

ICR Treatment Study Summary Report

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Arlington Water Treatment Plant

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Evaluation of Granular Activated Carbon Adsorption of Disinfection Byproduct Precursors for Compliance with the Information Collection Rule

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Attachments: 1 CD-ROM containing *Data Collection Spreadsheets*, *Treatment Study Summary Report Spreadsheet*, this report and laboratory reports listing all analytical results and QC data in portable document format (PDF)

Table of Contents

Table of Contents

1	List of Tables.....	iv
2	List of Figures	vi
3	List of Abbreviations.....	xiv
4	Conclusions and Recommendations.....	1
5	Background Information.....	4
5.1	Treatment Plant Description.....	4
5.1.1	Treatment plant design information.....	4
5.1.2	Treatment challenges facing plant.....	4
5.2	Tabular Summary of Source and Finished Water Quality	4
6	Materials and Methods	9
6.1	Treatment Study Influent Sampling Procedures.....	9
6.2	Pretreatment Processes to the Advanced Treatment Processes	9
6.3	Advanced Treatment Process Information	10
6.3.1	Schematics and descriptions of the process equipment used	10
6.3.2	Design data for the advanced treatment process	10
6.3.3	Procedures specific to the treatment study	10
6.3.3.1	GAC Preparation Procedures	10
6.3.3.2	RSSCT Column Setup	11
6.3.3.3	Batch Influent Preparation	11
6.3.3.4	RSSCT Monitoring.....	12
6.4	Experimental Design.....	12
6.5	ICR Treatment Study Protocol	12
6.6	Simulated Distribution System (SDS) Chlorination Conditions	13
6.7	Analytical Methods.....	13
7	Results and Discussion Overview	23
7.1	Data Analysis.....	23
7.2	Problems Encountered	23
7.3	Water Quality Data	23
8	Impact of Empty-Bed Contact Time (EBCT).....	26
8.1	Evaluation on Scaled Operation Time Basis	26
8.2	Evaluation on Throughput Basis.....	27
8.3	DBP Species Breakthrough Evaluation.....	29
9	Impact of Influent pH	72
10	Blended Effluent Simulation and Breakthrough Curve Extrapolation.....	90
11	Normalized DBP Precursor Breakthrough	144
12	Duplicate RSSCT Performance Comparison	150
13	TOC-DBP and UV ₂₅₄ -DBP Relationships	162
14	TOC Breakthrough Performance Evaluation	167
15	Cost Information and Analysis.....	169
16	Summary of Significant Results.....	174
17	QA/QC Summary	176
17.1	Calibration Procedures	176

17.1.1	Bromide (EPA Method 300.0 A)	176
17.1.2	Haloacetic Acids (EPA Method 552.2)	176
17.1.3	Total Organic Carbon (Standard Method 5310 C).....	177
17.1.4	Total Organic Halide (Standard Method 5320 B).....	177
17.1.5	Trihalomethanes (EPA Method 551.1).....	177
18	List of References.....	180
Appendix: Summary of Treatment Study Data		

l *List of Tables*

1 List of Tables

Table 1	Summary of treatment plant design data	6
Table 2	Summary of source water quality at the Arlington Water Treatment Plant	6
Table 3	Summary of finished water quality at the Arlington Water Treatment Plant	7
Table 4	Sampling dates for GAC bench-scale treatment study sessions	14
Table 5	Summary of TOC sampling before and after water shipment	14
Table 6	Summary of design data for each pretreatment process prior to GAC	15
Table 7	Summary of RSSCT design parameters	16
Table 8	Experimental design summary	17
Table 9	Summary of RSSCT run termination criteria, run time, and percent TOC breakthrough reached	17
Table 10	Simulated distribution system (SDS) chlorination target conditions for all runs	18
Table 11	Summary of experimental SDS chlorination conditions for GAC influent water	18
Table 12	Summary of experimental SDS chlorination conditions for GAC effluent water	18
Table 13	Summary of analytical methods and MRLs	19
Table 14	Summary of laboratories conducting analyses	19
Table 15	Laboratory contact information	19
Table 16	Summary of GAC influent water quality	25
Table 17	GAC effluent pH and temperature data for 10, 15, and 20 minute EBCT contactors ..	31
Table 18	GAC effluent pH and temperature data for 5.0, 7.5, and 10 minute EBCT contactors	32
Table 19	Run times to selected GAC effluent criteria (5 minute EBCT)	33
Table 20	Run times to selected GAC effluent criteria (7.5 minute EBCT)	34
Table 21	Run times to selected GAC effluent criteria (10 minute EBCT)	35
Table 22	Run times to selected GAC effluent criteria (15 minute EBCT)	36
Table 23	Run times to selected GAC effluent criteria (20 minute EBCT)	37
Table 24	GAC effluent pH and temperature data for influent pH 7.0, 7.4, and 7.8 contactors ...	74
Table 25	Run times to selected GAC effluent criteria (influent pH 7.0)	75
Table 26	Run times to selected GAC effluent criteria (influent pH 7.4)	76
Table 27	Run times to selected GAC effluent criteria (influent pH 7.8)	77
Table 28	Summary of logistic function curve fit parameters and r^2 values	93
Table 29	Run times to selected GAC effluent criteria based on effluent blending (5.0 minute EBCT)	94
Table 30	Run times to selected GAC effluent criteria based on effluent blending (7.5 minute EBCT)	95
Table 31	Run times to selected GAC effluent criteria based on effluent blending (10 minute EBCT)	96
Table 32	Run times to selected GAC effluent criteria based on effluent blending (15 minute EBCT)	97
Table 33	Run times to selected GAC effluent criteria based on effluent blending (20 minute EBCT)	98
Table 34	Run times to selected GAC effluent criteria based on effluent blending (influent pH 7.0; 10 minute EBCT)	99
Table 35	Run times to selected GAC effluent criteria based on effluent blending (influent pH 7.4; 10 minute EBCT)	100

Table 36	Run times to selected GAC effluent criteria based on effluent blending (influent pH 7.8; 10 minute EBCT)	101
Table 37	Summary of logistic function curve fit parameters and r^2 values for curve fits after breakthrough curve extrapolation	102
Table 38	Economic input data to cost model	171
Table 39	Summary of GAC run times to meet the placeholders for Stage 2 MCLs	172
Table 40	Summary of GAC adsorption costs for compliance with the placeholders for Stage 2 MCLs.....	172
Table 41	Summary of field duplicate precision for all RSSCT runs	178
Table 42	Haloacetic acid aqueous calibration standard concentrations (EPA Method 552.2) ..	179
Table 43	Trihalomethane aqueous calibration standard concentrations (EPA Method 551.1)..	179

2

List of Figures

2 List of Figures

Figure 1	Arlington Water Treatment Plant schematic	8
Figure 2	Schematic of pretreatment processes prior to GAC.....	20
Figure 3	RSSCT system schematic for 5.0, 7.5, and 10 minute EBCT full-scale equivalent contactor and 10 minute EBCT, pH study contactors.....	21
Figure 4	RSSCT system schematic for 15 and 20 minute EBCT full-scale equivalent contactors	21
Figure 5	RSSCT column GAC support system for 8.0 mm inner diameter column	22
Figure 6	Impact of EBCT on TOC breakthrough (10 to 20 minutes).....	38
Figure 7	Impact of EBCT on UV-254 breakthrough (10 to 20 minutes).....	38
Figure 8	Impact of EBCT on SDS-THM4 breakthrough (10 to 20 minutes).....	39
Figure 9	Impact of EBCT on SDS-HAA5 breakthrough (10 to 20 minutes).....	39
Figure 10	Impact of EBCT on SDS-HAA6 breakthrough (10 to 20 minutes).....	40
Figure 11	Impact of EBCT on SDS-HAA9 breakthrough (10 to 20 minutes).....	40
Figure 12	Impact of EBCT on SDS-TOX breakthrough (10 to 20 minutes).....	41
Figure 13	Impact of EBCT on SDS-CLD breakthrough (10 to 20 minutes)	41
Figure 14	Impact of EBCT on TOC breakthrough (5.0 to 10 minutes).....	42
Figure 15	Impact of EBCT on UV-254 breakthrough (5.0 to 10 minutes).....	42
Figure 16	Impact of EBCT on SDS-THM4 breakthrough (5.0 to 10 minutes).....	43
Figure 17	Impact of EBCT on SDS-HAA5 breakthrough (5.0 to 10 minutes).....	43
Figure 18	Impact of EBCT on SDS-HAA6 breakthrough (5.0 to 10 minutes).....	44
Figure 19	Impact of EBCT on SDS-HAA9 breakthrough (5.0 to 10 minutes).....	44
Figure 20	Impact of EBCT on SDS-TOX breakthrough (5.0 to 10 minutes)	45
Figure 21	Impact of EBCT on SDS-CLD breakthrough (5.0 to 10 minutes)	45
Figure 22	Impact of EBCT (10 to 20 minutes) on run times based on single contactor breakthrough curves for TOC and UV-254 effluent criteria (high).....	46
Figure 23	Impact of EBCT (10 to 20 minutes) on run times based on single contactor breakthrough curves for TOC and UV-254 effluent criteria (low).....	46
Figure 24	Impact of EBCT (10 to 20 minutes) on run times based on single contactor breakthrough curves for Stage 1 THM4 and HAA5 effluent criteria	46
Figure 25	Impact of EBCT (10 to 20 minutes) on run times based on single contactor breakthrough curves for Stage 2 THM4 and HAA5 effluent criteria	46
Figure 26	Impact of EBCT (5.0 to 10 minutes) on run times based on single contactor breakthrough curves for TOC and UV-254 effluent criteria (high).....	47
Figure 27	Impact of EBCT (5.0 to 10 minutes) on run times based on single contactor breakthrough curves for TOC and UV-254 effluent criteria (low).....	47
Figure 28	Impact of EBCT (5.0 to 10 minutes) on run times based on single contactor breakthrough curves for Stage 1 THM4 and HAA5 effluent criteria	47
Figure 29	Impact of EBCT (5.0 to 10 minutes) on run times based on single contactor breakthrough curves for Stage 2 THM4 and HAA5 effluent criteria	47
Figure 30	Impact of EBCT on TOC breakthrough (10 to 20 minutes) plotted as throughput in bed volumes treated.....	48
Figure 31	Impact of EBCT on UV-254 breakthrough (10 to 20 minutes) plotted as throughput in bed volumes treated.....	48

Figure 32 Impact of EBCT on SDS-THM4 breakthrough (10 to 20 minutes) plotted as throughput in bed volumes treated.....	49
Figure 33 Impact of EBCT on SDS-HAA5 breakthrough (10 to 20 minutes) plotted as throughput in bed volumes treated.....	49
Figure 34 Impact of EBCT on SDS-HAA6 breakthrough (10 to 20 minutes) plotted as throughput in bed volumes treated.....	50
Figure 35 Impact of EBCT on SDS-HAA9 breakthrough (10 to 20 minutes) plotted as throughput in bed volumes treated.....	50
Figure 36 Impact of EBCT on SDS-TOX breakthrough (10 to 20 minutes) plotted as throughput in bed volumes treated.....	51
Figure 37 Impact of EBCT on SDS-CLD breakthrough (10 to 20 minutes) plotted as throughput in bed volumes treated.....	51
Figure 38 Impact of EBCT on TOC breakthrough (5.0 to 10 minutes) plotted as throughput in bed volumes treated.....	52
Figure 39 Impact of EBCT on UV-254 breakthrough (5.0 to 10 minutes) plotted as throughput in bed volumes treated.....	52
Figure 40 Impact of EBCT on SDS-THM4 breakthrough (5.0 to 10 minutes) plotted as throughput in bed volumes treated.....	53
Figure 41 Impact of EBCT on SDS-HAA5 breakthrough (5.0 to 10 minutes) plotted as throughput in bed volumes treated.....	53
Figure 42 Impact of EBCT on SDS-HAA6 breakthrough (5.0 to 10 minutes) plotted as throughput in bed volumes treated.....	54
Figure 43 Impact of EBCT on SDS-HAA9 breakthrough (5.0 to 10 minutes) plotted as throughput in bed volumes treated.....	54
Figure 44 Impact of EBCT on SDS-TOX breakthrough (5.0 to 10 minutes) plotted as throughput in bed volumes treated.....	55
Figure 45 Impact of EBCT on SDS-CLD breakthrough (5.0 to 10 minutes) plotted as throughput in bed volumes treated.....	55
Figure 46 Impact of EBCT (10 to 20 minutes) on throughput based on single contactor breakthrough curves for TOC and UV-254 effluent criteria (high).....	56
Figure 47 Impact of EBCT (10 to 20 minutes) on throughput based on single contactor breakthrough curves for TOC and UV-254 effluent criteria (low).....	56
Figure 48 Impact of EBCT (10 to 20 minutes) on throughput based on single contactor breakthrough curves for Stage 1 THM4 and HAA5 effluent criteria	56
Figure 49 Impact of EBCT (10 to 20 minutes) on throughput based on single contactor breakthrough curves for Stage 2 THM4 and HAA5 effluent criteria	56
Figure 50 Impact of EBCT (5.0 to 10 minutes) on throughput based on single contactor breakthrough curves for TOC and UV-254 effluent criteria (high).....	57
Figure 51 Impact of EBCT (5.0 to 10 minutes) on throughput based on single contactor breakthrough curves for TOC and UV-254 effluent criteria (low).....	57
Figure 52 Impact of EBCT (5.0 to 10 minutes) on throughput based on single contactor breakthrough curves for Stage 1 THM4 and HAA5 effluent criteria	57
Figure 53 Impact of EBCT (5.0 to 10 minutes) on throughput based on single contactor breakthrough curves for Stage 2 THM4 and HAA5 effluent criteria	57
Figure 54 Impact of EBCT (10 to 20 minutes) on SDS-CHCl3 breakthrough	58
Figure 55 Impact of EBCT (10 to 20 minutes) on SDS-BDCM breakthrough.....	58

Figure 56	Impact of EBCT (10 to 20 minutes) on SDS-DBCM breakthrough.....	59
Figure 57	Impact of EBCT (10 to 20 minutes) on SDS-CHBr3 breakthrough.....	59
Figure 58	Impact of EBCT (10 to 20 minutes) on SDS-MCAA breakthrough	60
Figure 59	Impact of EBCT (10 to 20 minutes) on SDS-DCAA breakthrough	60
Figure 60	Impact of EBCT (10 to 20 minutes) on SDS-TCAA breakthrough.....	61
Figure 61	Impact of EBCT (10 to 20 minutes) on SDS-MBAA breakthrough	61
Figure 62	Impact of EBCT (10 to 20 minutes) on SDS-DBAA breakthrough	62
Figure 63	Impact of EBCT (10 to 20 minutes) on SDS-BCAA breakthrough	62
Figure 64	Impact of EBCT (10 to 20 minutes) on SDS-DCBAA breakthrough.....	63
Figure 65	Impact of EBCT (10 to 20 minutes) on SDS-CDBAA breakthrough.....	63
Figure 66	Impact of EBCT (10 to 20 minutes) on SDS-TBAA breakthrough.....	64
Figure 67	Impact of EBCT (5.0 to 10 minutes) on SDS-CHCl3 breakthrough	65
Figure 68	Impact of EBCT (5.0 to 10 minutes) on SDS-BDCM breakthrough.....	65
Figure 69	Impact of EBCT (5.0 to 10 minutes) on SDS-DBCM breakthrough.....	66
Figure 70	Impact of EBCT (5.0 to 10 minutes) on SDS-CHBr3 breakthrough.....	66
Figure 71	Impact of EBCT (5.0 to 10 minutes) on SDS-MCAA breakthrough.....	67
Figure 72	Impact of EBCT (5.0 to 10 minutes) on SDS-DCAA breakthrough	67
Figure 73	Impact of EBCT (5.0 to 10 minutes) on SDS-TCAA breakthrough.....	68
Figure 74	Impact of EBCT (5.0 to 10 minutes) on SDS-MBAA breakthrough.....	68
Figure 75	Impact of EBCT (5.0 to 10 minutes) on SDS-DBAA breakthrough	69
Figure 76	Impact of EBCT (5.0 to 10 minutes) on SDS-BCAA breakthrough	69
Figure 77	Impact of EBCT (5.0 to 10 minutes) on SDS-DCBAA breakthrough.....	70
Figure 78	Impact of EBCT (5.0 to 10 minutes) on SDS-CDBAA breakthrough.....	70
Figure 79	Impact of EBCT (5.0 to 10 minutes) on SDS-TBAA breakthrough.....	71
Figure 80	Impact of influent pH on TOC breakthrough for 10 minute EBCT contactors.....	78
Figure 81	Impact of influent pH on UV-254 breakthrough for 10 minute EBCT contactors.....	78
Figure 82	Impact of influent pH on SDS-THM4 breakthrough for 10 minute EBCT contactors	79
Figure 83	Impact of influent pH on SDS-HAA5 breakthrough for 10 minute EBCT contactors	79
Figure 84	Impact of influent pH on SDS-HAA6 breakthrough for 10 minute EBCT contactors	80
Figure 85	Impact of influent pH on SDS-HAA9 breakthrough for 10 minute EBCT contactors	80
Figure 86	Impact of influent pH on SDS-TOX breakthrough for 10 minute EBCT contactors ..	81
Figure 87	Impact of influent pH on SDS-CLD breakthrough for 10 minute EBCT contactors ..	81
Figure 88	Impact of influent pH on run times based on single contactor breakthrough curves for TOC and UV-254 effluent criteria (high).....	82
Figure 89	Impact of influent pH on run times based on single contactor breakthrough curves for TOC and UV-254 effluent criteria (low).....	82
Figure 90	Impact of influent pH on run times based on single contactor breakthrough curves for Stage 1 THM4 and HAA5 effluent criteria	82
Figure 91	Impact of influent pH on run times based on single contactor breakthrough curves for Stage 2 THM4 and HAA5 effluent criteria	82
Figure 92	Impact of influent pH on SDS-CHCl3 breakthrough for 10 minute EBCT contactors	83

Figure 93 Impact of influent pH on SDS-BDCM breakthrough for 10 minute EBCT contactors	83
Figure 94 Impact of influent pH on SDS-DBCM breakthrough for 10 minute EBCT contactors	84
Figure 95 Impact of influent pH on SDS-CHBr3 breakthrough for 10 minute EBCT contactors	84
Figure 96 Impact of influent pH on SDS-MCAA breakthrough for 10 minute EBCT contactors	85
Figure 97 Impact of influent pH on SDS-DCAA breakthrough for 10 minute EBCT contactors	85
Figure 98 Impact of influent pH on SDS-TCAA breakthrough for 10 minute EBCT contactors	86
Figure 99 Impact of influent pH on SDS-MBAA breakthrough for 10 minute EBCT contactors	86
Figure 100 Impact of influent pH on SDS-DBAA breakthrough for 10 minute EBCT contactors	87
Figure 101 Impact of influent pH on SDS-BCAA breakthrough for 10 minute EBCT contactors	87
Figure 102 Impact of influent pH on SDS-DCBAA breakthrough for 10 minute EBCT contactors	88
Figure 103 Impact of influent pH on SDS-CDBAA breakthrough for 10 minute EBCT contactors	88
Figure 104 Impact of influent pH on SDS-TBAA breakthrough for 10 minute EBCT contactors	89
Figure 105 TOC breakthrough and effluent blending for 10 and 20 minute EBCT contactors	103
Figure 106 UV-254 breakthrough and effluent blending for 10 and 20 minute EBCT contactors	103
Figure 107 SDS-THM4 breakthrough and effluent blending for 10 and 20 minute EBCT contactors	104
Figure 108 SDS-HAA5 breakthrough and effluent blending for 10 and 20 minute EBCT contactors	104
Figure 109 SDS-HAA6 breakthrough and effluent blending for 10 and 20 minute EBCT contactors	105
Figure 110 SDS-HAA9 breakthrough and effluent blending for 10 and 20 minute EBCT contactors	105
Figure 111 SDS-TOX breakthrough and effluent blending for 10 and 20 minute EBCT contactors	106
Figure 112 TOC breakthrough and effluent blending for 5.0 and 7.5 minute EBCT contactors	107
Figure 113 UV-254 breakthrough and effluent blending for 5.0 and 7.5 minute EBCT contactors	107
Figure 114 SDS-THM4 breakthrough and effluent blending for 5.0 and 7.5 minute EBCT contactors	108
Figure 115 SDS-HAA5 breakthrough and effluent blending for 5.0 and 7.5 minute EBCT contactors	108
Figure 116 SDS-HAA6 breakthrough and effluent blending for 5.0 and 7.5 minute EBCT contactors	109

Figure 117 SDS-HAA9 breakthrough and effluent blending for 5.0 and 7.5 minute EBCT contactors.....	109
Figure 118 SDS-TOX breakthrough and effluent blending for 5.0 and 7.5 minute EBCT contactors.....	110
Figure 119 TOC breakthrough and effluent blending for 15 minute EBCT contactor.....	111
Figure 120 UV-254 breakthrough and effluent blending for 15 minute EBCT contactor.....	111
Figure 121 SDS-THM4 breakthrough and effluent blending for 15 minute EBCT contactor ..	112
Figure 122 SDS-HAA5 breakthrough and effluent blending for 15 minute EBCT contactor...	112
Figure 123 SDS-HAA6 breakthrough and effluent blending for 15 minute EBCT contactor...	113
Figure 124 SDS-HAA9 breakthrough and effluent blending for 15 minute EBCT contactor...	113
Figure 125 SDS-TOX breakthrough and effluent blending for 15 minute EBCT contactor.....	114
Figure 126 TOC breakthrough and effluent blending for influent pH 7.0 and 7.4 contactors (10 minute EBCT).....	115
Figure 127 UV-254 breakthrough and effluent blending for influent pH 7.0 and 7.4 contactors (10 minute EBCT).....	115
Figure 128 SDS-THM4 breakthrough and effluent blending for influent pH 7.0 and 7.4 contactors (10 minute EBCT).....	116
Figure 129 SDS-HAA5 breakthrough and effluent blending for influent pH 7.0 and 7.4 contactors (10 minute EBCT).....	116
Figure 130 SDS-HAA6 breakthrough and effluent blending for influent pH 7.0 and 7.4 contactors (10 minute EBCT).....	117
Figure 131 SDS-HAA9 breakthrough and effluent blending for influent pH 7.0 and 7.4 contactors (10 minute EBCT).....	117
Figure 132 SDS-TOX breakthrough and effluent blending for influent pH 7.0 and 7.4 contactors (10 minute EBCT).....	118
Figure 133 TOC breakthrough and effluent blending for influent pH 7.8 contactor (10 minute EBCT)	119
Figure 134 UV-254 breakthrough and effluent blending for influent pH 7.8 contactor (10 minute EBCT)	119
Figure 135 SDS-THM4 breakthrough and effluent blending for influent pH 7.8 contactor (10 minute EBCT).....	120
Figure 136 SDS-HAA5 breakthrough and effluent blending for influent pH 7.8 contactor (10 minute EBCT).....	120
Figure 137 SDS-HAA6 breakthrough and effluent blending for influent pH 7.8 contactor (10 minute EBCT).....	121
Figure 138 SDS-HAA9 breakthrough and effluent blending for influent pH 7.8 contactor (10 minute EBCT).....	121
Figure 139 SDS-TOX breakthrough and effluent blending for influent pH 7.8 contactor (10 minute EBCT).....	122
Figure 140 GAC run times based on single contactor breakthrough and effluent blending for TOC and UV-254 criteria (high) for 10 and 20 minute EBCT contactors.....	123
Figure 141 GAC run times based on single contactor breakthrough and effluent blending for TOC and UV-254 criteria (low) for 10 and 20 minute EBCT contactors.....	123
Figure 142 GAC run times based on single contactor breakthrough and effluent blending for Stage 1 THM4 and HAA5 criteria for 10 and 20 minute EBCT contactors	123

Figure 143 GAC run times based on single contactor breakthrough and effluent blending for Stage 2 THM4 and HAA5 criteria for 10 and 20 minute EBCT contactors	123
Figure 144 GAC run times based on single contactor breakthrough and effluent blending for TOC and UV-254 criteria (high) for 5 and 7.5 minute EBCT contactors.....	124
Figure 145 GAC run times based on single contactor breakthrough and effluent blending for TOC and UV-254 criteria (low) for 5 and 7.5 minute EBCT contactors.....	124
Figure 146 GAC run times based on single contactor breakthrough and effluent blending for Stage 1 THM4 and HAA5 criteria for 5 and 7.5 minute EBCT contactors	124
Figure 147 GAC run times based on single contactor breakthrough and effluent blending for Stage 2 THM4 and HAA5 criteria for 5 and 7.5 minute EBCT contactors	124
Figure 148 GAC run times based on single contactor breakthrough and effluent blending for TOC and UV-254 criteria (high) for 15 minute EBCT contactors	125
Figure 149 GAC run times based on single contactor breakthrough and effluent blending for TOC and UV-254 criteria (low) for 15 minute EBCT contactors	125
Figure 150 GAC run times based on single contactor breakthrough and effluent blending for Stage 1 THM4 and HAA5 criteria for 15 minute EBCT contactors.....	125
Figure 151 GAC run times based on single contactor breakthrough and effluent blending for Stage 2 THM4 and HAA5 criteria for 15 minute EBCT contactors.....	125
Figure 152 Run times based on single contactors and effluent blending for TOC and UV-254 criteria (high) for influent pH 7.0 and 7.4 contactors (10 minute EBCT).....	126
Figure 153 Run times based on single contactors and effluent blending for TOC and UV-254 criteria (low) for influent pH 7.0 and 7.4 contactors (10 minute EBCT).....	126
Figure 154 Run times based on single contactors and effluent blending for Stage 1 THM4 and HAA5 criteria for influent pH 7.0 and 7.4 contactors (10 minute EBCT).....	126
Figure 155 Run times based on single contactors and effluent blending for Stage 2 THM4 and HAA5 criteria for influent pH 7.0 and 7.4 contactors (10 minute EBCT).....	126
Figure 156 Run times based on single contactors and effluent blending for TOC and UV-254 criteria (high) for influent pH 7.8 contactor (10 minute EBCT)	127
Figure 157 Run times based on single contactors and effluent blending for TOC and UV-254 criteria (low) for influent pH 7.8 contactor (10 minute EBCT)	127
Figure 158 Run times based on single contactors and effluent blending for Stage 1 THM4 and HAA5 criteria for influent pH 7.8 contactor (10 minute EBCT)	127
Figure 159 Run times based on single contactors and effluent blending for Stage 2 THM4 and HAA5 criteria for influent pH 7.8 contactor (10 minute EBCT)	127
Figure 160 Single contactor and blended effluent extrapolated TOC breakthrough curve (10 minute EBCT).....	128
Figure 161 Single contactor and blended effluent extrapolated TOC breakthrough curve (20 minute EBCT).....	128
Figure 162 Single contactor and blended effluent extrapolated UV-254 breakthrough curve (10 minute EBCT).....	129
Figure 163 Single contactor and blended effluent extrapolated UV-254 breakthrough curve (20 minute EBCT).....	129
Figure 164 Single contactor and blended effluent extrapolated SDS-THM4 breakthrough curve (10 minute EBCT).....	130
Figure 165 Single contactor and blended effluent extrapolated SDS-THM4 breakthrough curve (20 minute EBCT).....	130

Figure 166 Single contactor and blended effluent extrapolated SDS-TOX breakthrough curve (10 minute EBCT).....	131
Figure 167 Single contactor and blended effluent extrapolated SDS-TOX breakthrough curve (20 minute EBCT).....	131
Figure 168 Single contactor and blended effluent extrapolated TOC breakthrough curve (5 minute EBCT).....	132
Figure 169 Single contactor and blended effluent extrapolated TOC breakthrough curve (7.5 minute EBCT).....	132
Figure 170 Single contactor and blended effluent extrapolated UV-254 breakthrough curve (5 minute EBCT).....	133
Figure 171 Single contactor and blended effluent extrapolated UV-254 breakthrough curve (7.5 minute EBCT).....	133
Figure 172 Single contactor and blended effluent extrapolated SDS-THM4 breakthrough curve (5 minute EBCT).....	134
Figure 173 Single contactor and blended effluent extrapolated SDS-THM4 breakthrough curve (7.5 minute EBCT).....	134
Figure 174 Single contactor and blended effluent extrapolated SDS-TOX breakthrough curve (5 minute EBCT).....	135
Figure 175 Single contactor and blended effluent extrapolated SDS-TOX breakthrough curve (7.5 minute EBCT).....	135
Figure 176 Single contactor and blended effluent extrapolated TOC breakthrough curve (15 minute EBCT).....	136
Figure 177 Single contactor and blended effluent extrapolated UV-254 breakthrough curve (15 minute EBCT).....	136
Figure 178 Single contactor and blended effluent extrapolated SDS-THM4 breakthrough curve (15 minute EBCT).....	137
Figure 179 Single contactor and blended effluent extrapolated SDS-TOX breakthrough curve (15 minute EBCT).....	137
Figure 180 Single contactor and blended effluent extrapolated TOC breakthrough curve for influent pH 7.4 contactor (10 minute EBCT).....	138
Figure 181 Single contactor and blended effluent extrapolated TOC breakthrough curve for influent pH 7.0 contactor (10 minute EBCT).....	138
Figure 182 Single contactor and blended effluent extrapolated UV-254 breakthrough curve for influent pH 7.4 contactor (10 minute EBCT).....	139
Figure 183 Single contactor and blended effluent extrapolated UV-254 breakthrough curve for influent pH 7.0 contactor (10 minute EBCT).....	139
Figure 184 Single contactor and blended effluent extrapolated SDS-THM4 breakthrough curve for influent pH 7.4 contactor (10 minute EBCT).....	140
Figure 185 Single contactor and blended effluent extrapolated SDS-THM4 breakthrough curve for influent pH 7.0 contactor (10 minute EBCT).....	140
Figure 186 Single contactor and blended effluent extrapolated SDS-TOX breakthrough curve for influent pH 7.4 contactor (10 minute EBCT).....	141
Figure 187 Single contactor and blended effluent extrapolated SDS-TOX breakthrough curve for influent pH 7.0 contactor (10 minute EBCT).....	141
Figure 188 Single contactor and blended effluent extrapolated TOC breakthrough curve for influent pH 7.8 contactor (10 minute EBCT).....	142

Figure 189 Single contactor and blended effluent extrapolated UV-254 breakthrough curve for influent pH 7.8 contactor (10 minute EBCT).....	142
Figure 190 Single contactor and blended effluent extrapolated SDS-THM4 breakthrough curve for influent pH 7.8 contactor (10 minute EBCT).....	143
Figure 191 Single contactor and blended effluent extrapolated SDS-TOX breakthrough curve for influent pH 7.8 contactor (10 minute EBCT).....	143
Figure 192 Normalized breakthrough patterns for 10 minute EBCT contactor.....	145
Figure 193 Normalized breakthrough patterns for 20 minute EBCT contactor.....	145
Figure 194 Normalized breakthrough patterns for 5 minute EBCT contactor.....	146
Figure 195 Normalized breakthrough patterns for 7.5 minute EBCT contactor.....	146
Figure 196 Normalized breakthrough patterns for 15 minute EBCT contactor.....	147
Figure 197 Normalized breakthrough patterns for influent pH 7.4 contactor (10 minute EBCT).....	148
Figure 198 Normalized breakthrough patterns for influent pH 7.0 contactor (10 minute EBCT).....	148
Figure 199 Normalized breakthrough patterns for influent pH 7.8 contactor (10 minute EBCT).....	149
Figure 200 TOC breakthrough comparison for two 10 minute EBCT contactors	151
Figure 201 UV-254 breakthrough comparison for two 10 minute EBCT contactors	151
Figure 202 SDS-THM4 breakthrough comparison for two 10 minute EBCT contactors	152
Figure 203 SDS-HAA5 breakthrough comparison for two 10 minute EBCT contactors	152
Figure 204 SDS-HAA6 breakthrough comparison for two 10 minute EBCT contactors	153
Figure 205 SDS-HAA9 breakthrough comparison for two 10 minute EBCT contactors	153
Figure 206 SDS-TOX breakthrough comparison for two 10 minute EBCT contactors.....	154
Figure 207 SDS-CLD breakthrough comparison for two 10 minute EBCT contactors.....	154
Figure 208 SDS-CHCl3 breakthrough comparison for two 10 minute EBCT contactors.....	155
Figure 209 SDS-BDCM breakthrough comparison for two 10 minute EBCT contactors	155
Figure 210 SDS-DBCM breakthrough comparison for two 10 minute EBCT contactors	156
Figure 211 SDS-CHBr3 breakthrough comparison for two 10 minute EBCT contactors.....	156
Figure 212 SDS-MCAA breakthrough comparison for two 10 minute EBCT contactors.....	157
Figure 213 SDS-DCAA breakthrough comparison for two 10 minute EBCT contactors.....	157
Figure 214 SDS-TCAA breakthrough comparison for two 10 minute EBCT contactors	158
Figure 215 SDS-MBAA breakthrough comparison for two 10 minute EBCT contactors	158
Figure 216 SDS-DBAA breakthrough comparison for two 10 minute EBCT contactors.....	159
Figure 217 SDS-BCAA breakthrough comparison for two 10 minute EBCT contactors.....	159
Figure 218 SDS-DCBAA breakthrough comparison for two 10 minute EBCT contactors	160
Figure 219 SDS-CDBAA breakthrough comparison for two 10 minute EBCT contactors	160
Figure 220 SDS-TBAA breakthrough comparison for two 10 minute EBCT contactors	161
Figure 221 TOC correlations with UV-254 and SDS-DBPs in GAC effluent water	163
Figure 222 UV-254 correlations with TOC and SDS-DBPs in GAC effluent water	164
Figure 223 Normalized TOC correlations with normalized UV-254 and SDS-DBPs	165
Figure 224 Normalized UV-254 correlations with normalized TOC and SDS-DBPs	166
Figure 225 Comparison between GAC performance during treatment study testing and average water GAC performance.....	168
Figure 226 Average costs for GAC treatment with five steel pressure contactors and on-site reactivation	173

3

List of Abbreviations

3 List of Abbreviations

°C	degrees Celsius
µg	microgram
µL	microliter
µm	micrometer
A_0	logistic function parameter
A_f	logistic function parameter
B	logistic function parameter
BCAA	bromochloroacetic acid
BDCM	bromodichloromethane
BMRL	below minimum reporting level
BV	bed volume
BV ₅₀	bed volumes to 50 percent TOC breakthrough
C	concentration
\bar{C}	blended effluent concentration
C1	larger of two observed values for RPD calculation
C2	smaller of two observed values for RPD calculation
CCC	continuing calibration check
CCI	construction cost index
CDBAA	chlorodibromoacetic acid
CHBr ₃	bromoform
CHCl ₃	chloroform
Cl ⁻	chloride
CLD	chlorine demand
cm	centimeter
cu	cubic
CUR	carbon usage rate
D	column inner diameter
d	day
d	diameter
D	logistic function parameter
DBAA	dibromoacetic acid
DBCM	dibromochloromethane
DBP	disinfection byproduct
DCAA	dichloroacetic acid
DCBAA	dichlorobromoacetic acid
DS	distribution system
EBCT	empty-bed contact time
EPA	Environmental Protection Agency
ft	feet
g	gram
GAC	granular activated carbon
gal	gallon
gpm	gallons per minute

HAA	haloacetic acid
HAA5	sum of five haloacetic acids: MCAA, DCAA, TCAA, MBAA, DBAA
HAA6	sum of five haloacetic acids: MCAA, DCAA, TCAA, MBAA, DBAA, BCAA
HAA9	sum of five haloacetic acids: MCAA, DCAA, TCAA, MBAA, DBAA, BCAA, DCBAA, CDBAA, TBAA
hr	hour
<i>i</i>	individual contactor
ICR	Information Collection Rule
in	inch
inf	influent
l	bed length
L	liter
LC	large column
m	mass
^{max}	maximum
MBAA	monobromoacetic acid
MCAA	monochloroacetic acid
MCL	maximum contaminant level
mg	milligram
MGD	million gallons per day
^{min}	minimum
min	minute
mL	milliliter
mm	millimeter
MRL	minimum reporting level
MtBE	methyl tert-butyl ether
<i>n</i>	number of contactors
NA	not applicable
NA	not analyzed
NA _p	not applicable
NA _v	not available
ntu	nephelometric turbidity unit
O&M	operations and maintenance
_p	particle
PE	performance evaluation
PPI	Producers Price Index
Q	flow rate
QA/QC	quality assurance/quality control
Re	Reynold's number
RPD	relative percent difference
RSSCT	rapid small-scale column test
sc	small column
SDS	simulated distribution system
sec	second
SF	scaling factor
SM	<i>Standard Methods</i>

SUVA	specific ultraviolet absorbance
t	time
T	total
TBAA	tribromoacetic acid
TCAA	trichloroacetic acid
THM	trihalomethane
THM4	sum of four trihalomethanes: CHCl_3 , BDCM, DBCM, and CHBr_3
TOC	total organic carbon
TOC_0	influent total organic carbon
TOX	total organic halide
TSUVA	specific ultraviolet absorbance based on TOC
UV	ultraviolet absorbance
UV_{254}	ultraviolet absorbance at 254 nm
ϵ	bed porosity
ν	kinematic viscosity
ρ	density

4

Conclusions and Recommendations

4 Conclusions and Recommendations

As required by the Information Collection Rule (ICR), a treatment study was conducted by Summers & Hooper, Inc. (S&H) to evaluate the removal of disinfection byproduct (DBP) precursors by granular activated carbon (GAC) for the Arlington Water Treatment Plant, operated by the Jacksonville Electric Authority. The rapid small-scale column test (RSSCT) was utilized as the bench-scale method to simulate full-scale GAC performance. The treatment study was performed off-site at S&H's laboratory facilities in Cincinnati, Ohio. It was designed and conducted as required by section 141.141(3) of the ICR, published in the May 14, 1996 Federal Register. A bituminous coal-based GAC manufactured by Calgon Carbon Corporation, F-400, was investigated. DBP formation by disinfection with free chlorine was simulated by utilizing site-specific chlorination conditions designed to match distribution system conditions. The procedures followed were those contained in the *GAC Precursor Removal Studies* section of the *ICR Manual for Bench- and Pilot-Scale Treatment Studies* (USEPA, 1996a), and all analyses were conducted following approved methods and as required by the *ICR/DBP Analytical Methods Manual* (USEPA, 1996b).

An electronic deliverable is included at the end of this report. It includes: this report in portable document format along with all data analyzed during this treatment study and all required QA/QC information; the *ICR Treatment Studies Data Collection Spreadsheets*, with all data input as required by EPA; and the *Treatment Study Summary Report Spreadsheet*, with all data input as required by EPA.

The source water to the Arlington Water Treatment Plant is the Floridan Aquifer, a groundwater. Because the source water is not impacted by seasonal variations in water quality, an evaluation of seasonal variability was not required. Instead, GAC optimization studies were performed by evaluating a range of empty-bed contact times (EBCTs) and influent pH levels.

The Arlington Water Treatment Plant performs aeration, pH adjustment, and disinfection. The pH after aeration is typically 7.4. The treatment study influent water was collected after aeration. The pH level in the water collected after full-scale aeration was maintained in the influent water to RSSCTs designed to simulate five EBCTs, ranging from 5.0 to 20 minutes. A separate pH study was conducted to investigate the impact on GAC performance of an increase or decrease in influent pH. A pH range of 7.0 to 7.8 was investigated. A GAC influent pH of 7.0 represents a pH adjustment step prior to GAC treatment with the goal of improving GAC performance, as adsorption of DBP precursors typically improves with decreasing pH. However, as the treatment plant is currently designed, if GAC is installed at full-scale after caustic addition, the GAC influent pH would be 7.8.

Based on an EPA cost model, the total cost for GAC to maintain simulated distribution system (SDS) DBP levels below the placeholders for Stage 2 maximum contaminant levels (MCLs) using steel pressure contactors was estimated as low as 34 cents/1,000 gallons for a 5.0 minute EBCT contactor operated in parallel staggered mode. Selection of an appropriate EBCT is important towards maintaining cost-effective adsorption of DBP precursors. The overall costs of a system with 5.0 minute EBCT contactors were estimated as less than that for a systems with longer EBCTs because capital costs associated with the larger contactors increased in greater

proportion than the decrease in operations and maintenance costs due to less frequent reactivation. GAC influent pH between 7.0 and 7.8 had a negligible impact on total system costs for GAC treatment. The cost estimates were based on the operation of 5 steel pressure contactors in parallel with staggered reactivation cycles and did not include the cost of pH adjustment. All run times given reflect meeting the placeholder for Stage 2 THM4 and HAA5 MCL with a 20 percent safety factor, 32 and 24 µg/L, respectively.

A relative measure of GAC performance is the number of bed volumes to 50 percent total organic carbon (TOC) breakthrough, BV_{50} . This parameter can correlate GAC performance to the influent TOC concentration. Typically, GAC performance improves with decreasing influent TOC concentration, as the loading on the GAC contactor is decreased. The measured BV_{50} values for GAC runs in this study were compared to the BV_{50} of an average water, correlated to the influent TOC concentration, which is available in the literature. Based on the average influent TOC concentration during each session, the BV_{50} was slightly higher than expected. While for the 5.0 and 7.5 minute EBCT contactors the measured BV_{50} values were about equal to the expected values, at higher EBCTs (10 to 20 minutes) the BV_{50} averaged 26 percent higher than predicted. Decreasing the influent pH from 7.4 to 7.0 increased BV_{50} values, while increasing the influent pH from 7.4 to 7.8 decreased BV_{50} values. Based on influent pH values between 7.8 and 7.0, BV_{50} values ranged from 3 to 21 percent above the predicted BV_{50} .

Evaluating the results of the GAC treatment study using normalized breakthrough curves (effluent percent breakthrough) indicated that TOC was a conservative indicator for the breakthrough of SDS total trihalomethane (THM4), SDS haloacetic acid (HAA), and SDS total organic halide (TOX). Therefore, by monitoring the GAC effluent for TOC, a conservative estimate of the relative breakthrough of SDS-DBPs would be known. Normalized ultraviolet absorbance at 254 nm (UV_{254}) was observed to be a good predictor of SDS-THM4, SDS-HAA5, and SDS-TOX breakthrough.

GAC influent TOC concentration averaged 1.9 mg/L throughout the treatment study, while bromide concentration was very high, averaging 448 µg/L. Due to the high bromide concentration, the chlorinated GAC influent was dominated by the formation of brominated compounds. For example, chloroform, dichloroacetic acid, and trichloroacetic acid, which normally account for a high percentage of THM and HAA formation in most waters, were measured at or below 3 µg/L in the GAC influent during this study.

GAC treatment does not remove bromide, while TOC is adsorbed, resulting in higher GAC effluent bromide to TOC ratios as compared to the GAC influent. Due to this increase, GAC effluent formed DBPs may undergo shifts in speciation to higher concentrations of the more brominated DBP species. In some cases, such as for bromoform, effluent concentrations were measured near influent levels. It is important to track the breakthrough behavior of specific DBP species, because some may be of potential health concern and a MCL could be set for a specific DBP species.

Overall, SDS-DBP formation was well-controlled by GAC. Using the placeholders for Stage 2 DBP MCLs (40 µg/L for THM4 and 30 µg/L for HAA5) the formation of THM4 was the controlling parameter for GAC run time estimates. The results indicated that even without GAC adsorption, the Arlington Water Treatment Plant should easily meet the placeholder for Stage 2

HAA5 MCL. For a 5.0 minute EBCT contactor, the run time to the placeholder for Stage 2 THM4 MCL was 39 days. This run time is extended to 67 days assuming operation of five contactors in parallel and with staggered reactivation cycles. Under the five contactor blended effluent assumption, run times are as long as 146 days for a 10 minute EBCT contactor and 397 days for a 20 minute EBCT contactor.

In general, GAC performance can be improved by lowering the influent TOC concentration and the decreasing influent pH. Lower influent TOC concentrations result in less loading on the GAC contactor. Reducing the influent pH renders natural organic matter (DBP precursors) less soluble and therefore more adsorbable. The TOC levels measured during the study were fairly low, 1.8 to 2.0 mg/L, yielding relatively long GAC run times. Furthermore, the influent pH of 7.4 should not be detrimental to DBP precursor adsorption. Although lowering the influent pH to 7.0 did not significantly decrease the estimated costs of GAC treatment, it is not known whether further decreases in influent pH would improve GAC performance sufficiently to impact the costs of treatment.

5

Background Information

5 Background Information

5.1 Treatment Plant Description

The Jacksonville Electric Authority operates the Arlington Water Treatment Plant, a groundwater aeration and disinfection plant that provides drinking water for a population of 204,600 in the southeast Jacksonville, Florida area. The state approved plant capacity is 12.2 MGD and the source water is the Floridan Aquifer, a groundwater.

Figure 1 shows a simple schematic of the Arlington Water Treatment Plant. Aeration, for iron removal and the control of taste and odors associated with hydrogen sulfide gas, is followed by caustic soda addition, to increase pH, and disinfection with free chlorine.

5.1.1 Treatment plant design information

Table 1 summarizes the Arlington Water Treatment Plant design data. The data presented is based on data from report A.2 "Design Plant Parameters" and report A.3 "Design Plant Chemical Parameters," of the *ICR Water Utility Database System*.

5.1.2 Treatment challenges facing plant

The plant source water contains iron and hydrogen sulfide gas. Aeration is used to remove iron and to control taste and odors associated with hydrogen sulfide gas. In the future, the plant is studying the possibility of the elimination of the use of chlorine gas as primary disinfectant. One alternative being considered is the use of ozone.

5.2 Tabular Summary of Source and Finished Water Quality

Tables 2 and 3 summarize average source and finished water quality, respectively, at the Arlington Water Treatment Plant, based on data taken between July 1997 and December 1998. The data set used was derived from ICR monitoring efforts performed by the Jacksonville Electric Authority, and has not yet undergone EPA QA/QC review. The source water is characterized by low TOC levels and very high bromide levels, with source water TOC and bromide levels averaging 2.0 mg/L and 441 µg/L, respectively. This results in a very high bromide to TOC ratio (221 µg/mg) which would be expected to favor the formation of brominated DBPs upon chlorination. Overall, source water quality variability was minimal.

Using all 18 months of monitoring data, the source water UV₂₅₄ showed a very high standard deviation, caused by one data point, taken in May 1998, with a UV absorbance about a factor of five greater than the average (see value listed as maximum). Tables 2 and 3 also include statistics on the data set omitting this data point. The source water specific UV absorbance (TSUVA, defined as $100 \cdot \text{UV}_{254} / \text{TOC}$) averaged 2.8 L/mg-m in the 17-observation data set. This

was reduced to an average of 1.8 L/mg-m after treatment, due to aeration and chlorination of the water. The average TOC concentration after treatment was 1.9 mg/L, only a 0.1 mg/L decrease.

Distribution system (DS) THM4 levels ranged from 37 to 75 µg/L. DS-THM4 levels averaged 57 µg/L, below the Stage 1 MCL of 80 µg/L or 64 µg/L with a 20 percent safety factor, and exceeding the placeholders for Stage 2 MCLs of 40 µg/L or 32 µg/L with a 20 percent safety factor. DS-HAA5 averaged 11 µg/L, in compliance with both the Stage 1 MCL of 60 µg/L or 48 µg/L with a 20 percent safety factor and the placeholder for Stage 2 MCL of 30 µg/L or 24 µg/L with a 20 percent safety factor for HAA5. Like DS-THM4, DS-HAA5 showed a wide variability in measured concentrations. This variability was not evident in TOC concentration, which yielded a standard deviation of only 0.2 mg/L. However, the distribution system DBP values reported in Table 3 reflect the average of all distribution system DBP sampling, resulting in variation due to samples taken at different residence times.

Unit Process	Process Description
Other Treatment Process (Aeration)	Surface Area (ft ²): NA _V Liquid Volume (gal): NA _V Short Circuiting Factor: NA _V
Disinfection Addition	Chemical Type: CL2 Measured as: Cl ₂ Dose Rate (mg/L): 4.00
Disinfection Contact Basin	Surface Area (ft ²): 10,000 Liquid Volume (gal): 1,875,000 Baffling Type: Average Short Circuiting Factor: NA _V
Disinfection Addition	Chemical Type: CL2 Measured as: Cl ₂ Dose Rate (mg/L): 3.30

NA_V: Not available

Table 1 Summary of treatment plant design data

Water quality parameter	Mean	Standard deviation	Minimum	Maximum	Count
Temperature (°C)	28	1	24	30	18
pH	7.5	0.2	7.2	7.8	18
Alkalinity (mg/L as CaCO ₃)	137	4	133	147	18
Total hardness (mg/L as CaCO ₃)	356	21	324	400	18
Calcium hardness (mg/L as CaCO ₃)	231	22	192	294	18
TOC (mg/L)	2.0	0.4	1.7	3.4	18
UV ₂₅₄ (1/cm)	0.072	0.073	0.047	0.361	18
UV ₂₅₄ (1/cm)*	0.055	0.009	0.047	0.075	17
Bromide (µg/L)	441	58	340	610	18
TSUVA (L/mg-m)	3.6	3.1	1.9	15.7	18
TSUVA (L/mg-m)*	2.8	0.6	1.9	4.3	17

*Not including UV₂₅₄ data sampled in May 1998.

Table 2 Summary of source water quality at the Arlington Water Treatment Plant

Water quality parameter	Mean	Standard deviation	Minimum	Maximum	Count
Temperature (°C)	28	1	25	30	18
pH	7.6	0.2	7.3	7.9	18
Turbidity (ntu)	0.63	0.14	0.42	0.85	18
TOC (mg/L)	1.9	0.2	1.7	2.6	18
UV ₂₅₄ (1/cm)	0.054	0.085	0.031	0.394	18
UV ₂₅₄ (1/cm)*	0.034	0.002	0.031	0.038	17
TSUVA (L/mg-m)	2.7	3.8	1.3	17.9	18
TSUVA (L/mg-m)*	1.8	0.3	1.3	2.2	17
DS-THM4 (µg/L)	57	11	37	75	24
DS-HAA5 (µg/L)	11	2	7	16	24
DS-HAA6 (µg/L)	14	2	10	20	24

*Not including UV₂₅₄ data sampled in May, 1998.

DS: distribution system

Table 3 Summary of finished water quality at the Arlington Water Treatment Plant

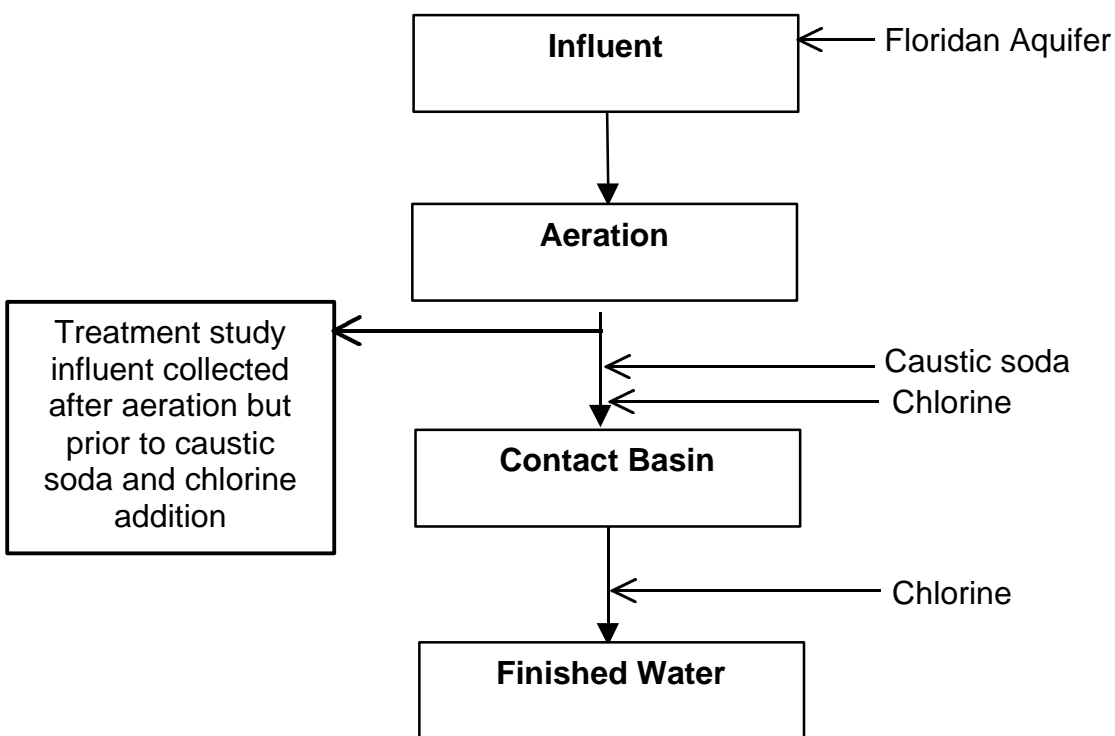


Figure 1 Arlington Water Treatment Plant schematic

6

Materials and Methods

6 Materials and Methods

6.1 Treatment Study Influent Sampling Procedures

The treatment study influent water was sampled from the Arlington Water Treatment Plant after full-scale aeration and prior pH adjustment and disinfectant addition. To complete the study, water samples were taken on three occasions, the dates of which are summarized in Table 4.

The water was sampled in 55-gallon plastic drums. The 55-gallon drums were extensively cleaned at S&H's laboratory facility prior to use. The cleaning process included 24-hour exposures to hot tap water, a basic solution, and an acidic solution. Prior to use, the drums were filled with water and TOC samples taken to ensure that no measurable (as TOC) leaching of organic compounds from the inside surface of the drums was occurring.

The representativeness of treatment study influent water sampled was based on knowledge of plant operations at the time of sampling. Because the source water to the Arlington Water Treatment Plant is a groundwater, little variability in source water quality was expected.

For all three sampling sessions the treatment study influent water was shipped the day of sampling. The travel time for the each session was two days, under ambient temperature conditions. To check for significant biodegradation or other changes during shipment, an aliquot of the treatment study influent water was sampled and analyzed for TOC approximately half way through each sampling event. The sample was immediately preserved. Upon arrival at S&H's laboratory facilities, a second aliquot was obtained for TOC analysis. Both samples were analyzed, and the results are summarized in Table 5. The TOC concentration of the treatment study sampling point before and after shipping did not change by more than 0.1 mg/L during any of the three sampling periods. Over the three sampling sessions, the TOC concentration of the treatment study sampling point averaged 2.0 ± 0.1 mg/L (relative standard deviation, RSD, = 5.0%), a low variability confirming the decision not to evaluate seasonal variability.

6.2 Pretreatment Processes to the Advanced Treatment Processes

The full-scale and bench-scale pretreatment processes in place prior to bench-scale GAC are described in Figure 2. The water was sampled after full-scale aeration. Bench-scale filtration through a 1.0- μ m glass fiber cartridge filter simulated full-scale rapid sand filtration. Although full-scale filtration is not practiced, bench-scale cartridge filtration is a necessary pretreatment step prior to RSSCT testing. The TOC data for the filtered water, Table 5, shows that there was little change in TOC concentration before and after cartridge filtration: all filtered TOC values are within 0.1 mg/L of the unfiltered TOC concentrations. During the operation of the RSSCT, the pH was maintained within 0.1 pH units of the target GAC influent pH by the addition of dilute solutions of sulfuric acid and sodium hydroxide as needed.

Table 6 summarizes the design data for each pretreatment process prior to GAC adsorption. Bench-scale cartridge filtration was employed as bench-scale pretreatment during all three sessions. During the pH study, bench-scale pH adjustment was performed.

6.3 Advanced Treatment Process Information

6.3.1 Schematics and descriptions of the process equipment used

Figures 3 and 4 show a schematic of the RSSCT systems. All components were of stainless steel, glass, or Teflon construction. The batch influent water was held in a stainless steel container. The influent water was pumped through each column using a metering diaphragm pump. The wetted parts of the pump were Teflon and glass. The pumps were rated for 1 percent speed control and 75 psi continuous duty. A stainless steel gas sampling cylinder was used as a pulse dampener. Pressure gauges with stainless steel connections were used to monitor the system pressure. The effluent flow rate was monitored constantly. The calibration of the effluent flow rate control system was checked by a manual measurement at least twice daily and adjusted as necessary to maintain it within 3 percent of the design flow rate.

The system configuration for the 5, 7.5, and 10 minute EBCT contactors is shown in Figure 3. For these RSSCTs, the entire GAC bed was packed in a single column. The same configuration was used for the three 10 minute EBCT contactors used to evaluate influent pH. The 15 and 20 minute EBCT contactors were packed into two columns in series, as shown in Figure 4. This allowed for backwashing by mixing the top portion of the GAC bed, if made necessary by high system pressures, without disturbing the remainder of the bed. However, no backwashing was necessary during this treatment study. Typically, 90 percent of the GAC bed was packed in the second column. Both columns were of equal inner diameters.

The GAC was packed in glass chromatography columns with Teflon fittings. The GAC support consisted of appropriately sized stainless steel screens and glass wool. The standard 8.0 mm inner diameter columns used required a stainless steel support system as shown in Figure 5.

6.3.2 Design data for the advanced treatment process

The design data for the RSSCTs conducted during each session are summarized in Table 7. Over the course of the entire study, all RSSCTs were designed using columns with inner diameters of 8.0 mm, to conserve the total amount of water used due to the relatively long run times associated with low influent TOC concentrations. A Reynolds number of 0.50 was used for all RSSCTs.

6.3.3 Procedures specific to the treatment study

6.3.3.1 GAC Preparation Procedures

A representative batch of Filtrasorb 400 (F-400), a bituminous-coal based GAC, was obtained from the manufacturer, Calgon Carbon Co. The GAC is a 12x40 mesh size (average particle diameter, $d_p = 1.06$ mm). Using a riffle splitter, a small (30-50 g) representative sample of the GAC was obtained. Using a jar mill, the GAC was ground to a 140x230 mesh size ($d_p = 0.085$ mm). Care was taken to frequently remove and sieve the GAC in the jar mill. The GAC was

ground until the entire sample passed through the 140 mesh size sieve. Usually, a recovery of 25 to 30 percent was obtained, as defined by the amount of GAC retained between the 140 and 230 mesh size sieves divided by the total amount of GAC prior to grinding.

The ground GAC was transferred to a beaker, and covered with reagent grade (adsorbed-deionized) water. The GAC was washed by repeated additions and decantations of reagent grade water. The reagent grade water was added at a high rate and turbulence, to stir up the GAC and release fines. The supernatant water containing GAC fines was decanted after the GAC was allowed to settle. Towards the end of the cleaning procedure, the sample was sonicated twice for 5 to 10 seconds. The sonication step helped loosen attached fines and were subsequently removed by the addition and decantation of reagent grade water.

The GAC was dried in an oven at 80 to 90°C for 6 to 12 hours. The temperature was then raised to between 100 and 110°C and the sample was dried until it reached a constant weight. The sample was removed and cooled inside a dessicator. Once cooled, if not immediately used, it was stored in a glass vial sealed with a lid with TFE-lined septum until ready for use.

The dry bed density was measured using a sample of dried and cooled GAC. Stored GAC was dried in an oven as described above prior to the dry bed density measurement. To measure the dry bed density, a sample of the GAC was placed inside a 10-mL glass graduated cylinder to a level of 5 to 9 mL. The cylinder was tapped to pack the GAC. A volume was measured and recorded. This GAC was then weighed on a balance. The volume reading of the graduated cylinder was checked and calibrated if necessary by adding a known volume of water to it using a 10-mL class A graduated pipette. The GAC dry bed density was calculated by dividing the weight by the calibrated volume.

The calculated mass of GAC of each RSSCT was weighed, placed inside a clean beaker, and covered with reagent grade water. The wetted GAC was usually allowed to sit for 12-24 hours, followed by placement in a vacuum for at least 1 hour to displace the air within the pores.

6.3.3.2 RSSCT Column Setup

The support for RSSCT columns consisted of a 325 mesh size stainless steel screen and a 200 mesh size stainless steel screen placed on top of the Teflon fitting (Figure 5). A small amount of glass wool was placed inside the Teflon fitting, supported by a 60 mesh size stainless steel screen.

The columns were packed by adding the GAC as a slurry and packing the column by repeatedly tapping the sides. The 15- and 20 minute full-scale equivalent EBCT RSSCTs were packed into two columns of the same inner diameter placed in series. Only reagent grade water was used during the packing process.

6.3.3.3 Batch Influent Preparation

On arrival to S&H's laboratory facilities, the influent water was filtered through a 1.0- μ m nominal pore size glass fiber cartridge filter. The cartridge filter was pre-rinsed with deionized

water. For the influent pH runs, the pH of the batch influent was adjusted to the target pH using dilute solutions of sulfuric acid or sodium hydroxide. Dilute solutions of sulfuric acid and sodium hydroxide were used to maintain the influent pH within 0.1 pH units of the target pH during operation of the RSSCTs.

6.3.3.4 RSSCT Monitoring

The effluent flow rates were monitored constantly to ensure that the flow rates were maintained within 3 percent of the design flow rate. The calibration of the effluent flow rate control system was checked at least twice daily and adjusted when a flow rate differed by more than 3 percent from the design flow rate. The system pressure was monitored daily. The effluent TOC concentration was monitored frequently so that samples could be taken at 5 to 8 percent increments of the average influent TOC concentration.

6.4 Experimental Design

Because the source water for the Arlington Water Treatment Plant is a groundwater, multiple RSSCT sessions to evaluate seasonal variability were not required. In lieu of evaluating seasonal variability, two GAC process parameters were evaluated: EBCT and influent pH. EBCTs of 5, 7.5, 10, 15, and 20 minutes were evaluated during two sessions. At a constant EBCT of 10 minutes, three influent pH values were evaluated: 7.0, 7.4, and 7.8. The experimental design is summarized in Table 8.

6.5 ICR Treatment Study Protocol

This treatment study was designed and conducted as required by section 141.141(3) of the Information Collection Rule (ICR), published in the May 14, 1996 Federal Register. The procedures contained in the *GAC Precursor Removal Studies* section of the *ICR Manual for Bench- and Pilot-Scale Treatment Studies* were followed. During RSSCT operation, a minimum of 12 effluent samples were taken at target 5 to 8 percent increments of the average influent TOC concentration. Three samples were taken in duplicate and the resulting experimental variability is displayed on all plots as vertical error bars representing the relative difference between the duplicate samples. All required analyses were conducted, including pH, temperature, TOC, UV₂₅₄, and SDS chlorination for THMs, HAAs, and TOX.

For the first session, in which two EBCTs were evaluated, the RSSCTs were operated in parallel. Therefore, only two influent A (alkalinity, calcium hardness, total hardness, ammonia, and bromide) and three influent B (pH, temperature, turbidity, TOC, UV₂₅₄, SDS chlorination) samples were taken during the runs, and the data from these applied to both the RSSCTs operated. During the second session, three EBCTs were evaluated. The operation of these RSSCTs was staggered: the 5.0 and 15 minute EBCTs were run first. When the required run for the 5.0 minute EBCT contactor was complete, the 7.5 minute EBCT contactor was run, using the same batch influent. Therefore, both the 5.0 and 7.5 minute EBCT contactors were operated in parallel with the 15 minute EBCT contactor. During this session, three influent A samples and four influent B samples were taken. For the influent pH evaluation studies, a separate batch

influent was used for each column. Two influent A samples and one or two influent B samples were taken from each batch influent. A total of five influent B samples were taken.

The ICR requires that the RSSCTs be operated until the first of three conditions are met:

1. the effluent TOC concentration reaches at least 70 percent of the average influent TOC concentration
2. the effluent TOC concentration reaches a plateau at greater than 50 percent of the influent TOC concentration (a plateau is defined as an increase in TOC concentration of no more than 10 percent over a two-month full-scale equivalent time period)
3. the RSSCT has been operated for an equivalent of one year full-scale operation

All column runs were terminated based on meeting the first condition: the effluent TOC concentration reached or exceeded 70 percent of the average influent TOC concentration. The twelfth and last RSSCT effluent sample was taken at this point. A thirteenth effluent sample (analyzed for TOC, pH, and temperature only) was taken two full-scale equivalent weeks after the twelfth effluent sample to confirm that 70 percent TOC breakthrough was reached, as required by the ICR. Table 9 summarizes the run termination criteria used, percent breakthrough reached at the twelfth sample, and the corresponding full-scale equivalent run time.

A tabular summary of the all data analyzed during the treatment study is given in the Appendix. As required by EPA, the data was input into the *ICR Treatment Studies Data Collection Spreadsheets*. These files are included in electronic form (CD-ROM) as an attachment to this report.

6.6 Simulated Distribution System (SDS) Chlorination Conditions

The target simulated distribution system (SDS) conditions are summarized in Table 10. During all sessions, a 7.2-hour holding time was targeted. The samples were buffered at pH 7.7 using a combination phosphate-borate buffer, and the target free chlorine residual after 7.2 hours was 1.0 mg/L as Cl₂. The incubation temperature used for all runs was 27°C. For GAC influent water, during all sessions, the average and standard deviation obtained for each parameter are summarized in Table 11. The same data are summarized in Table 12 for the effluent samples from all RSSCT runs.

6.7 Analytical Methods

A list of all analytical methods used during the study is shown in Table 13. A summary listing the laboratories involved for analytical support and the period over which analyses were conducted by each laboratory is shown in Table 14. Contact information for the laboratories involved is summarized in Table 15.

Session	Sampling Date
1	April 6, 1998
2	June 9, 1998
3	July 7, 1998

Table 4 Sampling dates for GAC bench-scale treatment study sessions

Month sampled	Treatment study sampling point TOC concentration (mg/L)		Percent change (%)	Filtered water TOC concentration (mg/L)
	On day of sampling	Upon arrival at S&H		
April	2.1	2.2	+4.8	2.2
June	1.9	1.8	-5.3	1.9
July	1.9	1.9	0.0	1.8

Table 5 Summary of TOC sampling before and after water shipment

Unit Process	Process Description
Other Treatment Process (Aeration)	Surface Area (ft ²): NA _V Liquid Volume (gal): NA _V Short Circuiting Factor: NA _V
Cartridge Filtration (Bench-Scale)	Surface Area (ft ²): 5.0 Nominal Pore Size (µm): 1.0 Filter Material: Glass fiber Filter Life (gallons of processed water): 200 - 250
pH Adjustment (Bench-Scale - Influent pH Study)	Chemical Type: Sulfuric acid Adjusted pH: 7.0 Dose Rate (mg/L): 17
pH Adjustment (Bench-Scale - Influent pH Study)	Chemical Type: Sodium hydroxide Adjusted pH: 7.8 Dose Rate (mg/L): 5

NA_V: Not available

Table 6 Summary of design data for each pretreatment process prior to GAC

Design parameter	Design value		
	10, 20 minute EBCT	10 minute EBCT, influent pH study	5.0, 7.5, 15 minute EBCT
GAC manufacturer	Calgon Carbon Co.	Calgon Carbon Co.	Calgon Carbon Co.
GAC brand name	F-400	F-400	F-400
GAC type	Bituminous	Bituminous	Bituminous
GAC mesh size	12x40	12x40	12x40
Particle diameter, d_{LC} (mm)	1.063	1.063	1.063
General design parameters			
Minimum Reynold's number, $Re_{SC, min}$ ()	0.50	0.50	0.50
Full-scale operating temperature ($^{\circ}C$)	27	27	27
Kinematic viscosity, ν_{LC} (m^2/s)	8.54E-07	8.54E-07	8.54E-07
Bed porosity, ϵ_{LC} ()	0.45	0.45	0.45
Measured dry bed density, ρ_{SC} (g/cm^3)	0.499	0.485	0.516
RSSCT design parameters			
RSSCT mesh size	140x230	140x230	140x230
Particle diameter, d_{SC} (mm)	0.085	0.085	0.085
Scaling factor, SF	12.57	12.57	12.57
Hydraulic loading rate, ν_{SC} (m/hr)	8.19	8.19	8.19
Column diameter, D_{SC} (mm)	8.0	8.0	8.0
Flow rate, Q_{SC} (mL/min)	6.9	6.9	6.9
Estimated run length			
RSSCT influent TOC concentration (mg/L)	2.0	1.8	1.9
Bed volumes to 50% TOC breakthrough, BV_{50}	8,800	9,800	9,800
Estimated total run time, BV_T	30,800	34,400	34,100
RSSCT 1			
Full-scale empty-bed contact time, $EBCT_{LC}$ (min)	10	10	5
Estimated full-scale run time, t_{LC}^T (days)	214	239	119
Estimated RSSCT run time, t_{SC}^T (days)	17.0	19.0	9.4
Volume water required, V_{SC} (L)	168	188	93
Mass GAC required, m_{SC} (g)	2.72	2.65	1.41
RSSCT empty-bed contact time, $EBCT_{SC}$ (min)	0.80	0.80	0.40
Bed length, l_{SC} (cm)	10.9	10.9	5.4
RSSCT 2			
Full-scale empty-bed contact time, $EBCT_{LC}$ (min)	20	10	7.5
Estimated full-scale run time, t_{LC}^T (days)	428	239	178
Estimated RSSCT run time, t_{SC}^T (days)	34.1	19.0	14.1
Volume water required, V_{SC} (L)	337	188	140
Mass GAC required, m_{SC} (g)	5.44	2.65	1.86
RSSCT empty-bed contact time, $EBCT_{SC}$ (min)	1.59	0.80	0.60
Bed length, l_{SC} (cm)	21.7	10.9	8.1
RSSCT 3			
Full-scale empty-bed contact time, $EBCT_{LC}$ (min)		10	15
Estimated full-scale run time, t_{LC}^T (days)		239	356
Estimated RSSCT run time, t_{SC}^T (days)		19.0	28.3
Volume water required, V_{SC} (L)		188	279
Mass GAC required, m_{SC} (g)		2.65	4.22
RSSCT empty-bed contact time, $EBCT_{SC}$ (min)		0.80	1.19
Bed length, l_{SC} (cm)		10.9	16.3

Table 7 Summary of RSSCT design parameters

Month sampled	Pretreatment	Influent pH	EBCT (min)
April	Aeration	7.4	10, 20
June	Aeration	7.4	5.0, 7.5, 15
July	Aeration	7.0, 7.4, 7.8	10, 10, 10

Table 8 Experimental design summary

EBCT (min)	Influent pH	Month sampled	Run termination criteria*	10 minute EBCT Run time (days)	Percent TOC breakthrough
5.0	7.4	June	1	65	71
7.5	7.4	June	1	87	73
10	7.4	April	1	112	73
15	7.4	June	1	247	72
20	7.4	April	1	259	70
10	7.0	July	1	138	72
10	7.4	July	1	130	73
10	7.8	July	1	128	71

* 1: the effluent TOC concentration reaches at least 70 percent of the average influent TOC concentration

2: the effluent TOC concentration reaches a plateau at greater than 50 percent of the influent TOC concentration (a plateau is defined as an increase in TOC concentration of no more than 10 percent over a two-month full-scale equivalent time period)

3: the RSSCT has been operated for the full-scale equivalent of one year

Table 9 Summary of RSSCT run termination criteria, run time, and percent TOC breakthrough reached

Parameter	Value	Tolerance
Incubation time (hours)	7.2	0.4
Incubation temperature (°C)	27.0	2.0
pH	7.70	0.20
Free chlorine residual (mg/L)	1.00	0.30

Table 10 Simulated distribution system (SDS) chlorination target conditions for all runs

EBCT (min)	Influent pH	Incubation time (hours)		Incubation temperature (°C)		Incubation pH		Free chlorine residual (mg/L)	
		Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation
5.0	7.4	7.0	0.5	26.8	0.3	7.73	0.03	1.09	0.45
7.5	7.4	7.0	0.5	26.8	0.3	7.73	0.03	1.09	0.45
10	7.4	7.4	0.2	27.3	0.5	7.73	0.05	1.12	0.06
15	7.4	7.0	0.5	26.8	0.3	7.73	0.03	1.09	0.45
20	7.4	7.4	0.2	27.3	0.5	7.73	0.05	1.12	0.06
10	7.0	7.3	0.2	27.8	1.4	7.72	0.03	1.04	0.09
10	7.4	7.3	0.2	27.8	1.4	7.72	0.03	1.04	0.09
10	7.8	7.3	0.2	27.8	1.4	7.72	0.03	1.04	0.09

*pH is average of analysis at beginning and end of incubation period for each sample.

Table 11 Summary of experimental SDS chlorination conditions for GAC influent water

EBCT (min)	Influent pH	Incubation time (hours)		Incubation temperature (°C)		Incubation pH		Free chlorine residual (mg/L)	
		Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation
5.0	7.4	7.2	0.2	26.9	0.2	7.78	0.02	0.84	0.11
7.5	7.4	7.2	0.1	26.6	0.0	7.75	0.03	1.17	0.10
10	7.4	7.3	0.1	27.4	0.1	7.74	0.03	1.08	0.06
15	7.4	7.2	0.1	27.1	0.2	7.76	0.03	1.22	0.38
20	7.4	7.3	0.1	27.2	0.3	7.72	0.04	1.41	0.21
10	7.0	7.1	0.1	26.0	0.9	7.68	0.04	1.00	0.15
10	7.4	7.2	0.2	25.9	0.5	7.73	0.03	1.28	0.47
10	7.8	7.3	0.1	25.8	0.5	7.73	0.03	1.03	0.23

*pH is average of analysis at beginning and end of incubation period for each sample.

Table 12 Summary of experimental SDS chlorination conditions for GAC effluent water

Analyte	Session	Method	Minimum reporting level (MRL)
Alkalinity	All	SM 2320 B	5 mg/L as CaCO ₃
Ammonia-Nitrogen	All	EPA 350.1	0.05 mg/L as NH ₃ -N
Bromide	All	EPA 300.0 A	0.02 mg/L
Calcium hardness	All	EPA 200.7	5 mg/L as CaCO ₃
Chlorine dose (solution standardization)	All	SM 4500-Cl B	NA
Chlorine residual	All	SM 4500-Cl F	0.2 mg/L as Cl ₂
HAA (DCAA, TCAA, MBAA, DBAA, BCAA, BDCAA)	All	EPA 552.2	1.0 µg/L (each analyte)
HAA (MCAA, CDBAA)	All	EPA 552.2	2.0 µg/L (each analyte)
HAA (TBAA)	All	EPA 552.2	4.0 µg/L
pH	All	4500-H ⁺ B	NA
Temperature	All	SM 2550 B	NA
Total hardness	All	SM 2340 B	5 mg/L as CaCO ₃
Total organic carbon (TOC)	All	SM 5310 C	0.50 mg/L
Total organic halide (TOX)	All	SM 5320 B	25 µg/L as Cl ⁻
THM (CHCl ₃ , BDCM, DBCM, CHBr ₃)	All	EPA 551.1	1.0 µg/L (each analyte)
Turbidity	All	SM 2130 B	0.05 ntu
UV absorbance at 254 nm (UV ₂₅₄)	All	SM 5910 B	0.009 cm ⁻¹

NA: not applicable

SM: *Standard Methods*
Table 13 Summary of analytical methods and MRLs

Analyses performed	Sessions of service	Laboratory
Alkalinity, chlorine dose, chlorine residual, HAA9, pH, temperature, THM4, TOC, TOX, turbidity, UV ₂₅₄	All	Summers & Hooper, Inc.
Ammonia, bromide, calcium hardness, total hardness	All	Montgomery Watson Laboratories

Table 14 Summary of laboratories conducting analyses

	Summers & Hooper, Inc.	Montgomery Watson Laboratories
ICR lab ID number	ICROH033	ICRCA013
Contact name:	Stuart Hooper	Andrew Eaton
Contact phone number	(513) 679-2200	(626) 568-6400
Contact fax number	(513) 679-2201	(626) 568-6324

Table 15 Laboratory contact information

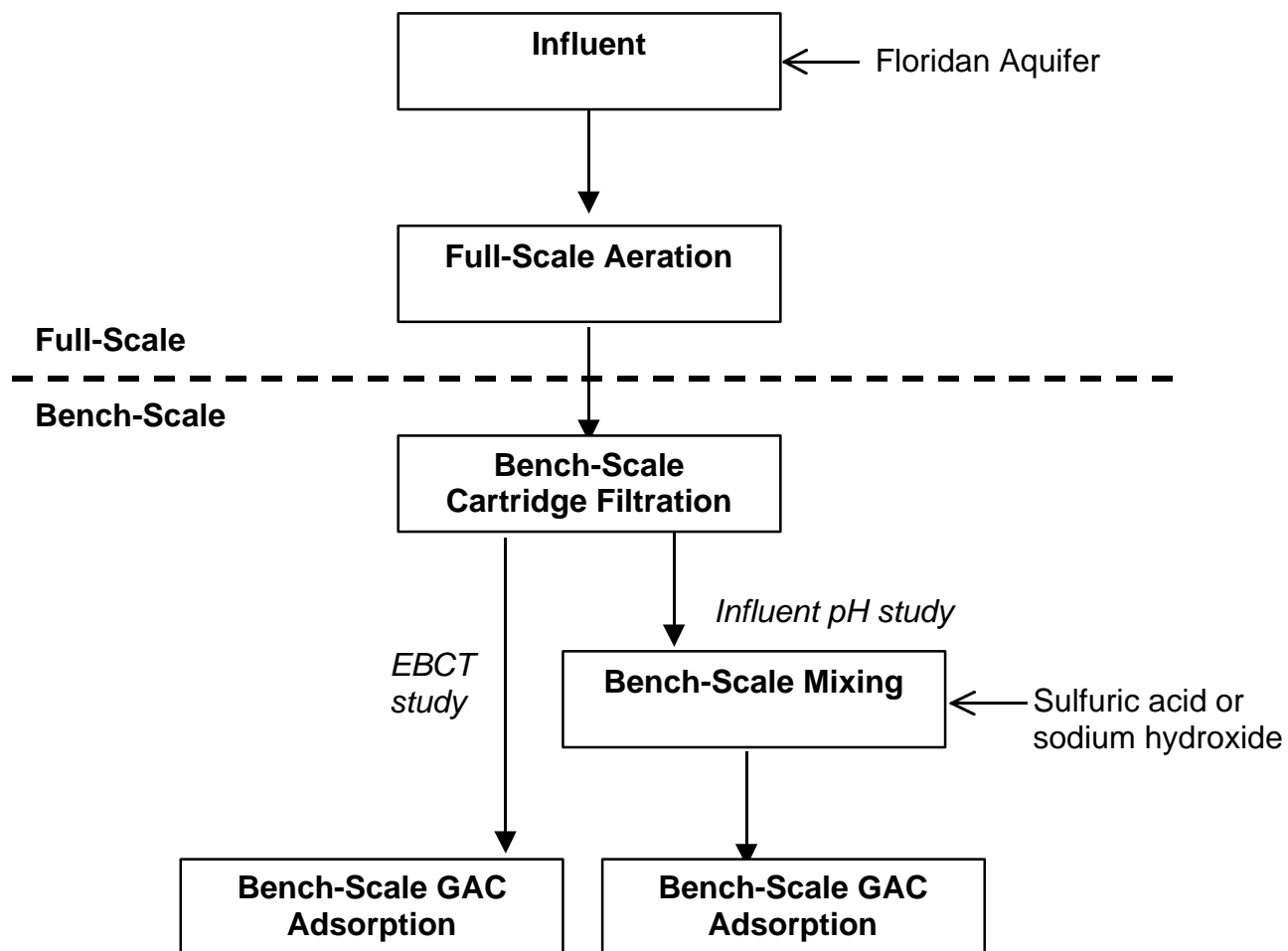


Figure 2 Schematic of pretreatment processes prior to GAC

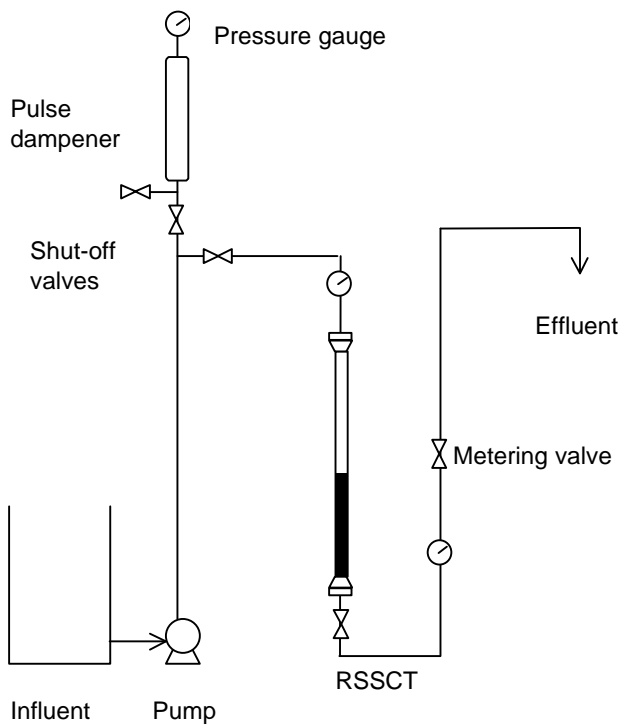


Figure 3 RSSCT system schematic for 5.0, 7.5, and 10 minute EBCT full-scale equivalent contactor and 10 minute EBCT, pH study contactors

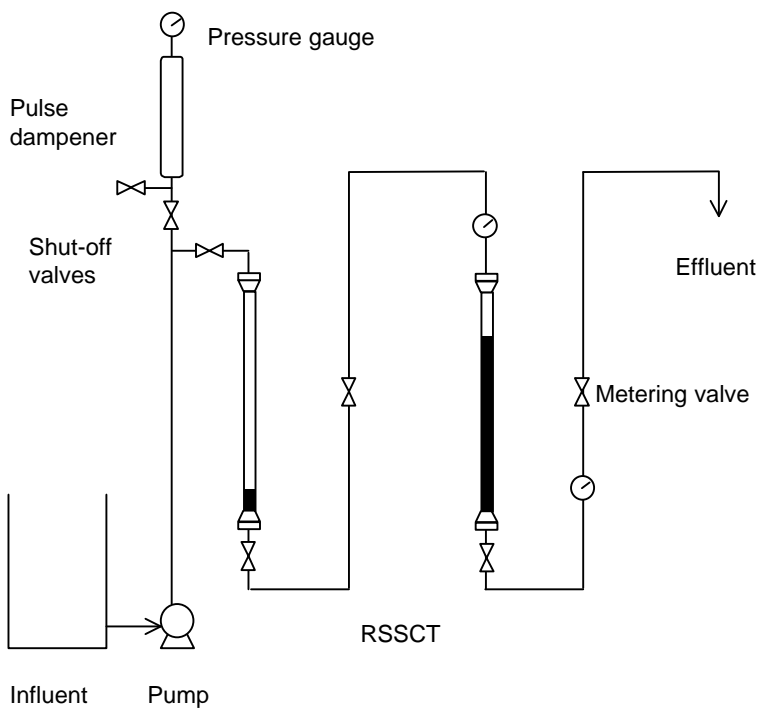


Figure 4 RSSCT system schematic for 15 and 20 minute EBCT full-scale equivalent contactors

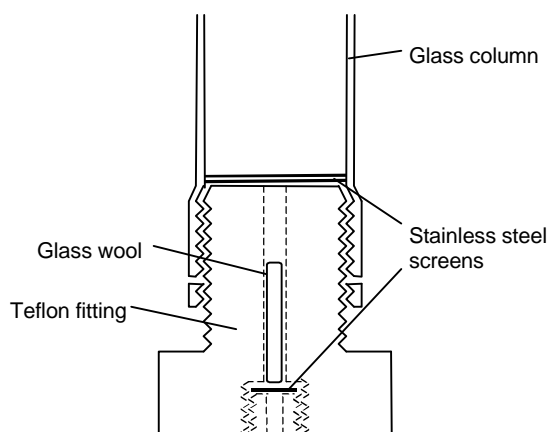


Figure 5 RSSCT column GAC support system for 8.0 mm inner diameter column

7

Results and Discussion Overview

7 Results and Discussion Overview

7.1 Data Analysis

A significant amount of data was collected during the treatment study. The following chapters summarize various methods of analyzing the data. These include a discussion of the impact of contactor EBCT and GAC influent pH on DBP precursor control. Although data for single contactor operation was generated by this treatment study, in practice, multiple GAC contactors in parallel are used, and GAC run times are lengthened significantly by operating the contactors in a staggered mode. GAC run times are estimated based on a model that simulates the operation of multiple GAC contactors in parallel. Breakthrough curve extrapolations were performed: the algorithm used and the results obtained are presented. The extent to which TOC and UV₂₅₄ breakthrough served as indicators for DBP precursor breakthrough is analyzed. During the course of the treatment study, two RSSCTs were operated under the same experimental design (EBCT and GAC influent pH) using water from two sample dates. The results from the duplicate runs are compared. An evaluation of GAC performance based on TOC breakthrough and compared to other waters is presented. Finally, an EPA cost model is used to estimate the costs for GAC treatment based meeting the placeholders for Stage 2 DBP MCLs.

7.2 Problems Encountered

A difficulty encountered during the treatment study was the occurrence of constant or decreasing chlorine demand over the course of the RSSCT run. Normally, it is expected that chlorine demand increases as TOC increases, due to the increase in organic chlorine demand. This assumption normally aids in the determination of the proper chlorine dose for a target residual during SDS testing. However, during the 7.5, 15, and 20 minute EBCT runs, and the influent pH 7.4 run during the pH study runs, chlorine demand decreased over the course of the run. This hampered chlorine demand estimates for SDS chlorination. It was suspected that a decrease in inorganic chlorine demand, greater than the increase in organic demand due to TOC breakthrough, was occurring during the affected runs. This hypothesis was verified during one run by measuring the inorganic chlorine demand of the GAC effluent water over the course of the run. It was shown that by accounting for the decrease in inorganic demand, organic chlorine demand increased during the run. The results of this experiment are summarized in Section 8.1.

7.3 Water Quality Data

The average pretreated influent to GAC water quality for each sample taken is summarized in Table 16. Although average ammonia levels ranged from 0.14 to 0.24 mg/L, influent chlorine demand was relatively constant, averaging 3.1 ± 0.1 mg/L over all sessions. Influent TOC concentration ranged from 1.8 to 2.0 mg/L. Bromide levels were very high, but varied little over the course of the treatment study: the average bromide concentration was 0.47 ± 0.05 mg/L. Due to the high bromide to TOC ratio, it was expected that HAA and THM speciation would be shifted towards the more brominated species. In fact, influent chloroform levels average 3 µg/L,

while influent bromoform levels averaged 36 µg/L. Little variability was observed in other inorganic water quality parameters, including alkalinity, calcium hardness and total hardness. Alkalinity averaged 126 ± 5 mg/L for all runs with an influent pH of 7.4. Calcium and total hardness levels were high, averaging 247 ± 4 and 404 ± 5 mg/L, respectively. The average TOC concentration across all sessions was relatively low and very constant: 1.8 ± 0.1 mg/L (RSD = 5 percent). UV_{254} averaged 0.047 ± 0.001 1/cm (RSD = 1 percent). Furthermore, TSUVA showed almost no variability across all sessions, averaging 2.6 L/mg-m, with an RSD of 1 percent.

Constant chlorination conditions were utilized during all three sessions, and influent SDS-DBP concentrations remained fairly constant: SDS-THM4, SDS-HAA6, and SDS-TOX RSDs were 7, 12, and 2 percent, respectively. The relatively high RSD measured for HAA6 can be attributed to the low levels of HAAs formed: HAA6 concentrations averaged only 11 µg/L. Conversely, SDS-THM4 levels were measured at much higher levels, averaging 82 µg/L. SDS-TOX concentrations averaged 138 µg Cl⁻/L. Chlorine demand average 3.1 ± 0.1 mg/L (RSD = 4 percent).

Water Quality Parameter	10, 20 minute EBCT		5.0, 7.5, 15 minute EBCT		10 minute EBCT, influent pH study					
					Influent pH 7.0		Influent pH 7.4		Influent pH 7.8	
	Average	St. Dev.	Average	St. Dev.	Average	St. Dev.	Average	St. Dev.	Average	St. Dev.
Temperature (°C)	18.3	2.0	19.0	1.9	20.2	1.4	20.4	1.5	20.5	0.1
pH	7.40	0.03	7.43	0.02	7.03	0.06	7.46	0.04	7.82	0.03
Turbidity (ntu)	0.10	0.00	0.11	0.02	0.13	0.04	0.15	0.00	0.10	0.00
Alkalinity (mg/L as CaCO ₃)	130	1.8	128	1.1	100	18	121	5	131	1
Calcium hardness (mg/L as CaCO ₃)	247	21	240	10.6	250	0	250	0	250	0
Total hardness (mg/L as CaCO ₃)	404	15	396	10.6	406	0	408	3	408	3
Ammonia (mg/L)	0.14	0.01	0.24	0.09	0.15	0.02	0.19	0.05	0.15	0.01
Bromide (mg/L)	0.450	0.014	0.395	0.007	0.500	0.014	0.500	0.000	0.495	0.007
TOC (mg/L)	2.0	0.07	1.8	0.05	1.8	0.0	1.8	0.0	1.8	0.0
UV ₂₅₄ (1/cm)	0.047	0.000	0.046	0.000	0.047	0.000	0.047	0.000	0.047	0.000
Specific UV absorbance, TSUVA (L/mg-m)	2.4	--	2.6	--	2.6	--	2.7	--	2.7	--
SDS-THM4 (µg/L)	82	4.3	72	4.1	82	2	87	NA	83	9
SDS-HAA5 (µg/L)	8	0.3	8	2.3	8	3	10	NA	8	3
SDS-HAA6 (µg/L)	11	0.6	11	2.7	10	3	14	NA	10	4
SDS-HAA9 (µg/L)	20	3.4	21	5.1	19	9	27	NA	19	9
SDS-TOX (µg Cl ⁻ /L)	135	7	139	8	138	5	142	NA	138	4
SDS-chlorine demand (mg/L)	3.3	0.1	3.0	0.5	3.2	0.0	3.0	NA	3.2	0.1
NA: not applicable										

Table 16 Summary of GAC influent water quality

8

*Impact of Empty-Bed Contact
Time (EBCT)*

8 Impact of Empty-Bed Contact Time (EBCT)

8.1 Evaluation on Scaled Operation Time Basis

Five EBCTs were evaluated over the course of this study: 5.0, 7.5, 10, 15, and 20 minutes. For purposes of comparison, the 10, 15, and 20 minute EBCT breakthrough data are compared as a set, followed by a comparison of the 5.0, 7.5, and 10 minute EBCT breakthrough data. By doing so, the impact of EBCT is assessed.

Figure 6 shows the impact of EBCT on TOC breakthrough for EBCTs of 10, 15, and 20 minutes. A range of effluent TOC breakthrough behavior was observed, with scaled operation times of 73 to 180 days to an effluent concentration of 1.0 mg/L. Run times to 70 percent TOC breakthrough ranged from 101 to 257 days. At EBCTs above 10 minutes, the effluent breakthrough profiles shifted to the right, indicating longer run times to a given effluent criterion. However, little difference was observed in the breakthrough curves of the 15 and 20 minute EBCT contactors.

The impact of EBCT between 10 and 20 minutes on UV₂₅₄ breakthrough is shown in Figure 7. GAC performance improved with increasing EBCT for all three runs. Similar results were obtained for the SDS-DBPs, shown in Figures 8 through 13. Control of effluent SDS-THM4 and SDS-HAA improved with increasing EBCT, and effluent SDS-HAA levels were very low. SDS-TOX breakthrough followed the trends observed with SDS-THM4 breakthrough. The GAC effluent SDS chlorine demand (CLD), Figure 13, showed a relatively high immediate breakthrough. For the 10 minute EBCT contactor, effluent SDS-CLD increased over time, as would be expected. However, effluent SDS-CLD levels for the 15 and 20 minute EBCT contactors decreased over time. This phenomenon may have been caused by biological removal of inorganic chlorine demand, possibly ammonia, during the runs. The decrease in effluent inorganic chlorine demand was equal to or greater than the increase in organic chlorine demand during the runs. Effluent ammonia samples were not taken; however, inorganic chlorine demand testing was performed on one contactor as described below.

Figure 14 shows the impact of EBCT on TOC breakthrough for EBCTs of 5.0, 7.5, and 10 minutes. Again, a range of effluent TOC breakthrough behavior was observed, with run times of 38 to 73 days to an effluent concentration of 1.0 mg/L. Run times to 70 percent TOC breakthrough ranged from 61 to 101 days. As the EBCT increased, the effluent breakthrough profile shifted to the right, indicating longer run times to a given effluent criterion. The 10 minute EBCT contactor showed a higher immediate breakthrough of TOC, although the difference was less than 0.2 mg/L. Towards the end of the run, after 90 days, the effluent TOC profile of the 7.5 and 10 minute EBCT contactors converged.

Similar results were obtained for UV₂₅₄ and all SDS-DBPs, shown in Figures 15 through 20. Again, breakthrough performance improved with increasing EBCT. Unlike TOC, UV₂₅₄ and SDS-DBPs did not show a convergence in effluent levels towards the end of the run. As was observed with the 15 and 20 minute contactors, the effluent SDS chlorine demand for the 7.5 minute EBCT contactor decreased during the run (Figure 21). However, the SDS-CLD

breakthrough profile for the 5.0 minute EBCT contactor increased during the run. The decrease in overall chlorine demand for the 7.5 minute EBCT run indicates that a decrease in inorganic chlorine demand was greater than the increase in organic chlorine demand due to the breakthrough of TOC and UV₂₅₄. To confirm this hypothesis, an attempt was made to measure the inorganic chlorine demand of the GAC effluent water from the 7.5 minute EBCT contactor. A 5-minute chlorine demand test was used. After five minutes of exposure to chlorine, a chlorine residual was measured. The chlorine demand after only 5 minutes reaction can be assumed to be mostly due to fast reactions with inorganic components. The results of this testing are presented in Figure 21. The data show that inorganic demand decreased over time, and that the difference between total demand and inorganic demand, or the organic chlorine demand, increased over time, as would be expected by the breakthrough of TOC and UV₂₅₄. It was not determined why the decrease in inorganic chlorine demand did not occur during all runs.

The effluent pH and temperature for all EBCT contactors was also monitored. The results are summarized in Tables 17 and 18. The variability of both effluent pH and temperature was very low during all runs.

Tables 19 through 23 summarize run times to various GAC effluent criteria for the all EBCT contactors evaluated. The SDS-DBP run time criteria chosen are based on Stage 1 (80 µg/L THM4 and 60 µg/L HAA5) and the placeholder for Stage 2 MCLs (40 µg/L THM4 and 30 µg/L HAA5), with a 20 percent safety factor. Based on the calculated run times for all EBCTs, the corresponding concentration of other measured parameters (DBP precursor surrogates and SDS-DBPs) at that run time were also calculated. For example, Table 19 shows that when the placeholder for Stage 2 MCL for THM4 with a 20 percent safety factor (32 µg/L) was exceeded, the TOC concentration was 1.0 mg/L, the SDS-HAA5 concentration was 4 µg/L, and the SDS-TOX concentration was 52 µg Cl⁻/L. The 32 µg/L THM4 criterion was exceeded after 39, 56, 86, 189, and 238 days for the 5.0, 7.5, 10, 15, and 20 minute EBCT contactors, respectively.

