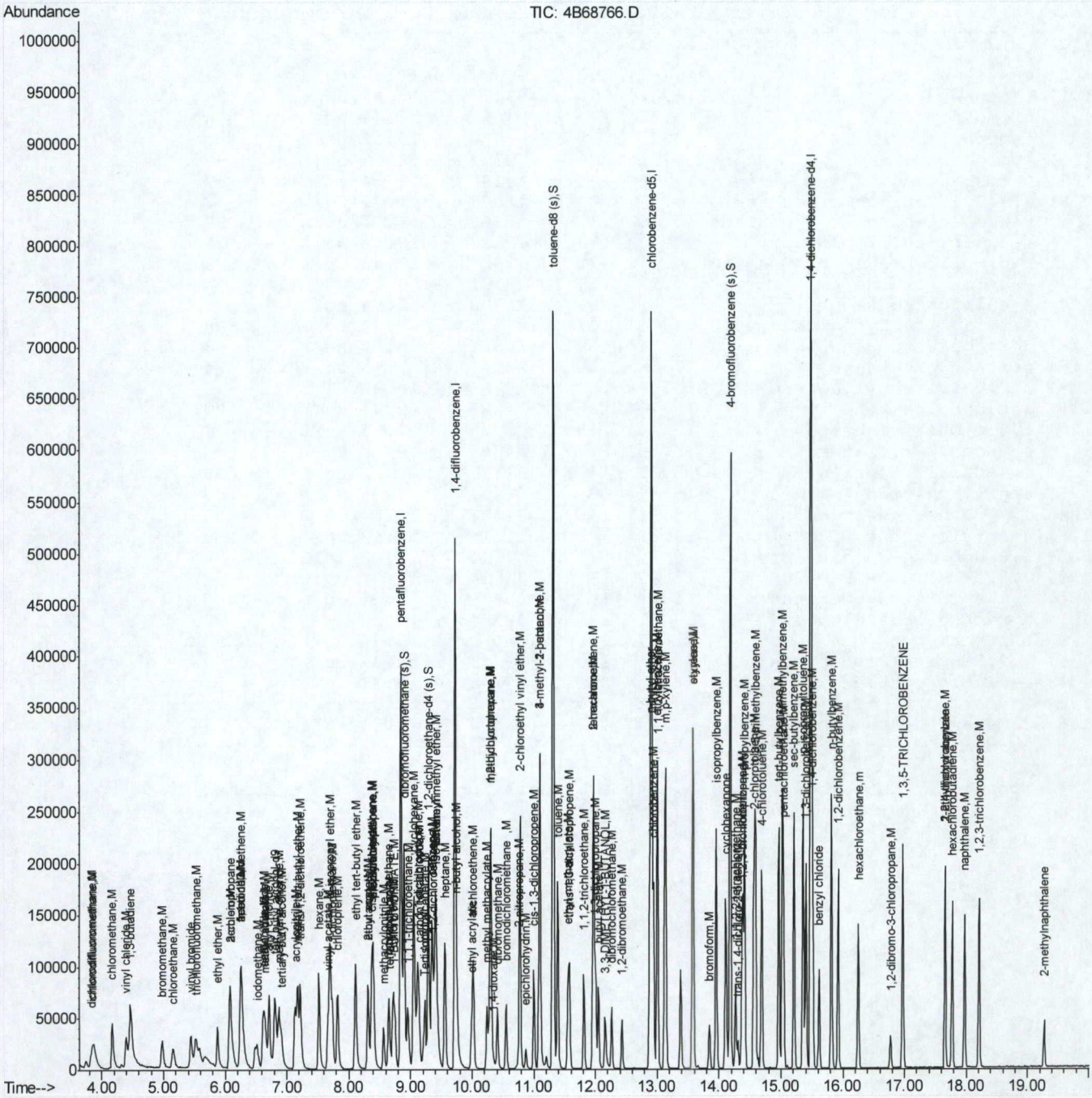
7.7.9

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68766.D
Acq On : 27 Jan 2017 4:25 pm
Operator : Hueanht
Sample : ic2825-10
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jan 27 16:54:20 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 16:46:56 2017
Response via : Initial Calibration



M4B2825.M Tue Jan 31 17:22:03 2017 GCMS4B

Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68767.D
Acq On : 27 Jan 2017 4:53 pm
Operator : Hueanht
Sample : ic2825-100
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 27 17:17:39 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 17:14:59 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) tert butyl alcohol-d9	6.81	65	121614	500.00	ug/L	0.00
5) pentafluorobenzene	8.84	168	286866	50.00	ug/L	0.00
56) 1,4-difluorobenzene	9.72	114	404778	50.00	ug/L	0.00
88) chlorobenzene-d5	12.91	117	367387	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	15.48	152	232497	50.00	ug/L	0.00
System Monitoring Compounds						
49) dibromofluoromethane (s)	8.89	113	122358	50.56	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 101.12%			
50) 1,2-dichloroethane-d4 (s)	9.29	65	127674	48.51	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 97.02%			
80) toluene-d8 (s)	11.31	98	465483	49.77	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.54%			
105) 4-bromofluorobenzene (s)	14.18	95	185784	48.67	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 97.34%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	6.91	59	154792	486.24	ug/L	95
3) 1,4-dioxane	10.35	88	69849	2546.50	ug/L	98
7) chlorodifluoromethane	3.87	51	471135	104.42	ug/L	97
8) dichlorodifluoromethane	3.82	85	408155	104.18	ug/L	99
10) chloromethane	4.17	52	200985	102.26	ug/L	97
11) vinyl chloride	4.40	62	531767	101.51	ug/L	98
12) bromomethane	4.97	94	238296	97.89	ug/L	95
13) chloroethane	5.15	64	239650	102.67	ug/L	99
14) vinyl bromide	5.44	106	336111	102.96	ug/L	100
15) trichlorofluoromethane	5.53	101	459528	102.36	ug/L	99
16) 1,3-butadiene	4.47	54	441254	102.77	ug/L	99
19) ethyl ether	5.88	74	165086	102.16	ug/L	97
20) 2-chloropropane	6.08	39	95819	85.76	ug/L	94
21) acrolein	6.09	56	591648	900.47	ug/L	98
22) 1,1-dichloroethene	6.26	96	269906	101.85	ug/L	97
23) acetone	6.26	58	152041	480.66	ug/L	99
24) allyl chloride	6.71	76	231756	88.93	ug/L	97
25) acetonitrile	6.63	40	174109	940.07	ug/L	94
26) iodomethane	6.52	142	546645	100.04	ug/L	99
27) carbon disulfide	6.62	76	894525	107.12	ug/L	100
28) methylene chloride	6.87	84	295750	98.90	ug/L	97
29) methyl acetate	6.65	74	45952	103.15	ug/L #	89
31) methyl tert butyl ether	7.18	73	785627	95.99	ug/L	100
32) trans-1,2-dichloroethene	7.22	96	263739	98.44	ug/L	99
33) di-isopropyl ether	7.69	45	1052391	92.21	ug/L	99
34) 2-butanone	8.31	72	175124	512.36	ug/L	96
35) 1,1-dichloroethane	7.73	63	515905	95.07	ug/L	100
36) chloroprene	7.82	53	438167	100.29	ug/L	100
37) acrylonitrile	7.13	53	563588	488.23	ug/L	99
38) vinyl acetate	7.66	86	55071	103.83	ug/L	100
39) ethyl tert-butyl ether	8.11	59	944315	98.14	ug/L	98
40) ethyl acetate	8.31	45	49535	100.27	ug/L	96
41) 2,2-dichloropropane	8.39	77	243446	89.98	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68767.D
Acq On : 27 Jan 2017 4:53 pm
Operator : Hueanht
Sample : ic2825-100
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 27 17:17:39 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 17:14:59 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
42) cis-1,2-dichloroethene	8.37	96	294496	98.35 ug/L	99
43) methylacrylate	8.39	85	43457	101.46 ug/L	97
44) propionitrile	8.39	54	394068	919.09 ug/L	98
45) bromochloromethane	8.65	128	155280	104.37 ug/L	98
46) tetrahydrofuran	8.66	42	94985	93.11 ug/L	98
47) chloroform	8.71	85	308359	93.95 ug/L	99
48) T-BUTYL FORMATE	8.74	59	242535	103.44 ug/L	99
51) freon 113	6.26	151	230482	101.42 ug/L	97
52) methacrylonitrile	8.56	41	202572	95.23 ug/L	98
53) 1,1,1-trichloroethane	8.95	97	387566	102.74 ug/L	100
54) cyclohexane	9.06	84	381836	98.30 ug/L	94
57) epichlorohydrin	10.87	57	157684	507.71 ug/L	98
58) n-butyl alcohol	9.75	56	426217	4420.99 ug/L	100
59) carbon tetrachloride	9.14	117	340778	100.27 ug/L	99
60) 1,1-dichloropropene	9.11	75	381091	95.55 ug/L	99
61) hexane	7.52	57	457036	98.15 ug/L	99
62) Tert Amyl alcohol	9.21	73	69755	447.58 ug/L	97
63) benzene	9.35	78	1090507	93.49 ug/L	100
64) iso-octane	9.42	57	1176157	94.68 ug/L	99
65) tert-amyl methyl ether	9.40	87	180074	99.72 ug/L	98
66) heptane	9.56	57	273683	92.80 ug/L	99
67) isopropyl acetate	9.24	61	121922	101.92 ug/L	96
68) 1,2-dichloroethane	9.37	62	349986	93.89 ug/L	100
69) trichloroethene	10.02	95	285074	97.90 ug/L	97
71) ethyl acrylate	9.99	55	379222	100.27 ug/L	100
72) 2-nitropropane	10.75	41	113557	96.77 ug/L	86
73) 2-chloroethyl vinyl ether	10.77	63	946153	482.13 ug/L	99
74) methyl methacrylate	10.25	100	85959	106.93 ug/L	90
75) 1,2-dichloropropane	10.30	63	300409	94.78 ug/L	99
76) dibromomethane	10.41	93	181463	96.94 ug/L	94
77) methylcyclohexane	10.30	83	480668	98.84 ug/L	100
78) bromodichloromethane	10.55	83	393131	104.39 ug/L	100
79) cis-1,3-dichloropropene	11.00	75	520590	103.32 ug/L	99
81) 4-methyl-2-pentanone	11.10	58	577883	444.61 ug/L	96
82) toluene	11.39	92	700703	94.91 ug/L	98
83) 3-methyl-1-butanol	11.08	55	248917	1852.61 ug/L	94
84) trans-1,3-dichloropropene	11.58	75	441509	101.19 ug/L	99
85) ethyl methacrylate	11.55	69	408422	102.12 ug/L	98
86) 1,1,2-trichloroethane	11.81	83	233996	99.64 ug/L	99
87) 2-hexanone	11.97	58	612829	458.81 ug/L	98
89) tetrachloroethene	11.96	164	295245	97.46 ug/L	99
90) 1,3-dichloropropane	12.00	76	426524	91.19 ug/L	95
91) butyl acetate	12.05	56	216196	101.08 ug/L	99
92) 3,3-DIMETHYL-1-BUTANOL	12.16	57	256300	963.21 ug/L	98
93) dibromochloromethane	12.26	129	336160	118.16 ug/L	100
94) 1,2-dibromoethane	12.43	107	308315	101.42 ug/L	99
95) n-butyl ether	12.88	57	1376448	99.47 ug/L	99
96) chlorobenzene	12.94	112	797384	96.98 ug/L	99
97) 1,1,1,2-tetrachloroethane	13.01	131	294892	101.19 ug/L	99
98) ethylbenzene	13.00	91	1298120	94.45 ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68767.D
Acq On : 27 Jan 2017 4:53 pm
Operator : Hueanht
Sample : ic2825-100
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 27 17:17:39 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 17:14:59 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
99) m,p-xylene	13.13	106	1054276	196.41 ug/L	98
100) o-xylene	13.57	106	550614	102.96 ug/L	96
101) styrene	13.59	104	901492	95.71 ug/L	95
102) bromoform	13.84	173	260439	100.11 ug/L	98
104) isopropylbenzene	13.95	105	1431244	93.28 ug/L	99
106) cyclohexanone	14.11	55	662451	868.25 ug/L	100
107) bromobenzene	14.39	156	411623	92.40 ug/L	94
108) 1,1,2,2-tetrachloroethane	14.27	83	407913	97.25 ug/L	99
109) trans-1,4-dichloro-2-buten	14.30	53	90911	98.30 ug/L	96
110) 1,2,3-trichloropropane	14.37	110	101594	96.69 ug/L	99
111) n-propylbenzene	14.41	91	1653930	93.49 ug/L	100
113) 2-chlorotoluene	14.57	126	369251	96.13 ug/L	99
114) 4-chlorotoluene	14.69	91	1044075	95.27 ug/L	99
115) 1,3,5-trimethylbenzene	14.59	105	1174477	93.25 ug/L	99
116) tert-butylbenzene	14.97	119	1109459	95.75 ug/L	99
117) pentachloroethane	15.05	167	243011	99.31 ug/L	98
118) 1,2,4-trimethylbenzene	15.03	105	1212501	94.72 ug/L	99
119) sec-butylbenzene	15.21	105	1667100	97.06 ug/L	100
120) 1,3-dichlorobenzene	15.40	146	773255	92.79 ug/L	100
121) p-isopropyltoluene	15.36	119	1461342	97.91 ug/L	100
122) 1,4-dichlorobenzene	15.51	146	774486	95.77 ug/L	100
123) benzyl chloride	15.61	91	754474	106.82 ug/L	100
124) 1,2-dichlorobenzene	15.93	146	755425	93.49 ug/L	99
126) n-butylbenzene	15.82	92	773040	97.83 ug/L	99
128) 1,2-dibromo-3-chloropropan	16.77	75	74438	105.05 ug/L	99
129) 1,3,5-TRICHLOROBENZENE	16.97	180	689078	96.93 ug/L	100
130) 1,2,4-trichlorobenzene	17.66	180	631538	100.22 ug/L	99
131) hexachlorobutadiene	17.77	225	336802	90.06 ug/L	98
132) naphthalene	17.97	128	1130331	99.04 ug/L	99
133) 1,2,3-trichlorobenzene	18.21	180	553198	99.66 ug/L	99
134) hexachloroethane	16.25	201	298499	108.49 ug/L	99
135) 2-ethylhexyl acrylate	17.66	70	32504	18.01 ug/L	95
136) 2-methylnaphthalene	19.27	142	302212	111.69 ug/L	99

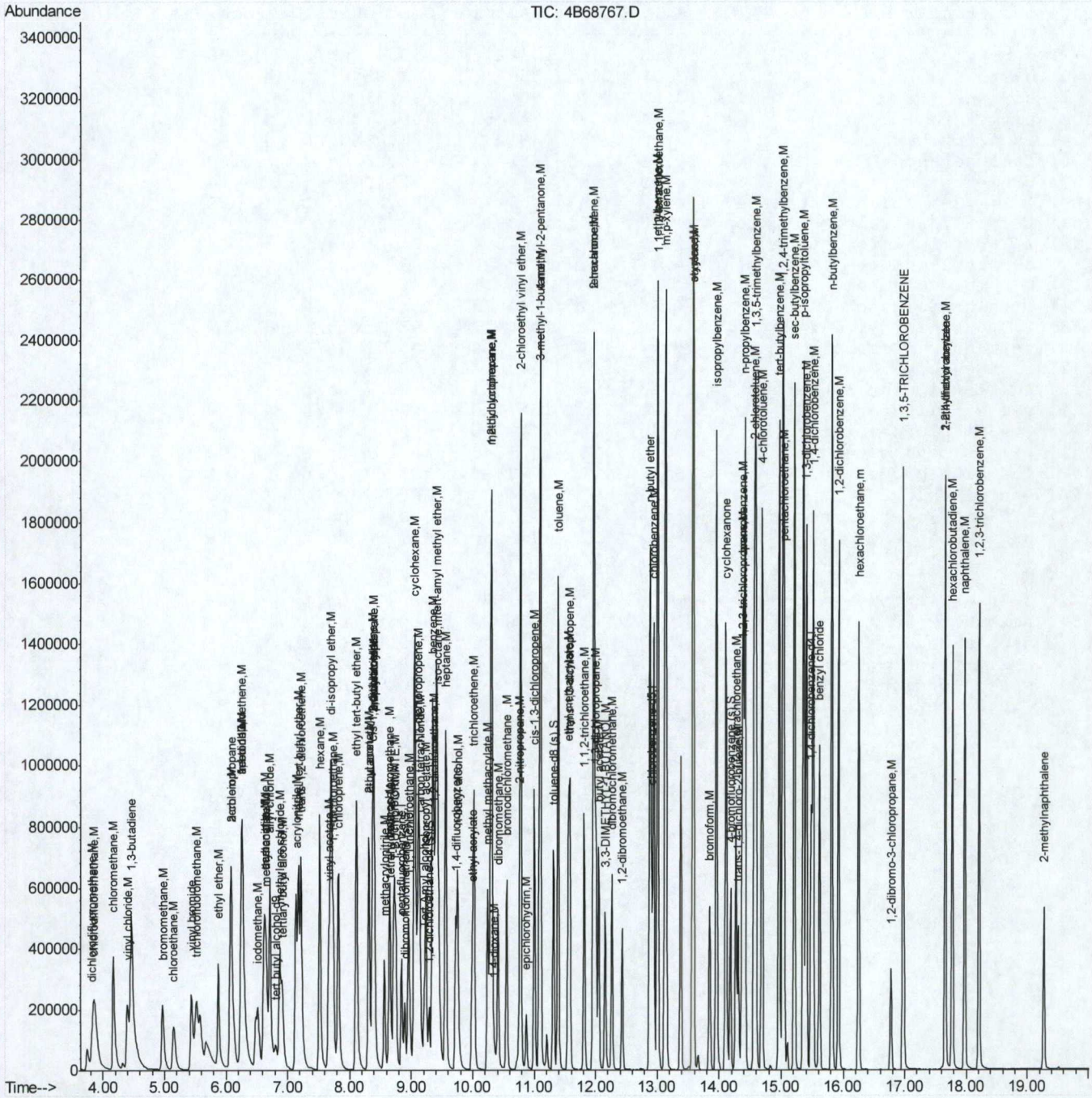
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.10 7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68767.D
Acq On : 27 Jan 2017 4:53 pm
Operator : Hueanht
Sample : ic2825-100
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jan 27 17:17:39 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Fri Jan 27 17:14:59 2017
Response via : Initial Calibration



SGS ACCUTEST JC37024

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68770.D
Acq On : 27 Jan 2017 6:19 pm
Operator : Hueanht
Sample : icv2825-50
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 31 17:15:20 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Jan 31 16:58:58 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) tert butyl alcohol-d9	6.81	65	112410	500.00 ug/L	0.00
5) pentafluorobenzene	8.84	168	288696	50.00 ug/L	0.00
56) 1,4-difluorobenzene	9.72	114	401883	50.00 ug/L	0.00
88) chlorobenzene-d5	12.91	117	371449	50.00 ug/L	0.00
103) 1,4-dichlorobenzene-d4	15.48	152	220768	50.00 ug/L	0.00
137) pentafluorobenzene(a)	8.84	168	288696	50.00 ug/L	0.00
System Monitoring Compounds					
49) dibromofluoromethane (s)	8.89	113	122417	50.21 ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 100.42%		
50) 1,2-dichloroethane-d4 (s)	9.29	65	128737	48.75 ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 97.50%		
80) toluene-d8 (s)	11.31	98	463561	49.94 ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.88%		
105) 4-bromofluorobenzene (s)	14.18	95	180304	49.88 ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 99.76%		
Target Compounds					Qvalue
2) tertiary butyl alcohol	6.91	59	77268	263.50 ug/L	97
3) 1,4-dioxane	10.34	88	33348	1311.25 ug/L	97
7) chlorodifluoromethane	3.85	51	209496	45.88 ug/L	97
8) dichlorodifluoromethane	3.82	85	211995	53.52 ug/L	98
10) chloromethane	4.18	52	111269	56.13 ug/L	98
11) vinyl chloride	4.40	62	270163	51.17 ug/L	99
12) bromomethane	4.98	94	125410	51.33 ug/L	99
13) chloroethane	5.16	64	114167	48.46 ug/L	98
14) vinyl bromide	5.45	106	168139	51.03 ug/L	99
15) trichlorofluoromethane	5.51	101	236199	52.13 ug/L	100
16) 1,3-butadiene	4.47	54	193052	44.51 ug/L	100
19) ethyl ether	5.88	74	83992	51.51 ug/L	97
20) 2-chloropropane	6.08	39	45231	40.95 ug/L	96
21) acrolein	6.09	56	295195	451.42 ug/L	98
22) 1,1-dichloroethene	6.25	96	145101	54.29 ug/L	94
23) acetone	6.26	58	78944	249.20 ug/L	96
24) allyl chloride	6.71	76	210302	92.58 ug/L #	68
25) acetonitrile	6.63	40	82534	445.77 ug/L	96
26) iodomethane	6.48	142	233324	42.43 ug/L	99
27) carbon disulfide	6.61	76	358470	42.32 ug/L	100
28) methylene chloride	6.87	84	149093	49.60 ug/L	97
29) methyl acetate	6.65	74	22841	50.72 ug/L #	86
31) methyl tert butyl ether	7.18	73	797117	97.17 ug/L	99
32) trans-1,2-dichloroethene	7.22	96	133429	49.57 ug/L	99
33) di-isopropyl ether	7.70	45	558906	49.04 ug/L	99
34) 2-butanone	8.31	72	85747	248.60 ug/L	98
35) 1,1-dichloroethane	7.73	63	271598	49.98 ug/L	99
36) chloroprene	7.82	53	225876	51.36 ug/L	99
37) acrylonitrile	7.13	53	284224	245.24 ug/L	98
38) vinyl acetate	7.66	86	26703	49.75 ug/L	92
39) ethyl tert-butyl ether	8.11	59	494222	51.13 ug/L	99
40) ethyl acetate	8.31	45	27023	54.33 ug/L	89

7.7.11

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Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68770.D
Acq On : 27 Jan 2017 6:19 pm
Operator : Hueanht
Sample : icv2825-50
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 31 17:15:20 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Jan 31 16:58:58 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
41) 2,2-dichloropropane	8.39	77	124618	46.23 ug/L	99
42) cis-1,2-dichloroethene	8.37	96	152676	50.76 ug/L	99
43) methylacrylate	8.39	85	21922	50.75 ug/L	97
44) propionitrile	8.39	54	200269	468.87 ug/L	97
45) bromochloromethane	8.65	128	80486	53.52 ug/L	97
46) tetrahydrofuran	8.66	42	48009	47.17 ug/L	98
47) chloroform	8.71	85	158435	48.29 ug/L	98
48) T-BUTYL FORMATE	8.75	59	85792	36.20 ug/L	96
51) freon 113	6.26	151	135431	59.08 ug/L	98
52) methacrylonitrile	8.56	41	100022	46.97 ug/L	98
53) 1,1,1-trichloroethane	8.95	97	186061	48.88 ug/L	99
54) cyclohexane	9.05	84	166031	42.55 ug/L #	63
57) epichlorohydrin	10.87	57	73315	237.36 ug/L	98
58) n-butyl alcohol	9.75	56	194035	2055.29 ug/L	100
59) carbon tetrachloride	9.14	117	167556	49.64 ug/L	98
60) 1,1-dichloropropene	9.11	75	199149	50.52 ug/L	98
61) hexane	7.52	57	112903	24.47 ug/L	99
62) Tert Amyl alcohol	9.21	73	63682	417.02 ug/L	83
63) benzene	9.35	78	564425	49.06 ug/L	99
64) iso-octane	9.42	57	566184	46.15 ug/L	98
65) tert-amyl methyl ether	9.40	87	95377	53.21 ug/L	93
66) heptane	9.56	57	145554	50.16 ug/L	97
67) isopropyl acetate	9.24	61	61503	51.66 ug/L	96
68) 1,2-dichloroethane	9.37	62	180220	49.00 ug/L	99
69) trichloroethene	10.02	95	149303	51.75 ug/L	98
71) ethyl acrylate	9.99	55	185142	49.29 ug/L	99
72) 2-nitropropane	10.75	41	56765	48.92 ug/L	94
73) 2-chloroethyl vinyl ether	10.77	63	504999	260.12 ug/L	100
74) methyl methacrylate	10.24	100	39697	49.31 ug/L #	87
75) 1,2-dichloropropane	10.30	63	156369	49.95 ug/L	100
76) dibromomethane	10.41	93	92328	49.83 ug/L	96
77) methylcyclohexane	10.30	83	241908	50.16 ug/L	98
78) bromodichloromethane	10.55	83	199371	53.09 ug/L	99
79) cis-1,3-dichloropropene	11.00	75	265363	52.87 ug/L	98
81) 4-methyl-2-pentanone	11.09	58	294828	231.03 ug/L	99
82) toluene	11.39	92	359760	49.33 ug/L	99
83) 3-methyl-1-butanol	11.08	55	112468	850.05 ug/L	98
84) trans-1,3-dichloropropene	11.57	75	224511	51.76 ug/L	96
85) ethyl methacrylate	11.55	69	200025	50.24 ug/L	98
86) 1,1,2-trichloroethane	11.81	83	118517	50.85 ug/L	98
87) 2-hexanone	11.97	58	303498	231.24 ug/L	100
89) tetrachloroethene	11.96	164	165487	54.17 ug/L	99
90) 1,3-dichloropropane	12.00	76	218328	46.58 ug/L	99
91) butyl acetate	12.05	56	106597	49.23 ug/L	98
92) 3,3-DIMETHYL-1-BUTANOL	12.16	57	108609	405.36 ug/L	98
93) dibromochloromethane	12.27	129	164600	56.20 ug/L	100
94) 1,2-dibromoethane	12.43	107	153000	49.71 ug/L	100
95) n-butyl ether	12.88	57	701233	50.15 ug/L	100
96) chlorobenzene	12.94	112	408445	49.28 ug/L	99
97) 1,1,1,2-tetrachloroethane	13.01	131	149535	50.69 ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68770.D
Acq On : 27 Jan 2017 6:19 pm
Operator : Hueanht
Sample : icv2825-50
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 31 17:15:20 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Jan 31 16:58:58 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
98) ethylbenzene	13.00	91	674095	48.78 ug/L	99
99) m,p-xylene	13.13	106	536172	98.97 ug/L	98
100) o-xylene	13.57	106	277637	51.20 ug/L	99
101) styrene	13.59	104	460446	48.56 ug/L	94
102) bromoform	13.84	173	119636	47.92 ug/L	99
104) isopropylbenzene	13.95	105	720187	49.76 ug/L	100
106) cyclohexanone	14.11	55	330790	464.23 ug/L	100
107) bromobenzene	14.39	156	206006	49.12 ug/L	94
108) 1,1,2,2-tetrachloroethane	14.27	83	193792	48.82 ug/L	98
109) trans-1,4-dichloro-2-buten	14.30	53	42573	49.53 ug/L	98
110) 1,2,3-trichloropropane	14.37	110	48532	48.84 ug/L	100
111) n-propylbenzene	14.41	91	829669	49.79 ug/L	100
113) 2-chlorotoluene	14.57	126	183133	50.42 ug/L	99
114) 4-chlorotoluene	14.69	91	519508	50.22 ug/L	100
115) 1,3,5-trimethylbenzene	14.59	105	588827	49.61 ug/L	99
116) tert-butylbenzene	14.97	119	555088	50.69 ug/L	99
117) pentachloroethane	15.05	167	104654	45.08 ug/L	98
118) 1,2,4-trimethylbenzene	15.03	105	609579	50.48 ug/L	99
119) sec-butylbenzene	15.21	105	839356	51.66 ug/L	100
120) 1,3-dichlorobenzene	15.40	146	388125	49.50 ug/L	99
121) p-isopropyltoluene	15.36	119	730366	51.67 ug/L	99
122) 1,4-dichlorobenzene	15.51	146	383477	50.21 ug/L	100
123) benzyl chloride	15.61	91	243262	36.00 ug/L	100
124) 1,2-dichlorobenzene	15.93	146	385238	50.62 ug/L	99
126) n-butylbenzene	15.82	92	388561	51.91 ug/L	100
128) 1,2-dibromo-3-chloropropan	16.77	75	35739	52.73 ug/L	97
129) 1,3,5-TRICHLOROBENZENE	16.97	180	350338	52.10 ug/L	99
130) 1,2,4-trichlorobenzene	17.66	180	313178	52.32 ug/L	98
131) hexachlorobutadiene	17.77	225	170593	48.58 ug/L	99
132) naphthalene	17.97	128	542940	50.16 ug/L	100
133) 1,2,3-trichlorobenzene	18.21	180	270681	51.38 ug/L	98
134) hexachloroethane	16.25	201	143456	54.25 ug/L	99
135) 2-ethylhexyl acrylate	17.66	70	12119	8.03 ug/L	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

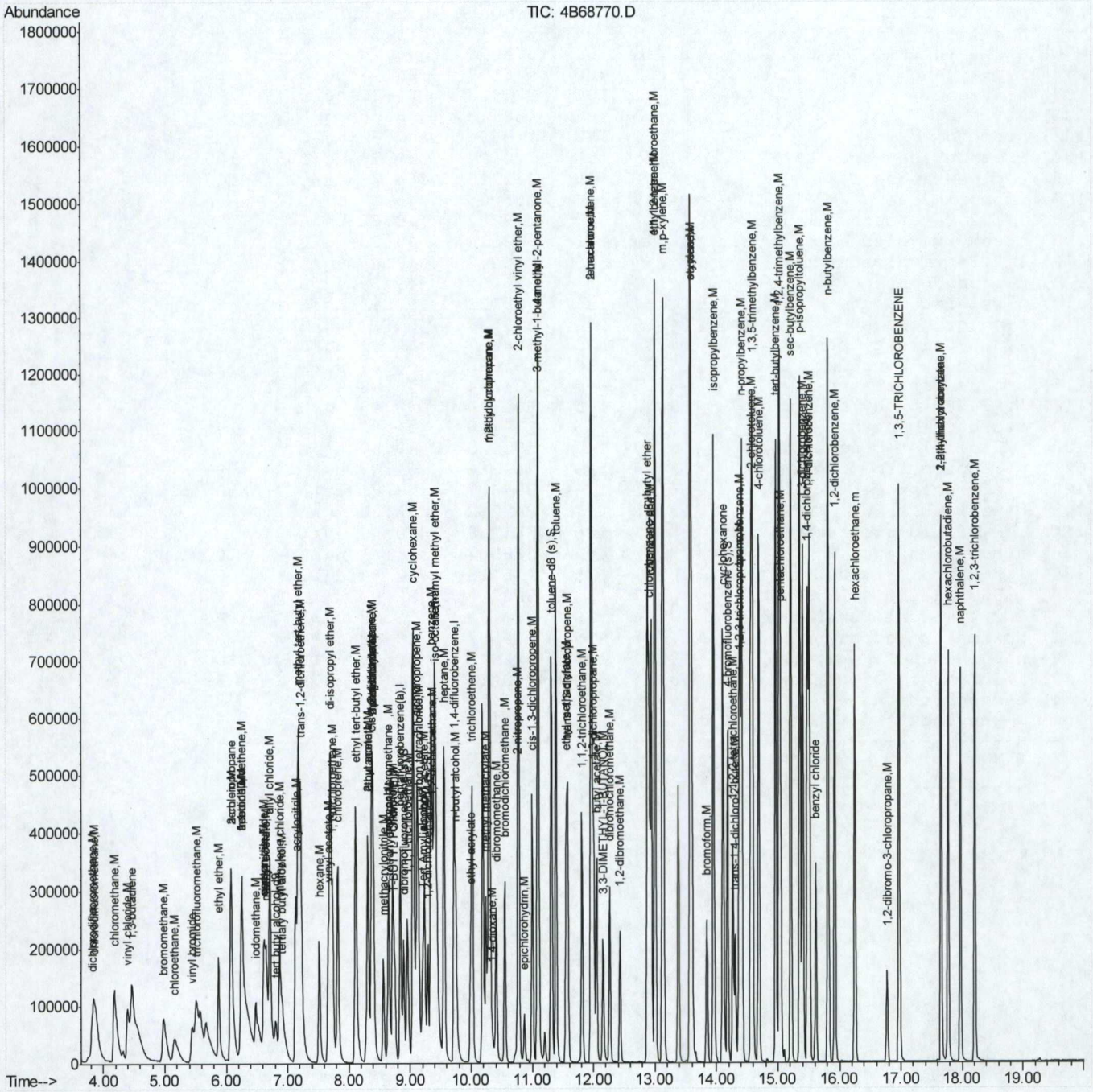
7.7.11

7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDCHEM\1\DATA\
Data File : 4B68770.D
Acq On : 27 Jan 2017 6:19 pm
Operator : Hueanht
Sample : icv2825-50
Misc : MS11826,V4B2825,W,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Jan 31 17:15:20 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Jan 31 16:58:58 2017
Response via : Initial Calibration



SGS ACCUTEST JC37024

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\
Data File : 4B68840.D
Acq On : 31 Jan 2017 4:10 am
Operator : Hueanht
Sample : icv2825-50
Misc : MS12037,V4B2828,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 31 17:11:55 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Jan 31 16:58:58 2017
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) tert butyl alcohol-d9	6.81	65	137634	500.00 ug/L	0.00
5) pentafluorobenzene	8.84	168	268903	50.00 ug/L	0.00
56) 1,4-difluorobenzene	9.72	114	379394	50.00 ug/L	0.00
88) chlorobenzene-d5	12.90	117	359007	50.00 ug/L	0.00
103) 1,4-dichlorobenzene-d4	15.48	152	206994	50.00 ug/L	0.00
137) pentafluorobenzene(a)	8.84	168	268903	50.00 ug/L	0.00
System Monitoring Compounds					
49) dibromofluoromethane (s)	8.89	113	118337	52.11 ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 104.22%		
50) 1,2-dichloroethane-d4 (s)	9.29	65	134264	54.58 ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 109.16%		
80) toluene-d8 (s)	11.31	98	441419	50.38 ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 100.76%		
105) 4-bromofluorobenzene (s)	14.18	95	170984	50.45 ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.90%		
Target Compounds					Qvalue
138) Freon 142B	4.11	65	112975	42.55 ug/L	89

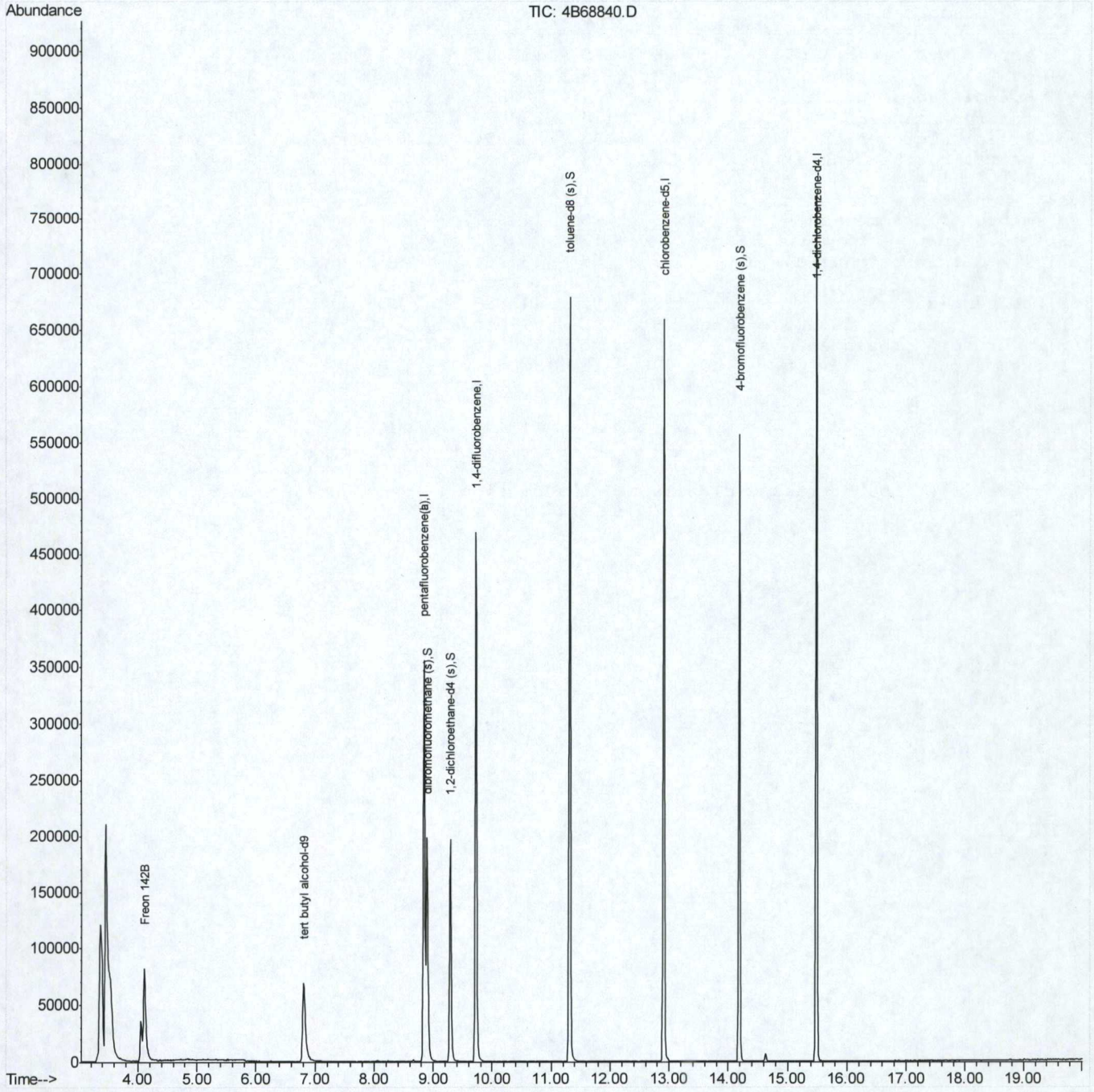
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.12 7

Quantitation Report (QT Reviewed)

Data Path : C:\MSDChem\1\DATA\
Data File : 4B68840.D
Acq On : 31 Jan 2017 4:10 am
Operator : Hueanht
Sample : icv2825-50
Misc : MS12037,V4B2828,W,,,,1
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jan 31 17:11:55 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Jan 31 16:58:58 2017
Response via : Initial Calibration