Bar graph plots of run times to TOC, UV₂₅₄, SDS-THM4, and SDS-HAA5 criteria were generated. For the 10, 15, and 20 minute EBCT contactors, Figures 22 and 23 summarize run times to effluent TOC and UV₂₅₄ criteria, and Figures 24 and 25 summarize run times to effluent SDS-THM4 and SDS-HAA5 criteria. For cases where the effluent concentration did not reach the run time criterion, no bar is shown. Bar graph GAC run time summaries are shown in Figures 26 through 29 for the 5.0, 7.5, and 10 minute EBCT contactors. For all EBCT contactors, neither Stage 1 or 2 HAA5 criteria were ever exceeded, as could be expected by the very low influent SDS-HAA5. As stated above, the Stage 2 THM4 criterion, 32 µg/L, was exceeded during operation of all EBCT contactors. The Stage 1 THM4 criterion, 64 µg/L, was not exceeded during any of the runs, although influent levels exceeded this criterion. The TOC, UV₂₅₄, and TOX breakthrough criteria were chosen to represent a range of concentrations. A relative performance criterion, 50 percent breakthrough, c/c_0 , was also chosen for TOC and UV₂₅₄.

8.2 Evaluation on Throughput Basis

To better evaluate the impact of EBCT on DBP precursor removal by GAC, the breakthrough curves for each EBCT are plotted on a throughput basis, with units of bed volumes (BV). This

transformation normalizes for the difference in EBCTs to be compared. The following equation is used to convert from scaled operation time to throughput in bed volumes:

$$\text{Throughput (bed volumes)} = \frac{\text{Scaled operation time}}{\text{EBCT}} \quad (1)$$

For the 10, 15, and 20 minute EBCT runs, Figures 30 through 37 compare contactor performance for the breakthrough of TOC, UV₂₅₄, SDS-THM4, SDS-HAA5, SDS-HAA6, SDS-HAA9, SDS-TOX, and SDS-CLD. The TOC breakthrough curves, Figure 30, show very little difference in throughput performance throughout most of the entire run time between the 10 and 20 minute EBCT contactors. The 15 minute EBCT contactor outperformed both the 10 and 20 minute EBCT contactors, especially at higher throughput, above 10,000 bed volumes. This difference may be due in part to the 10 percent lower average influent TOC concentration measured during the 15 minute EBCT run over that measured during the 10 and 20 minute EBCT run. A comparison of UV₂₅₄ breakthrough for the three EBCT contactors is shown in Figure 31. Very similar performance was observed between the 15 and 20 minute EBCT contactors, both outperforming the 10 minute EBCT contactor. Therefore, the removal of UV-absorbing compounds improved at EBCTs above 10 minutes, but little gain was achieved above 15 minutes of EBCT.

SDS-THM4 breakthrough behavior on a throughput basis for the three contactors, as shown in Figure 32, paralleled that observed for UV₂₅₄. The 15 and 20 minute EBCT contactors performed similarly, and both improved the control of THM4 precursors over the 10 minute EBCT contactor. Little difference was observed between the 15 and 20 minute EBCT contactors. Effluent SDS-HAA levels were relatively low for all three EBCTs, and again the 15 and 20 minute EBCT contactors outperformed the 10 minute EBCT contactor (Figures 33 through 35). The impact of EBCT on throughput breakthrough of SDS-TOX is shown in Figure 36. At higher throughput, above 13,000 bed volumes, TOX precursor removal improved with increasing EBCT. Normalized SDS-CLD breakthrough data is shown in Figure 37. Changes in inorganic chlorine demand hampered an interpretation of the SDS-CLD results.

For GAC contactor runs with EBCTs of 5.0, 7.5, and 10 minutes, Figure 38 compares TOC breakthrough of each contactor on a throughput basis. The data show very little difference in performance between EBCTs of 5.0 and 10 minutes. The throughput comparison of UV₂₅₄ breakthrough, Figure 39, shows a slight improvement in adsorption of UV-absorbing compounds with increasing EBCT between 5.0 and 10 minutes.

The throughput breakthrough of SDS-THM4, SDS-HAA5, SDS-HAA6, SDS-HAA9, and SDS-TOX for EBCTs of 5.0, 7.5, and 10 minutes are shown in Figures 40 through 44. For SDS-THM4, the 10 minute EBCT contactor slightly outperformed both the 5.0 and 7.5 minute EBCT contactors. There was no significant gain in GAC performance between EBCTs of 5.0 and 7.5 minutes based on the throughput breakthrough of SDS-THM4. SDS-HAA results (Figures 41 through 43) in general show that HAA precursor removal improved with increasing EBCT, on a throughput basis, although effluent levels are all fairly low. A small improvement in performance for SDS-TOX control on a throughput basis was evident between EBCTs of 5.0 and 10 minutes (Figure 44). Figure 45 shows that the effluent SDS-CLD during the 5.0 and 10 minute EBCT runs matched closely, while the 7.5 minute EBCT SDS-CLD decreased with

increasing throughput. Again, interpretation of the GAC effluent SDS-CLD results are made difficult by changes in inorganic chlorine demand.

A summary comparison of throughput to various TOC, UV_{254} , SDS-THM4, and SDS-HAA5 effluent criteria for EBCTs between 10 and 20 minutes is shown in Figures 46 through 49. No bars are plotted for runs that did not exceed run time criteria. A summary of throughput to the same effluent criteria for EBCTs between 5.0 and 10 minutes is shown in Figures 50 through 53.

8.3 DBP Species Breakthrough Evaluation

It is important to track the breakthrough behavior of specific DBP species, since some may be of potential health concern and in the future a MCL could be set for a specific DBP species. GAC does not remove bromide and this can result in relatively high bromide to TOC ratios in the GAC effluent. Because of the high bromide to TOC ratios, GAC effluent SDS-DBPs may undergo shifts in speciation to more brominated DBP species, especially during the early part of the breakthrough. In some cases, DBP species formed in chlorinating the GAC effluent are higher than that formed in chlorinated in the GAC influent.

For EBCTs between 10 and 20 minutes, Figures 54, 55, 56, and 57 show the breakthrough behavior of formed chloroform ($CHCl_3$), bromodichloromethane (BDCM), dibromochloromethane (DBCM), and bromoform ($CHBr_3$), respectively. Due to the extremely high bromide to TOC ratio SDS- $CHCl_3$ was not detected above the MRL in the chlorinated GAC effluent for all EBCTs. Due to the high bromide levels, GAC effluent formed THMs were dominated by the formation of $CHBr_3$. However, none of the brominated species reached levels higher than influent levels because of the high levels of brominated species formed in the chlorinated influent water. In proportion to formed influent levels, GAC was better able to control the formation of SDS-BDCM over SDS-DBCM and SDS- $CHBr_3$. The removal of precursors to each DBP species improved with increasing EBCT. The MRL for each analyte is indicated on each plot as a dashed line.

All nine HAA species were analyzed during the study. The effluent formed breakthrough curves for the nine HAA species for EBCTs between 10 and 20 minutes are shown in Figures 58 through 66. The HAA species measured are monochloroacetic acid (MCAA), dichloroacetic acid (DCAA), trichloroacetic acid (TCAA), monobromoacetic acid (MBAA), dibromoacetic acid (DBAA), bromochloroacetic acid (BCAA), dichlorobromoacetic acid (DCBAA), chlorodibromoacetic acid (CDBAA), and tribromoacetic acid (TBAA). HAA levels in the chlorinated influent water were very low; SDS-DBAA was the only species to form significant levels in the GAC effluent, and GAC performance for the control of SDS-DBAA improved with increasing EBCT.

For EBCTs between 5.0 and 10 minutes, Figures 67, 68, 69, and 70 show the breakthrough behavior of formed $CHCl_3$, BDCM, DBCM, and $CHBr_3$, respectively. Again, GAC effluent THM speciation was dominated by the formation of SDS- $CHBr_3$. Relative to formed GAC influent levels, effluent SDS-BDCM was better controlled than SDS-DBCM and SDS- $CHBr_3$. As the EBCT increased between 5.0 and 10 minutes, control of THM species breakthrough improved.

The breakthrough of the nine HAA species for EBCTs between 5.0 and 10 minutes is shown in Figures 71 through 79. Again, SDS-DBAA was the only HAA species present at significant levels for all three EBCTs, and the control of SDS-DBAA breakthrough improved with increasing EBCT.

Effluent sample number	Effluent pH at EBCT (min)			Effluent temperature (°C) at EBCT (min)		
	10	15	20	10	15	20
1	8.1	8.1	8.1	24	25	23
2	7.9	8.2	7.9	23	22	20
3	8.0	8.1	8.1	22	22	22
4	7.8	8.0	7.9	24	24	22
5	7.9	8.0	8.0	23	24	22
6	8.0	8.1	7.8	22	25	22
7	7.9	8.2	7.7	21	27	22
8	7.9	8.1	7.3	22	23	22
9	8.0	8.0	7.4	21	23	22
10	7.9	8.1	8.1	24	24	22
11	8.0	8.1	8.2	23	23	23
12	7.9	8.2	8.2	22	23	21
13	7.9	8.0	8.1	22	23	22
Mean	7.9	8.1	7.9	22	24	22
Standard deviation	±0.1	±0.1	±0.3	±1.0	±1.5	±0.8
Percent standard deviation	1	1	4	5	6	4

Table 17 GAC effluent pH and temperature data for 10, 15, and 20 minute EBCT contactors

Effluent sample number	Effluent pH at EBCT (min)			Effluent temperature (°C) at EBCT (min)		
	5.0	7.5	10	5.0	7.5	10
1	8.1	8.1	8.1	25	24	24
2	8.0	8.1	7.9	25	23	23
3	8.1	8.1	8.0	23	24	22
4	8.0	8.2	7.8	24	23	24
5	8.1	8.2	7.9	24	23	23
6	8.1	8.2	8.0	25	24	22
7	8.2	8.1	7.9	24	24	21
8	8.1	8.1	7.9	23	23	22
9	8.2	8.1	8.0	23	24	21
10	8.1	8.2	7.9	22	23	24
11	8.1	8.1	8.0	24	23	23
12	8.1	7.9	7.9	24	23	22
13	8.1	8.1	7.9	24	23	22
Mean	8.1	8.1	7.9	24	23	22
Standard deviation	±0.0	±0.1	±0.1	±0.9	±0.4	±1.0
Percent standard deviation	1	1	1	4	2	5

Table 18 GAC effluent pH and temperature data for 5.0, 7.5, and 10 minute EBCT contactors

Parameter	Units	Influent concentration	Breakthrough criterion	Value of listed parameter when breakthrough criterion is met (single contactor)								
				Run time (days)	Throughput (bed volumes)	TOC (mg/L)	UV ₂₅₄ (1/cm)	SDS-THM4 (µg/L)	SDS-HAA5 (µg/L)	SDS-HAA6 (µg/L)	SDS-HAA9 (µg/L)	SDS-TOX (µg Cl ⁻ /L)
TOC	(mg/L)	1.8	2.0	*	*							
			1.0	38	11,020	1.0	0.018	31	4	5	5	51
			0.9†	35	10,010	0.9	0.016	26	3	4	4	43
UV ₂₅₄	(1/cm)	0.046	0.040	*	*							
			0.020	41	11,920	1.1	0.020	35	4	5	6	57
			0.023†	50	14,400	1.2	0.023	47	4	6	7	68
SDS-THM4	(µg/L)	72	80	*	*							
			64	*	*							
			32	39	11,240	1.0	0.019	32	4	5	6	52
SDS-HAA5	(µg/L)	8	48	*	*							
			24	*	*							
SDS-HAA6	(µg/L)	11	48	*	*							
			24	*	*							
SDS-HAA9	(µg/L)	21	48	*	*							
			24	*	*							
SDS-TOX	(µg Cl ⁻ /L)	139	120	*	*							
			70	52	15,110	1.2	0.024	49	4	6	7	70

†GAC effluent concentration equal to 50 percent of the average influent concentration.

*Effluent concentration criteria not exceeded during GAC run time, value of listed parameter is left blank.

#Data not available for listed parameter at given breakthrough criterion.

Table 19 Run times to selected GAC effluent criteria (5 minute EBCT)

Parameter	Units	Influent concentration	Breakthrough criterion	Value of listed parameter when breakthrough criterion is met (single contactor)								
				Run time (days)	Throughput (bed volumes)	TOC (mg/L)	UV ₂₅₄ (1/cm)	SDS-THM4 (µg/L)	SDS-HAA5 (µg/L)	SDS-HAA6 (µg/L)	SDS-HAA9 (µg/L)	SDS-TOX (µg Cl ⁻ /L)
TOC	(mg/L)	1.8	2.0	*	*							
			1.0	57	11,040	1.0	0.016	33	4	4	4	47
			0.9†	50	9,570	0.9	0.013	27	4	4	4	37
UV ₂₅₄	(1/cm)	0.046	0.040	*	*							
			0.020	72	13,910	1.2	0.020	42	4	5	5	61
			0.023†	84	16,120	1.3	0.023	46	4	5	6	71
SDS-THM4	(µg/L)	72	80	*	*							
			64	*	*							
			32	56	10,840	1.0	0.016	32	4	4	4	46
SDS-HAA5	(µg/L)	8	48	*	*							
			24	*	*							
SDS-HAA6	(µg/L)	11	48	*	*							
			24	*	*							
SDS-HAA9	(µg/L)	21	48	*	*							
			24	*	*							
SDS-TOX	(µg Cl ⁻ /L)	139	120	*	*							
			70	83	15,870	1.3	0.023	46	4	5	6	70

†GAC effluent concentration equal to 50 percent of the average influent concentration.

*Effluent concentration criteria not exceeded during GAC run time, value of listed parameter is left blank.

#Data not available for listed parameter at given breakthrough criterion.

Table 20 Run times to selected GAC effluent criteria (7.5 minute EBCT)

Parameter	Units	Influent concentration	Breakthrough criterion	Value of listed parameter when breakthrough criterion is met (single contactor)								
				Run time (days)	Throughput (bed volumes)	TOC (mg/L)	UV ₂₅₄ (1/cm)	SDS-THM4 (µg/L)	SDS-HAA5 (µg/L)	SDS-HAA6 (µg/L)	SDS-HAA9 (µg/L)	SDS-TOX (µg Cl ⁻ /L)
TOC	(mg/L)	2.0	2.0	*	*							
			1.0	73	10,450	1.0	0.011	23	2	2	2	32
			1.0†	72	10,410	1.0	0.011	23	2	2	2	32
UV ₂₅₄	(1/cm)	0.047	0.040	*	*							
			0.020	103	14,810	1.4	0.020	39	4	5	5	64
			0.023†	*	*							
SDS-THM4	(µg/L)	82	80	*	*							
			64	*	*							
			32	86	12,400	1.2	0.016	32	3	3	3	47
SDS-HAA5	(µg/L)	8	48	*	*							
			24	*	*							
SDS-HAA6	(µg/L)	11	48	*	*							
			24	*	*							
SDS-HAA9	(µg/L)	20	48	*	*							
			24	*	*							
SDS-TOX	(µg Cl ⁻ /L)	135	120	*	*							
			70	*	*							

†GAC effluent concentration equal to 50 percent of the average influent concentration.

*Effluent concentration criteria not exceeded during GAC run time, value of listed parameter is left blank.

#Data not available for listed parameter at given breakthrough criterion.

Table 21 Run times to selected GAC effluent criteria (10 minute EBCT)

Parameter	Units	Influent concentration	Breakthrough criterion	Value of listed parameter when breakthrough criterion is met (single contactor)								
				Run time (days)	Throughput (bed volumes)	TOC (mg/L)	UV ₂₅₄ (1/cm)	SDS-THM4 (µg/L)	SDS-HAA5 (µg/L)	SDS-HAA6 (µg/L)	SDS-HAA9 (µg/L)	SDS-TOX (µg Cl ⁻ /L)
TOC	(mg/L)	1.8	2.0	*	*							
			1.0	180	17,250	1.0	0.015	29	3	3	3	42
			0.9†	152	14,600	0.9	0.012	22	2	2	2	32
UV ₂₅₄	(1/cm)	0.046	0.040	*	*							
			0.020	217	20,810	1.2	0.020	41	4	6	6	63
			0.023†	252	24,220	1.3	0.023	#	#	#	#	#
SDS-THM4	(µg/L)	72	80	*	*							
			64	*	*							
			32	189	18,120	1.1	0.016	32	4	4	4	47
SDS-HAA5	(µg/L)	8	48	*	*							
			24	*	*							
SDS-HAA6	(µg/L)	11	48	*	*							
			24	*	*							
SDS-HAA9	(µg/L)	21	48	*	*							
			24	*	*							
SDS-TOX	(µg Cl ⁻ /L)	139	120	*	*							
			70	243	23,320	1.3	0.022	46	5	6	9	70

†GAC effluent concentration equal to 50 percent of the average influent concentration.

*Effluent concentration criteria not exceeded during GAC run time, value of listed parameter is left blank.

#Data not available for listed parameter at given breakthrough criterion.

Table 22 Run times to selected GAC effluent criteria (15 minute EBCT)

Parameter	Units	Influent concentration	Breakthrough criterion	Value of listed parameter when breakthrough criterion is met (single contactor)								
				Run time (days)	Throughput (bed volumes)	TOC (mg/L)	UV ₂₅₄ (1/cm)	SDS-THM4 (µg/L)	SDS-HAA5 (µg/L)	SDS-HAA6 (µg/L)	SDS-HAA9 (µg/L)	SDS-TOX (µg Cl ⁻ /L)
TOC	(mg/L)	2.0	2.0	*	*							
			1.0	152	10,920	1.0	0.009	15	1	1	1	20
			1.0†	150	10,780	1.0	0.009	14	1	1	1	19
UV ₂₅₄	(1/cm)	0.047	0.040	*	*							
			0.020	269	19,360	1.4	0.020	#	#	#	#	#
			0.023†	*	*							
SDS-THM4	(µg/L)	82	80	*	*							
			64	*	*							
			32	238	17,160	1.3	0.016	32	3	4	4	56
SDS-HAA5	(µg/L)	8	48	*	*							
			24	*	*							
SDS-HAA6	(µg/L)	11	48	*	*							
			24	*	*							
SDS-HAA9	(µg/L)	20	48	*	*							
			24	*	*							
SDS-TOX	(µg Cl ⁻ /L)	135	120	*	*							
			70	*	*							

†GAC effluent concentration equal to 50 percent of the average influent concentration.

*Effluent concentration criteria not exceeded during GAC run time, value of listed parameter is left blank.

#Data not available for listed parameter at given breakthrough criterion.

Table 23 Run times to selected GAC effluent criteria (20 minute EBCT)

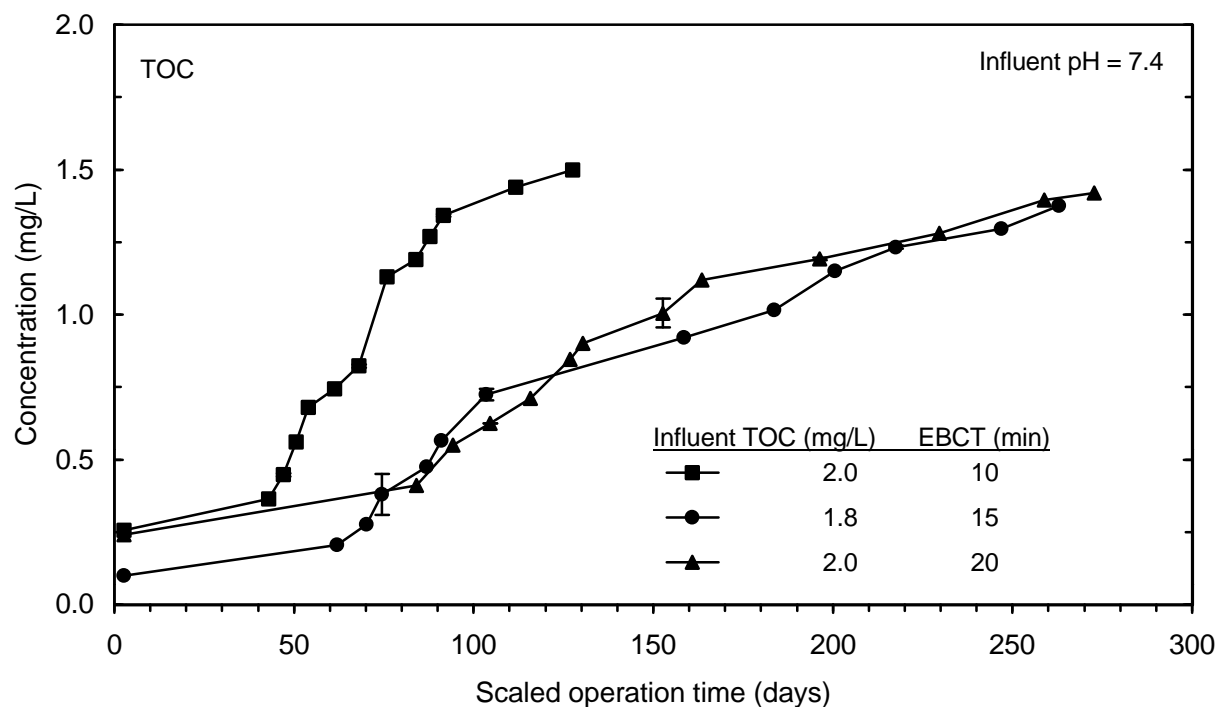


Figure 6 Impact of EBCT on TOC breakthrough (10 to 20 minutes)

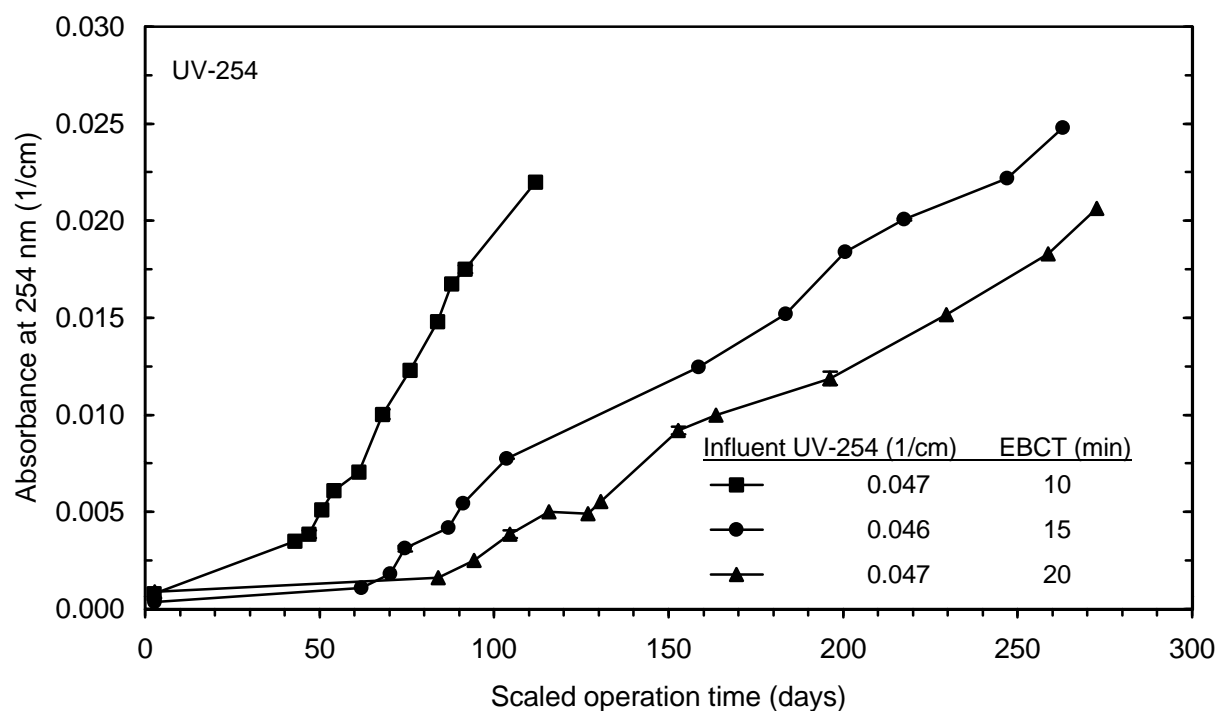


Figure 7 Impact of EBCT on UV-254 breakthrough (10 to 20 minutes)

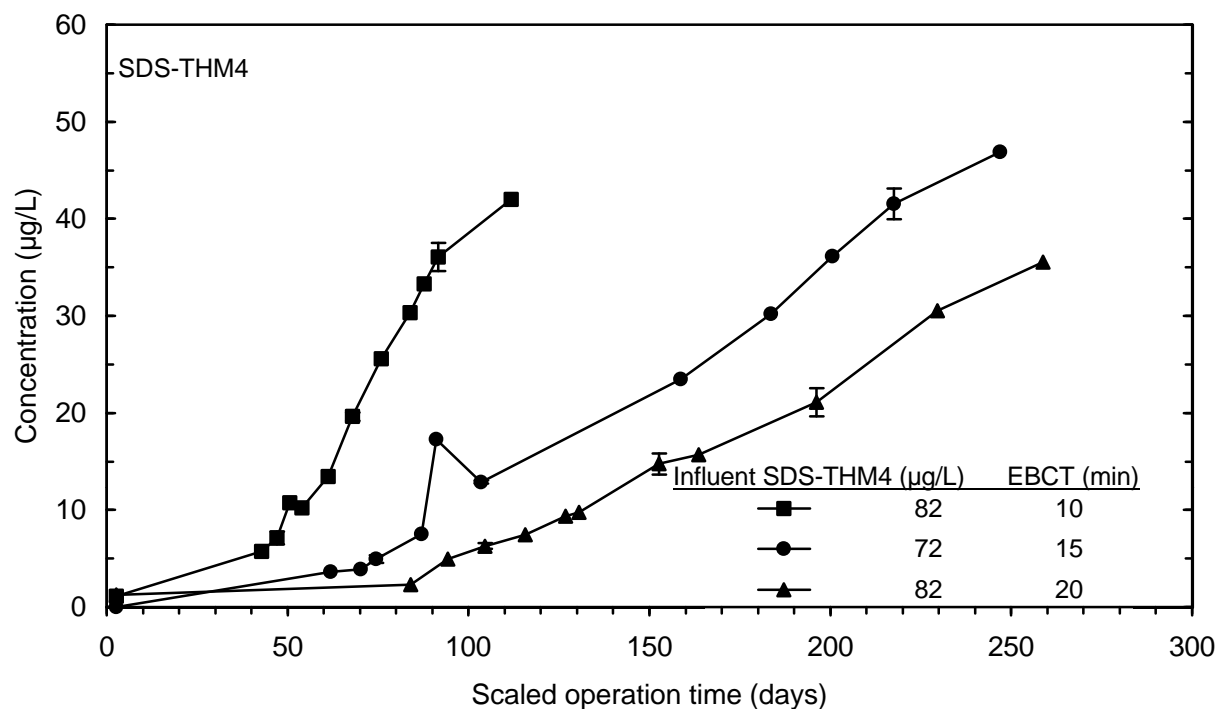


Figure 8 Impact of EBCT on SDS-THM4 breakthrough (10 to 20 minutes)

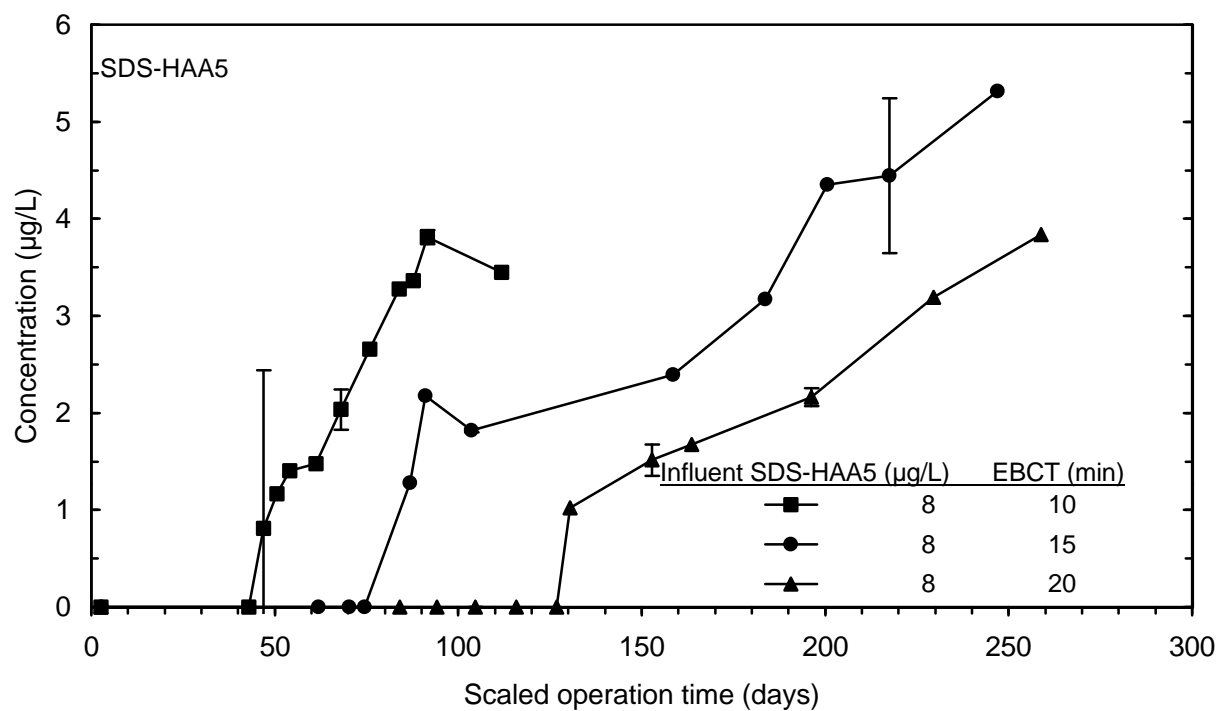


Figure 9 Impact of EBCT on SDS-HAA5 breakthrough (10 to 20 minutes)

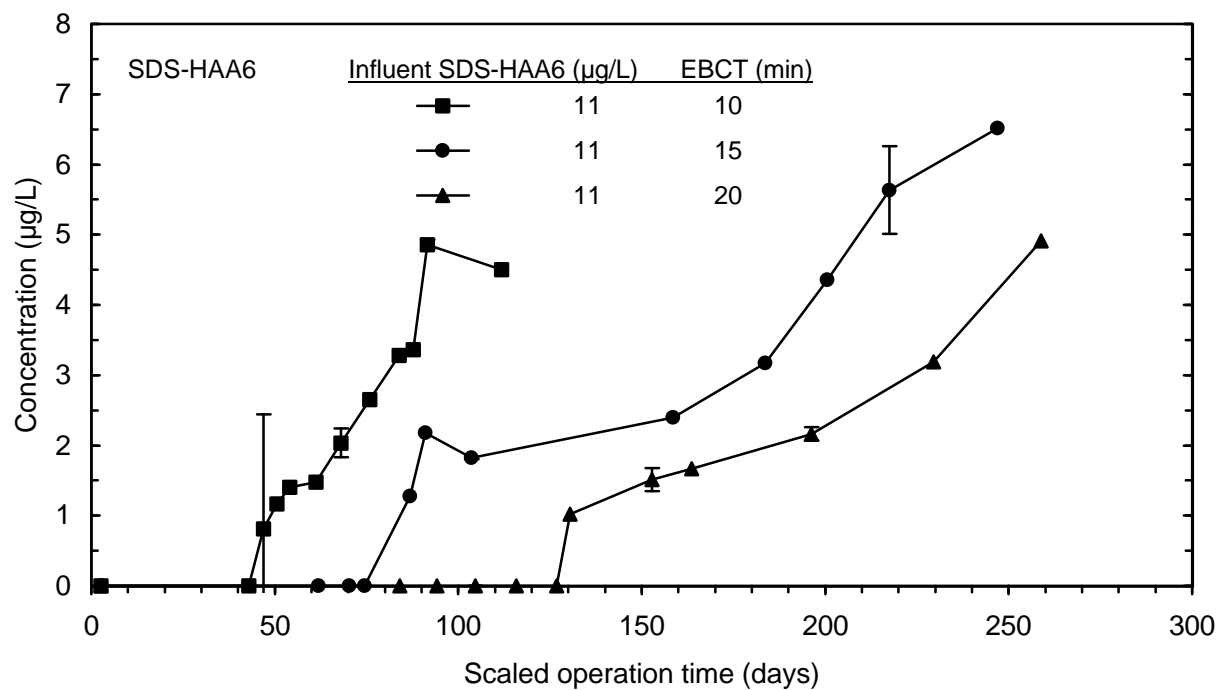


Figure 10 Impact of EBCT on SDS-HAA6 breakthrough (10 to 20 minutes)

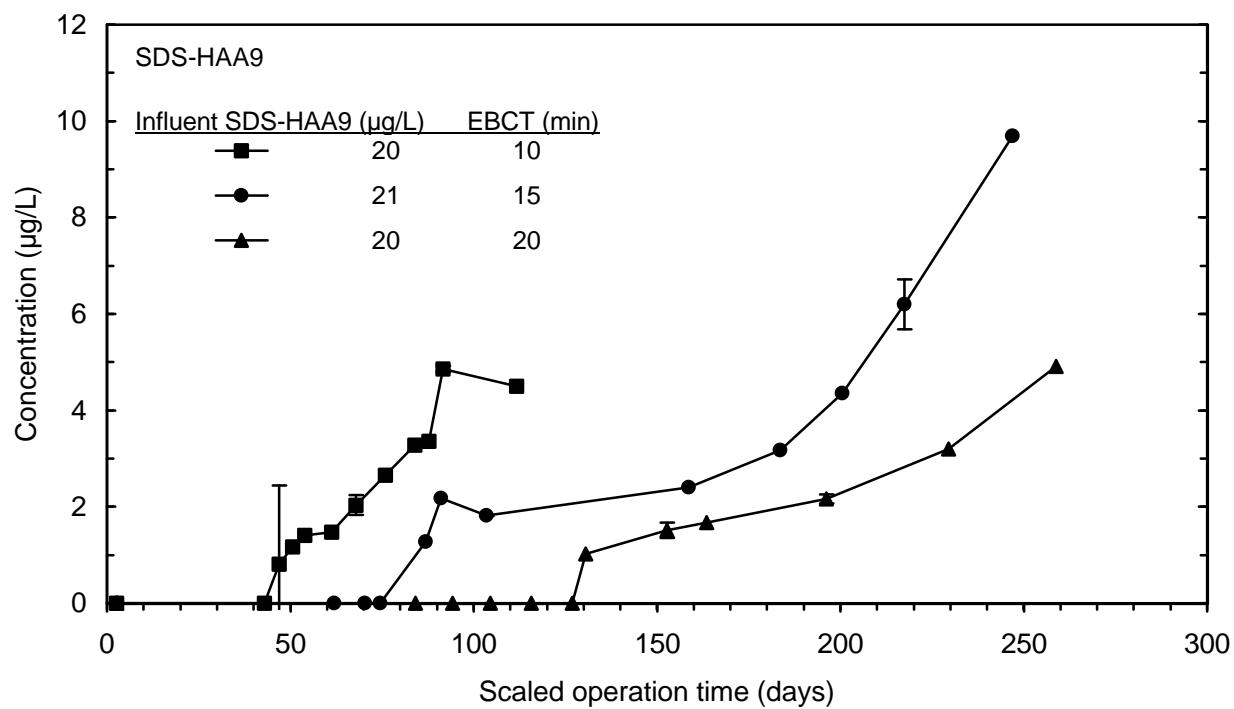


Figure 11 Impact of EBCT on SDS-HAA9 breakthrough (10 to 20 minutes)

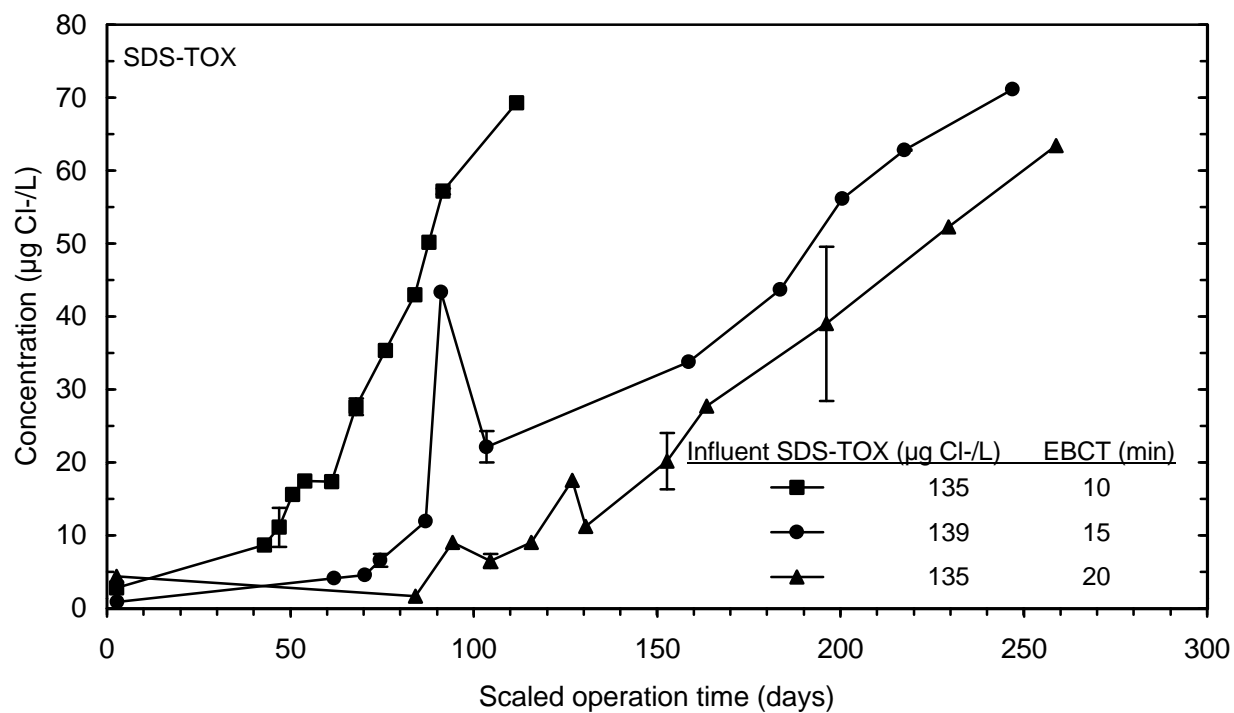


Figure 12 Impact of EBCT on SDS-TOX breakthrough (10 to 20 minutes)

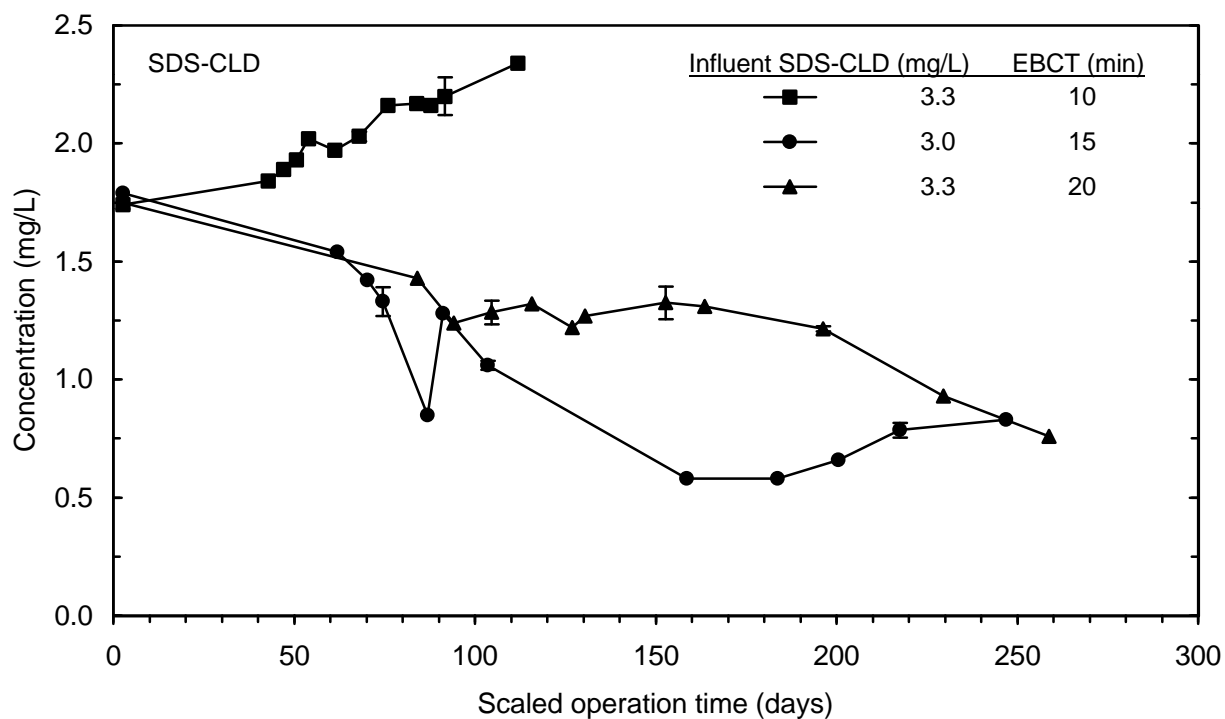


Figure 13 Impact of EBCT on SDS-CLD breakthrough (10 to 20 minutes)

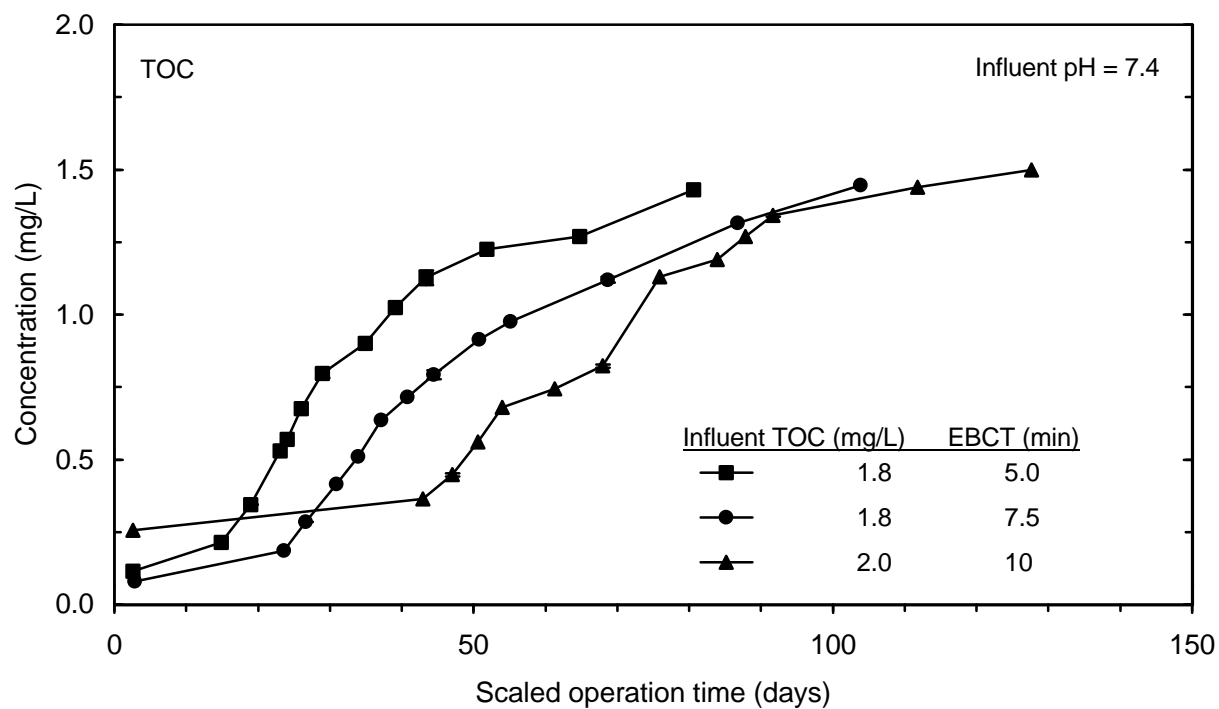


Figure 14 Impact of EBCT on TOC breakthrough (5.0 to 10 minutes)

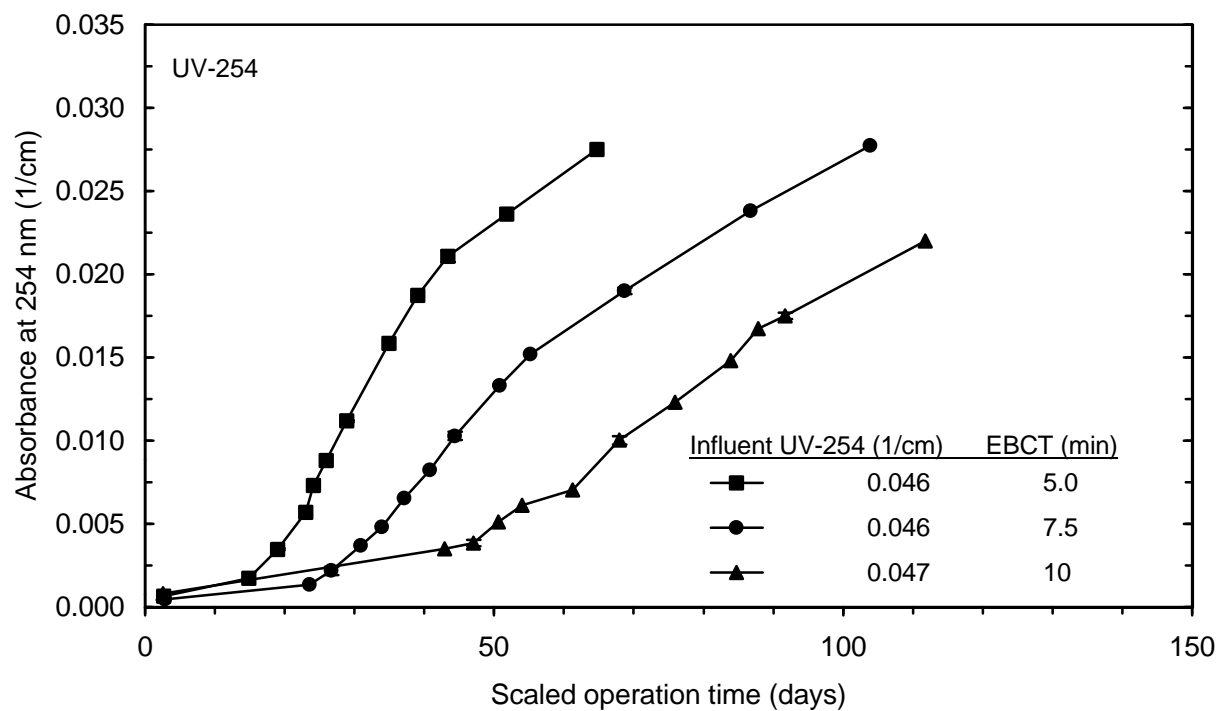


Figure 15 Impact of EBCT on UV-254 breakthrough (5.0 to 10 minutes)

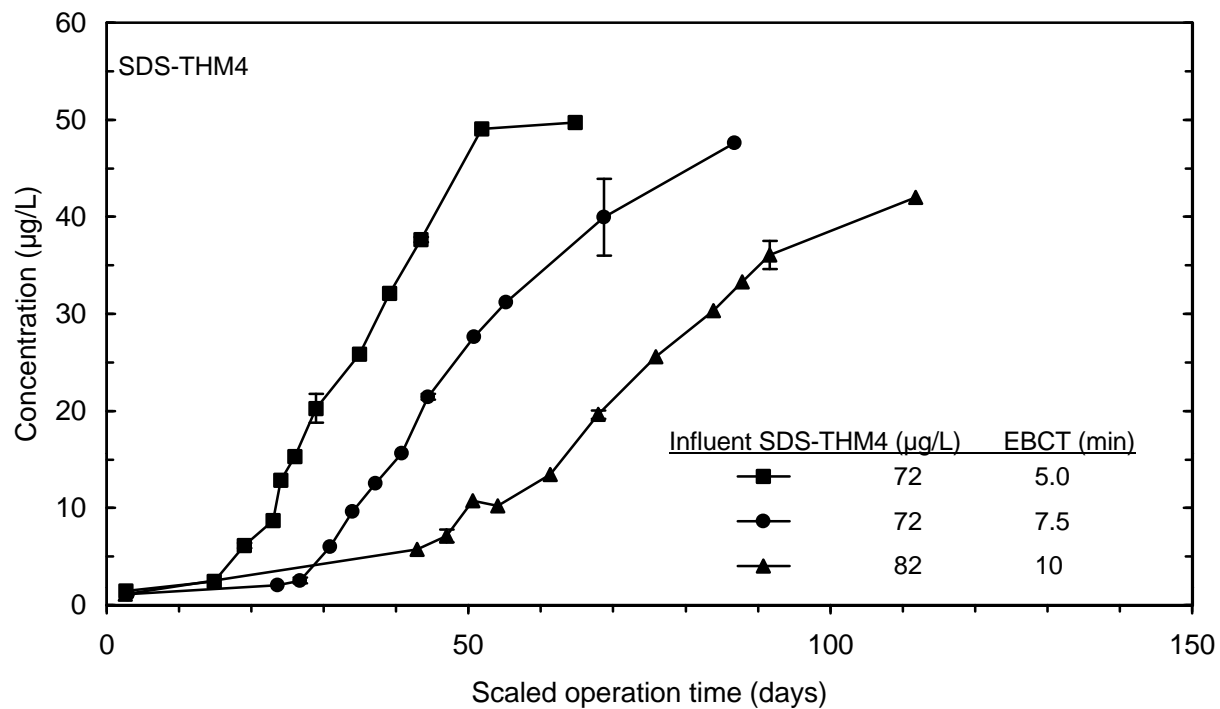


Figure 16 Impact of EBCT on SDS-THM4 breakthrough (5.0 to 10 minutes)

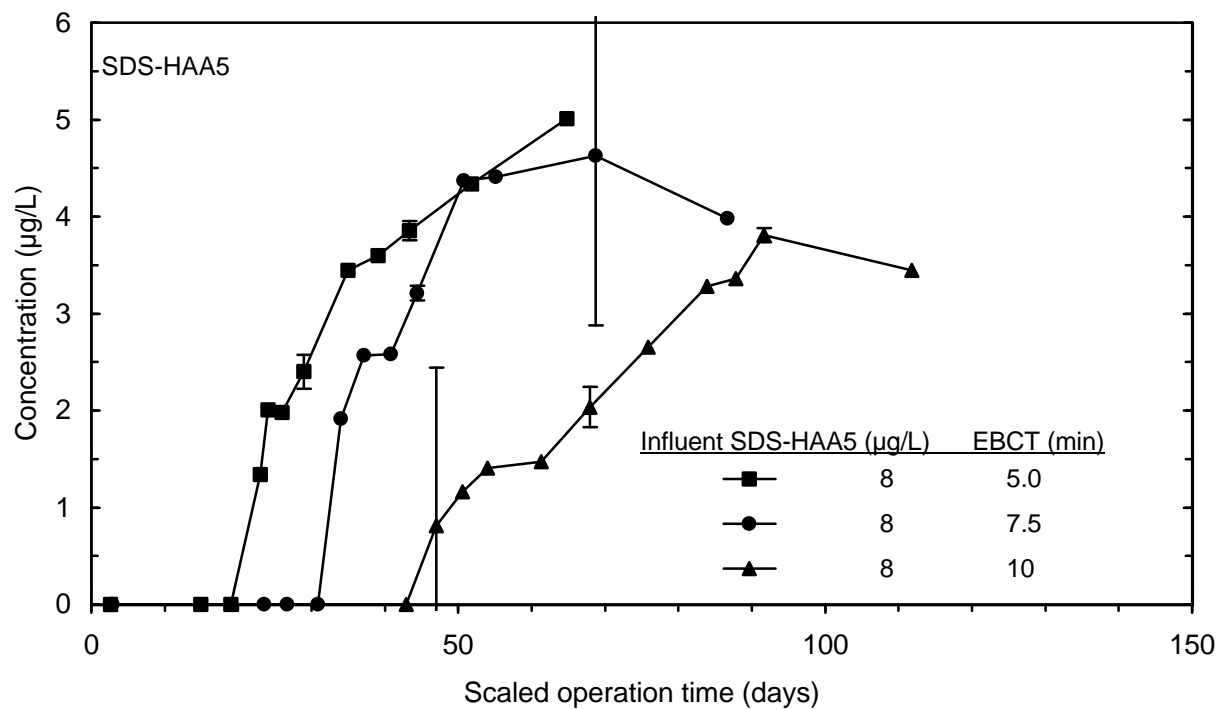


Figure 17 Impact of EBCT on SDS-HAA5 breakthrough (5.0 to 10 minutes)

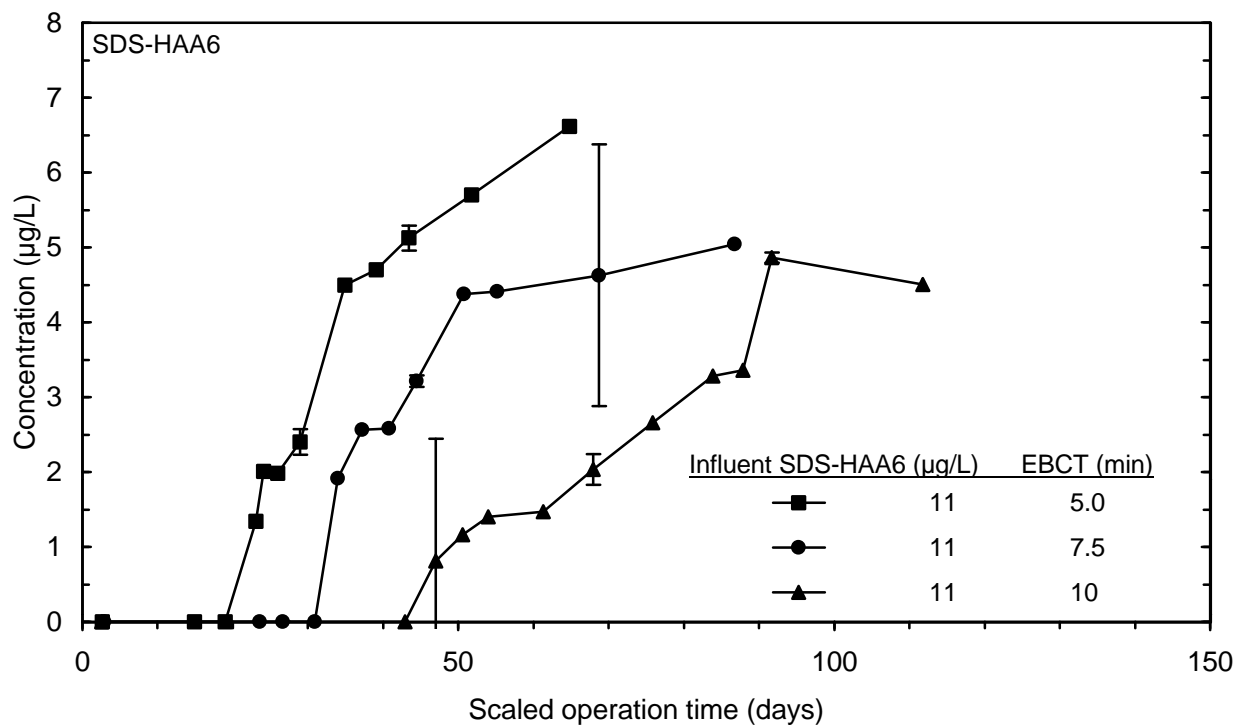


Figure 18 Impact of EBCT on SDS-HAA6 breakthrough (5.0 to 10 minutes)

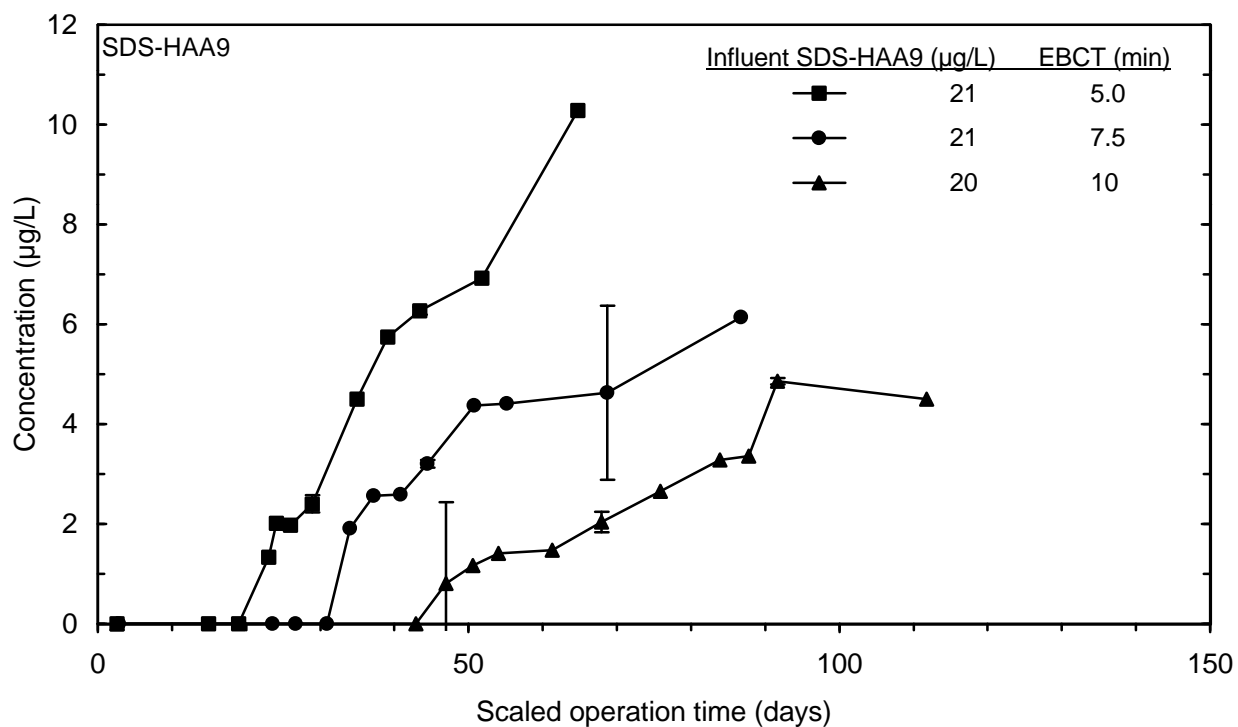


Figure 19 Impact of EBCT on SDS-HAA9 breakthrough (5.0 to 10 minutes)

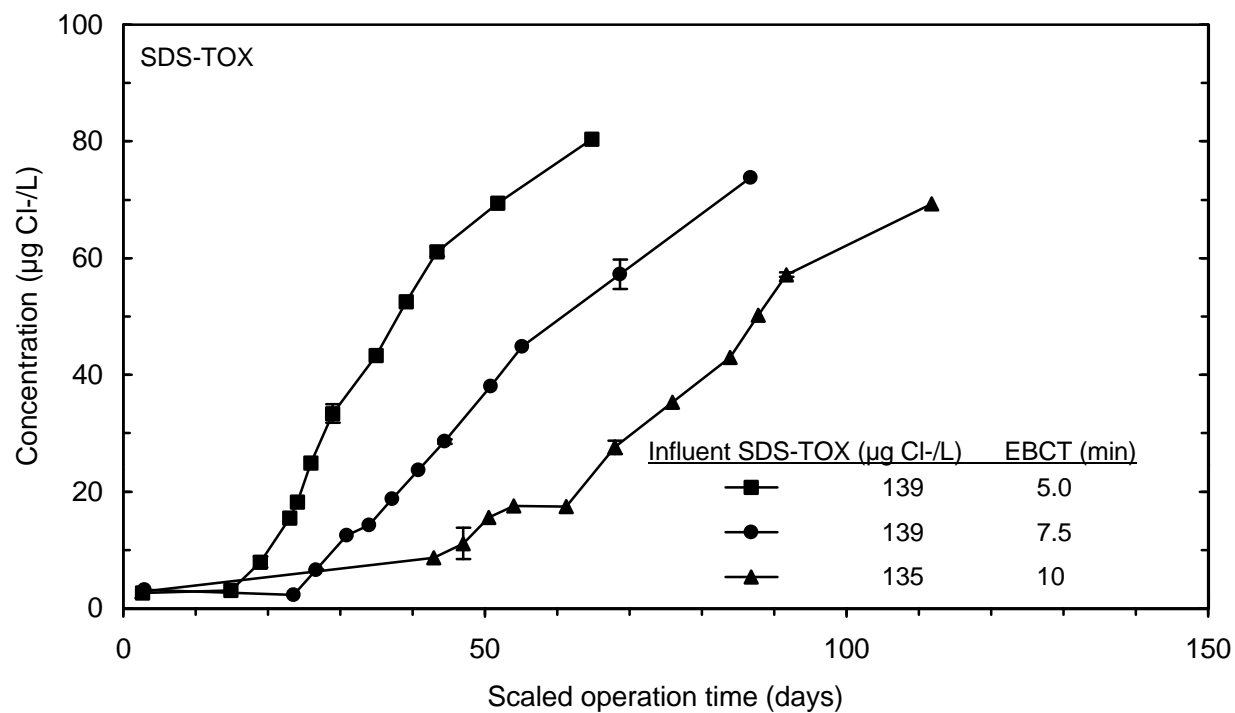


Figure 20 Impact of EBCT on SDS-TOX breakthrough (5.0 to 10 minutes)

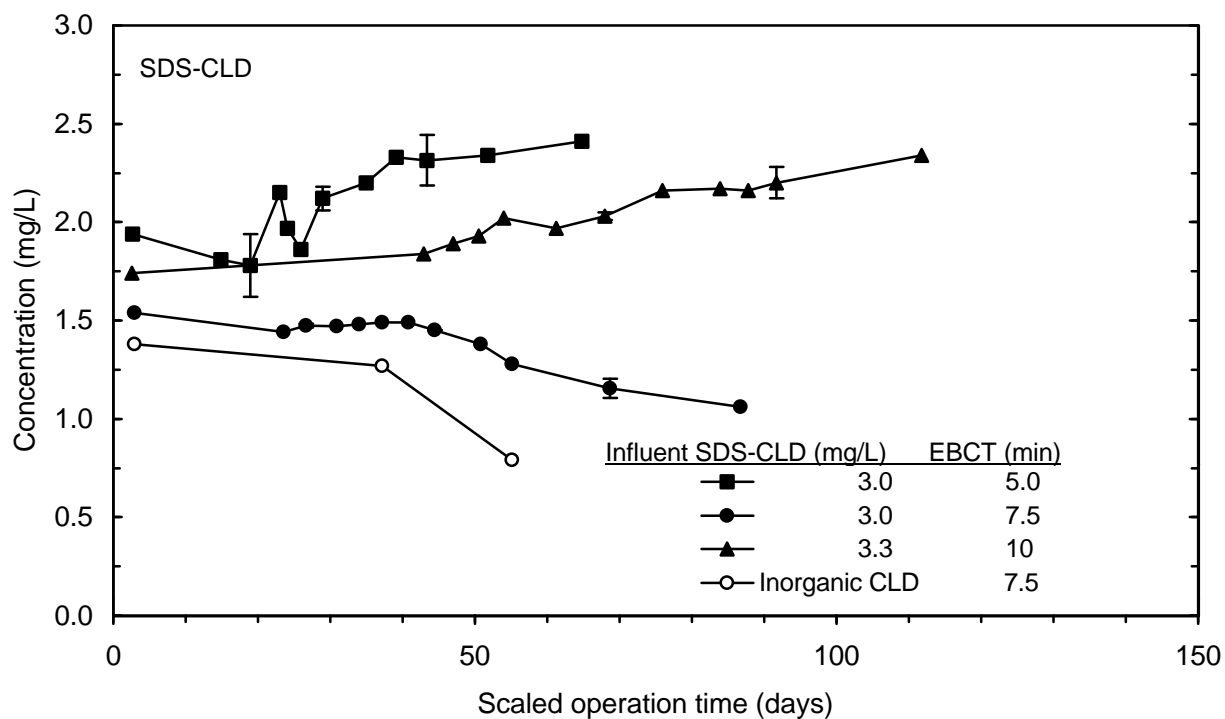


Figure 21 Impact of EBCT on SDS-CLD breakthrough (5.0 to 10 minutes)

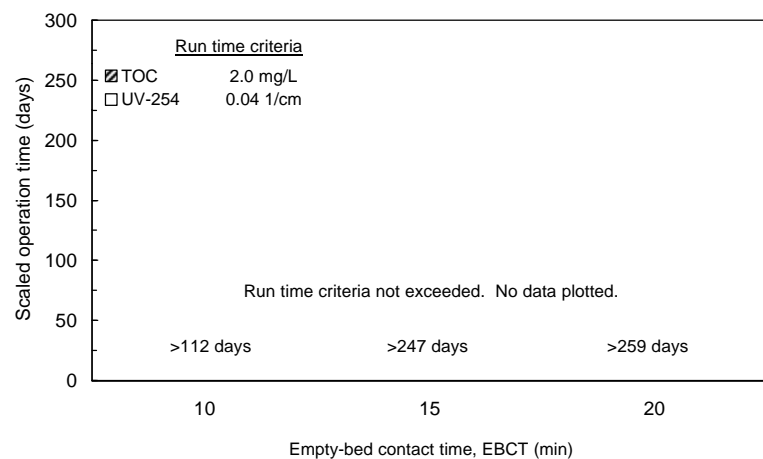


Figure 22 Impact of EBCT (10 to 20 minutes) on run times based on single contactor breakthrough curves for TOC and UV-254 effluent criteria (high)

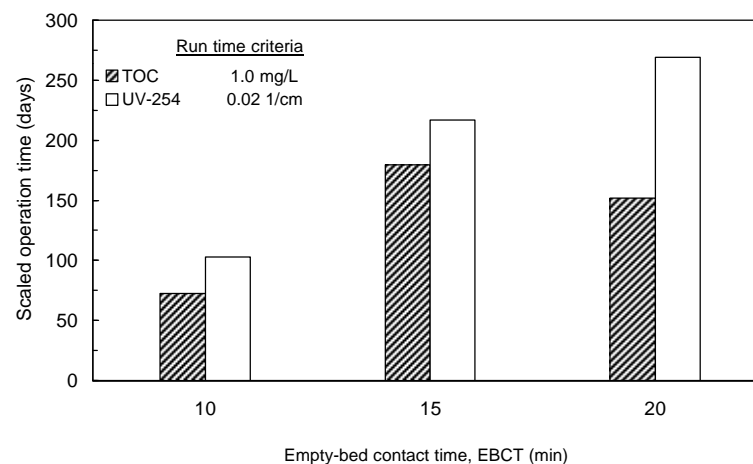


Figure 23 Impact of EBCT (10 to 20 minutes) on run times based on single contactor breakthrough curves for TOC and UV-254 effluent criteria (low)

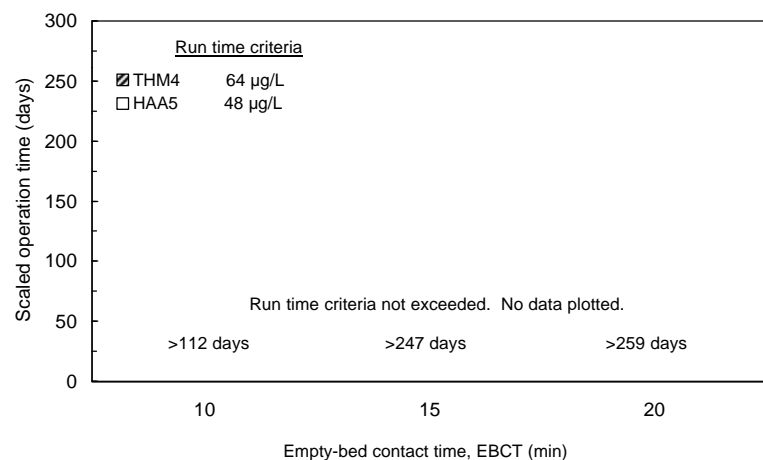


Figure 24 Impact of EBCT (10 to 20 minutes) on run times based on single contactor breakthrough curves for Stage 1 THM4 and HAA5 effluent criteria

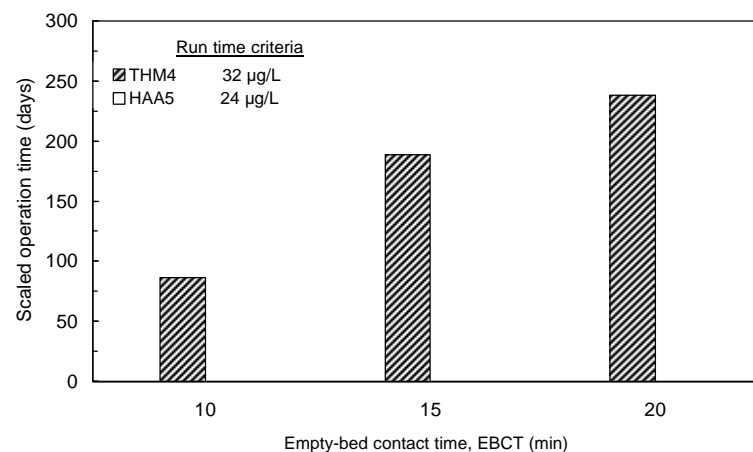


Figure 25 Impact of EBCT (10 to 20 minutes) on run times based on single contactor breakthrough curves for Stage 2 THM4 and HAA5 effluent criteria

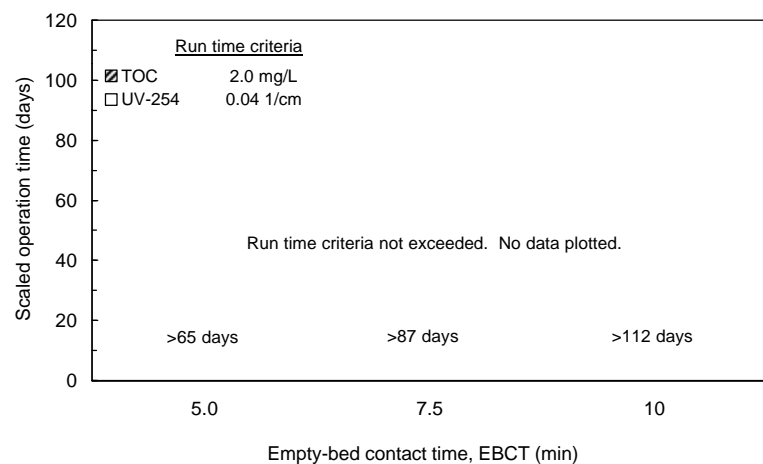


Figure 26 Impact of EBCT (5.0 to 10 minutes) on Scaled operation times based on single contactor breakthrough curves for TOC and UV-254 effluent criteria (high)

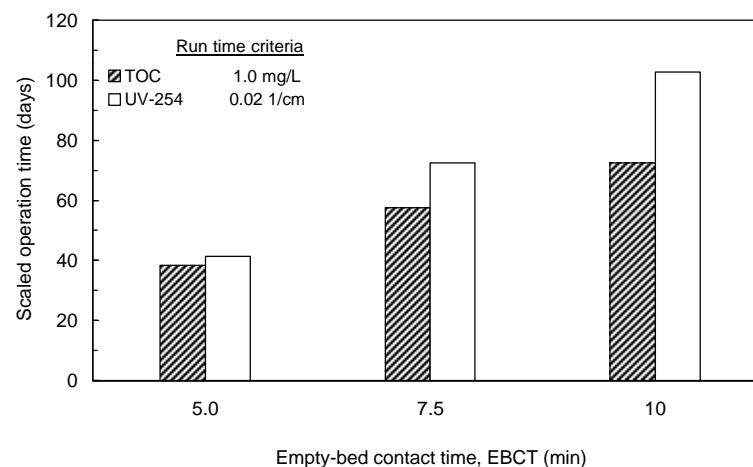


Figure 27 Impact of EBCT (5.0 to 10 minutes) on Scaled operation times based on single contactor breakthrough curves for TOC and UV-254 effluent criteria (low)

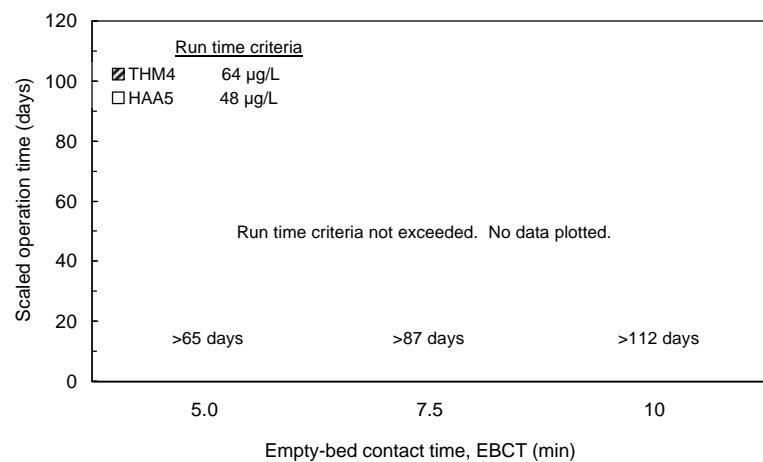


Figure 28 Impact of EBCT (5.0 to 10 minutes) on Scaled operation times based on single contactor breakthrough curves for Stage 1 THM4 and HAA5 effluent criteria

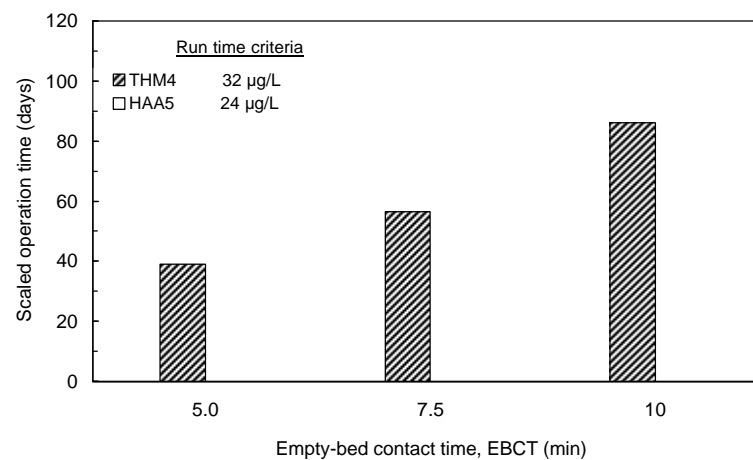


Figure 29 Impact of EBCT (5.0 to 10 minutes) on Scaled operation times based on single contactor breakthrough curves for Stage 2 THM4 and HAA5 effluent criteria

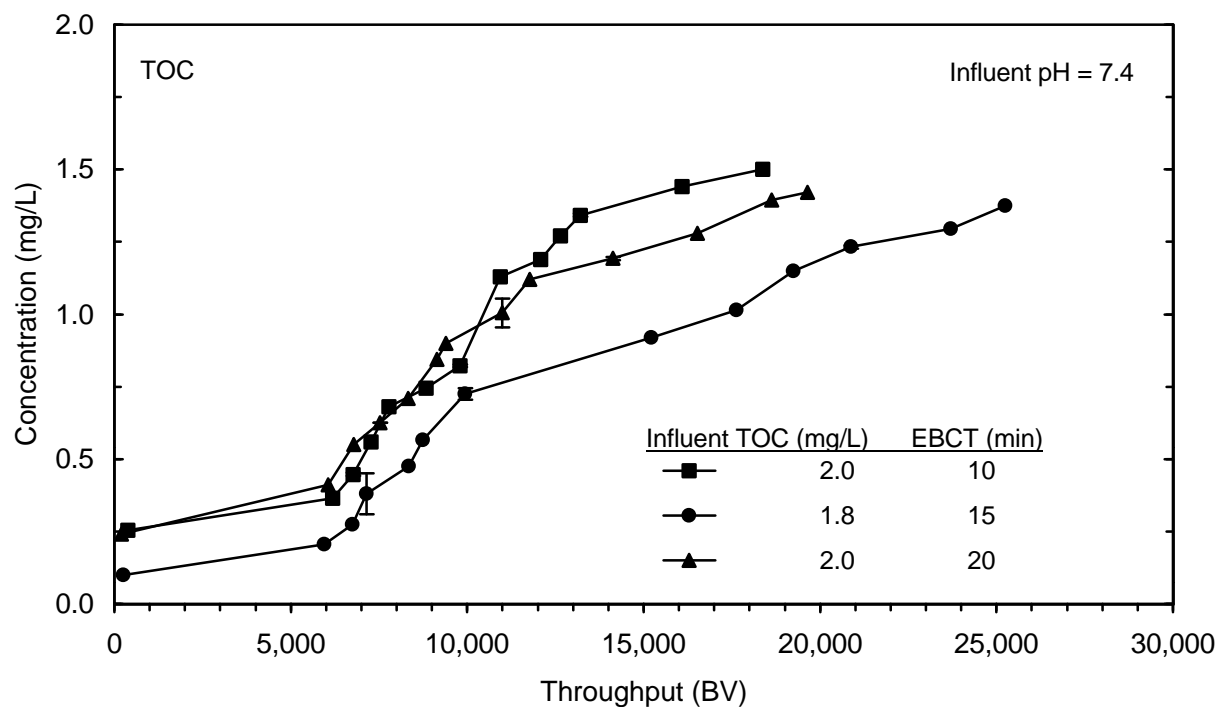


Figure 30 Impact of EBCT on TOC breakthrough (10 to 20 minutes) plotted as throughput in bed volumes treated

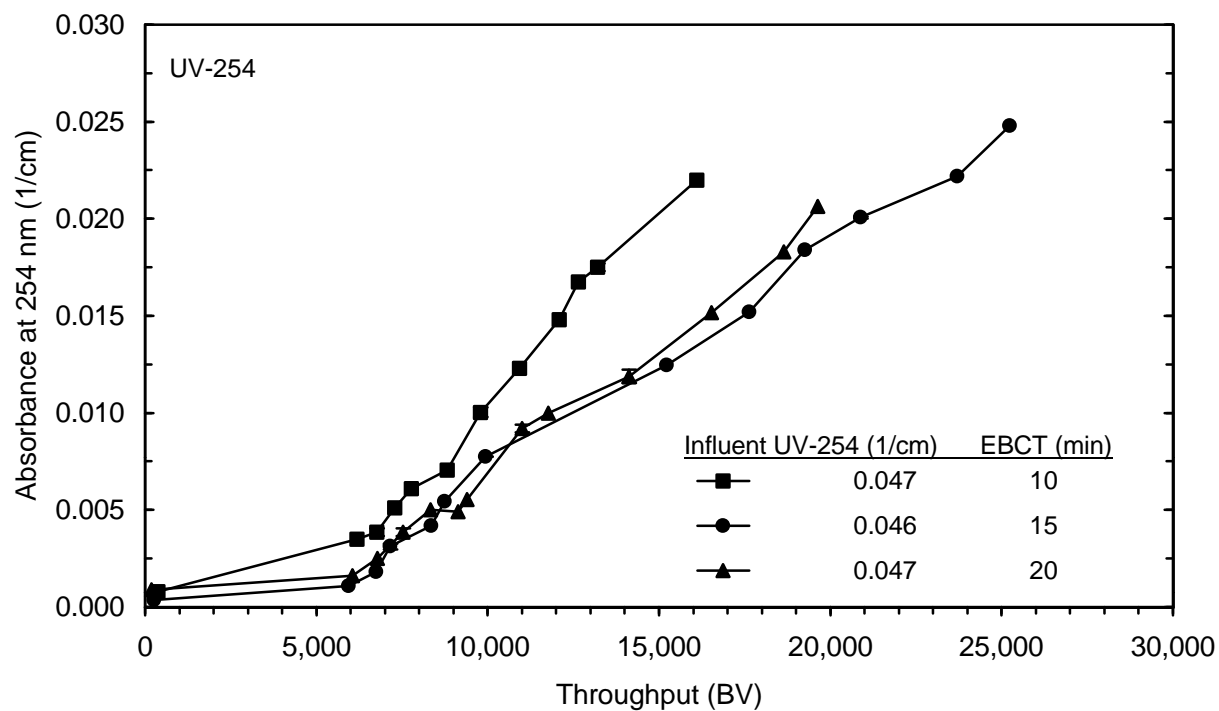


Figure 31 Impact of EBCT on UV-254 breakthrough (10 to 20 minutes) plotted as throughput in bed volumes treated

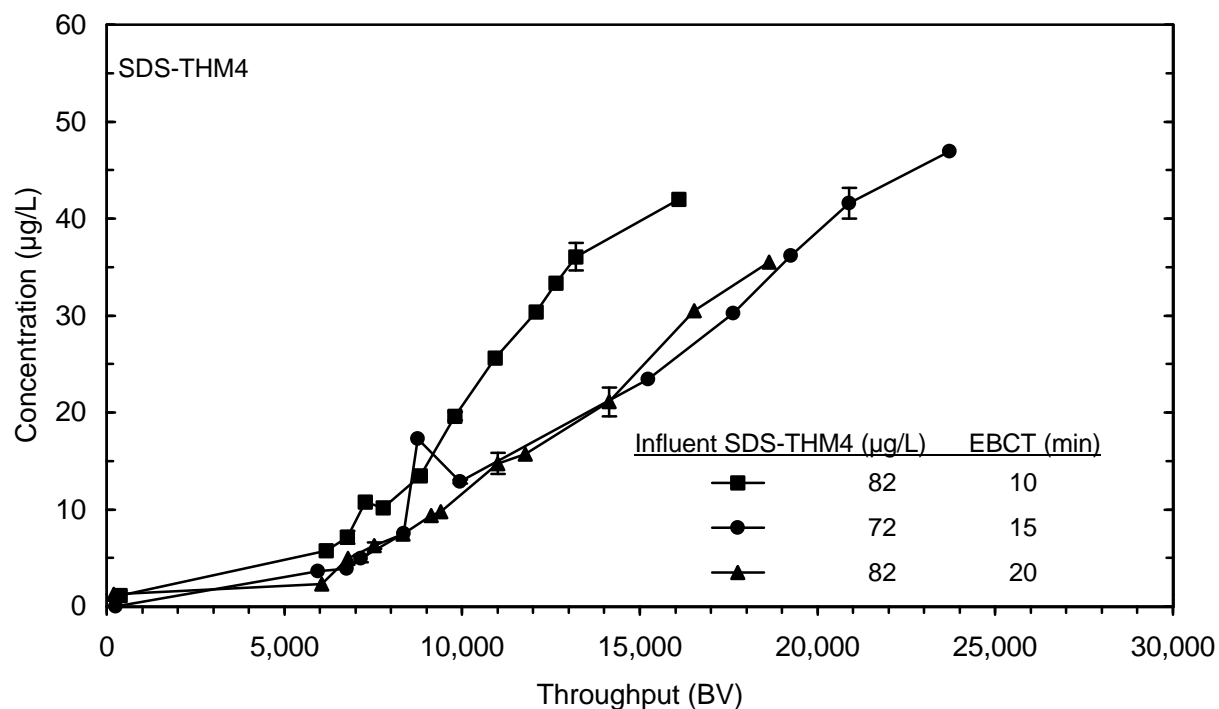


Figure 32 Impact of EBCT on SDS-THM4 breakthrough (10 to 20 minutes) plotted as throughput in bed volumes treated

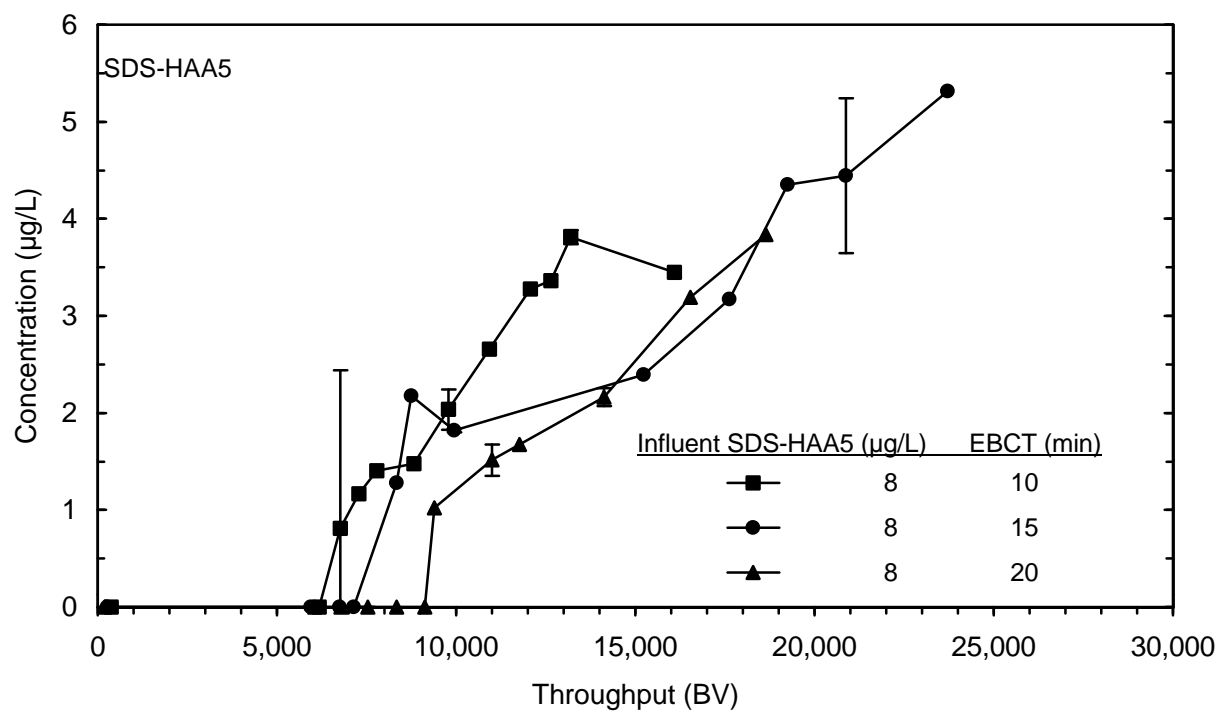


Figure 33 Impact of EBCT on SDS-HAA5 breakthrough (10 to 20 minutes) plotted as throughput in bed volumes treated

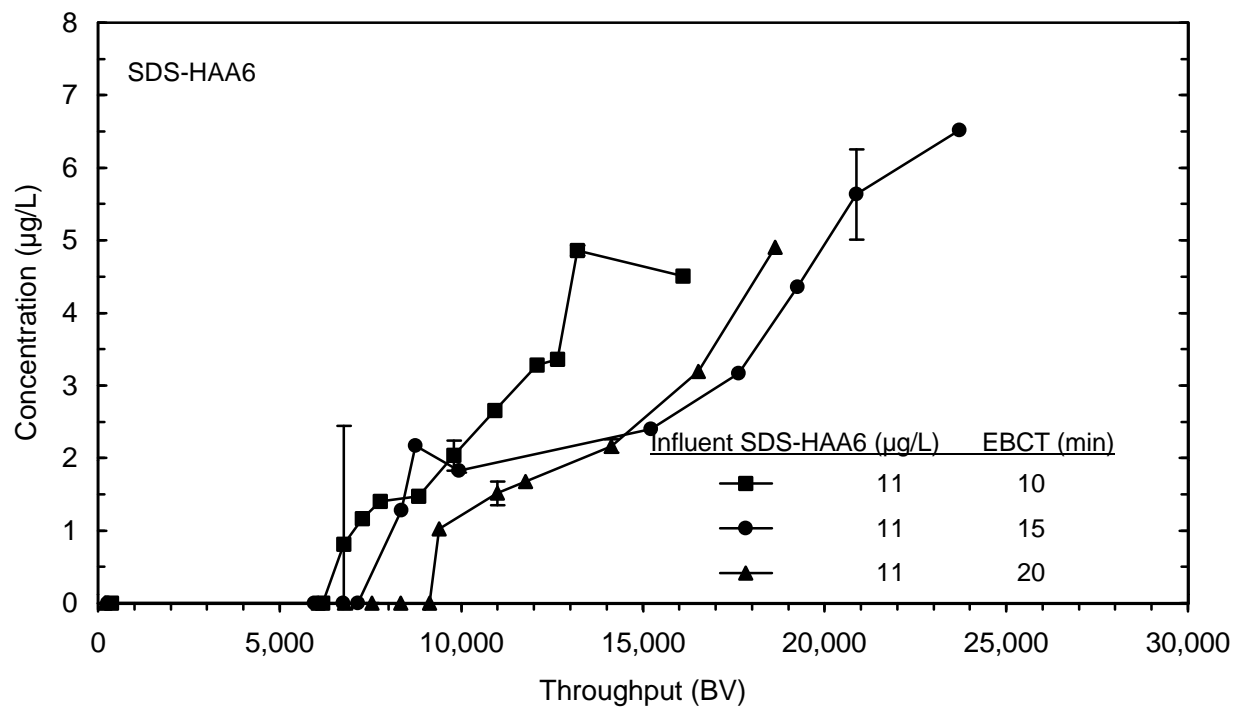


Figure 34 Impact of EBCT on SDS-HAA6 breakthrough (10 to 20 minutes) plotted as throughput in bed volumes treated

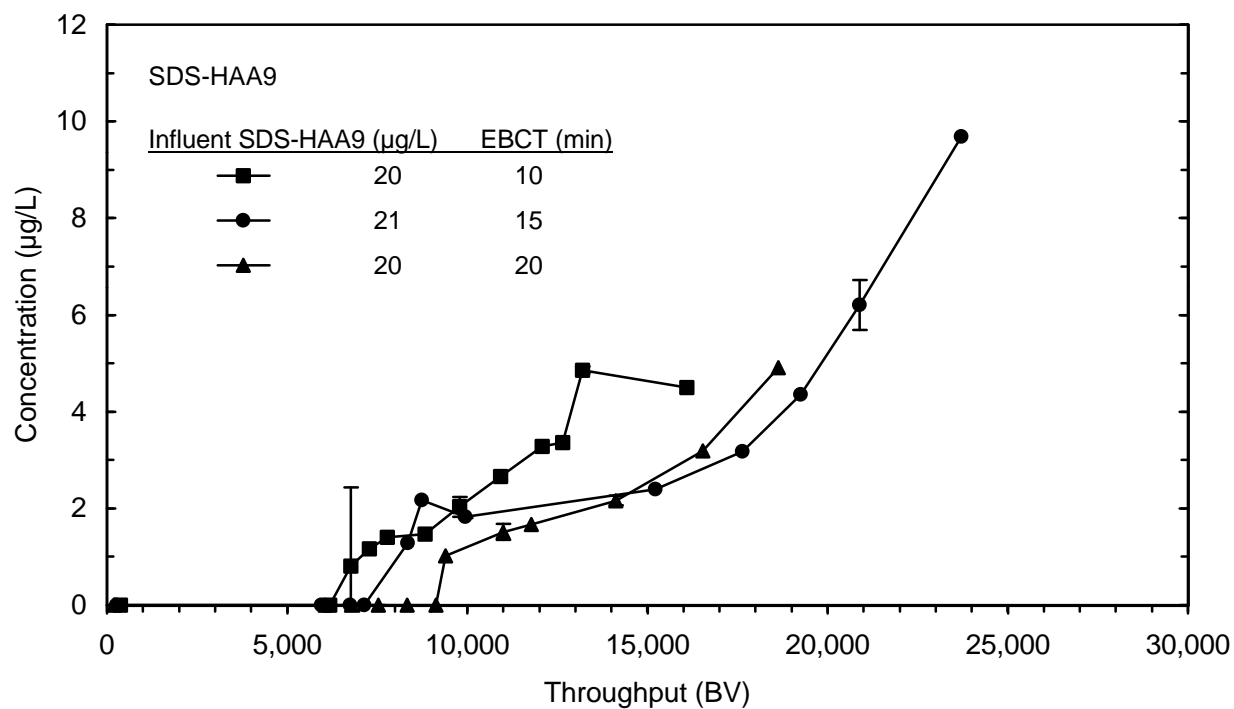


Figure 35 Impact of EBCT on SDS-HAA9 breakthrough (10 to 20 minutes) plotted as throughput in bed volumes treated

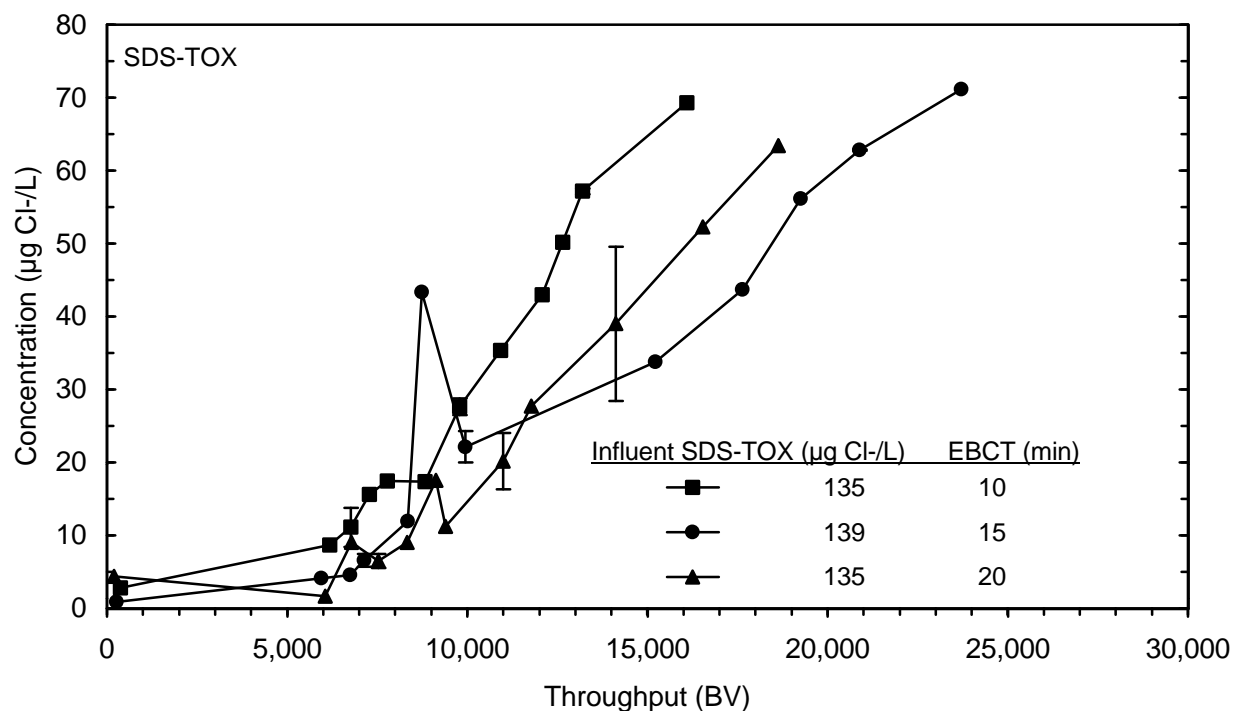


Figure 36 Impact of EBCT on SDS-TOX breakthrough (10 to 20 minutes) plotted as throughput in bed volumes treated

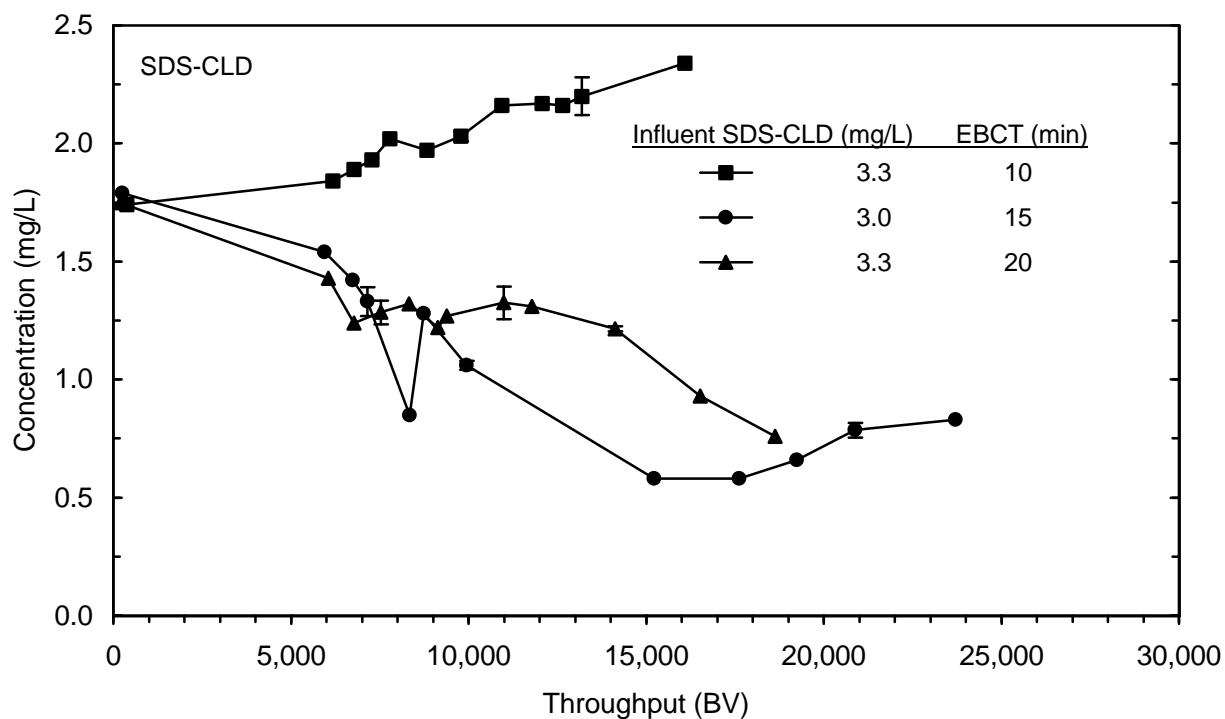


Figure 37 Impact of EBCT on SDS-CLD breakthrough (10 to 20 minutes) plotted as throughput in bed volumes treated

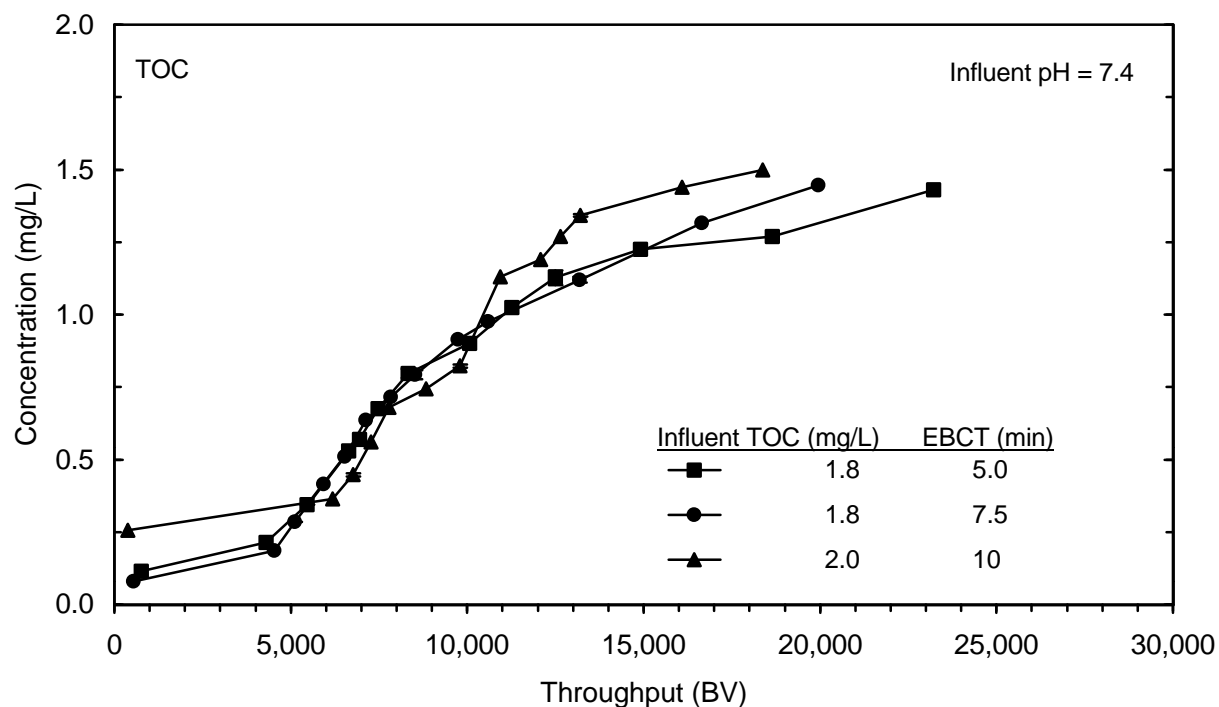


Figure 38 Impact of EBCT on TOC breakthrough (5.0 to 10 minutes) plotted as throughput in bed volumes treated

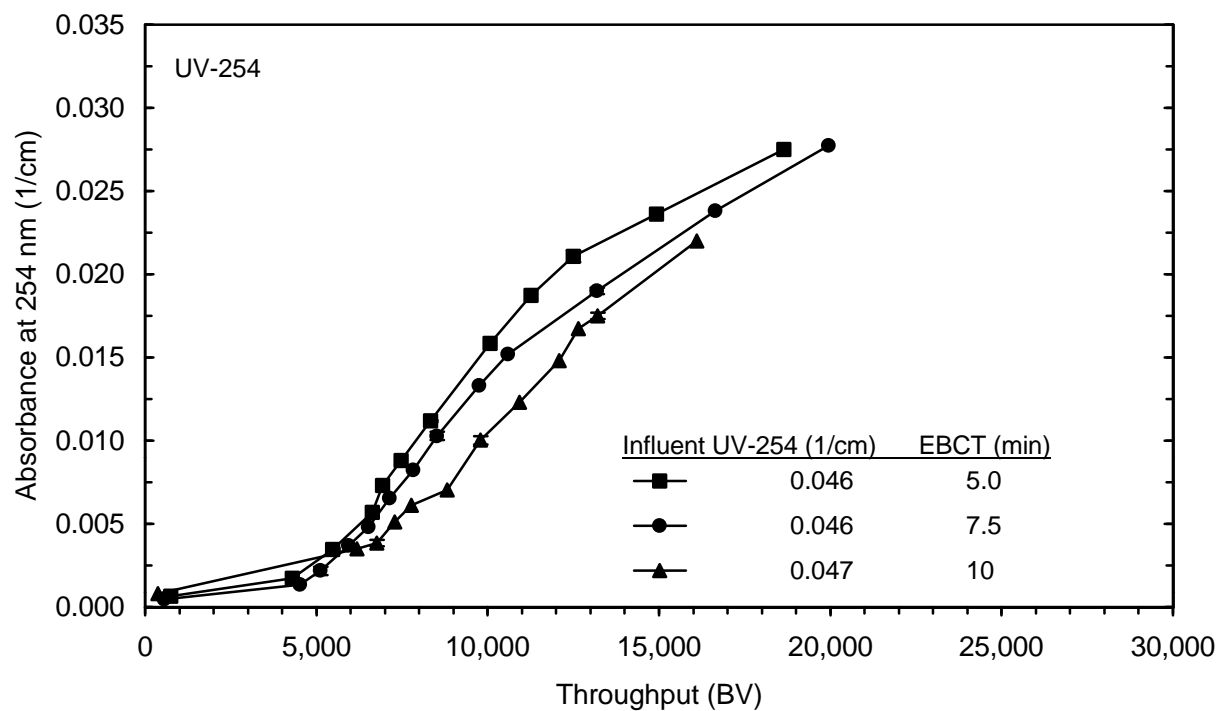


Figure 39 Impact of EBCT on UV-254 breakthrough (5.0 to 10 minutes) plotted as throughput in bed volumes treated

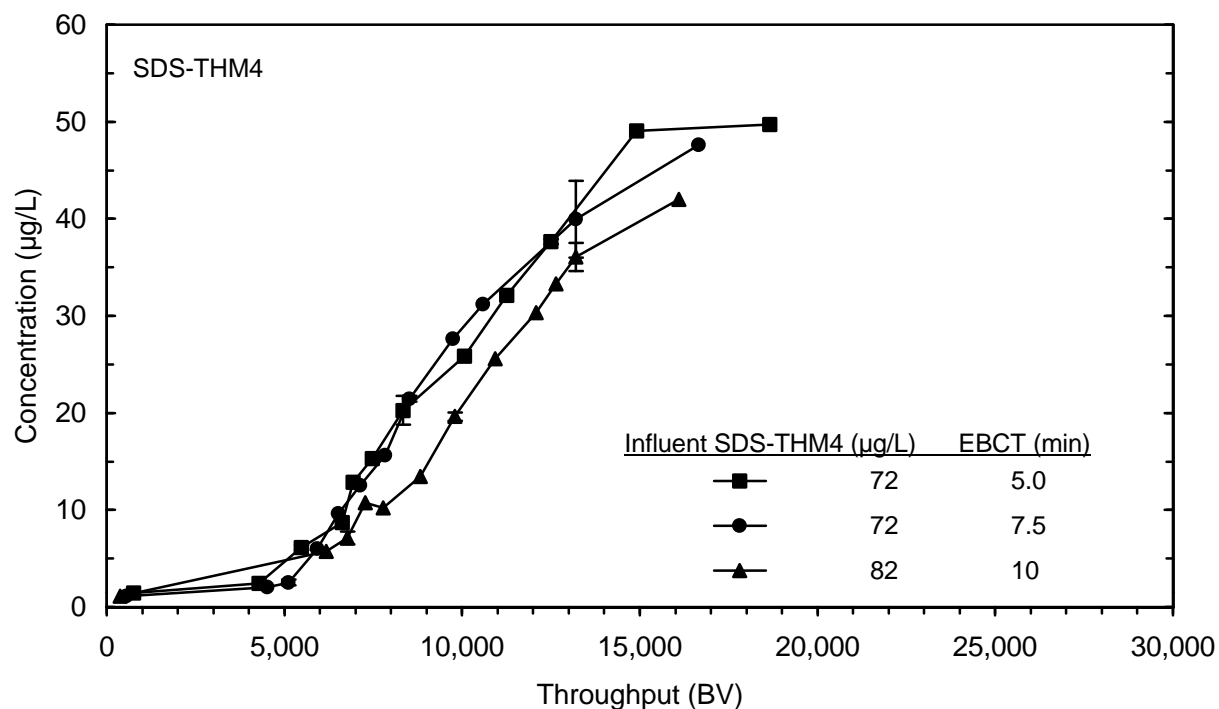


Figure 40 Impact of EBCT on SDS-THM4 breakthrough (5.0 to 10 minutes) plotted as throughput in bed volumes treated

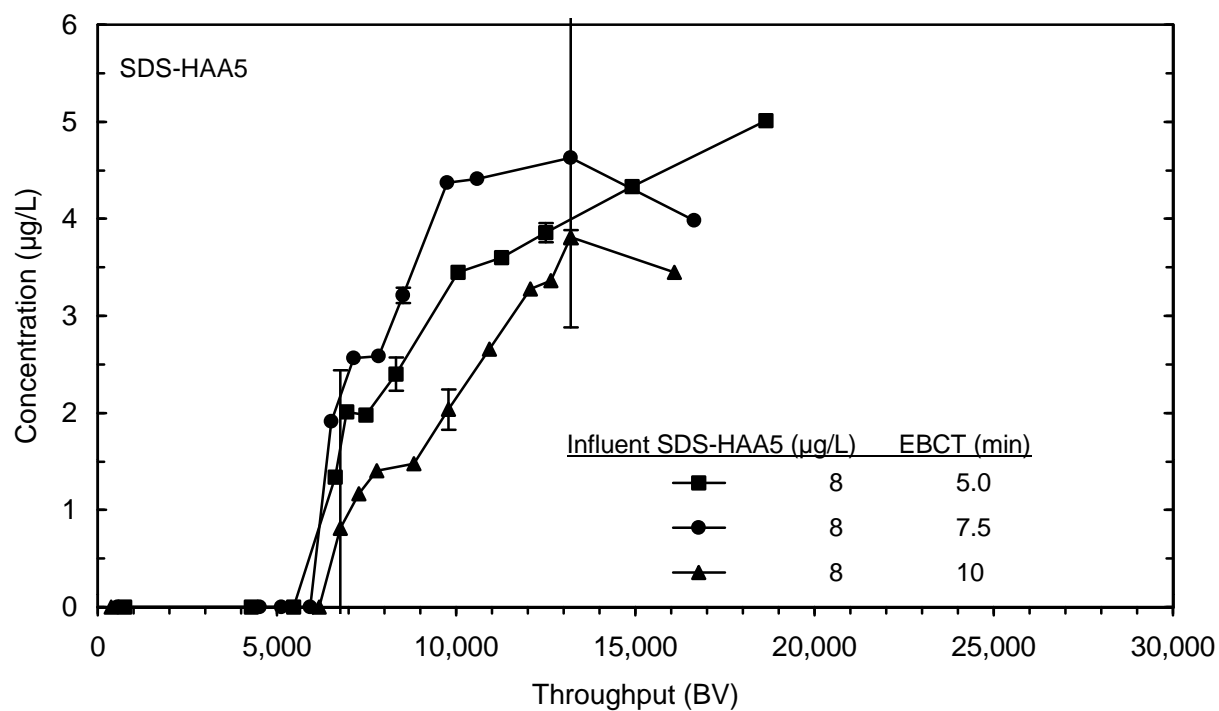


Figure 41 Impact of EBCT on SDS-HAA5 breakthrough (5.0 to 10 minutes) plotted as throughput in bed volumes treated

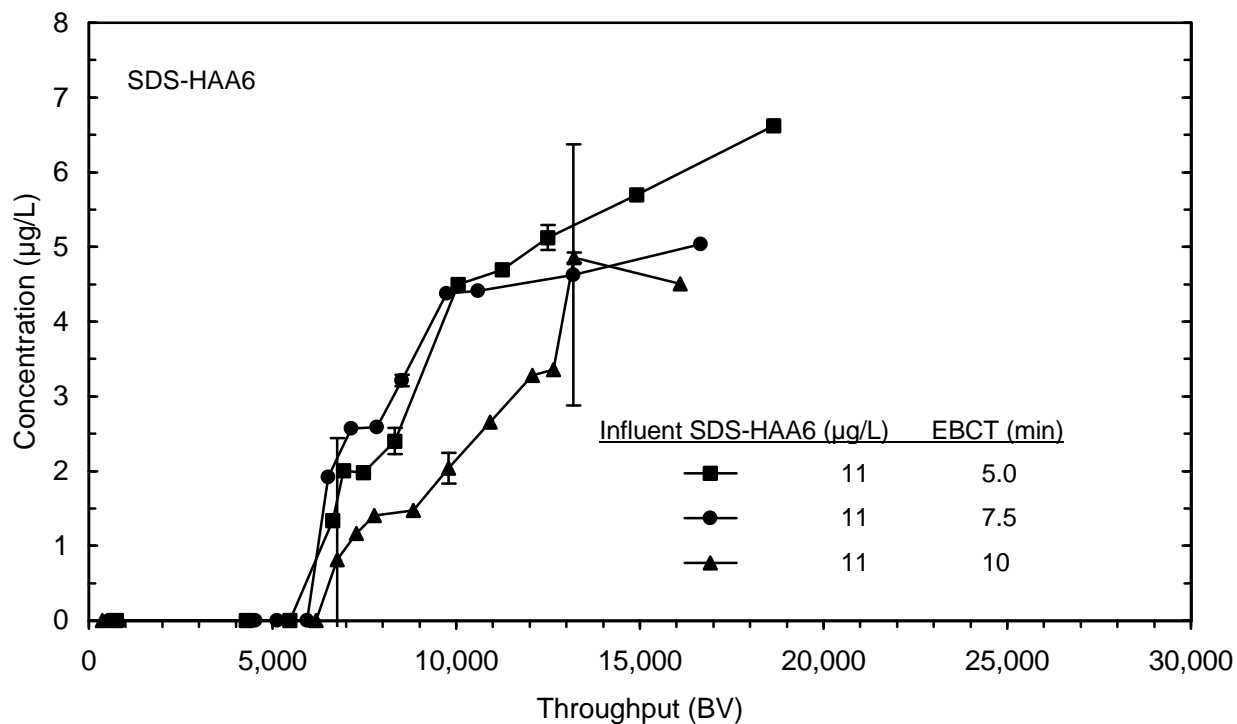


Figure 42 Impact of EBCT on SDS-HAA6 breakthrough (5.0 to 10 minutes) plotted as throughput in bed volumes treated

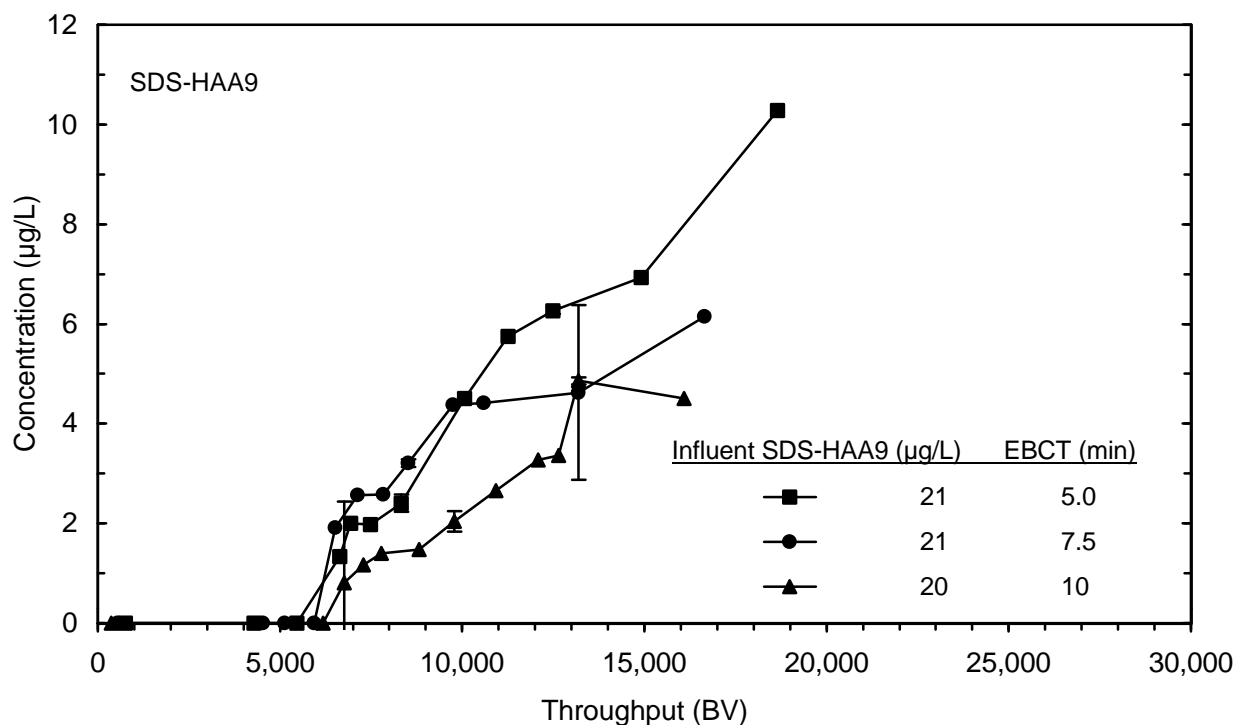


Figure 43 Impact of EBCT on SDS-HAA9 breakthrough (5.0 to 10 minutes) plotted as throughput in bed volumes treated

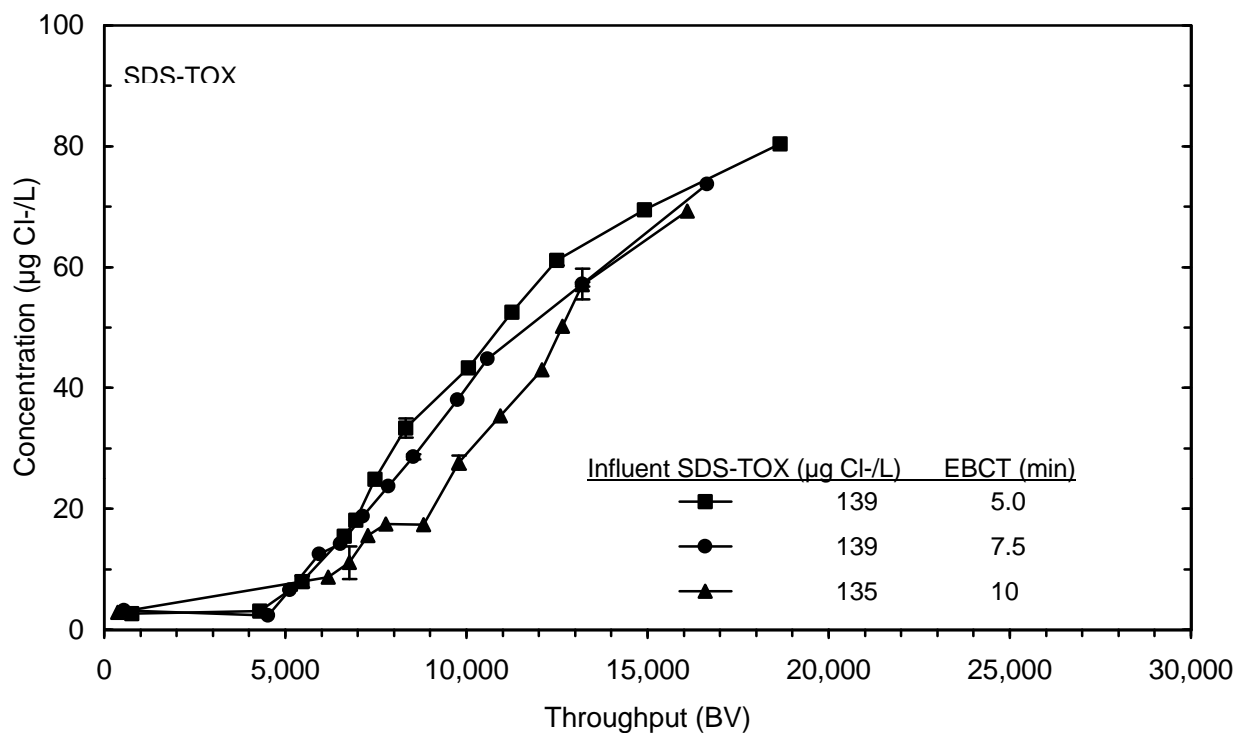


Figure 44 Impact of EBCT on SDS-TOX breakthrough (5.0 to 10 minutes) plotted as throughput in bed volumes treated

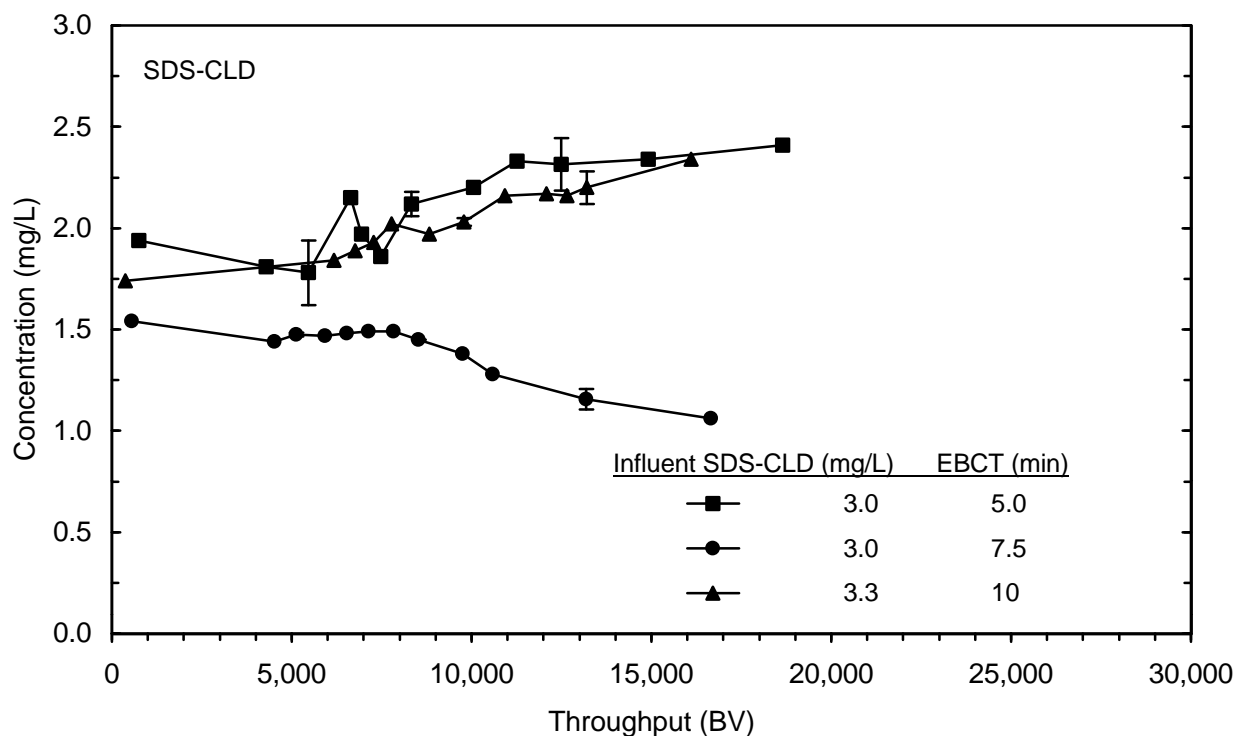


Figure 45 Impact of EBCT on SDS-CLD breakthrough (5.0 to 10 minutes) plotted as throughput in bed volumes treated

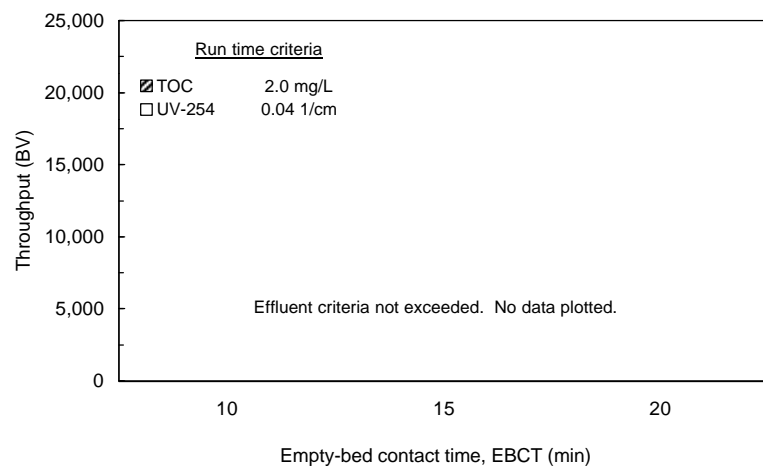


Figure 46 Impact of EBCT (10 to 20 minutes) on run times based on single contactor breakthrough curves for TOC and UV-254 effluent criteria (high)

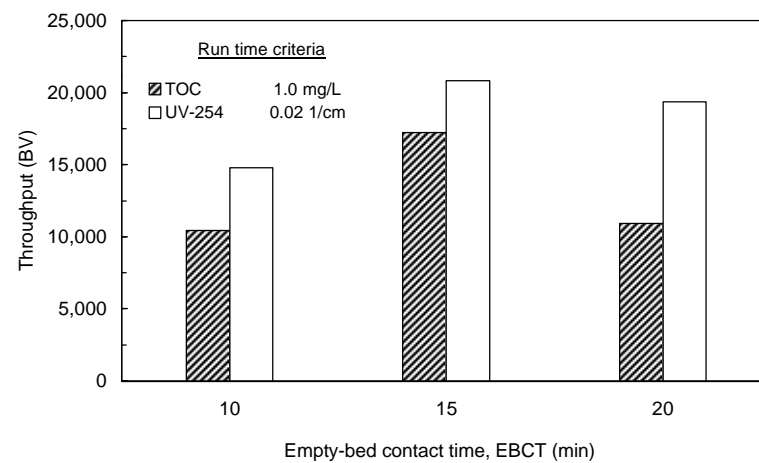


Figure 47 Impact of EBCT (10 to 20 minutes) on run times based on single contactor breakthrough curves for TOC and UV-254 effluent criteria (low)

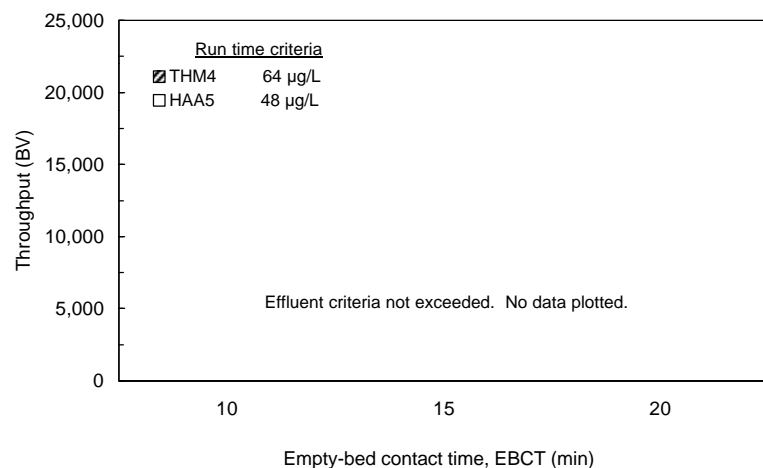


Figure 48 Impact of EBCT (10 to 20 minutes) on run times based on single contactor breakthrough curves for Stage 1 THM4 and HAA5 effluent criteria

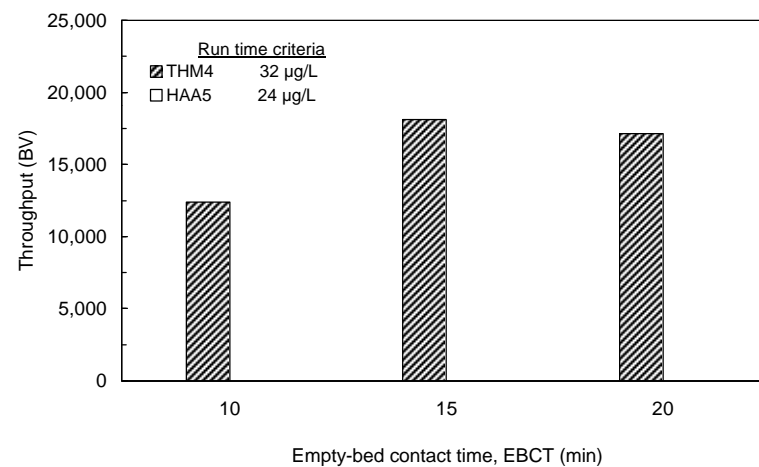


Figure 49 Impact of EBCT (10 to 20 minutes) on run times based on single contactor breakthrough curves for Stage 2 THM4 and HAA5 effluent criteria

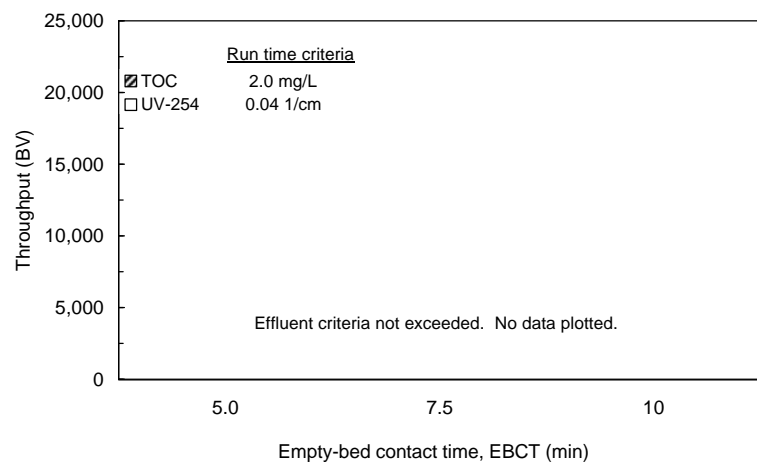


Figure 50 Impact of EBCT (5.0 to 10 minutes) on run times based on single contactor breakthrough curves for TOC and UV-254 effluent criteria (high)

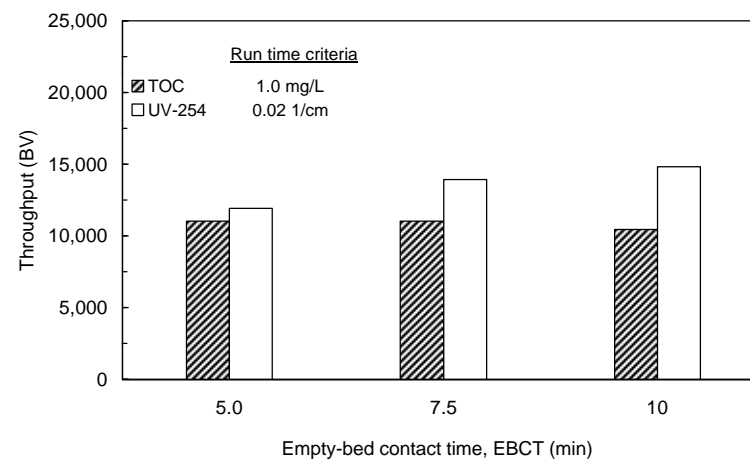


Figure 51 Impact of EBCT (5.0 to 10 minutes) on run times based on single contactor breakthrough curves for TOC and UV-254 effluent criteria (low)

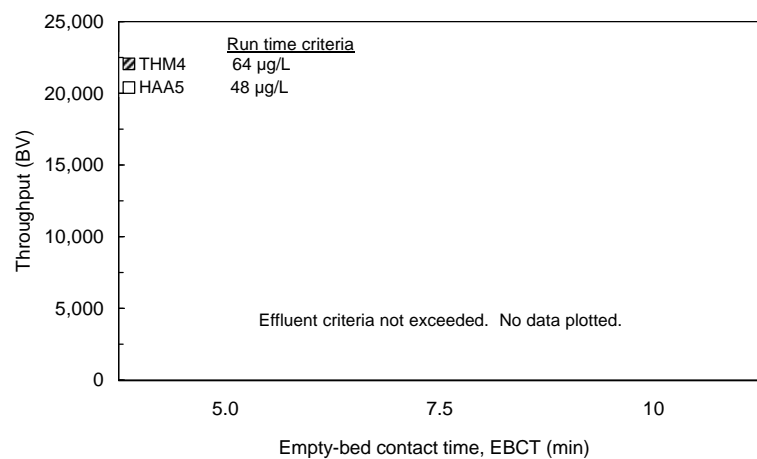


Figure 52 Impact of EBCT (5.0 to 10 minutes) on run times based on single contactor breakthrough curves for Stage 1 THM4 and HAA5 effluent criteria

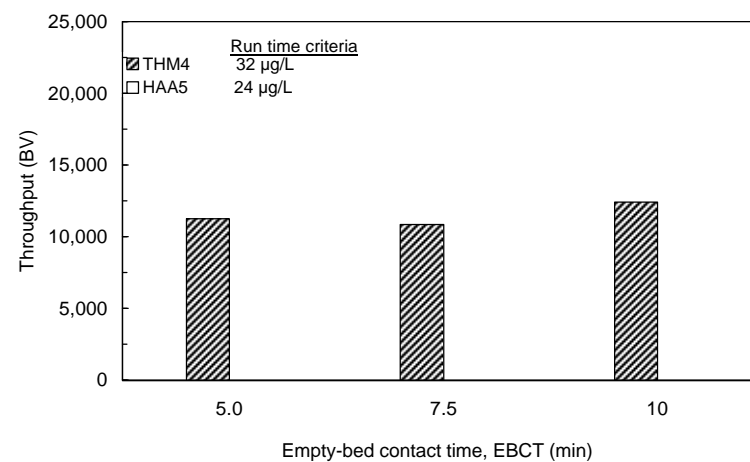


Figure 53 Impact of EBCT (5.0 to 10 minutes) on run times based on single contactor breakthrough curves for Stage 2 THM4 and HAA5 effluent criteria

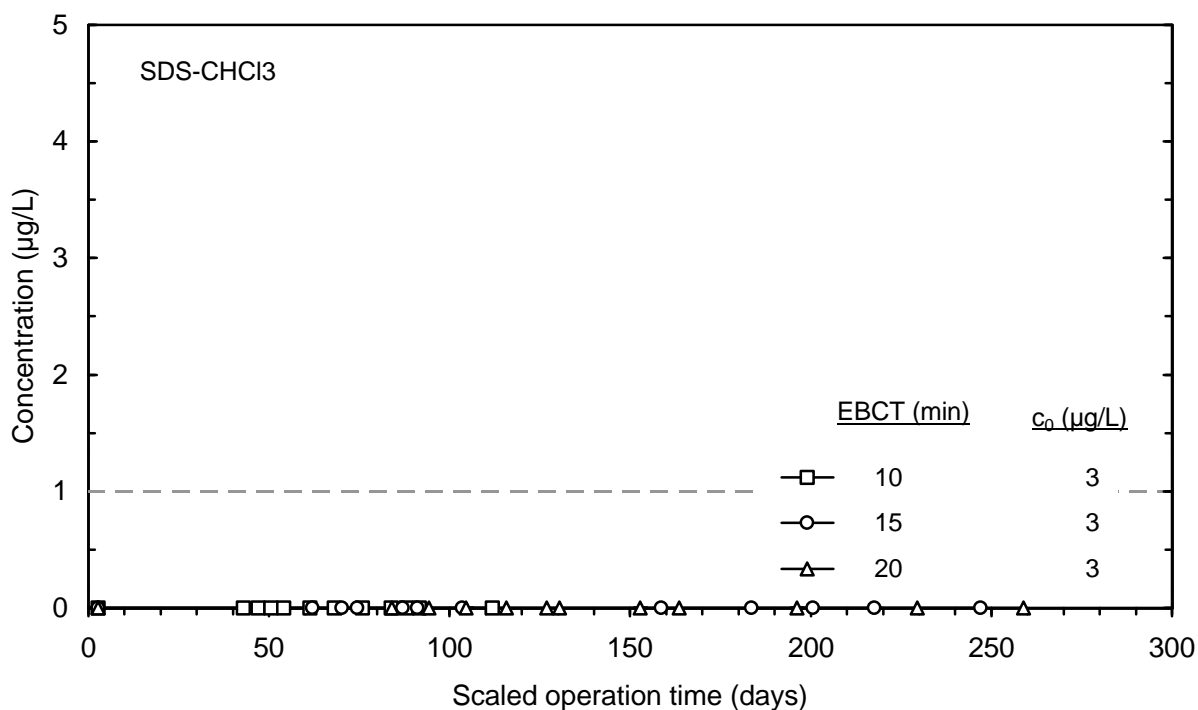


Figure 54 Impact of EBCT (10 to 20 minutes) on SDS-CHCl₃ breakthrough

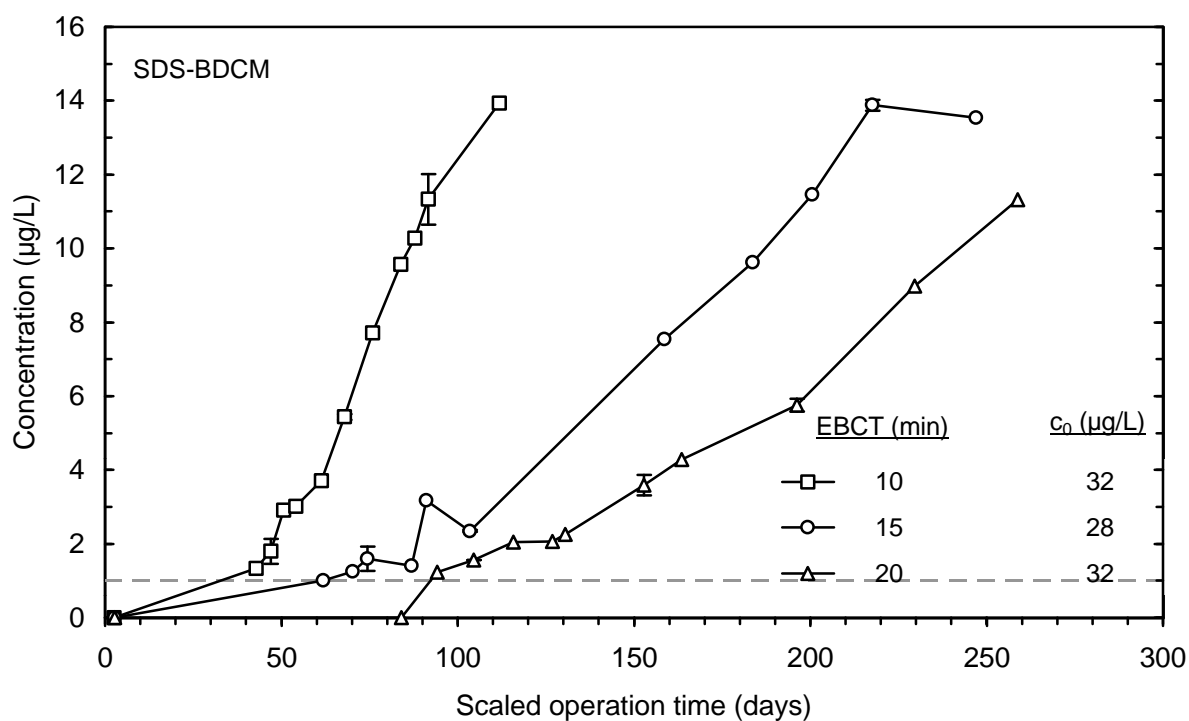


Figure 55 Impact of EBCT (10 to 20 minutes) on SDS-BDCM breakthrough

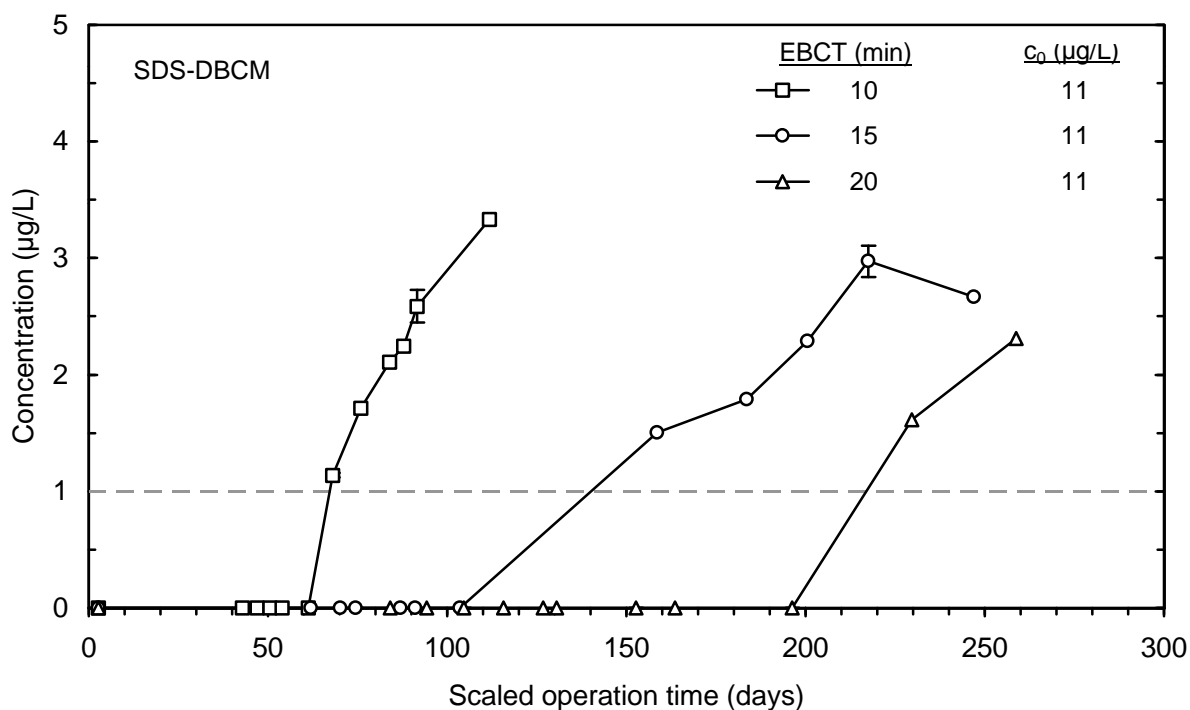


Figure 56 Impact of EBCT (10 to 20 minutes) on SDS-DBCM breakthrough

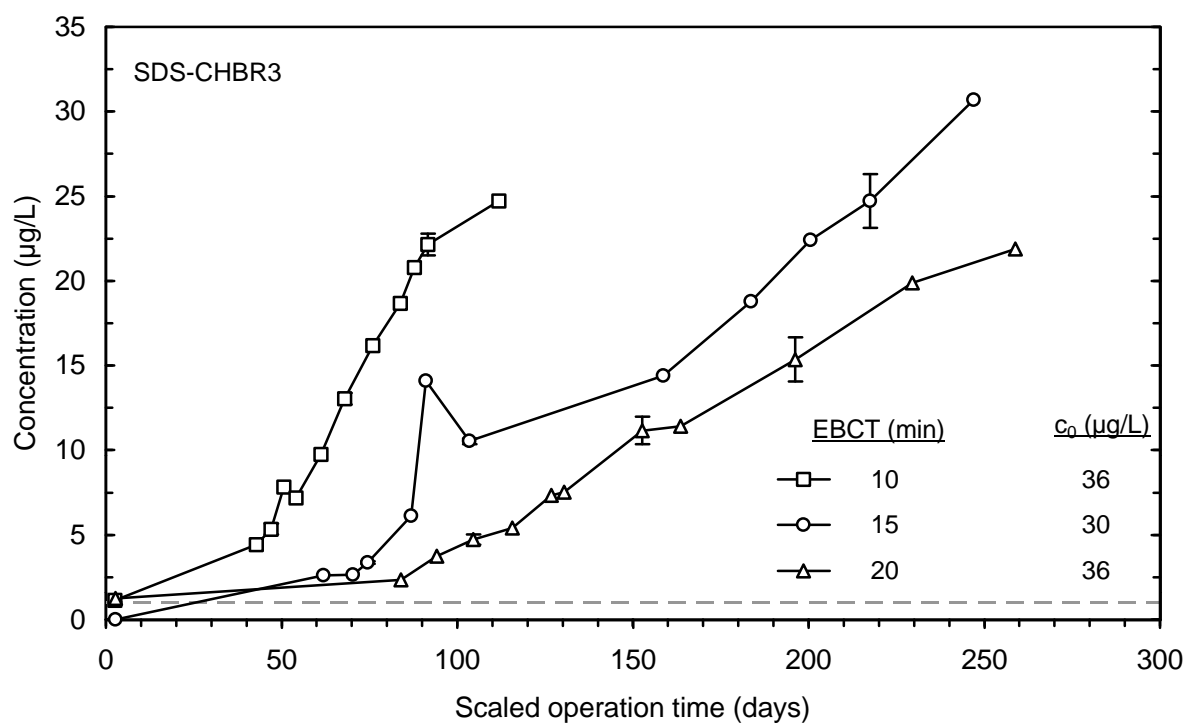


Figure 57 Impact of EBCT (10 to 20 minutes) on SDS-CHBR3 breakthrough

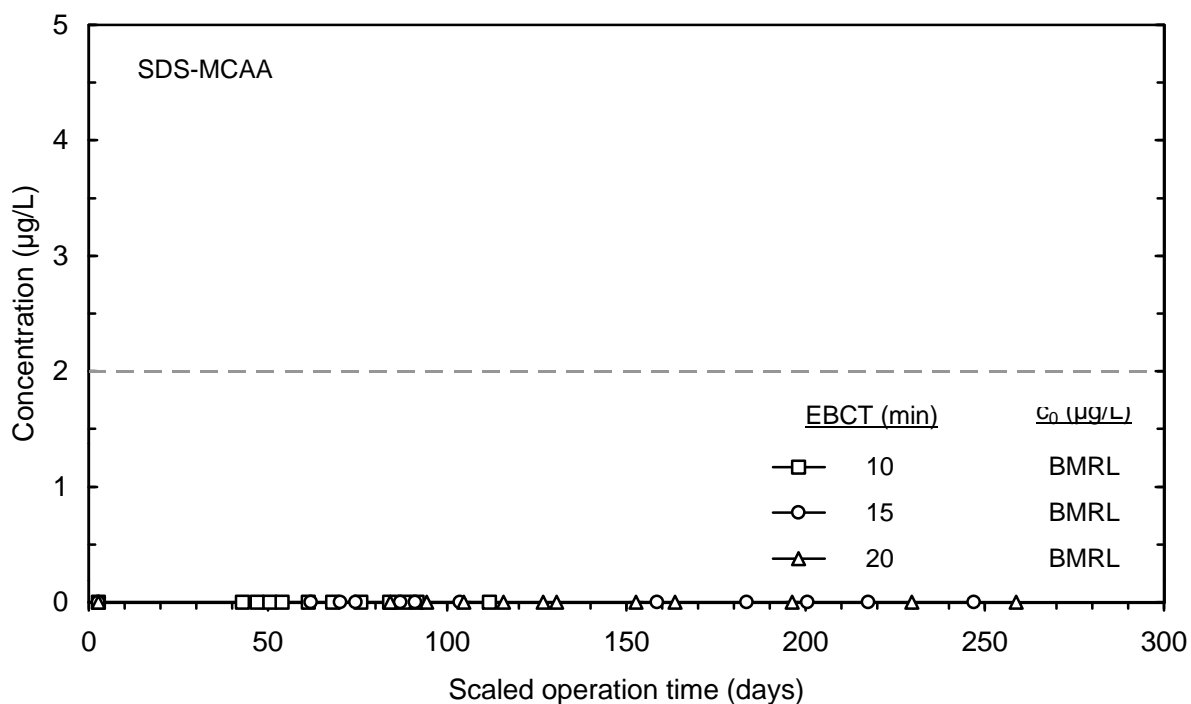


Figure 58 Impact of EBCT (10 to 20 minutes) on SDS-MCAA breakthrough

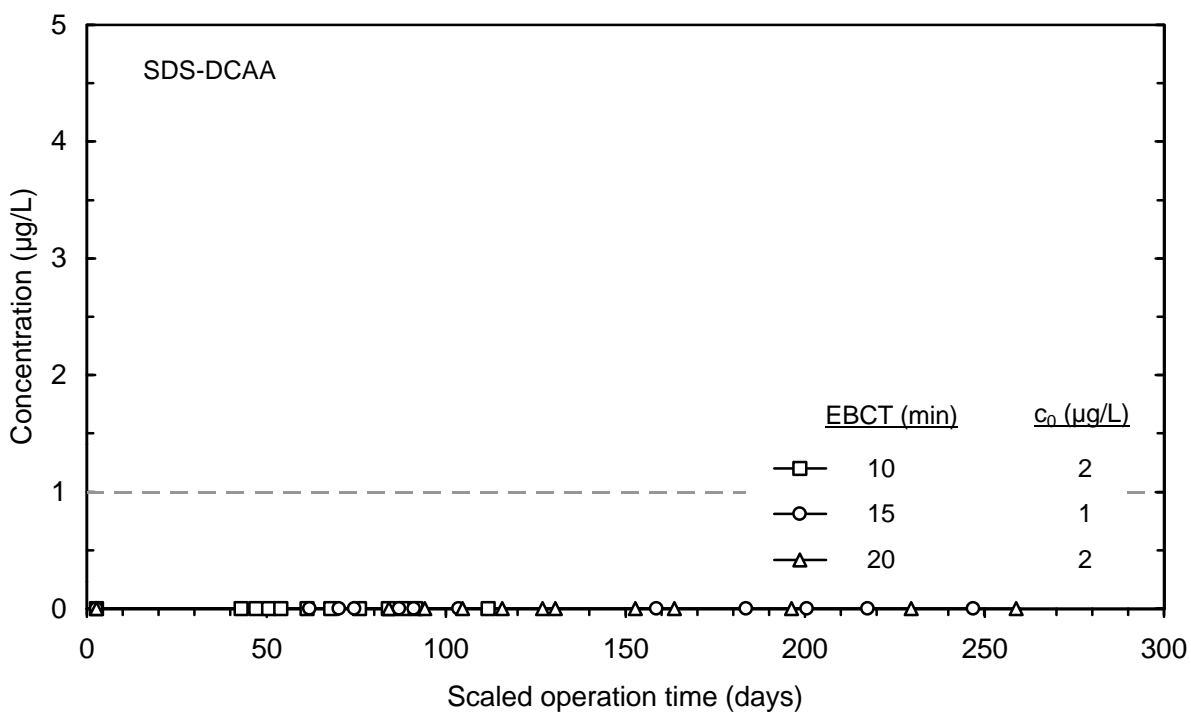


Figure 59 Impact of EBCT (10 to 20 minutes) on SDS-DCAA breakthrough

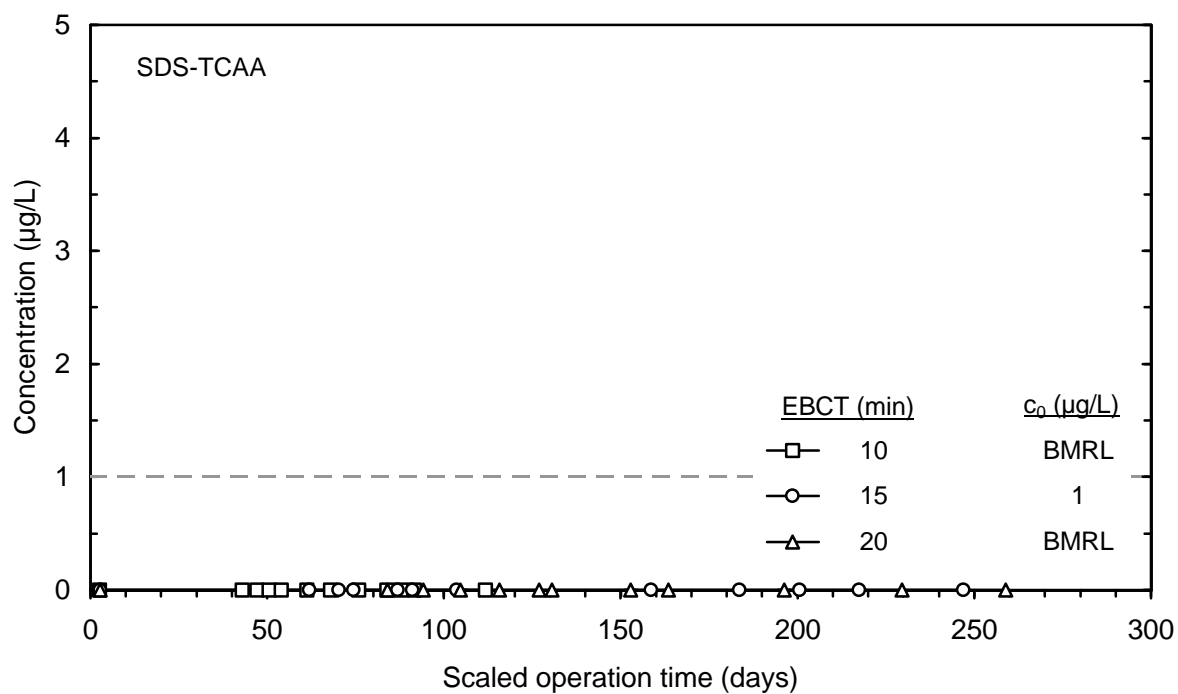


Figure 60 Impact of EBCT (10 to 20 minutes) on SDS-TCAA breakthrough

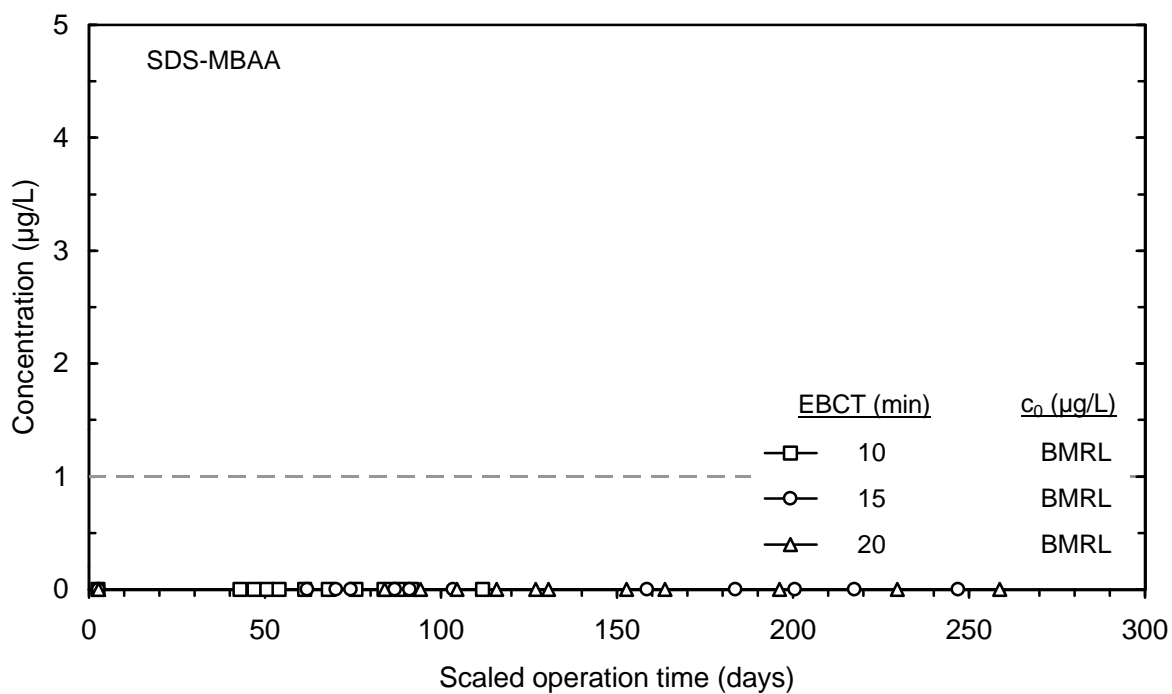


Figure 61 Impact of EBCT (10 to 20 minutes) on SDS-MBAA breakthrough

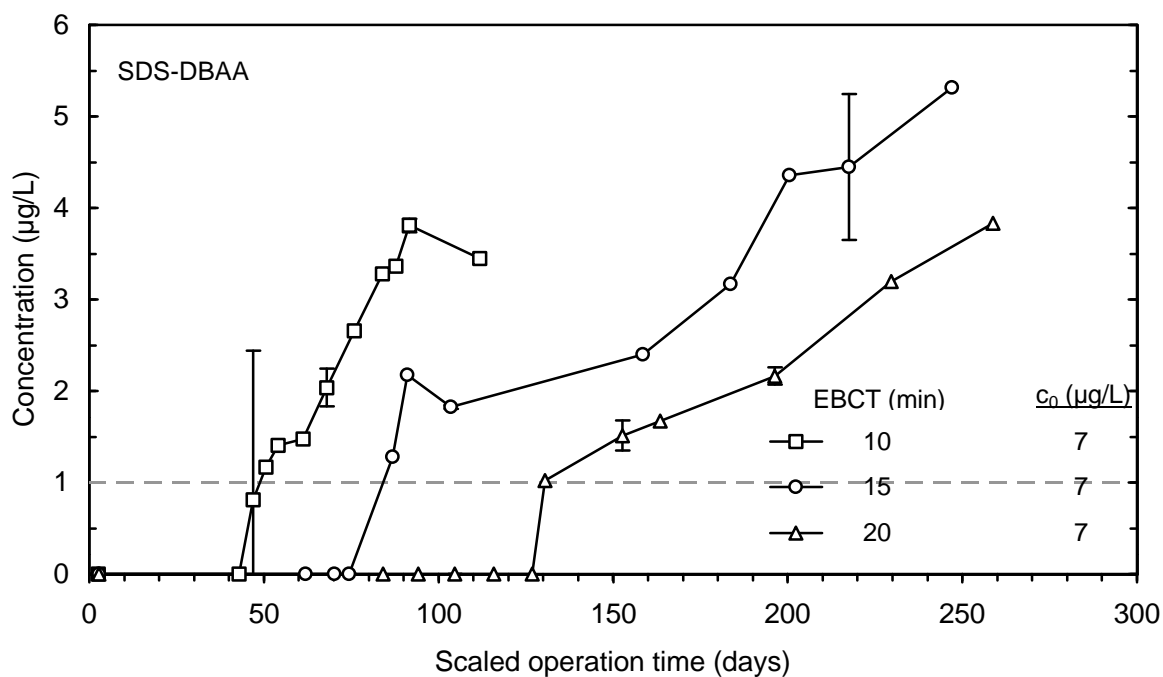


Figure 62 Impact of EBCT (10 to 20 minutes) on SDS-DBAA breakthrough

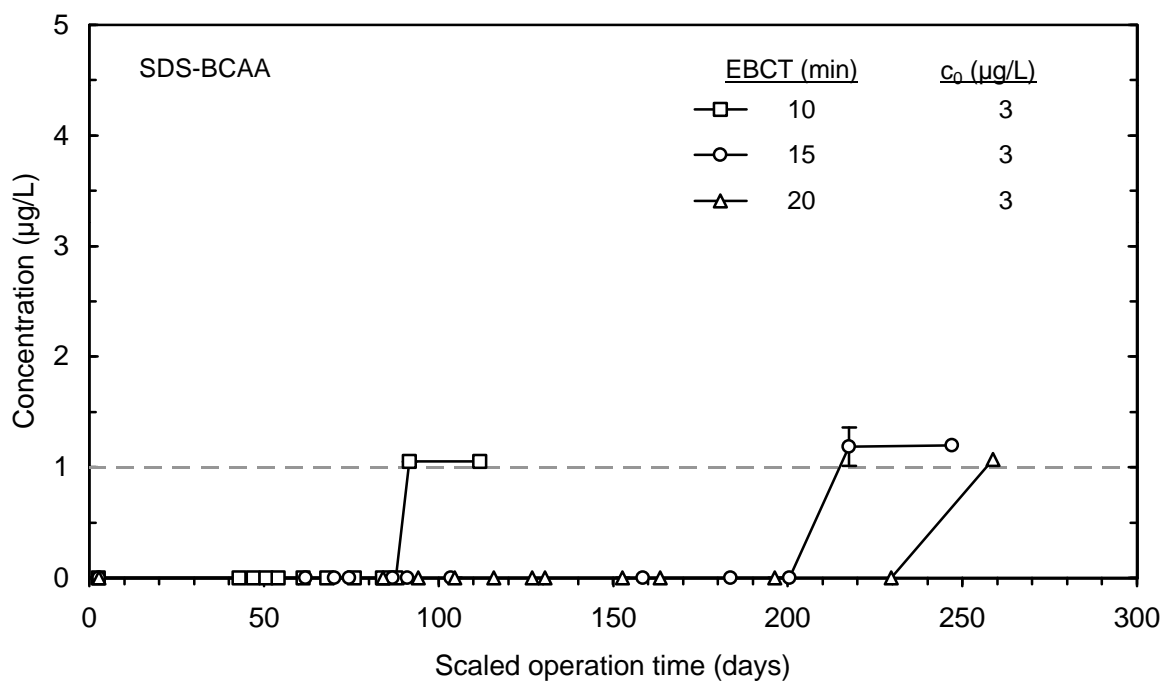


Figure 63 Impact of EBCT (10 to 20 minutes) on SDS-BCAA breakthrough

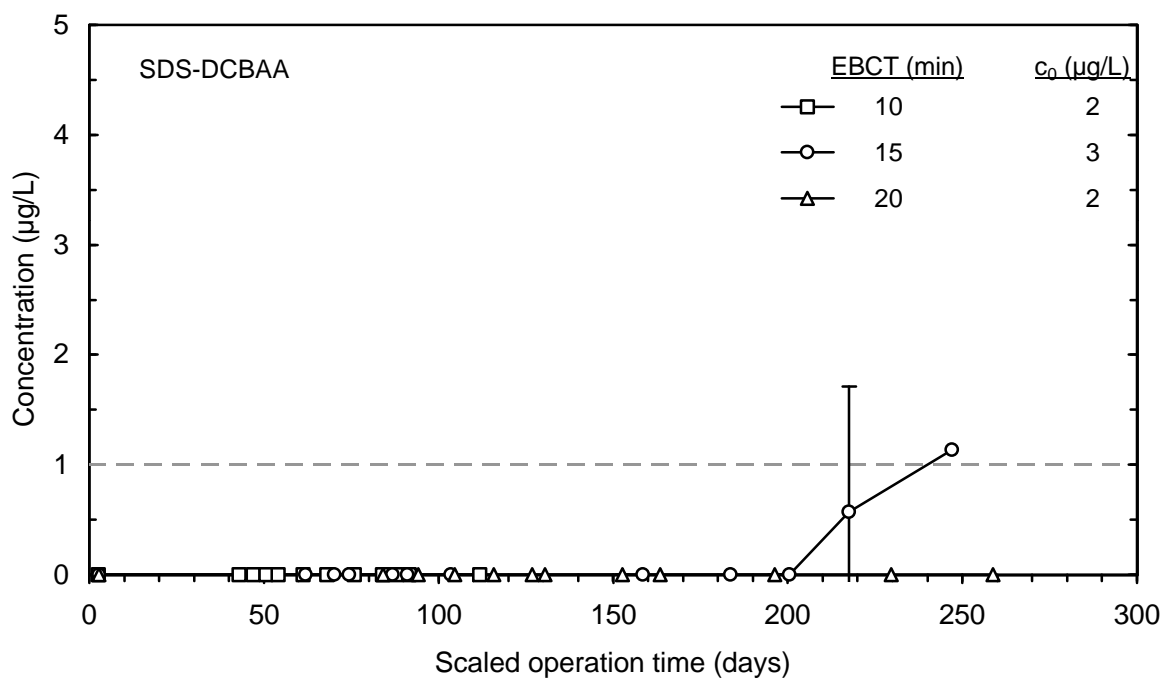


Figure 64 Impact of EBCT (10 to 20 minutes) on SDS-DCBAA breakthrough

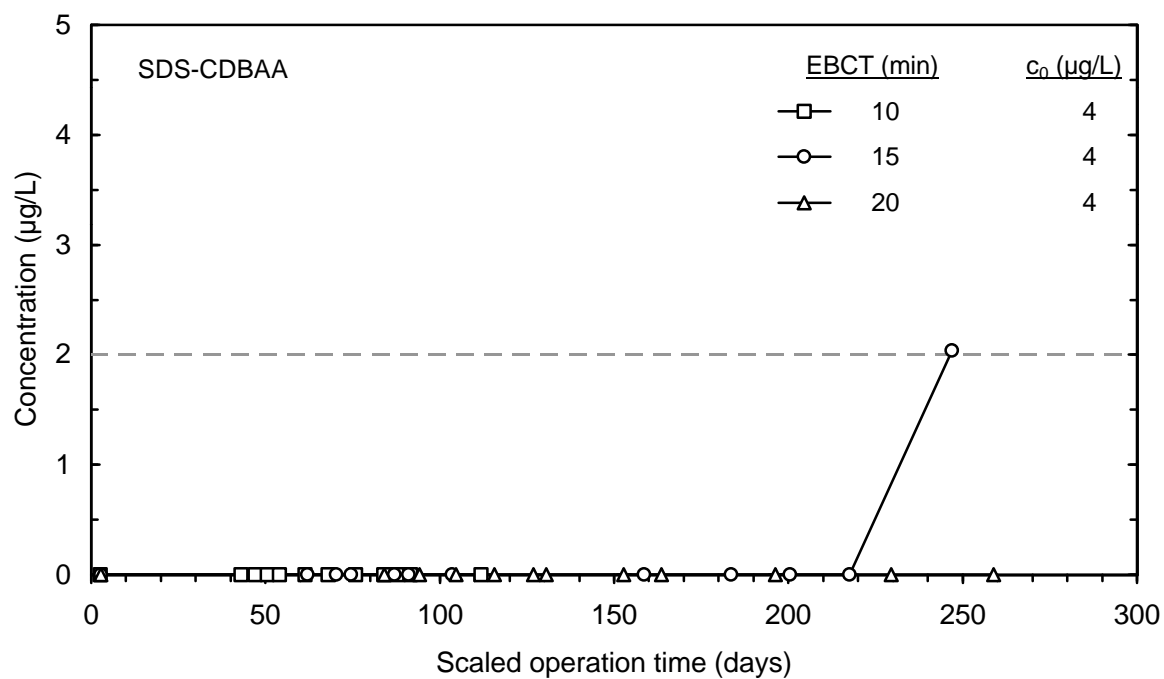


Figure 65 Impact of EBCT (10 to 20 minutes) on SDS-CDBAA breakthrough

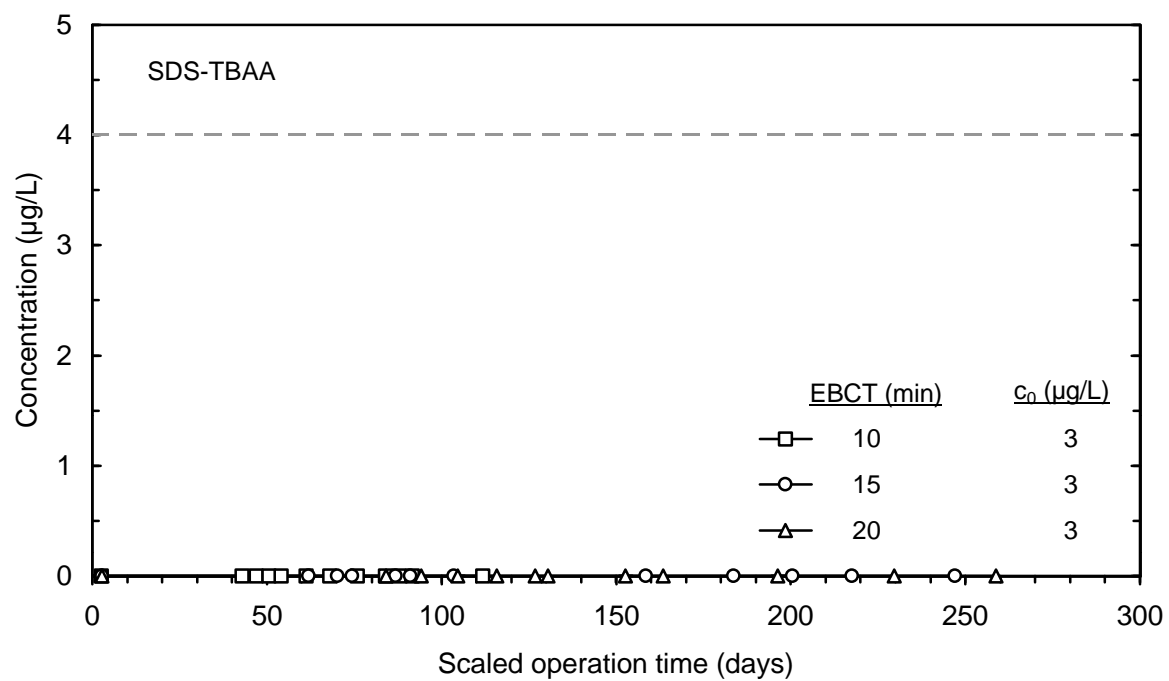


Figure 66 Impact of EBCT (10 to 20 minutes) on SDS-TBAA breakthrough

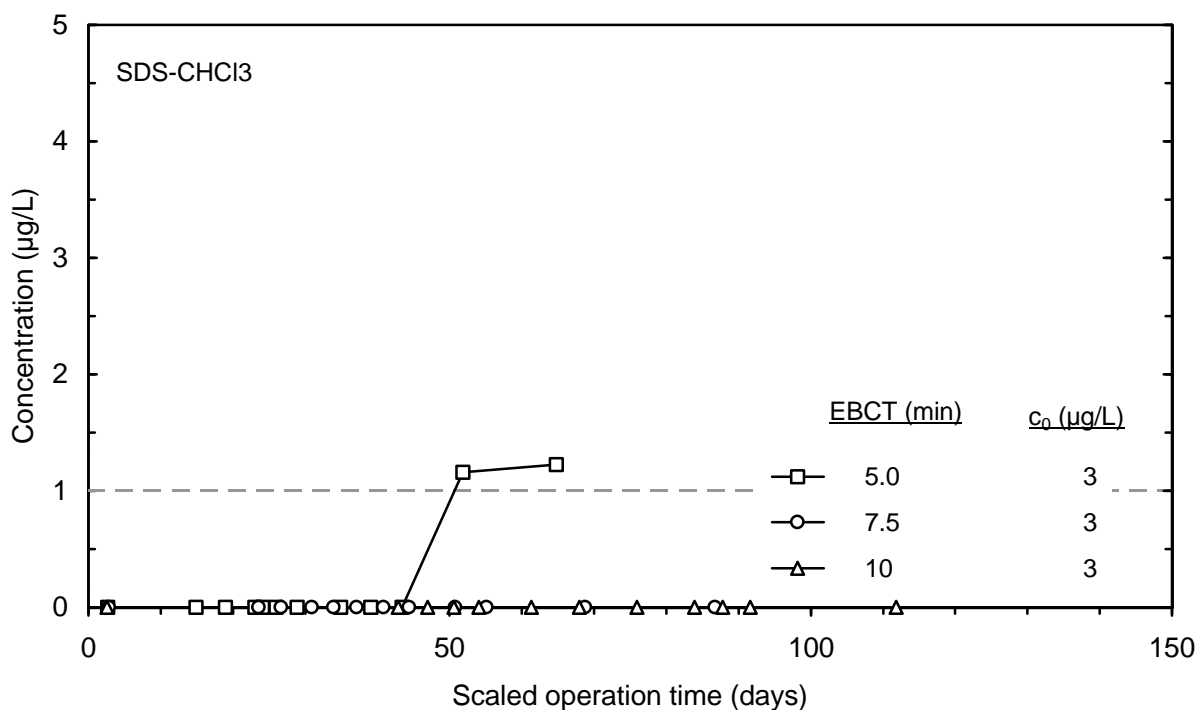


Figure 67 Impact of EBCT (5.0 to 10 minutes) on SDS-CHCl₃ breakthrough

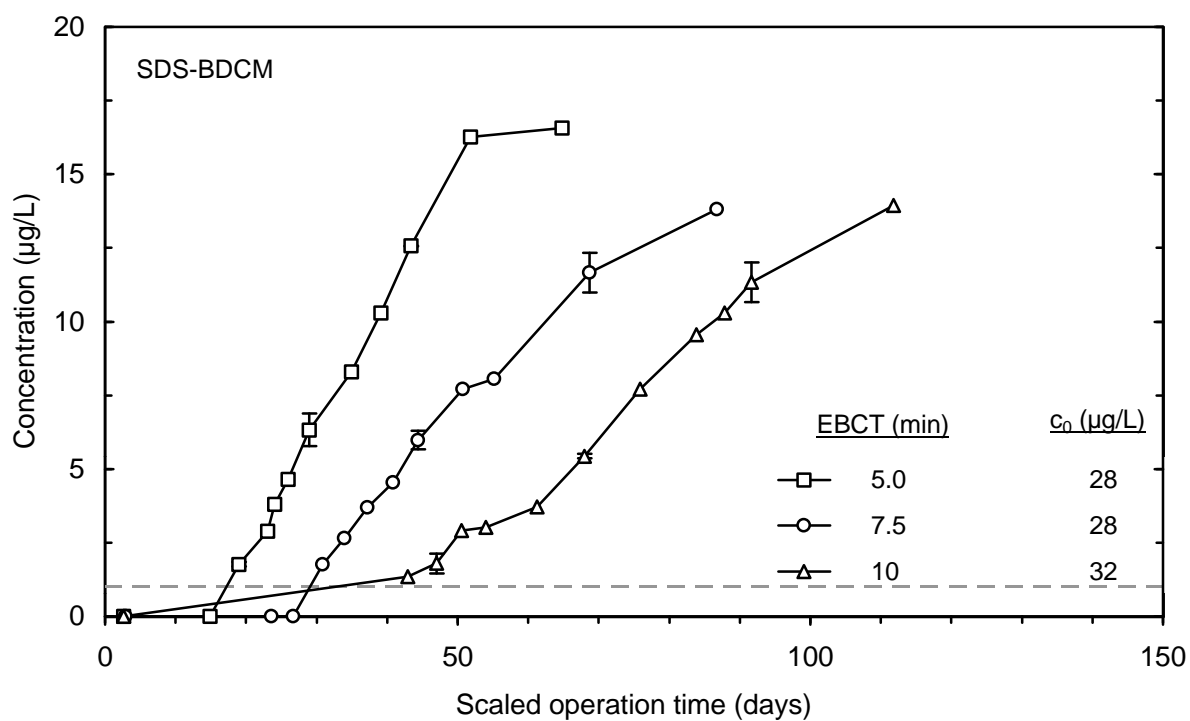


Figure 68 Impact of EBCT (5.0 to 10 minutes) on SDS-BDCM breakthrough

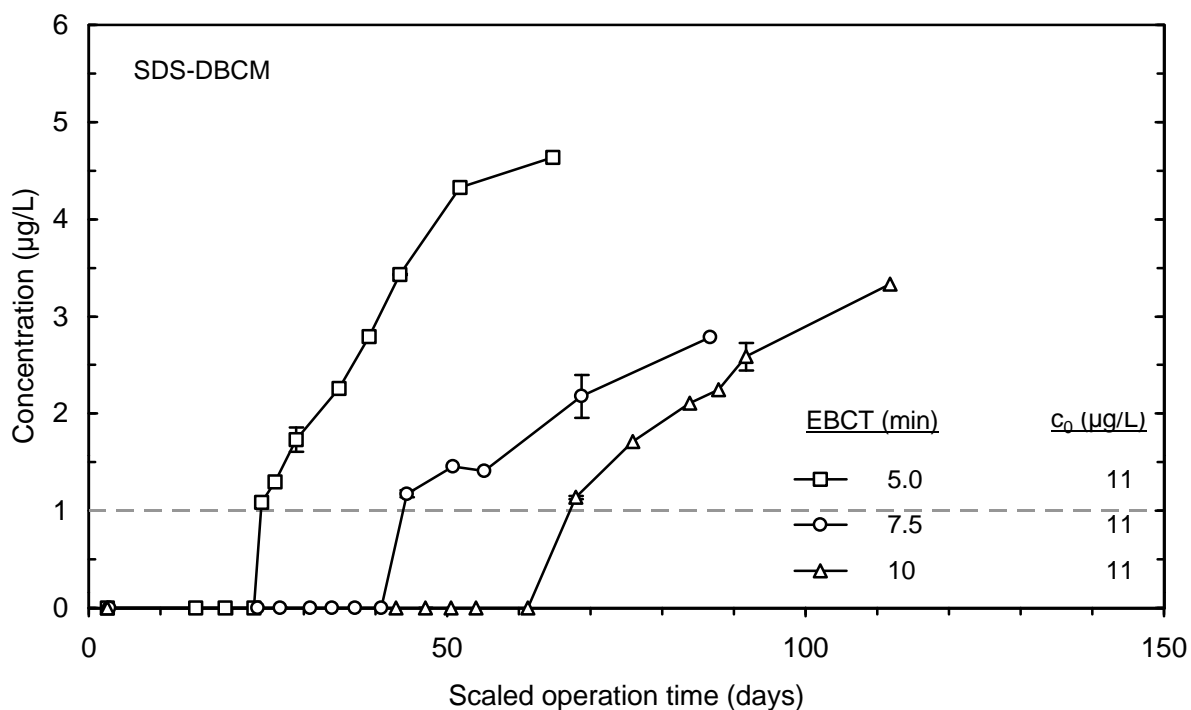


Figure 69 Impact of EBCT (5.0 to 10 minutes) on SDS-DBCM breakthrough

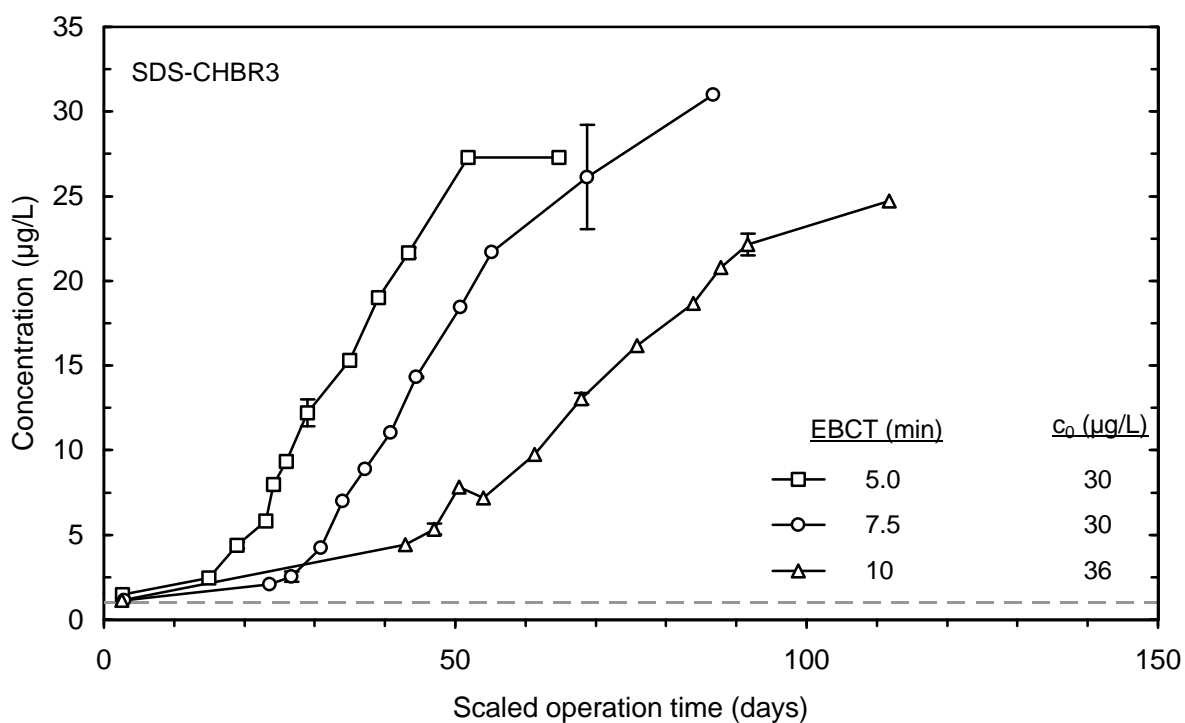


Figure 70 Impact of EBCT (5.0 to 10 minutes) on SDS-CHBR3 breakthrough

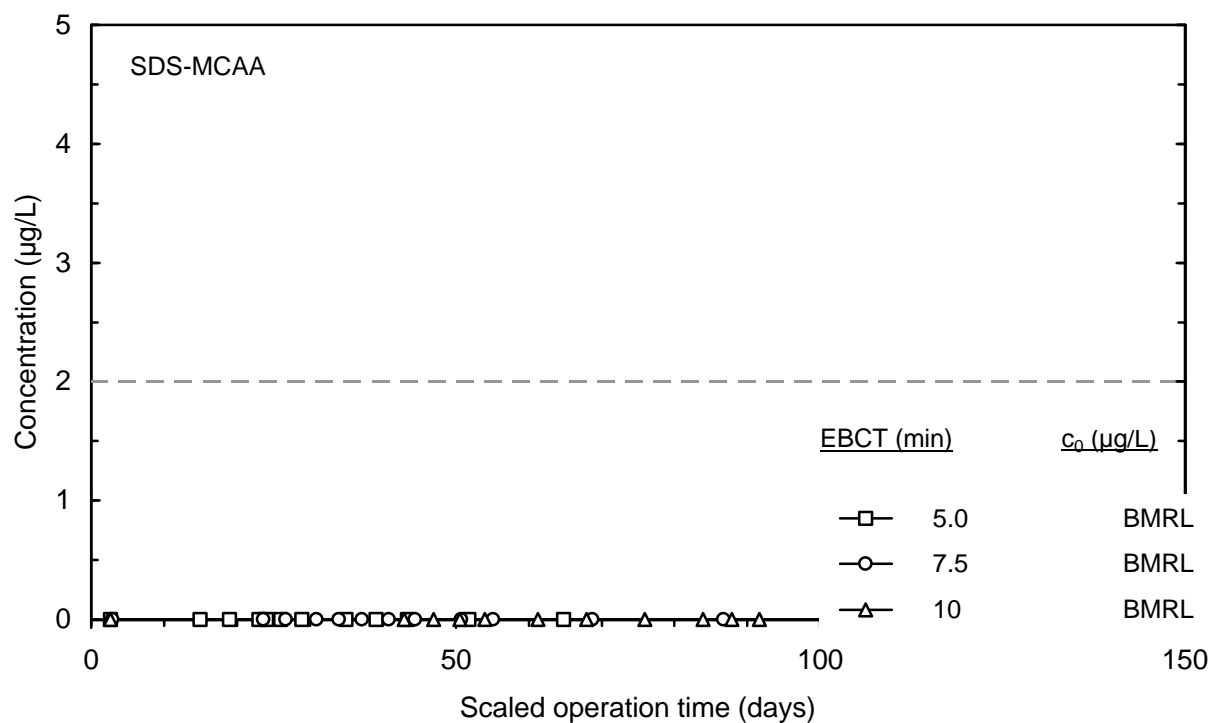


Figure 71 Impact of EBCT (5.0 to 10 minutes) on SDS-MCAA breakthrough

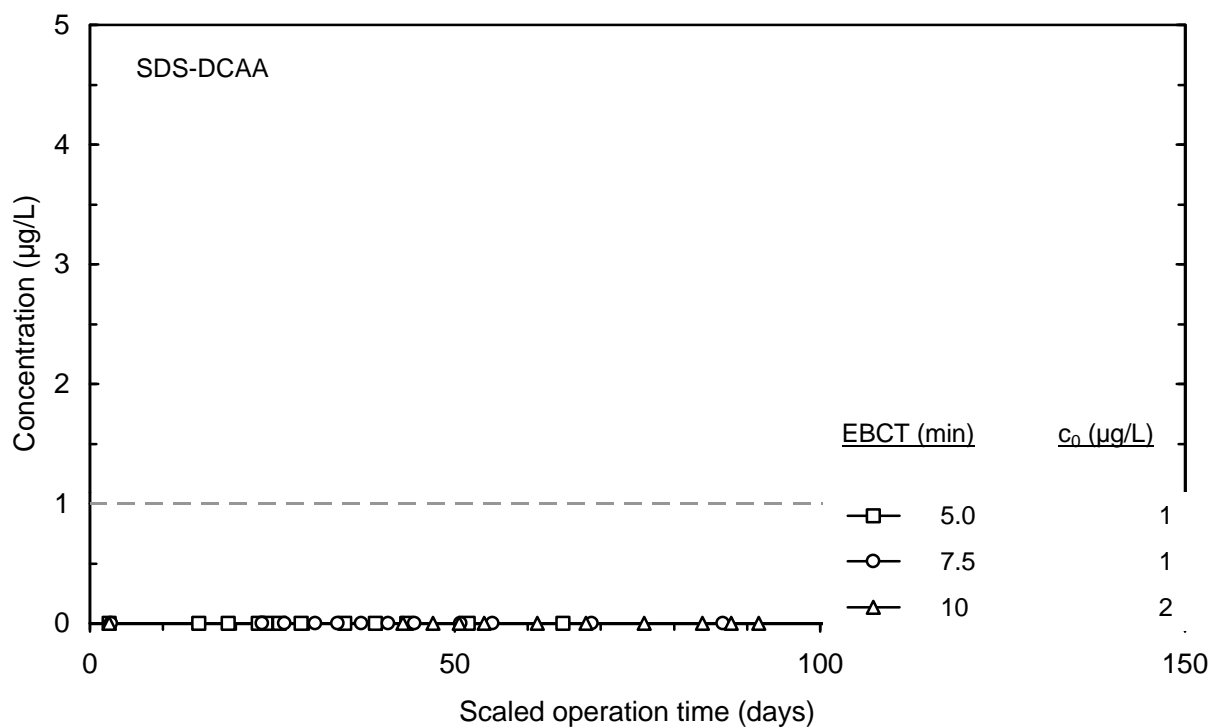


Figure 72 Impact of EBCT (5.0 to 10 minutes) on SDS-DCAA breakthrough

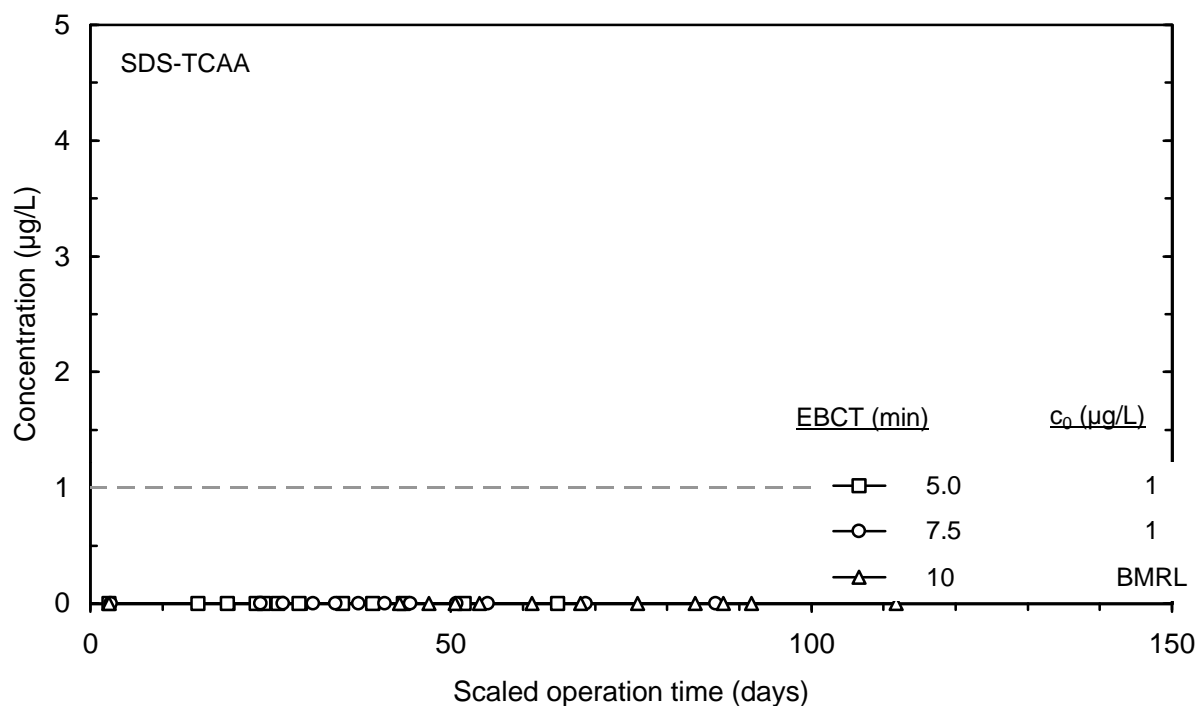


Figure 73 Impact of EBCT (5.0 to 10 minutes) on SDS-TCAA breakthrough

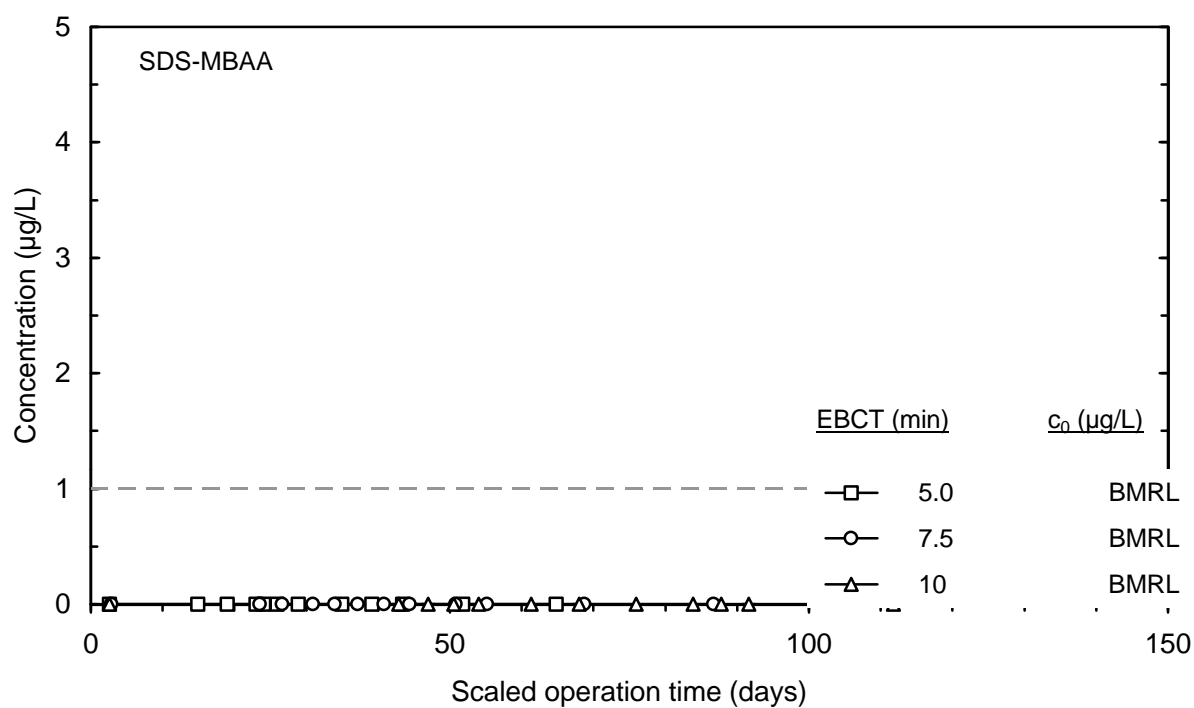


Figure 74 Impact of EBCT (5.0 to 10 minutes) on SDS-MBAA breakthrough

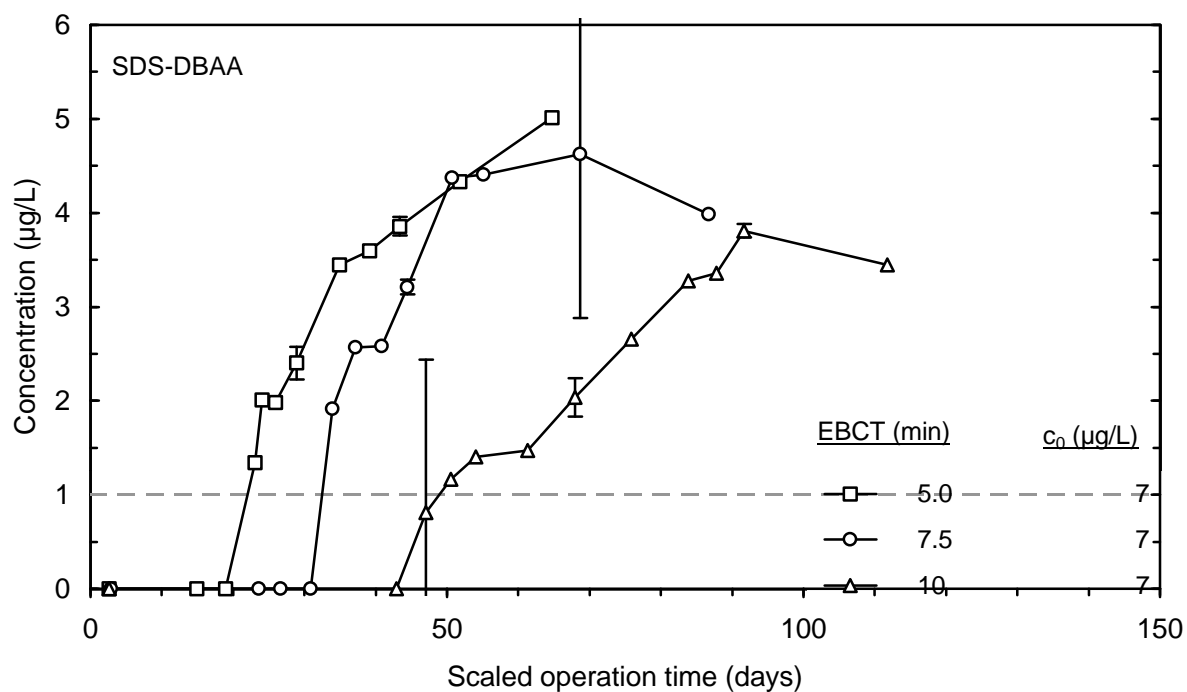


Figure 75 Impact of EBCT (5.0 to 10 minutes) on SDS-DBAA breakthrough

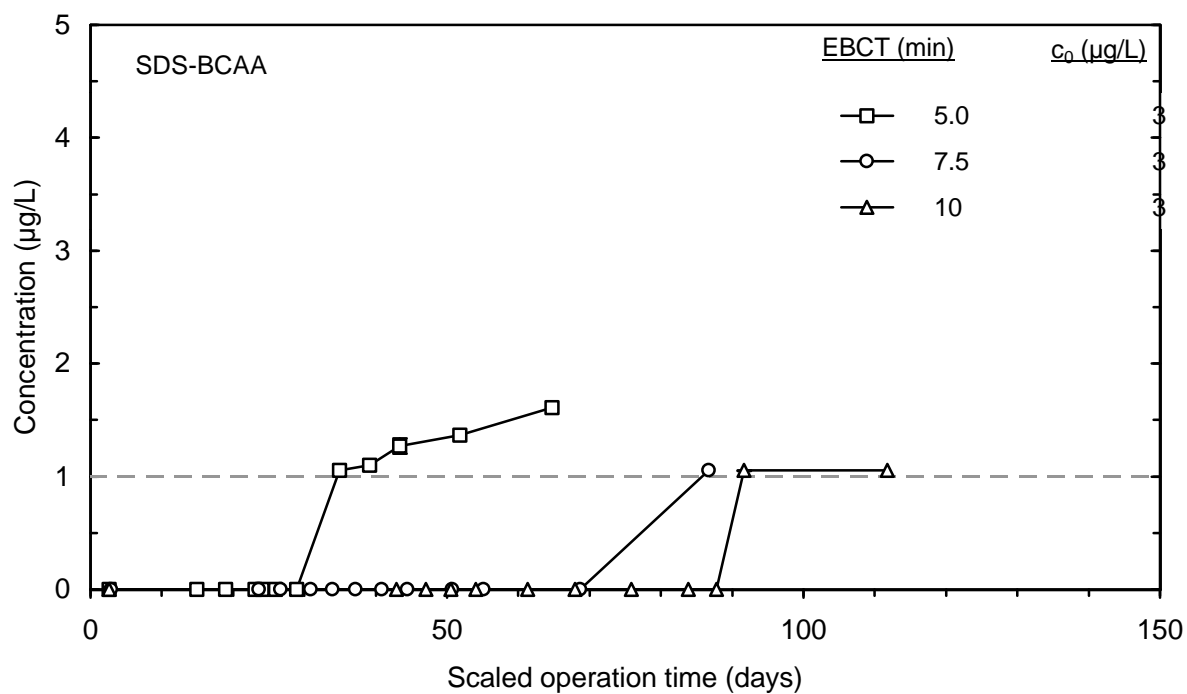


Figure 76 Impact of EBCT (5.0 to 10 minutes) on SDS-BCAA breakthrough

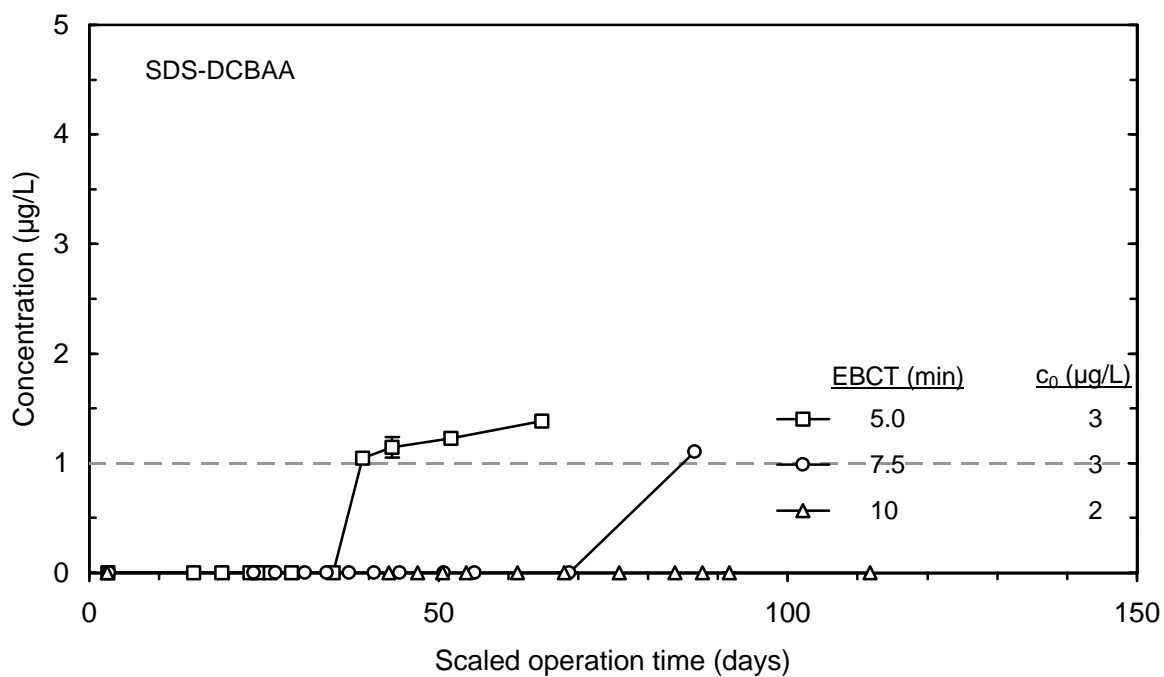


Figure 77 Impact of EBCT (5.0 to 10 minutes) on SDS-DCBAA breakthrough

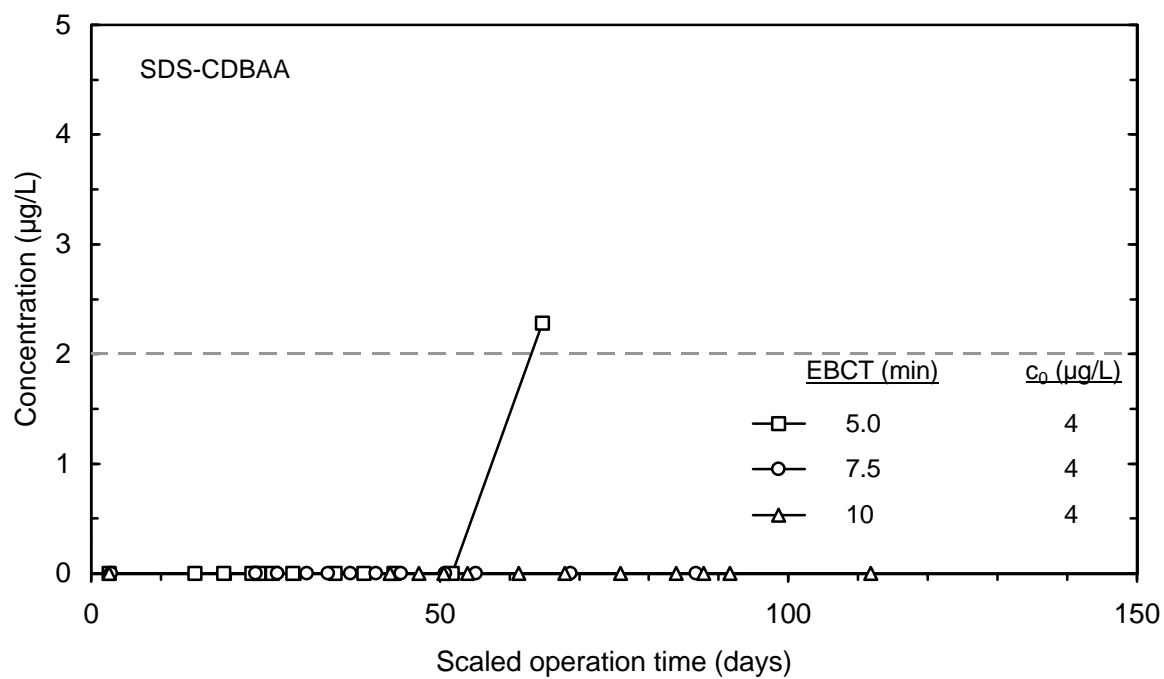


Figure 78 Impact of EBCT (5.0 to 10 minutes) on SDS-CDBAA breakthrough

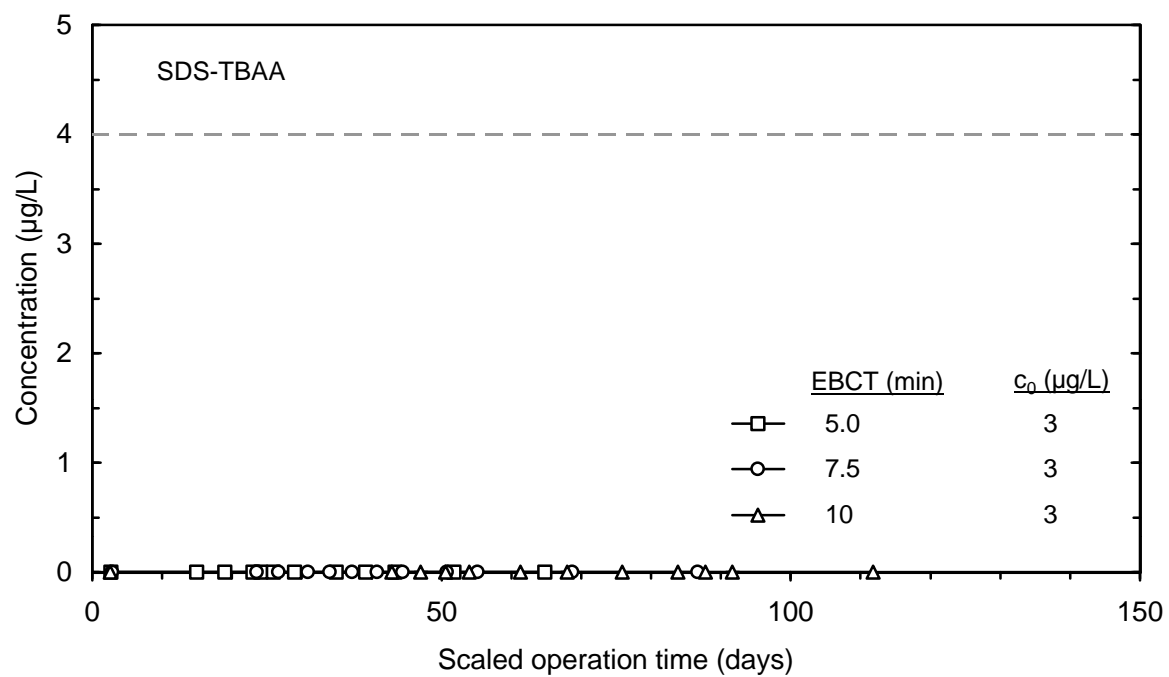


Figure 79 Impact of EBCT (5.0 to 10 minutes) on SDS-TBAA breakthrough

9

Impact of Influent pH

9 Impact of Influent pH

Using a batch of water sampled in July, three RSSCTs were operated at a constant EBCT (10 minutes). One contactor received water at pH 7.4, the target influent pH used during the EBCT study. The remaining two contactors received influent water adjusted to pH values of 7.0 and 7.8. The pH adjustment step to 7.0 simulates an acid adjustment pretreatment step to improve GAC performance by decreasing the influent pH. The influent pH run at 7.8 simulates moving the point of GAC adsorption to after caustic addition, currently performed at the plant to raise the pH from 7.4 to 7.8. The influent water quality for each contactor is summarized in Table 16. SDS chlorination for all three influent pH contactors was conducted under constant conditions, including pH, summarized in Table 10. Therefore, pH only affected adsorption of DBP precursors; all samples were buffered to pH 7.7 prior to SDS chlorination.