M4B2825.M Tue Jan 31 17:12:08 2017 GCMS4B

SGS ACCUTEST JC37024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\4B\V4B2850-51\
Data File : 4B69259.D
Acq On : 14 Feb 2017 9:31 am
Operator : Hueanht
Sample : ib
Misc : MS12448,V4B2850,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 15 10:27:32 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Jan 31 16:58:58 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) tert butyl alcohol-d9	6.802	65	114841	500.00 ug/L	0.00
5) pentafluorobenzene	8.842	168	278708	50.00 ug/L	0.00
56) 1,4-difluorobenzene	9.715	114	387691	50.00 ug/L	0.00
88) chlorobenzene-d5	12.905	117	371165	50.00 ug/L	0.00
103) 1,4-dichlorobenzene-d4	15.479	152	215566	50.00 ug/L	0.00
137) pentafluorobenzene(a)	8.842	168	278708	50.00 ug/L	# 0.00
System Monitoring Compounds					
49) dibromofluoromethane (s)	8.889	113	121686	51.70 ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 103.40%		
50) 1,2-dichloroethane-d4 (s)	9.286	65	132515	51.98 ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 103.96%		
80) toluene-d8 (s)	11.310	98	451705	50.45 ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 100.90%		
105) 4-bromofluorobenzene (s)	14.182	95	176055	49.88 ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 99.76%		
Target Compounds					Qvalue
2) tertiary butyl alcohol	6.901	59	30312	101.18 ug/L	93
3) 1,4-dioxane	10.343	88	13686	526.75 ug/L	97
7) chlorodifluoromethane	3.862	51	109616	24.87 ug/L	95
8) dichlorodifluoromethane	3.821	85	68521	17.92 ug/L	97
10) chloromethane	4.176	52	39317	20.54 ug/L	95
11) vinyl chloride	4.396	62	99776	19.58 ug/L	97
12) bromomethane	4.987	94	50981	21.61 ug/L	99
13) chloroethane	5.170	64	44736	19.67 ug/L	98
14) vinyl bromide	5.458	106	58009	18.24 ug/L	99
15) trichlorofluoromethane	5.510	101	97770	22.35 ug/L	97
16) 1,3-butadiene	4.474	54	80802	19.30 ug/L	100
19) ethyl ether	5.876	74	31550	20.04 ug/L	95
20) 2-chloropropane	6.069	39	19584	18.37 ug/L	90
21) acrolein	6.085	56	113401	179.63 ug/L	99
22) 1,1-dichloroethene	6.253	96	56667	21.96 ug/L	99
23) acetone	6.258	58	26785	87.58 ug/L	91
24) allyl chloride	6.713	76	77891	33.74 ug/L #	70
25) acetonitrile	6.624	40	37384	209.15 ug/L	93
26) iodomethane	6.483	142	88492	16.67 ug/L	95
27) carbon disulfide	6.608	76	155759	19.05 ug/L	98
28) methylene chloride	6.870	84	60163	20.73 ug/L	97
29) methyl acetate	6.655	74	8074	18.57 ug/L	96
31) methyl tert butyl ether	7.173	73	153955	19.44 ug/L	98
32) trans-1,2-dichloroethene	7.215	96	55955	21.53 ug/L	93
33) di-isopropyl ether	7.691	45	228594	20.78 ug/L	99
34) 2-butanone	8.303	72	29995	90.08 ug/L #	90
35) 1,1-dichloroethane	7.727	63	112149	21.38 ug/L	98
36) chloroprene	7.816	53	89864	21.16 ug/L	97
37) acrylonitrile	7.131	53	102711	91.80 ug/L	99
38) vinyl acetate	7.659	86	9866	19.04 ug/L	72
39) ethyl tert-butyl ether	8.109	59	185501	19.88 ug/L	98
40) ethyl acetate	8.308	45	9384	19.54 ug/L	83
41) 2,2-dichloropropane	8.392	77	57296	22.02 ug/L	99
42) cis-1,2-dichloroethene	8.366	96	62443	21.50 ug/L	98
43) methylacrylate	8.392	85	7507	18.00 ug/L #	82
44) propionitrile	8.381	54	78524	190.43 ug/L	82
45) bromochloromethane	8.643	128	31241	21.52 ug/L	97
46) tetrahydrofuran	8.658	42	17505	17.81 ug/L	95
47) chloroform	8.711	85	66927	21.13 ug/L	97
48) T-BUTYL FORMATE	8.737	59	42162	18.43 ug/L	92
51) freon 113	6.253	151	42499	19.20 ug/L	96
52) methacrylonitrile	8.559	41	37807	18.39 ug/L	97
53) 1,1,1-trichloroethane	8.951	97	78035	21.23 ug/L	98
54) cyclohexane	9.051	84	68765	18.26 ug/L #	60

7.7.13 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\4B\V4B2850-51\
Data File : 4B69259.D
Acq On : 14 Feb 2017 9:31 am
Operator : Hueanht
Sample : ib
Misc : MS12448,V4B2850,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 15 10:27:32 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Jan 31 16:58:58 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57)	epichlorohydrin	10.866	57	27221	91.35	ug/L	97
58)	n-butyl alcohol	9.746	56	88768	974.68	ug/L	99
59)	carbon tetrachloride	9.134	117	71528	21.97	ug/L	97
60)	1,1-dichloropropene	9.108	75	81286	21.37	ug/L	98
61)	hexane	7.513	57	98470	22.12	ug/L	99
62)	Tert Amyl alcohol	9.202	73	12769	86.68	ug/L	91
63)	benzene	9.344	78	226217	20.38	ug/L	99
64)	iso-octane	9.412	57	239182	20.21	ug/L	98
65)	tert-amyl methyl ether	9.396	87	33604	19.43	ug/L	90
66)	heptane	9.553	57	63081	22.53	ug/L	98
67)	isopropyl acetate	9.229	61	19940	17.36	ug/L	94
68)	1,2-dichloroethane	9.370	62	75299	21.22	ug/L	98
69)	trichloroethene	10.013	95	60246	21.65	ug/L	97
71)	ethyl acrylate	9.987	55	63158	17.43	ug/L	97
72)	2-nitropropane	10.751	41	21714	19.40	ug/L	92
73)	2-chloroethyl vinyl ether	10.771	63	174153	92.99	ug/L	99
74)	methyl methacrylate	10.238	100	14278	18.38	ug/L	97
75)	1,2-dichloropropane	10.296	63	65811	21.79	ug/L	98
76)	dibromomethane	10.405	93	36377	20.35	ug/L	95
77)	methylcyclohexane	10.296	83	98490	21.17	ug/L	98
78)	bromodichloromethane	10.547	83	82183	22.68	ug/L	99
79)	cis-1,3-dichloropropene	10.996	75	104215	21.52	ug/L	94
81)	4-methyl-2-pentanone	11.091	58	110316	89.61	ug/L	92
82)	toluene	11.389	92	140963	20.04	ug/L	98
83)	3-methyl-1-butanol	11.085	55	54026	423.29	ug/L	96
84)	trans-1,3-dichloropropene	11.577	75	90622	21.66	ug/L	99
85)	ethyl methacrylate	11.551	69	70572	18.37	ug/L	96
86)	1,1,2-trichloroethane	11.812	83	46236	20.57	ug/L	97
87)	2-hexanone	11.969	58	111913	88.39	ug/L	92
89)	tetrachloroethene	11.959	164	57833	18.94	ug/L	98
90)	1,3-dichloropropane	12.001	76	88258	18.84	ug/L	94
91)	butyl acetate	12.048	56	38729	17.90	ug/L	100
92)	3,3-DIMETHYL-1-BUTANOL	12.152	57	57446	214.57	ug/L	96
93)	dibromochloromethane	12.262	129	64863	22.16	ug/L	100
94)	1,2-dibromoethane	12.429	107	56942	18.51	ug/L	98
95)	n-butyl ether	12.879	57	265730	19.02	ug/L	98
96)	chlorobenzene	12.937	112	162733	19.65	ug/L	98
97)	1,1,1,2-tetrachloroethane	13.010	131	60941	20.67	ug/L	97
98)	ethylbenzene	13.000	91	278460	20.17	ug/L	99
99)	m,p-xylene	13.130	106	212777	39.31	ug/L	95
100)	o-xylene	13.570	106	110643	20.42	ug/L	97
101)	styrene	13.585	104	184633	19.49	ug/L	97
102)	bromoform	13.842	173	45482	18.72	ug/L	97
104)	isopropylbenzene	13.951	105	290986	20.59	ug/L	99
106)	cyclohexanone	14.103	55	105992	152.34	ug/L	98
107)	bromobenzene	14.386	156	82684	20.19	ug/L	98
108)	1,1,2,2-tetrachloroethane	14.265	83	75061	19.37	ug/L	97
109)	trans-1,4-dichloro-2-b...	14.302	53	15406	19.39	ug/L	89
110)	1,2,3-trichloropropane	14.365	110	18511	19.08	ug/L	95
111)	n-propylbenzene	14.412	91	351898	21.63	ug/L	99
113)	2-chlorotoluene	14.563	126	74408	20.98	ug/L	92
114)	4-chlorotoluene	14.689	91	212502	21.04	ug/L	98
115)	1,3,5-trimethylbenzene	14.584	105	243182	20.98	ug/L	99
116)	tert-butylbenzene	14.966	119	225537	21.09	ug/L	98
117)	pentachloroethane	15.045	167	50959	22.48	ug/L	99
118)	1,2,4-trimethylbenzene	15.024	105	252271	21.40	ug/L	99
119)	sec-butylbenzene	15.212	105	340593	21.47	ug/L	99
120)	1,3-dichlorobenzene	15.400	146	161943	21.15	ug/L	99
121)	p-isopropyltoluene	15.358	119	299797	21.72	ug/L	100
122)	1,4-dichlorobenzene	15.510	146	154009	20.65	ug/L	99
123)	benzyl chloride	15.615	91	134203	20.34	ug/L	98
124)	1,2-dichlorobenzene	15.923	146	155812	20.97	ug/L	98
126)	n-butylbenzene	15.813	92	160486	21.96	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\4B\V4B2850-51\
Data File : 4B69259.D
Acq On : 14 Feb 2017 9:31 am
Operator : Hueanht
Sample : ib
Misc : MS12448,V4B2850,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 15 10:27:32 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Jan 31 16:58:58 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
128) 1,2-dibromo-3-chloropr...	16.771	75	13537	20.46 ug/L	87
129) 1,3,5-TRICHLOROBENZENE	16.969	180	145331	22.13 ug/L	99
130) 1,2,4-trichlorobenzene	17.654	180	122323	20.93 ug/L	100
131) hexachlorobutadiene	17.770	225	72359	21.10 ug/L	99
132) naphthalene	17.968	128	201301	19.05 ug/L	100
133) 1,2,3-trichlorobenzene	18.209	180	102598	19.94 ug/L	98
134) hexachloroethane	16.248	201	57388	22.23 ug/L	99
135) 2-ethylhexyl acrylate	17.665	70	4874	4.09 ug/L	92
136) 2-methylnaphthalene	19.271	142	40354	15.78 ug/L	99

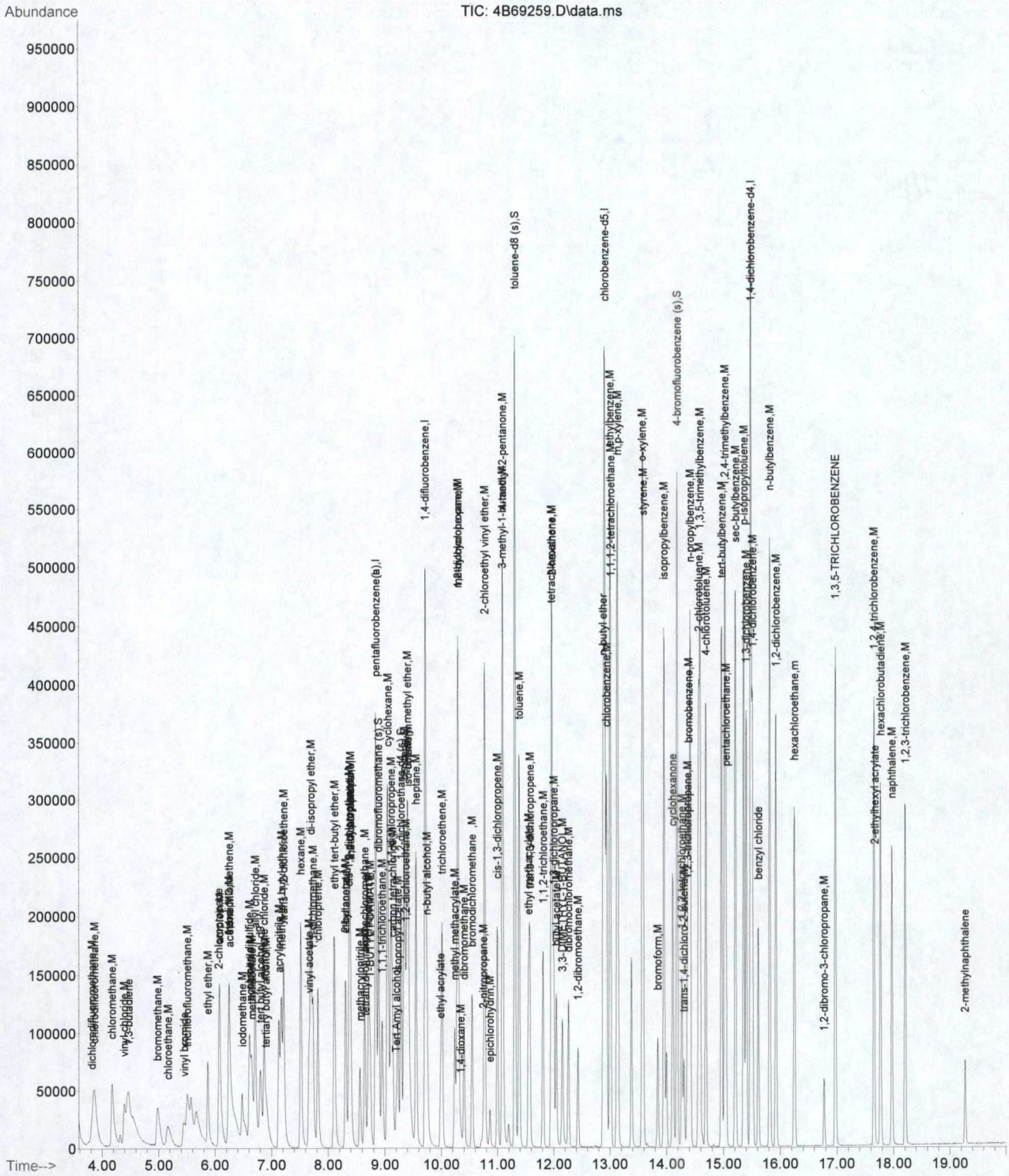
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.13 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\4B\V4B2850-51\
Data File : 4B69259.D
Acq On : 14 Feb 2017 9:31 am
Operator : Hueanht
Sample : ib
Misc : MS12448,V4B2850,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 15 10:27:32 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Jan 31 16:58:58 2017
Response via : Initial Calibration



SGS ACCUTEST JC37024

7.7.13 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\4B\v4b2853-2854\
Data File : 4B69310.D
Acq On : 15 Feb 2017 11:00 am
Operator : Hueanht
Sample : cc2825-20
Misc : MS12524,V4B2853,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 16 12:13:50 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Jan 31 16:58:58 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.807	65	140656	500.00	ug/L	0.00
5) pentafluorobenzene	8.841	168	302122	50.00	ug/L	0.00
56) 1,4-difluorobenzene	9.715	114	418432	50.00	ug/L	0.00
88) chlorobenzene-d5	12.905	117	392838	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	15.479	152	229784	50.00	ug/L	0.00
137) pentafluorobenzene(a)	8.841	168	302122	50.00	ug/L	# 0.00
System Monitoring Compounds						
49) dibromofluoromethane (s)	8.894	113	130526	51.16	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 102.32%			
50) 1,2-dichloroethane-d4 (s)	9.286	65	139670	50.54	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 101.08%			
80) toluene-d8 (s)	11.310	98	480675	49.74	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.48%			
105) 4-bromofluorobenzene (s)	14.182	95	187537	49.84	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 99.68%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	6.906	59	33696	91.83	ug/L	98
3) 1,4-dioxane	10.343	88	16685	524.31	ug/L	96
7) chlorodifluoromethane	3.873	51	84719	17.73	ug/L	95
8) dichlorodifluoromethane	3.826	85	70512	17.01	ug/L	99
10) chloromethane	4.171	52	32311	15.57	ug/L	99
11) vinyl chloride	4.396	62	88422	16.00	ug/L	98
12) bromomethane	4.976	94	51953	20.32	ug/L	98
13) chloroethane	5.154	64	47542	19.28	ug/L	96
14) vinyl bromide	5.442	106	61452	17.82	ug/L	100
15) trichlorofluoromethane	5.525	101	83627	17.64	ug/L	97
16) 1,3-butadiene	4.464	54	108266	23.85	ug/L	99
19) ethyl ether	5.876	74	33337	19.54	ug/L	90
20) 2-chloropropane	6.080	39	21695	18.77	ug/L	89
21) acrolein	6.085	56	122766	179.39	ug/L	95
22) 1,1-dichloroethene	6.252	96	53061	18.97	ug/L	98
23) acetone	6.258	58	30558	92.17	ug/L	97
24) allyl chloride	6.713	76	40948	16.00	ug/L	91
25) acetonitrile	6.619	40	38583	199.13	ug/L	93
26) iodomethane	6.483	142	115120	20.00	ug/L	97
27) carbon disulfide	6.613	76	182252	20.56	ug/L	99
28) methylene chloride	6.875	84	61921	19.68	ug/L	94
29) methyl acetate	6.650	74	8936	18.96	ug/L #	82
31) methyl tert butyl ether	7.173	73	161174	18.77	ug/L	99
32) trans-1,2-dichloroethene	7.215	96	55655	19.76	ug/L	98
33) di-isopropyl ether	7.696	45	220809	18.51	ug/L	99
34) 2-butanone	8.308	72	36095	100.00	ug/L	92
35) 1,1-dichloroethane	7.733	63	110931	19.51	ug/L	98
36) chloroprene	7.816	53	84143	18.28	ug/L	97
37) acrylonitrile	7.131	53	117723	97.06	ug/L	100
38) vinyl acetate	7.665	86	10547	18.78	ug/L	98
39) ethyl tert-butyl ether	8.109	59	183362	18.13	ug/L	99
40) ethyl acetate	8.313	45	10296	19.78	ug/L	65
41) 2,2-dichloropropane	8.397	77	60426	21.42	ug/L	96
42) cis-1,2-dichloroethene	8.371	96	63470	20.16	ug/L	96
43) methylacrylate	8.392	85	8789	19.44	ug/L	93
44) propionitrile	8.386	54	89260	199.69	ug/L	93
45) bromochloromethane	8.643	128	32324	20.54	ug/L	97
46) tetrahydrofuran	8.658	42	19421	18.23	ug/L	97
47) chloroform	8.711	85	65732	19.14	ug/L	98