The effluent pH and temperature for the three influent pH contactors was also monitored. The results are summarized in Table 24. The variability of both effluent pH and temperature was very low during all runs.

Figure 80 shows the impact of influent pH on TOC breakthrough. A small range of effluent TOC breakthrough behavior was observed, with run times to an effluent concentration of 1.0 mg/L ranging from 84 to 97 days. Run times to 70 percent TOC breakthrough ranged from 123 to 126 days. As influent pH was decreased from 7.8 to 7.0, the effluent TOC profiles shifted to the right, indicating improved performance at lower influent pH. The level of immediate breakthrough was similar for all three runs; the point of initial breakthrough (effluent concentrations beginning to increase above immediate breakthrough levels) shifted to the right, from 25 to 37 days, with decreasing influent pH. At higher run times, above 100 days, the three curves showed a convergence. The impact of influent pH on UV₂₅₄ breakthrough is shown in Figure 81. For the adsorption of UV-absorbing compounds, no significant benefit was achieved by decreasing the influent pH from 7.4 to 7.0. However, a shift to the left in the UV₂₅₄ breakthrough curve profile occurred when influent pH was increased from 7.4 to 7.8.

A comparison of SDS-THM4 breakthrough for the three influent pH values is shown in Figure 82. As was observed for TOC breakthrough, the control of THM4 precursors improved with decreasing influent pH. The gain in GAC performance from adjusting the influent pH from 7.4 to 7.0 was approximately equal in magnitude to the loss from adjusting the influent pH from 7.4 to 7.8.

The results obtained during the influent pH study for SDS-HAA5, SDS-HAA6, and SDS-HAA9 are shown in Figures 83, 84, and 85, respectively. Very low effluent SDS-HAA levels were measured for all three runs. Although HAA precursor removal tended to improve with decreasing pH, the improvement was not consistent throughout the entire run time, and the determination was made difficult by the low levels formed.

The impact of influent pH on SDS-TOX breakthrough is shown in Figure 86. The results paralleled those observed for UV₂₅₄ breakthrough: a large difference in performance was associated with the change in influent pH from 7.4 to 7.8, while little gain was made in TOX precursor removal by decreasing the pH from 7.4 to 7.0.

Plots of effluent SDS chlorine demand are shown in Figure 87. As was observed during the EBCT study, SDS-CLD either did not increase with time or decreased with time, indicating a decrease in inorganic chlorine demand during the run.

Tables 25 through 27 summarize run times to various GAC effluent criteria for the three influent pH runs. The mean, standard deviation, and percent standard deviation of the run times are also tabulated. Based on the calculated run times, the corresponding concentration of other measured parameters (DBP precursor surrogates and SDS-DBPs) at that run time were also calculated.

Bar graph plots of run times to TOC, UV_{254} , THM4, and HAA5 criteria were generated. Figures 88 and 89 summarize run times to effluent TOC and UV_{254} criteria, and Figures 90 and 91 summarize run times to effluent SDS-THM4 and SDS-HAA5 criteria. For cases where the effluent concentration did not reach the run time criterion, no bar is shown. For all influent pH contactors, neither Stage 1 or 2 HAA5 criteria were exceeded. Stage 2 THM4 criteria were also not exceeded.

Figures 92, 93, 94, and 95 show the breakthrough of formed $CHCl_3$, BDCM, DBCM, and $CHBr_3$, respectively, for all three influent pH contactors. Overall, the same THM speciation behavior observed during the EBCT study was evident: $CHBr_3$ was the dominant species present in the GAC effluent of all influent pH contactors. In general, THM species precursor removal improved with decreasing influent pH. This trend was evident in the SDS-BDCM and SDS- $CHBr_3$ breakthrough curve data; the low levels of SDS-DBCM measured resulted in less clearly defined trends.

The breakthrough of the nine HAA species for the influent pH runs is shown in Figures 96 through 104. SDS-DBAA was the only species detected in the effluent of all three contactors at significant levels, although these did not exceed $7 \mu\text{g/L}$ for any contactor. Only slight differences in breakthrough occurred, and the low levels measured prevented the determination of clear effects of influent pH on effluent SDS-DBAA levels.

Effluent sample number	Effluent pH			Effluent temperature (°C)		
	7.0	7.4	7.8	7.0	7.4	7.8
1	7.4	8.1	8.3	24	24	24
2	7.8	8.1	8.2	23	23	23
3	7.9	8.2	8.3	23	24	23
4	7.8	8.1	8.3	23	23	24
5	7.7	8.0	8.3	23	23	23
6	7.6	7.9	8.3	23	23	24
7	7.8	8.0	8.2	23	23	22
8	7.7	7.9	8.2	23	23	24
9	7.7	8.0	8.3	23	23	24
10	7.7	8.1	8.3	24	23	24
11	7.7	8.0	8.2	23	23	23
12	7.6	8.1	8.3	23	23	23
13	7.7	8.0	8.3	24	23	23
Mean	7.7	8.0	8.3	23	23	23
Standard deviation	±0.1	±0.1	±0.0	±0.4	±0.5	±0.5
Percent standard deviation	1	1	1	2	2	2

Table 24 GAC effluent pH and temperature data for influent pH 7.0, 7.4, and 7.8 contactors

Parameter	Units	Influent concentration	Breakthrough criterion	Value of listed parameter when breakthrough criterion is met (single contactor)								
				Run time (days)	Throughput (bed volumes)	TOC (mg/L)	UV ₂₅₄ (1/cm)	SDS-THM4 (µg/L)	SDS-HAA5 (µg/L)	SDS-HAA6 (µg/L)	SDS-HAA9 (µg/L)	SDS-TOX (µg Cl ⁻ /L)
TOC	(mg/L)	1.8	2.0	*	*							
			1.0	97	13,940	1.0	0.016	27	4	4	4	42
			0.9†	85	12,240	0.9	0.013	20	3	3	3	35
UV ₂₅₄	(1/cm)	0.047	0.040	*	*							
			0.020	118	16,970	1.2	0.020	35	5	6	6	56
			0.024†	137	19,750	1.3	0.024	47	6	7	11	69
SDS-THM4	(µg/L)	84	80	*	*							
			64	*	*							
			32	108	15,590	1.1	0.018	32	5	6	6	51
SDS-HAA5	(µg/L)	8	48	*	*							
			24	*	*							
SDS-HAA6	(µg/L)	11	48	*	*							
			24	*	*							
SDS-HAA9	(µg/L)	21	48	*	*							
			24	*	*							
SDS-TOX	(µg Cl ⁻ /L)	139	120	*	*							
			70	138	19,850	1.3	0.024	47	6	7	11	70

†GAC effluent concentration equal to 50 percent of the average influent concentration.

*Effluent concentration criteria not exceeded during GAC run time, value of listed parameter is left blank.

#Data not available for listed parameter at given breakthrough criterion.

Table 25 Run times to selected GAC effluent criteria (influent pH 7.0)

Parameter	Units	Influent concentration	Breakthrough criterion	Value of listed parameter when breakthrough criterion is met (single contactor)								
				Run time (days)	Throughput (bed volumes)	TOC (mg/L)	UV ₂₅₄ (1/cm)	SDS-THM4 (µg/L)	SDS-HAA5 (µg/L)	SDS-HAA6 (µg/L)	SDS-HAA9 (µg/L)	SDS-TOX (µg Cl ⁻ /L)
TOC	(mg/L)	1.8	2.0	*	*							
			1.0	92	13,230	1.0	0.015	27	4	4	4	41
			0.9†	79	11,360	0.9	0.012	20	3	3	3	33
UV ₂₅₄	(1/cm)	0.047	0.040	*	*							
			0.020	113	16,210	1.2	0.020	37	5	5	5	57
			0.024†	131	18,900	1.3	0.024	#	#	#	#	#
SDS-THM4	(µg/L)	84	80	*	*							
			64	*	*							
			32	102	14,700	1.1	0.017	32	4	4	4	48
SDS-HAA5	(µg/L)	8	48	*	*							
			24	*	*							
SDS-HAA6	(µg/L)	11	48	*	*							
			24	*	*							
SDS-HAA9	(µg/L)	21	48	*	*							
			24	*	*							
SDS-TOX	(µg Cl ⁻ /L)	139	120	*	*							
			70	*	*							

†GAC effluent concentration equal to 50 percent of the average influent concentration.

*Effluent concentration criteria not exceeded during GAC run time, value of listed parameter is left blank.

#Data not available for listed parameter at given breakthrough criterion.

Table 26 Run times to selected GAC effluent criteria (influent pH 7.4)

Parameter	Units	Influent concentration	Breakthrough criterion	Value of listed parameter when breakthrough criterion is met (single contactor)								
				Run time (days)	Throughput (bed volumes)	TOC (mg/L)	UV ₂₅₄ (1/cm)	SDS-THM4 (µg/L)	SDS-HAA5 (µg/L)	SDS-HAA6 (µg/L)	SDS-HAA9 (µg/L)	SDS-TOX (µg Cl ⁻ /L)
TOC	(mg/L)	1.8	2.0	*	*							
			1.0	84	12,060	1.0	0.016	28	4	4	4	44
			0.9†	72	10,430	0.9	0.013	22	3	3	3	34
UV ₂₅₄	(1/cm)	0.047	0.040	*	*							
			0.020	102	14,630	1.1	0.020	34	4	4	4	58
			0.024†	128	18,480	1.3	0.024	#	#	#	#	#
SDS-THM4	(µg/L)	84	80	*	*							
			64	*	*							
			32	95	13,650	1.1	0.019	32	4	4	4	53
SDS-HAA5	(µg/L)	8	48	*	*							
			24	*	*							
SDS-HAA6	(µg/L)	11	48	*	*							
			24	*	*							
SDS-HAA9	(µg/L)	21	48	*	*							
			24	*	*							
SDS-TOX	(µg Cl ⁻ /L)	139	120	*	*							
			70	*	*							

†GAC effluent concentration equal to 50 percent of the average influent concentration.

*Effluent concentration criteria not exceeded during GAC run time, value of listed parameter is left blank.

#Data not available for listed parameter at given breakthrough criterion.

Table 27 Run times to selected GAC effluent criteria (influent pH 7.8)

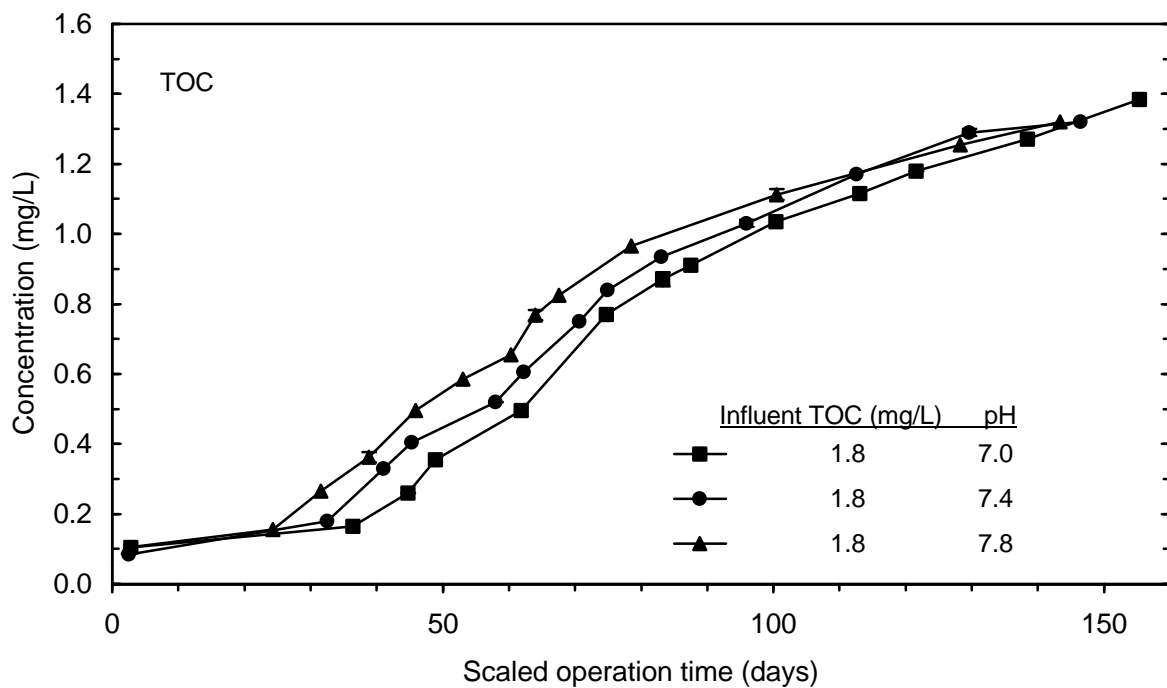


Figure 80 Impact of influent pH on TOC breakthrough for 10 minute EBCT contactors

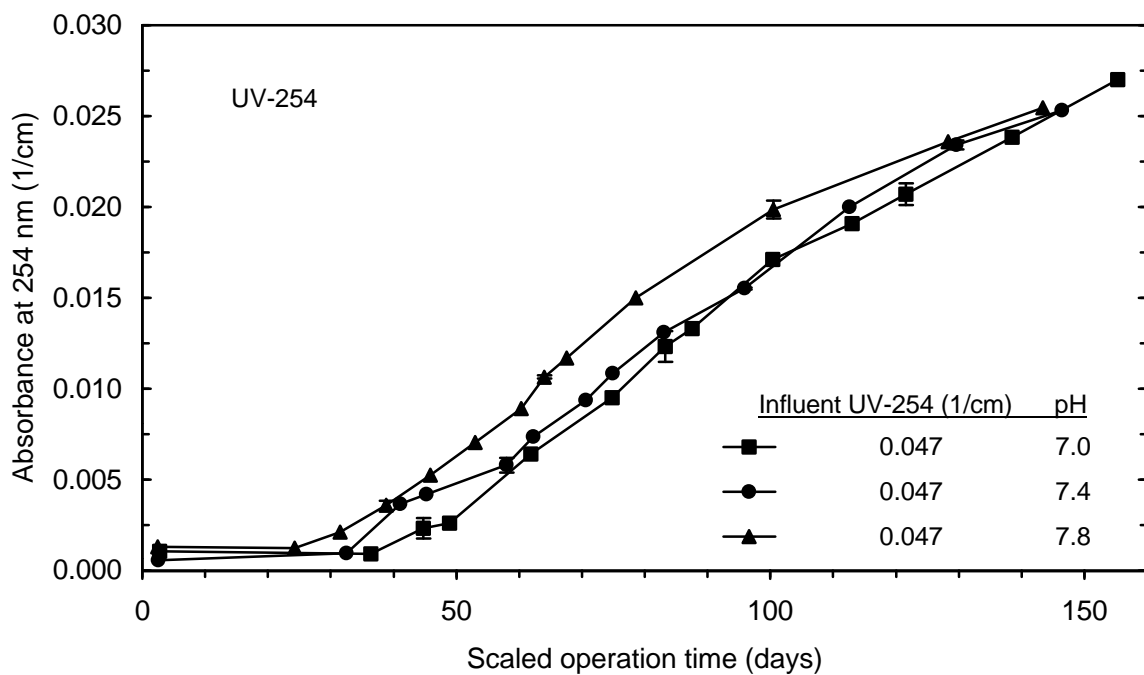


Figure 81 Impact of influent pH on UV-254 breakthrough for 10 minute EBCT contactors

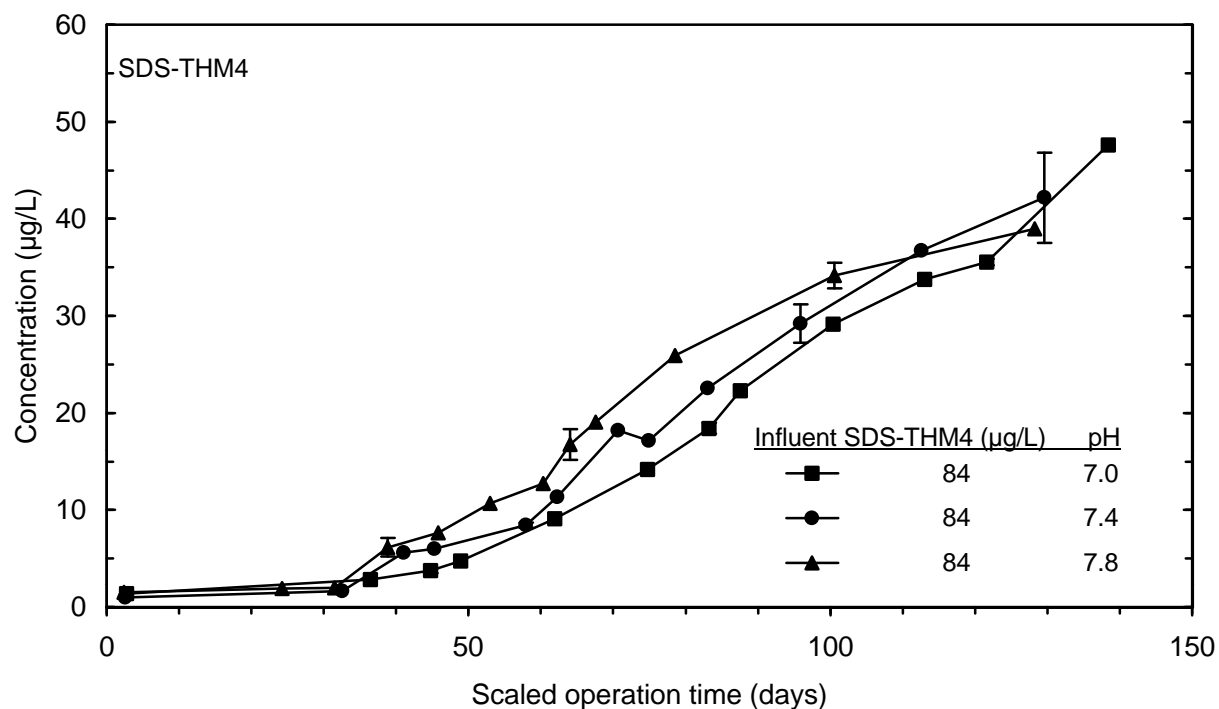


Figure 82 Impact of influent pH on SDS-THM4 breakthrough for 10 minute EBCT contactors

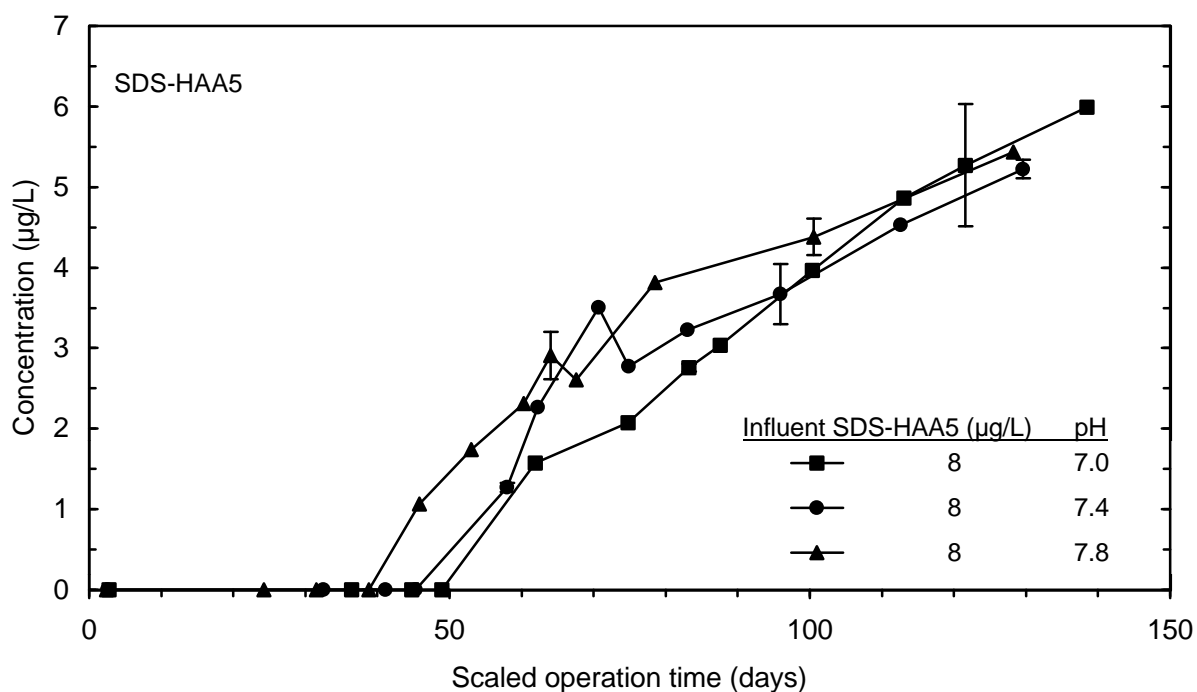


Figure 83 Impact of influent pH on SDS-HAA5 breakthrough for 10 minute EBCT contactors

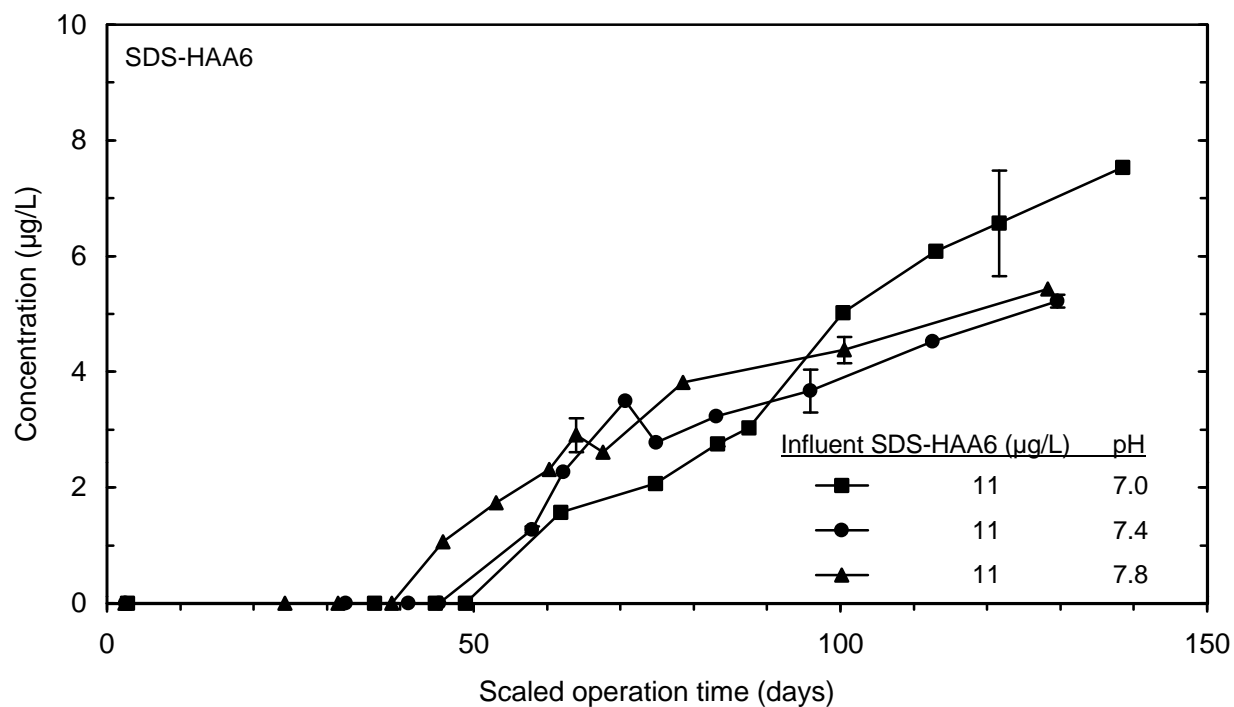


Figure 84 Impact of influent pH on SDS-HAA6 breakthrough for 10 minute EBCT contactors

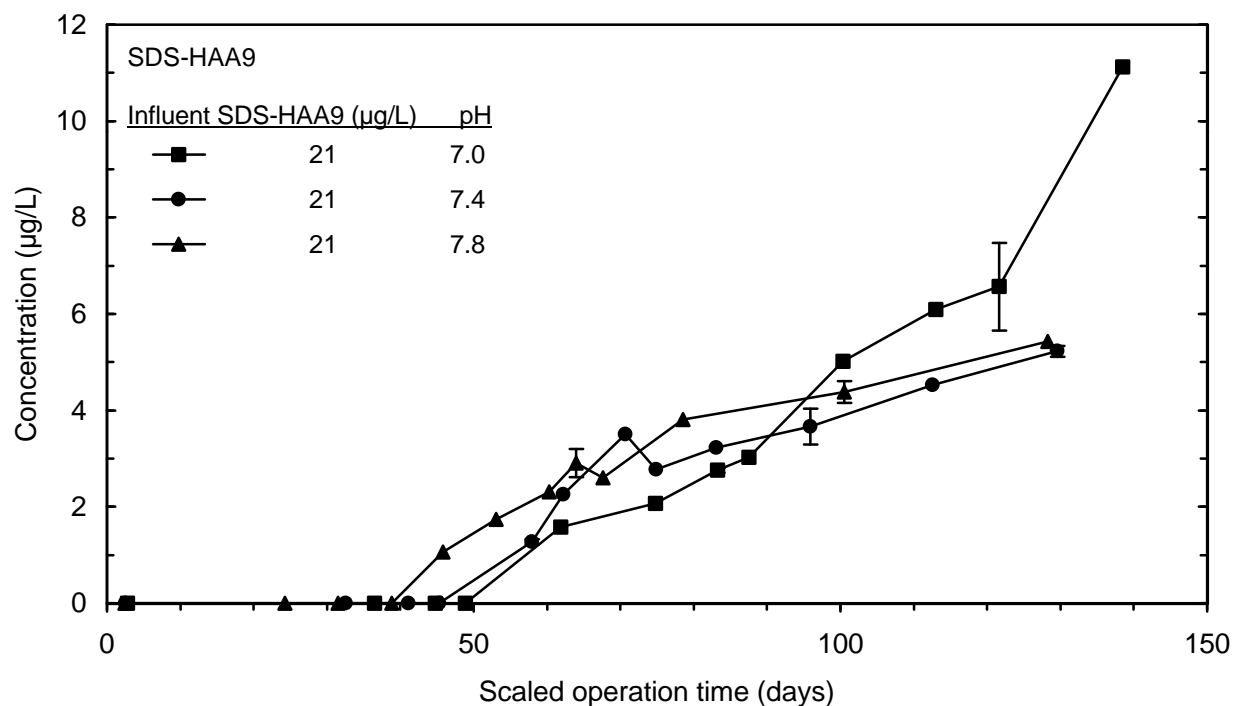


Figure 85 Impact of influent pH on SDS-HAA9 breakthrough for 10 minute EBCT contactors

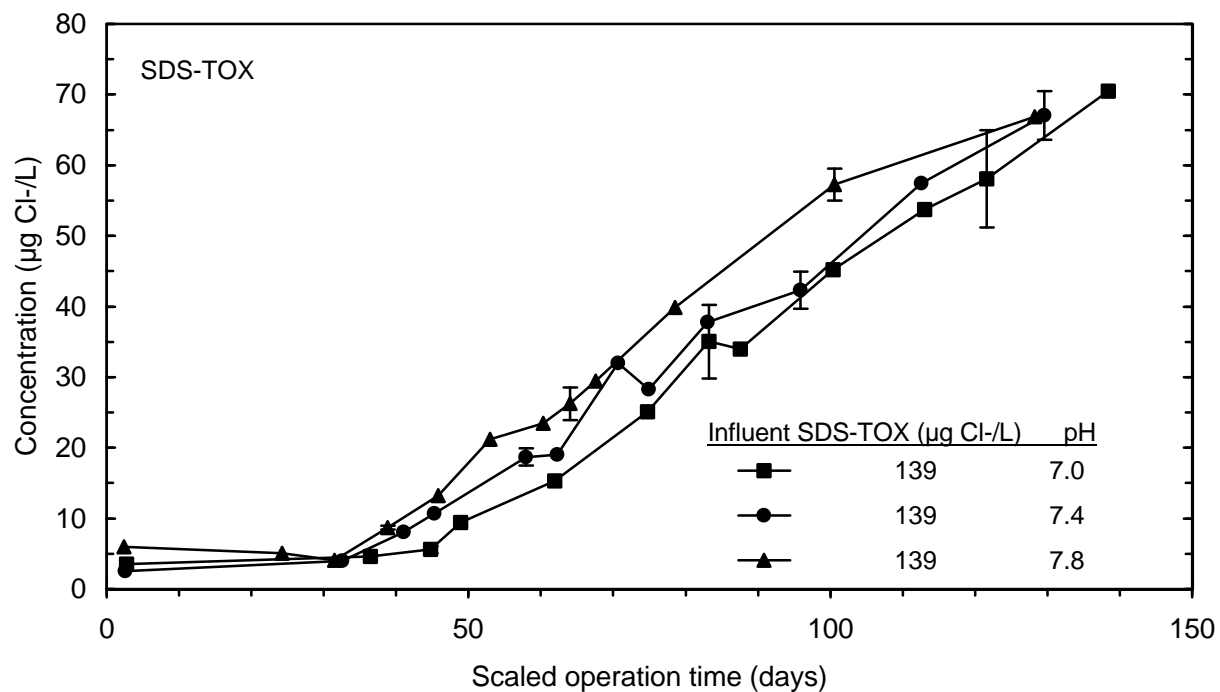


Figure 86 Impact of influent pH on SDS-TOX breakthrough for 10 minute EBCT contactors

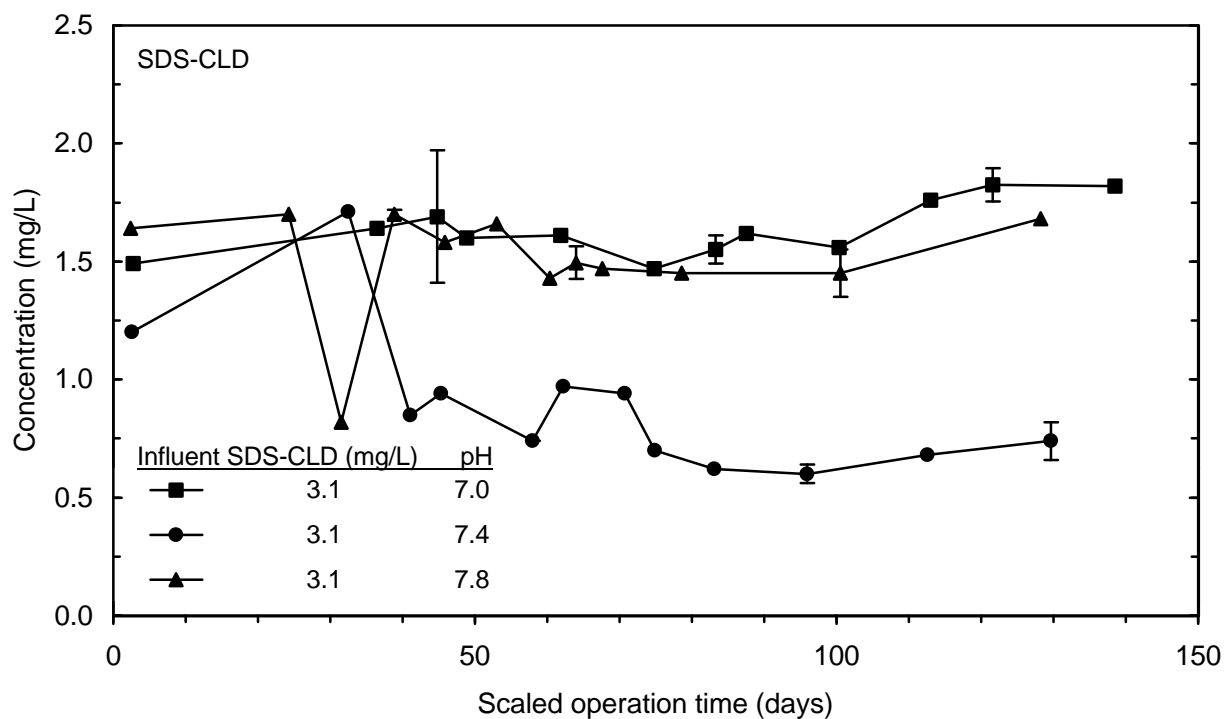


Figure 87 Impact of influent pH on SDS-CLD breakthrough for 10 minute EBCT contactors

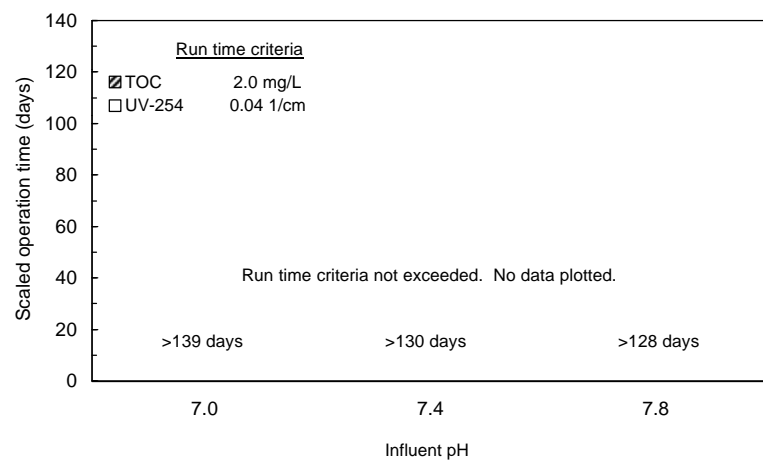


Figure 88 Impact of pH on run times based on single contactor breakthrough curves for TOC and UV-254 effluent criteria (high)

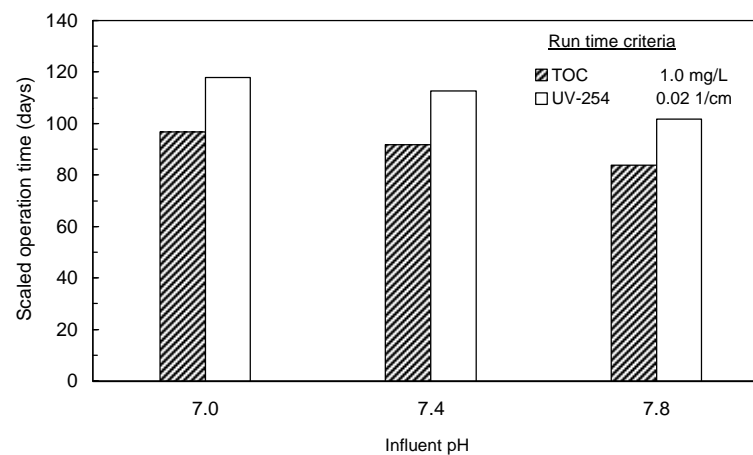


Figure 89 Impact of pH on run times based on single contactor breakthrough curves for TOC and UV-254 effluent criteria (low)

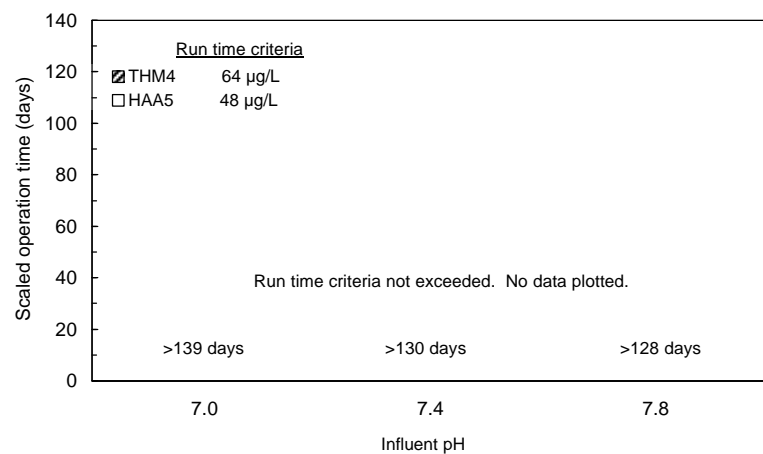


Figure 90 Impact of pH on run times based on single contactor breakthrough curves for Stage 1 THM4 and HAA5 effluent criteria

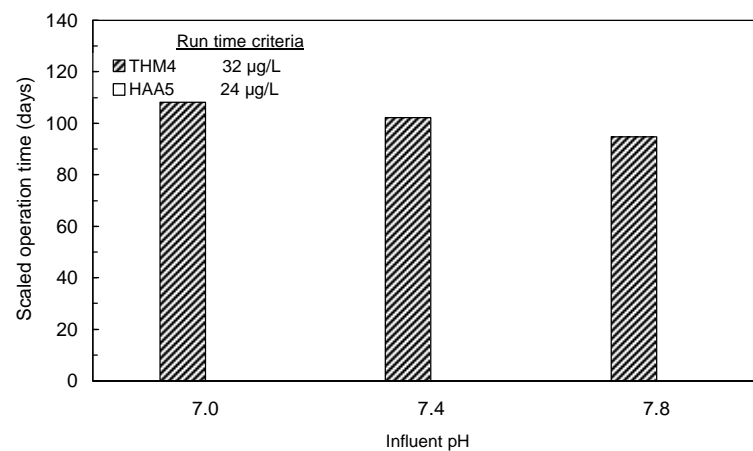


Figure 91 Impact of pH on run times based on single contactor breakthrough curves for Stage 2 THM4 and HAA5 effluent criteria

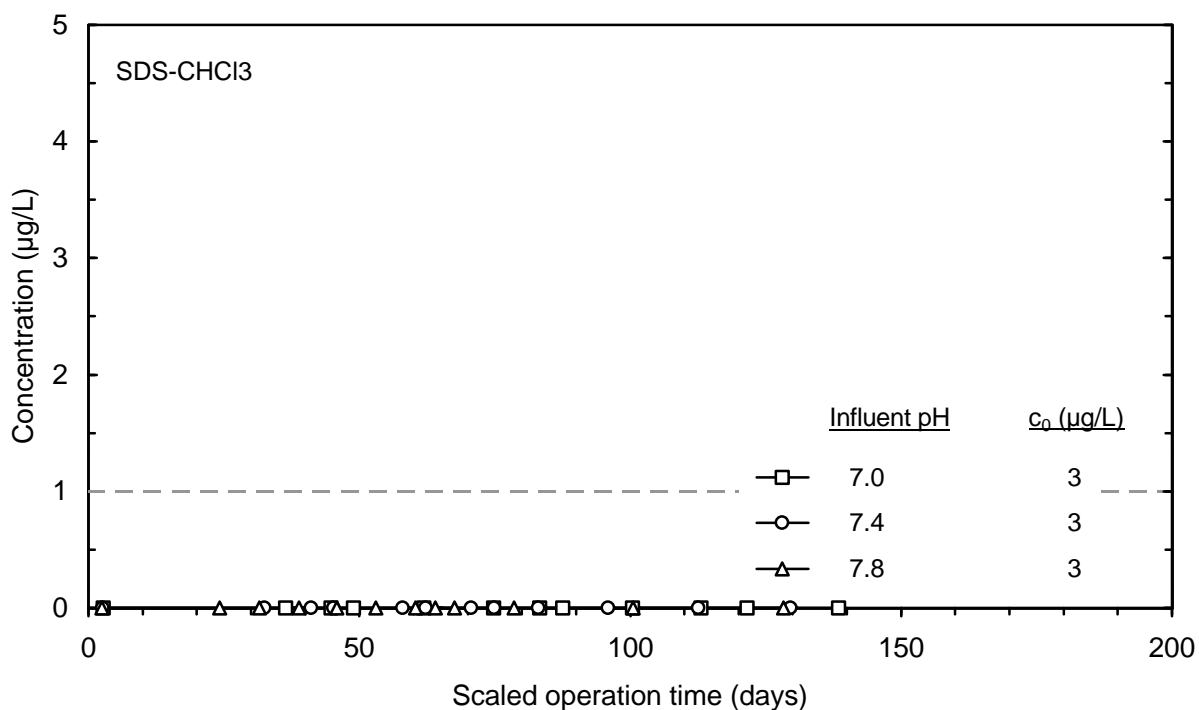


Figure 92 Impact of influent pH on SDS-CHCl₃ breakthrough for 10 minute EBCT contactors

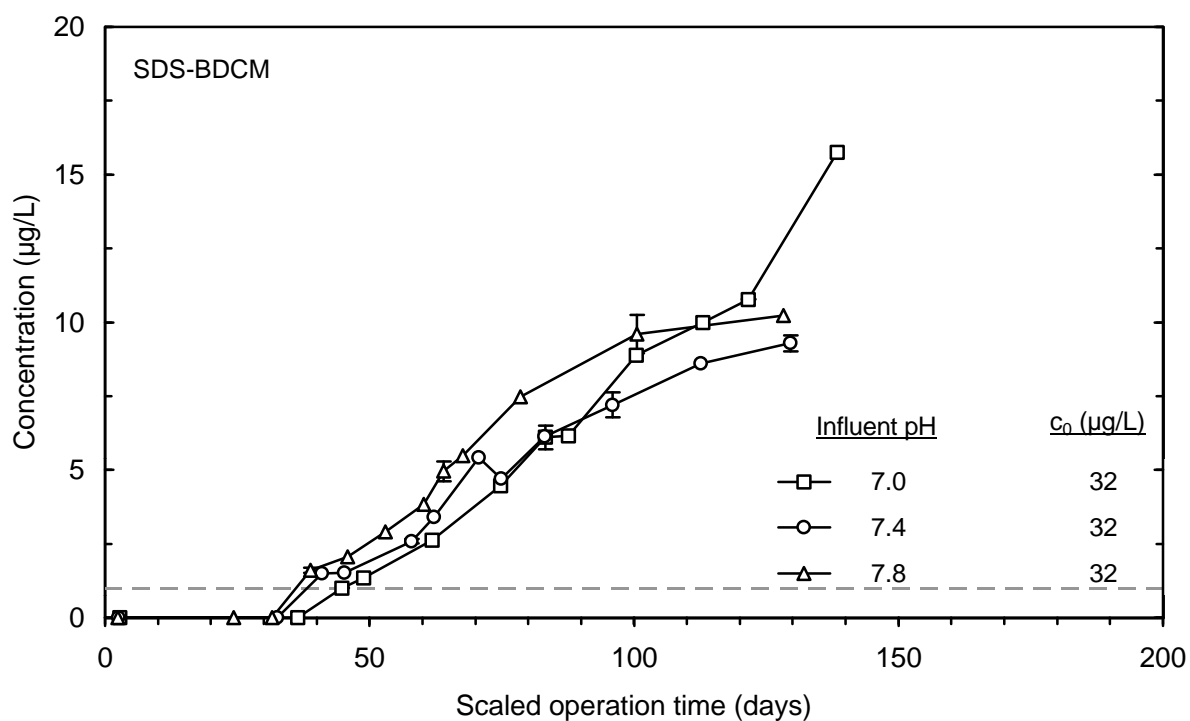


Figure 93 Impact of influent pH on SDS-BDCM breakthrough for 10 minute EBCT contactors

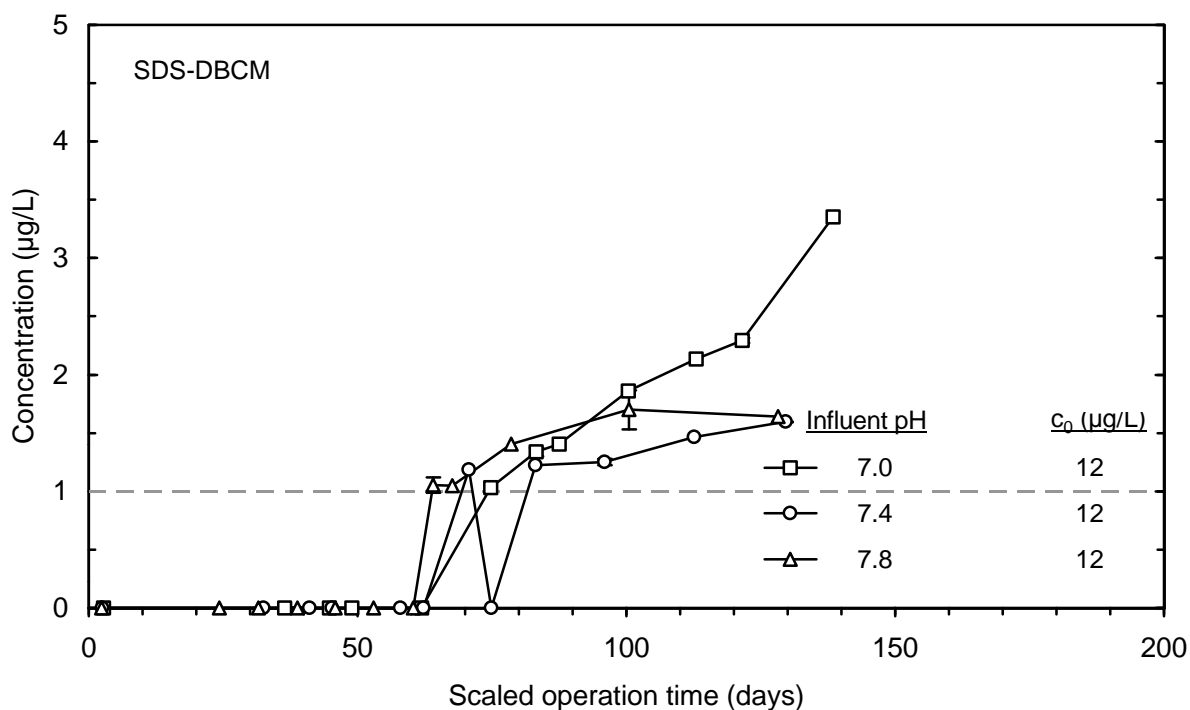


Figure 94 Impact of influent pH on SDS-DBCM breakthrough for 10 minute EBCT contactors

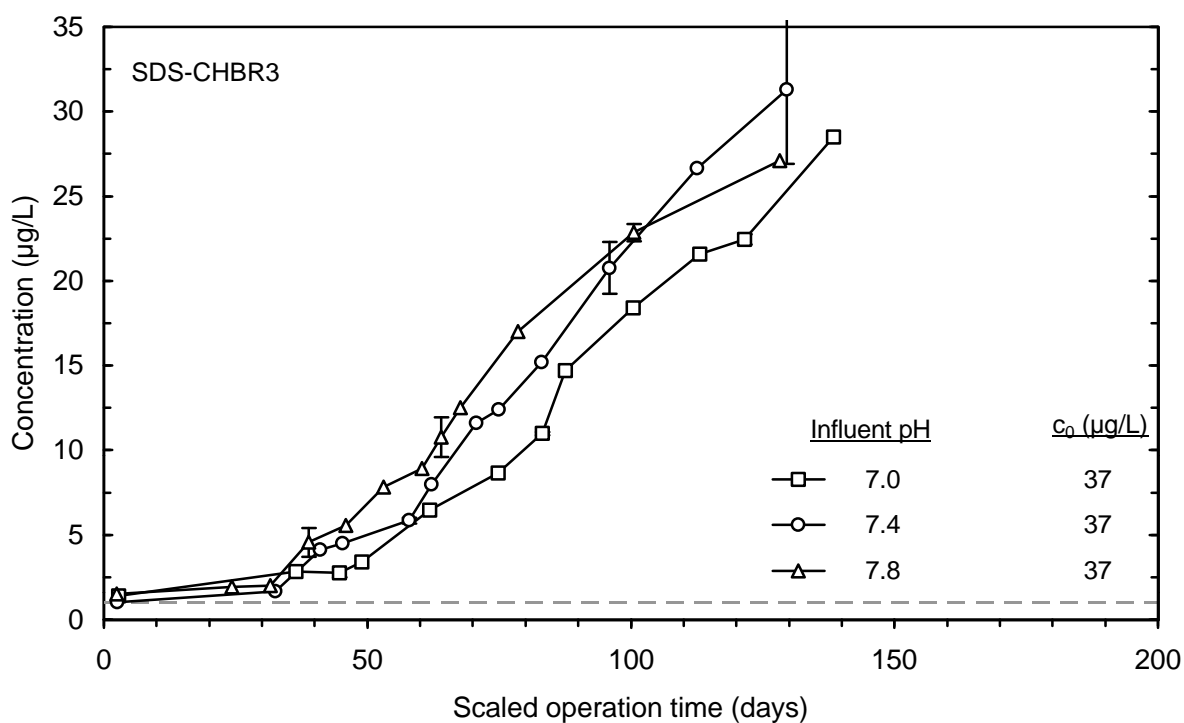


Figure 95 Impact of influent pH on SDS-CHBR3 breakthrough for 10 minute EBCT contactors

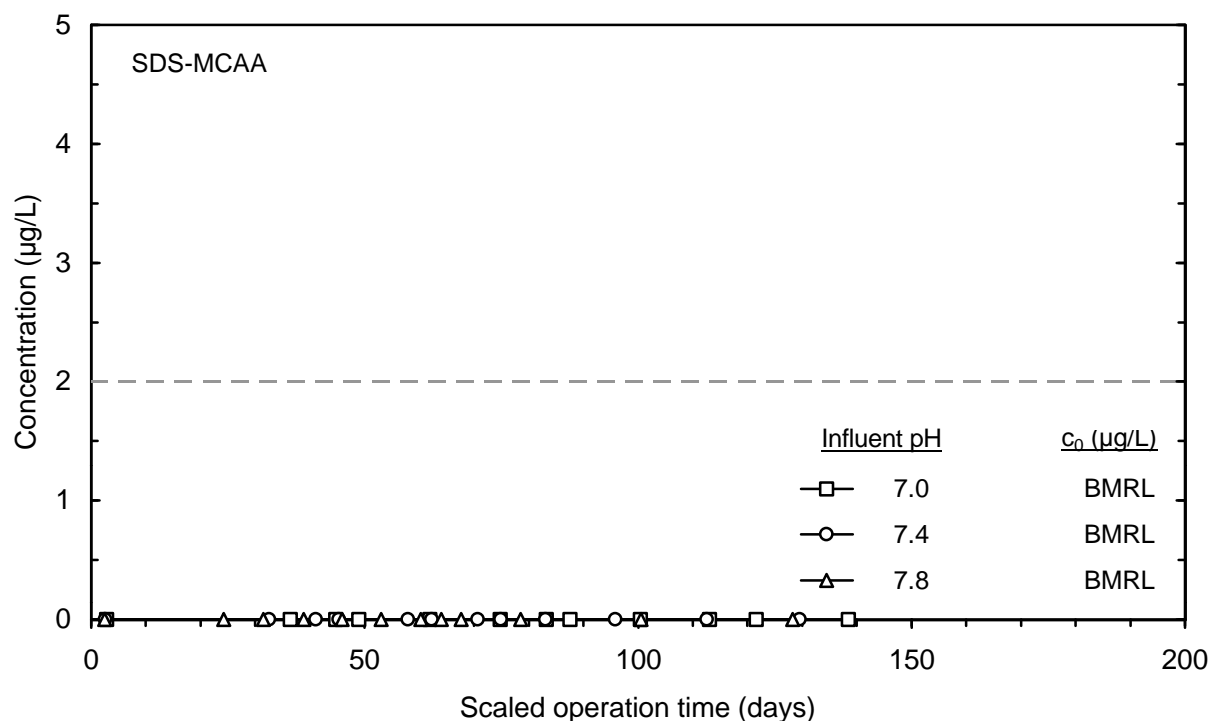


Figure 96 Impact of influent pH on SDS-MCAA breakthrough for 10 minute EBCT contactors

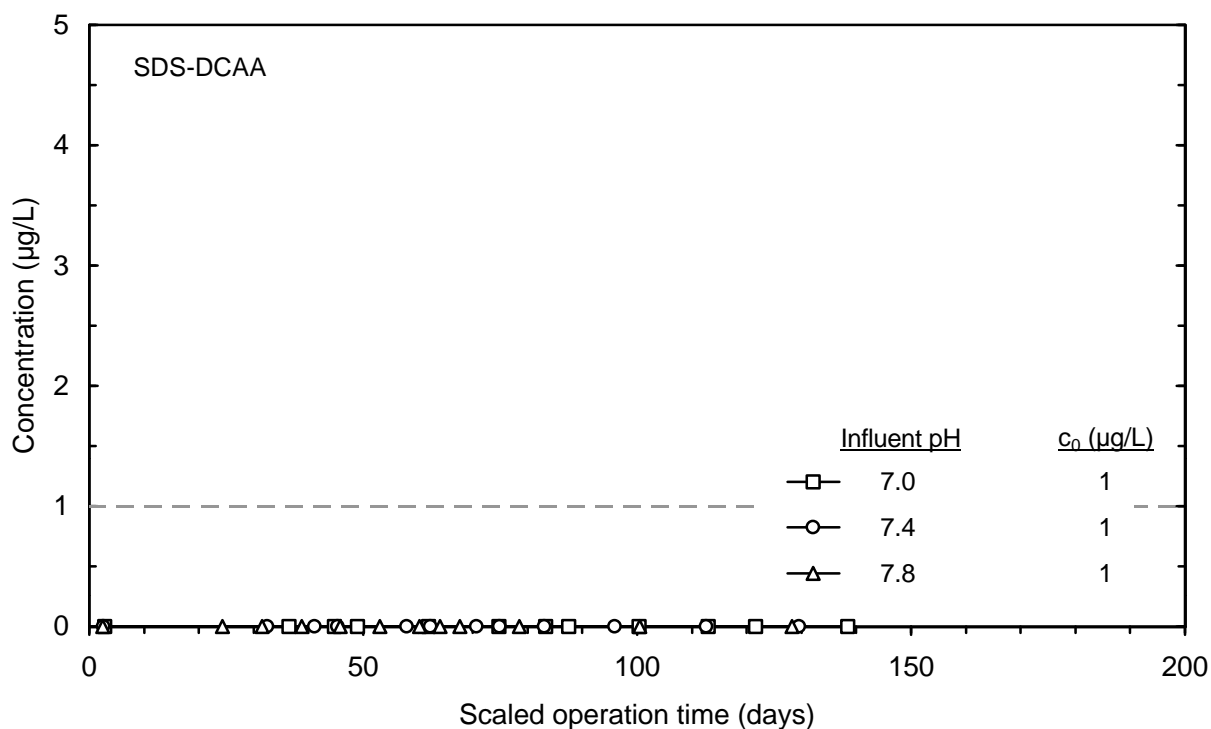


Figure 97 Impact of influent pH on SDS-DCAA breakthrough for 10 minute EBCT contactors

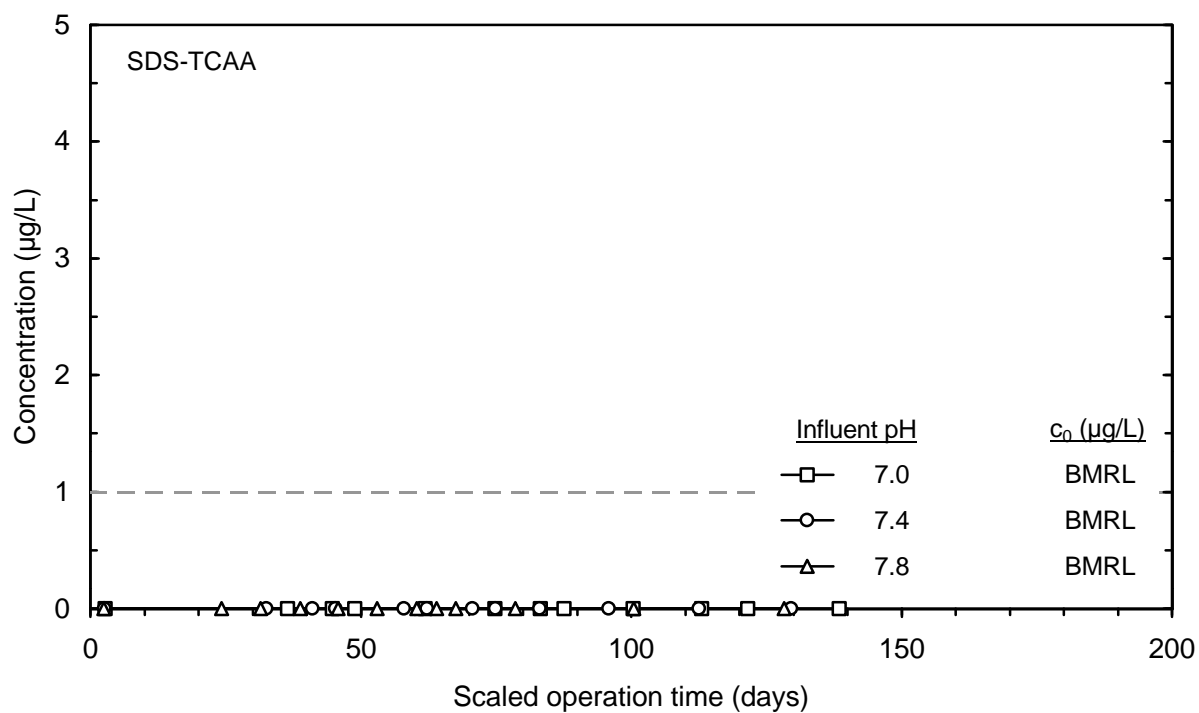


Figure 98 Impact of influent pH on SDS-TCAA breakthrough for 10 minute EBCT contactors

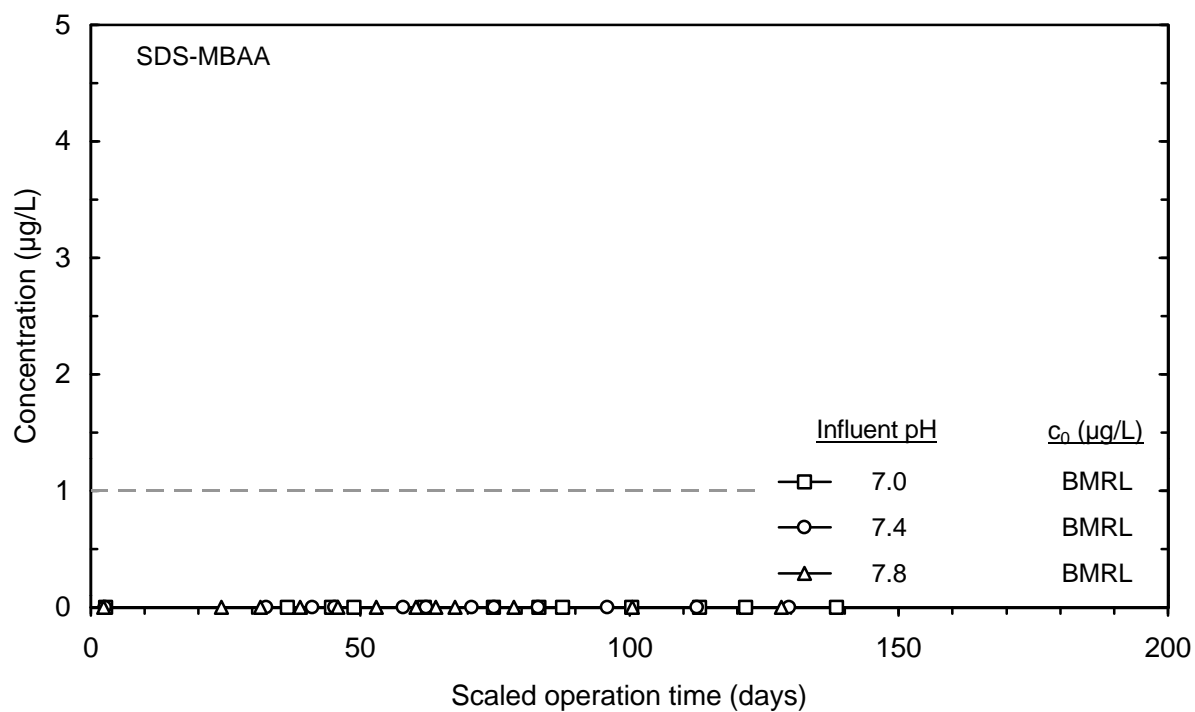


Figure 99 Impact of influent pH on SDS-MBAA breakthrough for 10 minute EBCT contactors

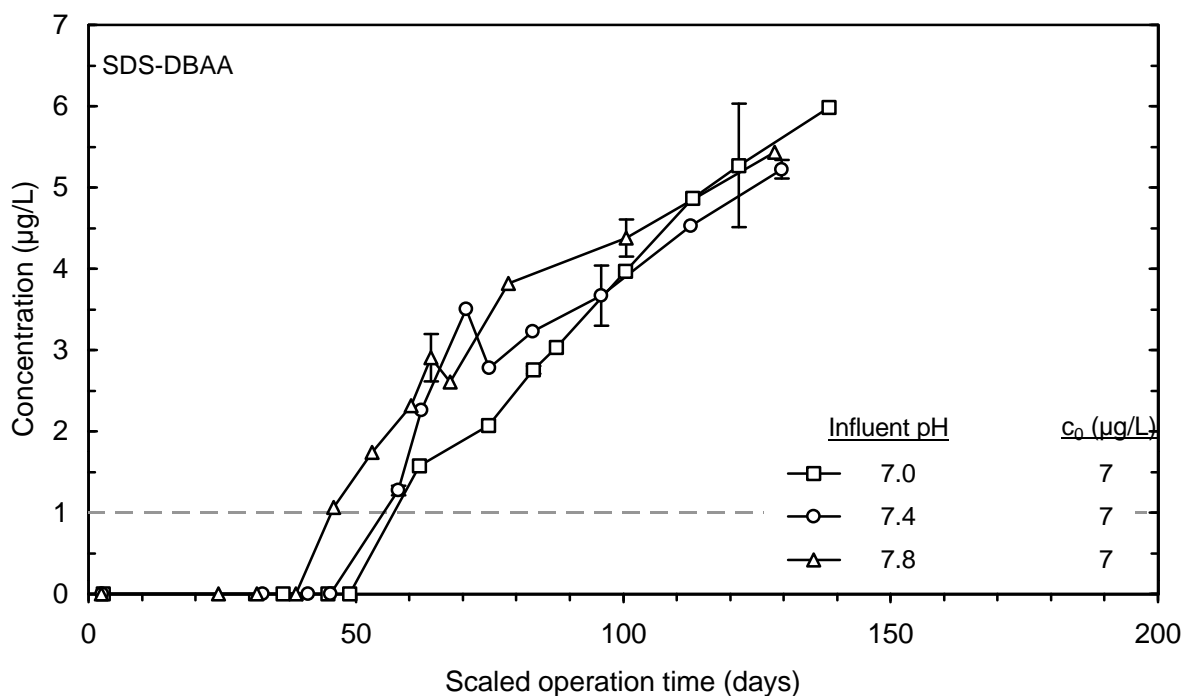


Figure 100 Impact of influent pH on SDS-DBAA breakthrough for 10 minute EBCT contactors

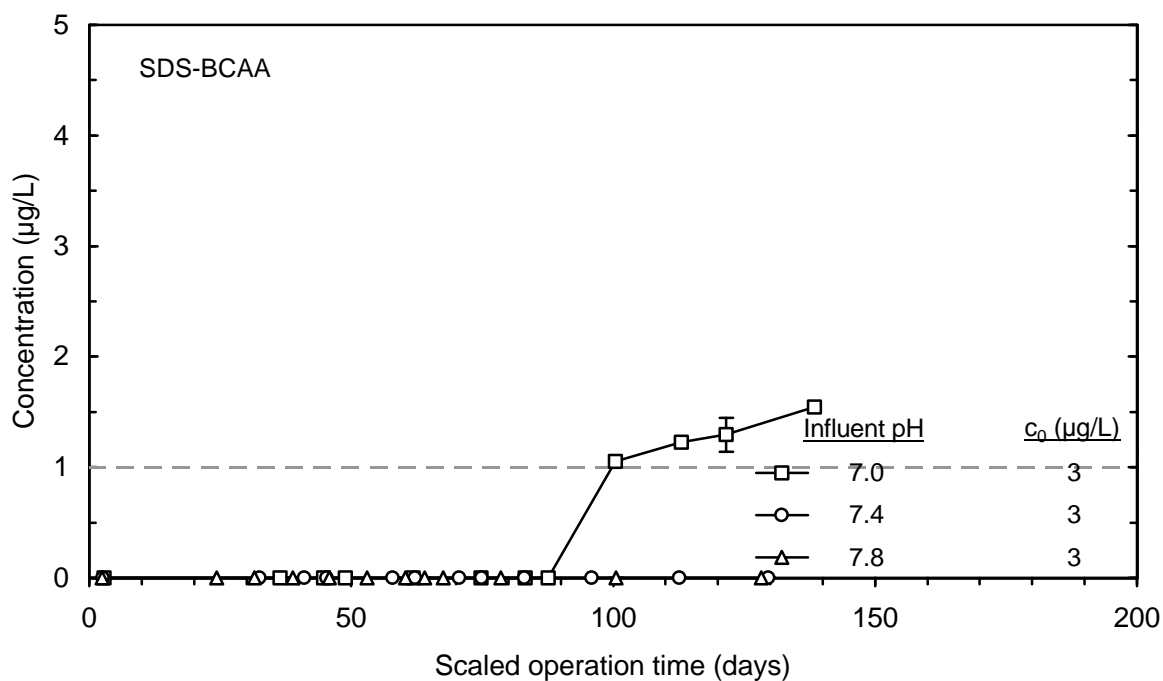


Figure 101 Impact of influent pH on SDS-BCAA breakthrough for 10 minute EBCT contactors

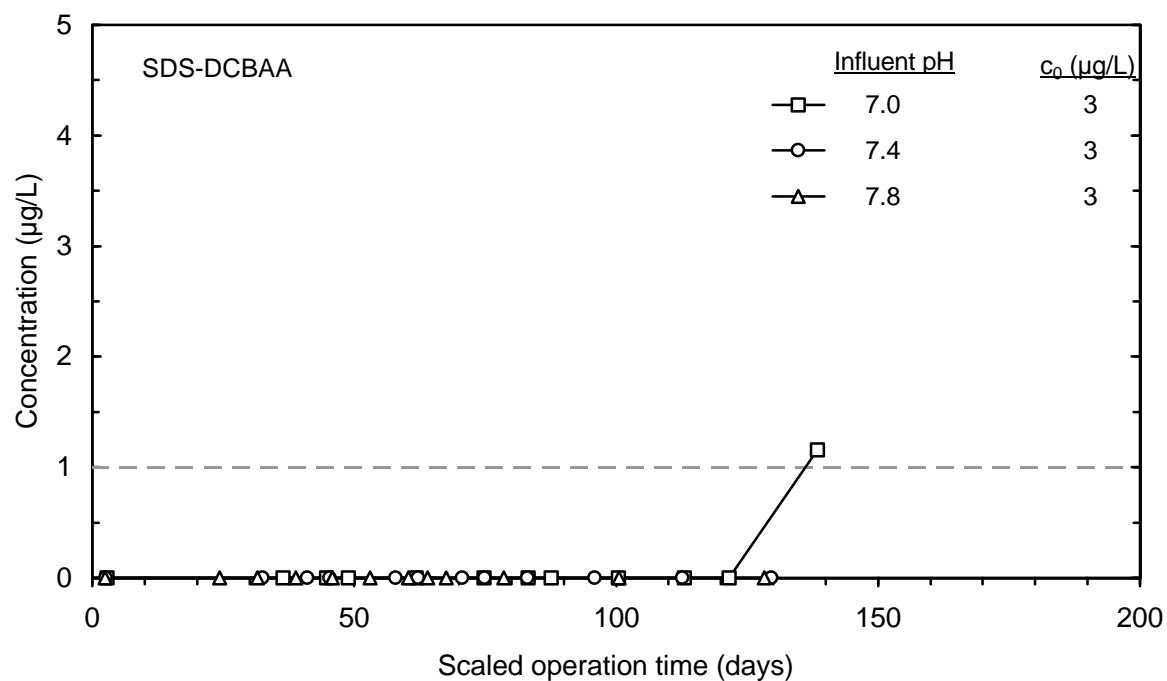


Figure 102 Impact of influent pH on SDS-DCBAA breakthrough for 10 minute EBCT contactors

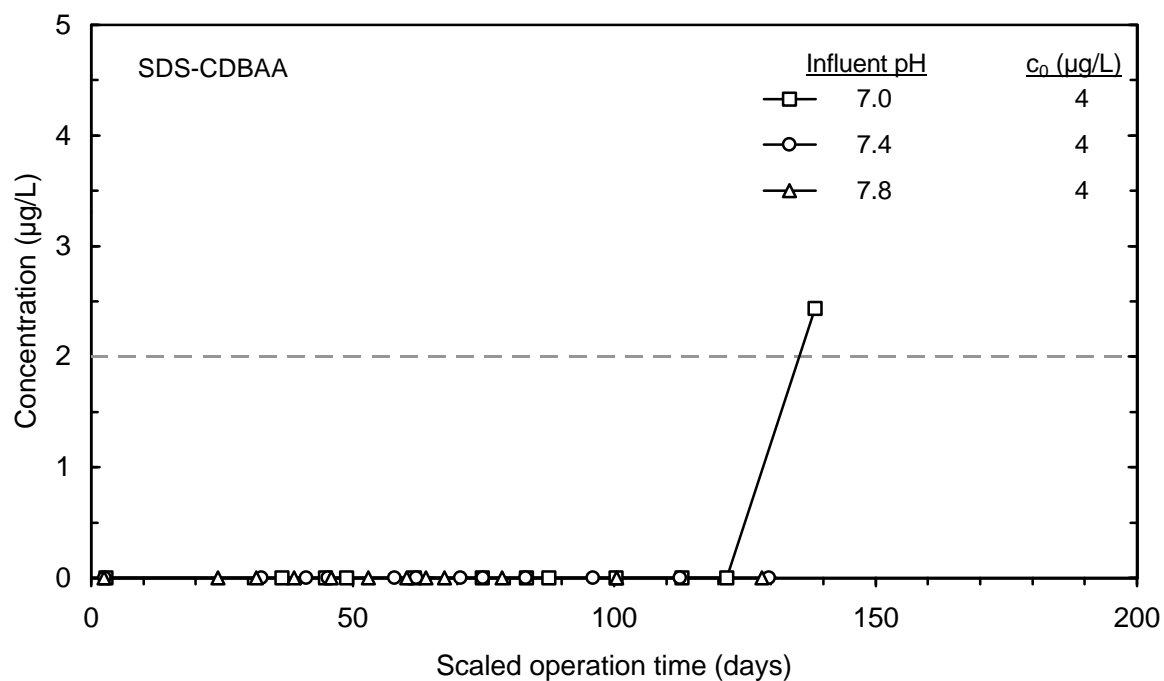


Figure 103 Impact of influent pH on SDS-CDBAA breakthrough for 10 minute EBCT contactors

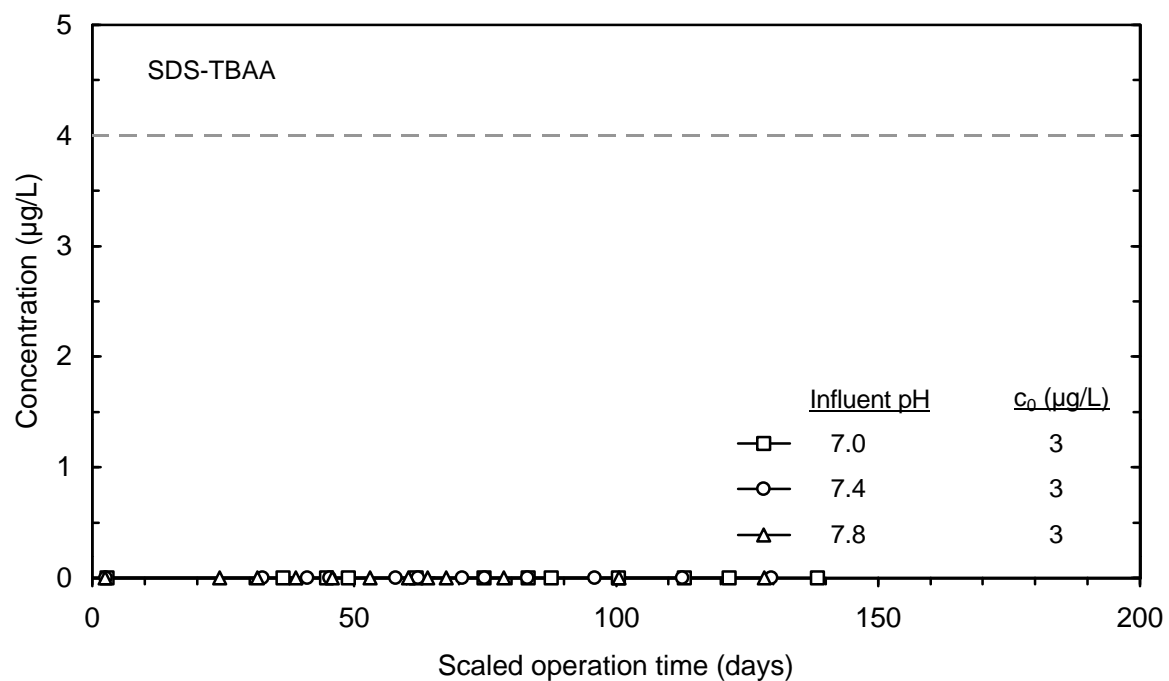


Figure 104 Impact of influent pH on SDS-TBAA breakthrough for 10 minute EBCT contactors

10

*Blended Effluent Simulation
and Breakthrough Curve
Extrapolation*

10 Blended Effluent Simulation and Breakthrough Curve Extrapolation

The data generated by an RSSCT simulates the performance of a single GAC contactor for DBP precursor control. For single contactor operation, when the effluent water quality exceeds levels set as run time criteria, the GAC must be replaced with reactivated or virgin GAC. In practice, multiple GAC contactors in parallel are used, and GAC run times are lengthened significantly by operating the contactors in a staggered mode: the GAC in each contactor is replaced with reactivated or virgin GAC at regular intervals (Westrick and Cohen, 1976; Roberts and Summers, 1982). The effluent from all contactors is blended prior to disinfection. Since only the blended effluent must meet a given water quality objective, each contactor can be operated longer and produce a water quality in excess of the system water quality objective. As a prelude to any type of cost analysis, the impact of blended GAC contactor effluents should be considered.

It is possible to model the performance of contactors operated in parallel staggered mode using the data produced by a single RSSCT. The breakthrough curve data are first fit to the logistic function, a function that results in a characteristic S-shape curve typical of breakthrough curves:

$$C(t) = \frac{A_f - A_0}{1 + Be^{-Dt}} + A_0 \quad (2)$$

This form of the logistic function is a variation of that presented in Chowdhury et al. (1996). The parameters A_f , A_0 , B , and D are varied for a best-fit of the data by a sum of squares minimization algorithm. An equation that simulates a blended effluent scenario can be derived by the following integration of the logistic function:

$$\bar{C}(t) = \frac{1}{t} \int_0^t C(t) dt \quad (3)$$

For applications involving 10 or more staggered contactors operated in parallel, Equation 3 provides a good approximation of blended effluent water quality (Roberts and Summers, 1982). Integration of Equation 2 and substitution into Equation 3 yields:

$$\bar{C}(t) = A_f + \frac{A_f - A_0}{Dt} \ln \frac{1 + Be^{-Dt}}{1 + B} \quad (4)$$

From a best fit of Equation 2 to the breakthrough data the parameter values for A_0 , A_f , B , and D were determined (using a least squares minimization approach). These parameter values then were input into Equation 4, yielding the blended effluent concentration at any contactor run time. A summary of the best fit parameter values and r^2 values for fits to all 64 breakthrough data sets is given in Table 28. As can be seen by the high r^2 values for curve fits not including SDS-CLD (mean: 0.97, 25th percentile: 0.96, 75th percentile: 0.99), the model well fit the data. Due to the decrease in inorganic chlorine demand during some of the runs, the logistic function was not

always an adequate model for fitting the SDS-CLD breakthrough data, and therefore was omitted from this analysis.

Figures 105 through 111 contain single column and blended effluent breakthrough curves for 10 and 20 minute EBCT contactors for TOC, UV₂₅₄, SDS-THM4, SDS-HAA5, SDS-HAA6, SDS-HAA9, and SDS-TOX. The analysis summarized in these plots demonstrates the potential impact on overall costs of accounting for a blended effluent situation. For instance, the 10 minute EBCT contactor TOC breakthrough curve plotted in Figure 105 exceeds an effluent concentration of 0.8 mg/L after 73 days. The multiple contactor blended effluent breakthrough curve exceeds the same effluent TOC criterion after 127 days of single contactor operation time. Thus, for multiple GAC contactors operated in staggered mode, each 10 minute EBCT individual contactor can be operated a factor of 1.7 times longer, prior to reaching a treated water target effluent TOC concentration of 0.8 mg/L. A similar analysis can be made for SDS-THM4 and SDS-HAA5.

The single contactor and blended effluent (multiple contactors) comparisons are presented for the 5.0 and 7.5 minute EBCT contactors in Figures 112 through 118, and for the 15 minute EBCT contactor in Figures 119 through 125. For the influent pH study, Figures 126 through 132 compare single contactor data to blended effluent data for the contactors with influent pH values of 7.4 and 7.0. For the influent pH 7.8 contactor, the comparisons are made in Figures 133 through 139.

Tables 29 through 33 summarize multiple contactor blended effluent run times for EBCTs between 5.0 and 20 minutes. For each parameter and criterion, the value of other parameters is given when the run time criterion is met. When applicable, run time calculations based on effluent blending of extrapolated breakthrough curves are included (described below). Tables 34 through 36 contain the same information for the three influent pH runs.

Bar graph summaries of run times to effluent criteria for single and multiple contactor configurations for 10 and 20 minute EBCTs are shown in Figures 140 through 143. Run times are calculated and compared based on TOC, UV₂₅₄, SDS-THM4, and SDS-HAA5 criteria, as described in Section 8.1. Run time comparisons for the 5.0 and 7.5 minute EBCT contactors are shown in Figures 144 through 147. Figures 148 through 151 show the same data for the 15 minute EBCT contactors. A similar analysis was performed on the influent pH runs: bar graph summaries of run times to effluent criteria for single and multiple contactor configurations for runs with influent pH values of 7.0 and 7.4 are shown in Figures 152 through 155. For the influent pH 7.8 run, the same data are shown in Figures 156 through 159.

In many cases, the blended effluent simulation results did not exceed run time criteria. To increase the benefit of the data set, a breakthrough curve extrapolation procedure was developed to allow reasonable and conservative run time estimates to be made, when blended effluent levels did not exceed the reactivation criteria. To the original breakthrough curve data set for each parameter, three points were added at 150, 200, and 250 percent of the run time at which the last sample point was reported (t_{max}), based on the following set of equations:

Point	Run time	Concentration	
A	$1.5t_{\max}$	$C(t_{\max}) + 0.5[C_{\text{inf}} - C(t_{\max})]$	(5)
B	$2.0t_{\max}$	$C(t_{\max}) + 0.6[C_{\text{inf}} - C(t_{\max})]$	(6)
C	$2.5t_{\max}$	$C(t_{\max}) + 0.7[C_{\text{inf}} - C(t_{\max})]$	(7)

where C_{inf} is the influent concentration for each parameter, and $C(t_{\max})$ is the effluent concentration of the parameter at t_{\max} .

The logistic function curve was fit to the data set including the three extrapolation points. The integrated form of the logistic function (Equation 4) was again used to estimate blended effluent water quality for the extrapolation. The run time data contained in the figures and tables presented earlier in this section include the estimates derived by the extrapolation procedure, when applicable. No breakthrough curves were extrapolated beyond 250 percent of the maximum run time. Figures 160 through 191 contain the extrapolated breakthrough curves for all runs. Extrapolation results are not presented for HAA data, due to the low levels measured. Table 37 summarizes the best fit parameter values and r^2 values for all curve fits.

Parameter	Coefficient	EBCT study, EBCT (min)					Influent pH study, influent pH		
		5.0	7.5	10	15	20	7.0	7.4	7.8
TOC	A_o	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	A_f	1.35	1.38	1.57	1.39	1.45	1.34	1.34	1.30
	B	18.0	23.0	26.2	12.2	11.1	28.0	21.1	17.8
	D	0.106	0.075	0.053	0.021	0.021	0.046	0.046	0.050
	r^2	0.987	0.983	0.976	0.975	0.981	0.991	0.995	0.995
UV ₂₅₄	A_o	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	A_f	0.027	0.027	0.030	0.029	0.027	0.031	0.030	0.025
	B	60.2	55.3	20.0	20.0	20.0	20.0	20.0	42.5
	D	0.126	0.076	0.035	0.017	0.014	0.030	0.032	0.052
	r^2	0.994	0.988	0.988	0.989	0.984	0.987	0.993	0.996
SDS-THM4	A_o	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	A_f	52.1	46.6	45.8	58.5	44.8	54.4	45.9	39.7
	B	64.3	145.0	103.5	31.2	51.6	66.0	67.6	78.8
	D	0.121	0.105	0.064	0.020	0.020	0.042	0.050	0.063
	r^2	0.991	0.992	0.996	0.970	0.993	0.990	0.994	0.996
SDS-HAA5	A_o	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	A_f	4.5	4.3	3.7	6.8	276.3	6.0	4.6	5.0
	B	148.7	7250.8	291.6	32.3	1408.6	207.3	440.1	217.6
	D	0.177	0.237	0.089	0.019	0.012	0.061	0.091	0.085
	r^2	0.957	0.954	0.964	0.913	0.906	0.984	0.940	0.972
SDS-HAA6	A_o	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	A_f	6.1	4.7	5.0	18.3	17.3	7.8	4.6	5.0
	B	198.3	2424.9	177.5	58.2	228.8	344.4	440.1	217.6
	D	0.172	0.201	0.072	0.014	0.017	0.063	0.091	0.085
	r^2	0.974	0.959	0.947	0.930	0.943	0.990	0.940	0.972
SDS-HAA9	A_o	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	A_f	10.0	5.3	5.0	27.9	17.3	20.1	4.6	5.0
	B	81.9	717.6	177.5	281.4	228.8	163.2	440.1	217.6
	D	0.114	0.161	0.072	0.020	0.017	0.038	0.091	0.085
	r^2	0.965	0.938	0.947	0.953	0.943	0.977	0.940	0.972
SDS-TOX	A_o	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	A_f	79	75	79	95	76	77	75	71
	B	69.4	71.9	100.2	22.1	98.7	60.5	41.1	47.5
	D	0.127	0.084	0.059	0.017	0.024	0.045	0.044	0.053
	r^2	0.991	0.990	0.991	0.866	0.983	0.992	0.985	0.992

Table 28 Summary of logistic function curve fit parameters and r2 values

Parameter	Units	Influent concentration	Breakthrough criterion	Value of listed parameter when breakthrough criterion is met (blended effluent)								
				Run time (days)	Throughput (bed volumes)	TOC (mg/L)	UV ₂₅₄ (1/cm)	SDS-THM4 (µg/L)	SDS-HAA5 (µg/L)	SDS-HAA6 (µg/L)	SDS-HAA9 (µg/L)	SDS-TOX (µg Cl ⁻ /L)
TOC	(mg/L)	1.8	2.0	*	*							
			1.0	92#	26,500	1.0	0.020	36	4	5	7	59
			0.9†	77#	22,120	0.9	0.017	31	3	4	5	49
UV ₂₅₄	(1/cm)	0.046	0.040	*	*							
			0.020	92#	26,400	1.0	0.020	36	4	5	7	58
			0.023†	111#	32,090	1.1	0.023	40	4	5	8	68
SDS-THM4	(µg/L)	72	80	*	*							
			64	*	*							
			32	81#	23,230	0.9	0.018	32	3	4	6	52
SDS-HAA5	(µg/L)	8	48	*	*							
			24	*	*							
SDS-HAA6	(µg/L)	11	48	*	*							
			24	*	*							
SDS-HAA9	(µg/L)	21	48	*	*							
			24	*	*							
SDS-TOX	(µg Cl ⁻ /L)	139	120	*	*							
			70	117#	33,760	1.1	0.024	41	4	6	9	70

†GAC effluent concentration equal to 50 percent of the average influent concentration.