7.7.14 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\4B\v4b2853-2854\
Data File : 4B69310.D
Acq On : 15 Feb 2017 11:00 am
Operator : Hueanht
Sample : cc2825-20
Misc : MS12524,V4B2853,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 16 12:13:50 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Jan 31 16:58:58 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
48)	T-BUTYL FORMATE	8.737	59	45150	18.21 ug/L	92
51)	freon 113	6.252	151	43637	18.19 ug/L	98
52)	methacrylonitrile	8.559	41	40840	18.33 ug/L	97
53)	1,1,1-trichloroethane	8.957	97	78375	19.67 ug/L	98
54)	cyclohexane	9.056	84	75240	18.43 ug/L	86
57)	epichlorohydrin	10.866	57	31006	96.41 ug/L	96
58)	n-butyl alcohol	9.746	56	101931	1036.99 ug/L	97
59)	carbon tetrachloride	9.134	117	69830	19.87 ug/L	94
60)	1,1-dichloropropene	9.108	75	77517	18.89 ug/L	99
61)	hexane	7.518	57	87819	18.28 ug/L	99
62)	Tert Amyl alcohol	9.208	73	15104	95.00 ug/L	93
63)	benzene	9.344	78	225483	18.82 ug/L	99
64)	iso-octane	9.417	57	237255	18.57 ug/L	99
65)	tert-amyl methyl ether	9.396	87	35599	19.08 ug/L	99
66)	heptane	9.553	57	52661	17.43 ug/L	100
67)	isopropyl acetate	9.234	61	22706	18.32 ug/L	93
68)	1,2-dichloroethane	9.370	62	76366	19.94 ug/L	100
69)	trichloroethene	10.013	95	59741	19.89 ug/L	96
71)	ethyl acrylate	9.987	55	70366	17.99 ug/L	98
72)	2-nitropropane	10.750	41	22863	18.92 ug/L	86
73)	2-chloroethyl vinyl ether	10.771	63	188563	93.28 ug/L	99
74)	methyl methacrylate	10.243	100	15855	18.92 ug/L	96
75)	1,2-dichloropropane	10.301	63	65232	20.01 ug/L	98
76)	dibromomethane	10.405	93	38090	19.74 ug/L	98
77)	methylcyclohexane	10.295	83	91771	18.28 ug/L	98
78)	bromodichloromethane	10.546	83	81162	20.76 ug/L	99
79)	cis-1,3-dichloropropene	11.002	75	102320	19.58 ug/L	97
81)	4-methyl-2-pentanone	11.090	58	124640	93.81 ug/L	96
82)	toluene	11.389	92	140141	18.46 ug/L	98
83)	3-methyl-1-butanol	11.085	55	61261	444.71 ug/L	95
84)	trans-1,3-dichloropropene	11.577	75	87166	19.30 ug/L	97
85)	ethyl methacrylate	11.551	69	75309	18.17 ug/L	99
86)	1,1,2-trichloroethane	11.812	83	47377	19.53 ug/L	97
87)	2-hexanone	11.969	58	129942	95.09 ug/L	95
89)	tetrachloroethene	11.959	164	58290	18.04 ug/L	97
90)	1,3-dichloropropane	12.001	76	91519	18.46 ug/L	99
91)	butyl acetate	12.048	56	41110	17.95 ug/L	97
92)	3,3-DIMETHYL-1-BUTANOL	12.152	57	58939	208.00 ug/L	96
93)	dibromochloromethane	12.262	129	63413	20.47 ug/L	98
94)	1,2-dibromoethane	12.429	107	60503	18.59 ug/L	99
95)	n-butyl ether	12.879	57	254161	17.19 ug/L	98
96)	chlorobenzene	12.937	112	161225	18.39 ug/L	100
97)	1,1,1,2-tetrachloroethane	13.010	131	60102	19.27 ug/L	98
98)	ethylbenzene	12.999	91	267574	18.31 ug/L	97
99)	m,p-xylene	13.135	106	209014	36.48 ug/L	100
100)	o-xylene	13.570	106	107473	18.74 ug/L	97
101)	styrene	13.585	104	182320	18.18 ug/L	97
102)	bromoform	13.847	173	43651	17.05 ug/L	95
104)	isopropylbenzene	13.951	105	279861	18.58 ug/L	99
106)	cyclohexanone	14.108	55	120295	162.20 ug/L	99
107)	bromobenzene	14.385	156	82553	18.91 ug/L	95
108)	1,1,2,2-tetrachloroethane	14.265	83	79000	19.12 ug/L	97
110)	1,2,3-trichloropropane	14.365	110	19932	19.27 ug/L	100
111)	n-propylbenzene	14.412	91	331410	19.11 ug/L	99
113)	2-chlorotoluene	14.563	126	71263	18.85 ug/L	98
114)	4-chlorotoluene	14.689	91	207424	19.27 ug/L	99
115)	1,3,5-trimethylbenzene	14.584	105	234521	18.98 ug/L	97
116)	tert-butylbenzene	14.966	119	212325	18.63 ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\4B\v4b2853-2854\
Data File : 4B69310.D
Acq On : 15 Feb 2017 11:00 am
Operator : Hueanht
Sample : cc2825-20
Misc : MS12524,V4B2853,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 16 12:13:50 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Jan 31 16:58:58 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
117) pentachloroethane	15.044	167	49464	20.47	ug/L		98
118) 1,2,4-trimethylbenzene	15.024	105	245404	19.53	ug/L		98
119) sec-butylbenzene	15.212	105	320717	18.96	ug/L		99
120) 1,3-dichlorobenzene	15.400	146	158443	19.41	ug/L		98
121) p-isopropyltoluene	15.358	119	284797	19.36	ug/L		100
122) 1,4-dichlorobenzene	15.510	146	153094	19.26	ug/L		97
123) benzyl chloride	15.615	91	125627	17.86	ug/L		99
124) 1,2-dichlorobenzene	15.923	146	156015	19.70	ug/L		99
126) n-butylbenzene	15.813	92	151429	19.44	ug/L		96
128) 1,2-dibromo-3-chloropr...	16.770	75	14029	19.89	ug/L		93
129) 1,3,5-TRICHLOROBENZENE	16.969	180	142698	20.39	ug/L		99
130) 1,2,4-trichlorobenzene	17.654	180	121109	19.44	ug/L		100
131) hexachlorobutadiene	17.769	225	70043	19.16	ug/L		97
132) naphthalene	17.968	128	209565	18.60	ug/L		99
133) 1,2,3-trichlorobenzene	18.209	180	102832	18.75	ug/L		98
134) hexachloroethane	16.247	201	47779	17.36	ug/L		99
135) 2-ethylhexyl acrylate	17.660	70	3878	3.39	ug/L	#	81
136) 2-methylnaphthalene	19.276	142	39075	14.33	ug/L		99

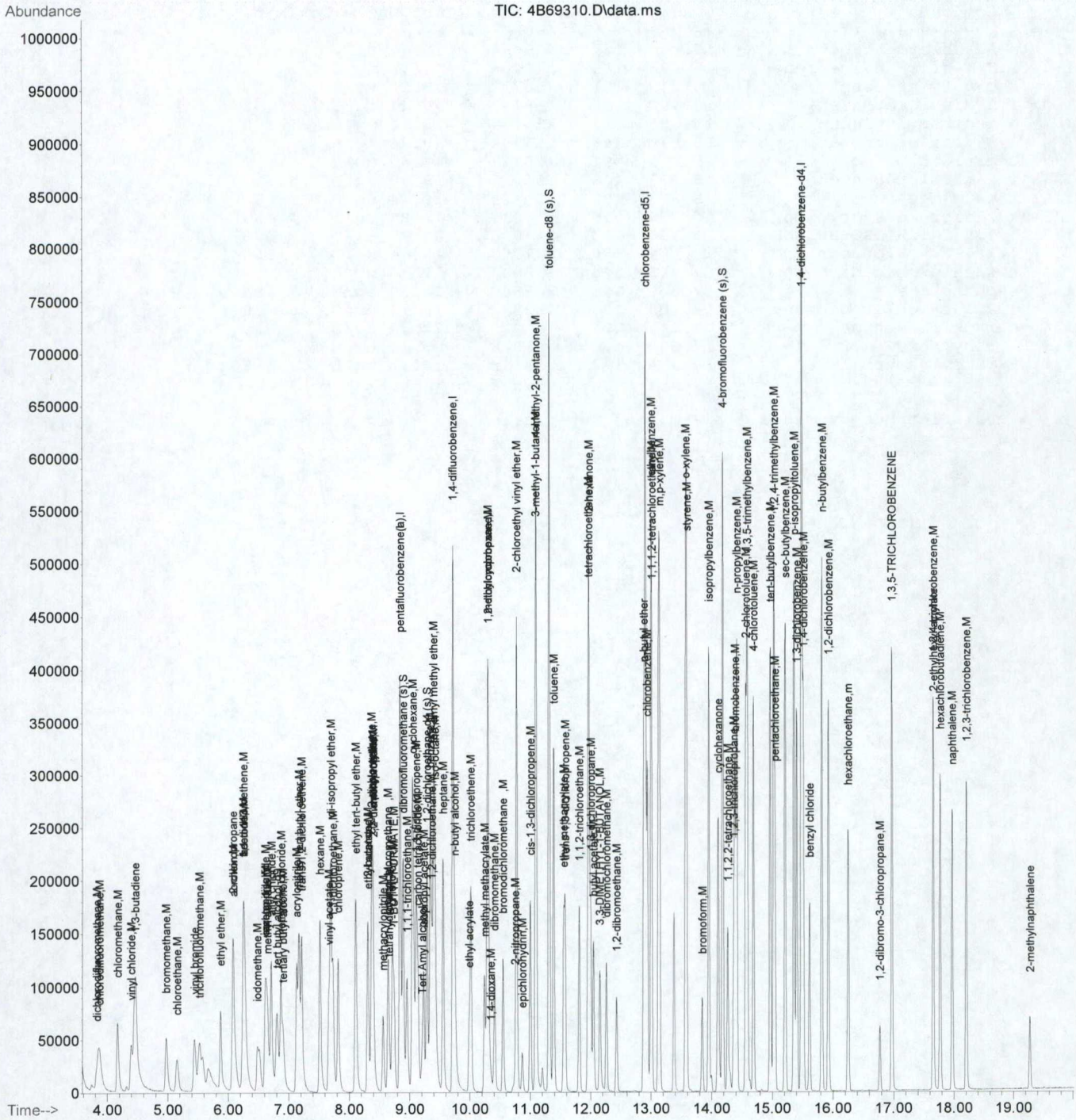
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.14 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\4B\v4b2853-2854\
Data File : 4B69310.D
Acq On : 15 Feb 2017 11:00 am
Operator : Hueanht
Sample : cc2825-20
Misc : MS12524,V4B2853,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 16 12:13:50 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Jan 31 16:58:58 2017
Response via : Initial Calibration



SGS ACCUTEST JC37024

7.7.14 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\4B\v4b2853-2854\
Data File : 4B69311.D
Acq On : 15 Feb 2017 11:28 am
Operator : Hueanht
Sample : cc2825-20
Misc : MS12524,V4B2853,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 16 12:13:39 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Jan 31 16:58:58 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.807	65	142502	500.00	ug/L	0.00
5) pentafluorobenzene	8.841	168	302451	50.00	ug/L	0.00
56) 1,4-difluorobenzene	9.720	114	419357	50.00	ug/L	0.00
88) chlorobenzene-d5	12.905	117	396909	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	15.478	152	229250	50.00	ug/L	0.00
137) pentafluorobenzene(a)	8.841	168	302451	50.00	ug/L	# 0.00
System Monitoring Compounds						
49) dibromofluoromethane (s)	8.894	113	130764	51.20	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 102.40%			
50) 1,2-dichloroethane-d4 (s)	9.286	65	141416	51.11	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 102.22%			
80) toluene-d8 (s)	11.310	98	481689	49.73	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.46%			
105) 4-bromofluorobenzene (s)	14.181	95	188939	50.33	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 100.66%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	6.906	59	35541	95.61	ug/L	98
3) 1,4-dioxane	10.348	88	15606	484.05	ug/L	96
7) chlorodifluoromethane	3.867	51	82939	17.34	ug/L	96
8) dichlorodifluoromethane	3.831	85	70726	17.04	ug/L	99
10) chloromethane	4.171	52	32657	15.72	ug/L	95
11) vinyl chloride	4.396	62	88074	15.92	ug/L	98
12) bromomethane	4.976	94	51649	20.18	ug/L	96
13) chloroethane	5.154	64	46946	19.02	ug/L	97
14) vinyl bromide	5.447	106	62167	18.01	ug/L	99
15) trichlorofluoromethane	5.525	101	82210	17.32	ug/L	97
16) 1,3-butadiene	4.469	54	109982	24.20	ug/L	99
19) ethyl ether	5.876	74	34870	20.41	ug/L	97
20) 2-chloropropane	6.080	39	21806	18.85	ug/L	86
21) acrolein	6.085	56	129523	189.06	ug/L	100
22) 1,1-dichloroethene	6.252	96	53180	18.99	ug/L	99
23) acetone	6.258	58	31332	94.40	ug/L	92
24) allyl chloride	6.713	76	39708	15.49	ug/L	95
25) acetonitrile	6.629	40	40072	206.59	ug/L	94
26) iodomethane	6.482	142	115499	20.05	ug/L	97
27) carbon disulfide	6.613	76	185054	20.85	ug/L	98
28) methylene chloride	6.869	84	61681	19.59	ug/L	99
29) methyl acetate	6.650	74	9871	20.92	ug/L	94
31) methyl tert butyl ether	7.173	73	165369	19.24	ug/L	97
32) trans-1,2-dichloroethene	7.215	96	55476	19.67	ug/L	96
33) di-isopropyl ether	7.696	45	222008	18.59	ug/L	99
34) 2-butanone	8.308	72	37022	102.45	ug/L	97
35) 1,1-dichloroethane	7.732	63	111524	19.59	ug/L	99
36) chloroprene	7.816	53	84147	18.26	ug/L	97
37) acrylonitrile	7.131	53	121539	100.10	ug/L	99
38) vinyl acetate	7.664	86	10987	19.54	ug/L	82
39) ethyl tert-butyl ether	8.109	59	185497	18.32	ug/L	99
40) ethyl acetate	8.313	45	10387	19.94	ug/L	84
41) 2,2-dichloropropane	8.397	77	60150	21.30	ug/L	98
42) cis-1,2-dichloroethene	8.371	96	63752	20.23	ug/L	94
43) methylacrylate	8.391	85	9054	20.01	ug/L	92
44) propionitrile	8.386	54	91863	205.29	ug/L	91
45) bromochloromethane	8.643	128	32612	20.70	ug/L	96
46) tetrahydrofuran	8.658	42	21571	20.23	ug/L	96
47) chloroform	8.716	85	67333	19.59	ug/L	98

7.7.15 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\4B\v4b2853-2854\
Data File : 4B69311.D
Acq On : 15 Feb 2017 11:28 am
Operator : Hueanht
Sample : cc2825-20
Misc : MS12524,V4B2853,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 16 12:13:39 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Jan 31 16:58:58 2017
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
48)	T-BUTYL FORMATE	8.742	59	46291	18.64 ug/L	92
51)	freon 113	6.263	151	44004	18.32 ug/L	96
52)	methacrylonitrile	8.559	41	42122	18.88 ug/L	98
53)	1,1,1-trichloroethane	8.956	97	78841	19.77 ug/L	97
54)	cyclohexane	9.056	84	76857	18.80 ug/L #	77
57)	epichlorohydrin	10.871	57	32314	100.26 ug/L	96
58)	n-butyl alcohol	9.751	56	105389	1069.80 ug/L	98
59)	carbon tetrachloride	9.134	117	70418	19.99 ug/L	97
60)	1,1-dichloropropene	9.108	75	78728	19.14 ug/L	98
61)	hexane	7.518	57	87705	18.21 ug/L	96
62)	Tert Amyl alcohol	9.207	73	15872	99.61 ug/L	93
63)	benzene	9.343	78	227170	18.92 ug/L	99
64)	iso-octane	9.417	57	238863	18.66 ug/L	99
65)	tert-amyl methyl ether	9.401	87	36719	19.63 ug/L	98
66)	heptane	9.553	57	53077	17.53 ug/L	99
67)	isopropyl acetate	9.228	61	23349	18.79 ug/L	98
68)	1,2-dichloroethane	9.370	62	78088	20.34 ug/L	98
69)	trichloroethene	10.013	95	60693	20.16 ug/L	98
71)	ethyl acrylate	9.987	55	73951	18.87 ug/L	99
72)	2-nitropropane	10.750	41	23682	19.56 ug/L #	71
73)	2-chloroethyl vinyl ether	10.771	63	190870	94.22 ug/L	100
74)	methyl methacrylate	10.243	100	16584	19.74 ug/L #	89
75)	1,2-dichloropropane	10.301	63	66622	20.40 ug/L	97
76)	dibromomethane	10.405	93	38634	19.98 ug/L	98
77)	methylcyclohexane	10.301	83	91604	18.20 ug/L	98
78)	bromodichloromethane	10.546	83	81958	20.91 ug/L	100
79)	cis-1,3-dichloropropene	11.001	75	103624	19.78 ug/L	99
81)	4-methyl-2-pentanone	11.095	58	132758	99.69 ug/L	96
82)	toluene	11.388	92	140724	18.49 ug/L	100
83)	3-methyl-1-butanol	11.085	55	62898	455.59 ug/L	98
84)	trans-1,3-dichloropropene	11.577	75	88024	19.45 ug/L	99
85)	ethyl methacrylate	11.551	69	78709	18.95 ug/L	99
86)	1,1,2-trichloroethane	11.812	83	48240	19.84 ug/L	99
87)	2-hexanone	11.969	58	137330	100.27 ug/L	94
89)	tetrachloroethene	11.959	164	60226	18.45 ug/L	97
90)	1,3-dichloropropane	12.000	76	93654	18.70 ug/L	98
91)	butyl acetate	12.047	56	42664	18.44 ug/L	91
92)	3,3-DIMETHYL-1-BUTANOL	12.152	57	61071	213.31 ug/L	97
93)	dibromochloromethane	12.262	129	64953	20.76 ug/L	98
94)	1,2-dibromoethane	12.429	107	62547	19.02 ug/L	96
95)	n-butyl ether	12.879	57	259894	17.39 ug/L	98
96)	chlorobenzene	12.937	112	162976	18.40 ug/L	99
97)	1,1,1,2-tetrachloroethane	13.010	131	60667	19.25 ug/L	97
98)	ethylbenzene	12.999	91	270312	18.31 ug/L	99
99)	m,p-xylene	13.130	106	211520	36.54 ug/L	93
100)	o-xylene	13.569	106	109803	18.95 ug/L	95
101)	styrene	13.585	104	186325	18.39 ug/L	97
102)	bromoform	13.847	173	44627	17.24 ug/L	96
104)	isopropylbenzene	13.951	105	281869	18.76 ug/L	98
106)	cyclohexanone	14.108	55	122696	165.82 ug/L	98
107)	bromobenzene	14.385	156	84602	19.42 ug/L	97
108)	1,1,2,2-tetrachloroethane	14.265	83	82752	20.08 ug/L	97
110)	1,2,3-trichloropropane	14.364	110	20418	19.79 ug/L	90
111)	n-propylbenzene	14.411	91	338754	19.58 ug/L	98
113)	2-chlorotoluene	14.563	126	72825	19.31 ug/L	96
114)	4-chlorotoluene	14.689	91	210926	19.64 ug/L	99
115)	1,3,5-trimethylbenzene	14.589	105	236706	19.20 ug/L	99
116)	tert-butylbenzene	14.966	119	216839	19.07 ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\4B\v4b2853-2854\
Data File : 4B69311.D
Acq On : 15 Feb 2017 11:28 am
Operator : Hueanht
Sample : cc2825-20
Misc : MS12524,V4B2853,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 16 12:13:39 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Jan 31 16:58:58 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
117) pentachloroethane	15.044	167	50634	21.00	ug/L	99
118) 1,2,4-trimethylbenzene	15.023	105	248963	19.85	ug/L	97
119) sec-butylbenzene	15.212	105	326556	19.35	ug/L	100
120) 1,3-dichlorobenzene	15.405	146	160507	19.71	ug/L	99
121) p-isopropyltoluene	15.358	119	287726	19.60	ug/L	99
122) 1,4-dichlorobenzene	15.510	146	154385	19.46	ug/L	99
123) benzyl chloride	15.614	91	128535	18.32	ug/L	99
124) 1,2-dichlorobenzene	15.923	146	157911	19.98	ug/L	99
126) n-butylbenzene	15.813	92	152363	19.60	ug/L	98
128) 1,2-dibromo-3-chloropr...	16.776	75	14526	20.64	ug/L	92
129) 1,3,5-TRICHLOROBENZENE	16.969	180	142440	20.40	ug/L	100
130) 1,2,4-trichlorobenzene	17.654	180	123409	19.86	ug/L	99
131) hexachlorobutadiene	17.769	225	69675	19.11	ug/L	98
132) naphthalene	17.973	128	217127	19.32	ug/L	99
133) 1,2,3-trichlorobenzene	18.209	180	106157	19.40	ug/L	98
134) hexachloroethane	16.247	201	47101	17.15	ug/L	99
135) 2-ethylhexyl acrylate	17.659	70	3536	3.21	ug/L #	77
136) 2-methylnaphthalene	19.270	142	39938	14.68	ug/L	99

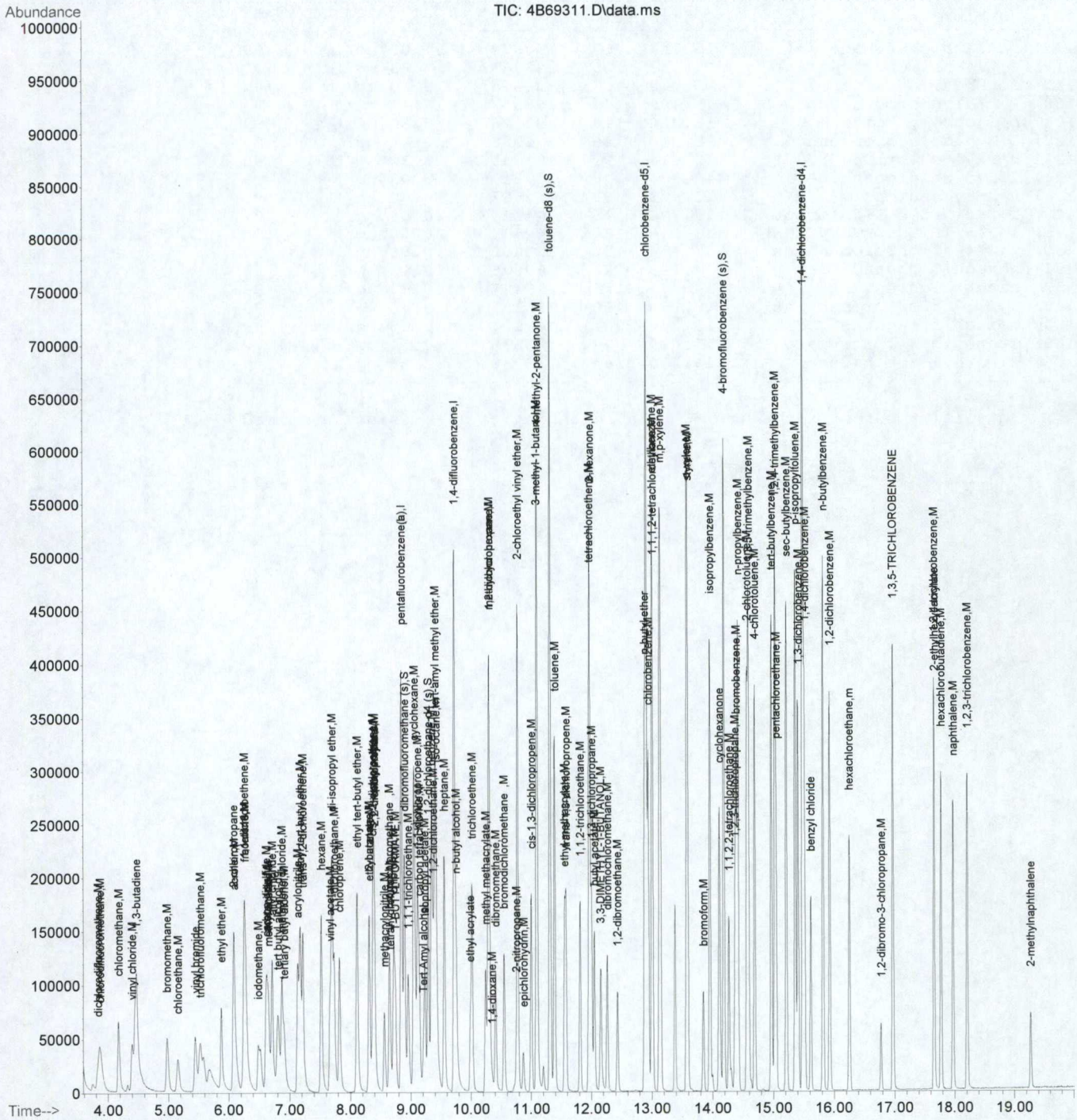
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.15 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\4B\v4b2853-2854\
Data File : 4B69311.D
Acq On : 15 Feb 2017 11:28 am
Operator : Hueanht
Sample : cc2825-20
Misc : MS12524,V4B2853,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 16 12:13:39 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Jan 31 16:58:58 2017
Response via : Initial Calibration



SGS ACCUTEST JC37024

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\4B\v4b2853-2854\
Data File : 4B69312.D
Acq On : 15 Feb 2017 12:02 pm
Operator : Hueanht
Sample : cc2825-0.5
Misc : MS12524,V4B2853,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 16 12:15:53 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Jan 31 16:58:58 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.807	65	156257	500.00	ug/L	0.00
5) pentafluorobenzene	8.841	168	322001	50.00	ug/L	0.00
56) 1,4-difluorobenzene	9.715	114	437141	50.00	ug/L	0.00
88) chlorobenzene-d5	12.905	117	410658	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	15.484	152	229690	50.00	ug/L	0.00
137) pentafluorobenzene(a)	8.841	168	322001	50.00	ug/L	# 0.00
System Monitoring Compounds						
49) dibromofluoromethane (s)	8.894	113	137432	50.54	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 101.08%			
50) 1,2-dichloroethane-d4 (s)	9.286	65	149955	50.91	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 101.82%			
80) toluene-d8 (s)	11.310	98	503020	49.82	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 99.64%			
105) 4-bromofluorobenzene (s)	14.181	95	192736	51.24	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 102.48%			
Target Compounds						Qvalue
11) vinyl chloride	4.396	62	2241	0.38	ug/L	83

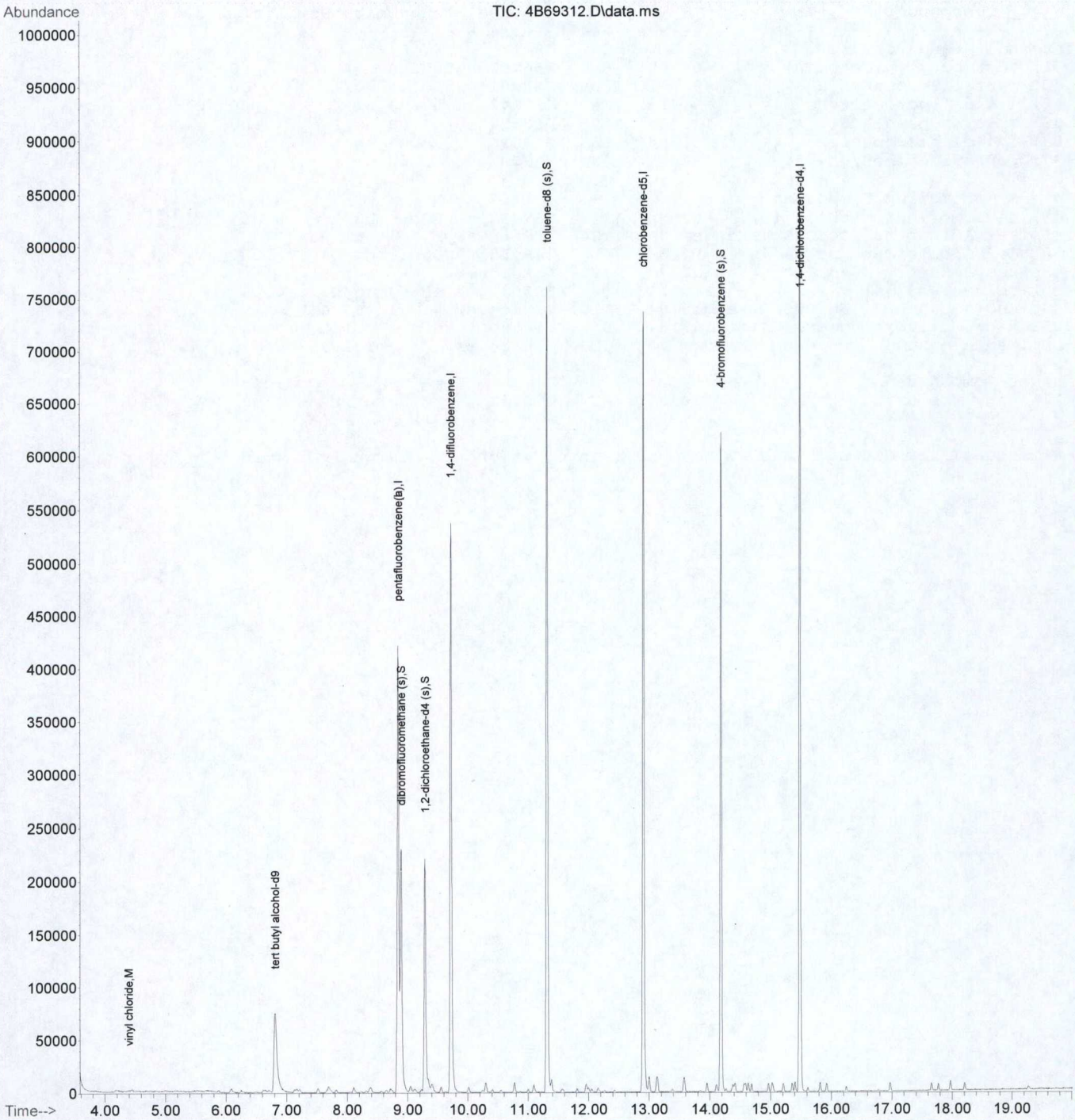
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.16 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\4B\v4b2853-2854\
Data File : 4B69312.D
Acq On : 15 Feb 2017 12:02 pm
Operator : Hueanht
Sample : cc2825-0.5
Misc : MS12524,V4B2853,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Feb 16 12:15:53 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Jan 31 16:58:58 2017
Response via : Initial Calibration



SGS ACCUTEST JC37024

7.7.16 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\4B\v4b2853-2854\
Data File : 4B69313.D
Acq On : 15 Feb 2017 12:30 pm
Operator : Hueanht
Sample : cc2825-1
Misc : MS12524,V4B2853,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 16 12:18:35 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Jan 31 16:58:58 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	6.812	65	163181	500.00	ug/L	0.00
5) pentafluorobenzene	8.841	168	321954	50.00	ug/L	0.00
56) 1,4-difluorobenzene	9.715	114	438830	50.00	ug/L	0.00
88) chlorobenzene-d5	12.905	117	413519	50.00	ug/L	0.00
103) 1,4-dichlorobenzene-d4	15.478	152	235005	50.00	ug/L	0.00
137) pentafluorobenzene(a)	8.841	168	321954	50.00	ug/L	# 0.00
System Monitoring Compounds						
49) dibromofluoromethane (s)	8.894	113	138837	51.06	ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 102.12%			
50) 1,2-dichloroethane-d4 (s)	9.286	65	152225	51.69	ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 103.38%			
80) toluene-d8 (s)	11.310	98	509113	50.23	ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 100.46%			
105) 4-bromofluorobenzene (s)	14.181	95	196371	51.03	ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 102.06%			
Target Compounds						Qvalue
10) chloromethane	4.181	52	1991	0.90	ug/L #	56

(#) = qualifier out of range (m) = manual integration (+) = signals summed

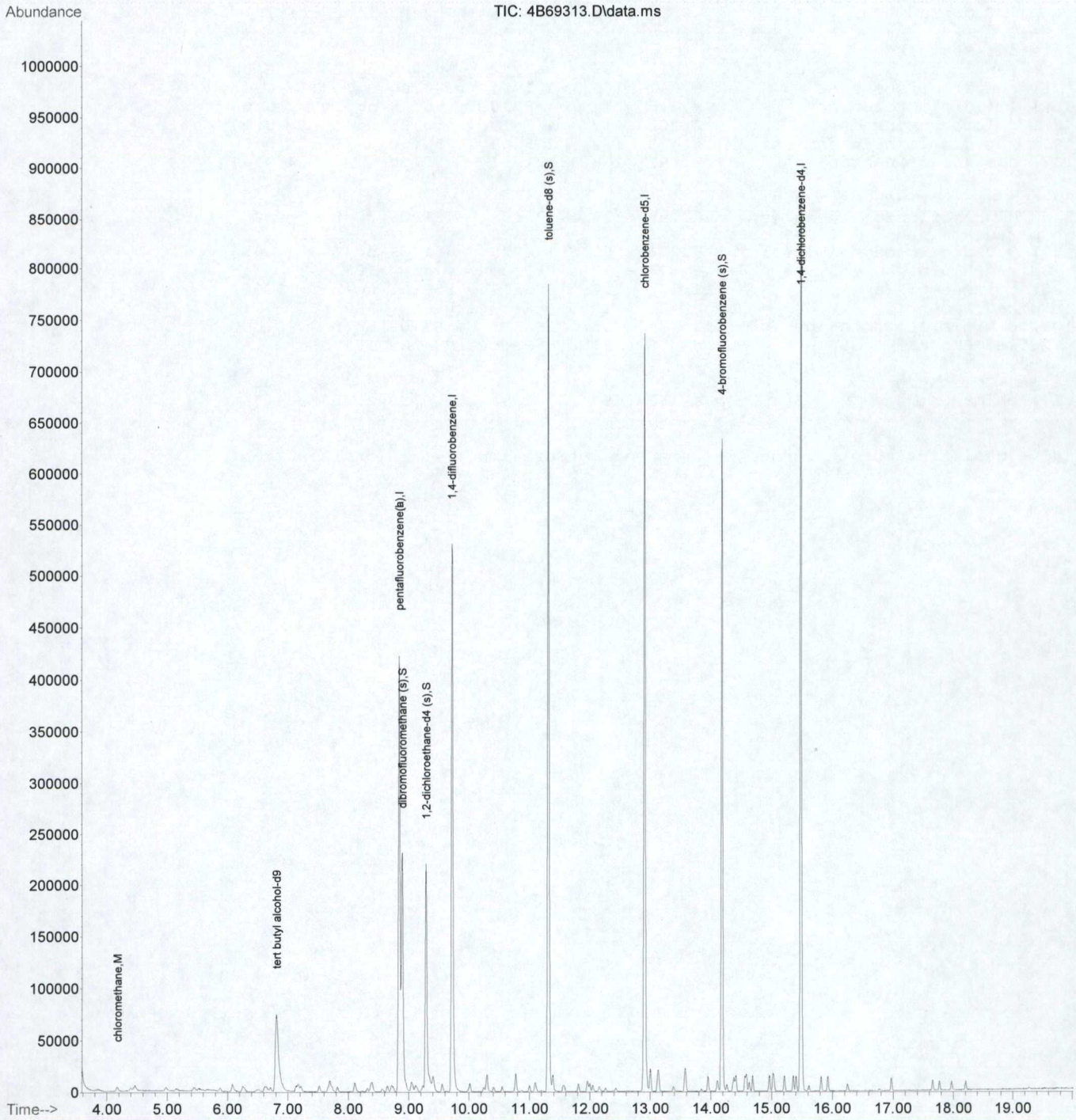
7.7.17

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\4B\v4b2853-2854\
Data File : 4B69313.D
Acq On : 15 Feb 2017 12:30 pm
Operator : Hueanht
Sample : cc2825-1
Misc : MS12524,V4B2853,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 16 12:18:35 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Tue Jan 31 16:58:58 2017
Response via : Initial Calibration



M4B2825.M Thu Feb 16 12:18:47 2017

SGS ACCUTEST JC37024

7.7.17 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\4B\v4b2853-2854\
Data File : 4B69333.D
Acq On : 15 Feb 2017 9:35 pm
Operator : Hueanht
Sample : cc2825-50
Misc : MS12524,V4B2853,5,,,,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 16 09:06:06 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Thu Feb 16 08:29:28 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) tert butyl alcohol-d9	6.802	65	126845	500.00 ug/L	0.00
5) pentafluorobenzene	8.841	168	278579	50.00 ug/L	0.00
56) 1,4-difluorobenzene	9.715	114	397084	50.00 ug/L	0.00
88) chlorobenzene-d5	12.905	117	371959	50.00 ug/L	0.00
103) 1,4-dichlorobenzene-d4	15.479	152	226170	50.00 ug/L	0.00
137) pentafluorobenzene(a)	8.841	168	278579	50.00 ug/L	# 0.00
System Monitoring Compounds					
49) dibromofluoromethane (s)	8.894	113	123433	52.47 ug/L	0.00
Spiked Amount 50.000	Range 76 - 120		Recovery = 104.94%		
50) 1,2-dichloroethane-d4 (s)	9.286	65	134039	52.60 ug/L	0.00
Spiked Amount 50.000	Range 73 - 122		Recovery = 105.20%		
80) toluene-d8 (s)	11.310	98	460117	50.17 ug/L	0.00
Spiked Amount 50.000	Range 84 - 119		Recovery = 100.34%		
105) 4-bromofluorobenzene (s)	14.181	95	184608	49.85 ug/L	0.00
Spiked Amount 50.000	Range 78 - 117		Recovery = 99.70%		
Target Compounds					Qvalue
2) tertiary butyl alcohol	6.911	59	85462	258.27 ug/L	98
3) 1,4-dioxane	10.342	88	35216	1227.13 ug/L	99
7) chlorodifluoromethane	3.867	51	233567	53.01 ug/L	99
8) dichlorodifluoromethane	3.826	85	177942	46.55 ug/L	97
10) chloromethane	4.171	52	85508	44.70 ug/L	97
11) vinyl chloride	4.396	62	230628	45.27 ug/L	99
12) bromomethane	4.976	94	129480	54.92 ug/L	99
13) chloroethane	5.154	64	120869	53.17 ug/L	98
14) vinyl bromide	5.447	106	160689	50.54 ug/L	99
15) trichlorofluoromethane	5.531	101	215545	49.30 ug/L	96
16) 1,3-butadiene	4.438	54	50583	12.09 ug/L	99
19) ethyl ether	5.876	74	80764	51.33 ug/L	94
20) 2-chloropropane	6.075	39	49922	46.84 ug/L	89
21) acrolein	6.085	56	316560	501.67 ug/L	99
22) 1,1-dichloroethene	6.252	96	130865	50.75 ug/L	99
23) acetone	6.263	58	60743	198.71 ug/L	92
24) allyl chloride	6.713	76	108811	47.77 ug/L	97
25) acetonitrile	6.624	40	98765	552.81 ug/L	96
26) iodomethane	6.509	142	271932	51.25 ug/L	99
27) carbon disulfide	6.619	76	438559	53.65 ug/L	99
28) methylene chloride	6.870	84	150799	51.99 ug/L	99
29) methyl acetate	6.650	74	23347	53.72 ug/L #	86
31) methyl tert butyl ether	7.173	73	385353	48.68 ug/L	100
32) trans-1,2-dichloroethene	7.215	96	131499	50.62 ug/L	97
33) di-isopropyl ether	7.696	45	539515	49.06 ug/L	99
34) 2-butanone	8.308	72	79903	240.07 ug/L	93
35) 1,1-dichloroethane	7.733	63	262781	50.11 ug/L	100
36) chloroprene	7.816	53	215438	50.76 ug/L	99
37) acrylonitrile	7.131	53	289704	259.04 ug/L	100
38) vinyl acetate	7.659	86	27389	52.88 ug/L	98
39) ethyl tert-butyl ether	8.109	59	459180	49.23 ug/L	98
40) ethyl acetate	8.308	45	25502	53.14 ug/L	82
41) 2,2-dichloropropane	8.392	77	126941	48.80 ug/L	97
42) cis-1,2-dichloroethene	8.371	96	149234	51.42 ug/L	100
43) methylacrylate	8.392	85	21945	52.65 ug/L	98
44) propionitrile	8.386	54	212271	515.02 ug/L	96
45) bromochloromethane	8.648	128	78281	53.94 ug/L	90
46) tetrahydrofuran	8.658	42	49948	50.85 ug/L	99
47) chloroform	8.716	85	157135	49.63 ug/L	97