*Effluent concentration criteria not exceeded during GAC run time (including extrapolation procedure). Value of listed parameter is left blank.

#Run time estimated from breakthrough curve extrapolation procedure.

Table 29 Run times to selected GAC effluent criteria based on effluent blending (5.0 minute EBCT)

Parameter	Units	Influent concentration	Breakthrough criterion	Value of listed parameter when breakthrough criterion is met (blended effluent)								
				Run time (days)	Throughput (bed volumes)	TOC (mg/L)	UV ₂₅₄ (1/cm)	SDS-THM4 (µg/L)	SDS-HAA5 (µg/L)	SDS-HAA6 (µg/L)	SDS-HAA9 (µg/L)	SDS-TOX (µg Cl ⁻ /L)
TOC	(mg/L)	1.8	2.0	*	*							
			1.0	133#	25,600	1.0	0.018	35	4	4	5	55
			0.9†	112#	21,580	0.9	0.015	30	4	4	4	45
UV ₂₅₄	(1/cm)	0.046	0.040	*	*							
			0.020	153#	29,420	1.1	0.020	38	4	5	7	62
			0.023†	186#	35,660	1.2	0.023	42	4	5	8	71
SDS-THM4	(µg/L)	72	80	*	*							
			64	*	*							
			32	121#	23,270	0.9	0.016	32	4	4	5	50
SDS-HAA5	(µg/L)	8	48	*	*							
			24	*	*							
SDS-HAA6	(µg/L)	11	48	*	*							
			24	*	*							
SDS-HAA9	(µg/L)	21	48	*	*							
			24	*	*							
SDS-TOX	(µg Cl ⁻ /L)	139	120	*	*							
			70	182#	34,940	1.2	0.023	41	4	5	8	70

†GAC effluent concentration equal to 50 percent of the average influent concentration.

*Effluent concentration criteria not exceeded during GAC run time (including extrapolation procedure). Value of listed parameter is left blank.

#Run time estimated from breakthrough curve extrapolation procedure.

Table 30 Run times to selected GAC effluent criteria based on effluent blending (12.5 minute EBCT)

Parameter	Units	Influent concentration	Breakthrough criterion	Value of listed parameter when breakthrough criterion is met (blended effluent)								
				Run time (days)	Throughput (bed volumes)	TOC (mg/L)	UV ₂₅₄ (1/cm)	SDS-THM4 (µg/L)	SDS-HAA5 (µg/L)	SDS-HAA6 (µg/L)	SDS-HAA9 (µg/L)	SDS-TOX (µg Cl ⁻ /L)
TOC	(mg/L)	2.0	2.0	*	*							
			1.0	159#	22,880	1.0	0.015	29	3	3	4	45
			1.0†	157#	22,570	1.0	0.015	28	3	3	4	45
UV ₂₅₄	(1/cm)	0.047	0.040	*	*							
			0.020	209#	30,150	1.2	0.020	38	4	5	6	60
			0.023†	261#	37,610	1.3	0.023	44	4	5	8	70
SDS-THM4	(µg/L)	82	80	*	*							
			64	*	*							
			32	174#	25,060	1.1	0.017	32	3	4	5	51
SDS-HAA5	(µg/L)	8	48	*	*							
			24	*	*							
SDS-HAA6	(µg/L)	11	48	*	*							
			24	*	*							
SDS-HAA9	(µg/L)	20	48	*	*							
			24	*	*							
SDS-TOX	(µg Cl ⁻ /L)	135	120	*	*							
			70	260#	37,470	1.3	0.023	43	4	5	8	70

†GAC effluent concentration equal to 50 percent of the average influent concentration.

*Effluent concentration criteria not exceeded during GAC run time (including extrapolation procedure). Value of listed parameter is left blank.

#Run time estimated from breakthrough curve extrapolation procedure.

Table 31 Run times to selected GAC effluent criteria based on effluent blending (10 minute EBCT)

Parameter	Units	Influent concentration	Breakthrough criterion	Value of listed parameter when breakthrough criterion is met (blended effluent)								
				Run time (days)	Throughput (bed volumes)	TOC (mg/L)	UV ₂₅₄ (1/cm)	SDS-THM4 (µg/L)	SDS-HAA5 (µg/L)	SDS-HAA6 (µg/L)	SDS-HAA9 (µg/L)	SDS-TOX (µg Cl ⁻ /L)
TOC	(mg/L)	1.8	2.0	*	*							
			1.0	395#	37,880	1.0	0.018	33	4	4	7	54
			0.9†	333#	31,970	0.9	0.015	28	3	4	5	45
UV ₂₅₄	(1/cm)	0.046	0.040	*	*							
			0.020	451#	43,270	1.1	0.020	37	4	5	8	61
			0.023†	547#	52,480	1.2	0.023	41	5	6	9	71
SDS-THM4	(µg/L)	72	80	*	*							
			64	*	*							
			32	377#	36,230	1.0	0.017	32	4	4	6	52
SDS-HAA5	(µg/L)	8	48	*	*							
			24	*	*							
SDS-HAA6	(µg/L)	11	48	*	*							
			24	*	*							
SDS-HAA9	(µg/L)	21	48	*	*							
			24	*	*							
SDS-TOX	(µg Cl ⁻ /L)	139	120	*	*							
			70	539#	51,760	1.2	0.023	41	5	6	9	70

†GAC effluent concentration equal to 50 percent of the average influent concentration.

*Effluent concentration criteria not exceeded during GAC run time (including extrapolation procedure). Value of listed parameter is left blank.

#Run time estimated from breakthrough curve extrapolation procedure.

Table 32 Run times to selected GAC effluent criteria based on effluent blending (15 minute EBCT)

Parameter	Units	Influent concentration	Breakthrough criterion	Value of listed parameter when breakthrough criterion is met (blended effluent)								
				Run time (days)	Throughput (bed volumes)	TOC (mg/L)	UV ₂₅₄ (1/cm)	SDS-THM4 (µg/L)	SDS-HAA5 (µg/L)	SDS-HAA6 (µg/L)	SDS-HAA9 (µg/L)	SDS-TOX (µg Cl ⁻ /L)
TOC	(mg/L)	2.0	2.0	*	*							
			1.0	344#	24,750	1.0	0.012	21	2	3	3	36
			1.0†	339#	24,390	1.0	0.011	21	2	2	3	36
UV ₂₅₄	(1/cm)	0.047	0.040	*	*							
			0.020	549#	39,500	1.3	0.020	36	4	5	7	62
			0.023†	*	*							
SDS-THM4	(µg/L)	82	80	*	*							
			64	*	*							
			32	474#	34,130	1.2	0.017	32	3	4	6	55
SDS-HAA5	(µg/L)	8	48	*	*							
			24	*	*							
SDS-HAA6	(µg/L)	11	48	*	*							
			24	*	*							
SDS-HAA9	(µg/L)	20	48	*	*							
			24	*	*							
SDS-TOX	(µg Cl ⁻ /L)	135	120	*	*							
			70	*	*							

†GAC effluent concentration equal to 50 percent of the average influent concentration.

*Effluent concentration criteria not exceeded during GAC run time (including extrapolation procedure). Value of listed parameter is left blank.

#Run time estimated from breakthrough curve extrapolation procedure.

Table 33 Run times to selected GAC effluent criteria based on effluent blending (20 minute EBCT)

Parameter	Units	Influent concentration	Breakthrough criterion	Value of listed parameter when breakthrough criterion is met (blended effluent)								
				Run time (days)	Throughput (bed volumes)	TOC (mg/L)	UV ₂₅₄ (1/cm)	SDS-THM4 (µg/L)	SDS-HAA5 (µg/L)	SDS-HAA6 (µg/L)	SDS-HAA9 (µg/L)	SDS-TOX (µg Cl ⁻ /L)
TOC	(mg/L)	1.8	2.0	*	*							
			1.0	235#	33,800	1.0	0.019	35	4	5	8	56
			0.9†	194#	27,950	0.9	0.016	29	4	4	6	46
UV ₂₅₄	(1/cm)	0.047	0.040	*	*							
			0.020	242#	34,890	1.0	0.020	36	4	5	8	58
			0.024†	301#	43,340	1.1	0.024	43	5	6	10	68
SDS-THM4	(µg/L)	84	80	*	*							
			64	*	*							
			32	213#	30,630	0.9	0.018	32	4	5	7	51
SDS-HAA5	(µg/L)	8	48	*	*							
			24	*	*							
SDS-HAA6	(µg/L)	11	48	*	*							
			24	*	*							
SDS-HAA9	(µg/L)	21	48	*	*							
			24	*	*							
SDS-TOX	(µg Cl ⁻ /L)	139	120	*	*							
			70	312#	44,960	1.1	0.024	44	5	6	10	70

†GAC effluent concentration equal to 50 percent of the average influent concentration.

*Effluent concentration criteria not exceeded during GAC run time (including extrapolation procedure). Value of listed parameter is left blank.

#Run time estimated from breakthrough curve extrapolation procedure.

Table 34 Run times to selected GAC effluent criteria based on effluent blending (influent pH 7.0; 10 minute EBCT)

Parameter	Units	Influent concentration	Breakthrough criterion	Value of listed parameter when breakthrough criterion is met (blended effluent)								
				Run time (days)	Throughput (bed volumes)	TOC (mg/L)	UV ₂₅₄ (1/cm)	SDS-THM4 (µg/L)	SDS-HAA5 (µg/L)	SDS-HAA6 (µg/L)	SDS-HAA9 (µg/L)	SDS-TOX (µg Cl ⁻ /L)
TOC	(mg/L)	1.8	2.0	*	*							
			1.0	219#	31,480	1.0	0.019	34	4	4	6	55
			0.9†	180#	25,940	0.9	0.015	28	3	4	4	44
UV ₂₅₄	(1/cm)	0.047	0.040	*	*							
			0.020	235#	33,850	1.0	0.020	37	4	5	6	59
			0.024†	293#	42,130	1.1	0.024	43	5	5	8	69
SDS-THM4	(µg/L)	84	80	*	*							
			64	*	*							
			32	204#	29,440	1.0	0.017	32	4	4	5	51
SDS-HAA5	(µg/L)	8	48	*	*							
			24	*	*							
SDS-HAA6	(µg/L)	11	48	*	*							
			24	*	*							
SDS-HAA9	(µg/L)	21	48	*	*							
			24	*	*							
SDS-TOX	(µg Cl ⁻ /L)	139	120	*	*							
			70	299#	43,080	1.1	0.024	43	5	6	8	70

†GAC effluent concentration equal to 50 percent of the average influent concentration.

*Effluent concentration criteria not exceeded during GAC run time (including extrapolation procedure). Value of listed parameter is left blank.

#Run time estimated from breakthrough curve extrapolation procedure.

Table 35 Run times to selected GAC effluent criteria based on effluent blending (influent pH 7.4; 10 minute EBCT)

Parameter	Units	Influent concentration	Breakthrough criterion	Value of listed parameter when breakthrough criterion is met (blended effluent)								
				Run time (days)	Throughput (bed volumes)	TOC (mg/L)	UV ₂₅₄ (1/cm)	SDS-THM4 (µg/L)	SDS-HAA5 (µg/L)	SDS-HAA6 (µg/L)	SDS-HAA9 (µg/L)	SDS-TOX (µg Cl ⁻ /L)
TOC	(mg/L)	1.8	2.0	*	*							
			1.0	205#	29,460	1.0	0.019	32	4	4	5	54
			0.9†	167#	24,050	0.9	0.015	26	4	4	4	43
UV ₂₅₄	(1/cm)	0.047	0.040	*	*							
			0.020	223#	32,100	1.0	0.020	35	4	5	6	59
			0.024†	279#	40,240	1.1	0.024	41	5	6	8	69
SDS-THM4	(µg/L)	84	80	*	*							
			64	*	*							
			32	202#	29,020	1.0	0.018	32	4	4	5	53
SDS-HAA5	(µg/L)	8	48	*	*							
			24	*	*							
SDS-HAA6	(µg/L)	11	48	*	*							
			24	*	*							
SDS-HAA9	(µg/L)	21	48	*	*							
			24	*	*							
SDS-TOX	(µg Cl ⁻ /L)	139	120	*	*							
			70	284#	40,880	1.1	0.024	42	5	6	8	70

†GAC effluent concentration equal to 50 percent of the average influent concentration.

*Effluent concentration criteria not exceeded during GAC run time (including extrapolation procedure). Value of listed parameter is left blank.

#Run time estimated from breakthrough curve extrapolation procedure.

Table 36 Run times to selected GAC effluent criteria based on effluent blending (influent pH 7.8; 10 minute EBCT)

Parameter	Coefficient	EBCT study, EBCT (min)					Influent pH study, influent pH		
		5.0	7.5	10	15	20	7.0	7.4	7.8
TOC	A_o	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	A_f	1.55	1.58	1.77	1.60	1.75	1.56	1.55	1.53
	B	11.3	14.3	16.5	10.1	6.8	16.7	13.5	11.1
	D	0.077	0.056	0.041	0.016	0.014	0.034	0.034	0.035
	r^2	0.969	0.969	0.966	0.970	0.962	0.979	0.981	0.973
UV ₂₅₄	A_o	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	A_f	0.038	0.038	0.038	0.038	0.038	0.039	0.039	0.039
	B	20.0	20.0	36.2	24.5	26.6	25.8	23.2	17.1
	D	0.069	0.041	0.037	0.015	0.013	0.028	0.027	0.026
	r^2	0.949	0.953	0.982	0.979	0.979	0.968	0.975	0.951
SDS-THM4	A_o	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	A_f	62.2	60.5	67.1	62.8	66.1	69.6	68.4	67.5
	B	37.1	46.0	41.9	29.8	42.8	46.9	34.8	23.1
	D	0.092	0.067	0.041	0.018	0.015	0.033	0.032	0.030
	r^2	0.975	0.962	0.971	0.970	0.988	0.986	0.976	0.933
SDS-HAA5	A_o	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	A_f	6.3	5.6	6.4	6.9	6.5	7.1	6.6	6.7
	B	23.1	339.0	31.3	33.4	131.7	95.7	40.0	40.4
	D	0.083	0.138	0.038	0.019	0.021	0.047	0.043	0.047
	r^2	0.898	0.895	0.873	0.912	0.925	0.977	0.891	0.928
SDS-HAA6	A_o	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	A_f	8.5	8.1	8.5	9.3	8.6	9.5	8.6	8.7
	B	33.0	21.1	44.6	50.9	173.4	134.2	27.4	23.9
	D	0.088	0.051	0.039	0.019	0.021	0.048	0.031	0.032
	r^2	0.917	0.764	0.900	0.930	0.948	0.982	0.860	0.880
SDS-HAA9	A_o	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	A_f	16.5	15.8	15.2	16.7	15.0	17.0	15.8	15.9
	B	34.7	26.9	60.8	135.7	215.3	149.7	40.1	33.8
	D	0.065	0.036	0.032	0.020	0.018	0.039	0.025	0.025
	r^2	0.935	0.772	0.859	0.940	0.943	0.977	0.816	0.825
SDS-TOX	A_o	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	A_f	114	114	110	116	109	113	113	113
	B	23.9	29.9	52.0	22.5	62.0	35.0	27.9	22.9
	D	0.071	0.049	0.042	0.015	0.017	0.030	0.030	0.029
	r^2	0.944	0.958	0.981	0.865	0.976	0.980	0.973	0.954

Table 37 Summary of logistic function curve fit parameters and r^2 values for curve fits after breakthrough curve extrapolation

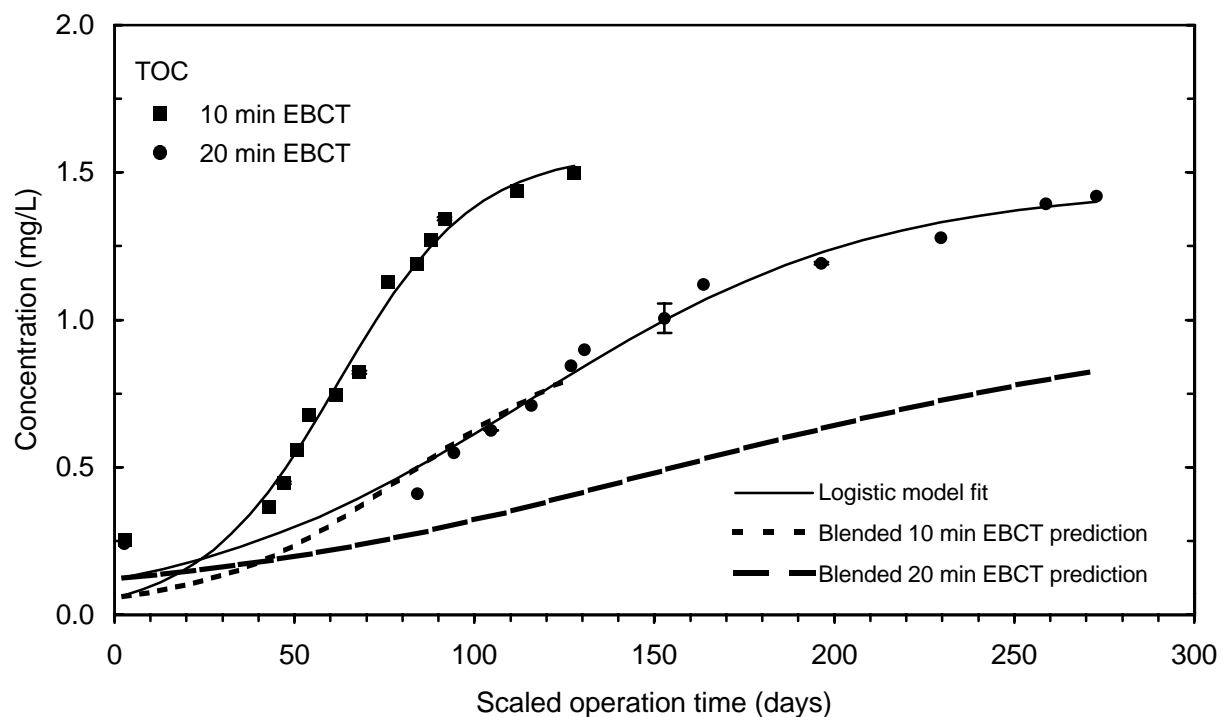


Figure 105 TOC breakthrough and effluent blending for 10 and 20 minute EBCT contactors

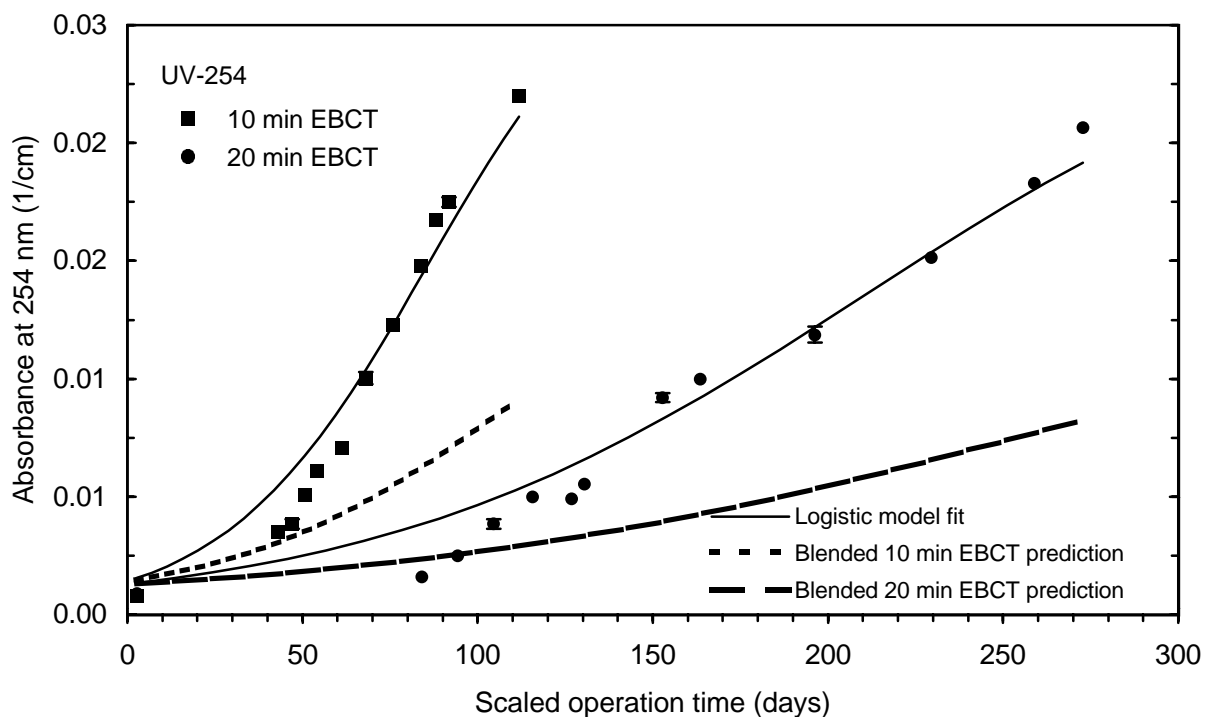


Figure 106 UV-254 breakthrough and effluent blending for 10 and 20 minute EBCT contactors

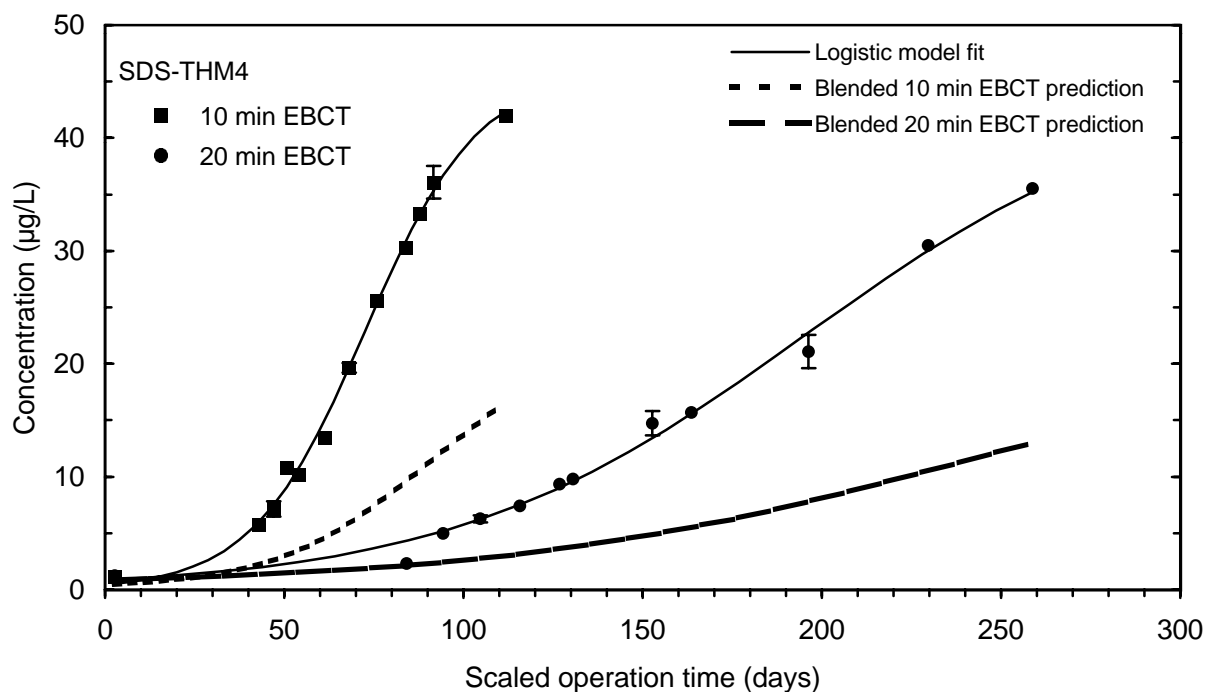


Figure 107 SDS-THM4 breakthrough and effluent blending for 10 and 20 minute EBCT contactors

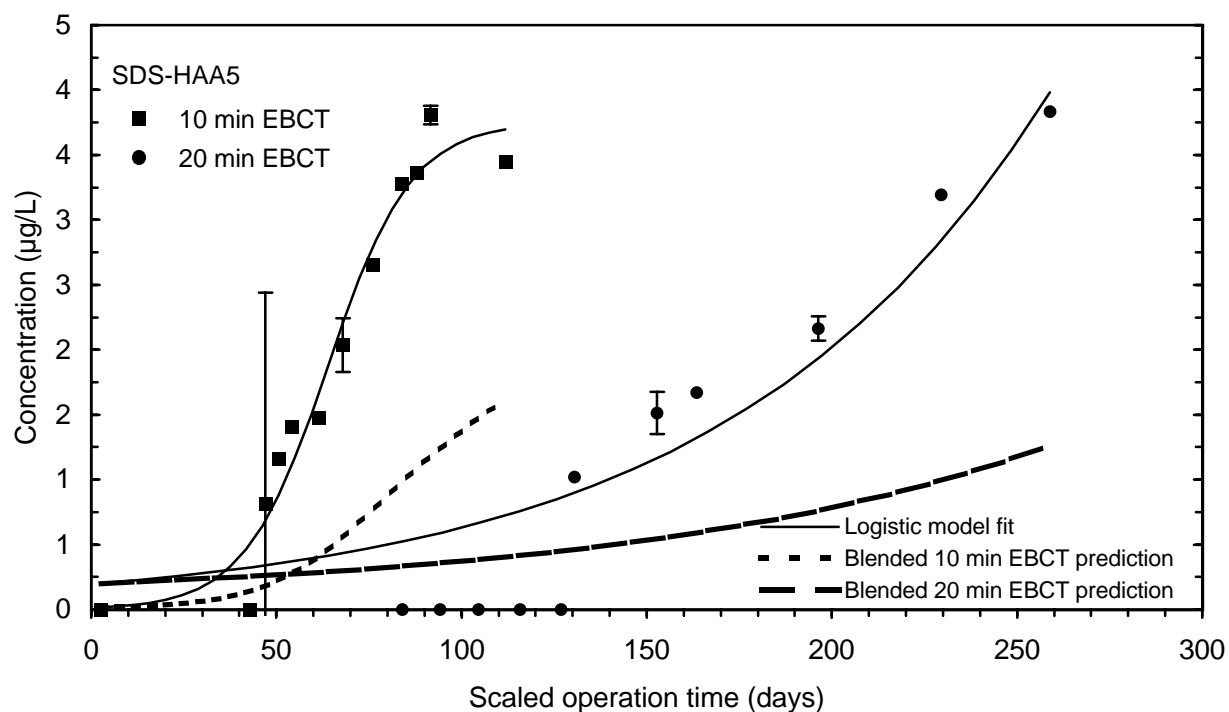


Figure 108 SDS-HAA5 breakthrough and effluent blending for 10 and 20 minute EBCT contactors

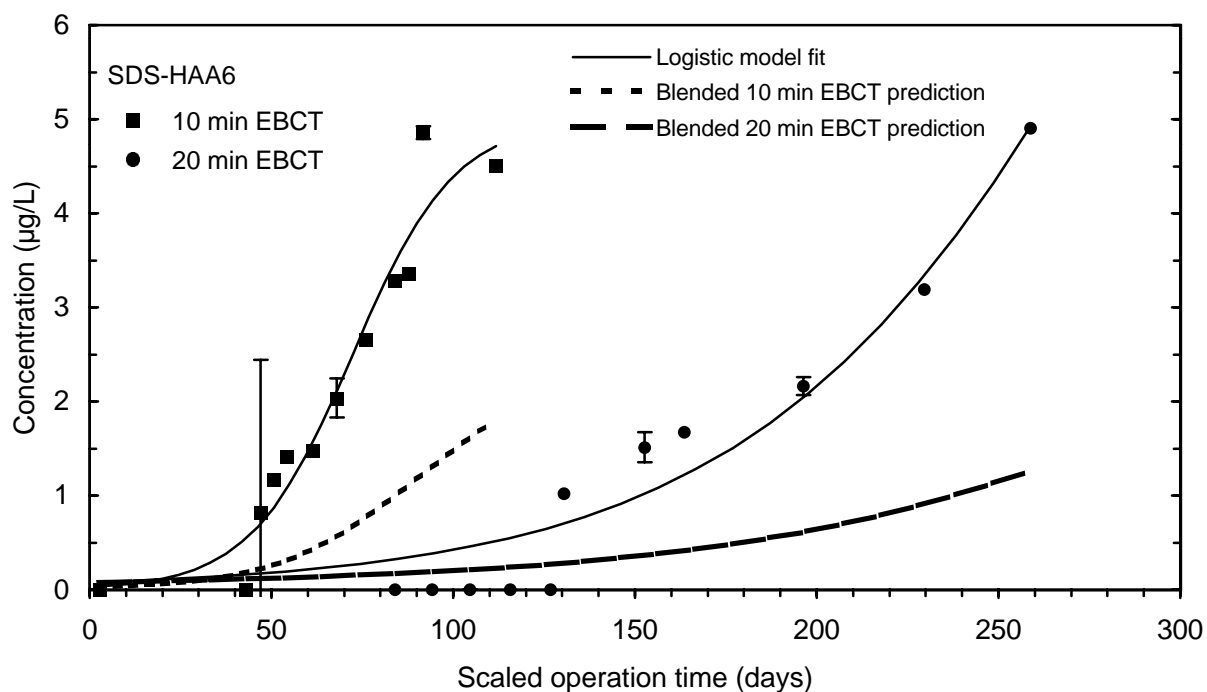


Figure 109 SDS-HAA6 breakthrough and effluent blending for 10 and 20 minute EBCT contactors

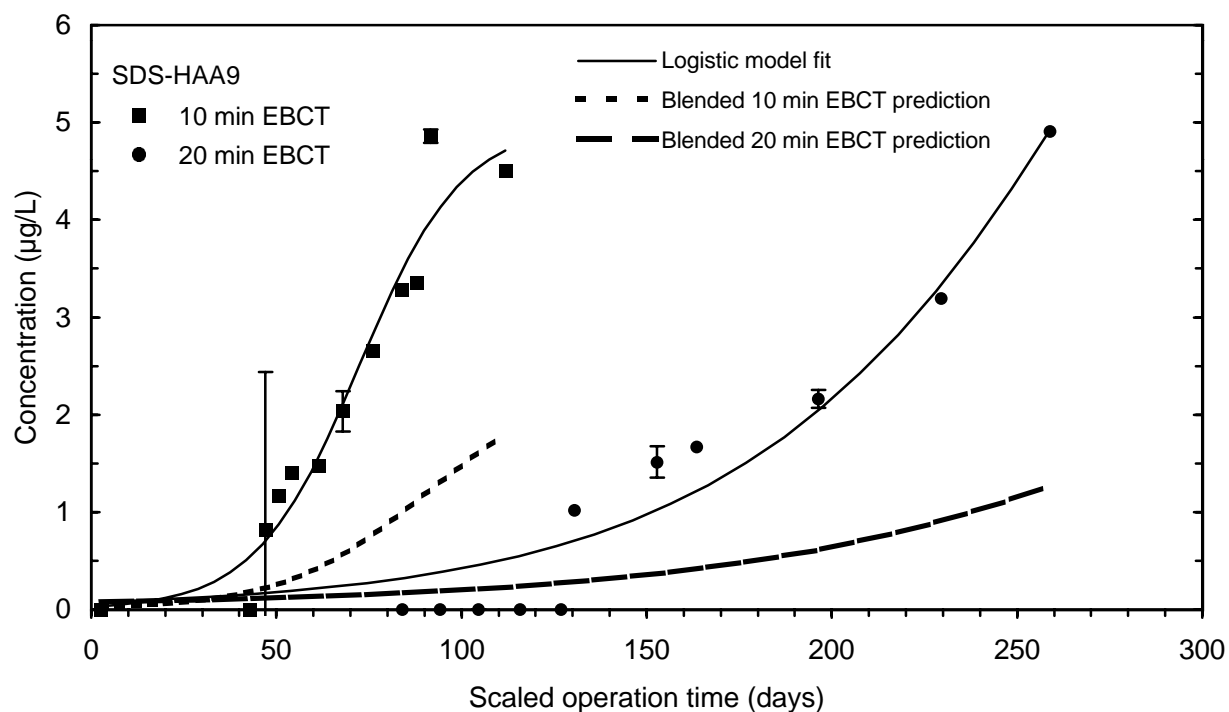


Figure 110 SDS-HAA9 breakthrough and effluent blending for 10 and 20 minute EBCT contactors

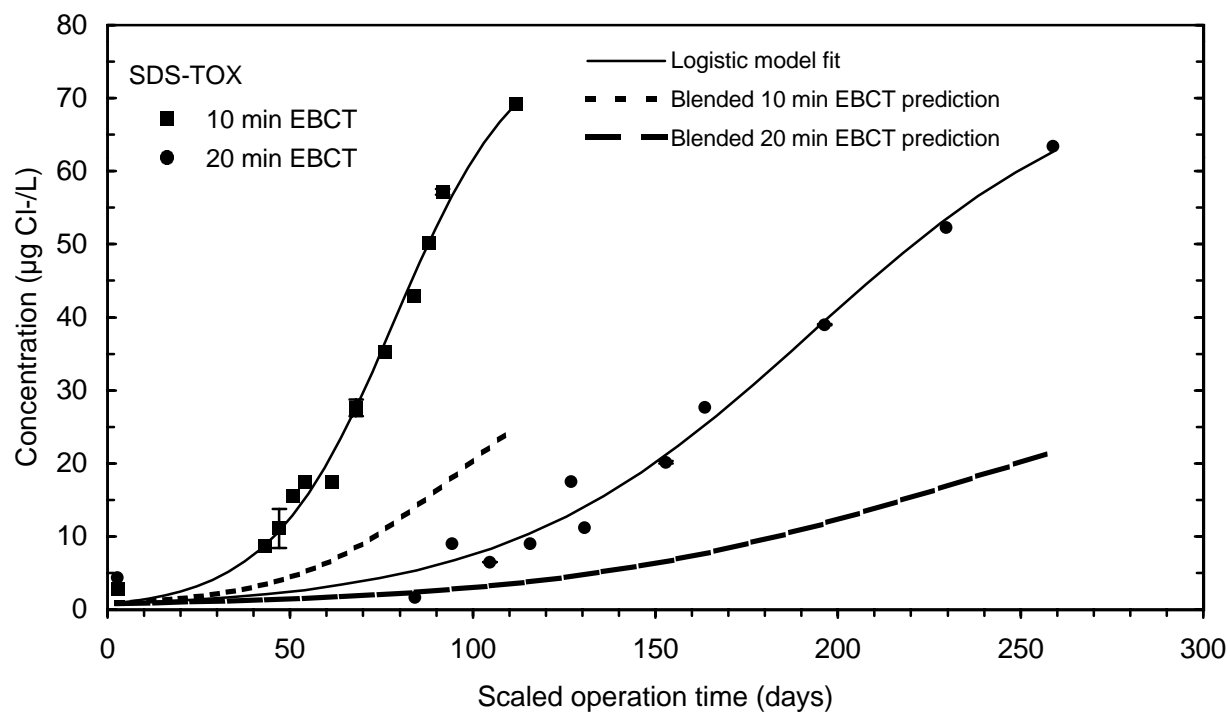


Figure 111 SDS-TOX breakthrough and effluent blending for 10 and 20 minute EBCT contactors

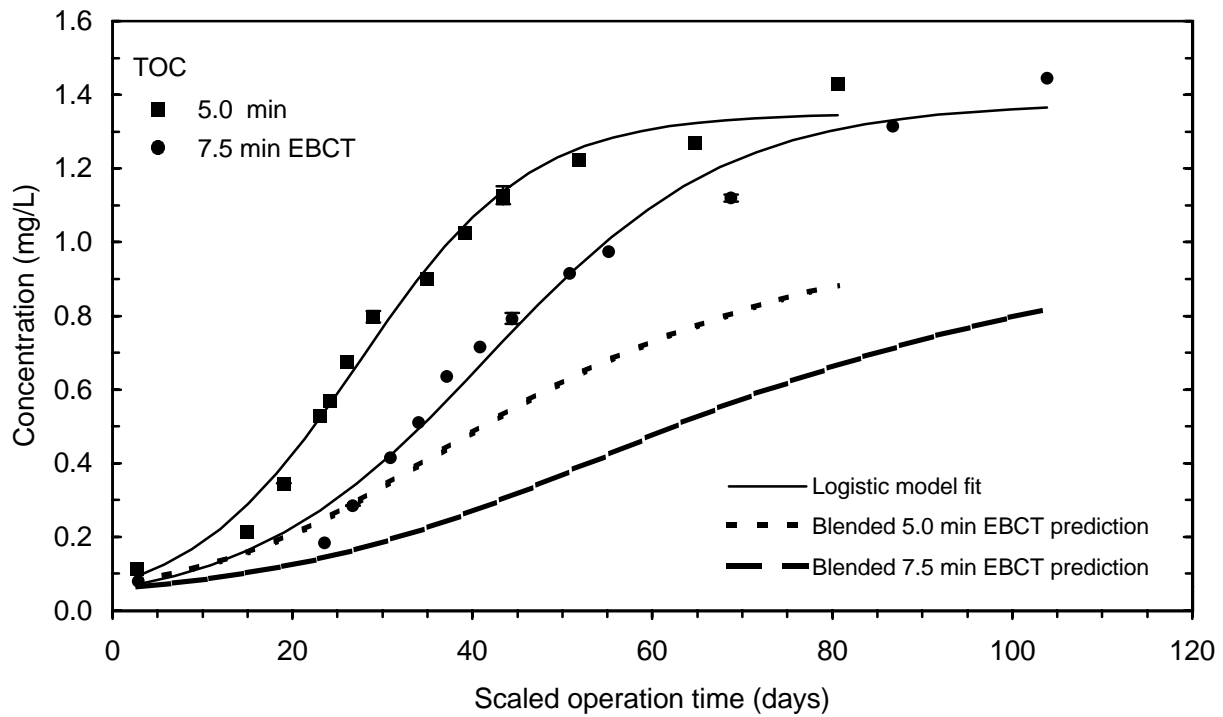


Figure 112 TOC breakthrough and effluent blending for 5.0 and 7.5 minute EBCT contactors

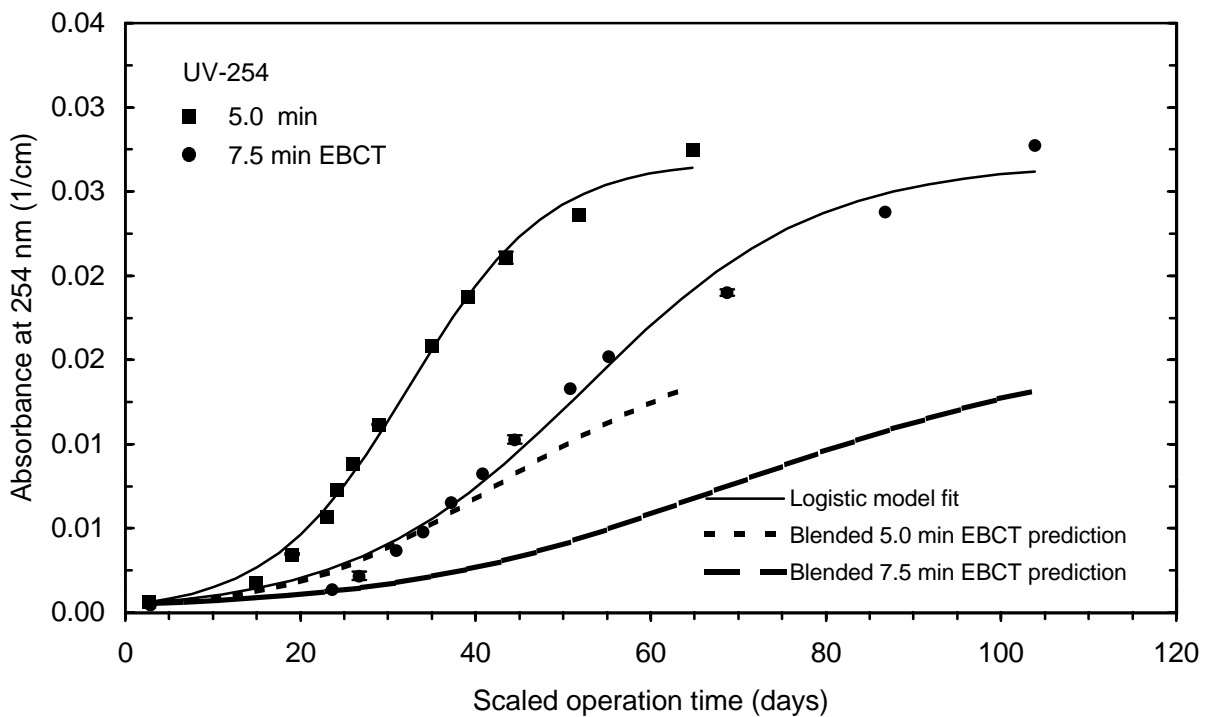


Figure 113 UV-254 breakthrough and effluent blending for 5.0 and 7.5 minute EBCT contactors

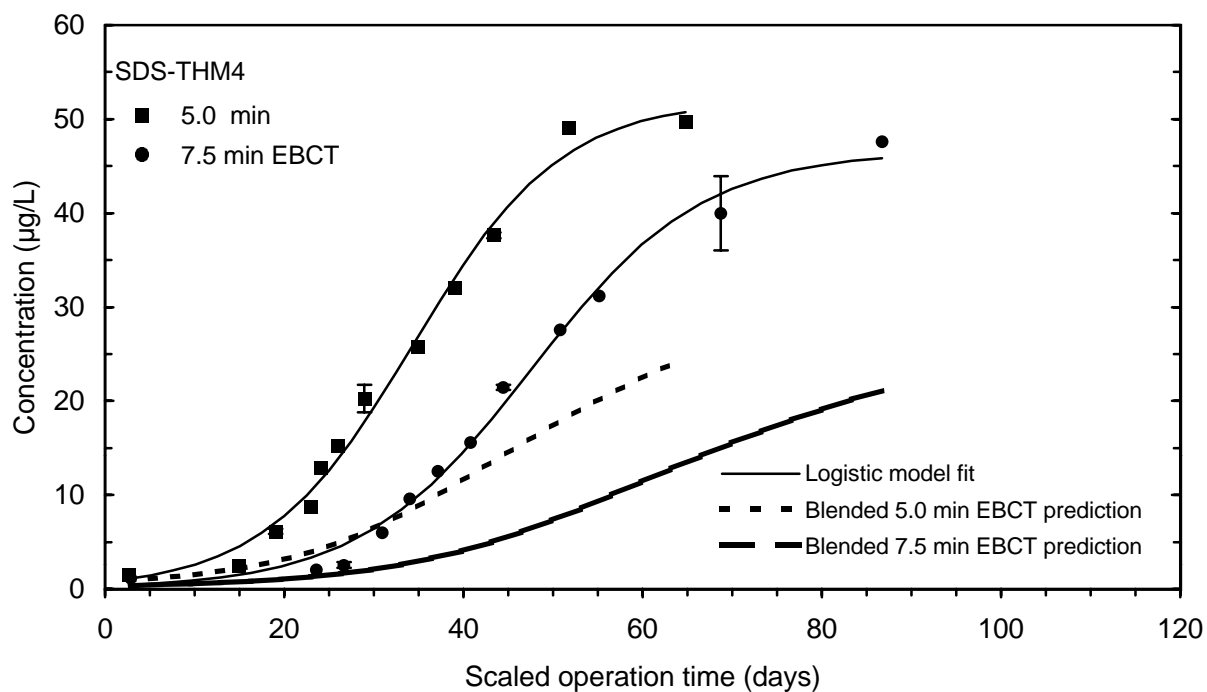


Figure 114 SDS-THM4 breakthrough and effluent blending for 5.0 and 7.5 minute EBCT contactors

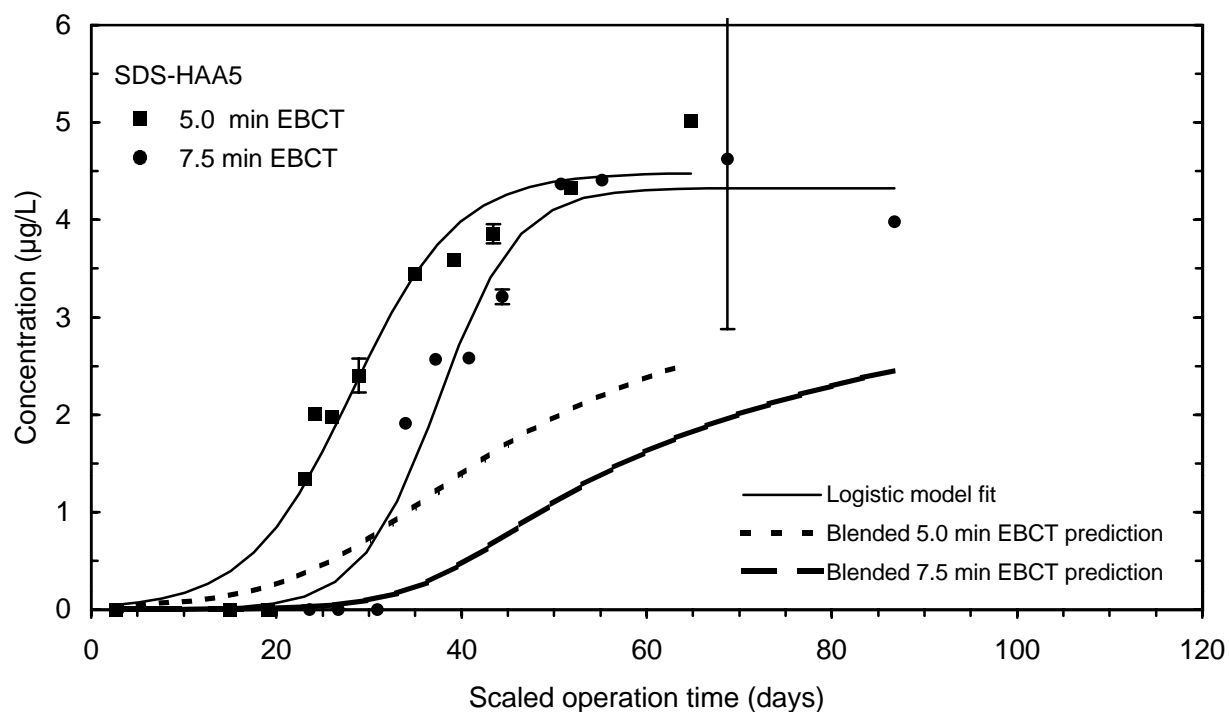


Figure 115 SDS-HAA5 breakthrough and effluent blending for 5.0 and 7.5 minute EBCT contactors

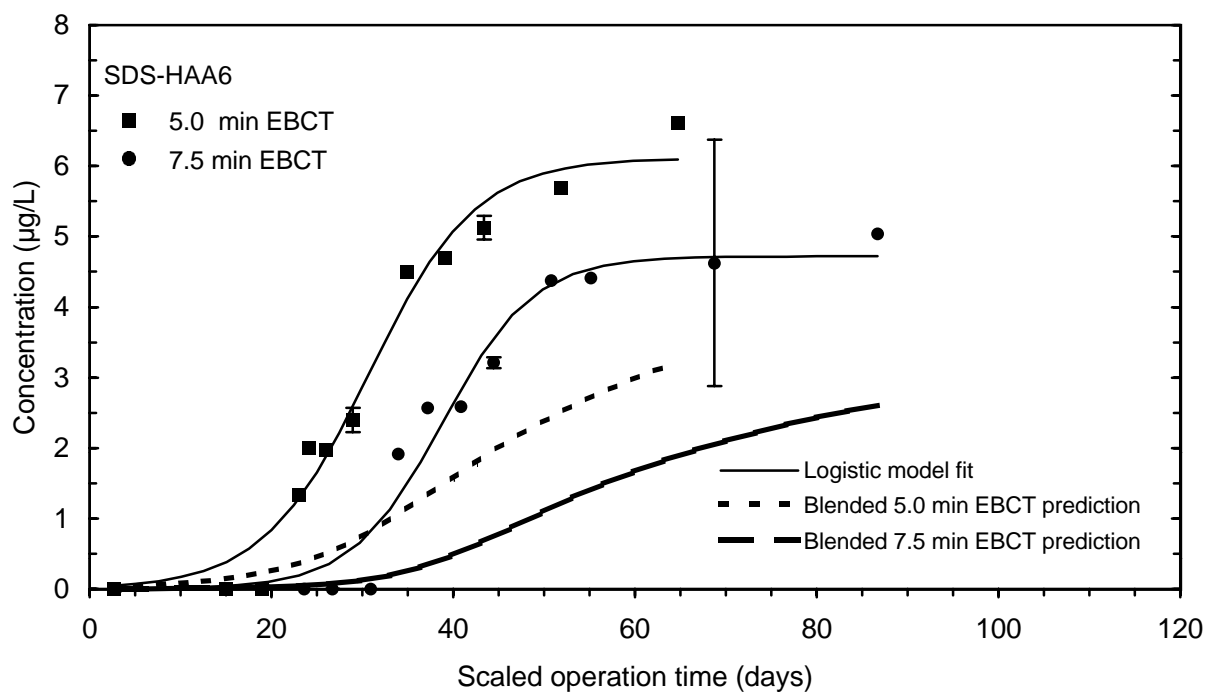


Figure 116 SDS-HAA6 breakthrough and effluent blending for 5.0 and 7.5 minute EBCT contactors

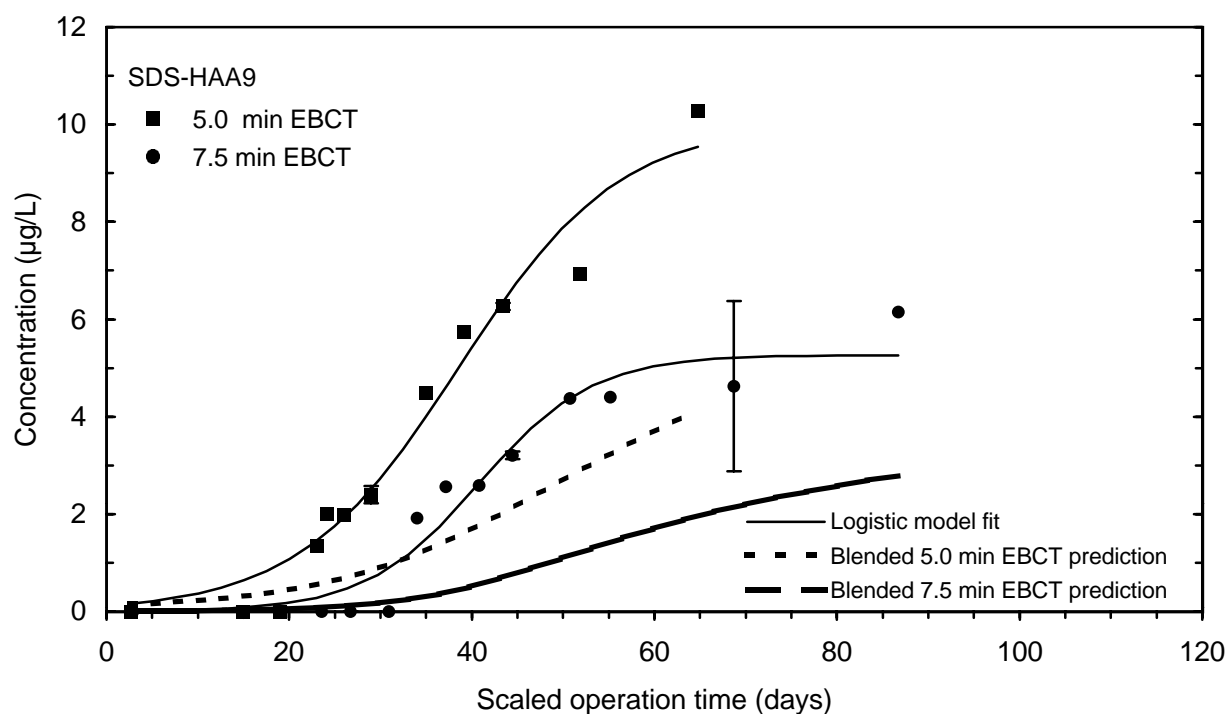


Figure 117 SDS-HAA9 breakthrough and effluent blending for 5.0 and 7.5 minute EBCT contactors

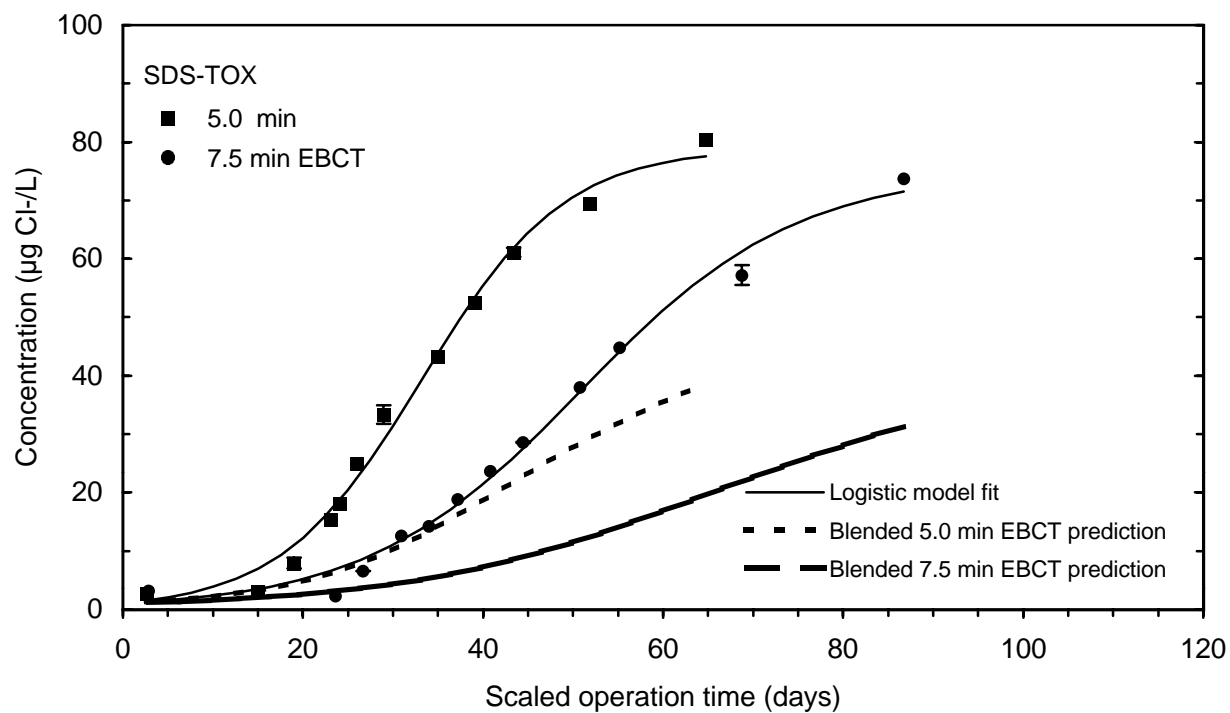


Figure 118 SDS-TOX breakthrough and effluent blending for 5.0 and 7.5 minute EBCT contactors

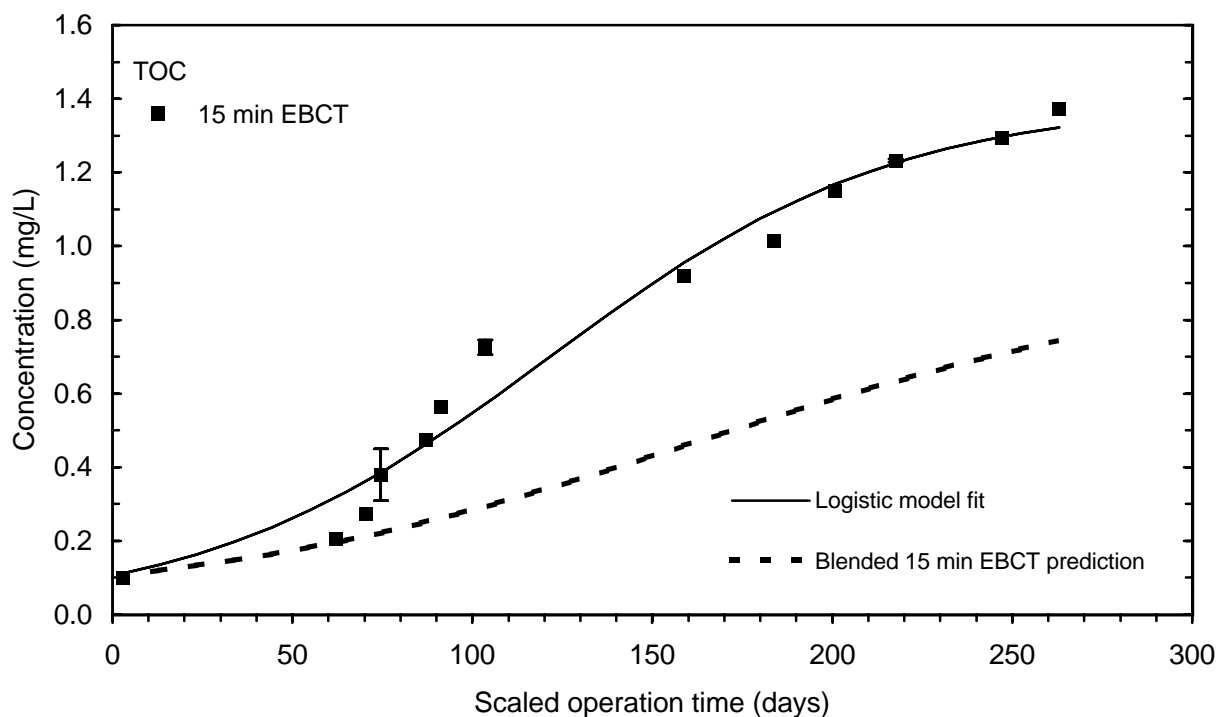


Figure 119 TOC breakthrough and effluent blending for 15 minute EBCT contactor

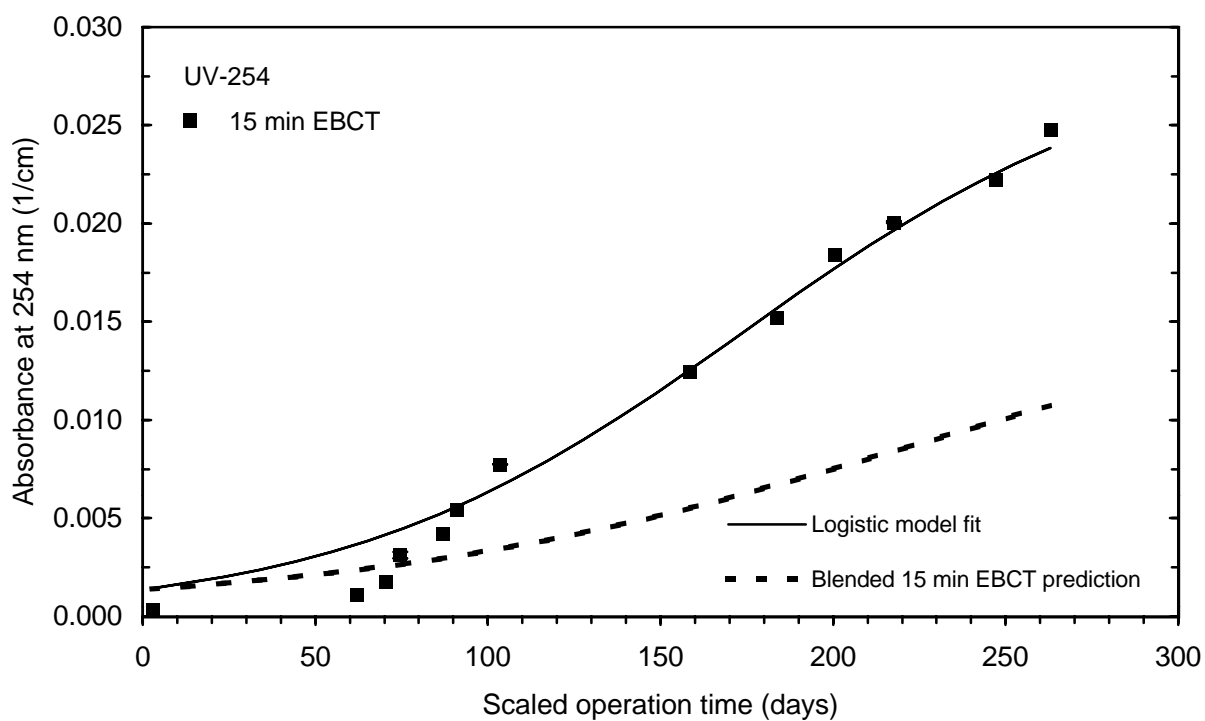


Figure 120 UV-254 breakthrough and effluent blending for 15 minute EBCT contactor

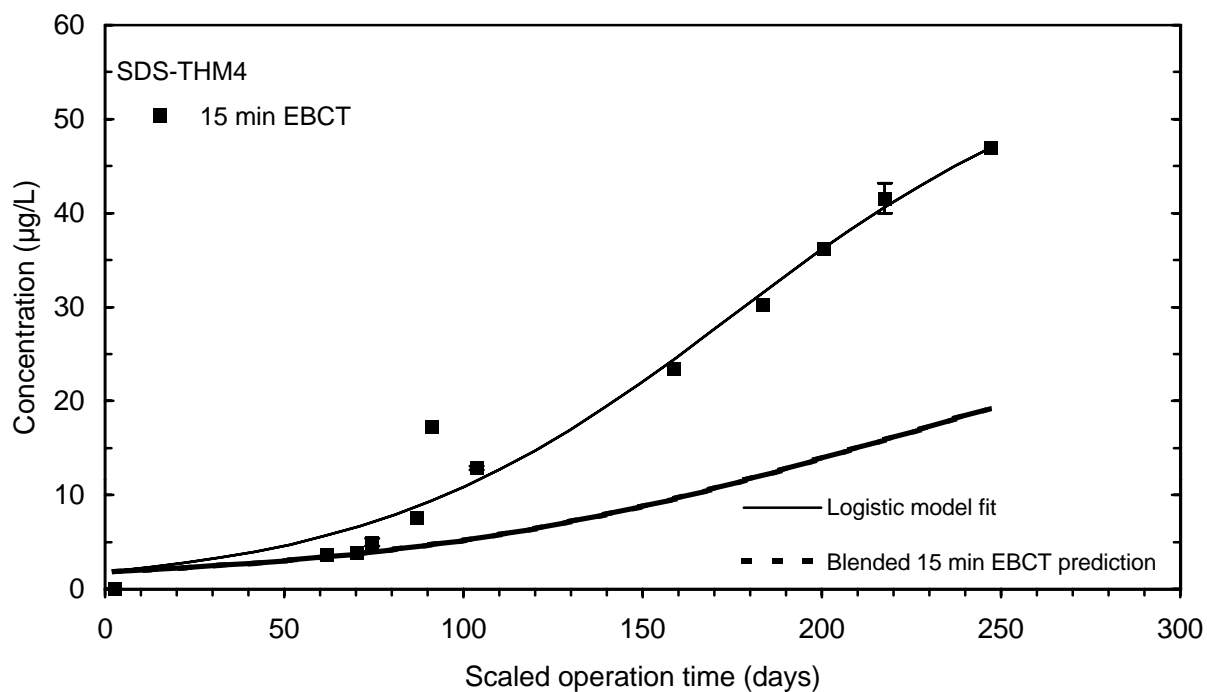


Figure 121 SDS-THM4 breakthrough and effluent blending for 15 minute EBCT contactor

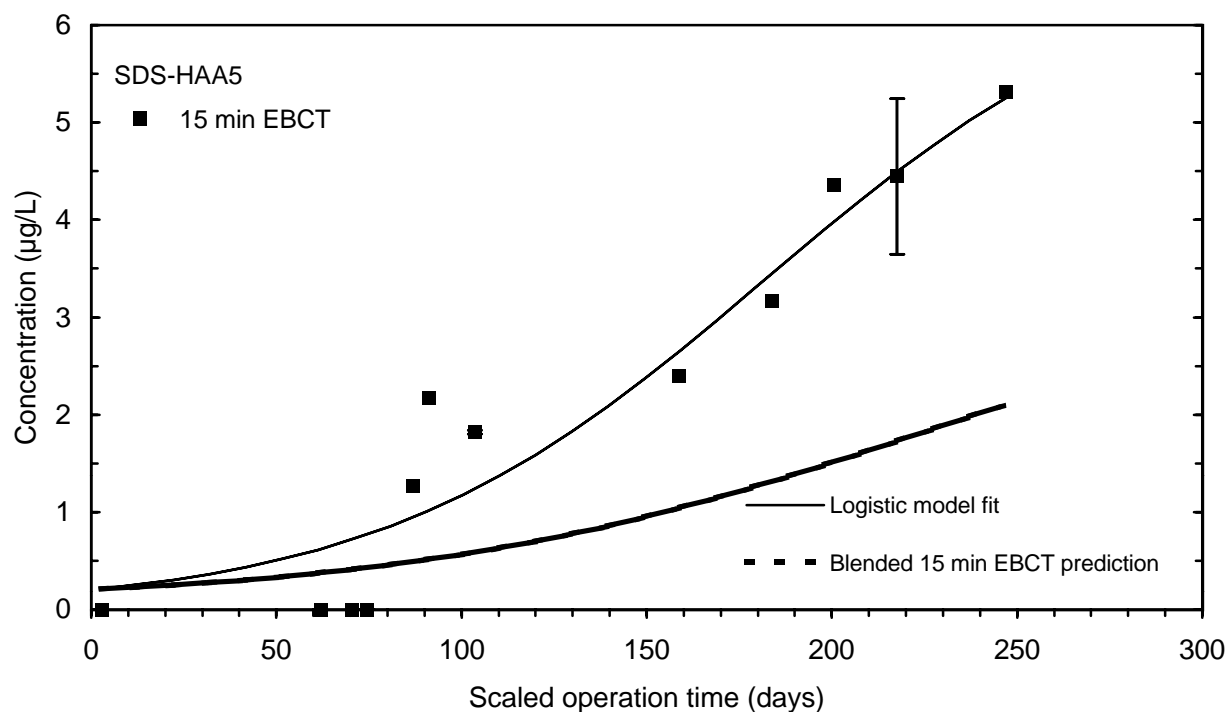


Figure 122 SDS-HAA5 breakthrough and effluent blending for 15 minute EBCT contactor

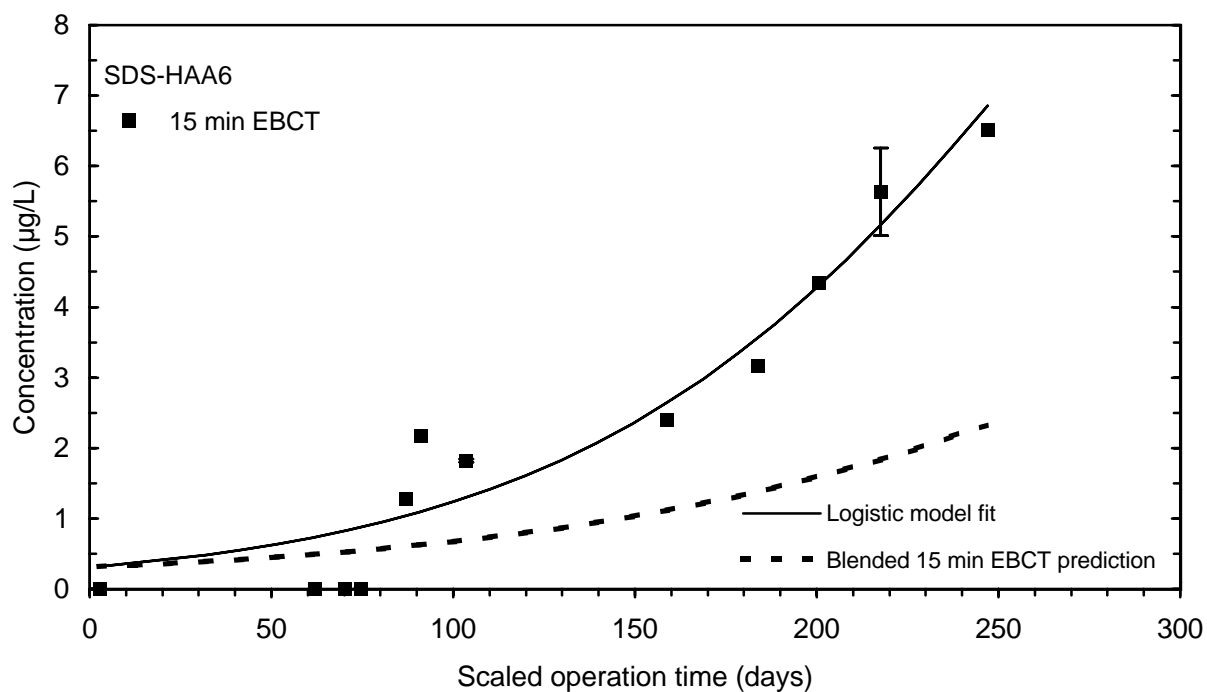


Figure 123 SDS-HAA6 breakthrough and effluent blending for 15 minute EBCT contactor

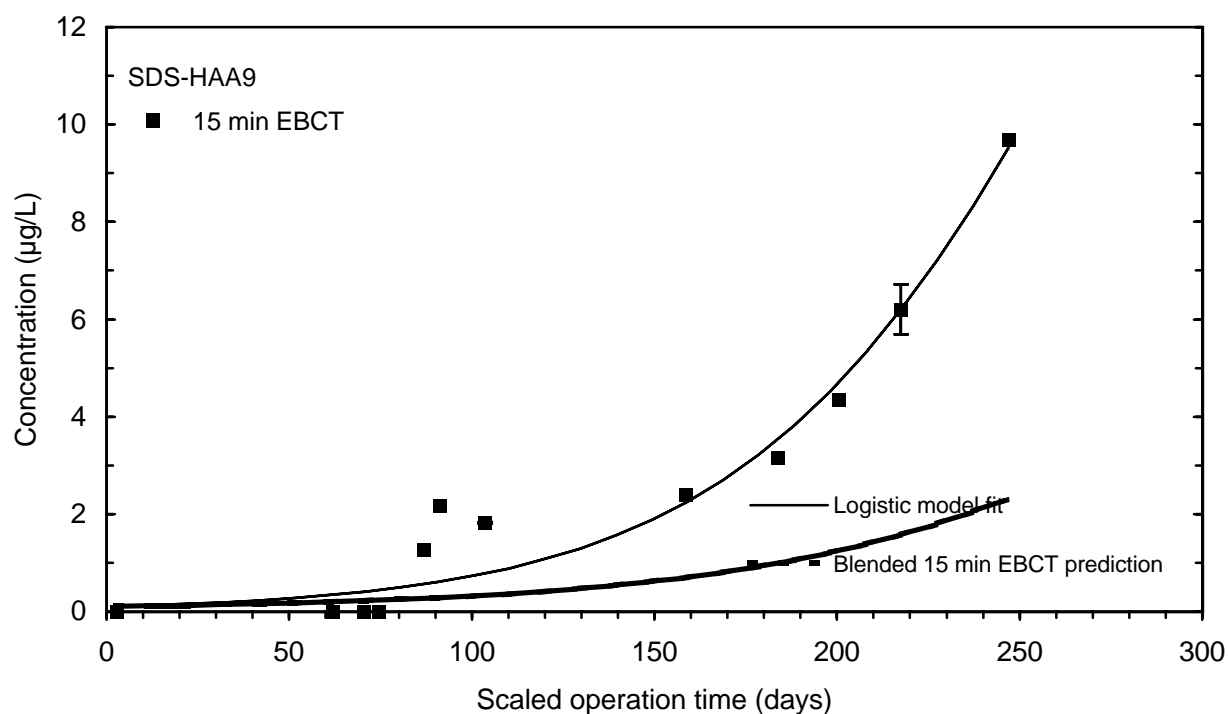


Figure 124 SDS-HAA9 breakthrough and effluent blending for 15 minute EBCT contactor

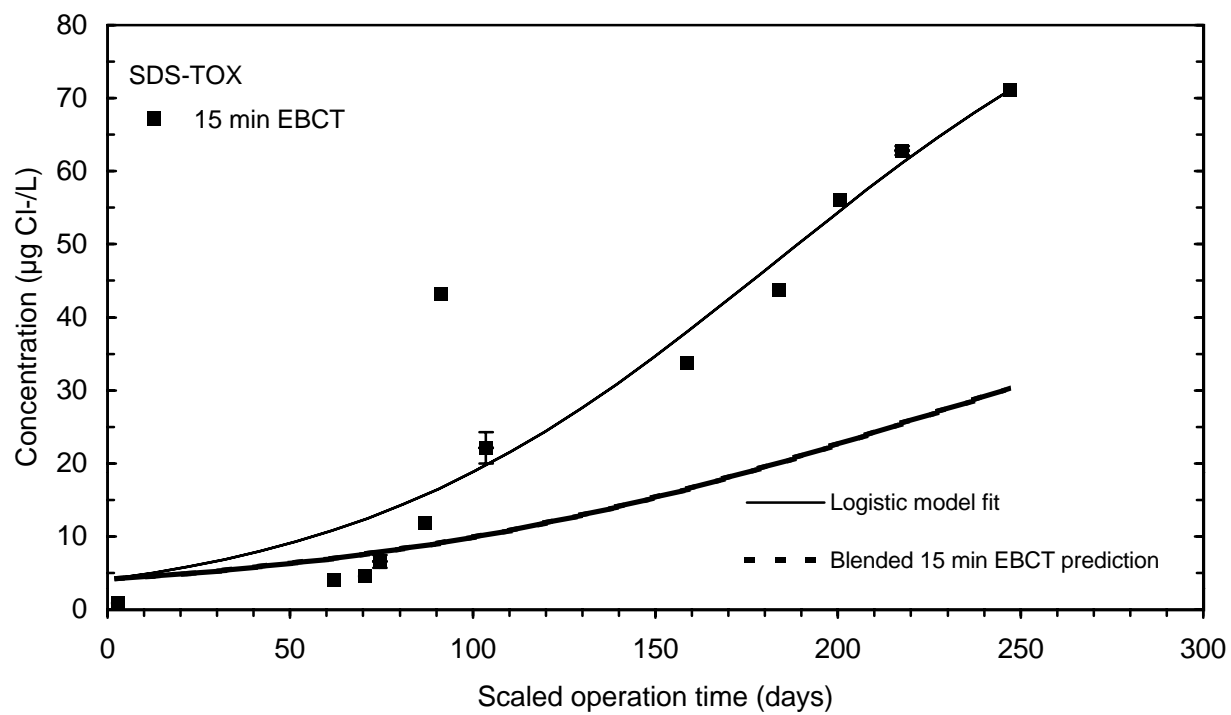


Figure 125 SDS-TOX breakthrough and effluent blending for 15 minute EBCT contactor

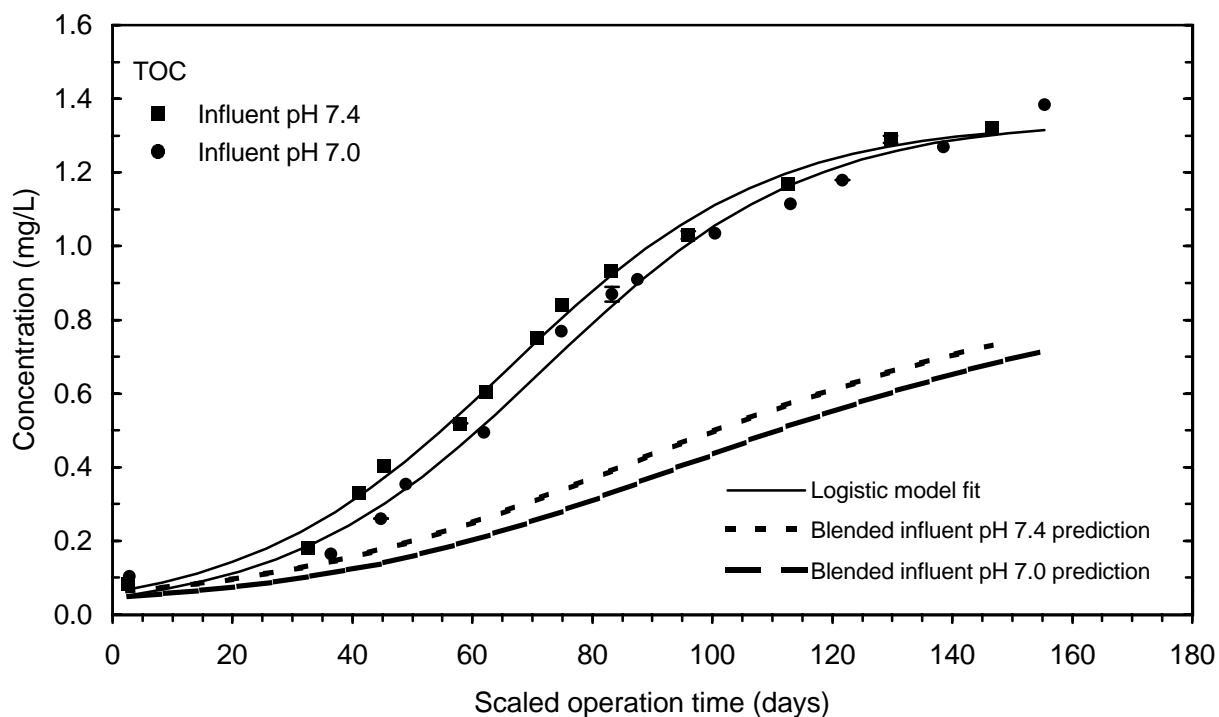


Figure 126 TOC breakthrough and effluent blending for influent pH 7.0 and 7.4 contactors (10 minute EBCT)

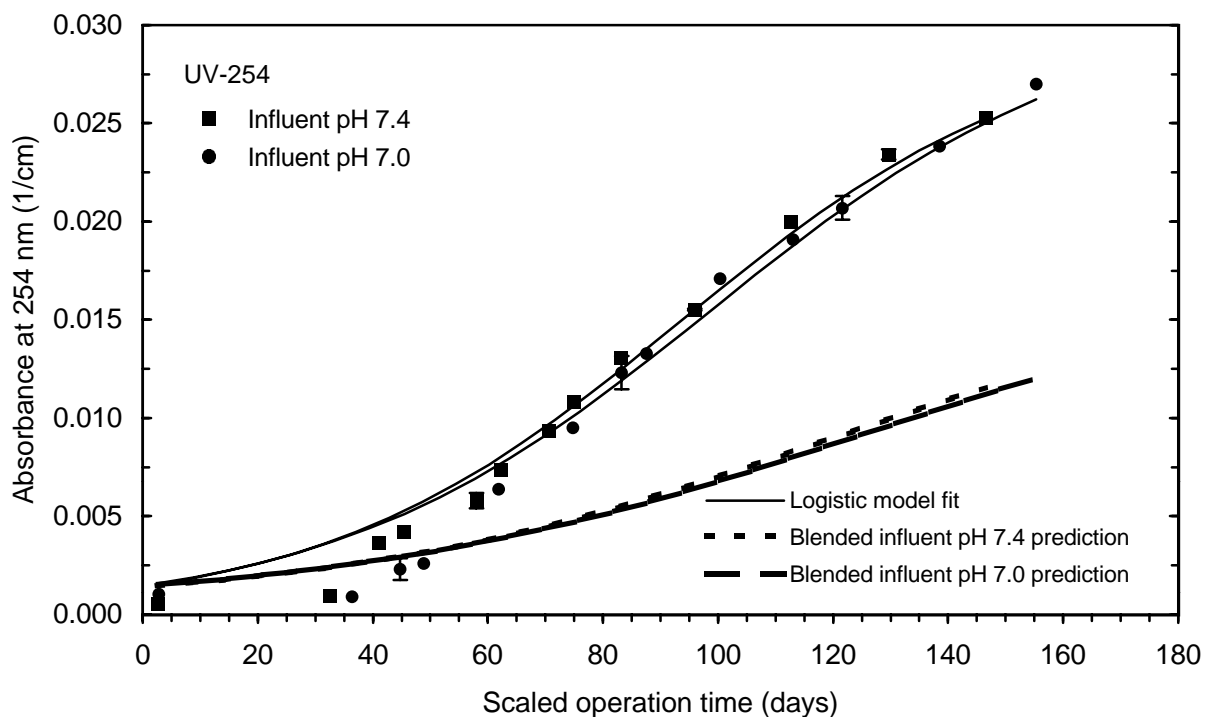


Figure 127 UV-254 breakthrough and effluent blending for influent pH 7.0 and 7.4 contactors (10 minute EBCT)

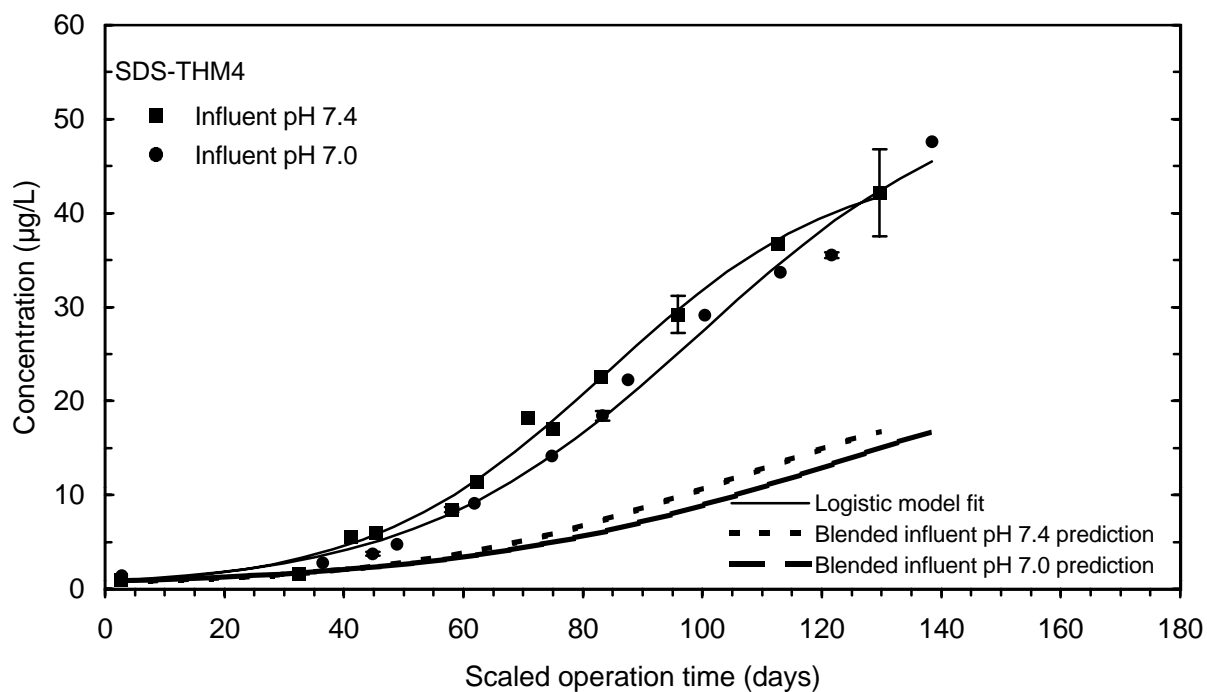


Figure 128 SDS-THM4 breakthrough and effluent blending for influent pH 7.0 and 7.4 contactors (10 minute EBCT)

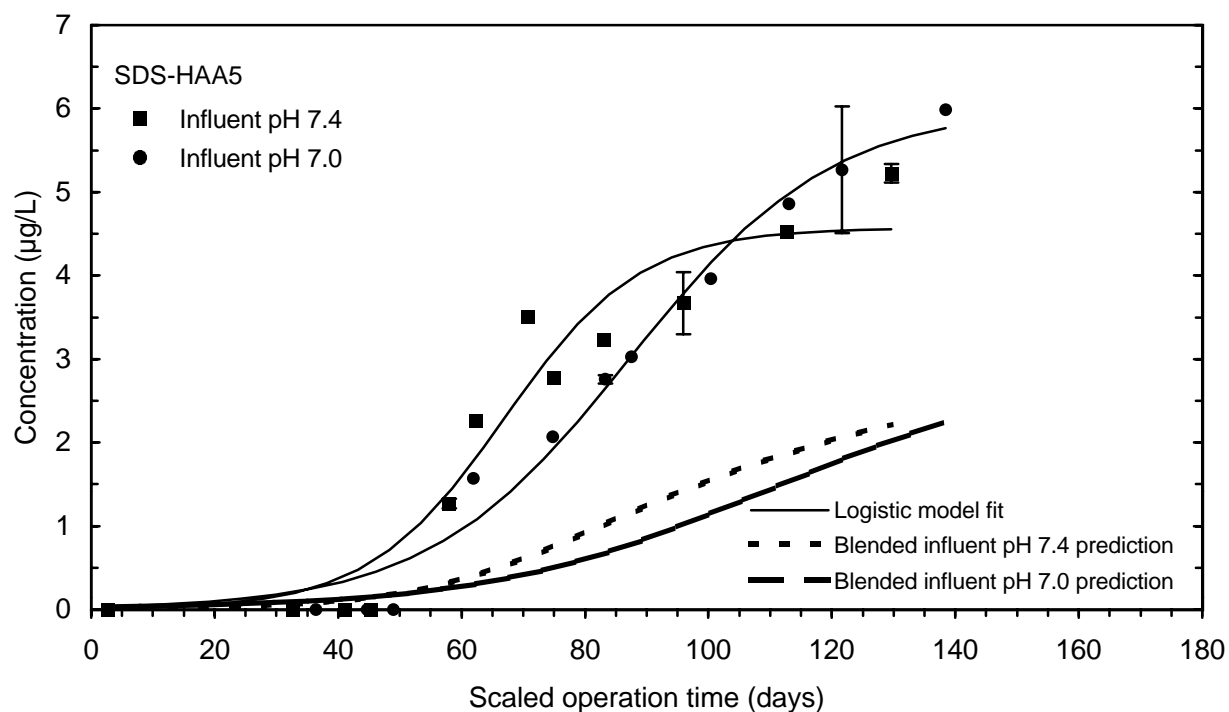


Figure 129 SDS-HAA5 breakthrough and effluent blending for influent pH 7.0 and 7.4 contactors (10 minute EBCT)

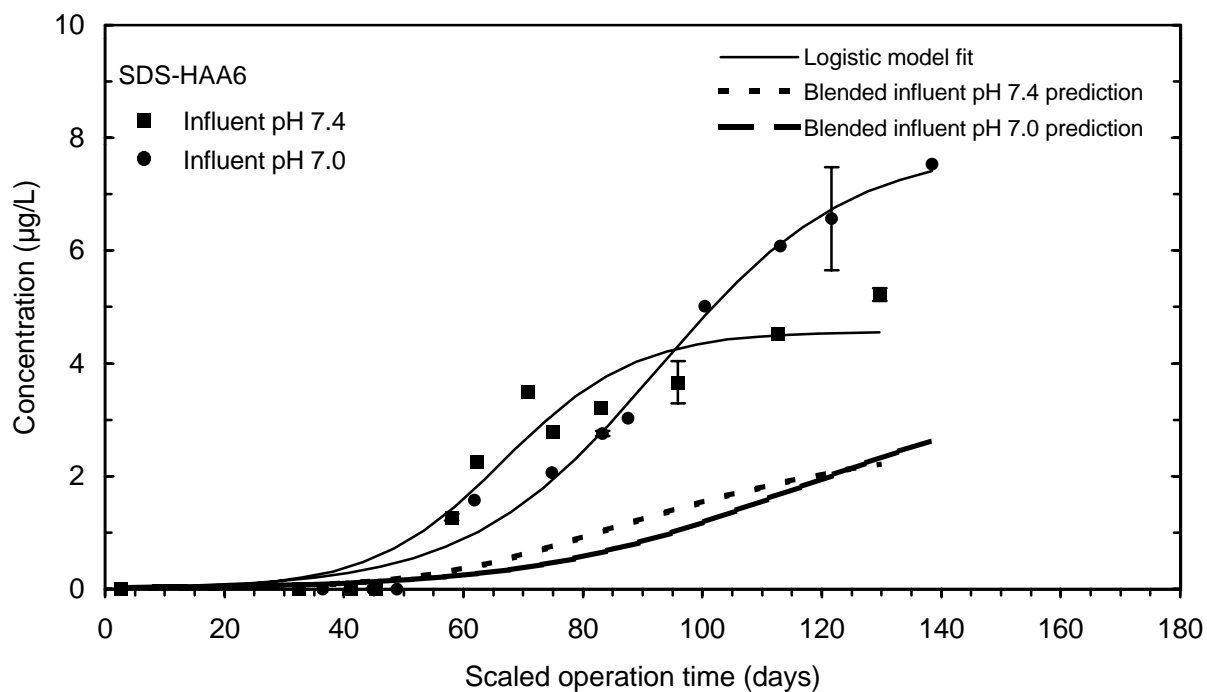


Figure 130 SDS-HAA6 breakthrough and effluent blending for influent pH 7.0 and 7.4 contactors (10 minute EBCT)

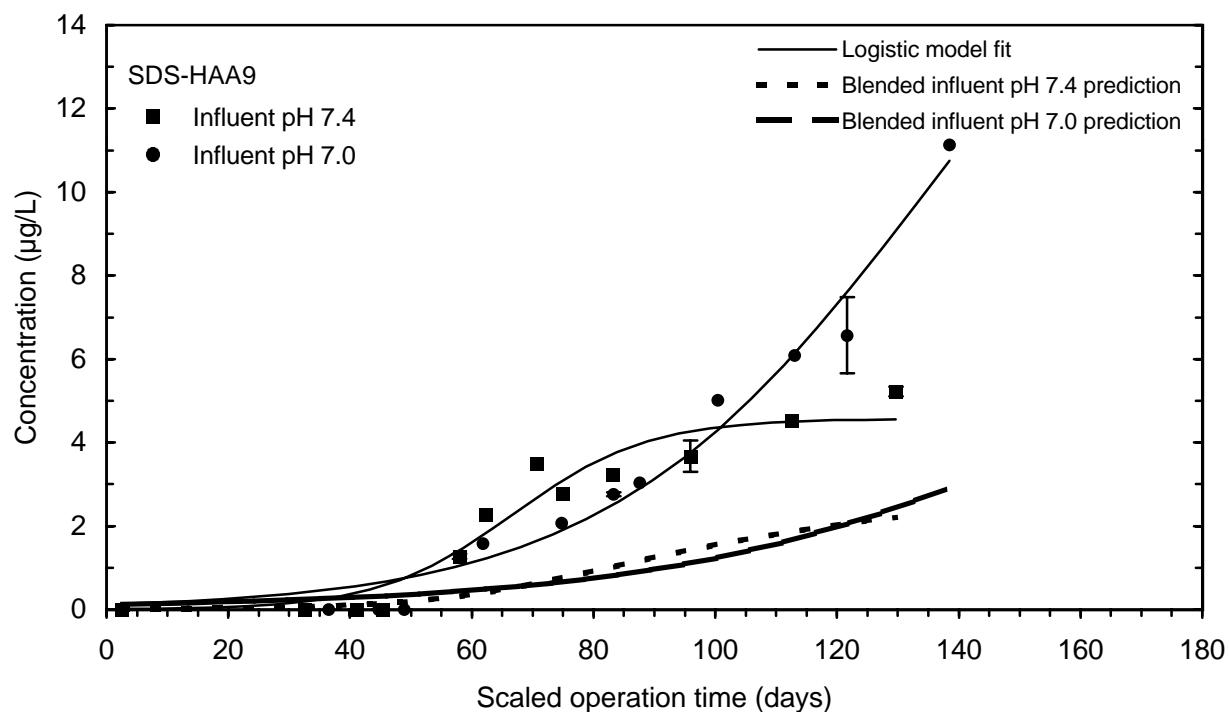


Figure 131 SDS-HAA9 breakthrough and effluent blending for influent pH 7.0 and 7.4 contactors (10 minute EBCT)

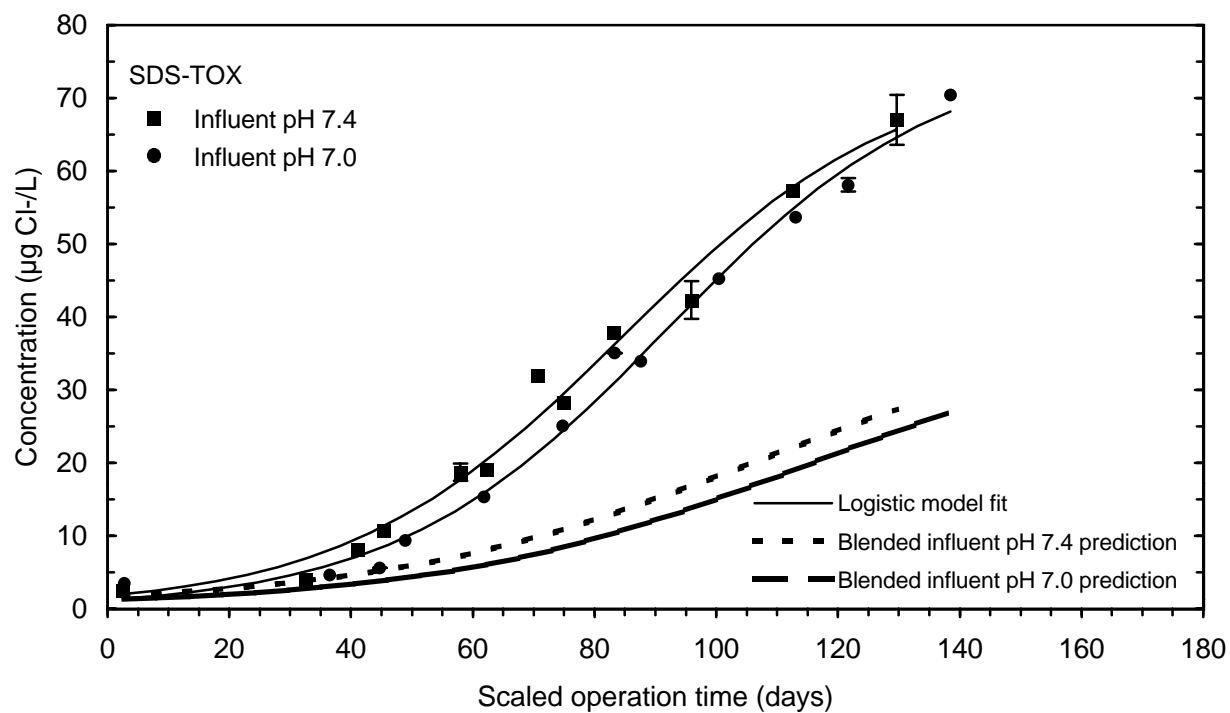


Figure 132 SDS-TOX breakthrough and effluent blending for influent pH 7.0 and 7.4 contactors (10 minute EBCT)