7.7.18

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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\4B\v4b2853-2854\
Data File : 4B69333.D
Acq On : 15 Feb 2017 9:35 pm
Operator : Hueanht
Sample : cc2825-50
Misc : MS12524,V4B2853,5,,,,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 16 09:06:06 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Thu Feb 16 08:29:28 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
48) T-BUTYL FORMATE	8.742	59	117232	51.26 ug/L	96
51) freon 113	6.263	151	107093	48.41 ug/L	97
52) methacrylonitrile	8.559	41	101874	49.58 ug/L	98
53) 1,1,1-trichloroethane	8.956	97	195296	53.17 ug/L	98
54) cyclohexane	9.056	84	188123	49.97 ug/L	86
57) epichlorohydrin	10.866	57	82349	269.82 ug/L	95
58) n-butyl alcohol	9.746	56	245416	2630.95 ug/L	98
59) carbon tetrachloride	9.134	117	173166	51.92 ug/L	98
60) 1,1-dichloropropene	9.108	75	188761	48.46 ug/L	98
61) hexane	7.518	57	203872	44.71 ug/L	99
62) Tert Amyl alcohol	9.208	73	35369	234.41 ug/L	97
63) benzene	9.344	78	543694	47.82 ug/L	100
64) iso-octane	9.417	57	538644	44.44 ug/L	98
65) tert-amyl methyl ether	9.401	87	89414	50.49 ug/L	95
66) heptane	9.553	57	124484	43.42 ug/L	98
67) isopropyl acetate	9.234	61	62984	53.54 ug/L	99
68) 1,2-dichloroethane	9.370	62	183663	50.54 ug/L	99
69) trichloroethene	10.013	95	144835	50.81 ug/L	96
71) ethyl acrylate	9.987	55	185624	50.02 ug/L	90
72) 2-nitropropane	10.750	41	60937	53.15 ug/L	85
73) 2-chloroethyl vinyl ether	10.771	63	497071	259.13 ug/L	99
74) methyl methacrylate	10.238	100	40321	50.69 ug/L	92
75) 1,2-dichloropropane	10.301	63	155719	50.34 ug/L	100
76) dibromomethane	10.405	93	94060	51.38 ug/L	99
77) methylcyclohexane	10.301	83	217909	45.73 ug/L	99
78) bromodichloromethane	10.552	83	203948	54.96 ug/L	100
79) cis-1,3-dichloropropene	10.996	75	255196	51.46 ug/L	97
81) 4-methyl-2-pentanone	11.090	58	290794	230.62 ug/L	98
82) toluene	11.389	92	341638	47.41 ug/L	99
83) 3-methyl-1-butanol	11.085	55	149044	1140.12 ug/L	98
84) trans-1,3-dichloropropene	11.577	75	223838	52.23 ug/L	100
85) ethyl methacrylate	11.551	69	198129	50.37 ug/L	100
86) 1,1,2-trichloroethane	11.807	83	121043	52.57 ug/L	98
87) 2-hexanone	11.969	58	290470	223.99 ug/L	98
89) tetrachloroethene	11.959	164	140827	46.03 ug/L	97
90) 1,3-dichloropropane	12.000	76	222246	47.35 ug/L	99
91) butyl acetate	12.048	56	111030	51.21 ug/L	98
92) 3,3-DIMETHYL-1-BUTANOL	12.152	57	145123	540.90 ug/L	98
93) dibromochloromethane	12.262	129	171393	58.44 ug/L	99
94) 1,2-dibromoethane	12.429	107	155465	50.44 ug/L	99
95) n-butyl ether	12.879	57	647921	46.27 ug/L	100
96) chlorobenzene	12.937	112	396884	47.82 ug/L	100
97) 1,1,1,2-tetrachloroethane	13.010	131	150259	50.87 ug/L	99
98) ethylbenzene	12.999	91	651399	47.08 ug/L	100
99) m,p-xylene	13.130	106	511582	94.30 ug/L	96
100) o-xylene	13.570	106	269919	49.70 ug/L	96
101) styrene	13.585	104	449785	47.37 ug/L	97
102) bromoform	13.842	173	128064	51.17 ug/L	99
104) isopropylbenzene	13.951	105	693157	46.75 ug/L	100
106) cyclohexanone	14.108	55	96693	132.46 ug/L	97
107) bromobenzene	14.385	156	206763	48.12 ug/L	94
108) 1,1,2,2-tetrachloroethane	14.265	83	212483	52.25 ug/L	99
109) trans-1,4-dichloro-2-b...	14.302	53	31735	36.48 ug/L	92
110) 1,2,3-trichloropropane	14.365	110	52475	51.55 ug/L	98
111) n-propylbenzene	14.412	91	810882	47.50 ug/L	100
113) 2-chlorotoluene	14.563	126	178024	47.85 ug/L	96
114) 4-chlorotoluene	14.689	91	512515	48.36 ug/L	99
115) 1,3,5-trimethylbenzene	14.589	105	572582	47.09 ug/L	100

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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\4B\v4b2853-2854\
Data File : 4B69333.D
Acq On : 15 Feb 2017 9:35 pm
Operator : Hueanht
Sample : cc2825-50
Misc : MS12524,V4B2853,5,,,,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 16 09:06:06 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Thu Feb 16 08:29:28 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
116) tert-butylbenzene	14.966	119	534119	47.61 ug/L	99
117) pentachloroethane	15.039	167	127438	53.58 ug/L	99
118) 1,2,4-trimethylbenzene	15.024	105	601781	48.65 ug/L	99
119) sec-butylbenzene	15.212	105	798267	47.95 ug/L	99
120) 1,3-dichlorobenzene	15.405	146	388234	48.33 ug/L	98
121) p-isopropyltoluene	15.358	119	705364	48.71 ug/L	100
122) 1,4-dichlorobenzene	15.510	146	384358	49.12 ug/L	100
123) benzyl chloride	15.615	91	323369	46.71 ug/L	99
124) 1,2-dichlorobenzene	15.923	146	385927	49.50 ug/L	99
126) n-butylbenzene	15.813	92	372414	48.56 ug/L	99
128) 1,2-dibromo-3-chloropr...	16.770	75	39729	57.22 ug/L	93
129) 1,3,5-TRICHLOROBENZENE	16.969	180	343005	49.79 ug/L	99
130) 1,2,4-trichlorobenzene	17.654	180	304748	49.70 ug/L	98
131) hexachlorobutadiene	17.769	225	154956	43.07 ug/L	100
132) naphthalene	17.973	128	553699	49.93 ug/L	100
133) 1,2,3-trichlorobenzene	18.209	180	262370	48.61 ug/L	99
134) hexachloroethane	16.253	201	133334	49.22 ug/L	99
135) 2-ethylhexyl acrylate	17.660	70	13471	8.60 ug/L	99
136) 2-methylnaphthalene	19.270	142	124029	46.22 ug/L	98

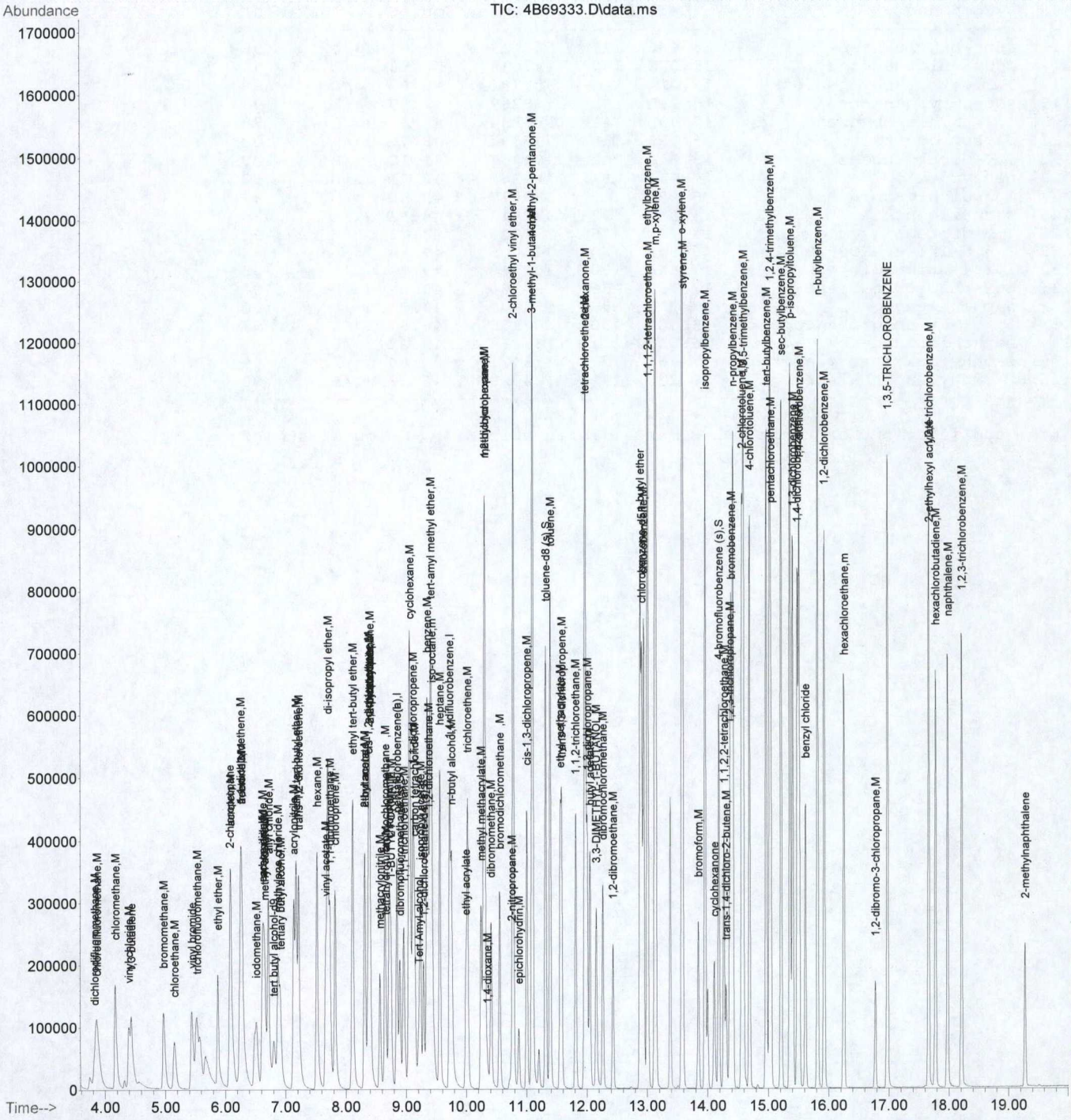
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.7.18 7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\4B\v4b2853-2854\
Data File : 4B69333.D
Acq On : 15 Feb 2017 9:35 pm
Operator : Hueanht
Sample : cc2825-50
Misc : MS12524,V4B2853,5,,,,1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Feb 16 09:06:06 2017
Quant Method : C:\MSDCHEM\1\METHODS\M4B2825.M
Quant Title : Method SW846 V8260C, ZB624 60mx0.25mmx1.4um
QLast Update : Thu Feb 16 08:29:28 2017
Response via : Initial Calibration



7.7.18

M4B2825.M Thu Feb 16 15:43:58 2017 Page: 4

SGS ACCUTEST JC37024

SGS ACCUTEST

VOLATILE ANALYSIS LOG

VOIG-2417 80 F/S 250/2500ppm
VOIG-2417- 69.2 1,3BTD 180ppm

Batch ID: V4B 2825

Date: 01/27/2017

Print Analyst Name: Hweurth Tran

Analyst Signature: hwu

Columns: Rxi 624 Sil (60mx0.25mmx1.4µm)

Method V8260C

Initial Cal. Method V4B ~~2824~~ 2825 1/27/2017

Standard Data

Lot #	Description	Conc.
VOIG-2417	62.39 Ext A	100 ppm
VOIG-2417	61.36 Ext B	100 ppm
VOIG-2417	111.2 Ext C	100 ppm
VOIG-2417	87.12 Ext E	100-100 ppm
VOIG-2417	79.5 Hex	100 ppm

Standard Data

Lot #	Description	Conc.
VOIG-2417-	86.20 A	100 ppm
VOIG-2417-	67.29 B	100 ppm
VOIG-2417-	125.5 C	100 ppm
VOIG-2417-	66.37 E	100-100 ppm
VOIG-2417-	100.16 Ketone	400 ppm

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: _____ **Date:** 2/1/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	HB 68755	BFB											ok	11:04am	
	68756	IC 2825-2	8260C initial	AQ			5						ok	2µl A,B,C,E,K,1,3BTD	/100ml
	68757	IC 2825-20	✓	AQ			5						ok	10µl A,B,C,E,K,1,3BTD	/50ml
	68758	IC2825-~~200~~ 50	✓	AQ			5						ok	25µl A,B,C,E,K,1,3BTD	/50ml
	68759	IC2825 ~~IB~~ 200	✓	AQ			5						ok	100µl A,B,C,E,K,1,3 BTD	/50ml
	68760	IB													
	68761	IB													
	68762	IC2825-0.2	✓	AQ			5						ok	1µl A,B,C,E,K,1,3BTD	/500ml
	68763	IC2825-0.5	✓	AQ			5						ok	2.5µl A,B,C,E,1,3BTD,K	/500ml
	68764	IC2825-1	✓	AQ			5						ok	1µl A,B,C,E,K,1,3BTD	/100ml
	68765	IC2825-5	✓	AQ			5						ok	5µl A,B,C,E,K,1,3BTD	/100ml
	68766	IC2825-10	✓	AQ			5						ok	10µl A,B,C,E,K,1,3BTD	/100ml
	68767	IC2825-100	✓	AQ			5						ok	50µl A,B,C,E,K,1,3BTD	/50ml
	68768	IB													
	68769	IB													
	68770	IC2825-50	✓	AQ			5						ok	25µl ~~Ext~~ A,B,C,E Hex Ketone,1,3 BTD	/50ml
	68771	IB												no hexane peak in interval	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

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Form: OR001-10
Rev. Date: 1/19/16

7.8.1

7

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: V4B 2828

Date: 01/30/2017

016-2417-80 TIS 250/2500 ppm

Print Analyst Name: Thuanh Tran

Analyst Signature: [signature]

Columns: RTX 624 SIL 60m x 0.25mm x 1µm

Method V8260C

Initial Cal. Method M4B 28285 TH 4/24/17

Standard Data

Lot #	Description	Conc.
V016-2417-123.2	Freon 142B	180 ppm
016-2417-130.1	Ext Freon 142B	180 ppm

Standard Data

Lot #	Description	Conc.
	A	
	B	
	C	
	E	
	1,3 BTD	TH 01/30/17

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 2/1/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	4B68828	BFB													
	68830	IC2825 -1	8260 Ext	A Q			5							1µl F142B	100ml
	68831	IC2825 -2	✓	A Q			5							2µl F142B	100ml
	68832	IC2825 -5	✓	A Q			5							5µl F142B	100ml
	68833	IC2825 -10	✓	A Q			5							10µl F142B	100ml
	68834	IC2825 -20	✓	A Q			5							10µl F142B	50ml
	68835	ICV2825 -50	✓	A Q			5							25µl F142B	50ml
	68836	IC2825 -100	✓	A Q			5							50µl F142B	50ml
	68837	IC2825 -200	✓	A Q			5							100µl F142B	50ml
	68838	IB													
	68839	IB													
	68840	ICV2825 -50	✓	A Q			5							25µl EXT A,B,C,E, Hex F142B	50ml
	68841	IB													
		IB													

TH 01/30/2017

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate. Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result. All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

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Form: OR001-10
Rev. Date: 1/19/16

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SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: V4B 2850 | 2851

Date: 02/14/2017

V016-2417 - 131.1 Ext 1,3 BTD 100 ppm
V016-2417 - 101.16 Ketones 400 ppm

Print Analyst Name: Thuranh Tran

Analyst Signature: [signature]

Columns: Rxi 624 Sil | 60mx0.25mm

Method V8260C

Initial Cal. Method M4B 2825

Standard Data

Lot #	Description	Conc.
016-2417	116.17 Ext A	100 ppm
016-2417	124.15 Ext B	100 ppm
016-2417	148.2 Ext C	100 ppm
016-2451	103 034 Ext E	100 ppm
016-2417	117.14 Hex	100 ppm

Standard Data

Lot #	Description	Conc.
016-2417	128.21 A	100 ppm
016-2417	99.25 B	100 ppm
016-2417	143.3 C	100 ppm
016-2417	113.38 E	100 ppm
016-2417	134 K	250 ppm

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044. 216315 DM Dayer

Supervisor Signature: [signature] Date: 2/15/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	4B 69257	BFB											ok 8:15am		
	69258	CC2825-20											NG		
	69259	CC2825_20									✓✓		ok	10µl MB, C, E, K, 1,3BTD	50 µl
	69260	MB									✓✓		ok		
	69261	BS									✓✓		ok 25µl	EXT A, B, C, E, K Hex, 1,3BTD	50 µl
PL	69262	JC36922-7	12448 PAMGTMB	GW	1		5/50		10x		✓	✓	ok		✓
	69263	JC37024-8	12540 SL	GW	5		5		1x		✓✓		ok		✓
	69264	JC37024-1	✓	GW	2		5		1x		✓✓		ok		✓
	69265	JC36997-1 ~~JC37024-3~~	12520 TCL42	W GW	2		5		1x		✓✓		ok		✓
	69266	JC37024-2	12540 SL ✓	GW	1		10/50		5x		✓✓		ok		✓
	69267	JC37024-8 MS	✓	GW			5		1x		✓✓		ok	20µl EXT A, B, C, E, Hex K, 1,3BTD	1µg/l
	69268	JC37024-8 MSD	✓	GW			5		1x		✓✓		ok		✓
PL	69269	JC37024-2	✓	GW	1		1/50		50x		✓✓		not need		✓
	69270	JC37089-8	12543 SL, NMBE	WT B			5		1x		✓✓		ok	UNDER QA	5
	69271	JC36997-2	12520 TCL42	W	1		5		1x		✓✓		ok		✓
	69272	JC36997-3	✓	W	1		5		1x		✓✓		ok		✓
	69273	JC36997-4	✓	W	2		5		1x		✓✓		ok		✓