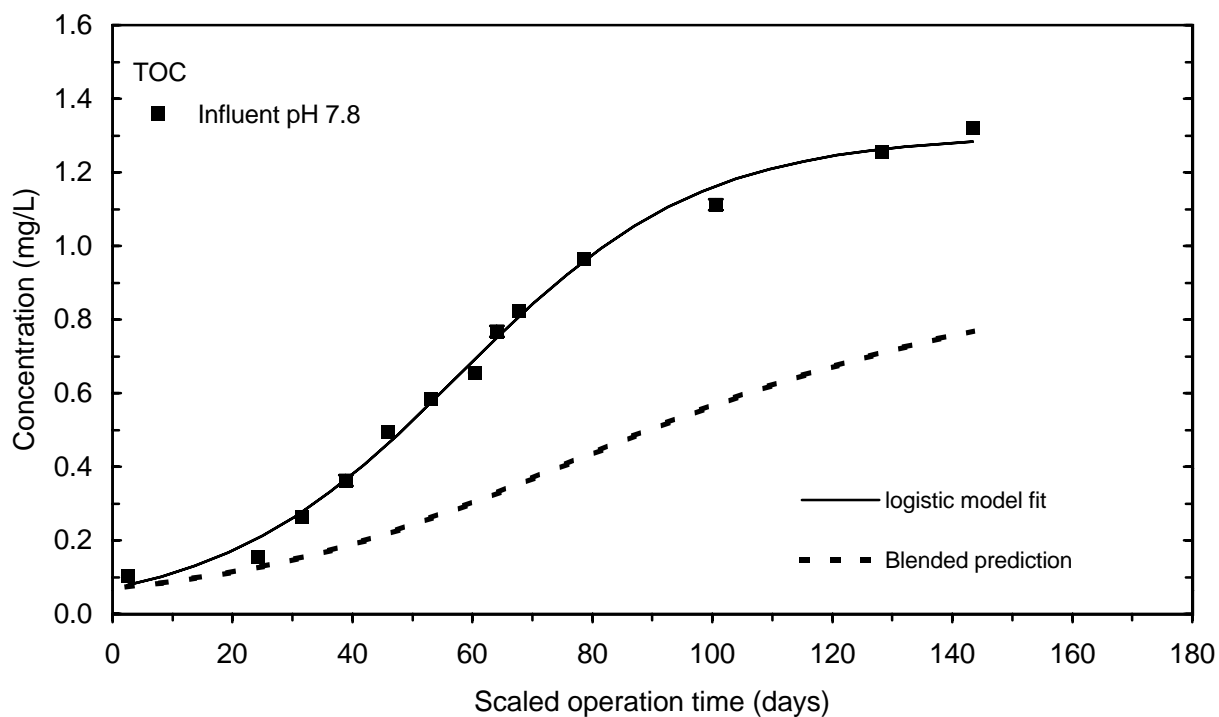


Figure 133 TOC breakthrough and effluent blending for influent pH 7.8 contactor (10 minute EBCT)

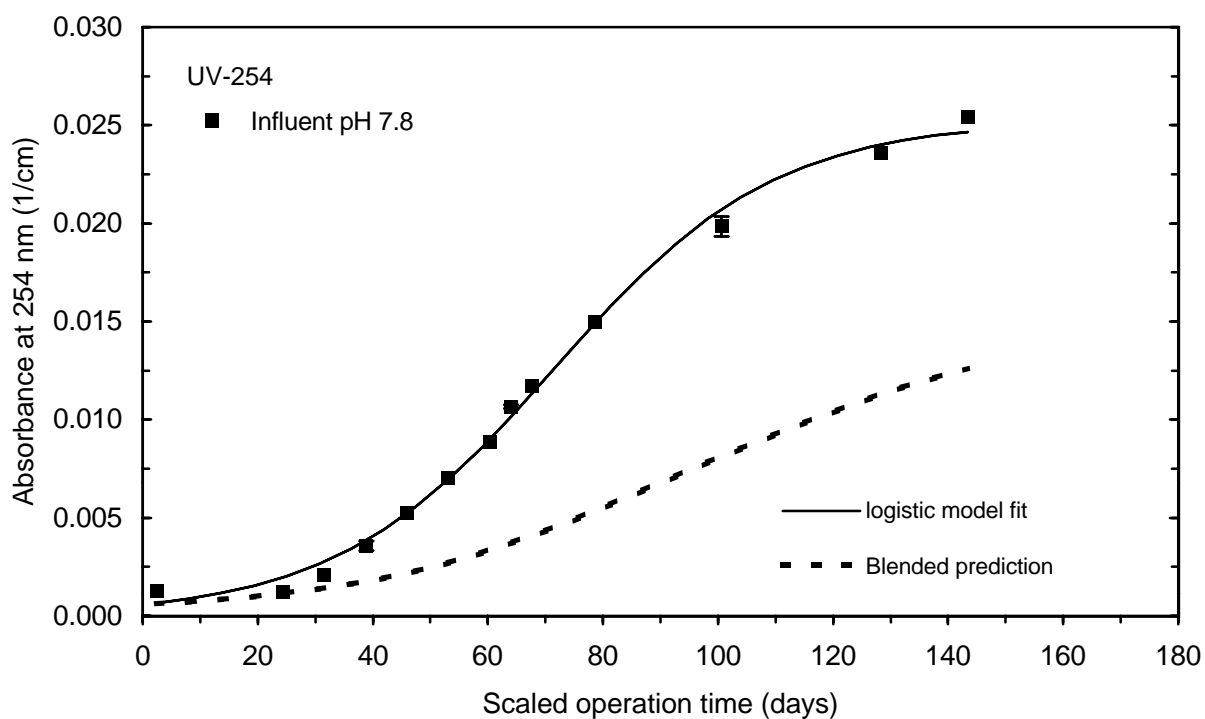


Figure 134 UV-254 breakthrough and effluent blending for influent pH 7.8 contactor (10 minute EBCT)

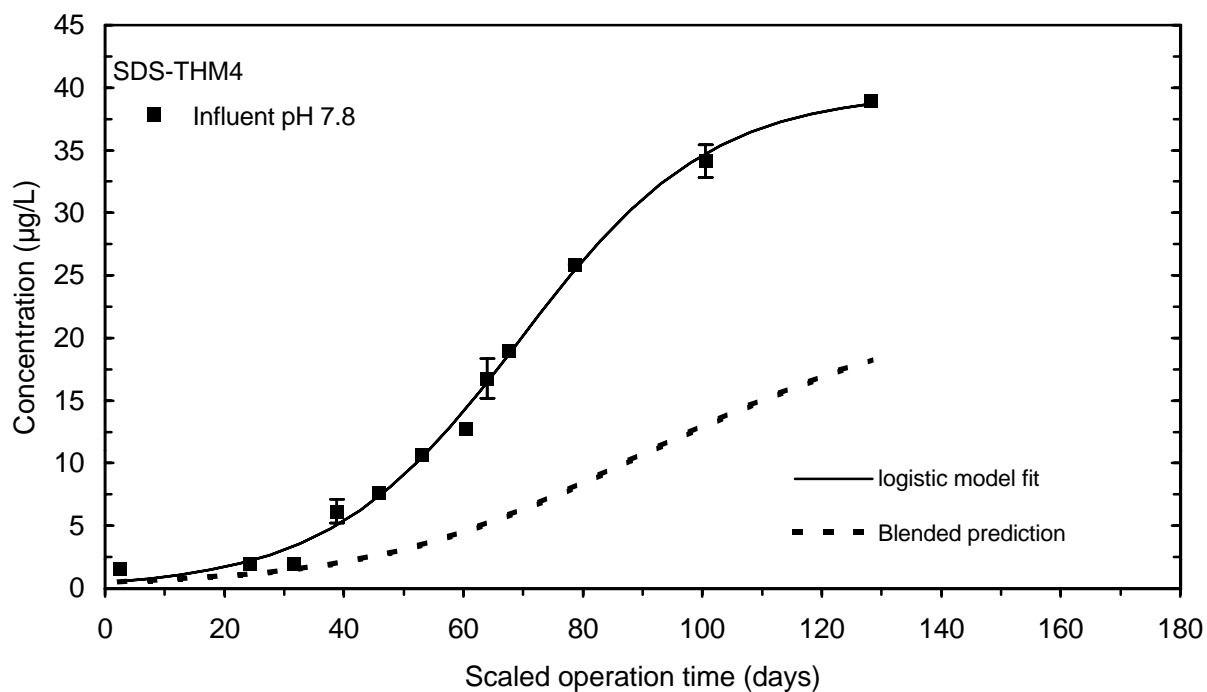


Figure 135 SDS-THM4 breakthrough and effluent blending for influent pH 7.8 contactor (10 minute EBCT)

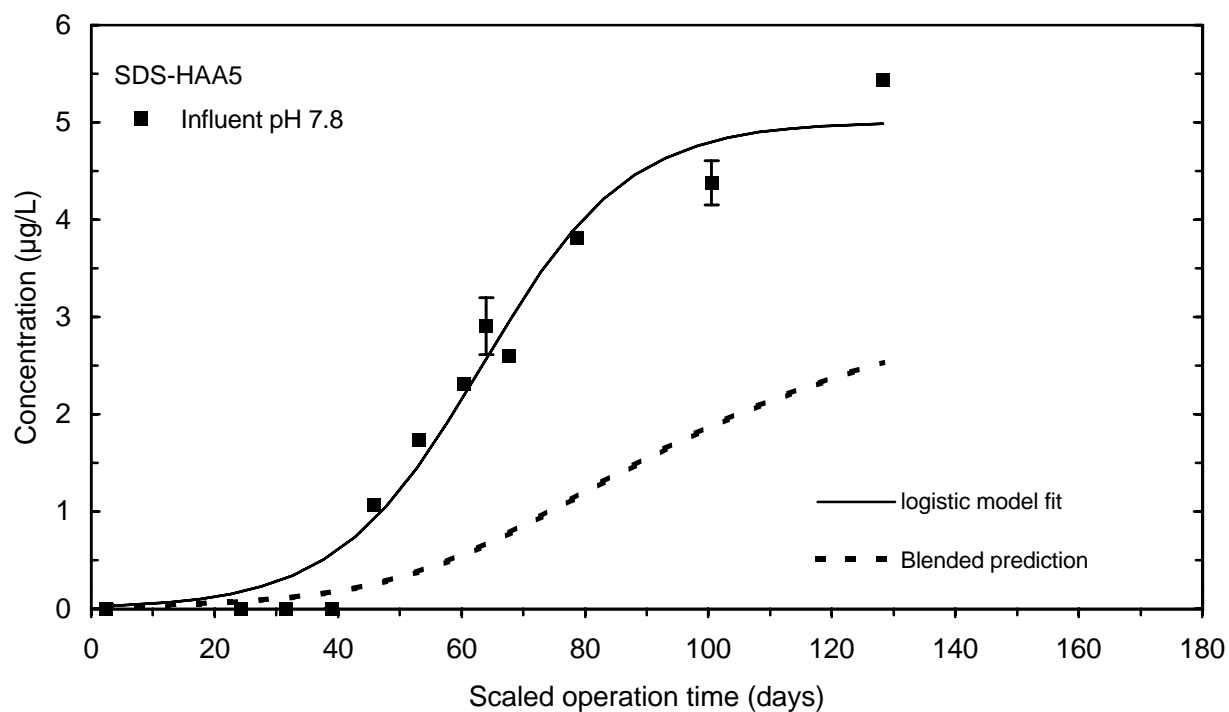


Figure 136 SDS-HAA5 breakthrough and effluent blending for influent pH 7.8 contactor (10 minute EBCT)

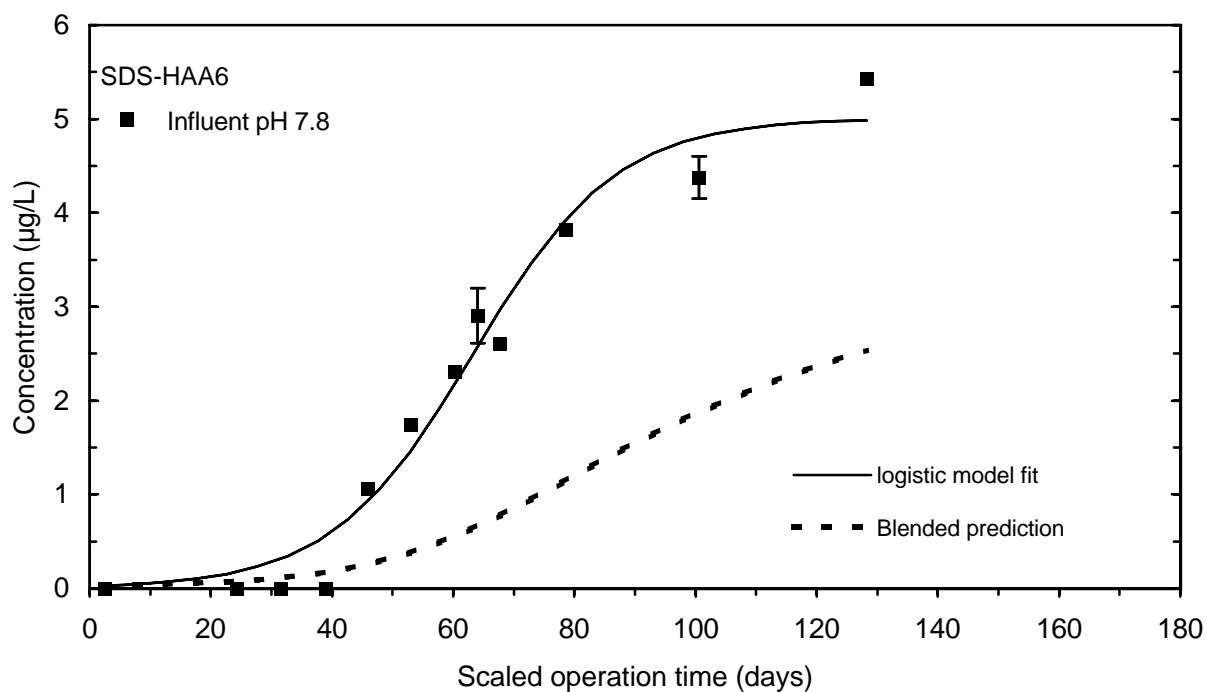


Figure 137 SDS-HAA6 breakthrough and effluent blending for influent pH 7.8 contactor (10 minute EBCT)

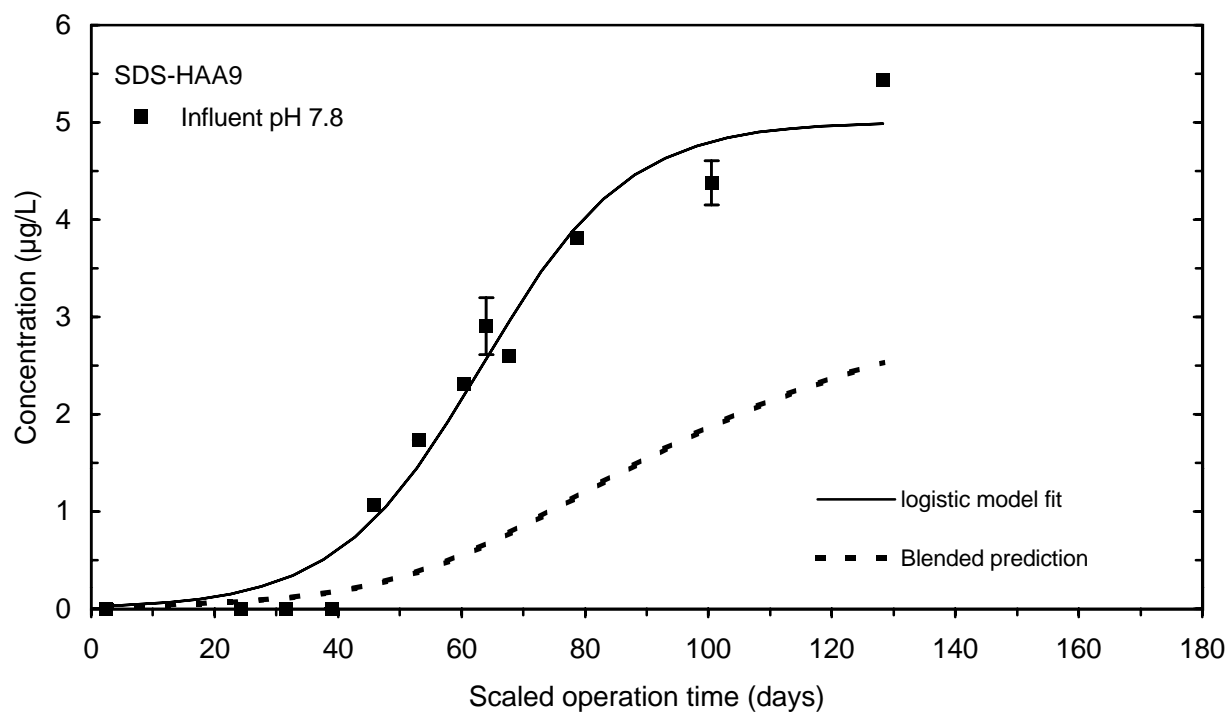


Figure 138 SDS-HAA9 breakthrough and effluent blending for influent pH 7.8 contactor (10 minute EBCT)

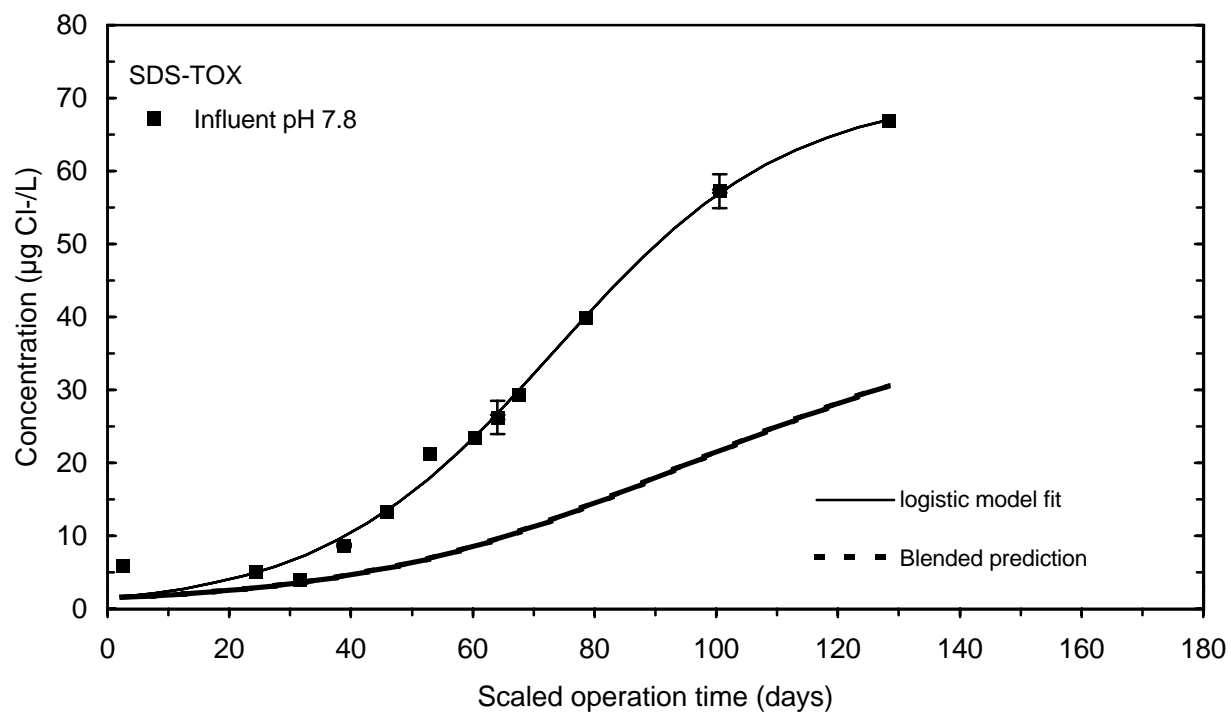


Figure 139 SDS-TOX breakthrough and effluent blending for influent pH 7.8 contactor (10 minute EBCT)

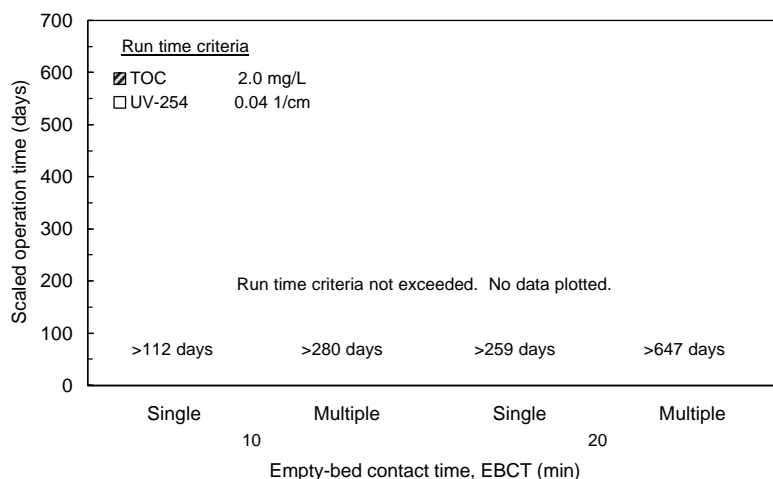


Figure 140 GAC run times based on single contactor breakthrough and effluent blending for TOC and UV-254 criteria (high) for 10 and 20 minute EBCT contactors

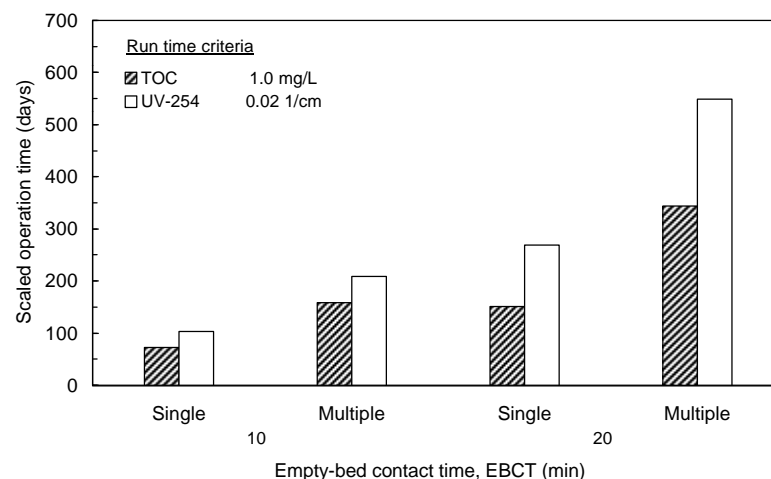


Figure 141 GAC run times based on single contactor breakthrough and effluent blending for TOC and UV-254 criteria (low) for 10 and 20 minute EBCT contactors

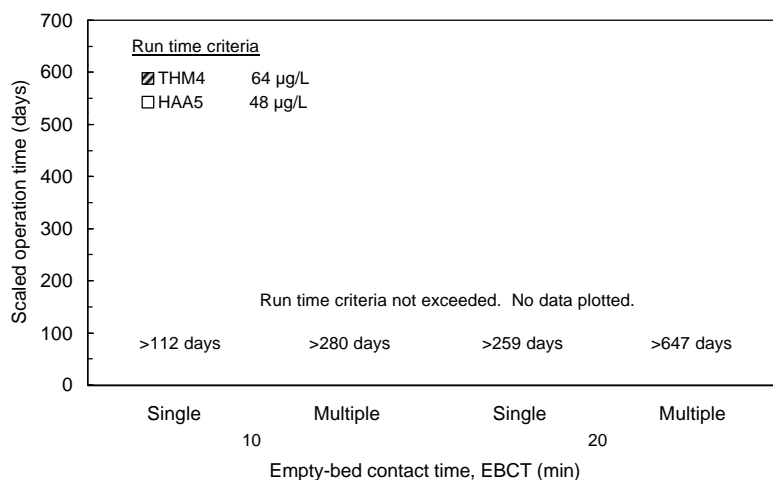


Figure 142 GAC run times based on single contactor breakthrough and effluent blending for Stage 1 THM4 and HAA5 criteria for 10 and 20 minute EBCT contactors

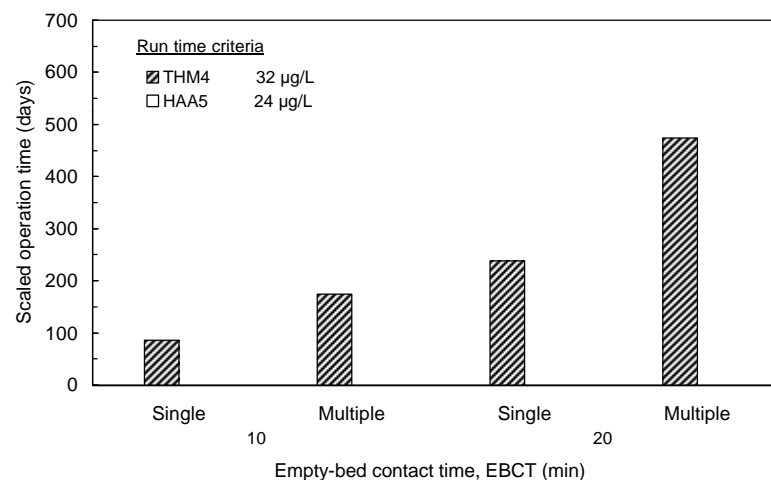


Figure 143 GAC run times based on single contactor breakthrough and effluent blending for Stage 2 THM4 and HAA5 criteria for 10 and 20 minute EBCT contactors

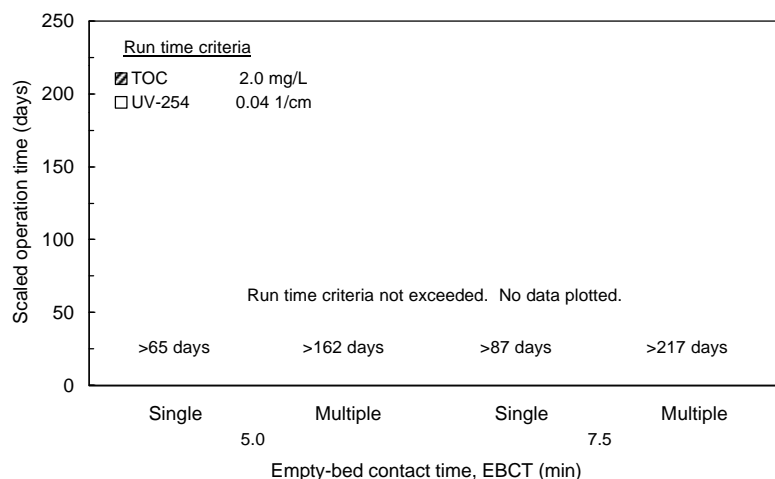


Figure 144 GAC run times based on single contactor breakthrough and effluent blending for TOC and UV-254 criteria (high) for 5.0 and 7.5 minute EBCT contactors

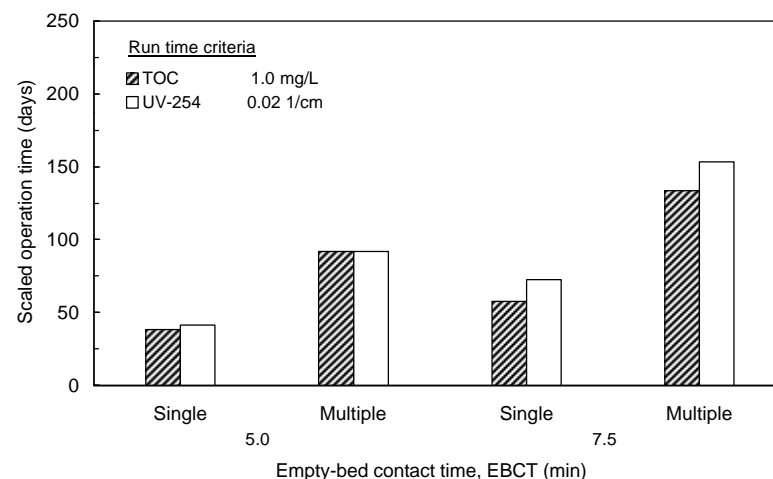


Figure 145 GAC run times based on single contactor breakthrough and effluent blending for TOC and UV-254 criteria (low) for 5.0 and 7.5 minute EBCT contactors

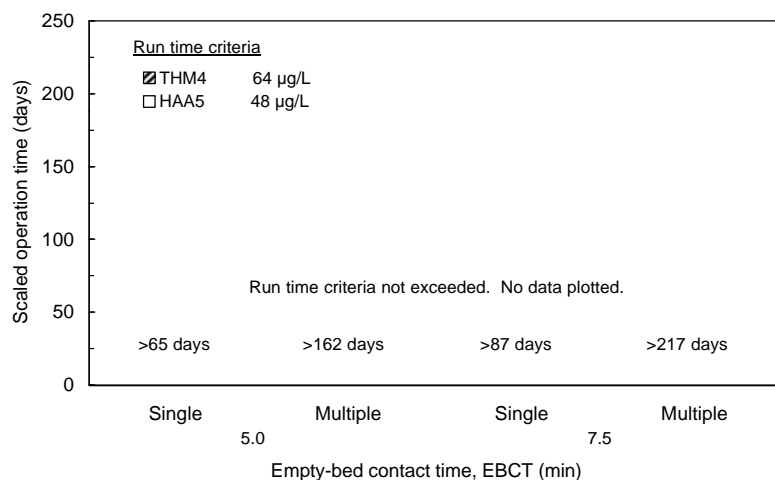


Figure 146 GAC run times based on single contactor breakthrough and effluent blending for Stage 1 THM4 and HAA5 criteria for 5.0 and 7.5 minute EBCT contactors

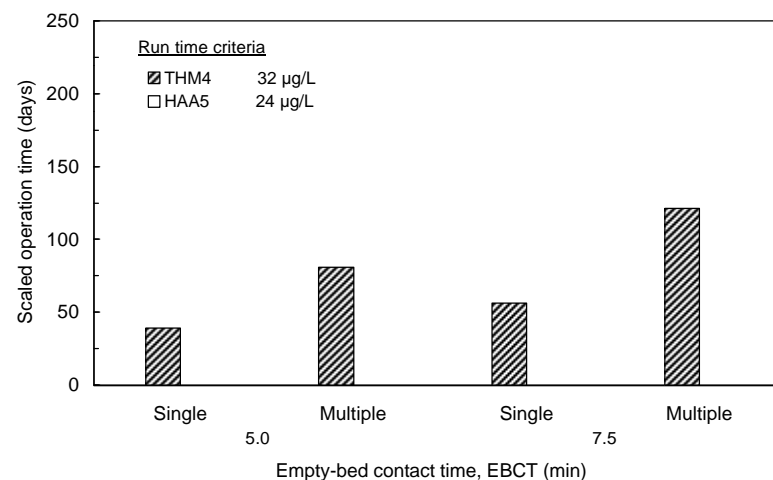


Figure 147 GAC run times based on single contactor breakthrough and effluent blending for Stage 2 THM4 and HAA5 criteria for 5.0 and 7.5 minute EBCT contactors

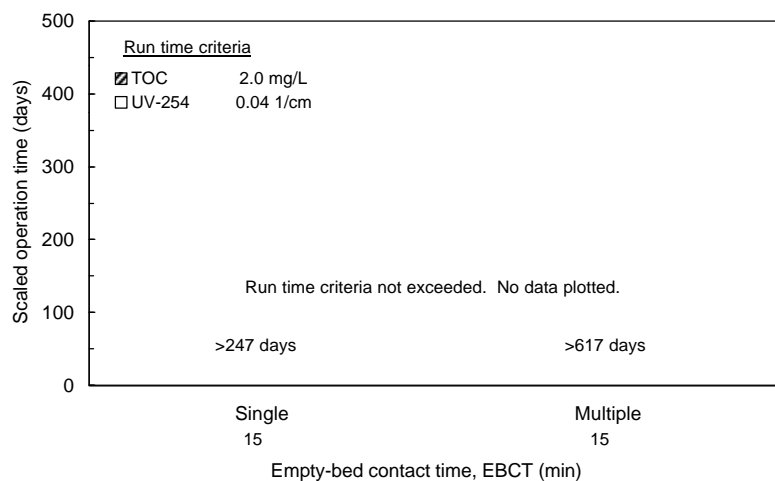


Figure 148 GAC run times based on single contactor breakthrough and effluent blending for TOC and UV-254 criteria (high) for 15 minute EBCT contactor

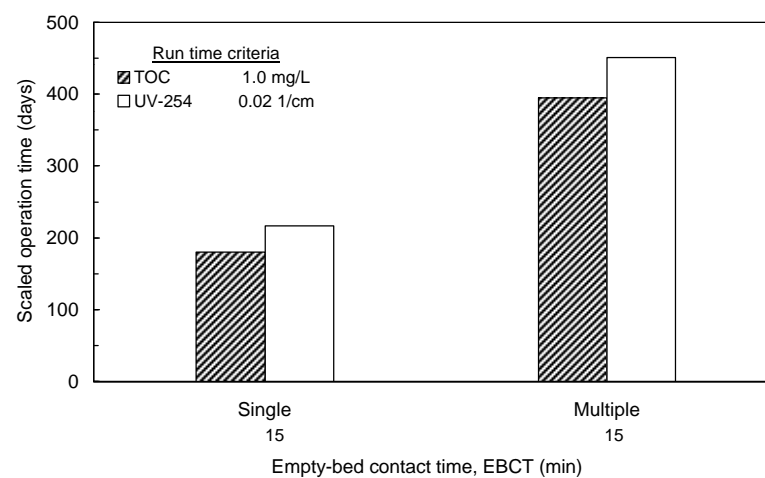


Figure 149 GAC run times based on single contactor breakthrough and effluent blending for TOC and UV-254 criteria (low) for 15 minute EBCT contactor

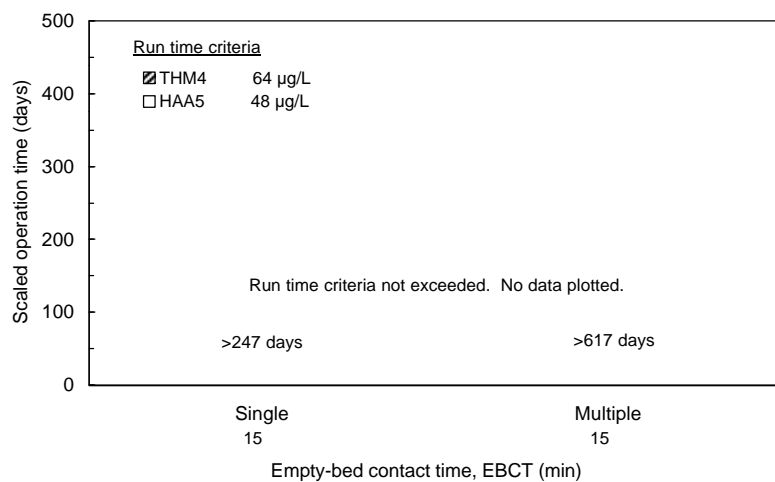


Figure 150 GAC run times based on single contactor breakthrough and effluent blending for Stage 1 THM4 and HAA5 criteria for 15 minute EBCT contactor

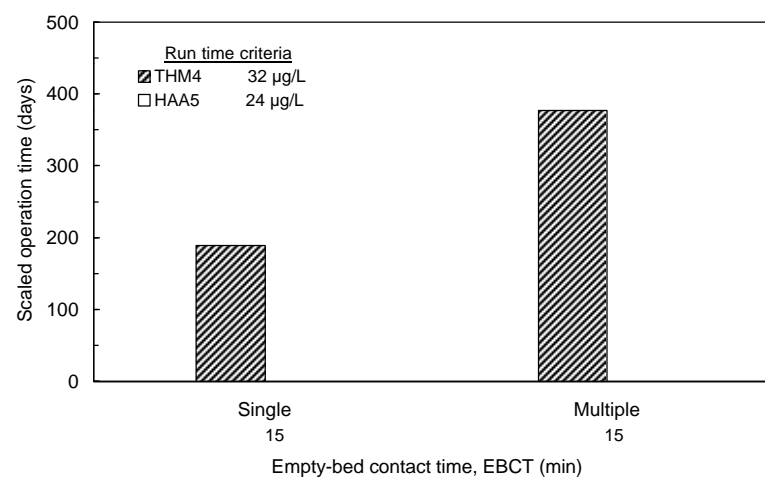


Figure 151 GAC run times based on single contactor breakthrough and effluent blending for Stage 2 THM4 and HAA5 criteria for 15 minute EBCT contactor

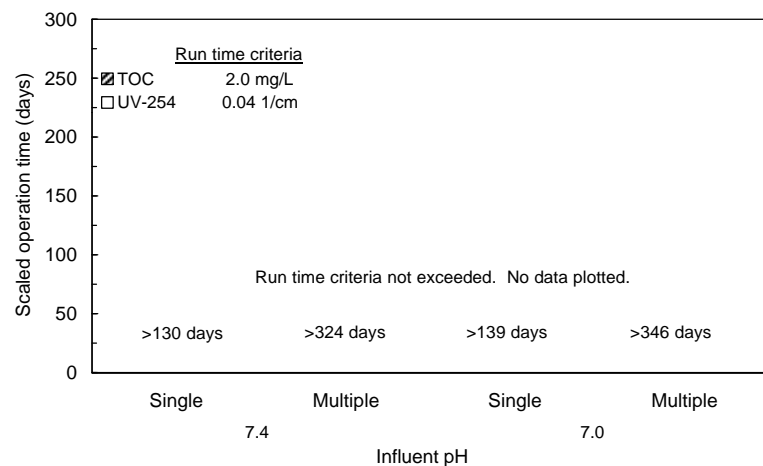


Figure 152 Run times based on single contactors and effluent blending for TOC and UV-254 criteria (high) for influent pH 7.0 and 7.4 contactors (10 minute EBCT)

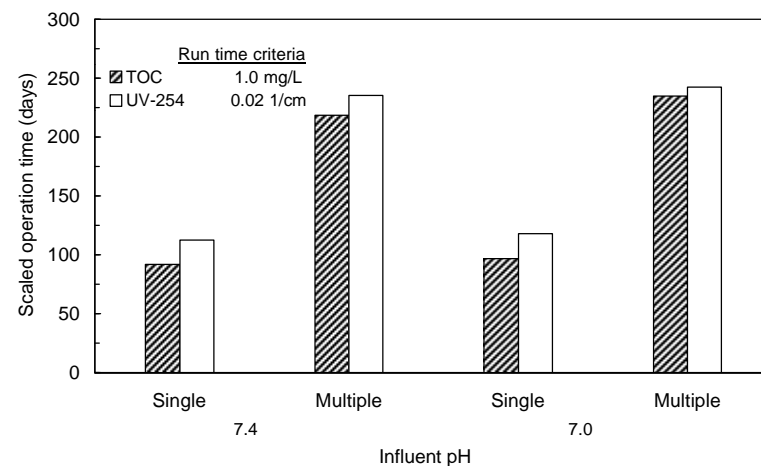


Figure 153 Run times based on single contactors and effluent blending for TOC and UV-254 criteria (low) for influent pH 7.0 and 7.4 contactors (10 minute EBCT)

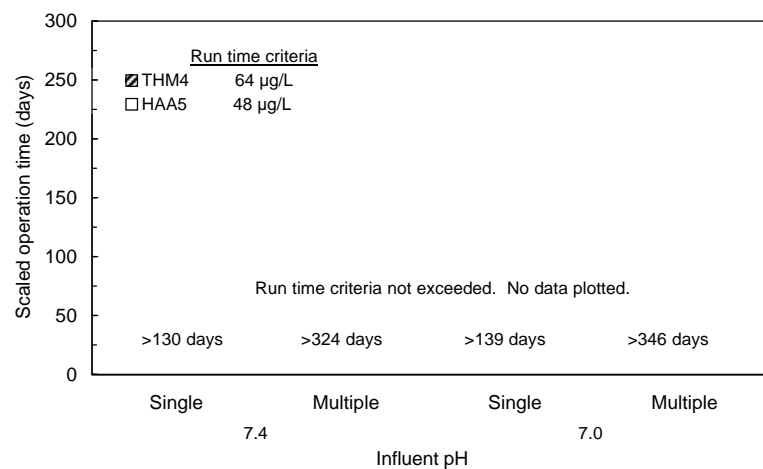


Figure 154 Run times based on single contactors and effluent blending for Stage 1 THM4 and HAA5 criteria for influent pH 7.0 and 7.4 (10 minute EBCT)

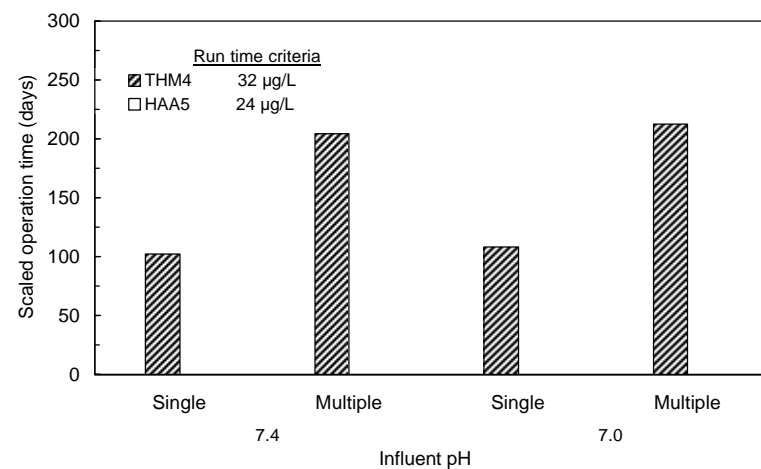


Figure 155 Run times based on single contactors and effluent blending for Stage 2 THM4 and HAA5 criteria for influent pH 7.0 and 7.4 (10 minute EBCT)

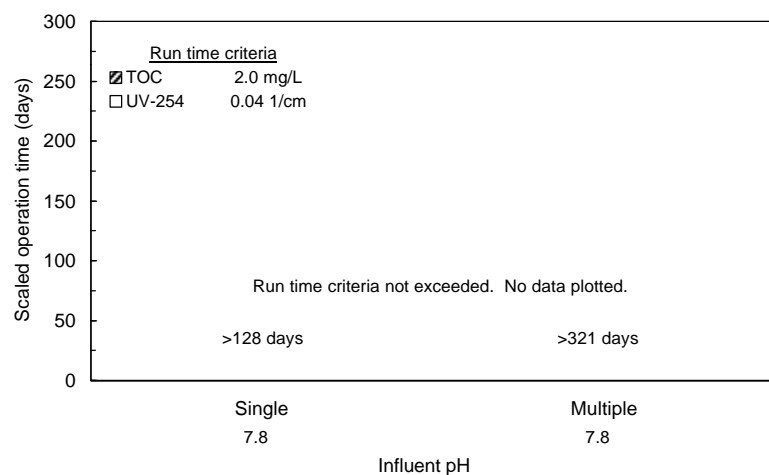


Figure 156 Run times based on single contactors and effluent blending for TOC and UV-254 criteria (high) for influent pH 7.8 contactor (10 minute EBCT)

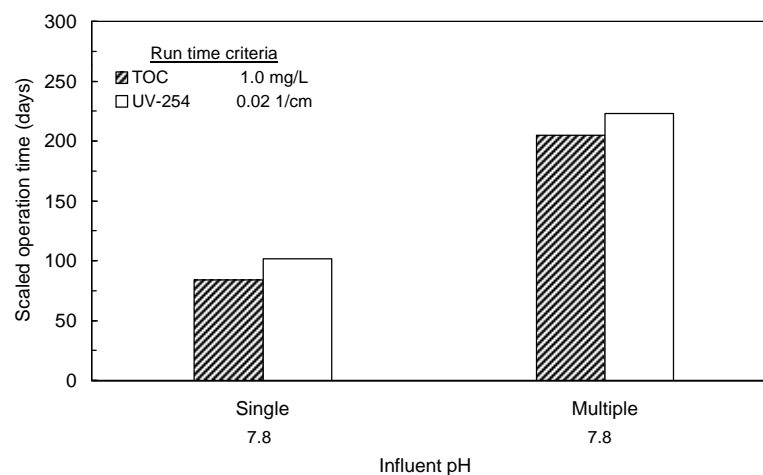


Figure 157 Run times based on single contactors and effluent blending for TOC and UV-254 criteria (low) for influent pH 7.8 contactor (10 minute EBCT)

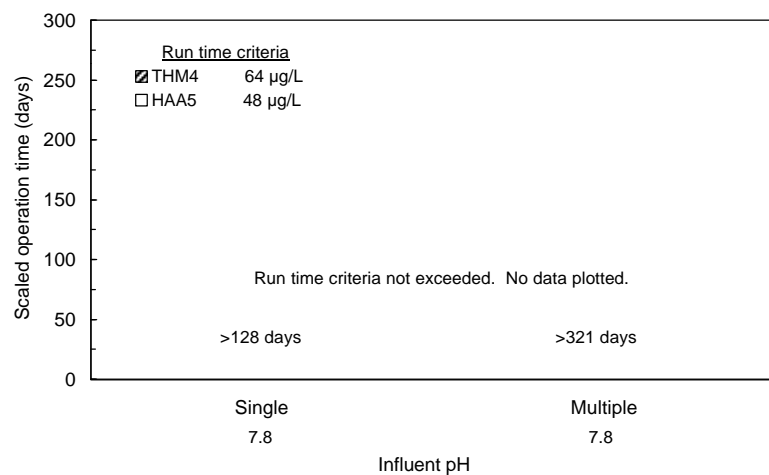


Figure 158 Run times based on single contactors and effluent blending for Stage 1 THM4 and HAA5 criteria for influent pH 7.8 contactor (10 minute EBCT)

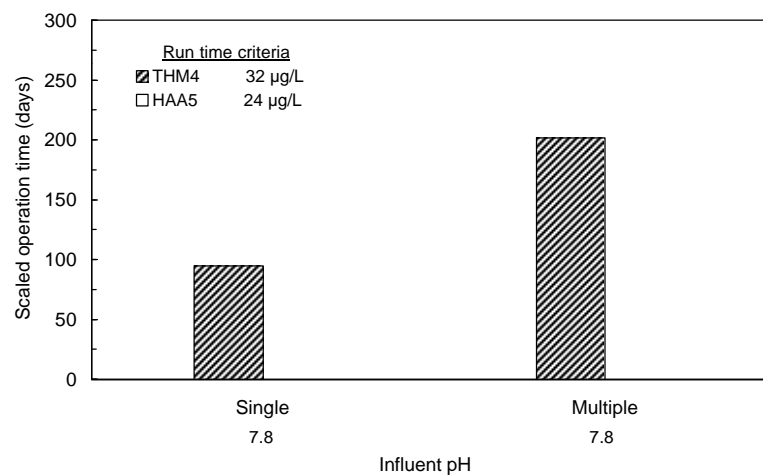


Figure 159 Run times based on single contactors and effluent blending for Stage 2 THM4 and HAA5 criteria for influent pH 7.8 contactor (10 minute EBCT)

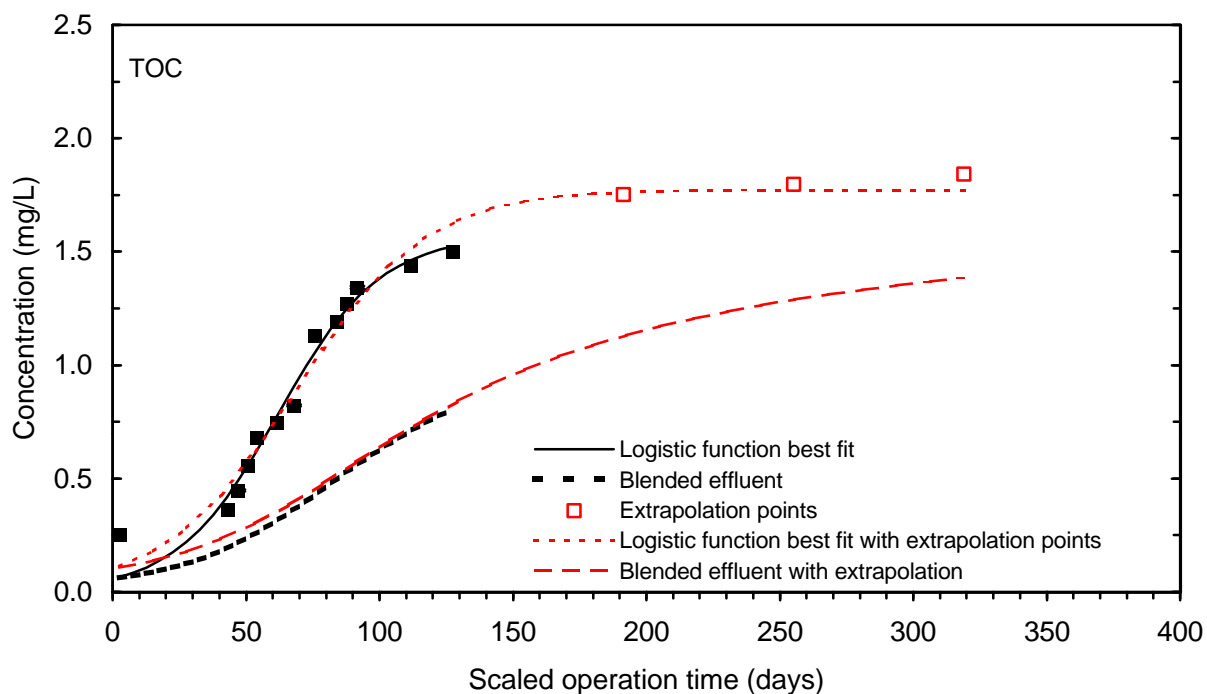


Figure 160 Single contactor and blended effluent extrapolated TOC breakthrough curve (10 minute EBCT)

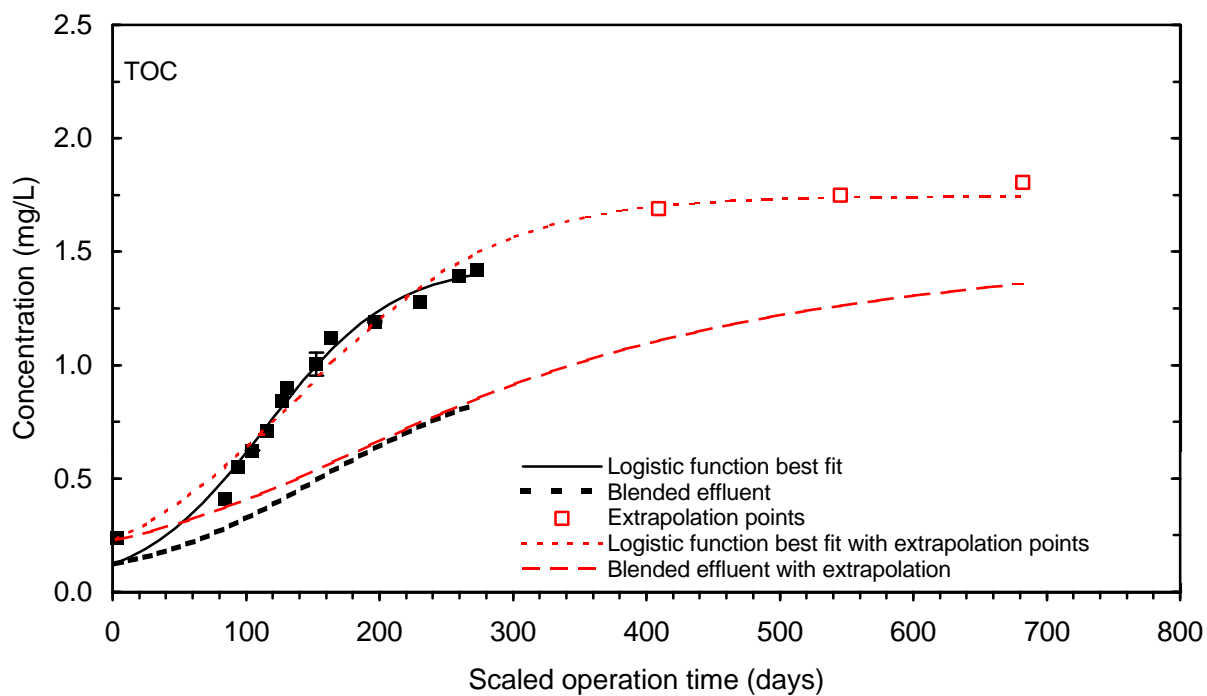


Figure 161 Single contactor and blended effluent extrapolated TOC breakthrough curve (20 minute EBCT)

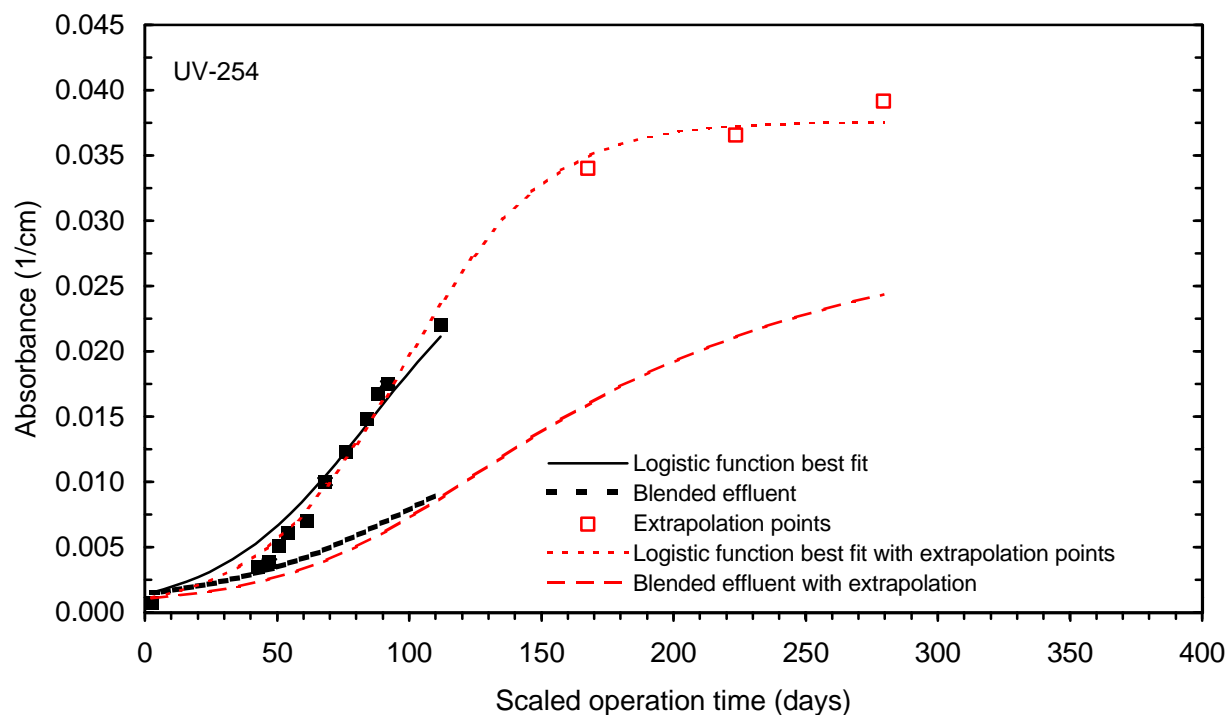


Figure 162 Single contactor and blended effluent extrapolated UV-254 breakthrough curve (10 minute EBCT)

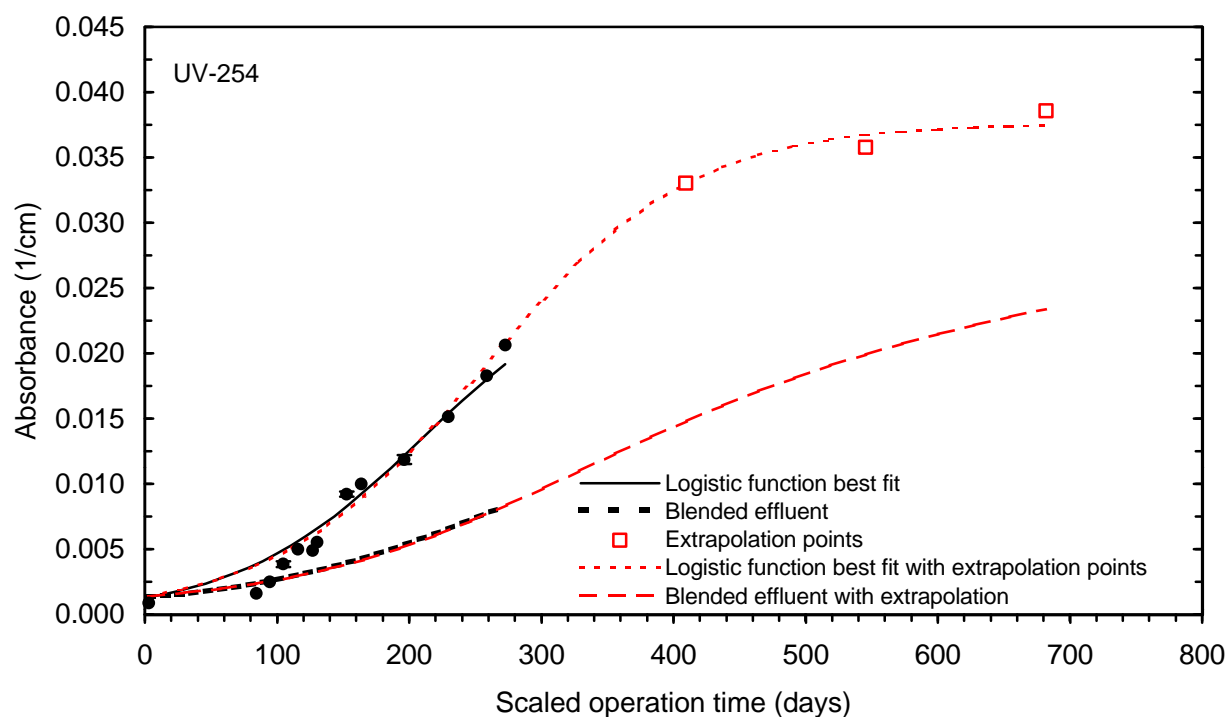


Figure 163 Single contactor and blended effluent extrapolated UV-254 breakthrough curve (20 minute EBCT)

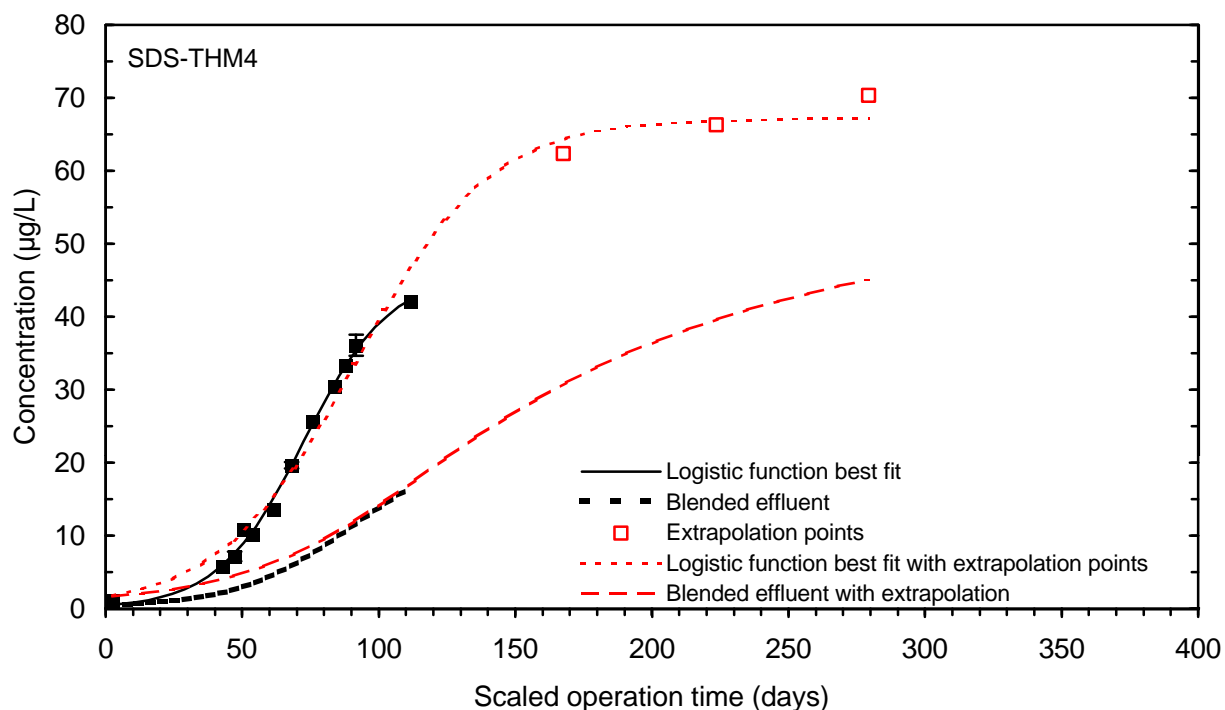


Figure 164 Single contactor and blended effluent extrapolated SDS-THM4 breakthrough curve (10 minute EBCT)

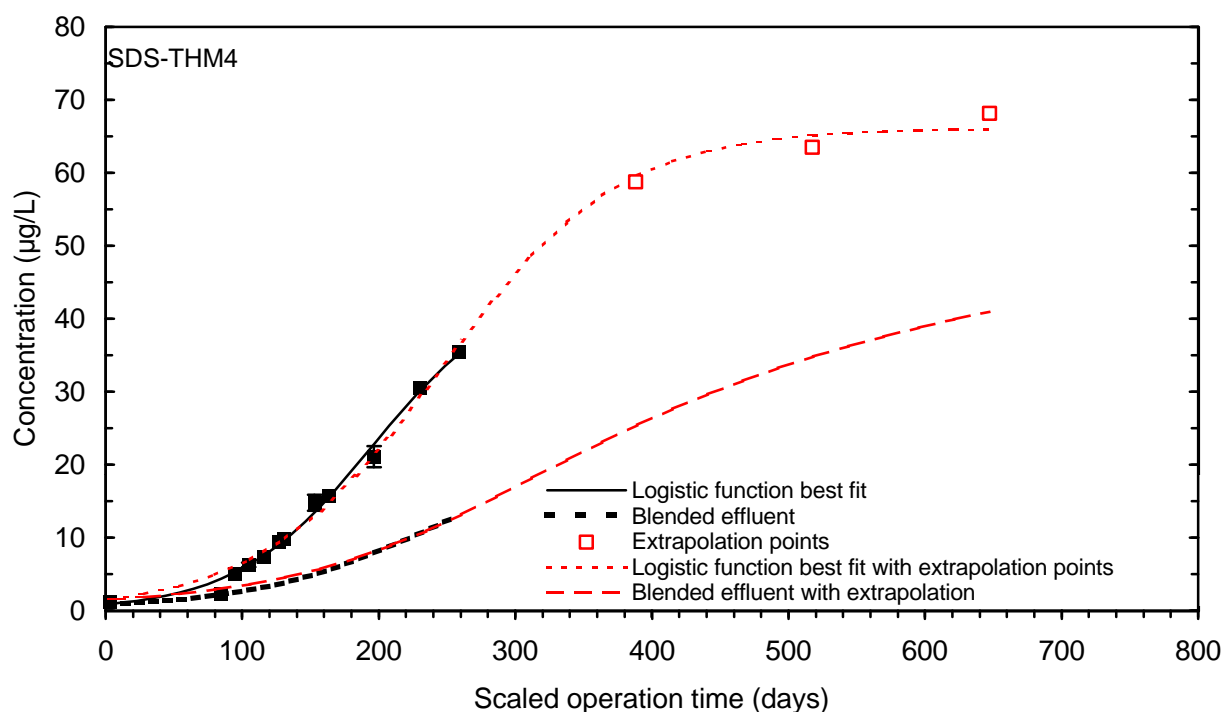


Figure 165 Single contactor and blended effluent extrapolated SDS-THM4 breakthrough curve (20 minute EBCT)

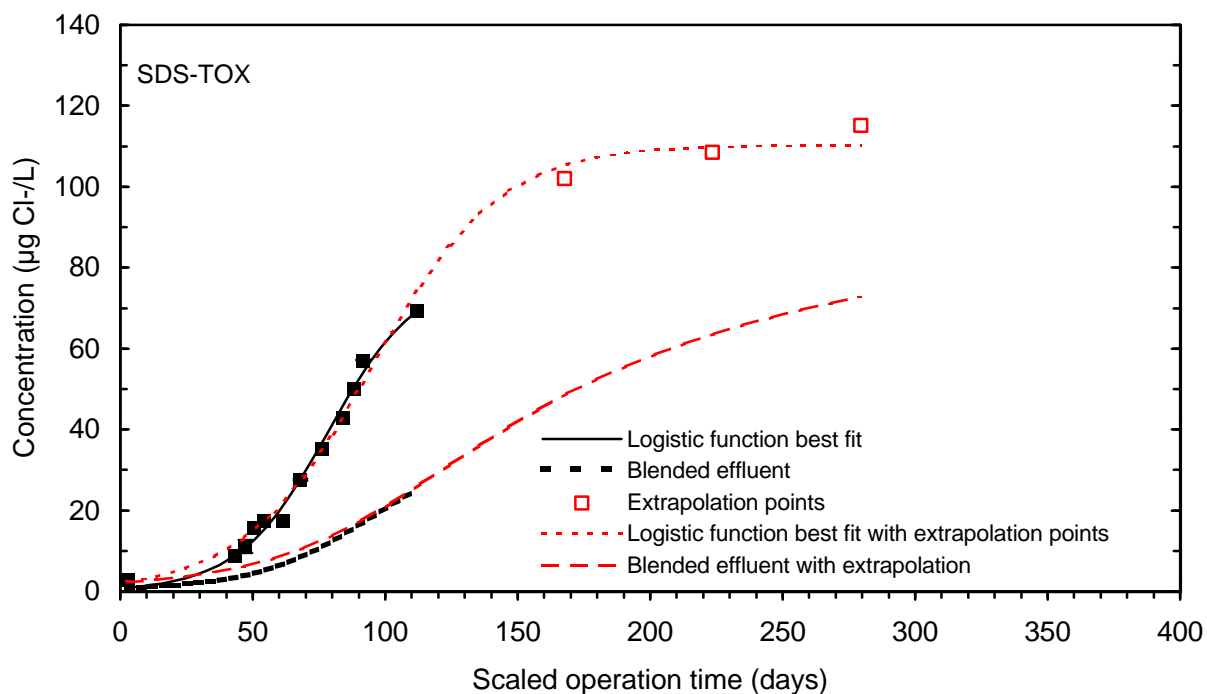


Figure 166 Single contactor and blended effluent extrapolated SDS-TOX breakthrough curve (10 minute EBCT)

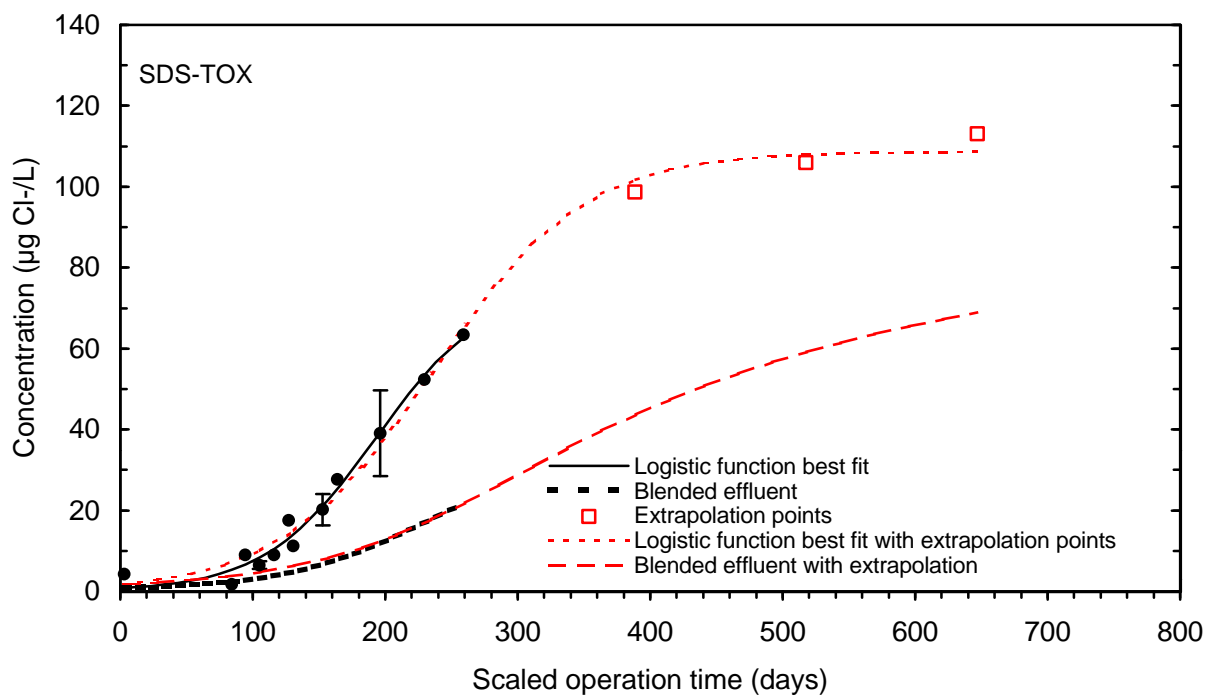


Figure 167 Single contactor and blended effluent extrapolated SDS-TOX breakthrough curve (20 minute EBCT)

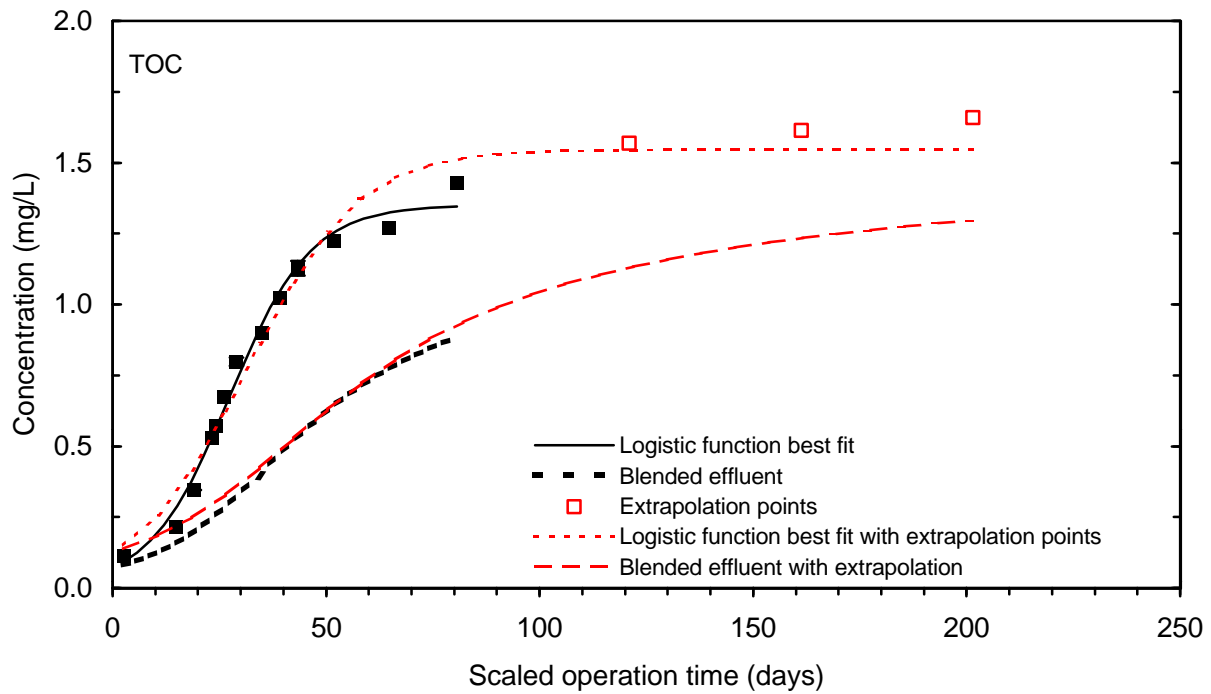


Figure 168 Single contactor and blended effluent extrapolated TOC breakthrough curve (5 minute EBCT)

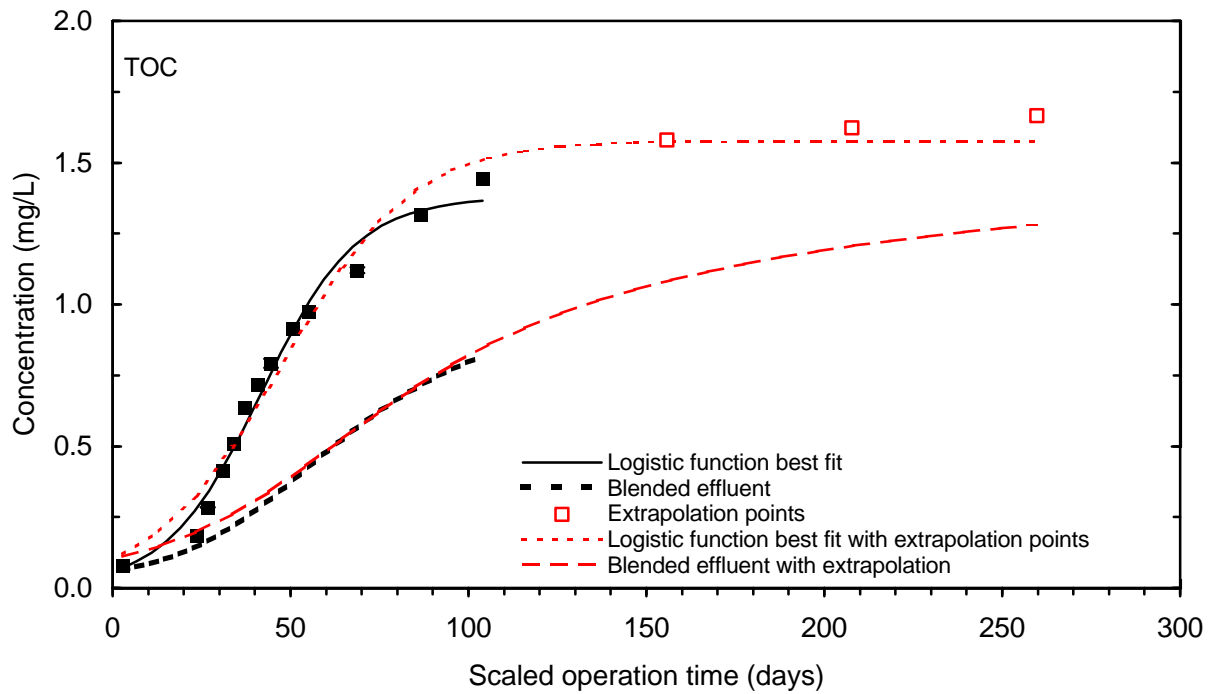


Figure 169 Single contactor and blended effluent extrapolated TOC breakthrough curve (7.5 minute EBCT)

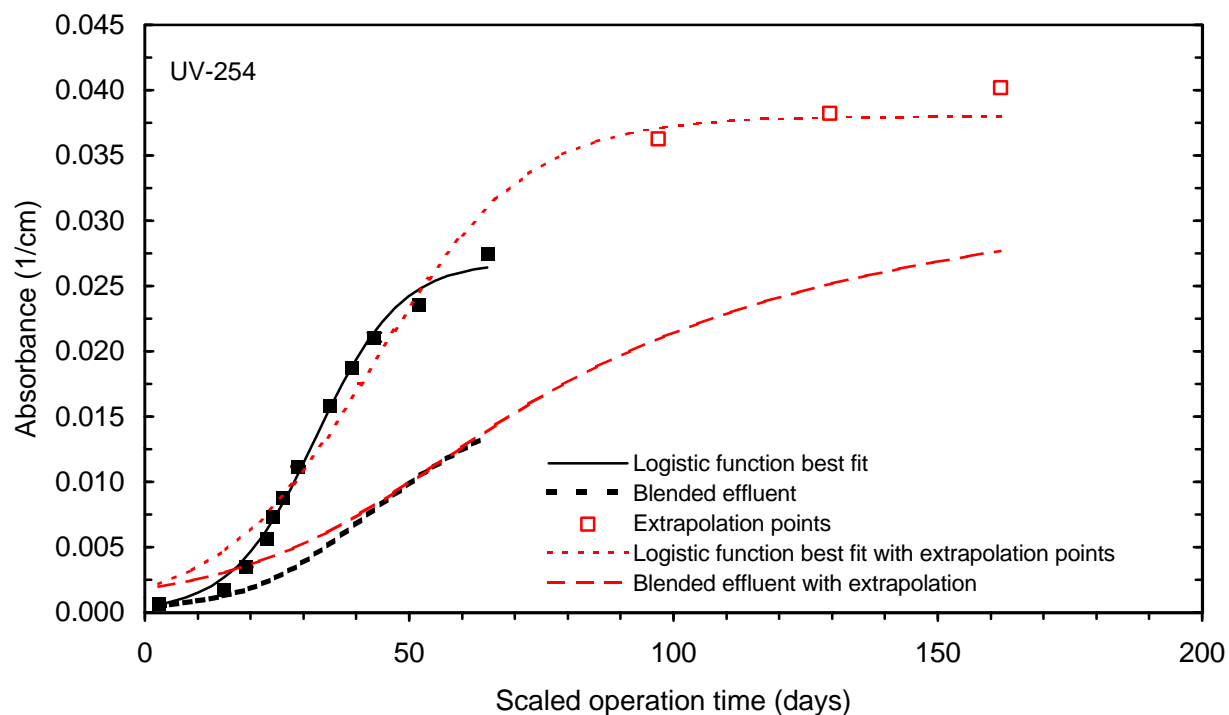


Figure 170 Single contactor and blended effluent extrapolated UV-254 breakthrough curve (5 minute EBCT)

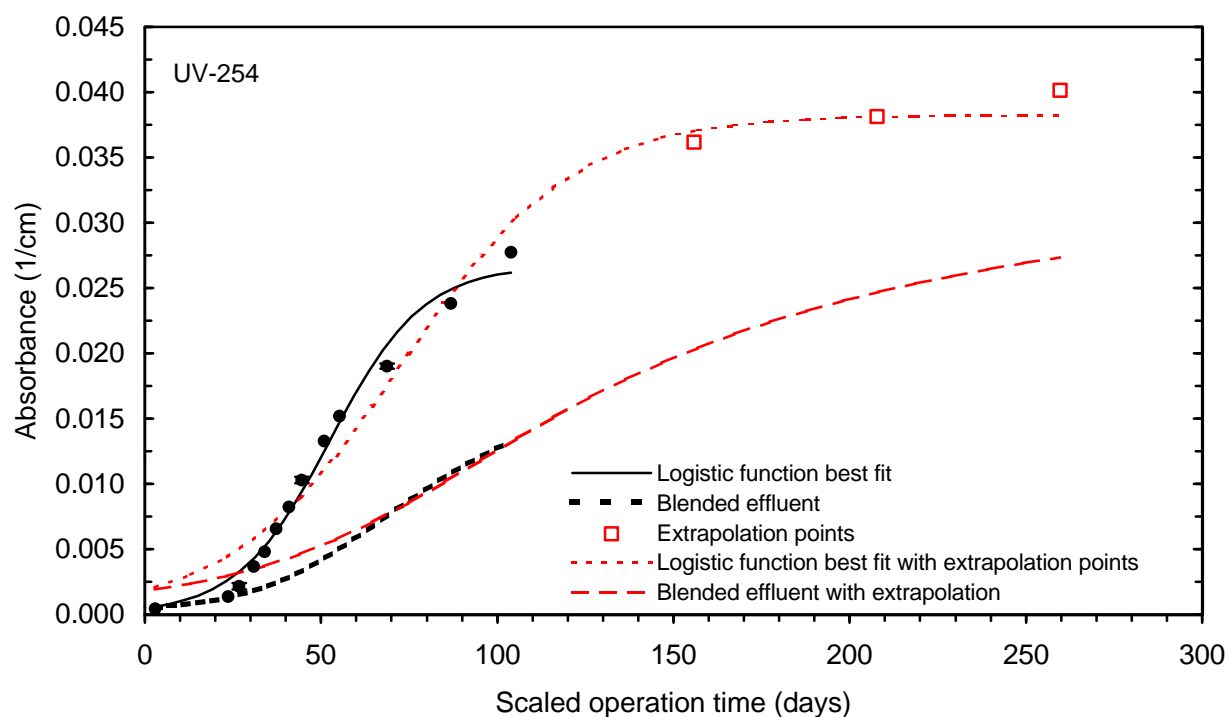


Figure 171 Single contactor and blended effluent extrapolated UV-254 breakthrough curve (7.5 minute EBCT)

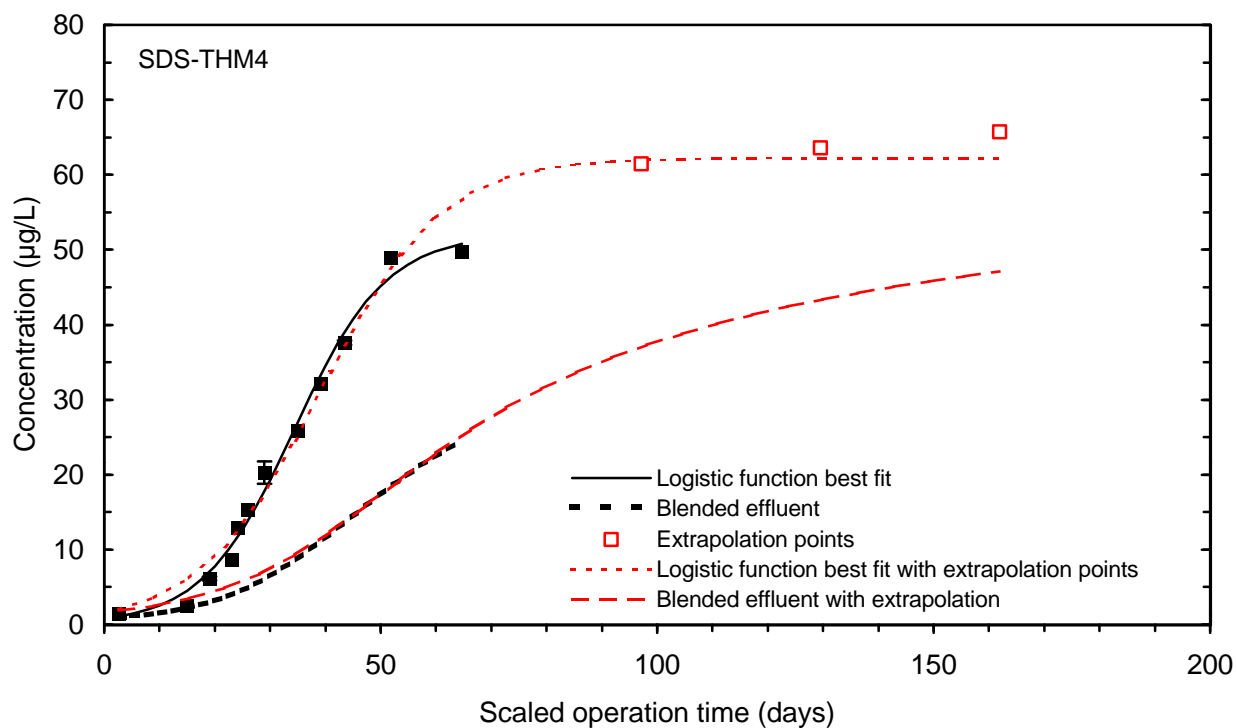


Figure 172 Single contactor and blended effluent extrapolated SDS-THM4 breakthrough curve (5 minute EBCT)

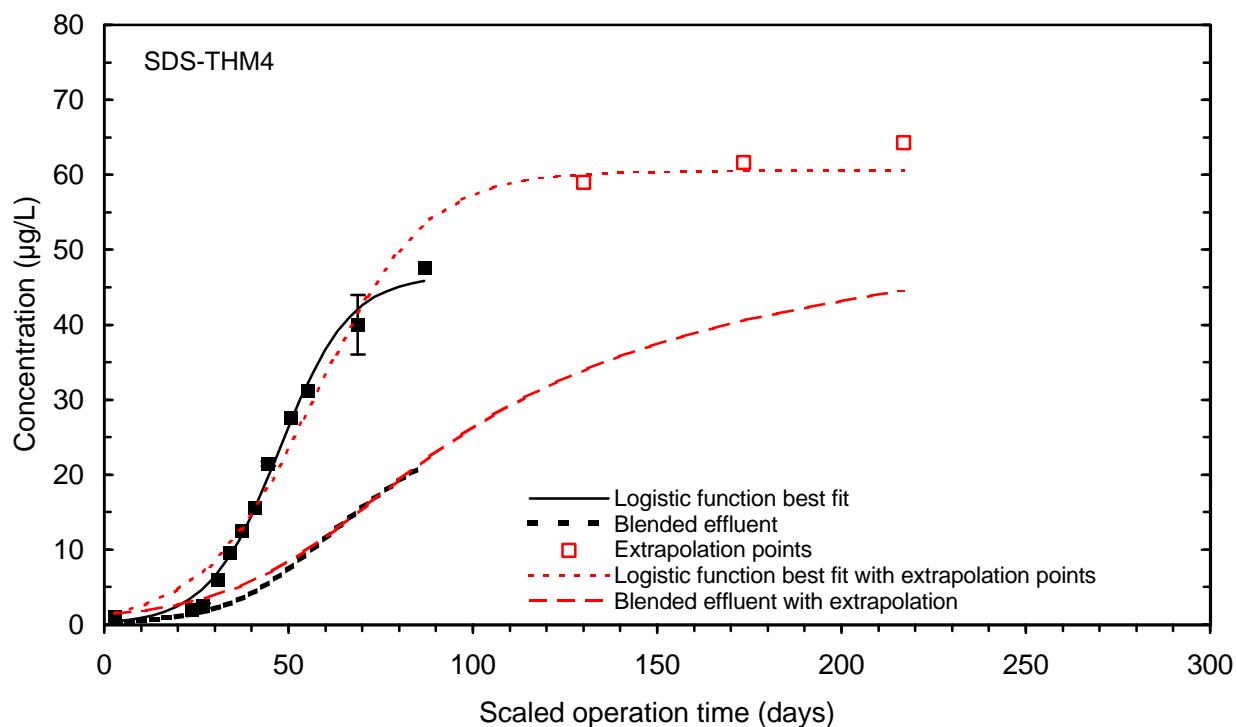


Figure 173 Single contactor and blended effluent extrapolated SDS-THM4 breakthrough curve (7.5 minute EBCT)

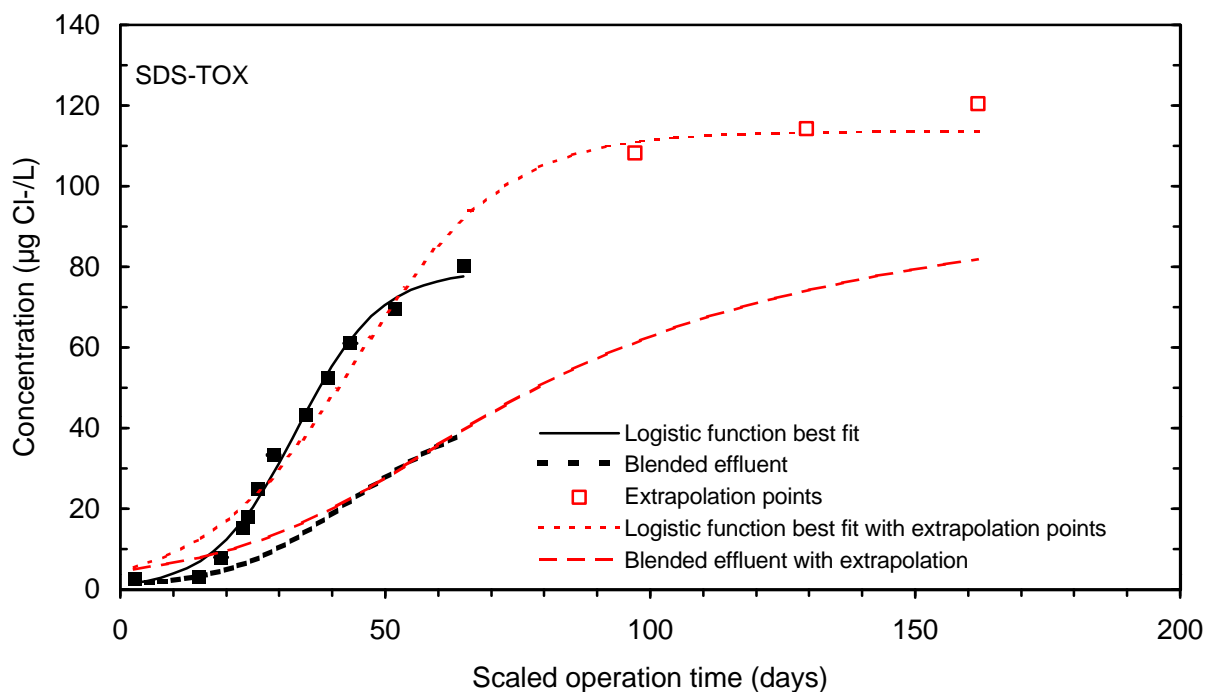


Figure 174 Single contactor and blended effluent extrapolated SDS-TOX breakthrough curve (5 minute EBCT)

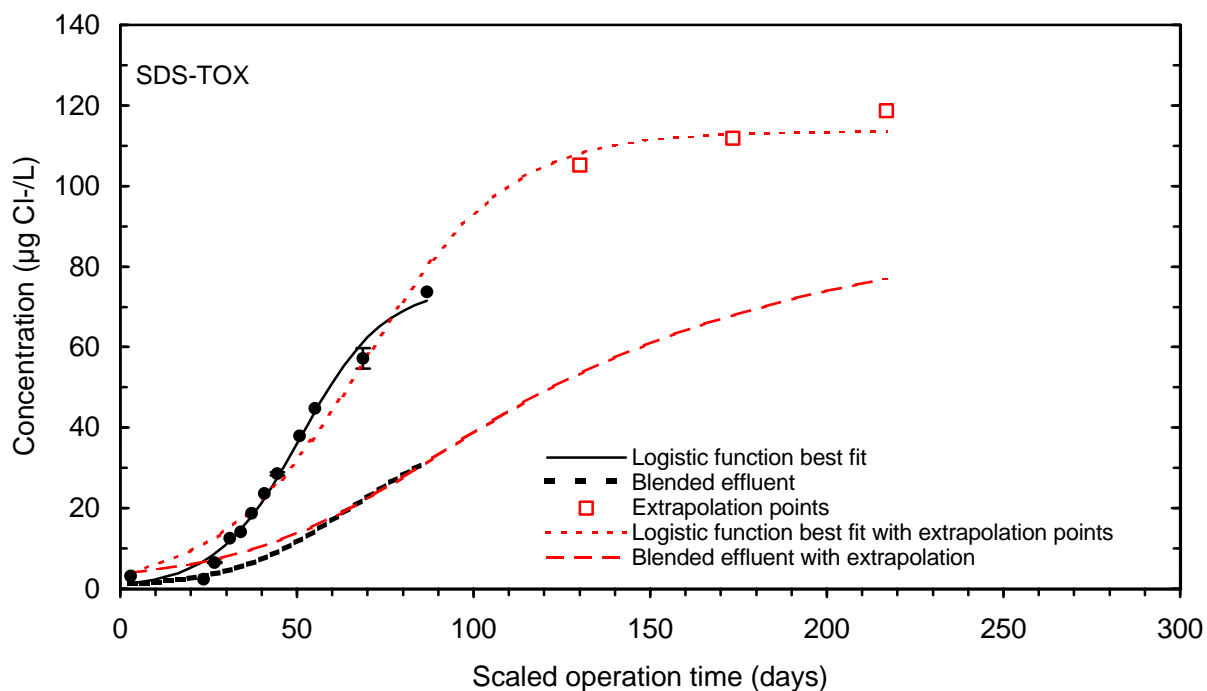


Figure 175 Single contactor and blended effluent extrapolated SDS-TOX breakthrough curve (7.5 minute EBCT)

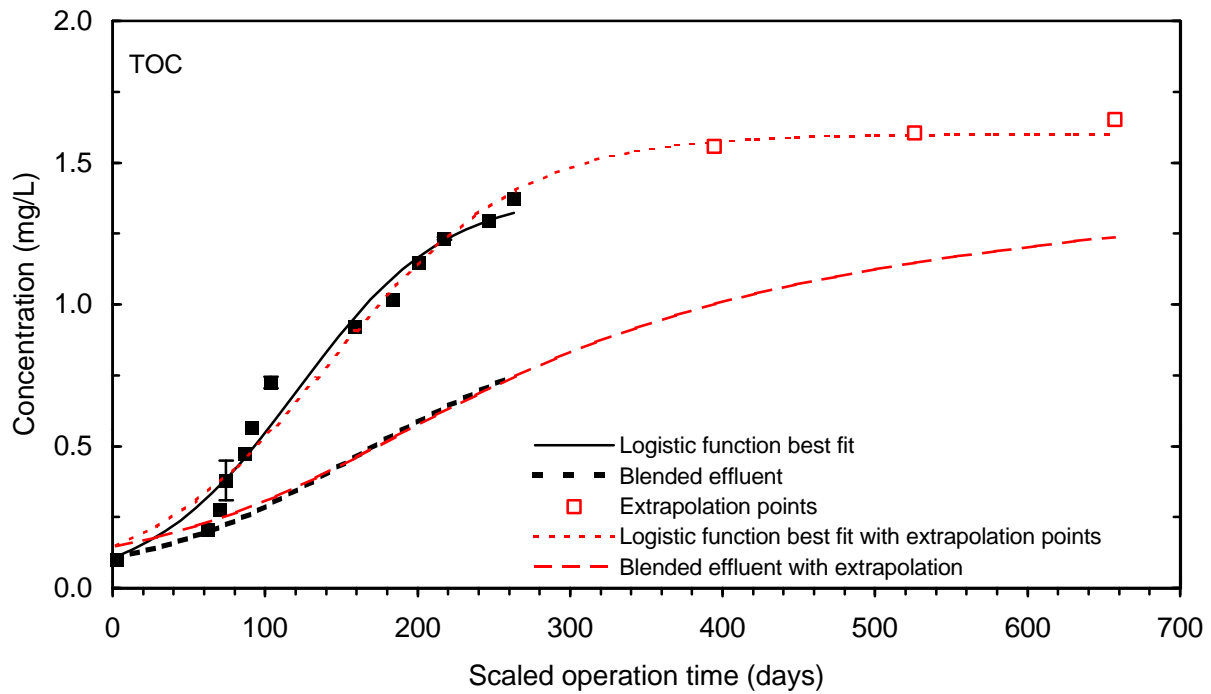


Figure 176 Single contactor and blended effluent extrapolated TOC breakthrough curve (15 minute EBCT)

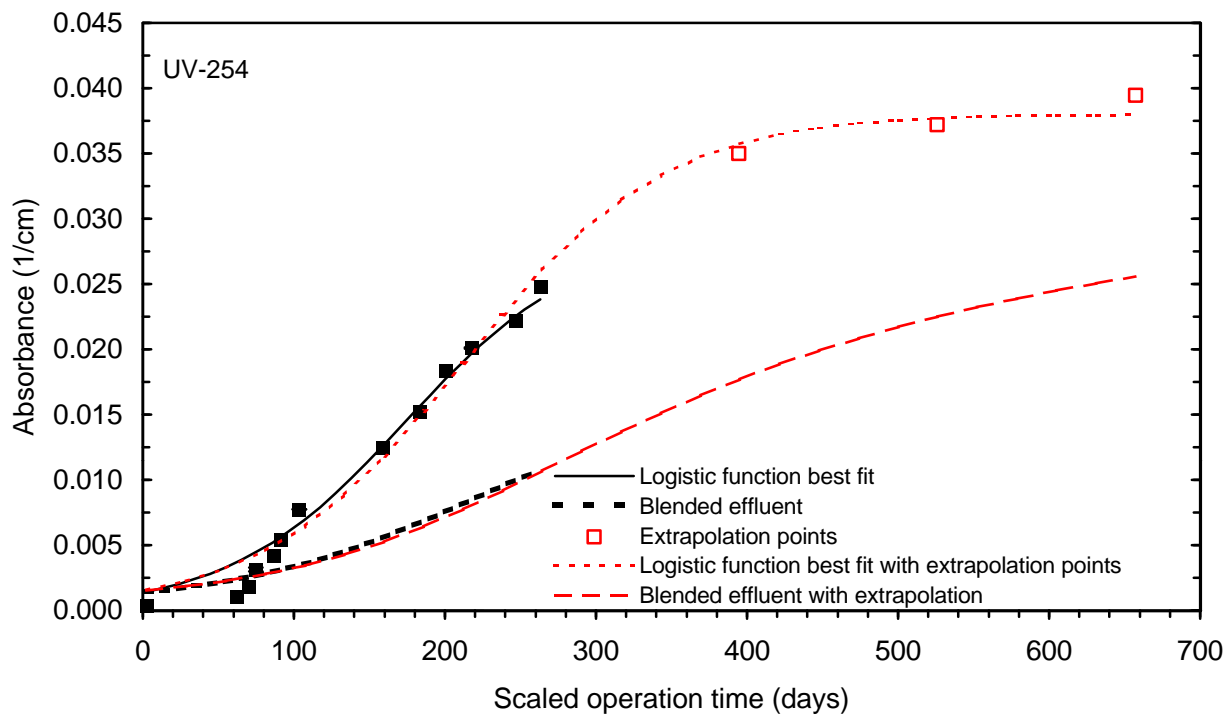


Figure 177 Single contactor and blended effluent extrapolated UV-254 breakthrough curve (15 minute EBCT)

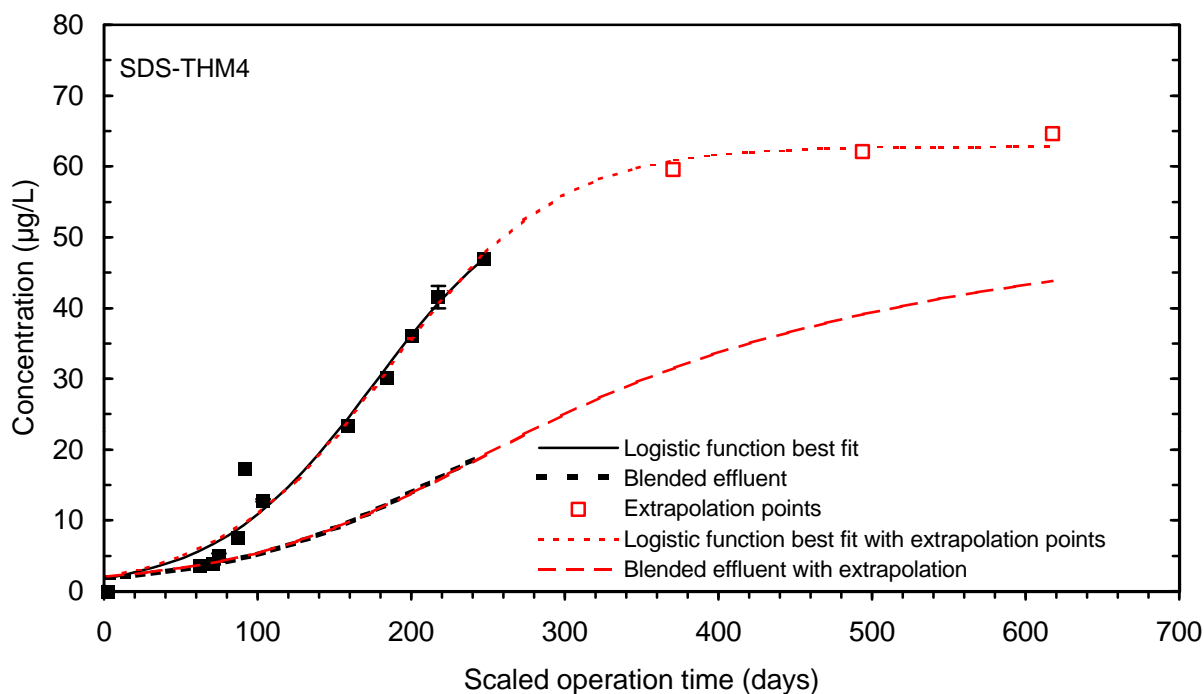


Figure 178 Single contactor and blended effluent extrapolated SDS-THM4 breakthrough curve (15 minute EBCT)

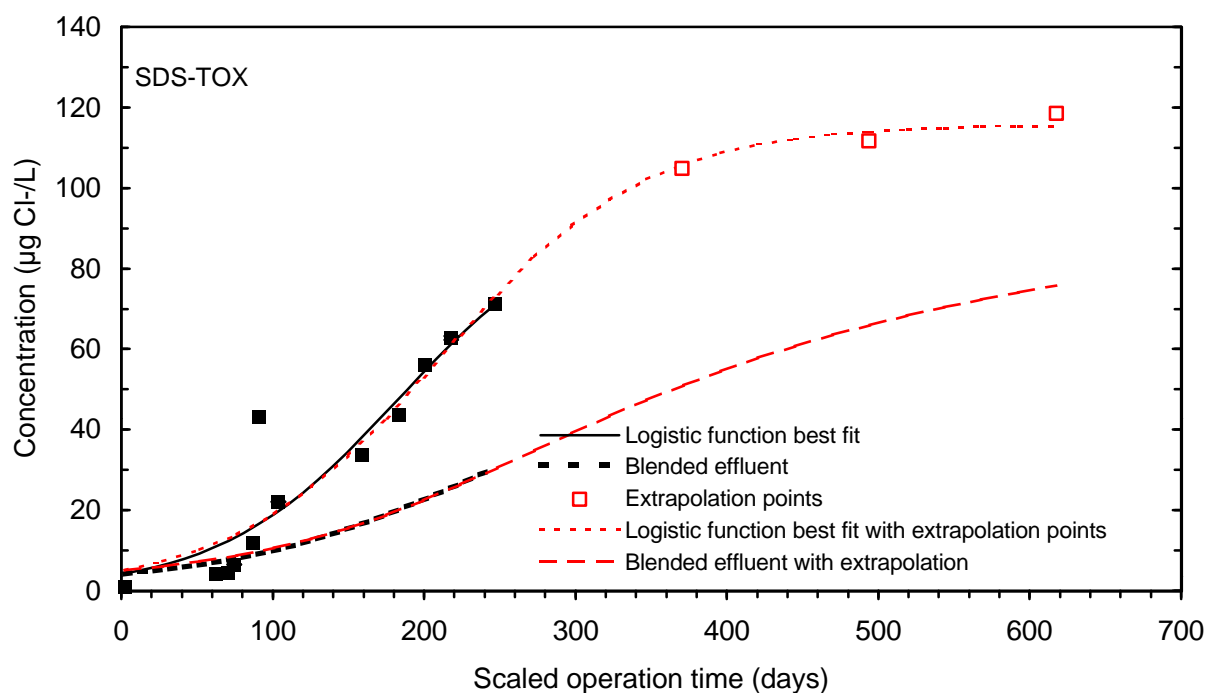


Figure 179 Single contactor and blended effluent extrapolated SDS-TOX breakthrough curve (15 minute EBCT)

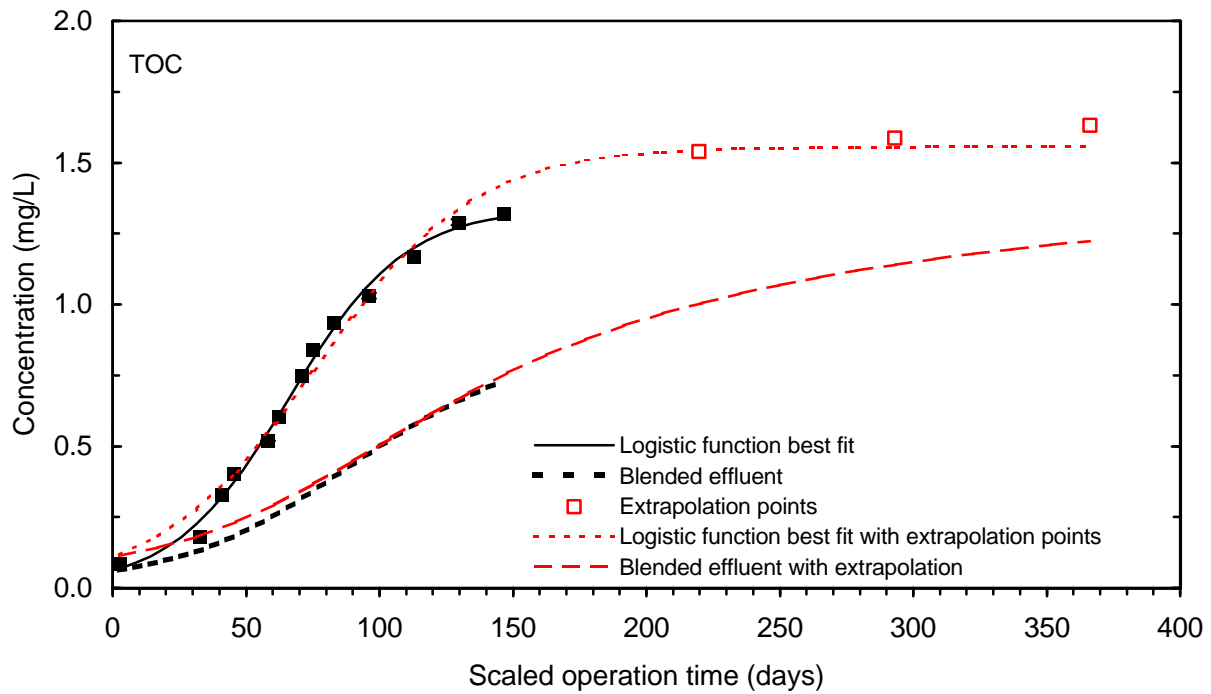


Figure 180 Single contactor and blended effluent extrapolated TOC breakthrough curve for influent pH 7.4 contactor (10 minute EBCT)

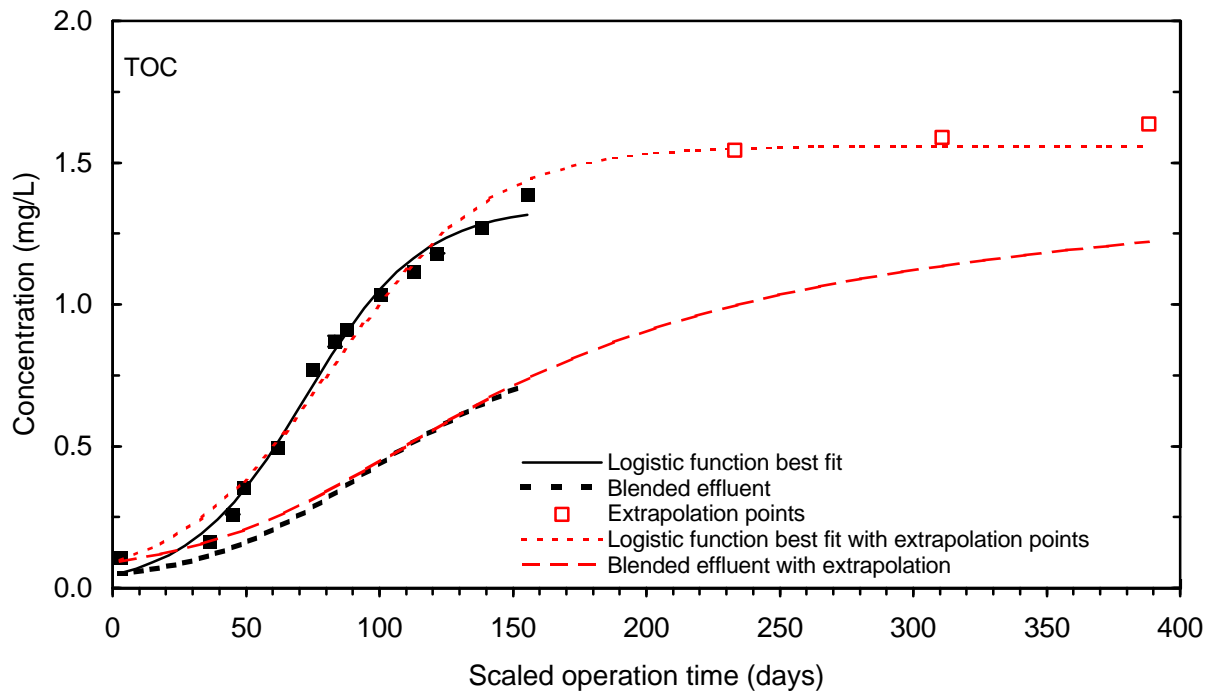


Figure 181 Single contactor and blended effluent extrapolated TOC breakthrough curve for influent pH 7.0 contactor (10 minute EBCT)

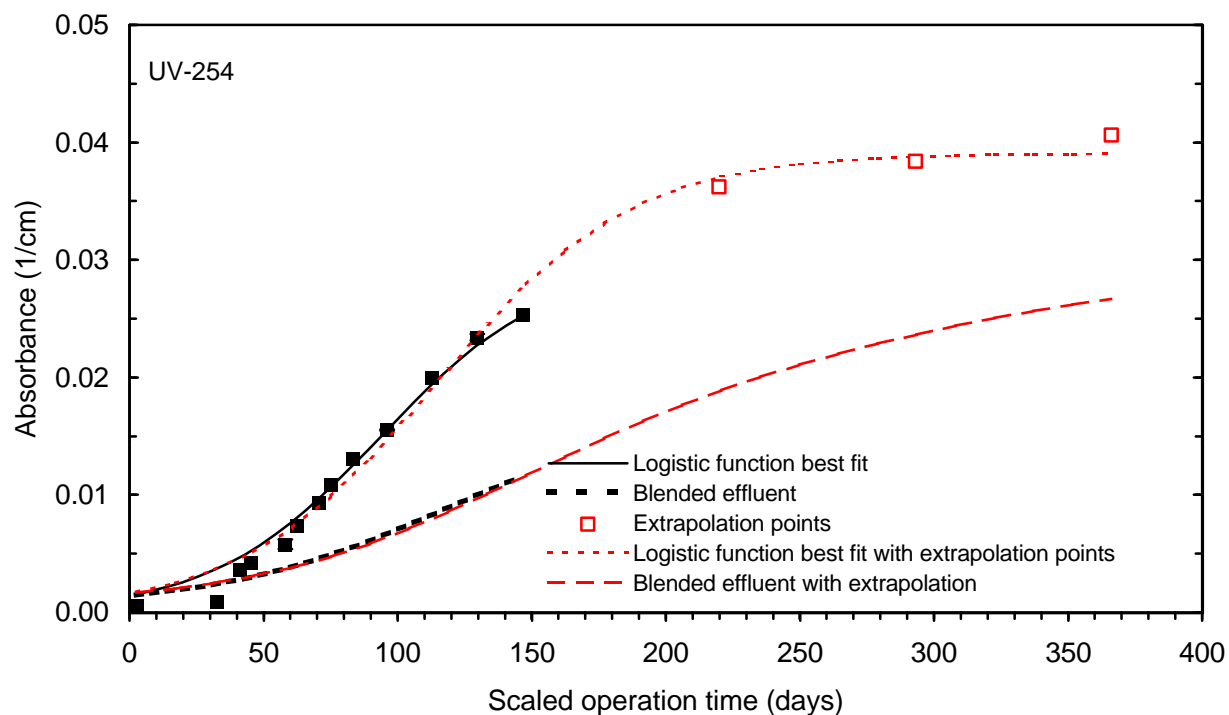


Figure 182 Single contactor and blended effluent extrapolated UV-254 breakthrough curve for influent pH 7.4 contactor (10 minute EBCT)

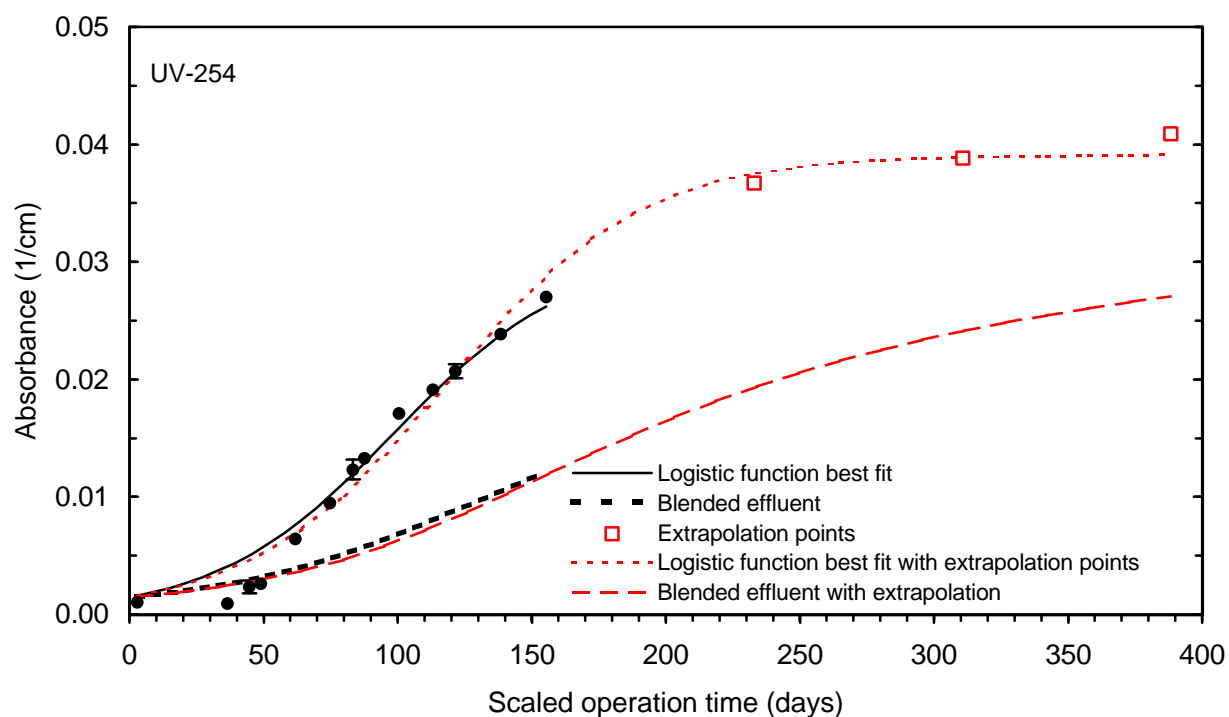


Figure 183 Single contactor and blended effluent extrapolated UV-254 breakthrough curve for influent pH 7.0 contactor (10 minute EBCT)

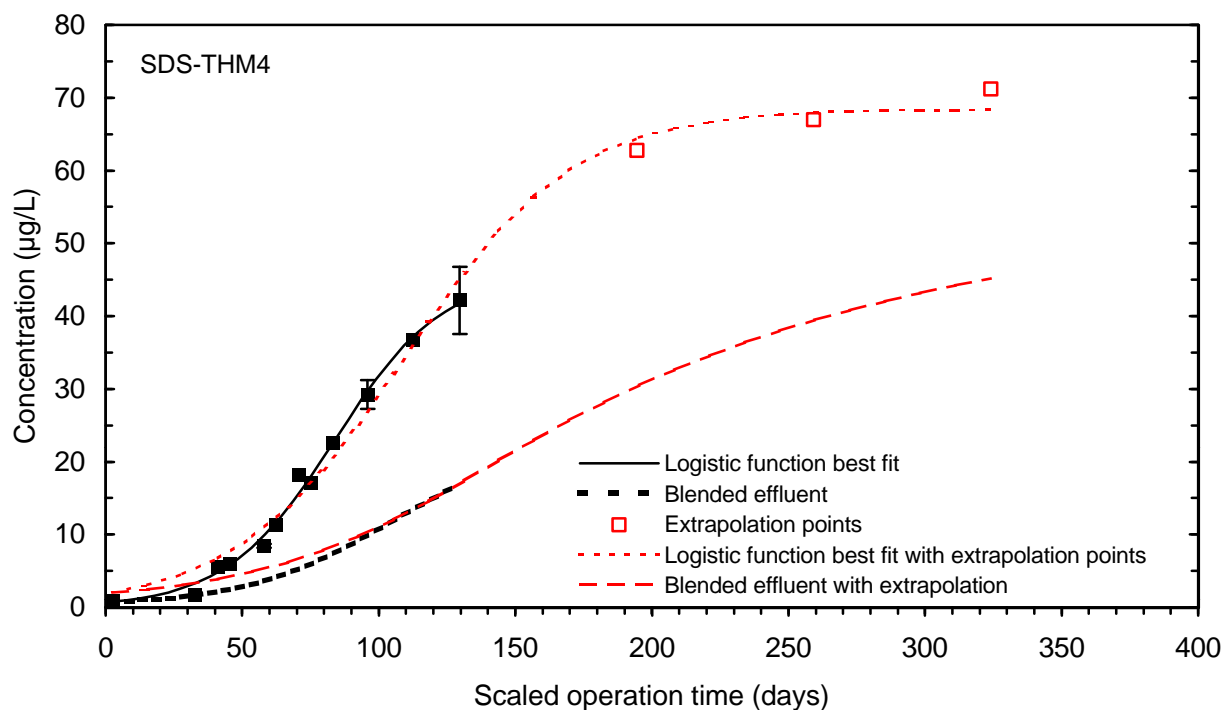


Figure 184 Single contactor and blended effluent extrapolated SDS-THM4 breakthrough curve for influent pH 7.4 contactor (10 minute EBCT)

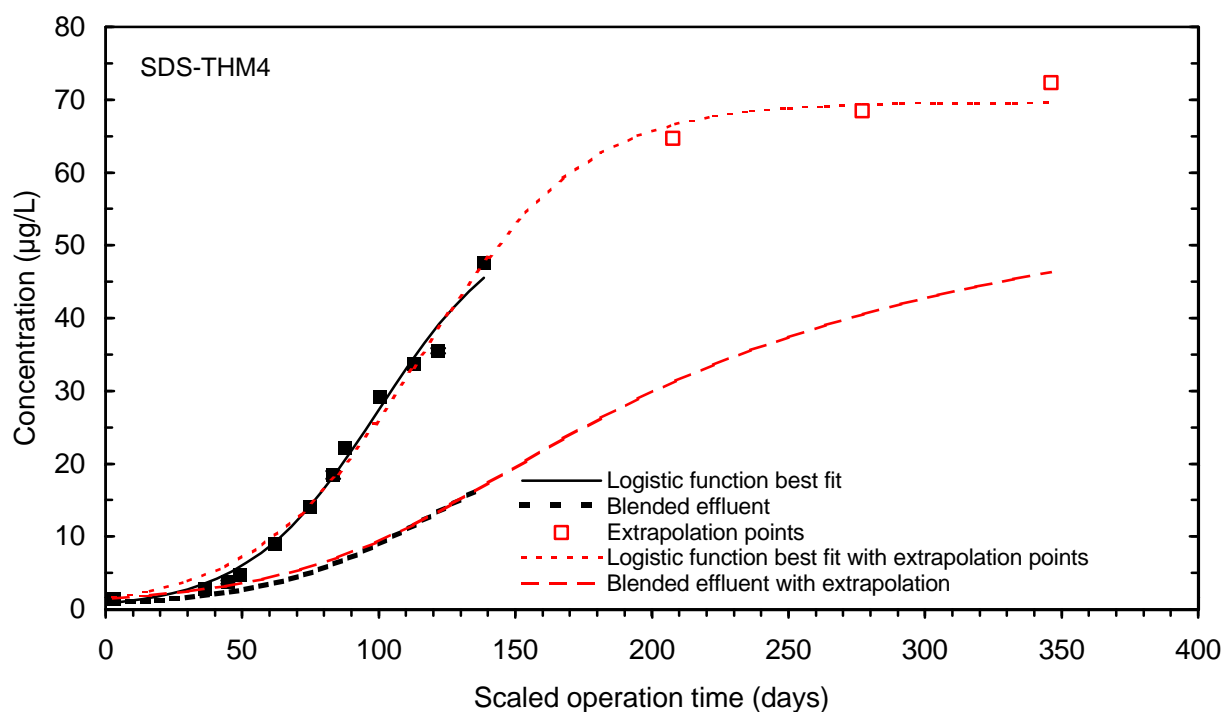


Figure 185 Single contactor and blended effluent extrapolated SDS-THM4 breakthrough curve for influent pH 7.0 contactor (10 minute EBCT)

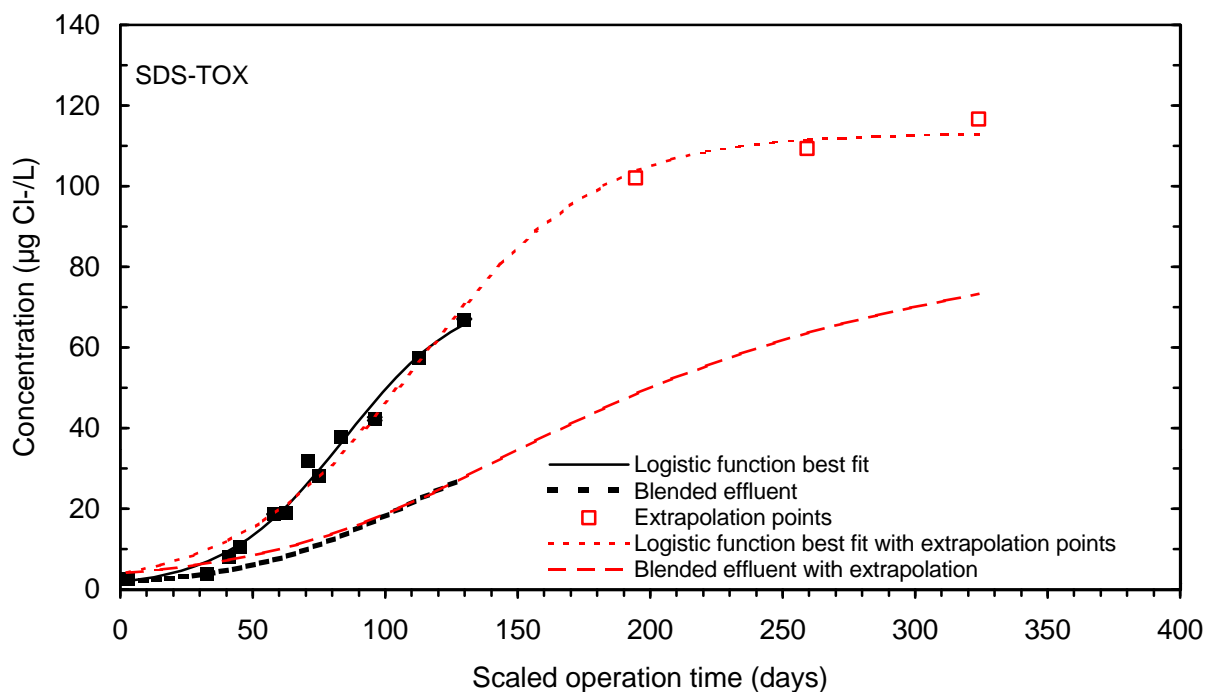


Figure 186 Single contactor and blended effluent extrapolated SDS-TOX breakthrough curve for influent pH 7.4 contactor (10 minute EBCT)

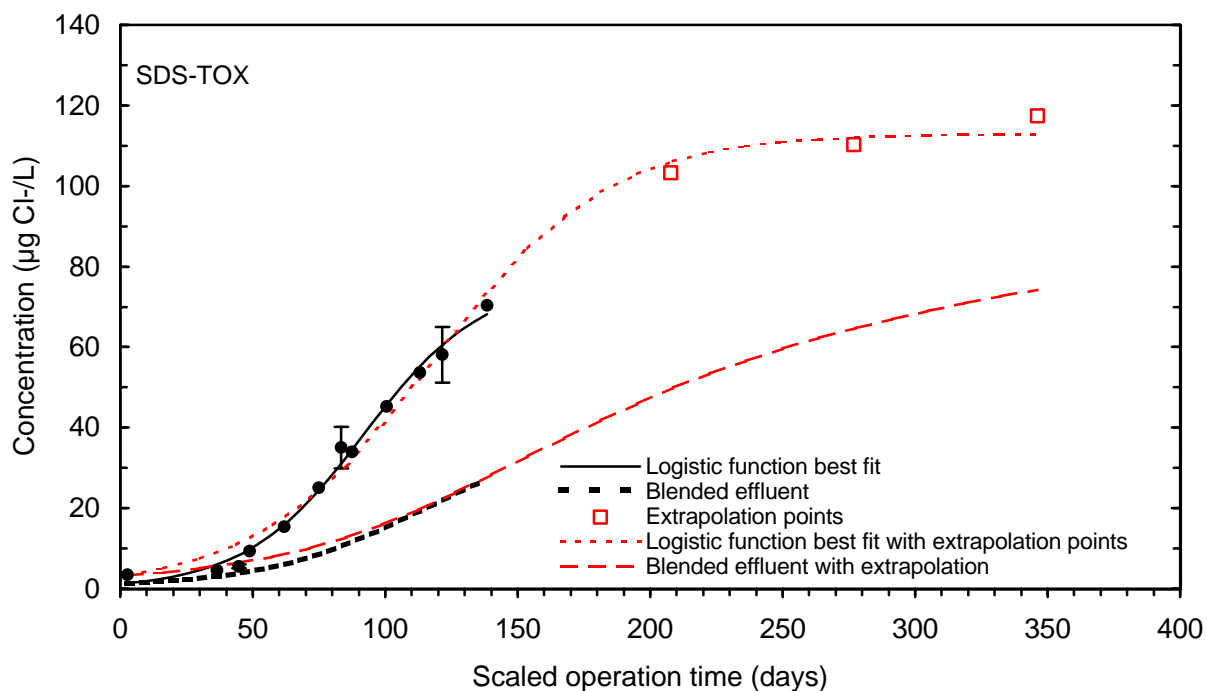


Figure 187 Single contactor and blended effluent extrapolated SDS-TOX breakthrough curve for influent pH 7.0 contactor (10 minute EBCT)

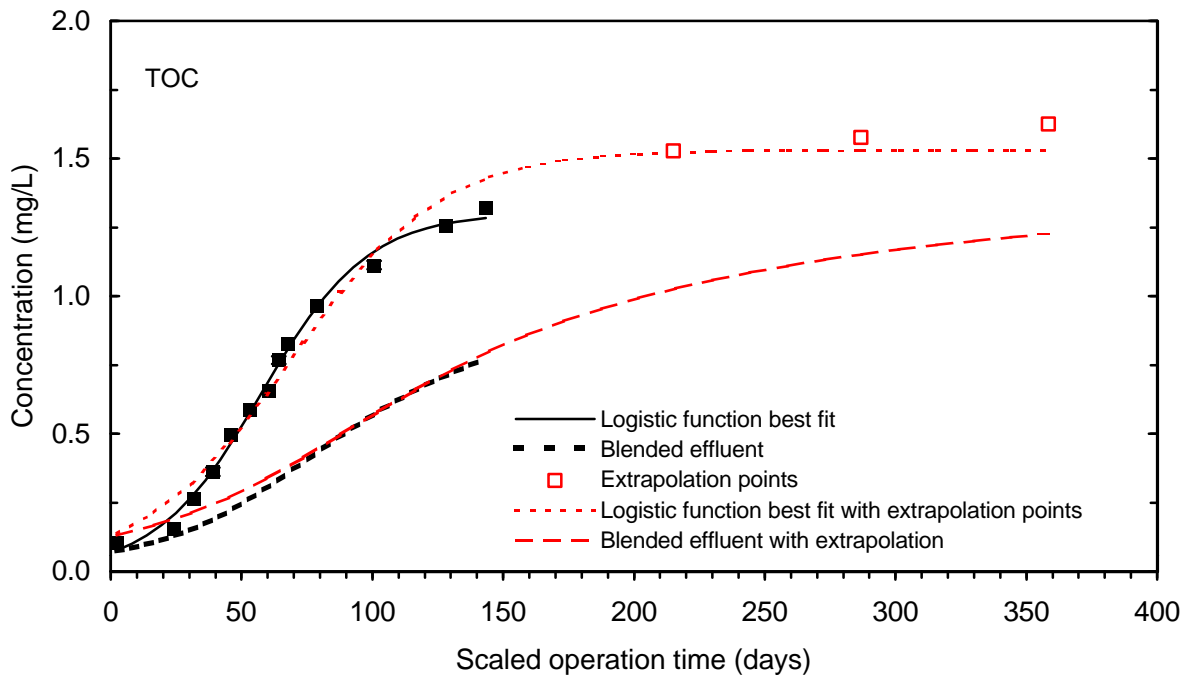


Figure 188 Single contactor and blended effluent extrapolated TOC breakthrough curve for influent pH 7.8 contactor (10 minute EBCT)

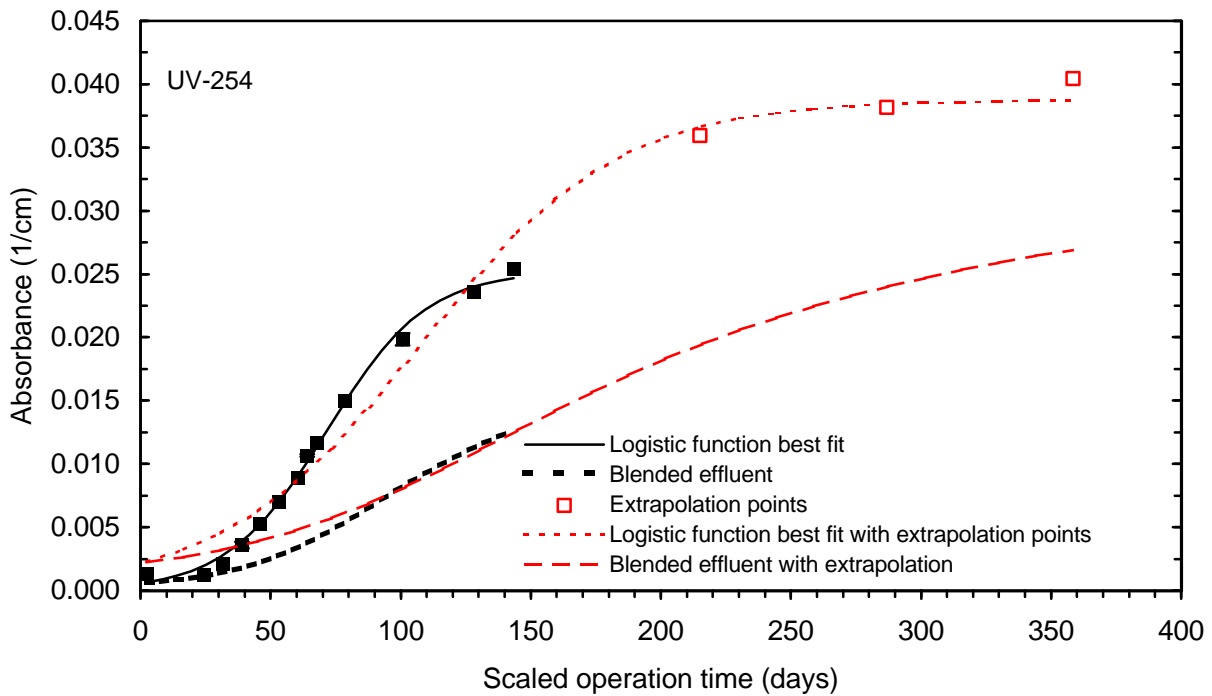


Figure 189 Single contactor and blended effluent extrapolated UV-254 breakthrough curve for influent pH 7.8 contactor (10 minute EBCT)

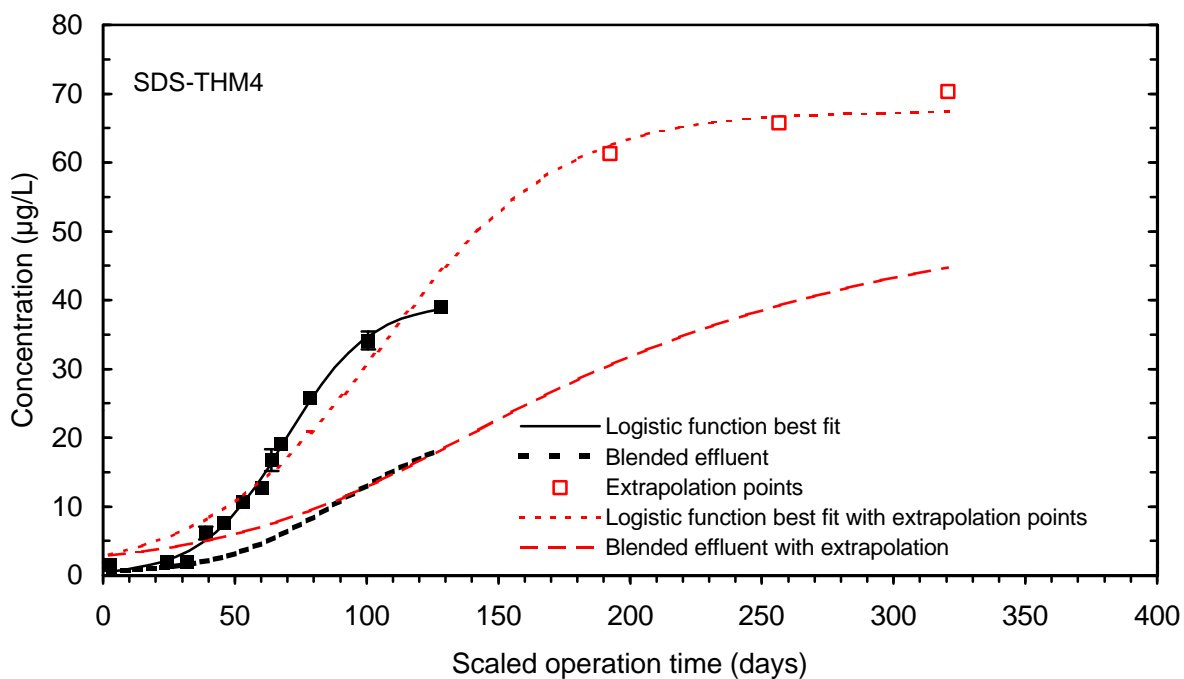


Figure 190 Single contactor and blended effluent extrapolated SDS-THM4 breakthrough curve for influent pH 7.8 contactor (10 minute EBCT)

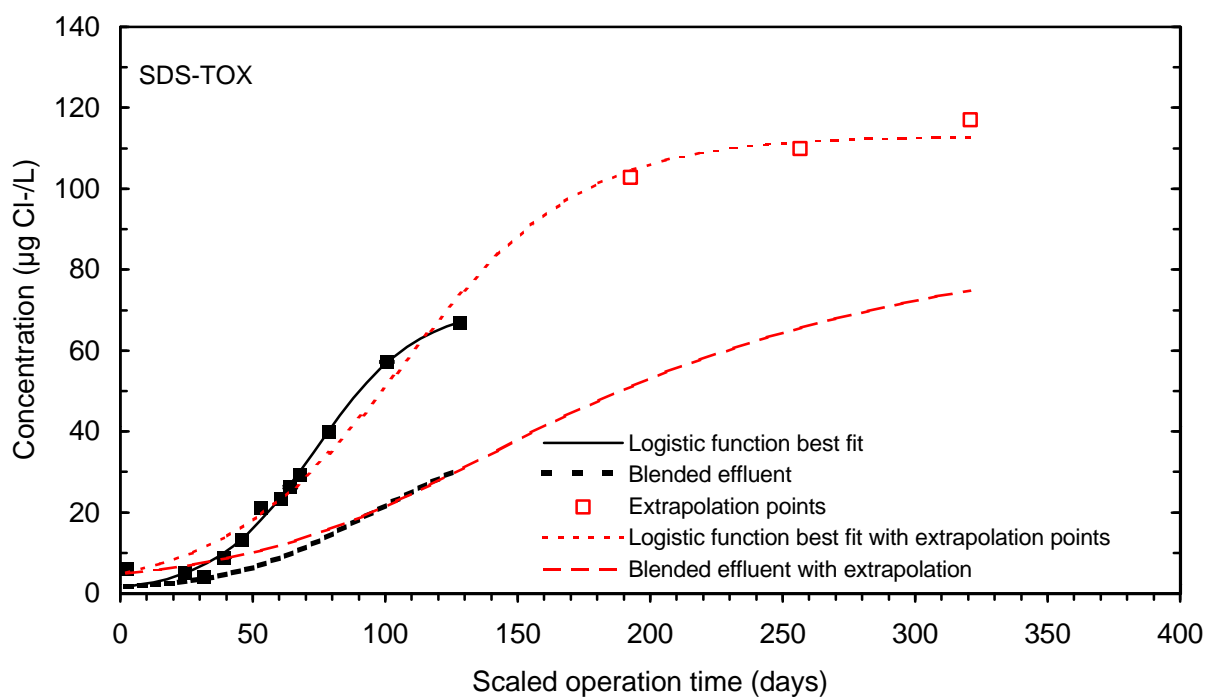


Figure 191 Single contactor and blended effluent extrapolated SDS-TOX breakthrough curve for influent pH 7.8 contactor (10 minute EBCT)

11 *Normalized DBP Precursor Breakthrough*

11 Normalized DBP Precursor Breakthrough

An additional method of analyzing GAC breakthrough data is to divide the GAC effluent concentrations of each parameter by their respective GAC influent concentrations. The relative breakthrough patterns of each parameter can then be compared on a percent breakthrough level. This type of analysis helps determine whether surrogates for DBP precursor breakthrough are reliable indicators of DBP precursor breakthrough. An analysis of the extent to which the surrogates can be classified as conservative indicators of specific DBP precursor breakthrough is also useful.

The normalized breakthrough patterns for all parameters for the 10 minute EBCT contactor are shown in Figure 192. High initial relative levels of chlorine demand are present, due to the presence of inorganic chlorine demand. The normalized breakthrough of TOC occurs much earlier and remains at a higher percent breakthrough than DBP precursors throughout the entire run time. This indicates a relatively large fraction of the GAC effluent organic matter measured as TOC does not serve as precursor material to the measured DBPs. Normalized breakthrough of UV₂₅₄, SDS-THM4, SDS-HAA5, SDS-HAA6, and SDS-TOX occur at about the same time during the run. The breakthrough of normalized SDS-HAA9 follows later. In this case, TOC breakthrough could be used as a very conservative indicator of THM, HAA and TOX precursor breakthrough.

Similar patterns were observed for the 20 minute EBCT contactor (Figure 193); the lag of normalized DBP precursor breakthrough as compared to TOC was larger than that observed for the 10 minute EBCT contactor. For the 5.0 minute EBCT run, Figure 194, the normalized breakthrough of TOC again occurred earlier than that of the SDS-DBPs. During the late stages of the run (after 50 days), normalized SDS-THM4 levels matched those for TOC. Figure 195 compares the normalized breakthrough profiles for the 7.5 minute EBCT run. Normalized SDS-HAA5 breakthrough at times exceeded normalized TOC breakthrough. Otherwise, TOC served as a conservative surrogate for the breakthrough of the remaining parameters. Similar results were obtained for the 15 minute EBCT run, shown in Figure 196. For all runs, normalized UV₂₅₄ breakthrough matched very well with normalized SDS-TOX breakthrough, indicating UV₂₅₄ breakthrough can be used as a direct predictor of SDS-TOX breakthrough.

The normalized breakthrough profiles for the three influent pH runs showed similar results (Figures 197 through 199). Overall, TOC breakthrough served as a conservative indicator of DBP breakthrough regardless of influent pH. Normalized TOC breakthrough was followed by normalized SDS-THM4 breakthrough for all three runs; during the influent pH 7.0 run, the two breakthrough curves converged towards the end of the run. As was observed during the EBCT runs, normalized SDS-HAA5, SDS-HAA6, SDS-TOX, and UV₂₅₄ breakthrough were very similar. UV₂₅₄ could serve as a good direct predictor of normalized SDS-TOX breakthrough. The impact of pH on these trends was not discernable.

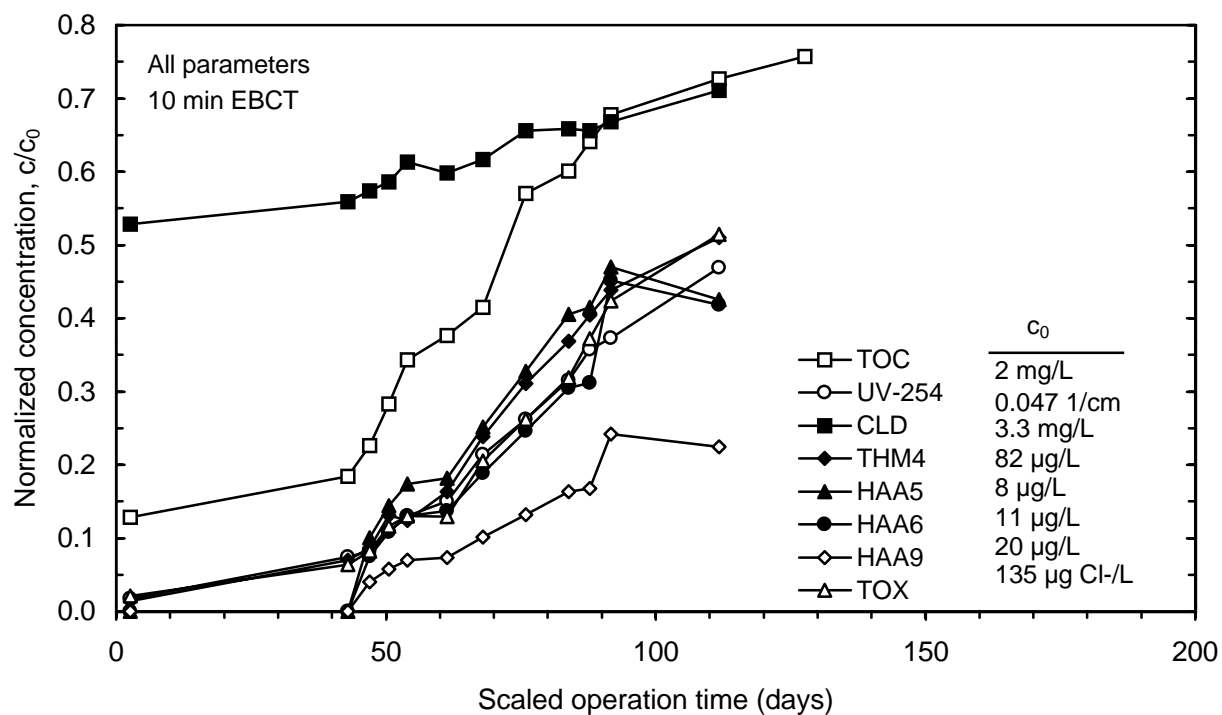


Figure 192 Normalized breakthrough patterns for 10 minute EBCT contactor

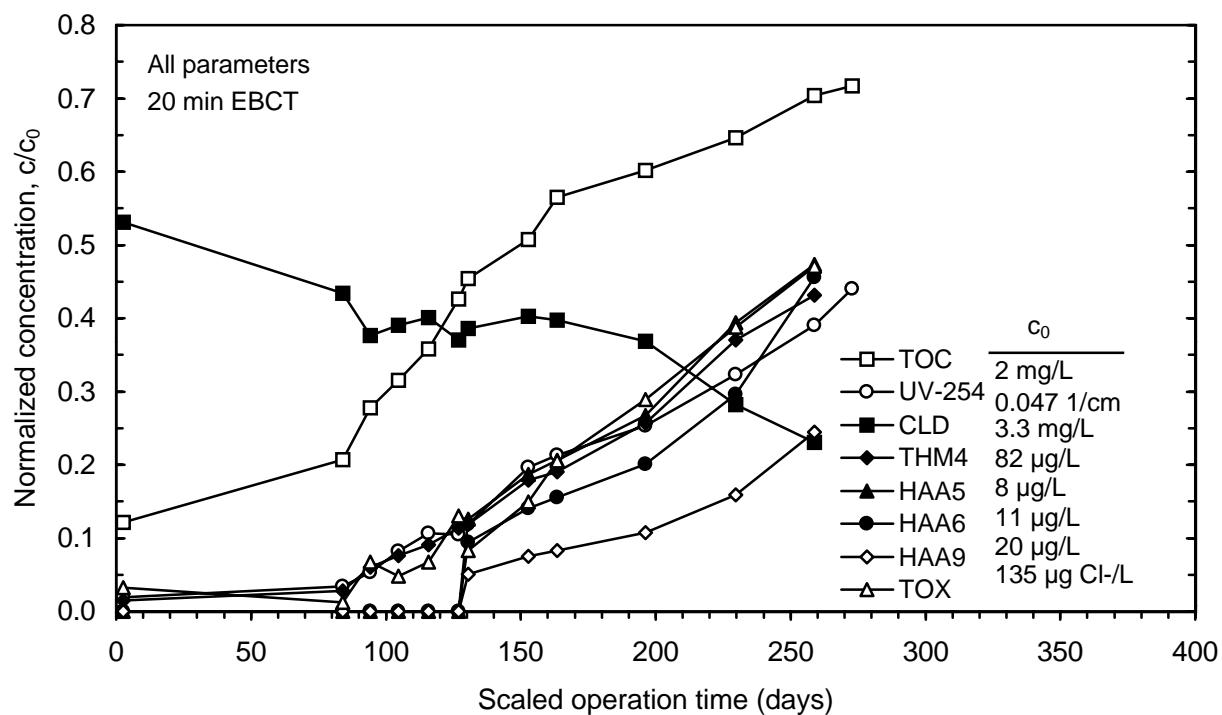


Figure 193 Normalized breakthrough patterns for 20 minute EBCT contactor

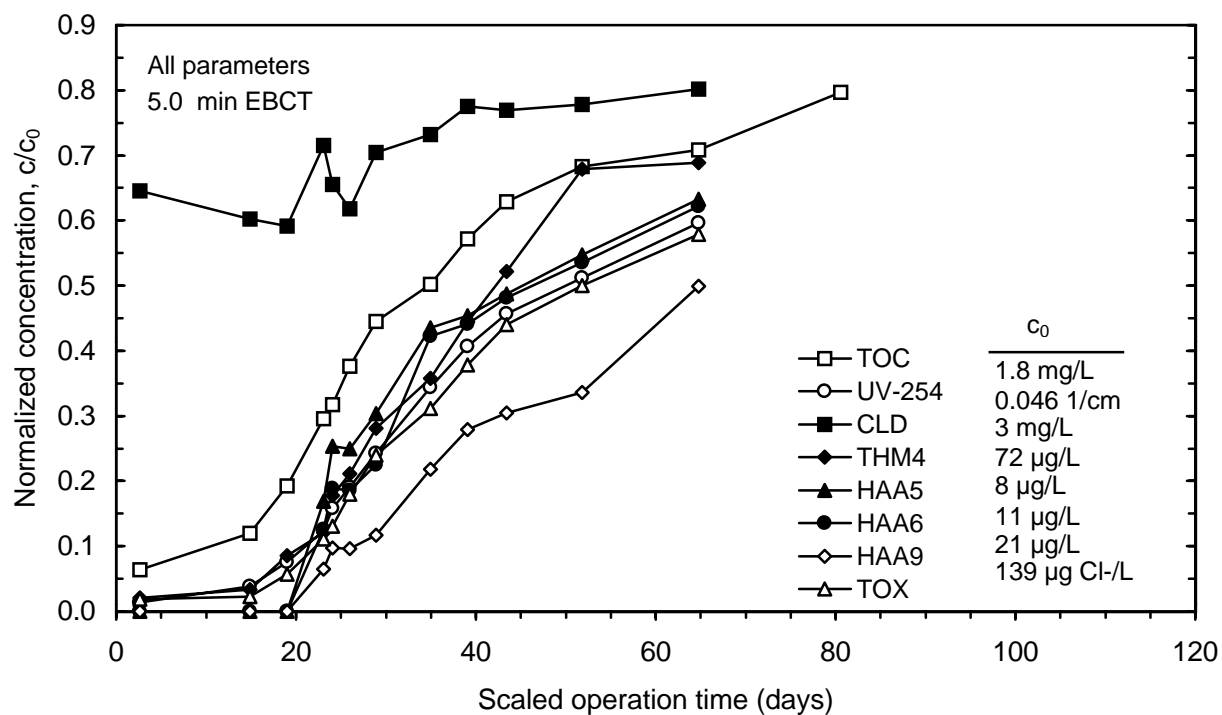


Figure 194 Normalized breakthrough patterns for 5.0 minute EBCT contactor

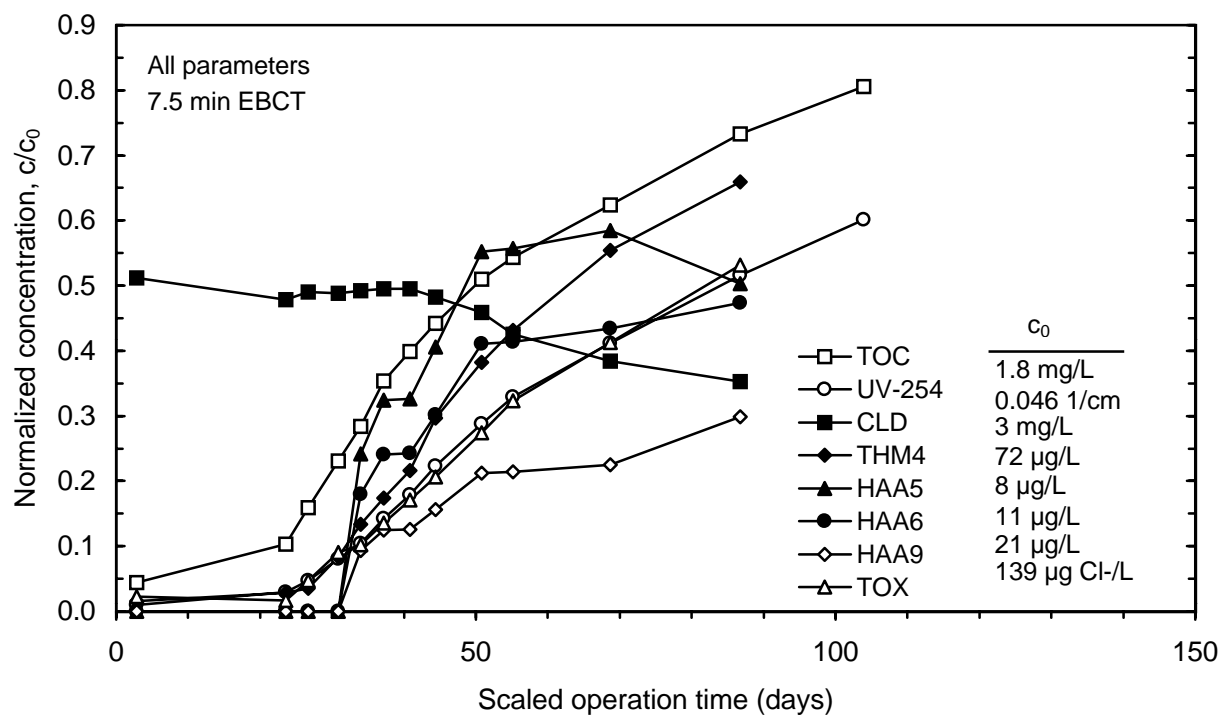


Figure 195 Normalized breakthrough patterns for 7.5 minute EBCT contactor

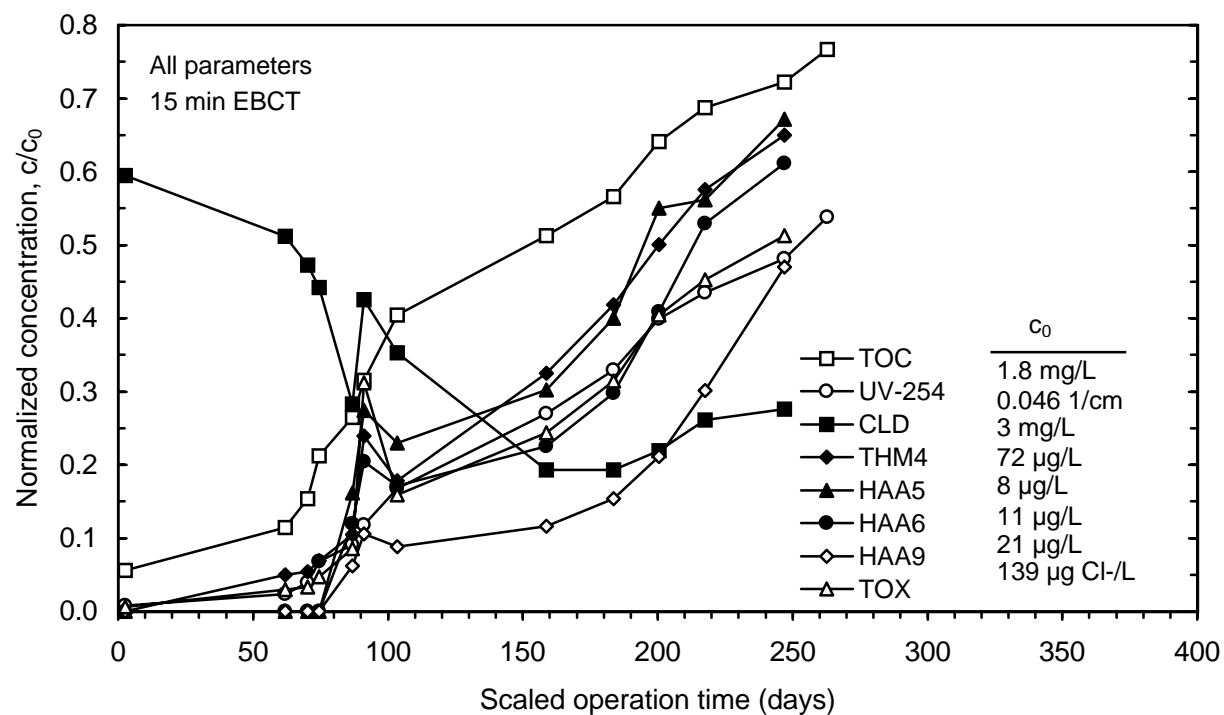


Figure 196 Normalized breakthrough patterns for 15 minute EBCT contactor

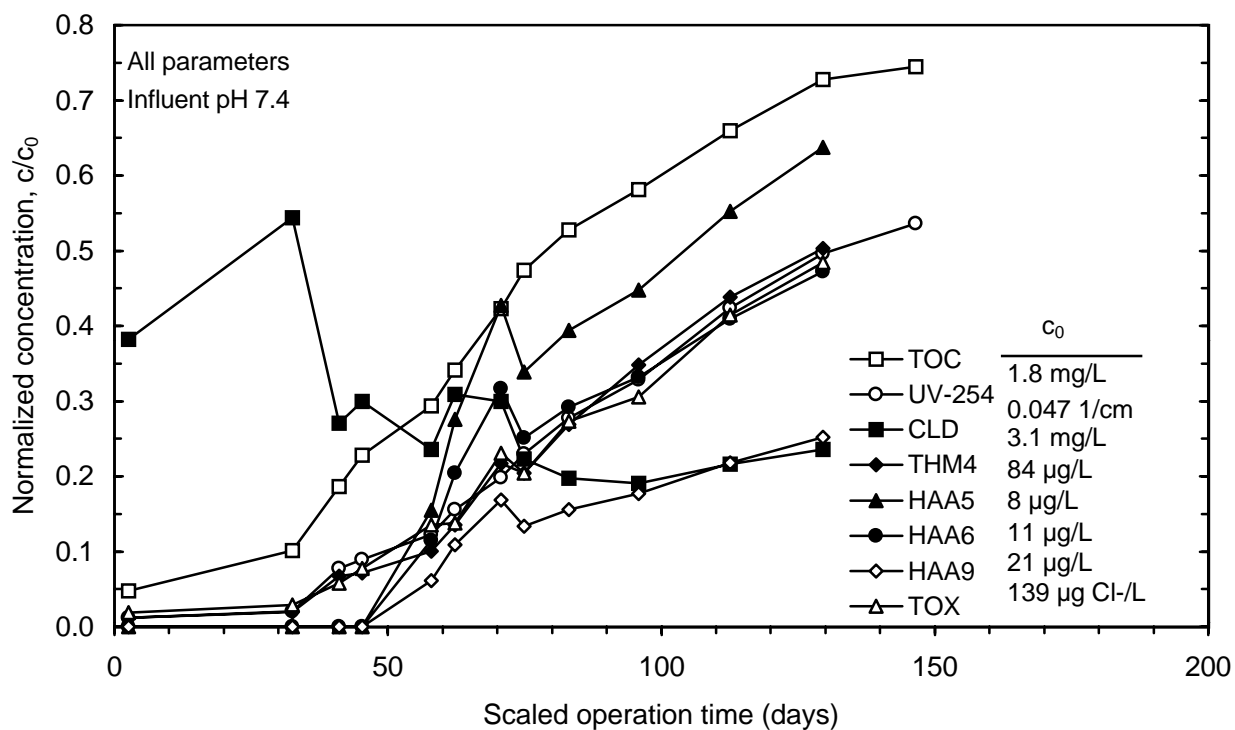


Figure 197 Normalized breakthrough patterns for influent pH 7.4 contactor (10 minute EBCT)

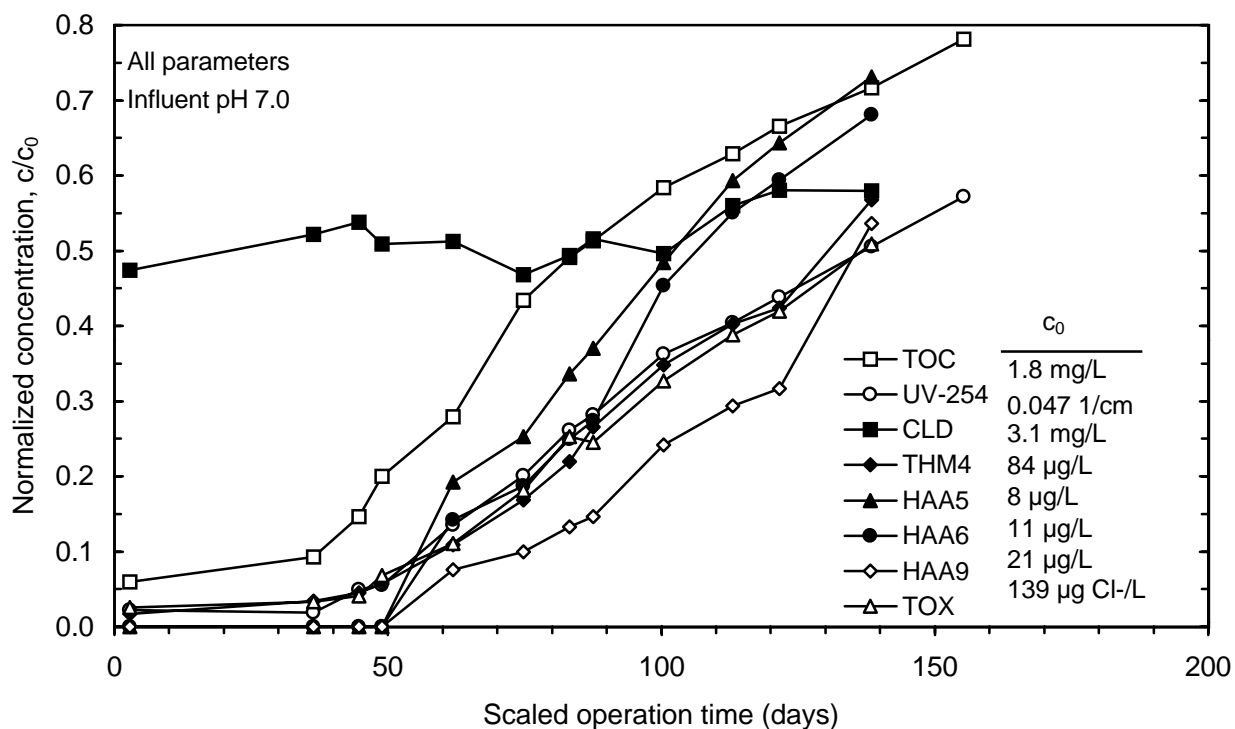


Figure 198 Normalized breakthrough patterns for influent pH 7.0 contactor (10 minute EBCT)

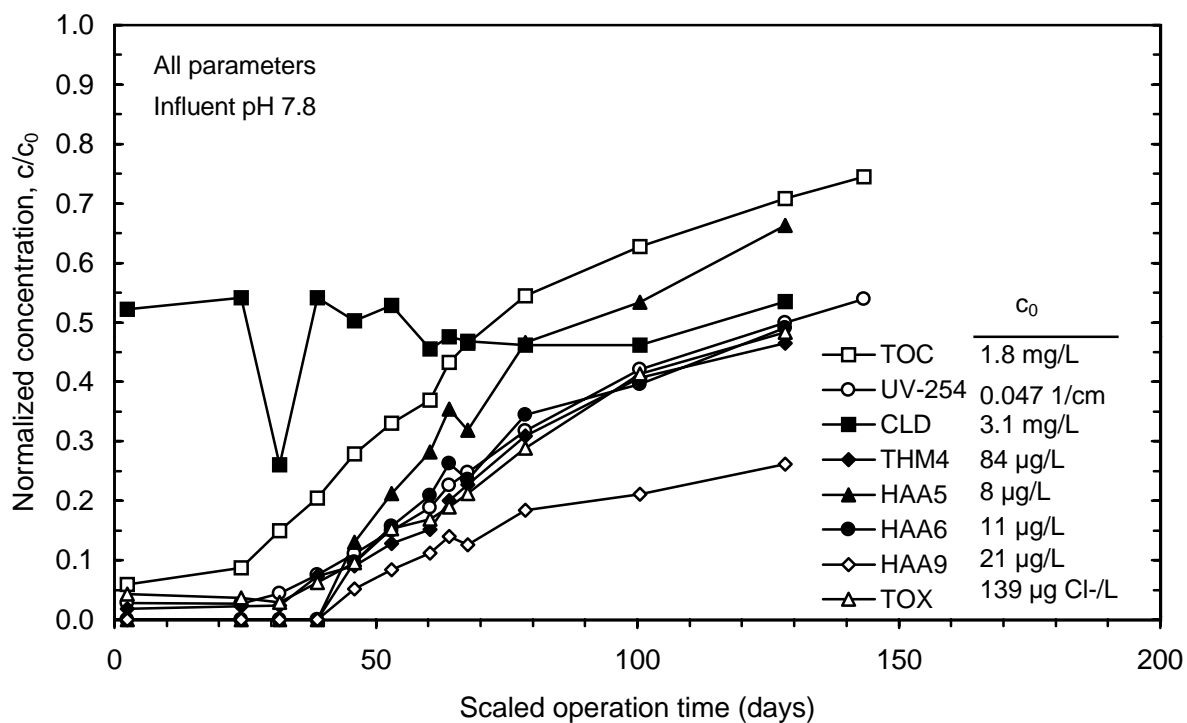


Figure 199 Normalized breakthrough patterns for influent pH 7.8 contactor (10 minute EBCT)

12

Duplicate RSSCT Performance Comparison

12 Duplicate RSSCT Performance Comparison

As part of the EBCT study, DBP precursor removal by a 10 minute EBCT contactor at an influent pH of 7.4 was evaluated. The influent water for this run was sampled on April 6, 1998. During the influent pH study, a 10 minute EBCT contactor with influent pH 7.4 was again operated, to provide a direct comparison of the results of the influent pH 7.0 and 7.8 contactors. The water for the influent pH study was sampled on July 7, 1998. The influent water quality parameters measured during each of the two runs (Table 16) showed that the two water samples collected contained very similar levels of DBP precursor material. The parameter with the largest relative difference in measured values was TOC, with a 10 percent difference (0.2 mg/L).

Figure 200 compares the TOC breakthrough profiles generated during the two runs. The July run showed a higher immediate breakthrough, but overall showed later breakthrough, as can be seen by a shift to the right, indicating improved TOC removal performance. For example, the run time to an effluent concentration of 1.0 mg/L increased from 73 to 92 days between the April and July runs, with the lower influent TOC run having the longer run time. The improvement in run time was likely due at least in part to the lower influent TOC concentration.

The measured influent UV_{254} during the two runs yielded identical average results. The effluent UV_{254} breakthrough profiles, shown in Figure 201, matched very well, with only slightly better performance by the July RSSCT at run times above 80 days. SDS-THM4 breakthrough also showed a divergence after 80 days of run time (Figure 202). Run times to an effluent 32 $\mu\text{g/L}$ increased from 86 to 102 days between the two runs. This difference is comparable to the difference observed for TOC breakthrough, although the influent SDS-THM4 were nearly identical, at 82 and 84 $\mu\text{g/L}$, for the two runs. Measured SDS-HAA levels were fairly low, and little difference in breakthrough profile trends was observed between the two runs, as shown in Figures 203, 204, and 205 for SDS-HAA5, SDS-HAA6, and SDS-HAA9, respectively. SDS-TOX breakthrough for the two runs followed the trends observed for SDS-THM4 breakthrough (Figure 206). The curves matched very well up to a run time of about 80 days, after which they diverged slightly, with longer run times to effluent SDS-TOX levels associated with the July RSSCT run. As shown in Figure 207, SDS-CLD results did not compare well between the two runs, likely due to differences in inorganic demand, and differences in inorganic chlorine demand changes during the runs.

Figures 208 through 211 show the breakthrough of SDS-THM species for the two contactors. The difference in SDS-THM4 breakthrough was mainly due to differences in SDS-BDCM and SDS-DBCM breakthrough; SDS-CHBr₃ breakthrough profiles for the two runs were nearly identical. The levels of all THM species formed in the influent water were nearly identical between the two runs, indicating very similar DBP precursor levels and speciation effects. Comparisons of the breakthrough of SDS-HAA species are shown in Figures 212 through 220. The only significant contributor to SDS-HAA formation was DBAA, and the SDS-DBAA breakthrough profiles for the two runs were very similar.