TT 021417

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

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Rev. Date: 1/19/16

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SGS ACCUTEST JC37024

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: V4B 2850 | 2851

Date: 02/14/2017

Print Analyst Name: Thuanh Tran

Analyst Signature: [signature]

Columns: RTX 624 SL (60m x 0.25mm x)

Method V8260C

Initial Cal. Method M4B 2825

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	~~Pg 278~~	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 2/15/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
	4B 69 274	JC 36997-4	12520 TCL 42	TN	2		5/50		10x		✓		ok		✓
	69 275	JC 37010-1	12501 TCL42+	TN	1		2.5/50		20x		✓		/	VMS+MDA/L, MAE, TBA, OXYL KRIX 010	✓
	69 276	JC 37010-1	✓	TN	1		0.25/50		200x		✓		DO Not Used		✓
	69 277	MB									✓				
	69 278	JC 34443-4I	1132 MDL	SMTFCNF			5/5	100			✓		ok	V4B 2851	
	69 279	JC 34443-4F	✓				5/5	100			✓		ok	5 MMB, CIE, 1,3 MTD / 100 ul 7.29 pm	
	69 280	IB													

HT 02/14/2017

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

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SGS ACCUTEST

VOLATILE ANALYSIS LOG

016-2417 - 101,22 EXT Ketone 400ppm
2/6/15 pH paper

Batch ID: V4B 2853 / 2854

Date: 02/15/2017

Print Analyst Name: Hueanh Tran

Analyst Signature: [signature]

Columns: RXI 624 SL (60m x 0.25mm x 1.4μm)

Method V8260C

Initial Cal. Method MAB 2825

Standard Data

Lot #	Description		Conc.
016-2417	128, 24	A	100 ppm
017-2451	1,3	B	100 ppm
016-2417	143,3	C	100 ppm
016-2417	113,38	E	100-1000 ppm
016-2417	134	TS	250/2500 ppm

Standard Data

Lot #	Description		Conc.
016-2417	116,31	EXT A	100 ppm
016-2417	124,24	EXT B	100 ppm
016-2417	149,2	EXT C	100 ppm
017-2451	-03,9	EXT E	100-1000 ppm
016-2417	-147,7	Hex	100 ppm

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] **Date:** 2/16/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	HB 69309	BFB											OK	10:32am	
	69310	CC2825-20									✓		OK	1,3BTD #10 10μl A,B,C,E,K / 50ml	
	69311	CC2825-20									✓		OK	#11	
	69312	CC2825 -0.5									✓		OK	OR #11 1μl A,B,C,E,1,3BTD / 200ml	
	69313	CC2825-1									✓		OK	OR #10 1μl A,B,C,E,1,3BTD / 100ml	
	69314	MB									✓		OK		
	69315	BS									✓		OK	25μl EXT A,B,C,E,Hex,K,1,3BTD / 50m	
	69316	JB													
	69317	JC37024-3	12540 SL	GW	2		5		1x		✓		OK		✓
	69318	JC37024-4	✓	GW	1		5		1x		✓		OK		✓
		~~JC37047-11~~	✓	GW	5				1x				~~HT~~	02/15/17	
	69319	JC37024-6	✓	GW	1		5		1x		✓		OK		✓
	69320	JC37024-7	✓	GW	2		5		1x		✓	✓	OK		✓
R	69321	JC37047-11	12524 BTXM	GW	5		5		1x		✓	✓	OK		✓
	69322	JC37024-3 MS	12540 SL	GW	1		5		1x		✓	✓	OK	20μl EXT A,B,C,E,Hex K,1,3BTD	Vial ✓
	69323	JB													
	69324	JC37024-4 DUP	✓	GW	2		5		1x		✓	✓	OK		✓

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

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Form: OR001-10
Rev. Date: 1/19/16

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SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: V4B 2853/2854

Date: 02/15/2017

Print Analyst Name: Huearn Tran

Analyst Signature: [signature]

Columns: RTX 624 SL (60mx0.25mmx1.4µm)

Method V8260C

Initial Cal. Method M4B 2825

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	Pg 289	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 2/16/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	AB 69325	JC 37024-5	12540 SL	WTB	2		5		1x		✓	✓	OK		✓
	69326	JC 37024-10	✓	WTB	2		5		1x		✓	✓	OK		✓
	69327	JC 37024-12	✓	WTB	2		5		1x		✓	✓	OK		✓
	69328	MB									✓	✓		V4B-2854	
	69329	JC34443-4F	11132 MDL	WTB			5/5	100			✓	✓		5ppb	
	69330	JC34443-4F	✓	WTB			5/5	100			✓	✓		5µl A1B1C1E 1,3BTD 8:38pm	1/10ml
		IB											not load		
	69332	BFB2											OK	9:06pm	
	69333	CC2825-50									✓	✓	OK	25µl A1B1C1E1K/50ml	
		IB											not load		
	69335	MB2									✓	✓	OK		
	69336	JC 37047-8	12524 BTXM	GW	6		5		1x		✓	✓	OK		✓
	69337	JC37047-18	✓	GW	6		0.5/50		100x		✓	✓	OK		✓
	69338	JC37047-18	✓	GW	6		0.05/50		1000x		✓	✓	not need		✓
	69339	JC37047-19	✓	GW	6		5		1x		✓	✓	OK		✓
	69340	JC37047-19	✓	GW	6		5/50		10x		✓	✓	not need		✓
	69341	JC37047-20	✓	GW	6		10/50		5x		✓	✓	OK		✓

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: V4B 2853 | 2854

Date: 02/15/2017

Print Analyst Name: Hueanh Tran

Analyst Signature: [signature]

Columns: Rxi 624 SiL | 60mx0.25mm x1.4um

Method: VA260C

Initial Cal. Method: M4B 2825

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	Ig 289	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 2/16/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	AB 69 342	JC 37047-20	12524 BTXM	GW	6		1/50		50x		✓	✓	OK		✓
	69 343	JC 37047-21	✓	GW	6		5		1x		✓	✓	OK		✓
	69 344	JC 37047-22	✓	GW	5		5		1x		✓	✓	OK		✓
	69 345	JC 37047-23	✓	GW	3		5		1x		✓	✓	OK		✓
	69 346	JC 37024-9	12540 SL	GW	2		5		1x	✓	✓	✓	OK	UTCQC	✓
	69 347	JC 37024-11	✓	GW	1		5		1x		✓	✓	OK	✓	✓
	1B												not run		
	69348	JC 37047-24	12524 BTXM	GW	4		5		1x		✓	✓	~~OK~~ RL	/RR 20x	✓
	69349	JC 37047-25	✓	GW	6		5		1x		✓	✓	RL	/RR 1x c/o	✓
	69350	JC 37047-26	✓	GW	6		5		1x		✓	✓	RL	/RR 1x c/o 5:11am	✓
														HT 02/16/2017	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

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Rev. Date: 1/19/16

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SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: V4B 2853/2854

Date: 02/15/2017

Print Analyst Name: Thuan Tran

Analyst Signature: [illegible]

Columns: RXI 624 SL (60m x 0.25mm x 1.4µm)

Method V8260C

Initial Cal. Method M4B 2825

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	Rg 289	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible] Date: 2/16/17

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	AB 69 325	JC 37024-5	12540 SL	WTB	2		5		1x		✓		OK		✓
	69 326	JC 37024-10	✓	WTB	2		5		1x		✓		OK		✓
	69 327	JC 37024-12	✓	WTB	2		5		1x		✓		OK		✓
	69 328	MB									✓				
	69 329	JC 34443-4F	11132 MDL	SEHT			5/5	100			✓		OK	VAB-2854 5ppb	
	69 330	JC 34443-4F	✓	SEHT			5/5	100			✓		OK	5µl A1B1C1E 1,3BTD 8:38pm	100ml
		IB											not load		
	69 332	BFB2											OK	9:06pm	
	69 333	CC 2825-50									✓		OK	25µl A1B1C1E1K	50ml
		IB											not load		
	69 335	MB2									✓		OK		
	69 336	JC 37047-8	12524 BTXM	GW	6		5		1x		✓		OK		✓
	69 337	JC 37047-18	✓	GW	6		0.5/50		100x		✓		OK		✓
	69 338	JC 37047-18	✓	GW	6		0.05/50		1000x		✓		not need		✓
	69 339	JC 37047-19	✓	GW	6		5		1x		✓		OK		✓
	69 340	JC 37047-19	✓	GW	6		5/50		10x		✓		not need		✓
	69 341	JC 37047-20	✓	GW	6		10/50		5x		✓		OK		✓

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

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SGS ACCUTEST
New Jersey

02/22/17

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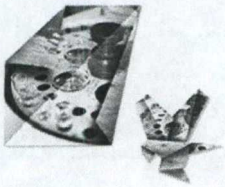

Technical Report for

United Technologies Corporation

ENSRILW: UTAS Plants 1/2 Facility, Rockford, IL

60532451

SGS Accutest Job Number: JC37020

Sampling Dates: 02/06/17 - 02/08/17

Report to:

AECOM, INC.
4320 Winfield Road
Warrenville, IL 60555
peter.hollatz@aecom.com

ATTN: Peter Hollatz

Total number of pages in report: 264

NELAP ACCREDITED TNI LABORATORY

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Nancy L. Cole
Nancy Cole
Laboratory Director

Client Service contact: Kelly Patterson 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (L-A-B L2248)

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Sample Summary

United Technologies Corporation

Job No: JC37020

ENSRILW: UTAS Plants 1/2 Facility, Rockford, IL
Project No: 60532451

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JC37020-1	02/06/17	11:40 NP	02/10/17	AQ	Ground Water	HSSER-SMW08-020617
JC37020-2	02/06/17	10:40 NP	02/10/17	AQ	Field Blank Water	HSSER-FBLK01-020617
JC37020-3	02/06/17	13:35 NP	02/10/17	AQ	Ground Water	HSSER-GMZ01-020617
JC37020-4	02/06/17	14:45 NP	02/10/17	AQ	Ground Water	HSSER-SMW01-020617
JC37020-5	02/07/17	09:20 NP	02/10/17	AQ	Ground Water	HSSER-SMW02-020717
JC37020-6	02/07/17	10:30 NP	02/10/17	AQ	Ground Water	HSSER-MW203-020717
JC37020-7	02/07/17	11:15 NP	02/10/17	AQ	Ground Water	HSSER-MW07FGA-020717
JC37020-8	02/07/17	13:05 NP	02/10/17	AQ	Ground Water	HSSER-SMW19-020717
JC37020-9	02/07/17	14:25 NP	02/10/17	AQ	Ground Water	HSSER-SMW21-020717
JC37020-10	02/08/17	08:30 NP	02/10/17	AQ	Ground Water	HSSER-GMZ04-020817
JC37020-11	02/08/17	09:40 NP	02/10/17	AQ	Ground Water	HSSER-SMW20-020817
JC37020-12	02/08/17	10:20 AH	02/10/17	AQ	Ground Water	HSSER-PMW01-020817
JC37020-13	02/08/17	10:35 AH	02/10/17	AQ	Equipment Blank	HSSER-EBLK01-020817

Sample Summary
(continued)

United Technologies Corporation

Job No: JC37020

ENSRILW: UTAS Plants 1/2 Facility, Rockford, IL
Project No: 60532451

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JC37020-14	02/08/17	10:50 NP	02/10/17	AQ	Ground Water	HSSER-GMZ03-020817
JC37020-15	02/08/17	11:45 AH	02/10/17	AQ	Ground Water	HSSER-PMW02-020817
JC37020-16	02/08/17	12:15 NP	02/10/17	AQ	Ground Water	HSSER-GMZ02-020817
JC37020-16D	02/08/17	12:15 NP	02/10/17	AQ	Water Dup/MSD	HSSER-MSD01-020817
JC37020-16S	02/08/17	12:15 NP	02/10/17	AQ	Water Matrix Spike	HSSER-MS01-020817
JC37020-17	02/08/17	12:45 AH	02/10/17	AQ	Ground Water	HSSER-SMW04-020817
JC37020-18	02/08/17	00:00 NP	02/10/17	AQ	Ground Water	HSSER-DUP01-020817
JC37020-19	02/08/17	12:45	02/10/17	AQ	Trip Blank Water	HSSER-TRIP01-020617

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	United Technologies Corporation	**Job No**	JC37020
Site:	ENSRILW: UTAS Plants 1/2 Facility, Rockford, IL	**Report Date**	2/22/2017 9:57:51 AM

On 02/10/2017, 16 Sample(s), 1 Trip Blank(s) and 1 Field Blank(s) and 1 Equipment Blank(s) were received at SGS Accutest at a maximum corrected temperature of 4.6 C. Samples were intact and chemically preserved, unless noted below. A SGS Accutest Job Number of JC37020 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260C

Matrix: AQ **Batch ID:** V4B2855

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC37020-16MS, JC37020-16MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** V4B2856

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC37230-4DUP, JC37230-5MS were used as the QC samples indicated.

SGS Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS Accutest is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS Accutest indicated via signature on the report cover

Summary of Hits

Job Number: JC37020
Account: United Technologies Corporation
Project: ENSRILW: UTAS Plants 1/2 Facility, Rockford, IL
Collected: 02/06/17 thru 02/08/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC37020-1	HSSER-SMW08-020617					
1,1-Dichloroethane		0.0063	0.0010	0.00021	mg/l	SW846 8260C
1,1-Dichloroethene		0.00033 J	0.0010	0.00020	mg/l	SW846 8260C
cis-1,2-Dichloroethene		0.0020	0.0010	0.00031	mg/l	SW846 8260C
Tetrachloroethene		0.0200	0.0010	0.00023	mg/l	SW846 8260C
1,1,1-Trichloroethane		0.0093	0.0010	0.00022	mg/l	SW846 8260C
Trichloroethene		0.0018	0.0010	0.00026	mg/l	SW846 8260C
JC37020-2	HSSER-FBLK01-020617					
Toluene		0.00023 J	0.0010	0.00023	mg/l	SW846 8260C
JC37020-3	HSSER-GMZ01-020617					
1,1-Dichloroethane		0.0074	0.0010	0.00021	mg/l	SW846 8260C
1,1-Dichloroethene		0.00047 J	0.0010	0.00020	mg/l	SW846 8260C
cis-1,2-Dichloroethene		0.0022	0.0010	0.00031	mg/l	SW846 8260C
Tetrachloroethene		0.0290	0.0010	0.00023	mg/l	SW846 8260C
1,1,1-Trichloroethane		0.0083	0.0010	0.00022	mg/l	SW846 8260C
Trichloroethene		0.0029	0.0010	0.00026	mg/l	SW846 8260C
JC37020-4	HSSER-SMW01-020617					
Tetrachloroethene		0.0023	0.0010	0.00023	mg/l	SW846 8260C
1,1,1-Trichloroethane		0.0012	0.0010	0.00022	mg/l	SW846 8260C
JC37020-5	HSSER-SMW02-020717					
1,1-Dichloroethane		0.00024 J	0.0010	0.00021	mg/l	SW846 8260C
Tetrachloroethene		0.00056 J	0.0010	0.00023	mg/l	SW846 8260C
JC37020-6	HSSER-MW203-020717					
Tetrachloroethene		0.0037	0.0010	0.00023	mg/l	SW846 8260C
JC37020-7	HSSER-MW07FGA-020717					
Tetrachloroethene		0.00098 J	0.0010	0.00023	mg/l	SW846 8260C
1,1,1-Trichloroethane		0.0023	0.0010	0.00022	mg/l	SW846 8260C
JC37020-8	HSSER-SMW19-020717					
cis-1,2-Dichloroethene		0.00076 J	0.0010	0.00031	mg/l	SW846 8260C
Tetrachloroethene		0.00073 J	0.0010	0.00023	mg/l	SW846 8260C

Summary of Hits

Job Number: JC37020
Account: United Technologies Corporation
Project: ENSRILW: UTAS Plants 1/2 Facility, Rockford, IL
Collected: 02/06/17 thru 02/08/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
1,1,1-Trichloroethane		0.00044 J	0.0010	0.00022	mg/l	SW846 8260C
Trichloroethene		0.0144	0.0010	0.00026	mg/l	SW846 8260C
JC37020-9	HSSER-SMW21-020717					
1,1-Dichloroethane		0.00022 J	0.0010	0.00021	mg/l	SW846 8260C
cis-1,2-Dichloroethene		0.00053 J	0.0010	0.00031	mg/l	SW846 8260C
1,1,1-Trichloroethane		0.0043	0.0010	0.00022	mg/l	SW846 8260C
JC37020-10	HSSER-GMZ04-020817					
1,1-Dichloroethane		0.00027 J	0.0010	0.00021	mg/l	SW846 8260C
cis-1,2-Dichloroethene		0.00046 J	0.0010	0.00031	mg/l	SW846 8260C
1,1,1-Trichloroethane		0.0028	0.0010	0.00022	mg/l	SW846 8260C
JC37020-11	HSSER-SMW20-020817					
No hits reported in this sample.						
JC37020-12	HSSER-PMW01-020817					
1,1-Dichloroethane		0.0011	0.0010	0.00021	mg/l	SW846 8260C
Tetrachloroethene		0.0116	0.0010	0.00023	mg/l	SW846 8260C
1,1,1-Trichloroethane		0.0051	0.0010	0.00022	mg/l	SW846 8260C
Trichloroethene		0.0010	0.0010	0.00026	mg/l	SW846 8260C
JC37020-13	HSSER-EBLK01-020817					
Toluene		0.00023 J	0.0010	0.00023	mg/l	SW846 8260C
JC37020-14	HSSER-GMZ03-020817					
1,1-Dichloroethane		0.00046 J	0.0010	0.00021	mg/l	SW846 8260C
cis-1,2-Dichloroethene		0.00031 J	0.0010	0.00031	mg/l	SW846 8260C
1,1,1-Trichloroethane		0.00060 J	0.0010	0.00022	mg/l	SW846 8260C
JC37020-15	HSSER-PMW02-020817					
1,1-Dichloroethane		0.0054	0.0010	0.00021	mg/l	SW846 8260C
cis-1,2-Dichloroethene		0.0098	0.0010	0.00031	mg/l	SW846 8260C
Tetrachloroethene		0.0217	0.0010	0.00023	mg/l	SW846 8260C
1,1,1-Trichloroethane		0.0025	0.0010	0.00022	mg/l	SW846 8260C
Trichloroethene		0.0021	0.0010	0.00026	mg/l	SW846 8260C
Vinyl chloride		0.0088	0.0010	0.00033	mg/l	SW846 8260C

Summary of Hits

Job Number: JC37020
Account: United Technologies Corporation
Project: ENSRILW: UTAS Plants 1/2 Facility, Rockford, IL
Collected: 02/06/17 thru 02/08/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC37020-16	HSSER-GMZ02-020817					
1,1-Dichloroethane		0.00067 J	0.0010	0.00021	mg/l	SW846 8260C
Tetrachloroethene		0.00031 J	0.0010	0.00023	mg/l	SW846 8260C
1,1,1-Trichloroethane		0.00072 J	0.0010	0.00022	mg/l	SW846 8260C
JC37020-17	HSSER-SMW04-020817					
1,1-Dichloroethane		0.0109	0.0010	0.00021	mg/l	SW846 8260C
cis-1,2-Dichloroethene		0.0273	0.0010	0.00031	mg/l	SW846 8260C
Tetrachloroethene		0.0108	0.0010	0.00023	mg/l	SW846 8260C
1,1,1-Trichloroethane		0.0011	0.0010	0.00022	mg/l	SW846 8260C
Trichloroethene		0.0010	0.0010	0.00026	mg/l	SW846 8260C
Vinyl chloride		0.0146	0.0010	0.00033	mg/l	SW846 8260C
JC37020-18	HSSER-DUP01-020817					
1,1-Dichloroethane		0.00049 J	0.0010	0.00021	mg/l	SW846 8260C
cis-1,2-Dichloroethene		0.00033 J	0.0010	0.00031	mg/l	SW846 8260C
1,1,1-Trichloroethane		0.00064 J	0.0010	0.00022	mg/l	SW846 8260C
JC37020-19	HSSER-TRIP01-020617					

No hits reported in this sample.