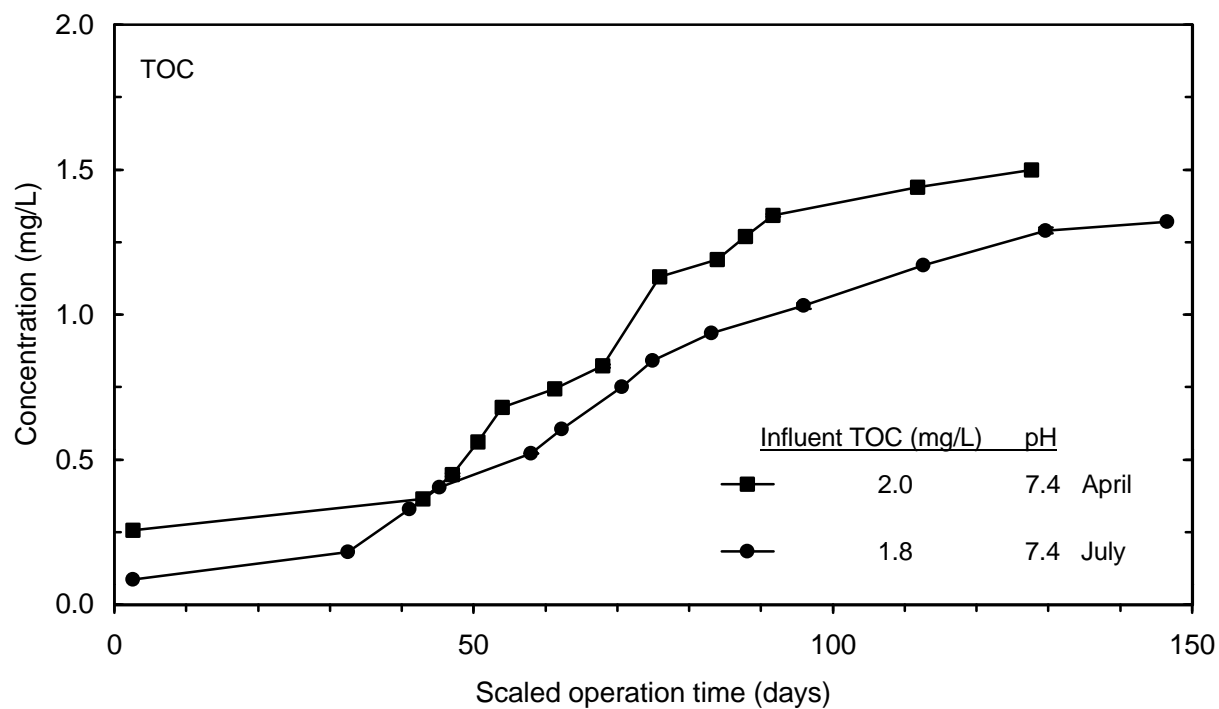


Figure 200 TOC breakthrough comparison for two 10 minute EBCT contactors

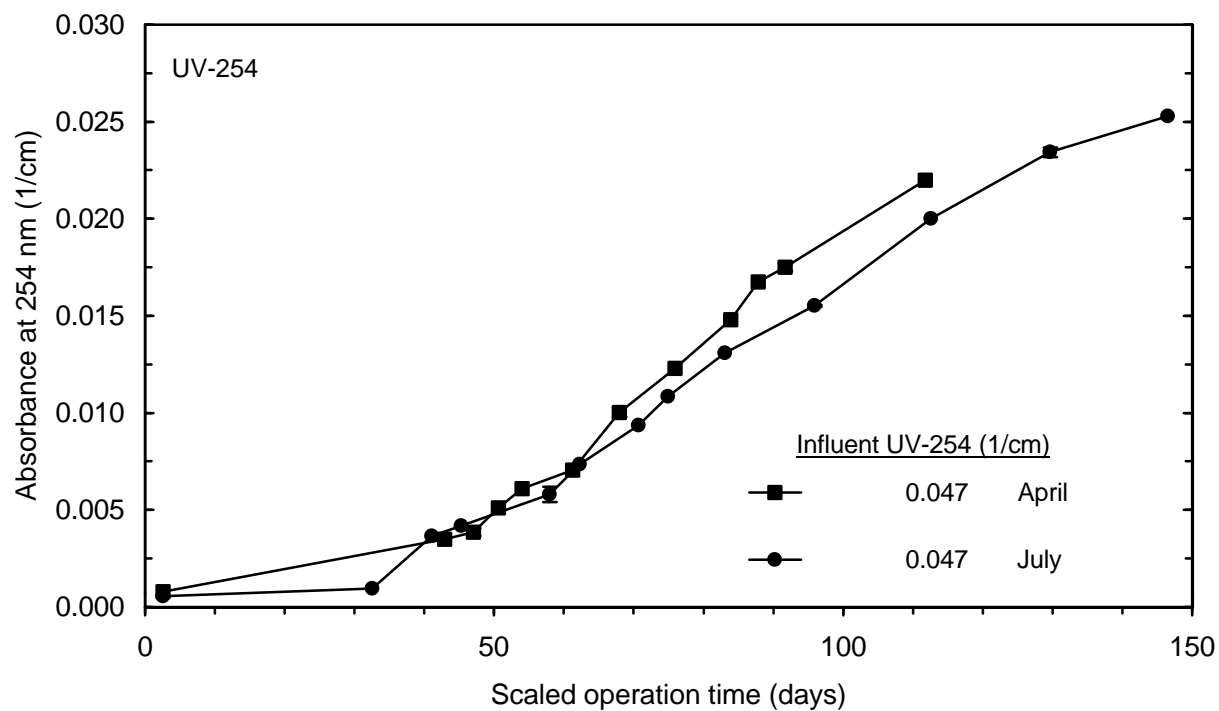


Figure 201 UV-254 breakthrough comparison for two 10 minute EBCT contactors

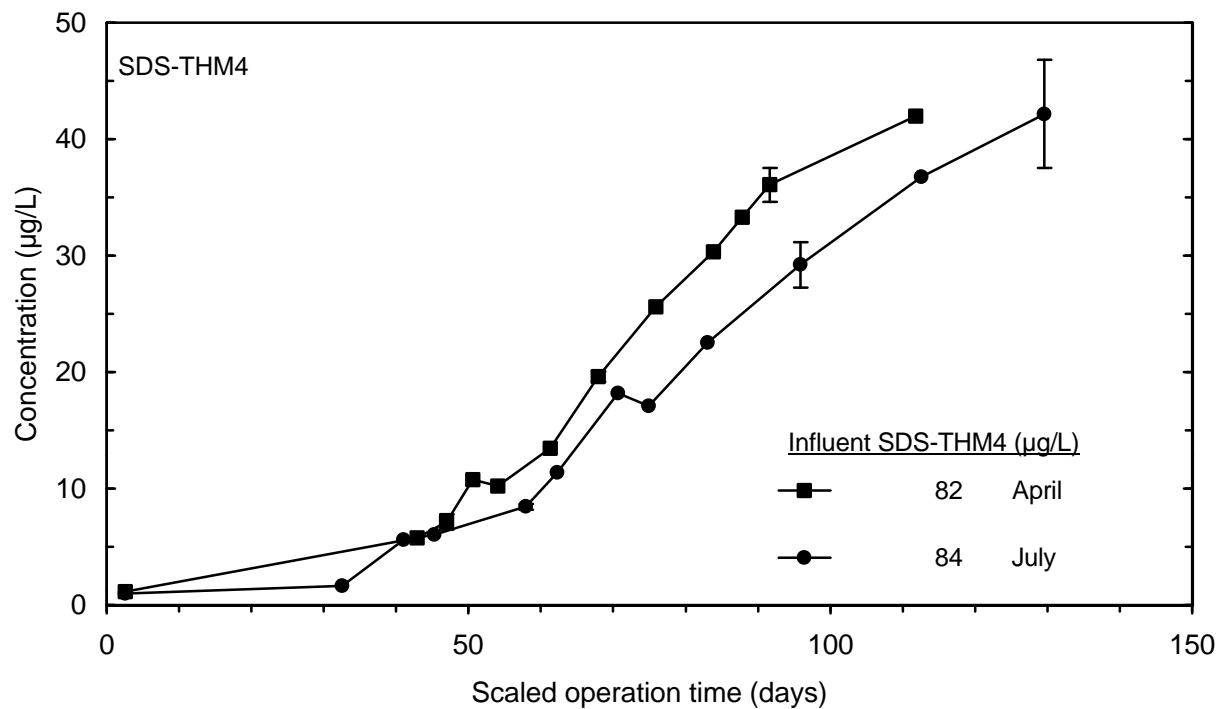


Figure 202 SDS-THM4 breakthrough comparison for two 10 minute EBCT contactors

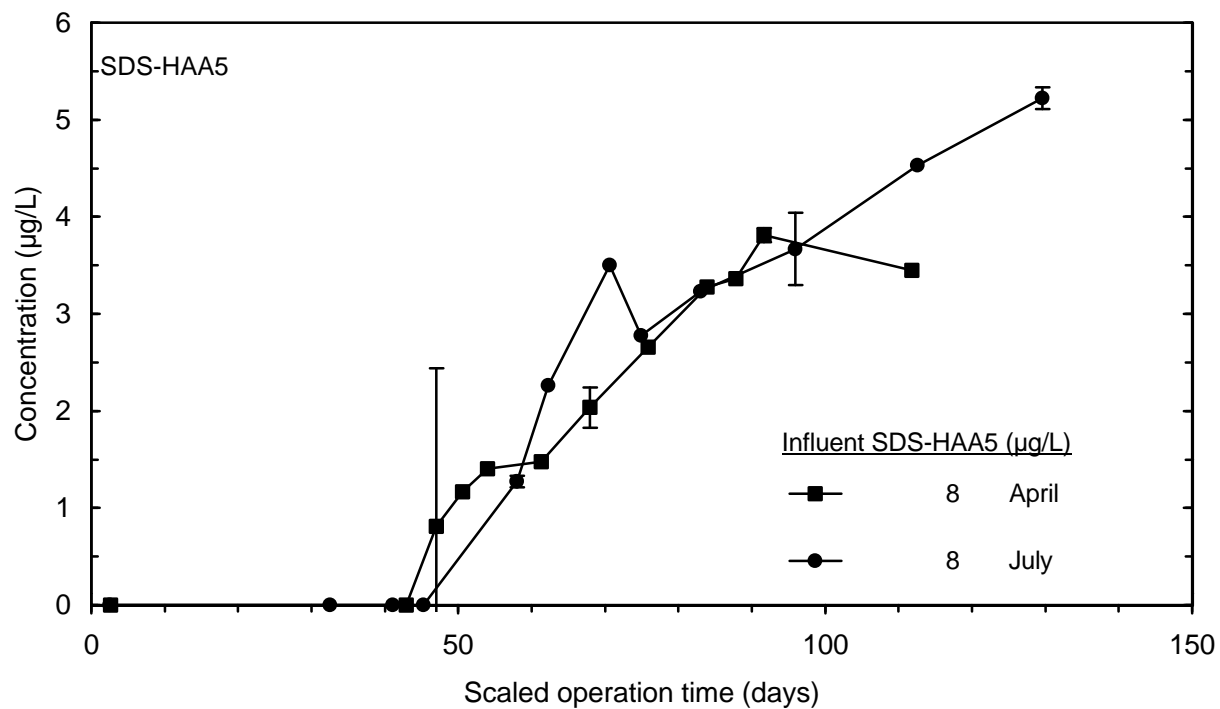


Figure 203 SDS-HAA5 breakthrough comparison for two 10 minute EBCT contactors

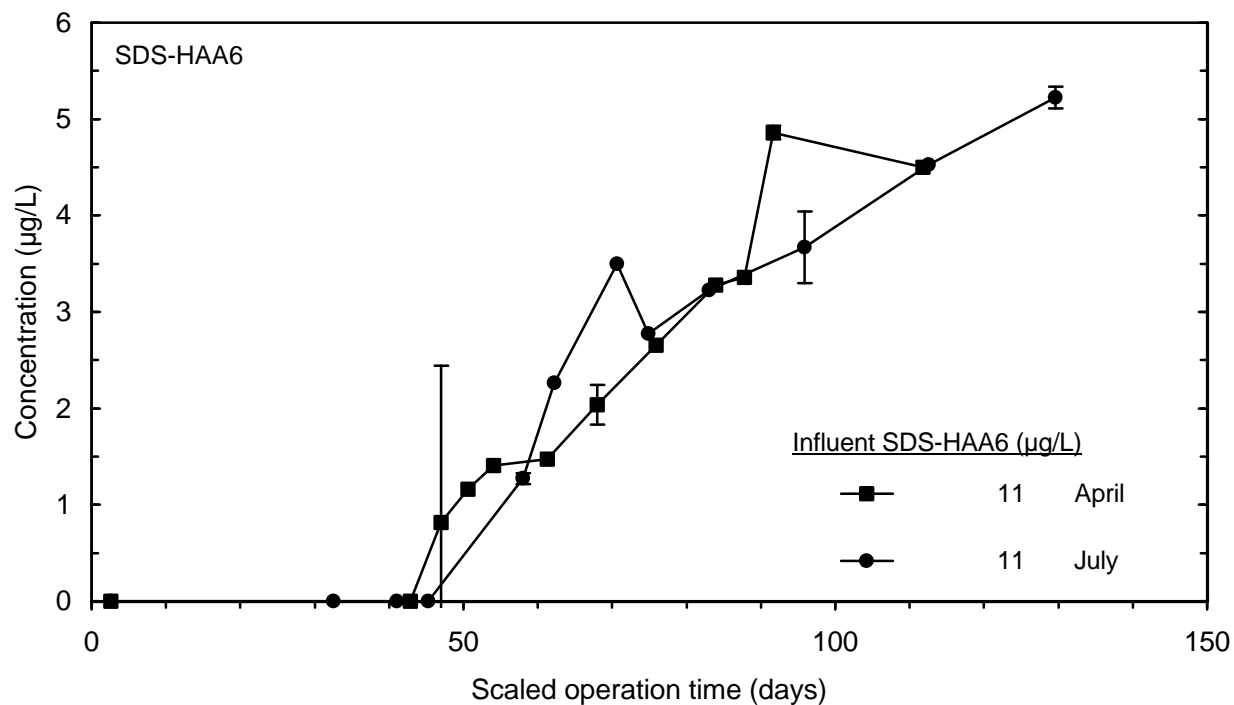


Figure 204 SDS-HAA6 breakthrough comparison for two 10 minute EBCT contactors

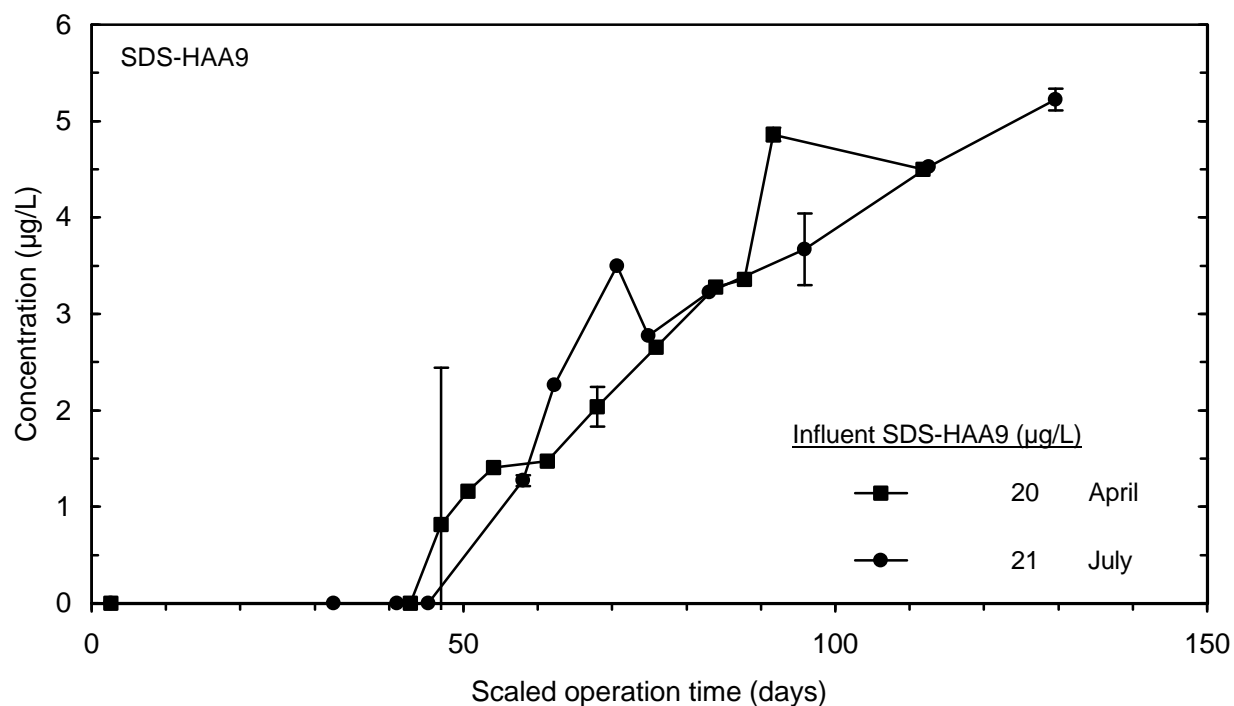


Figure 205 SDS-HAA9 breakthrough comparison for two 10 minute EBCT contactors

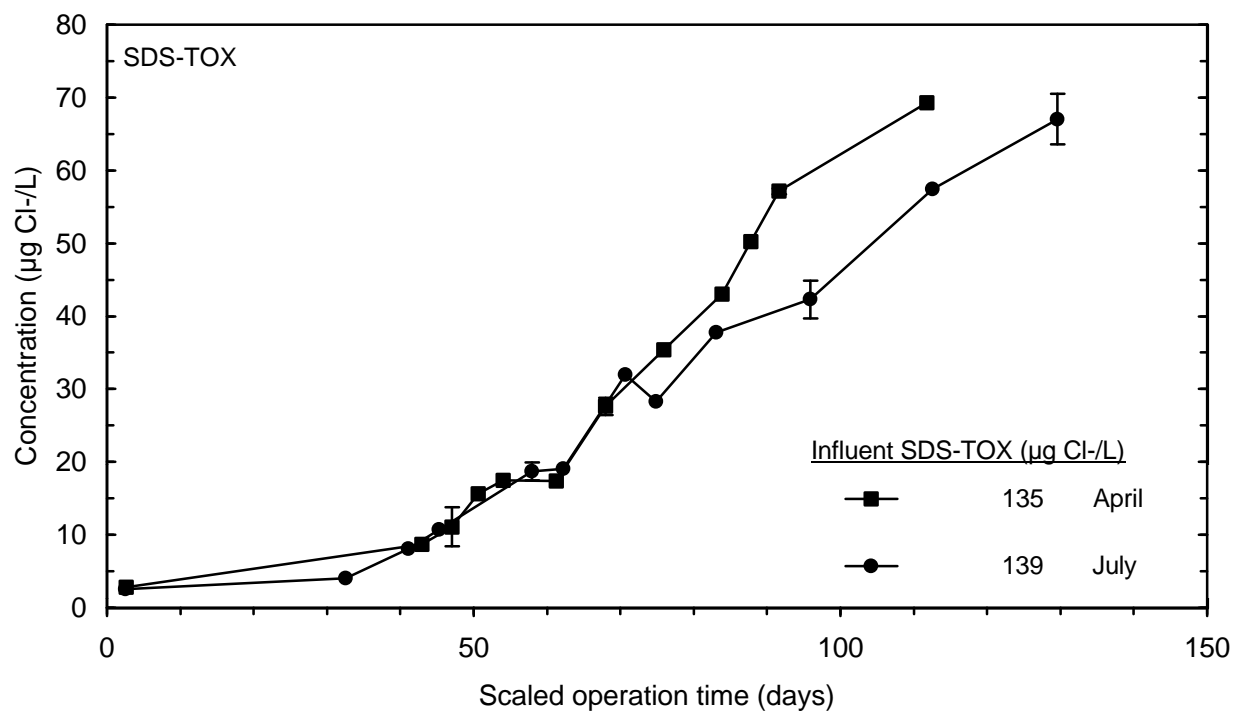


Figure 206 SDS-TOX breakthrough comparison for two 10 minute EBCT contactors

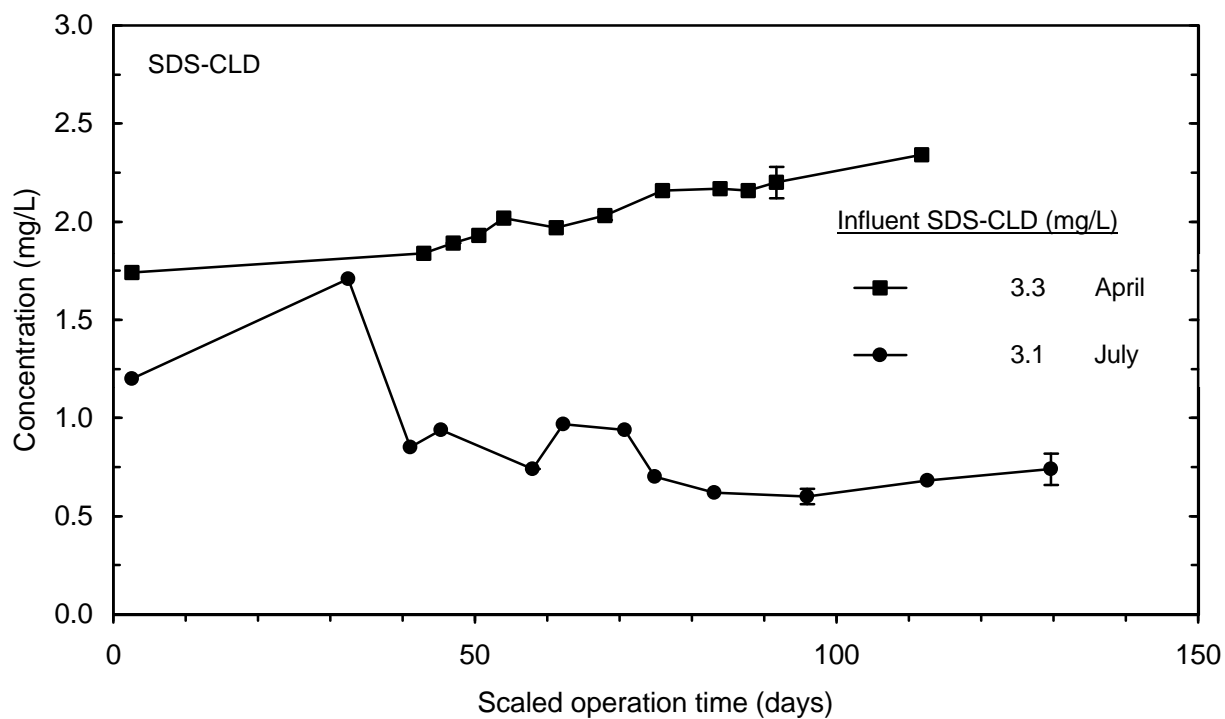


Figure 207 SDS-CLD breakthrough comparison for two 10 minute EBCT contactors

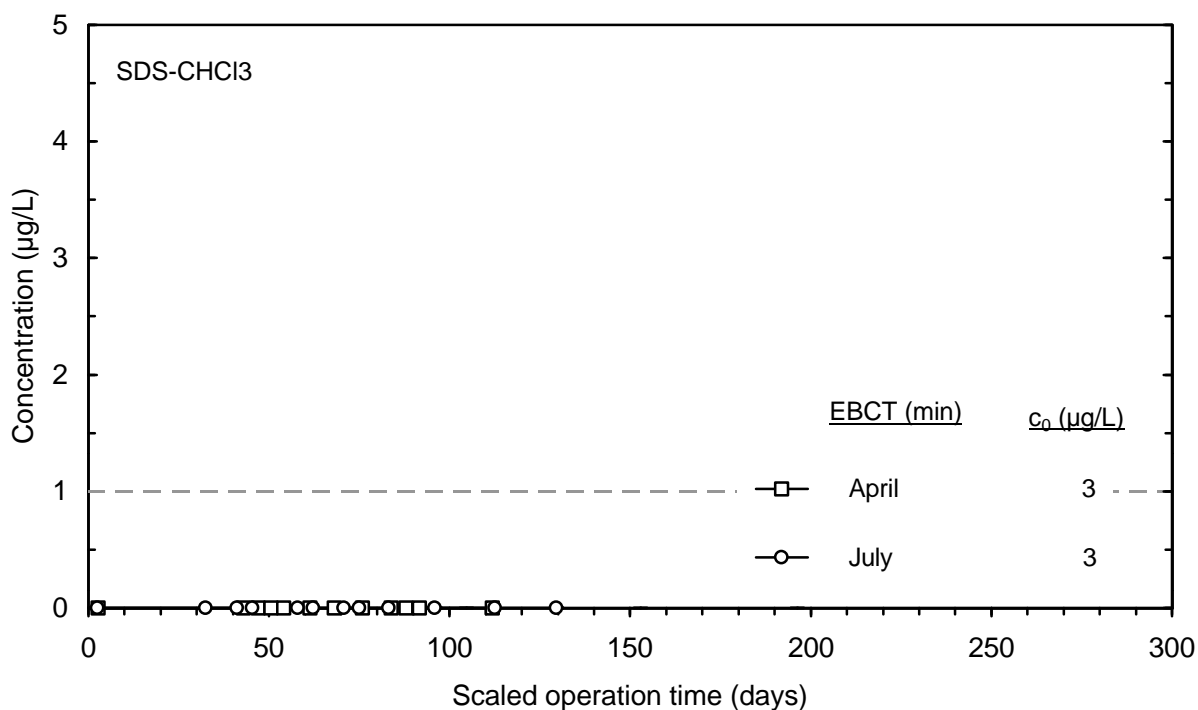


Figure 208 SDS-CHCl₃ breakthrough comparison for two 10 minute EBCT contactors

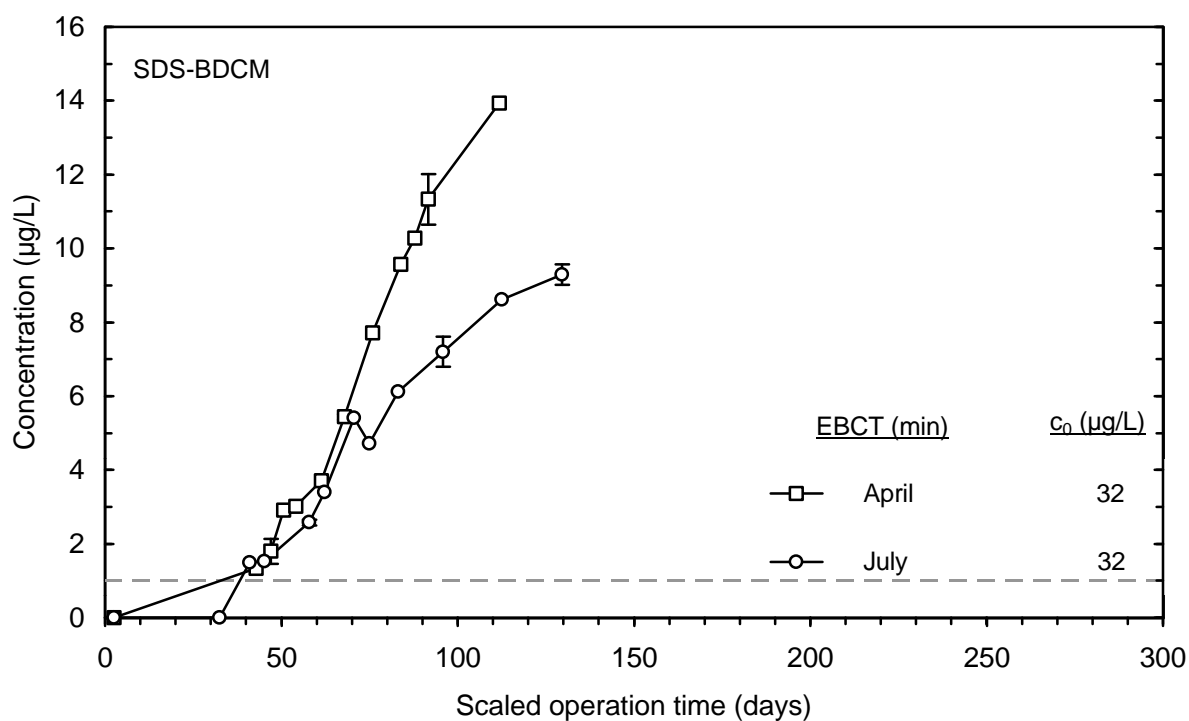


Figure 209 SDS-BDCM breakthrough comparison for two 10 minute EBCT contactors

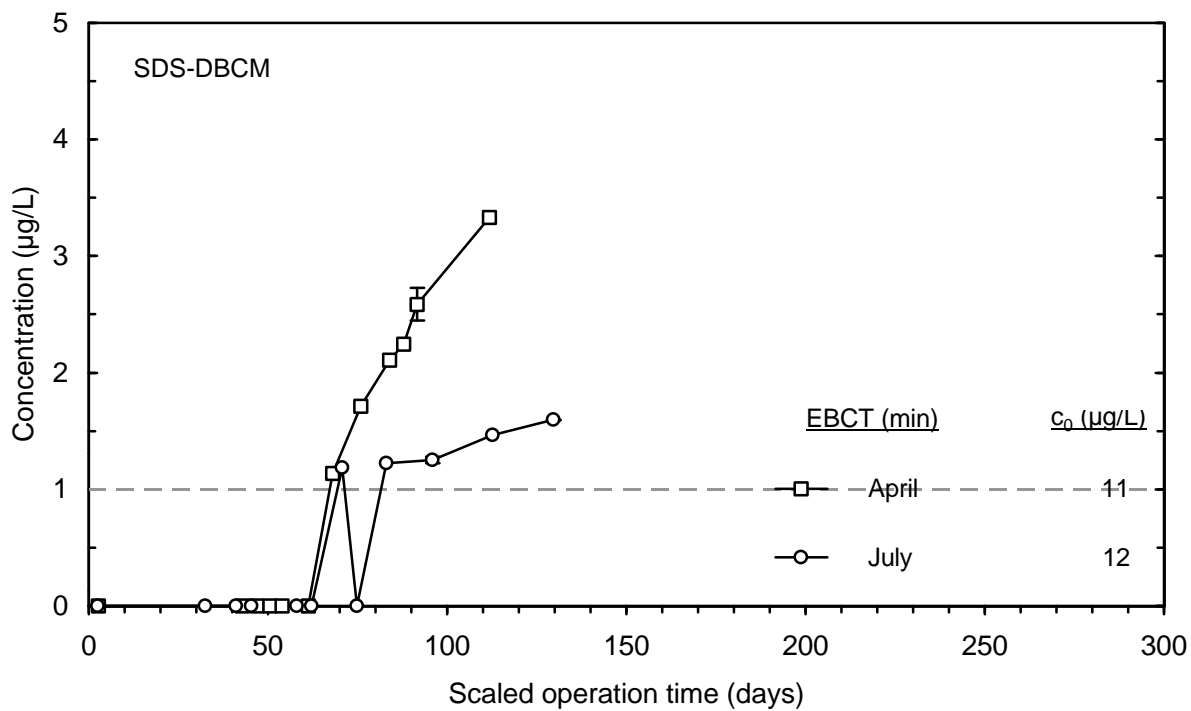


Figure 210 SDS-DBCM breakthrough comparison for two 10 minute EBCT contactors

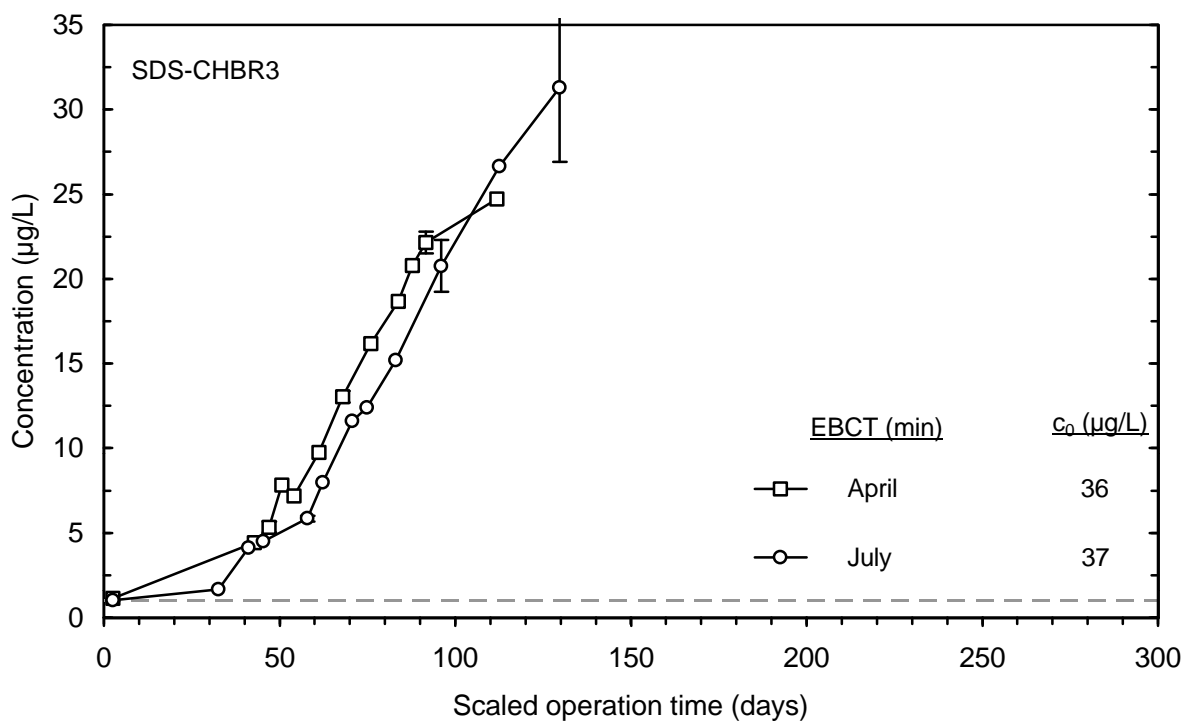


Figure 211 SDS-CHBR3 breakthrough comparison for two 10 minute EBCT contactors

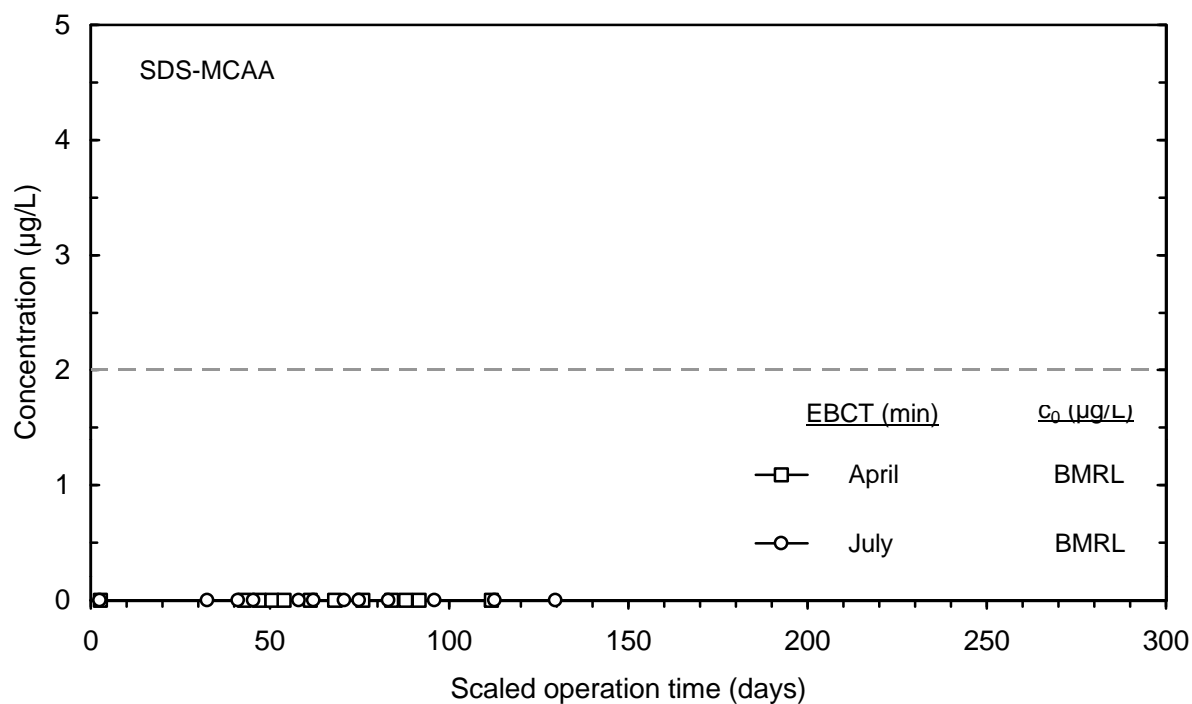


Figure 212 SDS-MCAA breakthrough comparison for two 10 minute EBCT contactors

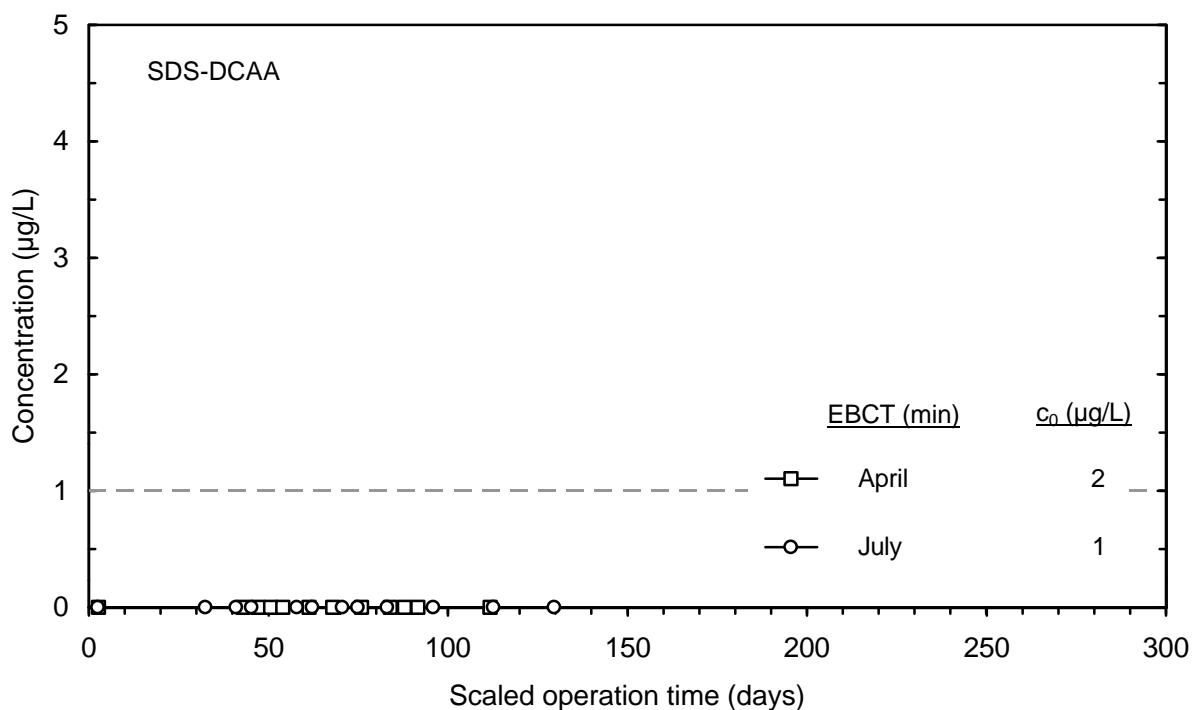


Figure 213 SDS-DCAA breakthrough comparison for two 10 minute EBCT contactors

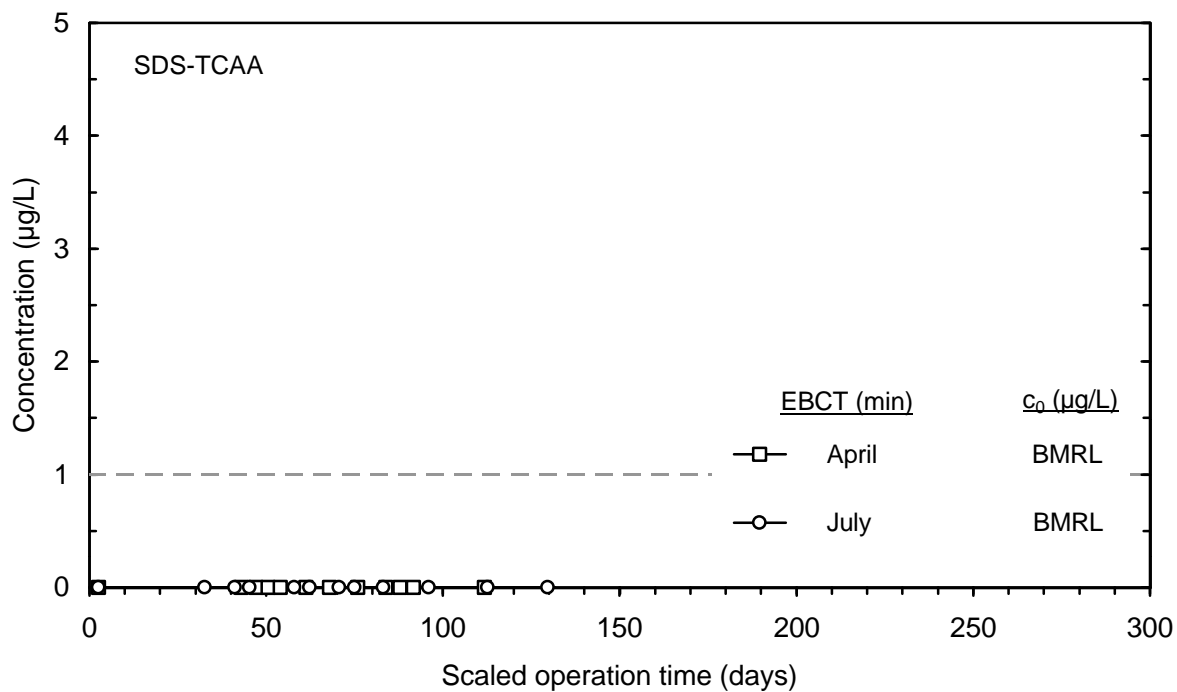


Figure 214 SDS-TCAA breakthrough comparison for two 10 minute EBCT contactors

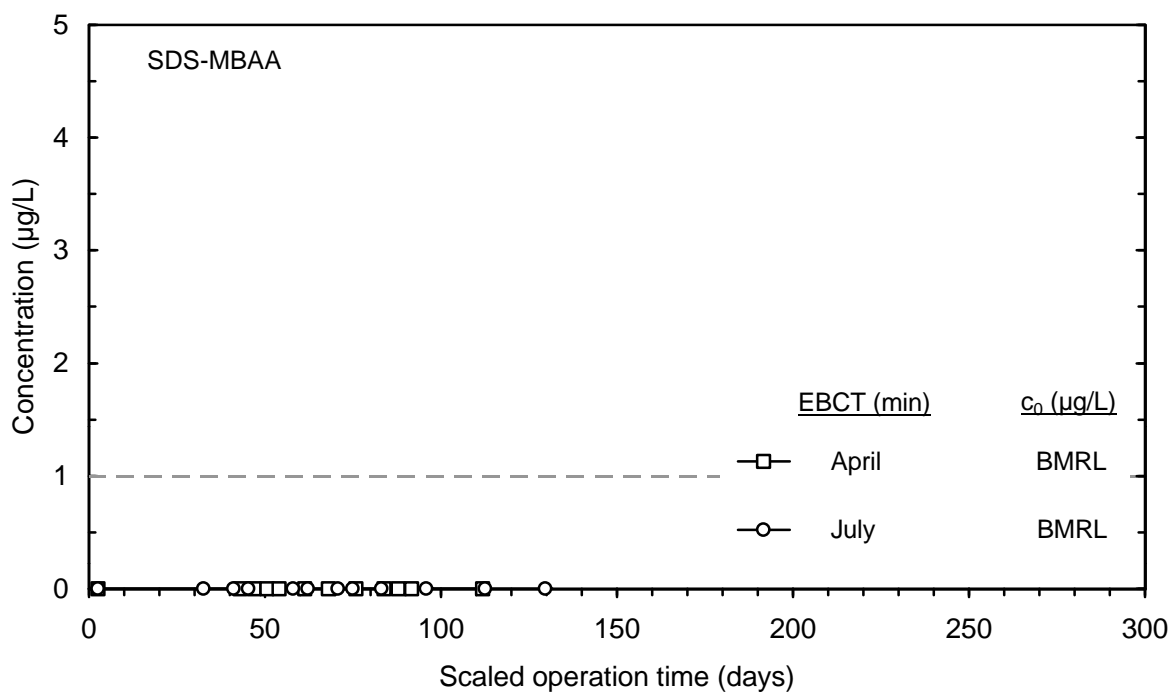


Figure 215 SDS-MBAA breakthrough comparison for two 10 minute EBCT contactors

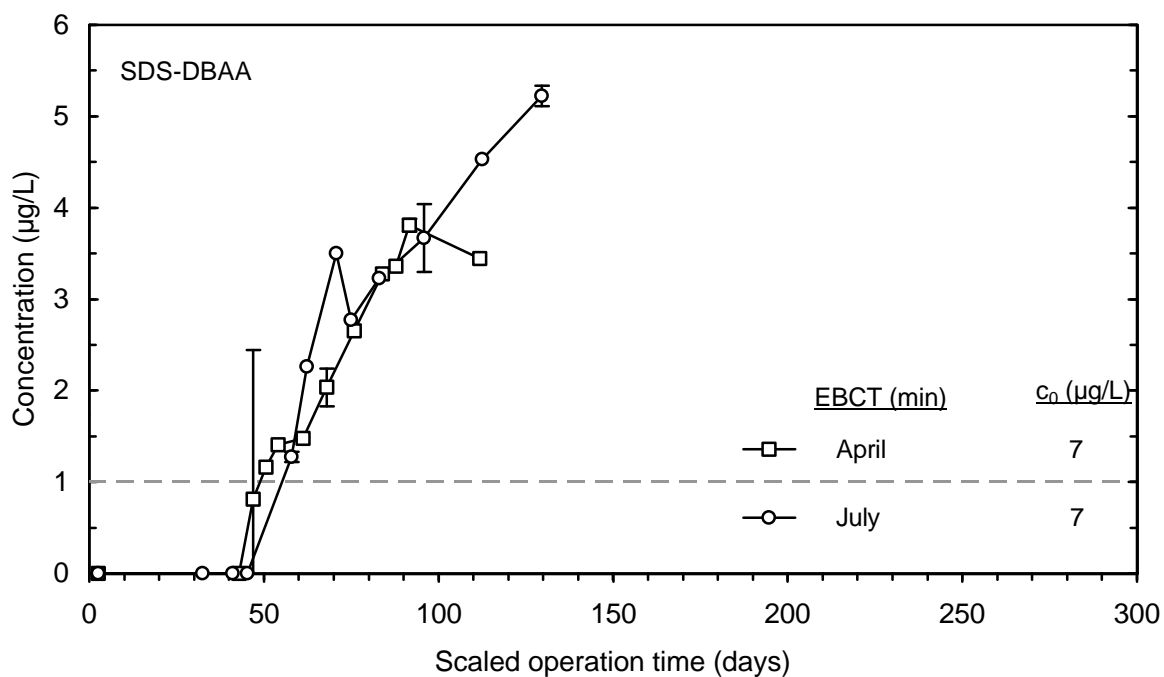


Figure 216 SDS-DBAA breakthrough comparison for two 10 minute EBCT contactors

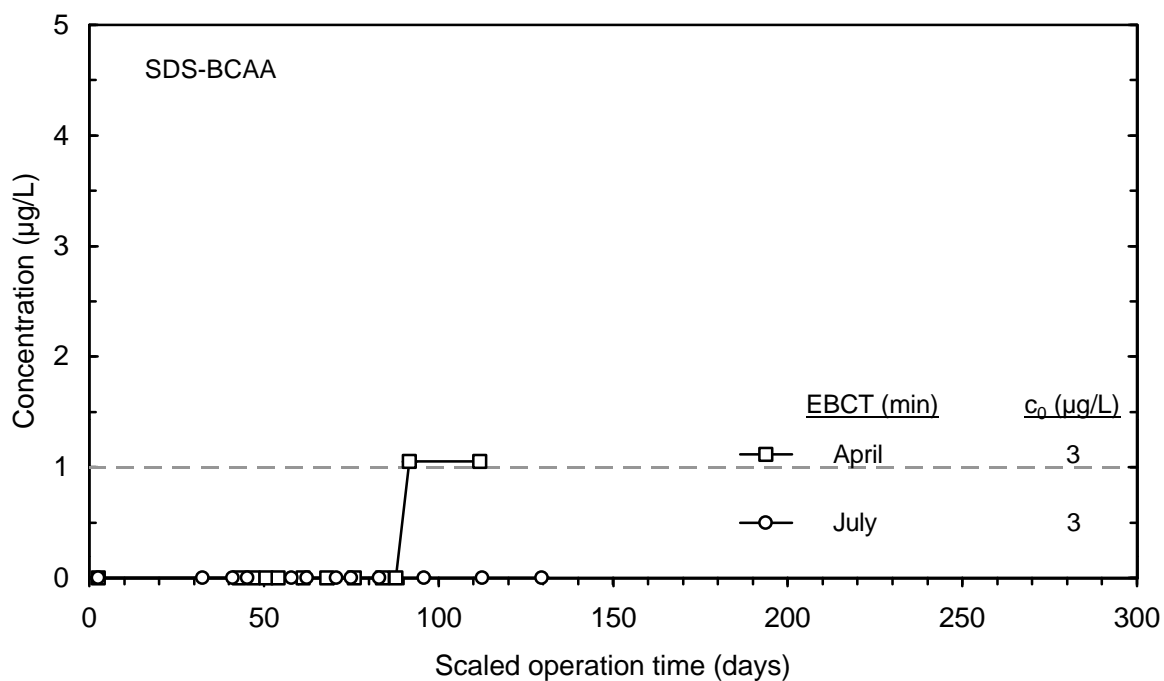


Figure 217 SDS-BCAA breakthrough comparison for two 10 minute EBCT contactors

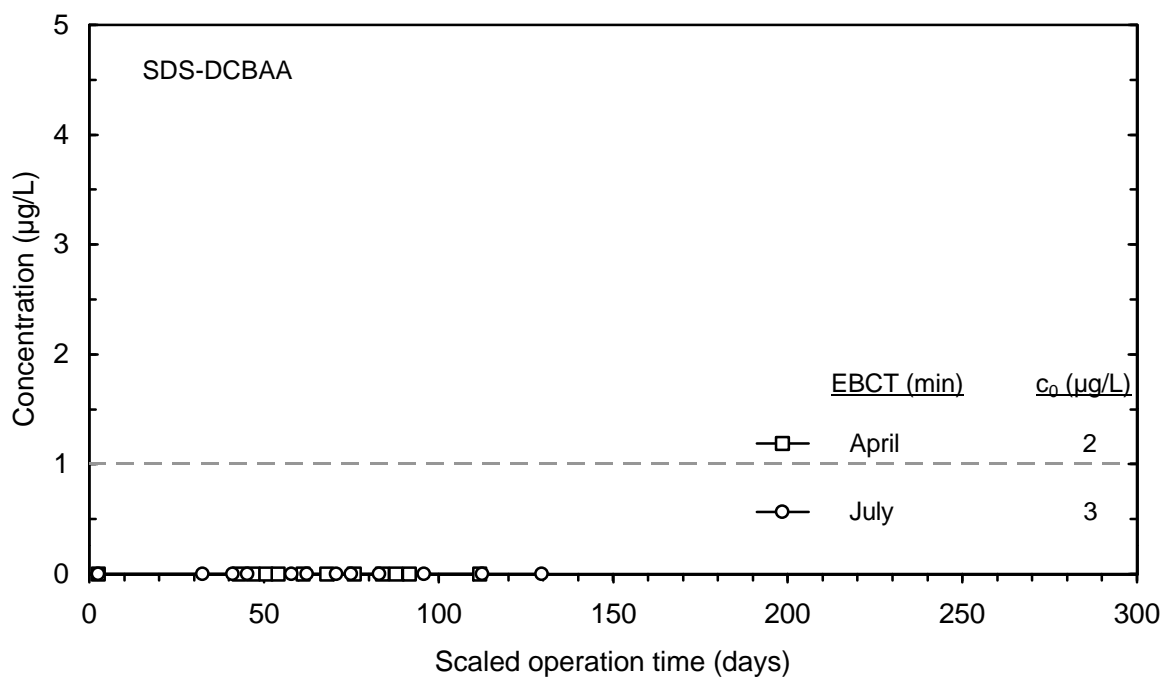


Figure 218 SDS-DCBAA breakthrough comparison for two 10 minute EBCT contactors

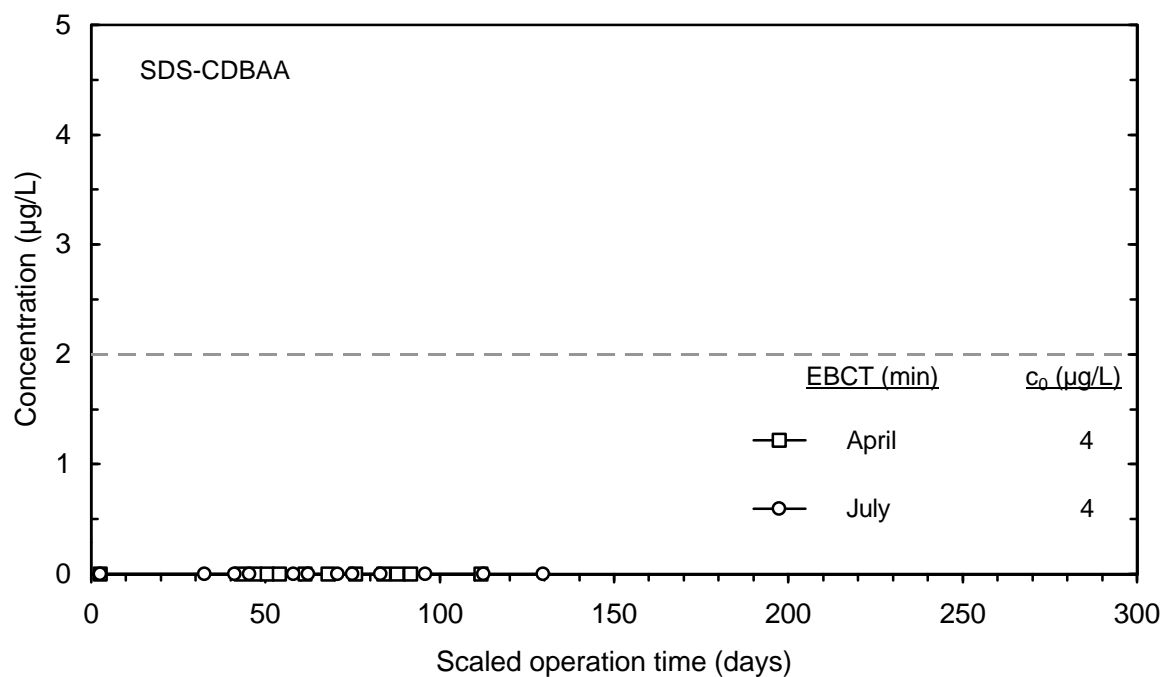


Figure 219 SDS-CDBAA breakthrough comparison for two 10 minute EBCT contactors

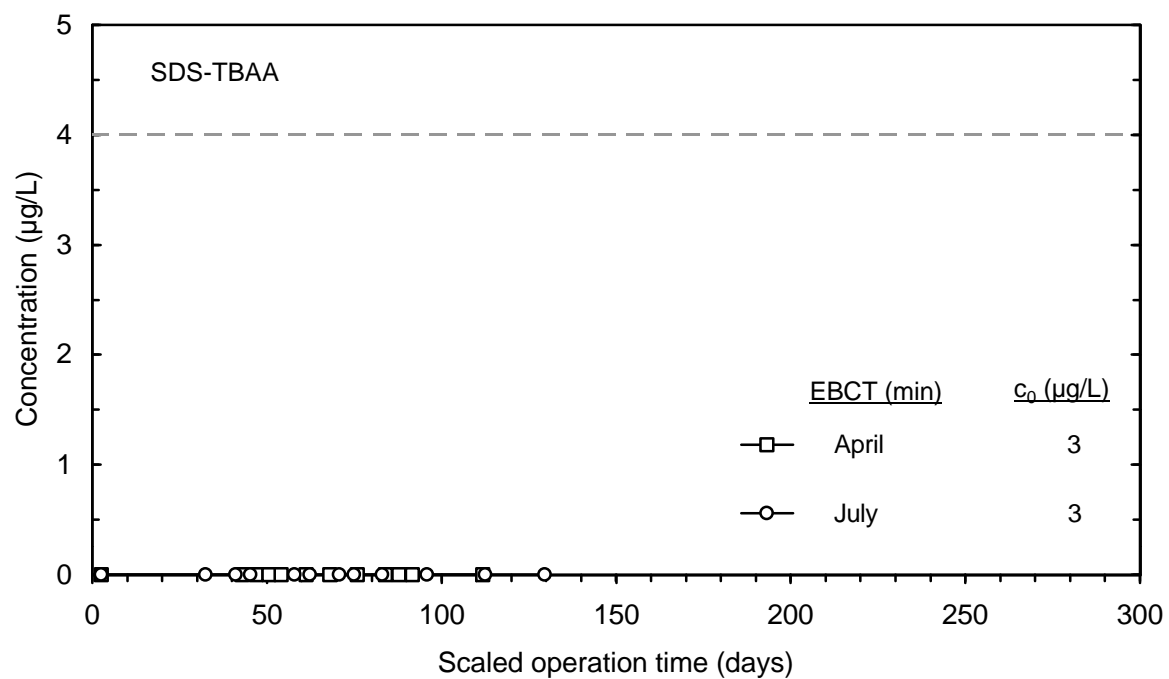


Figure 220 SDS-TBAA breakthrough comparison for two 10 minute EBCT contactors

13

TOC-DBP and UV₂₅₄-DBP Relationships

13 TOC-DBP and UV₂₅₄-DBP Relationships

Paired concentration plots of GAC effluent SDS-THM4, SDS-HAA5, SDS-HAA6, SDS-HAA9, and SDS-TOX against GAC effluent TOC and UV₂₅₄ were generated on a concentration and normalized (percent breakthrough) basis. These plots are summarized in Figures 221 through 224. All EBCT and influent pH runs are presented on the same plots. In general, TOC and UV₂₅₄ served as good predictors of GAC effluent DBP formation regardless of EBCT and influent pH. The graphs summarized in Figure 221 show that the correlation between TOC and UV₂₅₄ or SDS-DBPs for the initial 10 and 20 minute EBCT runs was shifted to the right, indicating that for these runs the GAC effluent TOC formed lower levels of SDS-DBPs after chlorination than during the other EBCT runs and influent pH runs. There was no apparent systematic impact of EBCT or influent pH on the correlation between TOC and SDS-DBPs.

In the paired normalized concentration data plots shown in Figures 223 and 224, a line with a slope of 1 and y-intercept of 0 is also plotted. The general trend of the data in comparison to this line indicates whether the percent breakthrough of the surrogate parameter (TOC or UV₂₅₄) directly predicts the percent breakthrough of the formed DBP (data falls on the line), or if the surrogate parameter serves as a conservative indicator of the formed DBP breakthrough (data lies below the line). Examples of the former are SDS-THM4, SDS-HAA6, and SDS-TOX against UV₂₅₄. Examples of the latter are SDS-THM4, SDS-HAA, and SDS-TOX against TOC. Therefore, although TOC served as a conservative indicator of SDS-DBP breakthrough, UV₂₅₄ served as a better direct predictor of SDS-DBP breakthrough. Again, there was no detectable impact of EBCT or influent pH on these trends.

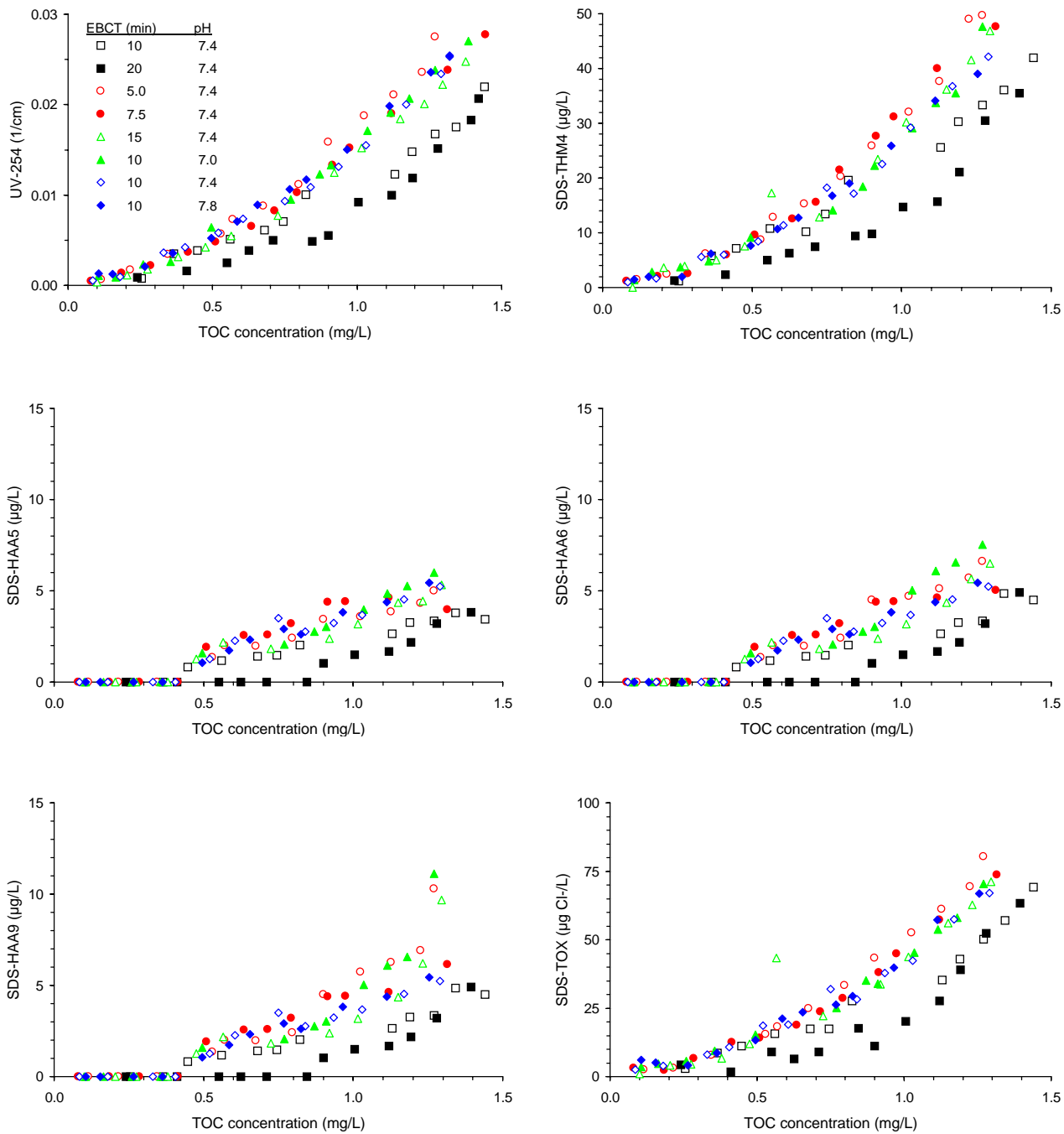


Figure 221 TOC correlations with UV-254 and SDS-DBPs in GAC effluent water

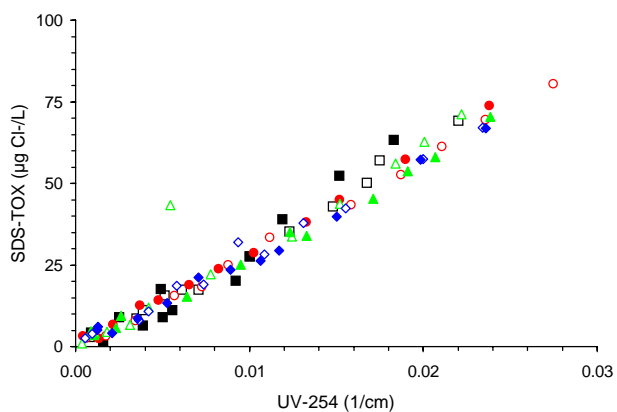
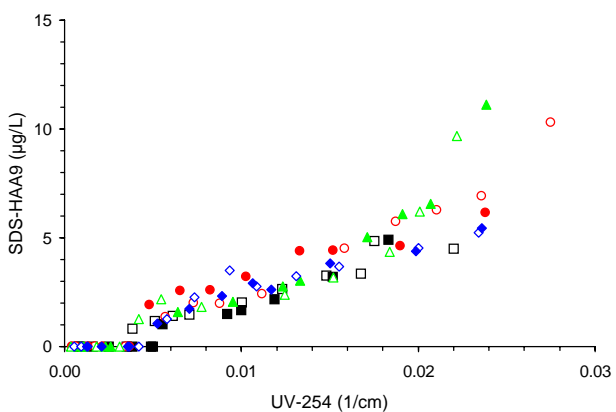
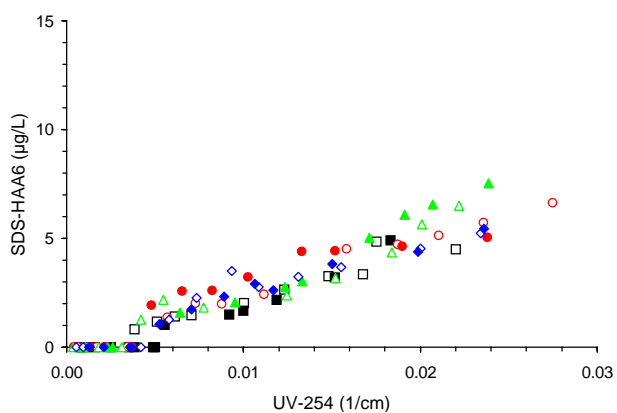
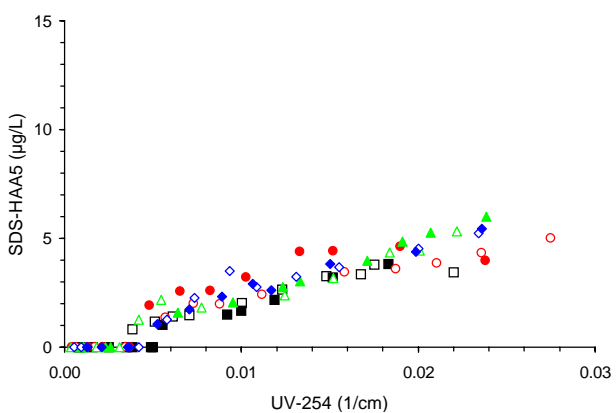
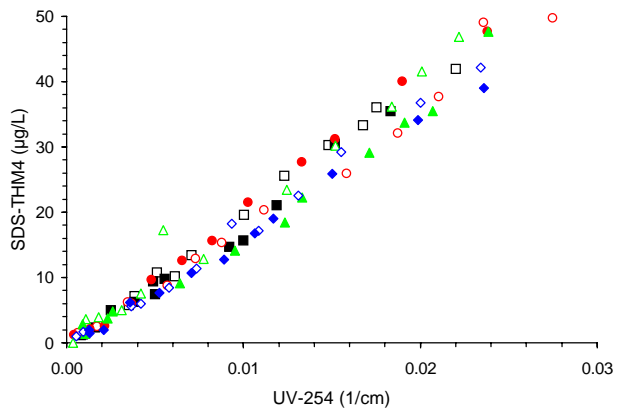
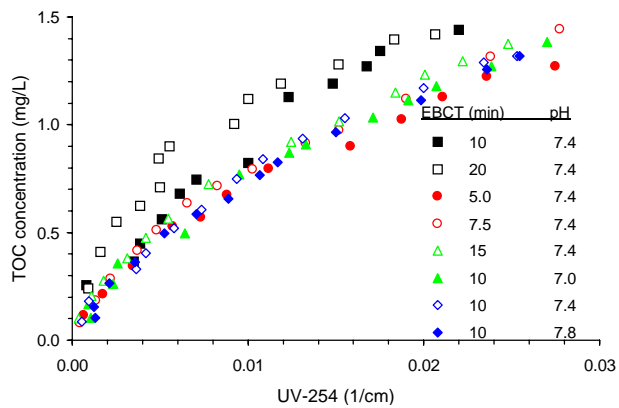


Figure 222 UV-254 correlations with TOC and SDS-DBPs in GAC effluent water

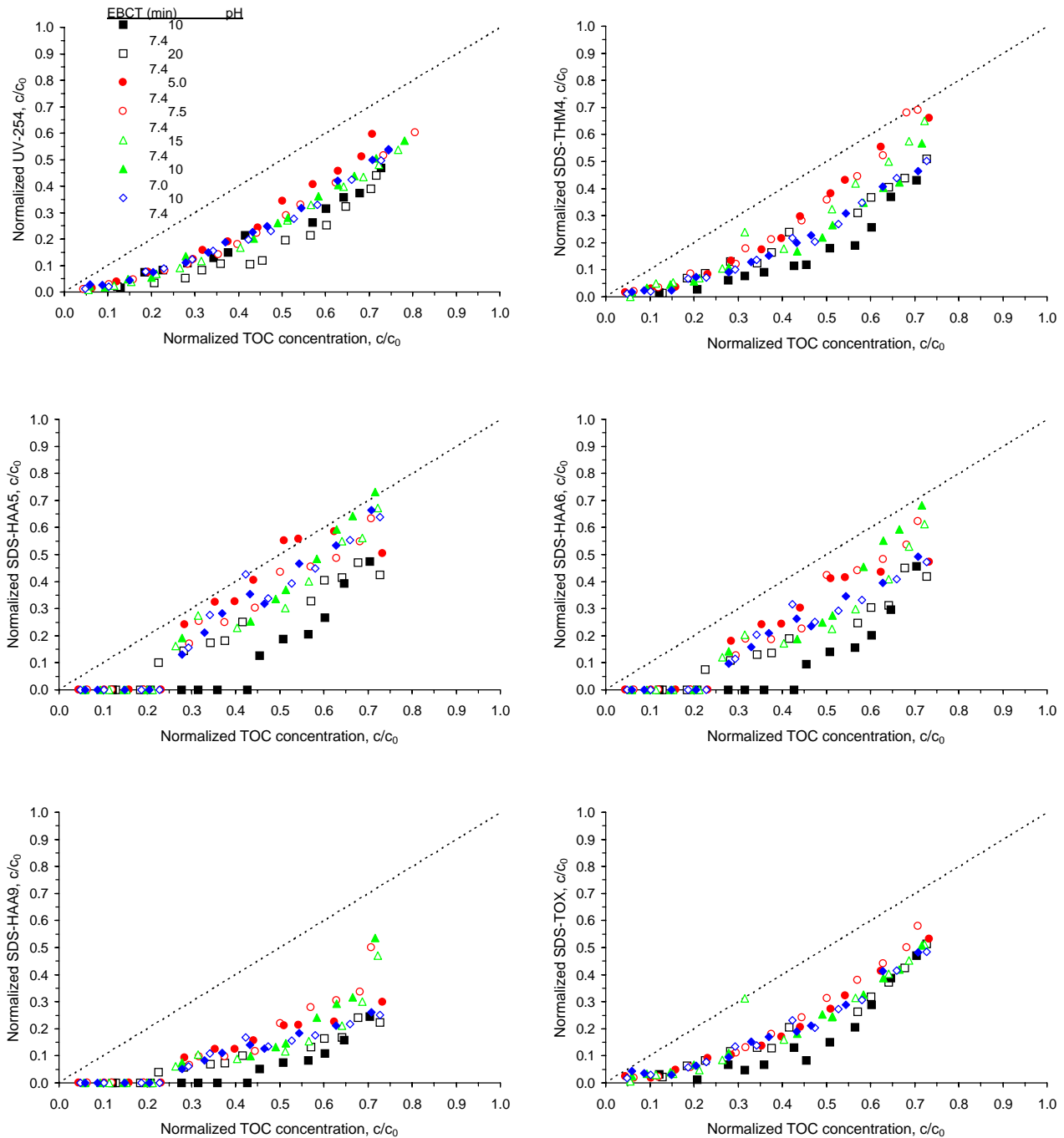


Figure 223 Normalized TOC correlations with normalized UV-254 and SDS-DBPs in GAC effluent water

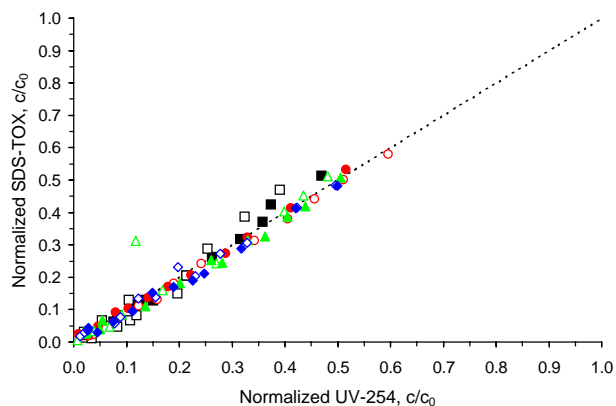
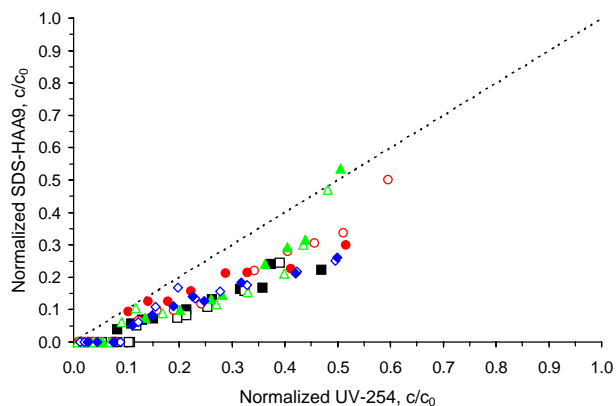
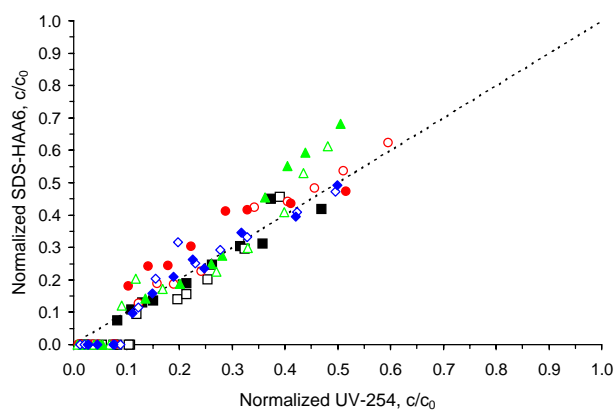
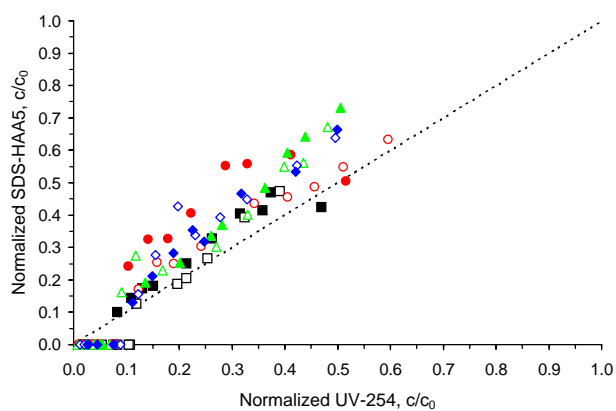
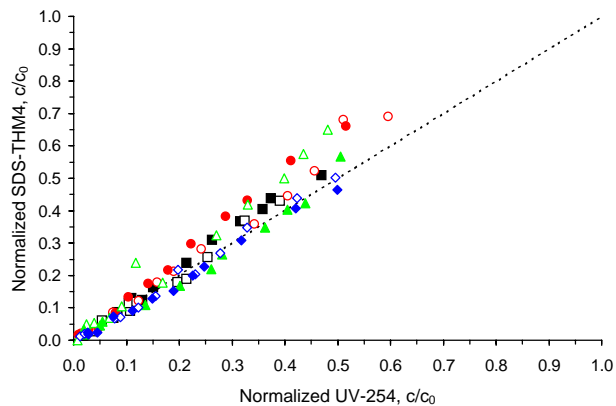
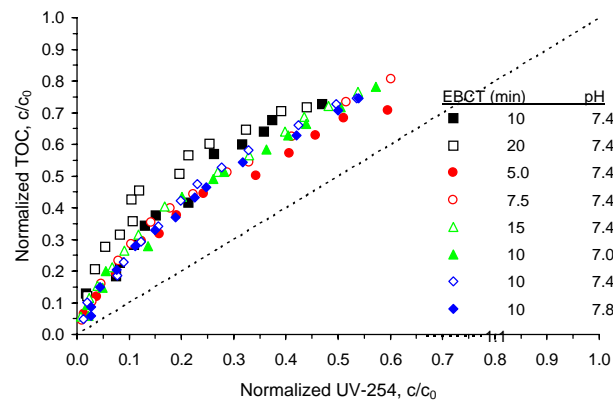


Figure 224 Normalized UV-254 correlations with normalized TOC and SDS-DBPs in GAC effluent water

14

TOC Breakthrough Performance Evaluation

14 TOC Breakthrough Performance Evaluation

Based on a correlation that relates influent TOC concentration to bed volumes to 50 percent TOC breakthrough, BV_{50} (Summers et al. 1994; Hooper et al. 1996), the GAC performance of the Arlington Water Treatment Plant water source can be evaluated. The correlation is given by the following equation:

$$BV_{50} = \frac{18,000}{TOC_0} \quad (8)$$

where TOC_0 is the mean influent TOC concentration, in mg/L. For RSSCT runs, the BV_{50} obtained is plotted in Figure 225. The performance of an average water is given by the dashed line, which represents Equation 8. Figure 225 shows that in general, GAC performance was well predicted by Equation 8, with a maximum deviation of 26 percent.

GAC performance improved with increasing EBCT and decreasing pH. The BV_{50} value for the 5.0 and 7.5 minute EBCT runs averaged 2 percent below the predicted, while the BV_{50} value for the 10, 15, and 20 minute EBCT contactors averaged 26 percent higher than predicted. At a 10 minute EBCT, the BV_{50} value improved with decreasing influent pH, from 3 to 21 percent above the predicted BV_{50} , as the influent pH was decreased from 7.8 to 7.0. The BV_{50} values for the two 10 minute EBCT, influent pH 7.4 runs were 12 and 15 percent higher than the predicted BV_{50} .

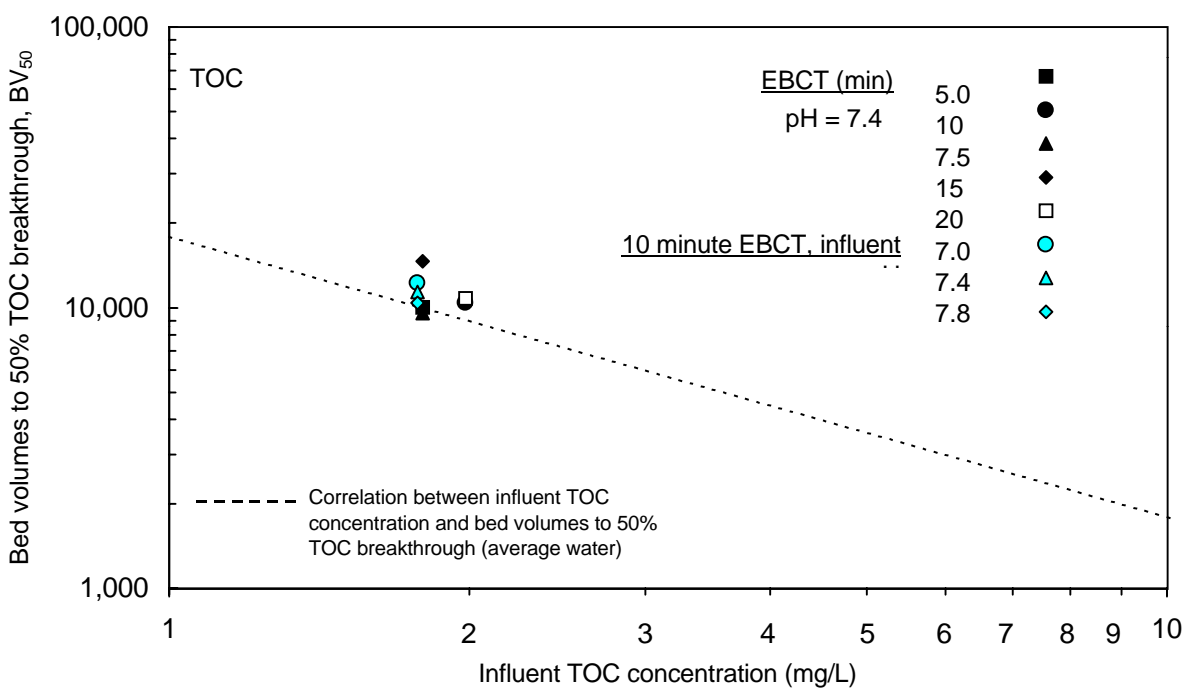


Figure 225 Comparison between GAC performance during treatment study testing and average water GAC performance

15

Cost Information and Analysis

15 Cost Information and Analysis

A comparative cost analysis was performed based on the data obtained during the treatment study using an EPA cost model (Clark and Adams, 1991). The cost analysis included the cost of on-site spent carbon reactivation. Costs were evaluated using steel pressure contactors and were determined in cents/1,000 gal for both capital and operations and maintenance (O&M) costs. Based on the maximum plant capacity of 12.2 MGD, 5 steel pressure contactors were required (20-ft diameter). Although average plant production varies throughout the year, an average of 6.6 MGD was used for modeling purposes. The economic input data to the model are summarized in Table 38.

For cost modeling purposes, it was assumed that GAC reactivation would be performed on-site. An average reactivation cost was determined based on reactivation by fluidized bed, infrared, and multihearth technologies. Total costs reflect an average of reactivation costs by the three technologies: individual costs for each reactivation technology are not reported.

The cost model sizes the contactors based on the plant capacity flow. The EBCT input into the model is the EBCT under plant capacity conditions. Therefore, under average flow conditions, the EBCT in each contactor will be higher, leading to longer intervals between GAC reactivation and lower O&M costs.

The capital costs are based on the economic input values, EBCT, type of contactor, and spent carbon reactivation demand. The O&M costs are determined based on the service life of each contactor assuming operation in parallel staggered mode. Relative to the placeholders for Stage 2 DBP MCLs, THM4 formation was much higher than HAA5 formation, and thus run time calculations are based on effluent SDS-THM4 levels. The service life input into the model was the run time to Stage 2 THM4 MCL (with a 20 percent safety factor). A cost of 90 cents/lb GAC was used.

The blended effluent analysis presented in Section 10 was a good approximation for 10 or more contactors operated in parallel. However, for the blended effluents of five parallel steel pressure contactors, the estimated run times are not as applicable. Instead, a better approximation can be made by using the following equation:

$$\bar{C}_n = \frac{1}{n} \sum_{i=1}^n C_i \quad (9)$$

where C_n is the concentration of the blend of n contactors in parallel and C_i is the effluent concentration of the i th adsorber (Roberts and Summers, 1982). The values for C_i are determined from the single contactor breakthrough curve, and the equation is valid under the assumption that contactors are replaced at regular intervals. This analysis was performed for all runs under the assumption that five steel pressure contactors would be operated in parallel. The resulting estimated run times are slightly shorter than those for the blended effluent as determined by Equations 3 and 4. In all cases, it was necessary to apply breakthrough curve extrapolation procedures (to at most 250 percent of the maximum run time) to the five contactor

configuration. Table 39 summarizes the estimated run times to comply with the placeholders for Stage 2 DBP MCLs for configurations of 5 and more than 10 contactors in parallel. An average 18 percent difference in contactor run time exists based on the number of contactors used for blended run time calculations.

Table 40 summarize the GAC cost analysis results. Capital, O&M, and total costs are included for all runs. The costs are given in cents/1,000 gallons water treated. Overall, the most cost-effective option for GAC treatment was 5.0 minute EBCT steel pressure contactors. The impact of influent pH between 7.0 and 7.8 was negligible on total costs, as shown in Table 40 and Figure 226. The total cost ranged from 29 to 50 cents/1,000 gallons. A bar graph comparison of capital, O&M, and total costs for all runs is shown in Figure 226 for five steel pressure contactors in parallel. The error bars shown represent the standard deviation of the average cost calculated from the three reactivation technologies. The cost model results do not include the cost for pH adjustment from the 7.4 to 7.0 for the influent pH runs. This model assumed and included the costs for on-site GAC reactivation; off-site reactivation costs would depend on the location and charges associated with a regional reactivation facility.

Parameter	Value
Capital recovery interest rate (%)	10
Capital recovery period (years)	20
Overhead & profit factor (% of construction costs)	5
Special sitework factor (% of construction costs)	5
Construction contingencies (% of construction costs)	10
Engineering fee factor (% of construction costs)	10
ENR construction cost index (CCI base year 1913) and date	6,006 (May 1999)
Producers Price Index (PPI base year 1967=100) and date	371 (April 1999)
Labor rate + fringe (\$/manhour)	15
Labor overhead factor (% of labor)	10
Electric rate (\$/kWh)	0.0466
Fuel oil rate (\$/gallon)	0.95
Natural gas rate (\$/cu.ft.)	0.0055
Process water rate (\$/1,000 gal)	0.35
Modifications to existing plant (% of construction cost)	5

Table 38 Economic input data to cost model

EBCT (min)	Influent pH	Run time (days) for contactor configuration		
		Single	5 contactors	Multiple (more than 10)
5.0	7.4	39	67†	81†
7.5	7.4	56	100†	121†
10	7.4	86	146†	174†
15	7.4	189	314†	377†
20	7.4	238	397†	474†
10	7.0	108	179†	213†
10	7.4	102	172†	204†
10	7.8	95	169†	202†

†Extrapolation beyond maximum run time required for estimate

Table 39 Summary of GAC run times to meet the placeholders for Stage 2 MCLs

EBCT (min)	Influent pH	Cost (cents/1,000 gal)		
		Capital	O&M	Total
5.0	7.4	23	10	34
7.5	7.4	28	10	38
10	7.4	32	10	43
15	7.4	41	9	50
20	7.4	50	9	60
10	7.0	32	10	42
10	7.4	32	10	42
10	7.8	32	10	42

Table 40 Summary of GAC adsorption costs for compliance with the placeholders for Stage 2 MCLs

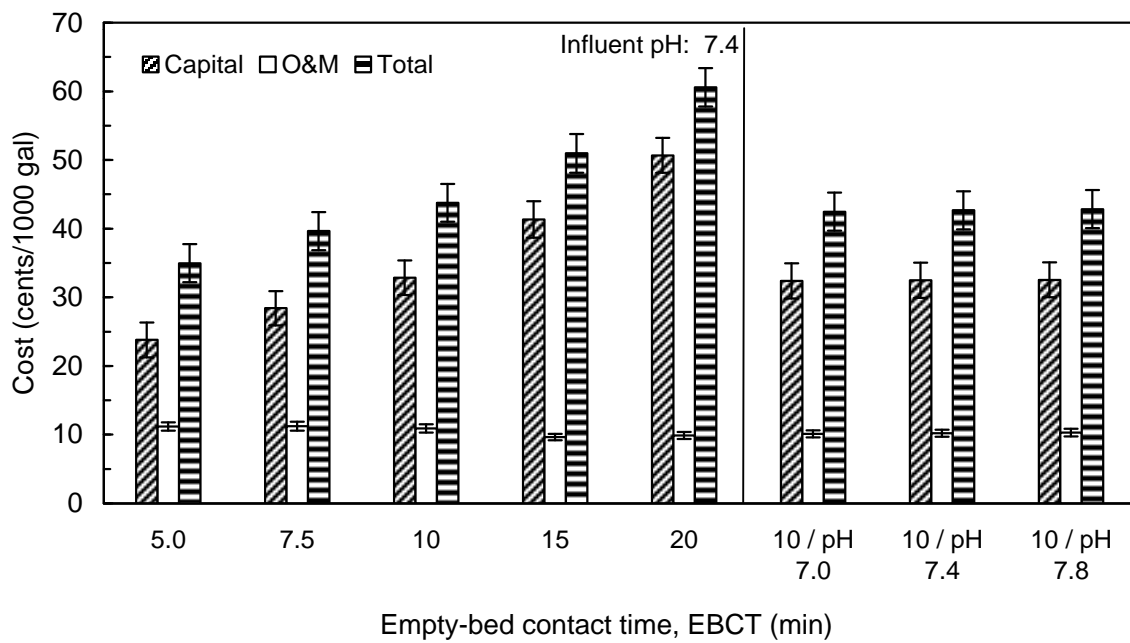


Figure 226 Average costs for GAC treatment with five steel pressure contactors and on-site reactivation

16

Summary of Significant Results

16 Summary of Significant Results

Based on an EPA cost model, the cost for GAC to maintain SDS-DBP levels below the placeholders for Stage 2 MCLs with a 20 percent safety factor using steel pressure contactors at an average flow of 6.6 MGD was estimated as low as 34 cents/1,000 gallons for a 5.0 minute EBCT. The cost estimates assumed operation in parallel staggered mode. Influent pH adjustment from 7.4 to 7.8 or 7.0 had a negligible impact on total system costs. The cost estimates do not include the cost of pH adjustment from pH 7.4 to 7.0 and 7.8. To comply with the placeholders for Stage 2 DBP MCLs, all GAC run times were controlled by the breakthrough of SDS-THM4.

In comparison to Stage 1 or the placeholders for Stage 2 DBP MCLs, HAA formation was much lower than THM4 formation. Thus, all cost estimates were based on the breakthrough of SDS-THM4. In fact, influent to GAC SDS-HAA5 levels were measured well below Stage 2 MCLs.

Based on the average influent TOC concentration during each session and a relationship developed from other TOC breakthrough curves, the contactor operation time measured as BV₅₀ was well predicted for the 5.0 and 7.5 minute EBCT contactors. At higher EBCTs (10 to 20 minutes) the BV₅₀ averaged 26 percent higher than predicted. Decreasing the influent pH from 7.4 to 7.0 improved BV₅₀ values, while increasing the influent pH from 7.4 to 7.8 increased BV₅₀ values. Based on influent pH values between 7.8 and 7.0, BV₅₀ values ranged from 3 to 21 percent above the predicted BV₅₀.

Overall, SDS-DBP formation was well-controlled by GAC with SDS-THM4 breakthrough occurring earlier than SDS-HAA breakthrough. For a 5.0 minute EBCT contactor, the run time to the placeholder for Stage 2 THM4 MCL was 39 days. This run time can be extended to 67 days assuming five contactors operated in parallel and with staggered reactivation cycles. Under the five contactor blended effluent assumption, run times to the placeholder for Stage 2 THM4 MCL are as long as 397 days for a 20 minute EBCT contactor. Selection of an appropriate EBCT is important towards maintaining cost-effective adsorption of DBP precursors. The overall costs of a system with 5.0 minute EBCT contactors is less than that for a system with longer EBCTs because capital costs associated with the larger contactors increase in greater proportion than the decrease in O&M costs due to less frequent reactivation.

The contactor influent pH for all EBCT runs was 7.4. To optimize GAC performance, a 10 minute EBCT contactor with influent pH 7.0 was operated in parallel to a 10 minute EBCT contactor with influent pH 7.4. Although run times were slightly extended due to the lower influent pH, the impact of influent pH in this range on total system costs was negligible. A third 10 minute EBCT contactor with influent pH of 7.8 was operated, simulating moving the point of GAC adsorption to after the point of pH adjustment, currently a treatment step at the plant. Again, no significant difference in total system costs was evident due to the slightly shorter run times caused by the higher influent pH. All run times were based on compliance with Stage 2 DBP MCLs.

A normalized breakthrough evaluation showed that TOC served as a very conservative indicator for the breakthrough of SDS-THM4, SDS-HAA, and SDS-TOX. UV₂₅₄ served as an excellent predictor of SDS-TOX breakthrough.

GAC influent TOC concentration averaged 1.9 mg/L throughout the treatment study, while bromide concentration was very high, averaging 448 µg/L. Due to the high bromide concentration, the chlorinated GAC influent was dominated by the formation of brominated compounds. For example, chloroform, dichloroacetic acid, and trichloroacetic acid, which normally account for a high percentage of THM and HAA formation in most waters, were measured at or below 3 µg/L in the GAC influent during this study.

GAC treatment does not remove bromide, while TOC is adsorbed, resulting in higher GAC effluent bromide to TOC ratios as compared to the GAC influent. Due to this increase, GAC effluent formed DBPs may undergo shifts in speciation to higher concentrations of the more brominated DBP species. In some cases, such as for bromoform, effluent concentrations were measured near influent levels. It is important to track the breakthrough behavior of specific DBP species, because some may be of potential health concern and a MCL could be set for a specific DBP species.

17

QA/QC Summary

17 QA/QC Summary

All analyses performed during the treatment study followed the methods and QA/QC procedures required by the *DBP/ICR Analytical Methods Manual*. A summary of the data analyzed during this treatment study and all the required QA/QC information is summarized in electronic form in portable document format at the end of this report. The EPA has requested that the results of laboratory duplicate analyses, laboratory fortified matrix spike analyses, and any performance evaluation (PE) analyses be reported in the *Treatment Study Summary Report Spreadsheet*, an electronic Excel workbook supplied by EPA. The required data has been input into this file, and an electronic version of it is included as an attachment to this report.

As required by the ICR, three field duplicates were collected from each RSSCT. The results of the duplicate analyses are summarized in Table 41.

17.1 Calibration Procedures

Calibration procedures for bromide, haloacetic acids, total organic carbon, total organic halide, and trihalomethanes analyzed during this study are summarized in the following sections.

17.1.1 Bromide (EPA Method 300.0 A)

Five calibration standards and a blank are prepared by adding accurately measured volumes of ICR stock standard to volumetric flask and diluting to volume with reagent water. The calibration standards range from 0.02 to 0.50 mg/L. Using a 200 µL injection volume, the peak area responses against the concentration are tabulated and a linear curve is established. The calibration correlation coefficient must be equal to or greater than 0.995. After establishing the calibration the fourth calibration standard is analyzed. The recovery must be within 90-110 percent of the true value. Next a second source standard at the MID level is analyzed and the recovery must be within 90-110 percent of the true value prior to proceeding with ICR protocol.

17.1.2 Haloacetic Acids (EPA Method 552.2)

An initial calibration curve is extracted and analyzed for each set of samples to be analyzed for haloacetic acids. The concentrations of each of the levels of aqueous calibration standards are given in Table 42.

Level 1 represents concentrations near the MDL for each analyte. The concentrations of the remaining levels define the working range of the detector. Levels 5 and 6 are specified by the *DBP/ICR Analytical Methods Manual* to be used as continuing calibration checks.

Each analysis run is started with a methyl tert-butyl ether (MtBE) solvent blank. This is a check on the extraction solvent as well as on the instrument system. If this run is acceptable, the extracts of the seven levels of the calibration curve are analyzed (2-µL injection volume). The Chemstation Chromatography Software System is used to generate a calibration curve by

plotting the areas against the concentrations of the seven calibration extracts. The curve is defined as first order; correlation coefficients must be greater than 0.9900.

17.1.3 Total Organic Carbon (Standard Method 5310 C)

The instrument calibration accuracy is verified daily by analysis of a 4.00 mg/L as carbon standard solution of potassium hydrogen phthalate. Recovery of the standard must be between 99 and 101 percent. When outside of this range, the slope of a linear regression between standard amount and area count and the origin is adjusted and the standard is reanalyzed to ensure a recovery between 99 and 101 percent. Calibration check standards and samples are then analyzed as described in the *DBP/ICR Analytical Methods Manual*.

17.1.4 Total Organic Halide (Standard Method 5320 B)

An instrument calibration verification is performed yearly. The 2,4,6-trichlorophenol standard is injected directly onto the nitrate-washed method blank. Concentrations of 0.5, 1, 2.5, 5, 10, and 20 µg as Cl⁻ are included in the curve. A first order curve with correlation coefficient greater than 0.99 must be obtained, and is only used to verify instrument performance.

At the beginning of each daily run, and after cell cleaning during the day, three NaCl injections of 5 µg as Cl⁻ are made directly into the titration cell. This serves as a cell performance check. Recovery of the NaCl standard must be within 3 percent of the historic mean. Typically, recovery is 95 to 105 percent.

17.1.5 Trihalomethanes (EPA Method 551.1)

An initial calibration curve is extracted and analyzed for each set of samples to be analyzed for trihalomethanes. The concentrations of each of the levels of aqueous calibration standards are given in Table 43.

Level 1 represents concentrations near the MDL for each analyte. The concentrations of the remaining levels define the working range of the detector. Levels 4 and 5 are specified by the *DBP/ICR Analytical Methods Manual* to be used as continuing calibration checks.

Each analysis run is started with a MtBE solvent blank. This is a check on the extraction solvent as well as on the instrument system. If this run is acceptable, the extracts of the six levels of the calibration curve are analyzed (2-µL injection volume). The Chemstation Chromatography Software System is used to generate a calibration curve by plotting the areas against the concentrations of the six calibration extracts. The curve is defined as first order; correlation coefficients must be greater than 0.99.

Analyte	Count	Mean RPD	Percentiles		
			25th	50th	75th
TOC	24	2.0	0.3	0.9	2.0
UV-254	24	4.0	1.1	2.5	5.2
pH	24	0.4	0.1	0.4	0.5
Temperature	24	0.2	0.0	0.0	0.4
SDS-TOX	24	8.7	3.7	6.3	12.2
SDS-THM4	24	6.0	3.0	5.5	8.3
SDS-HAA5	18	19.1	2.5	6.2	10.6
SDS-HAA6	18	18.7	2.6	6.2	10.6
SDS-HAA9	18	18.5	2.2	6.2	10.1
SDS-chlorine residual	23	6.6	1.9	3.9	8.5
<i>THM Species</i>					
SDS-CHCl ₃	0	NA	NA	NA	NA
SDS-BDCM	23	5.3	1.3	5.2	6.6
SDS-DBCM	13	4.2	1.6	3.2	6.2
SDS-CHBr ₃	24	6.2	2.2	6.2	8.5
<i>HAA Species</i>					
SDS-MCAA	0	NA	NA	NA	NA
SDS-DCAA	0	NA	NA	NA	NA
SDS-TCAA	0	NA	NA	NA	NA
SDS-MBAA	0	NA	NA	NA	NA
SDS-DBAA	18	19.1	2.5	6.2	10.6
SDS-BCAA	4	8.0	4.0	8.5	12.5
SDS-TBAA	0	NA	NA	NA	NA
SDS-CDBAA	0	NA	NA	NA	NA
SDS-DCBAA	2	104	NA	NA	NA

RPD: relative percent difference

NA: not applicable

Table 41 Summary of field duplicate precision for RSSCT runs

Level	Concentration (µg/L)
1	0.5
2	1.0
3	2.0
4	4.0
5	20.
6	40.
7	80.

Table 42 Haloacetic acid aqueous calibration standard concentrations (EPA Method 552.2)

Level	Concentration (µg/L)
1	0.5
2	1.0
3	5.0
4	20.
5	40.
6	80.

Table 43 Trihalomethane aqueous calibration standard concentrations (EPA Method 551.1)

18

List of References

18 List of References

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*Appendix: Summary of
Treatment Study Data*

Summers & Hooper, Inc.

RSSCT Sampling Summary Report

Study title: ICR RSSCT #1

Client: Jacksonville Electric Authority

Study#: 110

																	SDS Chlorination Conditions*							
No.	Sample ID	Client Sample ID	Start Date/Time	End Date/Time	Stop T (days)	Run L (days)	F-S L (days)	TOC (mg/L)	UV254 (1/cm)	Temp (°C)	pH	Dose (mg/L)	Res. (mg/L)	Dem (mg/L)	Temp (°C)	pH	Time hrs	Alk. (mg/L)	Hard-Tot (mg/L as CaCO3)	Hard-CA	Turb. (ntu)			
Effluent C		EBCT: 10 min	Carbon Type: Bituminous		Influent pH: 7.4		Scaling Factor: 12.6																	
1	9804-208	110.10.Eff-1	4/13/98 15:26	4/13/98 22:58			0.21	3	0.26	0.001	23.6	8.1	2.75	1.01	1.74	27.7	7.81	7.4						
2	9804-277	110.10.Eff-10	4/16/98 20:21	4/17/98 3:56			3.41	43	0.36	0.004	23.1	7.9	2.87	1.03	1.84	27.4	7.72	7.3						
3	9804-287	110.10.Eff-11	4/17/98 3:56	4/17/98 12:01			3.74	47	0.45	0.004	22.1	8.0	2.49			27.4	7.72	7.3						
3d	9804-288	110.10.Eff-11d	4/17/98 3:56	4/17/98 12:01			3.74	47	0.45	0.004	22.1	8.0	2.95	1.06	1.89	27.4	7.73	7.4						
4	9804-292	110.10.Eff-12	4/17/98 12:01	4/17/98 17:35			4.02	51	0.56	0.005	23.7	7.8	3.06	1.13	1.93	27.4	7.75	7.4						
5	9804-295	110.10.Eff-13	4/17/98 17:35	4/18/98 1:09			4.30	54	0.68	0.006	22.8	7.9	3.18	1.16	2.02	27.4	7.74	7.4						
6	9804-307	110.10.Eff-15	4/18/98 9:51	4/18/98 12:39			4.88	61	0.75	0.007	21.6	8.0	3.06	1.09	1.97	27.4	7.76	7.5						
7	9804-314	110.10.Eff-17	4/18/98 20:13	4/19/98 3:49			5.41	68	0.82	0.010	21.4	7.9	3.11	1.09	2.02	27.4	7.78	7.5						
7d	9804-315	110.10.Eff-17d	4/18/98 20:13	4/19/98 3:49			5.41	68	0.82	0.010	21.4	7.9	3.11	1.07	2.04	27.4	7.73	7.3						
8	9804-323	110.10.Eff-19	4/19/98 11:24	4/19/98 18:54			6.04	76	1.13	0.012	21.7	7.9	3.30	1.14	2.16	27.4	7.74	7.3						
9	9804-332	110.10.Eff-21	4/20/98 2:29	4/20/98 10:18			6.67	84	1.19	0.015	20.5	8.0	3.33	1.16	2.17	27.4	7.71	7.4						
10	9804-336	110.10.Eff-22	4/20/98 10:18	4/20/98 17:32			6.99	88	1.27	0.017	23.8	7.9	3.23	1.07	2.16	27.4	7.78	7.3						
11	9804-337	110.10.Eff-23	4/20/98 17:32	4/21/98 0:57			7.29	92	1.34	0.018	23.3	8.0	3.26	1.02	2.24	27.4	7.70	7.2						
11d	9804-338	110.10.Eff-23d	4/20/98 17:32	4/21/98 0:57			7.29	92	1.35	0.017	23.4	7.9	3.27	1.11	2.16	27.4	7.70	7.2						
12	9804-376	110.10.Eff-27	4/22/98 9:20	4/22/98 16:53	0.06	8.89	112	1.44	0.022	22.2	7.8	3.31	0.97	2.34	27.4	7.69	7.2							
13	9804-397	110.10.Eff-28	4/23/98 15:39	4/23/98 23:04	0.06	10.15	128	1.50		22.0	7.9													
Effluent C		EBCT: 20 min	Carbon Type: Bituminous		Influent pH: 7.4		Scaling Factor: 12.6																	
1	9804-209	110.20.Eff-1	4/13/98 15:26	4/13/98 23:20			0.21	3	0.24	0.001	23.4	8.1	2.81	1.06	1.75	27.7	7.81	7.4						
2	9804-333	110.20.Eff-6	4/20/98 3:11	4/20/98 10:16			6.69	84	0.41	0.002	20.2	7.9	2.85	1.42	1.43	27.4	7.68	7.3						
3	9804-345	110.20.Eff-8	4/21/98 0:13	4/21/98 4:01			7.49	94	0.55	0.003	22.1	8.0	2.91	1.67	1.24	27.4	7.70	7.3						
4	9804-363	110.20.Eff-11	4/21/98 18:24	4/22/98 1:31			8.32	105	0.63	0.004	21.5	7.9	2.94	1.68	1.26	27.4	7.68	7.3						
4d	9804-364	110.20.Eff-11d	4/21/98 18:24	4/22/98 1:31			8.32	105	0.63	0.004	21.6	7.9	2.94	1.63	1.31	27.4	7.70	7.4						
5	9804-387	110.20.Eff-13	4/22/98 15:40	4/22/98 22:46			9.21	116	0.71	0.005	21.6	8.0	2.98	1.66	1.32	27.4	7.70	7.4						
6	9804-398	110.20.Eff-15	4/23/98 12:57	4/23/98 19:55			10.09	127	0.84	0.005	21.6	7.7	2.44	1.22	1.22	27.3	7.69	7.2						
7	9804-399	110.20.Eff-16	4/23/98 19:55	4/24/98 2:49			10.38	130	0.90	0.006	21.8	7.7	2.50	1.23	1.27	27.3	7.70	7.3						
8	9804-423	110.20.Eff-21	4/25/98 14:18	4/25/98 21:24			12.15	153	0.98	0.009	21.8	7.3	2.58	1.29	1.29	27.3	7.75	7.3						
8d	9804-424	110.20.Eff-21d	4/25/98 14:18	4/25/98 21:24			12.15	153	1.03	0.009	21.8	7.3	2.63	1.27	1.36	27.3	7.77	7.3						
9	9804-430	110.20.Eff-24	4/26/98 11:13	4/26/98 17:51			13.01	164	1.12	0.010	21.6	7.4	2.72	1.41	1.31	27.3	7.70	7.4						
10	9804-480	110.20.Eff-32	4/29/98 1:26	4/29/98 8:25			15.61	196	1.19	0.012	22.0	8.1	2.45	1.23	1.22	26.6	7.69	7.1						
10d	9804-481	110.20.Eff-32d	4/29/98 1:26	4/29/98 8:25			15.61	196	1.19	0.012	22.2	8.1	2.45	1.24	1.21	26.6	7.77	7.2						
11	9805-48	110.20.Eff-35	5/1/98 17:03	5/2/98 0:02			18.26	230	1.28	0.015	22.5	8.1	2.35	1.42	0.93	26.8	7.72	7.2						
12	9805-78	110.20.Eff-37	5/4/98 0:51	5/4/98 7:58			20.59	259	1.40	0.018	20.6	8.1	2.50	1.74	0.76	26.8	7.71	7.2						

Summers & Hooper, Inc.

RSSCT Sampling Summary Report

Study title: ICR RSSCT #1

Client: Jacksonville Electric Authority

Study#: 110

#	SamplesID	ClientSampleID	F-S L (days)	TOC (mg/L)	TOX (µg Cl-/L)	Trihalomethanes (µg/L)					Haloacetic Acids (µg/L)										NH3-N (mg/L)	Brom (µg/L)	
						CF	BDCM	DBCM	BF	TTHM	MCAA	DCAA	TCAA	MBAA	DBAA	BCAA	BDCAA	DBCAA	TBAA	HAA6			HAA9
Effluent C		EBCT: 10 min	Carbon Type: Bituminous			Influent pH: 7.4					Scaling Factor: 12.6												
1	9804-208	110.10.Eff-1	3	0.26	3	ND	ND	ND	1.1	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	9804-277	110.10.Eff-10	43	0.36	9	ND	1.3	ND	4.4	5.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3	9804-287	110.10.Eff-11	47	0.45	10	ND	1.6	ND	5.2	6.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3d	9804-288	110.10.Eff-11d	47	0.45	12	ND	2.0	ND	5.5	7.5	ND	ND	ND	ND	2	ND	ND	ND	ND	2	2	2	2
4	9804-292	110.10.Eff-12	51	0.56	16	ND	2.9	ND	7.8	10.8	ND	ND	ND	ND	1	ND	ND	ND	ND	1	1	1	1
5	9804-295	110.10.Eff-13	54	0.68	18	ND	3.0	ND	7.2	10.2	ND	ND	ND	ND	1	ND	ND	ND	ND	1	1	1	1
6	9804-307	110.10.Eff-15	61	0.75	17	ND	3.7	ND	9.8	13.5	ND	ND	ND	ND	1	ND	ND	ND	ND	1	1	1	1
7	9804-314	110.10.Eff-17	68	0.82	28	ND	5.4	1.1	12.9	19.4	ND	ND	ND	ND	2	ND	ND	ND	ND	2	2	2	2
7d	9804-315	110.10.Eff-17d	68	0.82	27	ND	5.5	1.1	13.2	19.8	ND	ND	ND	ND	2	ND	ND	ND	ND	2	2	2	2
8	9804-323	110.10.Eff-19	76	1.13	35	ND	7.7	1.7	16.2	25.6	ND	ND	ND	ND	3	ND	ND	ND	ND	3	3	3	3
9	9804-332	110.10.Eff-21	84	1.19	43	ND	9.6	2.1	18.7	30.3	ND	ND	ND	ND	3	ND	ND	ND	ND	3	3	3	3
10	9804-336	110.10.Eff-22	88	1.27	50	ND	10.3	2.2	20.8	33.3	ND	ND	ND	ND	3	ND	ND	ND	ND	3	3	3	3
11	9804-337	110.10.Eff-23	92	1.34	57	ND	11.0	2.5	21.8	35.3	ND	ND	ND	ND	4	1	ND	ND	ND	5	5	5	5
11d	9804-338	110.10.Eff-23d	92	1.35	57	ND	11.7	2.7	22.5	36.8	ND	ND	ND	ND	4	1	ND	ND	ND	5	5	5	5
12	9804-376	110.10.Eff-27	112	1.44	69	ND	13.9	3.3	24.7	42.0	ND	ND	ND	ND	3	1	ND	ND	ND	5	5	5	5
13	9804-397	110.10.Eff-28	128	1.50																			
Effluent C		EBCT: 20 min	Carbon Type: Bituminous			Influent pH: 7.4					Scaling Factor: 12.6												
1	9804-209	110.20.Eff-1	3	0.24	4	ND	ND	ND	1.2	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	9804-333	110.20.Eff-6	84	0.41	2	ND	ND	ND	2.3	2.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3	9804-345	110.20.Eff-8	94	0.55	9	ND	1.2	ND	3.8	5.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4	9804-363	110.20.Eff-11	105	0.63	7	ND	1.6	ND	4.6	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4d	9804-364	110.20.Eff-11d	105	0.63	6	ND	1.6	ND	4.9	6.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5	9804-387	110.20.Eff-13	116	0.71	9	ND	2.0	ND	5.4	7.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6	9804-398	110.20.Eff-15	127	0.84	18	ND	2.1	ND	7.3	9.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
7	9804-399	110.20.Eff-16	130	0.90	11	ND	2.2	ND	7.5	9.8	ND	ND	ND	ND	1	ND	ND	ND	ND	1	1	1	1
8	9804-423	110.20.Eff-21	153	0.98	18	ND	3.4	ND	10.8	14.2	ND	ND	ND	ND	1	ND	ND	ND	ND	1	1	1	1
8d	9804-424	110.20.Eff-21d	153	1.03	22	ND	3.7	ND	11.6	15.3	ND	ND	ND	ND	2	ND	ND	ND	ND	2	2	2	2
9	9804-430	110.20.Eff-24	164	1.12	28	ND	4.3	ND	11.4	15.7	ND	ND	ND	ND	2	ND	ND	ND	ND	2	2	2	2
10	9804-480	110.20.Eff-32	196	1.19	44	ND	5.7	ND	14.7	20.4	ND	ND	ND	ND	2	ND	ND	ND	ND	2	2	2	2
10d	9804-481	110.20.Eff-32d	196	1.19	34	ND	5.8	ND	16.0	21.8	ND	ND	ND	ND	2	ND	ND	ND	ND	2	2	2	2
11	9805-48	110.20.Eff-35	230	1.28	52	ND	9.0	1.6	19.9	30.5	ND	ND	ND	ND	3	ND	ND	ND	ND	3	3	3	3
12	9805-78	110.20.Eff-37	259	1.40	63	ND	11.3	2.3	21.9	35.5	ND	ND	ND	ND	4	1	ND	ND	ND	5	5	5	5

Summers & Hooper, Inc.

RSSCT Sampling Summary Report

Study title: ICR RSSCT #1

Client: Jacksonville Electric Authority

Study#: 110

													SDS Chlorination Conditions*										
No.	Sample ID	Client Sample ID	Start Date/Time		End Date/Time		Stop T (days)	Run L (days)	F-S L (days)	TOC (mg/L)	UV254 (1/cm)	Temp (°C)	pH	Dose (mg/L)	Res. (mg/L)	Dem (mg/L)	Temp (°C)	pH	Time hrs	Alk. (mg/L)	Hard-Tot (mg/L as CaCO3)	Hard-CA	Turb. (ntu)
13	9805-105	110.20.Eff-38	5/5/98	5:02	5/5/98	8:52		21.70	273	1.42	0.021	21.7	8.1										
Influent A		EBCT:	Carbon Type:		Influent pH: 7.4		Scaling Factor: 12.6																
1	9804-203	110.INF.A-1	4/13/98	16:00	4/13/98	16:00		0.07	1											132	414	262	
2	9804-371	110.INF.A-2	4/22/98	12:30	4/22/98	12:30		8.93	112											129	393	232	
Influent B		EBCT:	Carbon Type:		Influent pH: 7.4		Scaling Factor: 12.6																
1	9804-204	110.INF.B-1	4/13/98	16:05	4/13/98	16:05		0.08	1	1.87	0.047	20.5	7.4	4.44	1.05	3.39	27.7	7.78	7.5				0.10
2	9804-305	110.INF.B-2	4/18/98	11:00	4/18/98	11:00		4.86	61	2.00		16.9	7.4										
3	9804-370	110.INF.B-3	4/22/98	12:35	4/22/98	12:35		8.93	112	1.97	0.046	15.7	7.4	4.49	1.15	3.34	27.4	7.67	7.4				0.10
4	9804-454	110.INF.B-4	4/27/98	12:50	4/27/98	12:50		13.94	175	2.08		18.9	7.4										
5	9805-89	110.INF.B-5	5/4/98	14:35	5/4/98	14:35		21.01	264	1.98	0.047	19.6	7.3	4.30	1.15	3.15	26.8	7.72	7.2				0.10
PreStudy		EBCT:	Carbon Type:		Influent pH:		Scaling Factor:																
1	9804-121	RAW	4/6/98	9:10	4/6/98	9:01				2.05													
2	9804-139	Post 1 Micron Filter	4/9/98	9:00	4/9/98	9:00				2.20													
3	9804-140	Pre 1 Micron Filter	4/9/98	9:00	4/9/98	9:00				2.16													

***Target SDS Chlorination Conditions**

Free Cl2 Residual: 1.00 mg/L **pH:** 7.7 **Temperature:** 27.0 °C **Holding time:** 7.2 hrs

Study Comments

Sample 9804-287: Chlorine residual and final chlorination pH were not measured because sample bottle broke. Samples were collected for TOX, THM4, and HAA9 analysis.

Summers & Hooper, Inc.

RSSCT Sampling Summary Report

Study title: ICR RSSCT #1

Client: Jacksonville Electric Authority

Study#: 110

#	SamplesID	ClientSampleID	F-S L (days)	TOC (mg/L)	TOX (µg Cl-/L)	Trihalomethanes (µg/L)					Haloacetic Acids (µg/L)										NH3-N	Brom	
						CF	BDCM	DBCM	BF	TTHM	MCAA	DCAA	TCAA	MBAA	DBAA	BCAA	BDCAA	DBCAA	TBAA	HAA6	HAA9	(mg/L)	(µg/L)
13	9805-105	110.20.Eff-38	273	1.42																			
Influent A		EBCT:	Carbon Type:		Influent pH: 7.4					Scaling Factor: 12.6													
1	9804-203	110.INF.A-1		1																		0.15	440
2	9804-371	110.INF.A-2		112																		0.13	460
Influent B		EBCT:	Carbon Type:		Influent pH: 7.4					Scaling Factor: 12.6													
1	9804-204	110.INF.B-1		1	1.87	143	3.3	33.1	11.8	38.7	86.9	ND	1	ND	ND	7	2	3	5	4	10	23	
2	9804-305	110.INF.B-2		61	2.00																		
3	9804-370	110.INF.B-3		112	1.97	129	3.1	30.7	11.5	33.0	78.3	ND	2	ND	ND	6	3	2	4	ND	11	16	
4	9804-454	110.INF.B-4		175	2.08																		
5	9805-89	110.INF.B-5		264	1.98	133	3.0	31.3	11.0	36.5	81.8	ND	2	ND	ND	7	3	2	3	4	11	21	
PreStudy		EBCT:	Carbon Type:		Influent pH:					Scaling Factor:													
1	9804-121	RAW			2.05																		
2	9804-139	Post 1 Micron Filter			2.20																		
3	9804-140	Pre 1 Micron Filter			2.16																		

Summers & Hooper, Inc.

RSSCT Sampling Summary Report

Study title: ICR RSSCT #2

Client: Jacksonville Electric Authority

Study#: 119

													SDS Chlorination Conditions*										
No.	Sample ID	Client Sample ID	Start Date/Time		End Date/Time		Stop T	Run L	F-S L	TOC	UV254	Temp	pH	Dose	Res.	Dem	Temp	pH	Time	Alk.	Hard-Tot	Hard-CA	Turb.
			(days)	(days)	(days)	(days)	(mg/L)	(1/cm)	(°C)		(mg/L)	(mg/L)	(mg/L)	(°C)				hrs	(mg/L)	(mg/L as CaCO3)		(ntu)	
Effluent C		EBCT: 15 min	Carbon Type: Bituminous			Influent pH: 7.4		Scaling Factor: 12.6															
1	9806-523	119.15.Eff-1	6/18/98	15:14	6/18/98	23:16	0.22	3	0.10	0.000	24.7	8.1	2.59	0.80	1.79	26.7	7.77	7.2					
2	9806-526	119.15.Eff-4	6/23/98	8:20	6/23/98	16:28	4.93	62	0.21	0.001	22.4	8.1	2.65	1.11	1.54	27.2	7.81	7.4					
3	9806-528	119.15.Eff-6	6/24/98	0:15	6/24/98	8:12	5.59	70	0.28	0.002	21.5	8.1	2.82	1.40	1.42	27.2	7.76	7.1					
4	9806-529	119.15.Eff-7	6/24/98	8:12	6/24/98	16:16	5.92	74	0.41	0.003	23.8	8.0	2.88	1.52	1.36	27.2	7.77	7.2					
4d	9806-553	119.15.Eff-7d	6/24/98	8:12	6/24/98	16:16	5.92	74	0.34	0.003	