Sample Results

Report of Analysis

SGS Accutest

Report of Analysis

Client Sample ID:	HSSER-SMW08-020617		
Lab Sample ID:	JC37020-1	Date Sampled:	02/06/17
Matrix:	AQ - Ground Water	Date Received:	02/10/17
Method:	SW846 8260C	Percent Solids:	n/a
Project:	ENSRILW: UTAS Plants 1/2 Facility, Rockford, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B69369.D	1	02/16/17	HT	n/a	n/a	V4B2855
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-34-3	1,1-Dichloroethane	0.0063	0.0010	0.00021	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00039	mg/l	
75-35-4	1,1-Dichloroethene	0.00033	0.0010	0.00020	mg/l	J
156-59-2	cis-1,2-Dichloroethene	0.0020	0.0010	0.00031	mg/l	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00036	mg/l	
100-41-4	Ethylbenzene	ND	0.0010	0.00020	mg/l	
75-09-2	Methylene chloride	ND	0.0020	0.0010	mg/l	
127-18-4	Tetrachloroethene	0.0200	0.0010	0.00023	mg/l	
108-88-3	Toluene	ND	0.0010	0.00023	mg/l	
71-55-6	1,1,1-Trichloroethane	0.0093	0.0010	0.00022	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	0.00028	mg/l	
79-01-6	Trichloroethene	0.0018	0.0010	0.00026	mg/l	
75-01-4	Vinyl chloride	ND	0.0010	0.00033	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		76-120%
17060-07-0	1,2-Dichloroethane-D4	117%		73-122%
2037-26-5	Toluene-D8	101%		84-119%
460-00-4	4-Bromofluorobenzene	106%		78-117%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	HSSER-FBLK01-020617		
Lab Sample ID:	JC37020-2	Date Sampled:	02/06/17
Matrix:	AQ - Field Blank Water	Date Received:	02/10/17
Method:	SW846 8260C	Percent Solids:	n/a
Project:	ENSRILW: UTAS Plants 1/2 Facility, Rockford, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B69377.D	1	02/16/17	HT	n/a	n/a	V4B2855
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00021	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00039	mg/l	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00020	mg/l	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00031	mg/l	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00036	mg/l	
100-41-4	Ethylbenzene	ND	0.0010	0.00020	mg/l	
75-09-2	Methylene chloride	ND	0.0020	0.0010	mg/l	
127-18-4	Tetrachloroethene	ND	0.0010	0.00023	mg/l	
108-88-3	Toluene	0.00023	0.0010	0.00023	mg/l	J
71-55-6	1,1,1-Trichloroethane	ND	0.0010	0.00022	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	0.00028	mg/l	
79-01-6	Trichloroethene	ND	0.0010	0.00026	mg/l	
75-01-4	Vinyl chloride	ND	0.0010	0.00033	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		76-120%
17060-07-0	1,2-Dichloroethane-D4	109%		73-122%
2037-26-5	Toluene-D8	100%		84-119%
460-00-4	4-Bromofluorobenzene	103%		78-117%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	HSSER-GMZ01-020617		
Lab Sample ID:	JC37020-3	Date Sampled:	02/06/17
Matrix:	AQ - Ground Water	Date Received:	02/10/17
Method:	SW846 8260C	Percent Solids:	n/a
Project:	ENSRILW: UTAS Plants 1/2 Facility, Rockford, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B69382.D	1	02/17/17	HT	n/a	n/a	V4B2855
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-34-3	1,1-Dichloroethane	0.0074	0.0010	0.00021	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00039	mg/l	
75-35-4	1,1-Dichloroethene	0.00047	0.0010	0.00020	mg/l	J
156-59-2	cis-1,2-Dichloroethene	0.0022	0.0010	0.00031	mg/l	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00036	mg/l	
100-41-4	Ethylbenzene	ND	0.0010	0.00020	mg/l	
75-09-2	Methylene chloride	ND	0.0020	0.0010	mg/l	
127-18-4	Tetrachloroethene	0.0290	0.0010	0.00023	mg/l	
108-88-3	Toluene	ND	0.0010	0.00023	mg/l	
71-55-6	1,1,1-Trichloroethane	0.0083	0.0010	0.00022	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	0.00028	mg/l	
79-01-6	Trichloroethene	0.0029	0.0010	0.00026	mg/l	
75-01-4	Vinyl chloride	ND	0.0010	0.00033	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		76-120%
17060-07-0	1,2-Dichloroethane-D4	116%		73-122%
2037-26-5	Toluene-D8	101%		84-119%
460-00-4	4-Bromofluorobenzene	103%		78-117%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	HSSER-SMW01-020617		
Lab Sample ID:	JC37020-4	Date Sampled:	02/06/17
Matrix:	AQ - Ground Water	Date Received:	02/10/17
Method:	SW846 8260C	Percent Solids:	n/a
Project:	ENSRILW: UTAS Plants 1/2 Facility, Rockford, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B69402.D	1	02/17/17	HT	n/a	n/a	V4B2856
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00021	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00039	mg/l	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00020	mg/l	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00031	mg/l	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00036	mg/l	
100-41-4	Ethylbenzene	ND	0.0010	0.00020	mg/l	
75-09-2	Methylene chloride	ND	0.0020	0.0010	mg/l	
127-18-4	Tetrachloroethene	0.0023	0.0010	0.00023	mg/l	
108-88-3	Toluene	ND	0.0010	0.00023	mg/l	
71-55-6	1,1,1-Trichloroethane	0.0012	0.0010	0.00022	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	0.00028	mg/l	
79-01-6	Trichloroethene	ND	0.0010	0.00026	mg/l	
75-01-4	Vinyl chloride	ND	0.0010	0.00033	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		76-120%
17060-07-0	1,2-Dichloroethane-D4	113%		73-122%
2037-26-5	Toluene-D8	100%		84-119%
460-00-4	4-Bromofluorobenzene	102%		78-117%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	HSSER-SMW02-020717		
Lab Sample ID:	JC37020-5	Date Sampled:	02/07/17
Matrix:	AQ - Ground Water	Date Received:	02/10/17
Method:	SW846 8260C	Percent Solids:	n/a
Project:	ENSRILW: UTAS Plants 1/2 Facility, Rockford, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B69403.D	1	02/17/17	HT	n/a	n/a	V4B2856
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-34-3	1,1-Dichloroethane	0.00024	0.0010	0.00021	mg/l	J
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00039	mg/l	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00020	mg/l	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00031	mg/l	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00036	mg/l	
100-41-4	Ethylbenzene	ND	0.0010	0.00020	mg/l	
75-09-2	Methylene chloride	ND	0.0020	0.0010	mg/l	
127-18-4	Tetrachloroethene	0.00056	0.0010	0.00023	mg/l	J
108-88-3	Toluene	ND	0.0010	0.00023	mg/l	
71-55-6	1,1,1-Trichloroethane	ND	0.0010	0.00022	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	0.00028	mg/l	
79-01-6	Trichloroethene	ND	0.0010	0.00026	mg/l	
75-01-4	Vinyl chloride	ND	0.0010	0.00033	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		76-120%
17060-07-0	1,2-Dichloroethane-D4	115%		73-122%
2037-26-5	Toluene-D8	99%		84-119%
460-00-4	4-Bromofluorobenzene	104%		78-117%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	HSSER-MW203-020717		
Lab Sample ID:	JC37020-6	Date Sampled:	02/07/17
Matrix:	AQ - Ground Water	Date Received:	02/10/17
Method:	SW846 8260C	Percent Solids:	n/a
Project:	ENSRILW: UTAS Plants 1/2 Facility, Rockford, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B69404.D	1	02/17/17	HT	n/a	n/a	V4B2856
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00021	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00039	mg/l	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00020	mg/l	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00031	mg/l	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00036	mg/l	
100-41-4	Ethylbenzene	ND	0.0010	0.00020	mg/l	
75-09-2	Methylene chloride	ND	0.0020	0.0010	mg/l	
127-18-4	Tetrachloroethene	0.0037	0.0010	0.00023	mg/l	
108-88-3	Toluene	ND	0.0010	0.00023	mg/l	
71-55-6	1,1,1-Trichloroethane	ND	0.0010	0.00022	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	0.00028	mg/l	
79-01-6	Trichloroethene	ND	0.0010	0.00026	mg/l	
75-01-4	Vinyl chloride	ND	0.0010	0.00033	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		76-120%
17060-07-0	1,2-Dichloroethane-D4	115%		73-122%
2037-26-5	Toluene-D8	101%		84-119%
460-00-4	4-Bromofluorobenzene	103%		78-117%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	HSSER-MW07FGA-020717		
Lab Sample ID:	JC37020-7	Date Sampled:	02/07/17
Matrix:	AQ - Ground Water	Date Received:	02/10/17
Method:	SW846 8260C	Percent Solids:	n/a
Project:	ENSRILW: UTAS Plants 1/2 Facility, Rockford, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B69405.D	1	02/17/17	HT	n/a	n/a	V4B2856
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00021	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00039	mg/l	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00020	mg/l	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00031	mg/l	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00036	mg/l	
100-41-4	Ethylbenzene	ND	0.0010	0.00020	mg/l	
75-09-2	Methylene chloride	ND	0.0020	0.0010	mg/l	
127-18-4	Tetrachloroethene	0.00098	0.0010	0.00023	mg/l	J
108-88-3	Toluene	ND	0.0010	0.00023	mg/l	
71-55-6	1,1,1-Trichloroethane	0.0023	0.0010	0.00022	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	0.00028	mg/l	
79-01-6	Trichloroethene	ND	0.0010	0.00026	mg/l	
75-01-4	Vinyl chloride	ND	0.0010	0.00033	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		76-120%
17060-07-0	1,2-Dichloroethane-D4	115%		73-122%
2037-26-5	Toluene-D8	101%		84-119%
460-00-4	4-Bromofluorobenzene	104%		78-117%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	HSSER-SMW19-020717		
Lab Sample ID:	JC37020-8	Date Sampled:	02/07/17
Matrix:	AQ - Ground Water	Date Received:	02/10/17
Method:	SW846 8260C	Percent Solids:	n/a
Project:	ENSRILW: UTAS Plants 1/2 Facility, Rockford, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B69380.D	1	02/16/17	HT	n/a	n/a	V4B2855
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00021	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00039	mg/l	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00020	mg/l	
156-59-2	cis-1,2-Dichloroethene	0.00076	0.0010	0.00031	mg/l	J
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00036	mg/l	
100-41-4	Ethylbenzene	ND	0.0010	0.00020	mg/l	
75-09-2	Methylene chloride	ND	0.0020	0.0010	mg/l	
127-18-4	Tetrachloroethene	0.00073	0.0010	0.00023	mg/l	J
108-88-3	Toluene	ND	0.0010	0.00023	mg/l	
71-55-6	1,1,1-Trichloroethane	0.00044	0.0010	0.00022	mg/l	J
79-00-5	1,1,2-Trichloroethane	ND	0.0010	0.00028	mg/l	
79-01-6	Trichloroethene	0.0144	0.0010	0.00026	mg/l	
75-01-4	Vinyl chloride	ND	0.0010	0.00033	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		76-120%
17060-07-0	1,2-Dichloroethane-D4	112%		73-122%
2037-26-5	Toluene-D8	100%		84-119%
460-00-4	4-Bromofluorobenzene	103%		78-117%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	HSSER-SMW21-020717		
Lab Sample ID:	JC37020-9	Date Sampled:	02/07/17
Matrix:	AQ - Ground Water	Date Received:	02/10/17
Method:	SW846 8260C	Percent Solids:	n/a
Project:	ENSRILW: UTAS Plants 1/2 Facility, Rockford, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B69381.D	1	02/16/17	HT	n/a	n/a	V4B2855
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-34-3	1,1-Dichloroethane	0.00022	0.0010	0.00021	mg/l	J
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00039	mg/l	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00020	mg/l	
156-59-2	cis-1,2-Dichloroethene	0.00053	0.0010	0.00031	mg/l	J
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00036	mg/l	
100-41-4	Ethylbenzene	ND	0.0010	0.00020	mg/l	
75-09-2	Methylene chloride	ND	0.0020	0.0010	mg/l	
127-18-4	Tetrachloroethene	ND	0.0010	0.00023	mg/l	
108-88-3	Toluene	ND	0.0010	0.00023	mg/l	
71-55-6	1,1,1-Trichloroethane	0.0043	0.0010	0.00022	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	0.00028	mg/l	
79-01-6	Trichloroethene	ND	0.0010	0.00026	mg/l	
75-01-4	Vinyl chloride	ND	0.0010	0.00033	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		76-120%
17060-07-0	1,2-Dichloroethane-D4	114%		73-122%
2037-26-5	Toluene-D8	101%		84-119%
460-00-4	4-Bromofluorobenzene	103%		78-117%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	HSSER-GMZ04-020817		
Lab Sample ID:	JC37020-10	Date Sampled:	02/08/17
Matrix:	AQ - Ground Water	Date Received:	02/10/17
Method:	SW846 8260C	Percent Solids:	n/a
Project:	ENSRILW: UTAS Plants 1/2 Facility, Rockford, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B69368.D	1	02/16/17	HT	n/a	n/a	V4B2855
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-34-3	1,1-Dichloroethane	0.00027	0.0010	0.00021	mg/l	J
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00039	mg/l	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00020	mg/l	
156-59-2	cis-1,2-Dichloroethene	0.00046	0.0010	0.00031	mg/l	J
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00036	mg/l	
100-41-4	Ethylbenzene	ND	0.0010	0.00020	mg/l	
75-09-2	Methylene chloride	ND	0.0020	0.0010	mg/l	
127-18-4	Tetrachloroethene	ND	0.0010	0.00023	mg/l	
108-88-3	Toluene	ND	0.0010	0.00023	mg/l	
71-55-6	1,1,1-Trichloroethane	0.0028	0.0010	0.00022	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	0.00028	mg/l	
79-01-6	Trichloroethene	ND	0.0010	0.00026	mg/l	
75-01-4	Vinyl chloride	ND	0.0010	0.00033	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		76-120%
17060-07-0	1,2-Dichloroethane-D4	116%		73-122%
2037-26-5	Toluene-D8	101%		84-119%
460-00-4	4-Bromofluorobenzene	104%		78-117%

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	HSSER-SMW20-020817		
Lab Sample ID:	JC37020-11	Date Sampled:	02/08/17
Matrix:	AQ - Ground Water	Date Received:	02/10/17
Method:	SW846 8260C	Percent Solids:	n/a
Project:	ENSRILW: UTAS Plants 1/2 Facility, Rockford, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B69367.D	1	02/16/17	HT	n/a	n/a	V4B2855
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00021	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00039	mg/l	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00020	mg/l	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00031	mg/l	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00036	mg/l	
100-41-4	Ethylbenzene	ND	0.0010	0.00020	mg/l	
75-09-2	Methylene chloride	ND	0.0020	0.0010	mg/l	
127-18-4	Tetrachloroethene	ND	0.0010	0.00023	mg/l	
108-88-3	Toluene	ND	0.0010	0.00023	mg/l	
71-55-6	1,1,1-Trichloroethane	ND	0.0010	0.00022	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	0.00028	mg/l	
79-01-6	Trichloroethene	ND	0.0010	0.00026	mg/l	
75-01-4	Vinyl chloride	ND	0.0010	0.00033	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		76-120%
17060-07-0	1,2-Dichloroethane-D4	116%		73-122%
2037-26-5	Toluene-D8	100%		84-119%
460-00-4	4-Bromofluorobenzene	105%		78-117%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	HSSER-PMW01-020817		
Lab Sample ID:	JC37020-12	Date Sampled:	02/08/17
Matrix:	AQ - Ground Water	Date Received:	02/10/17
Method:	SW846 8260C	Percent Solids:	n/a
Project:	ENSRILW: UTAS Plants 1/2 Facility, Rockford, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B69366.D	1	02/16/17	HT	n/a	n/a	V4B2855
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-34-3	1,1-Dichloroethane	0.0011	0.0010	0.00021	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00039	mg/l	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00020	mg/l	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00031	mg/l	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00036	mg/l	
100-41-4	Ethylbenzene	ND	0.0010	0.00020	mg/l	
75-09-2	Methylene chloride	ND	0.0020	0.0010	mg/l	
127-18-4	Tetrachloroethene	0.0116	0.0010	0.00023	mg/l	
108-88-3	Toluene	ND	0.0010	0.00023	mg/l	
71-55-6	1,1,1-Trichloroethane	0.0051	0.0010	0.00022	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	0.00028	mg/l	
79-01-6	Trichloroethene	0.0010	0.0010	0.00026	mg/l	
75-01-4	Vinyl chloride	ND	0.0010	0.00033	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		76-120%
17060-07-0	1,2-Dichloroethane-D4	115%		73-122%
2037-26-5	Toluene-D8	101%		84-119%
460-00-4	4-Bromofluorobenzene	104%		78-117%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS Accutest

Report of Analysis

Client Sample ID:	HSSER-EBLK01-020817		
Lab Sample ID:	JC37020-13	Date Sampled:	02/08/17
Matrix:	AQ - Equipment Blank	Date Received:	02/10/17
Method:	SW846 8260C	Percent Solids:	n/a
Project:	ENSRILW: UTAS Plants 1/2 Facility, Rockford, IL		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4B69378.D	1	02/16/17	HT	n/a	n/a	V4B2855
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
75-34-3	1,1-Dichloroethane	ND	0.0010	0.00021	mg/l	
107-06-2	1,2-Dichloroethane	ND	0.0010	0.00039	mg/l	
75-35-4	1,1-Dichloroethene	ND	0.0010	0.00020	mg/l	
156-59-2	cis-1,2-Dichloroethene	ND	0.0010	0.00031	mg/l	
156-60-5	trans-1,2-Dichloroethene	ND	0.0010	0.00036	mg/l	
100-41-4	Ethylbenzene	ND	0.0010	0.00020	mg/l	
75-09-2	Methylene chloride	ND	0.0020	0.0010	mg/l	
127-18-4	Tetrachloroethene	ND	0.0010	0.00023	mg/l	
108-88-3	Toluene	0.00023	0.0010	0.00023	mg/l	J
71-55-6	1,1,1-Trichloroethane	ND	0.0010	0.00022	mg/l	
79-00-5	1,1,2-Trichloroethane	ND	0.0010	0.00028	mg/l	
79-01-6	Trichloroethene	ND	0.0010	0.00026	mg/l	
75-01-4	Vinyl chloride	ND	0.0010	0.00033	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		76-120%
17060-07-0	1,2-Dichloroethane-D4	110%		73-122%
2037-26-5	Toluene-D8	100%		84-119%
460-00-4	4-Bromofluorobenzene	103%		78-117%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound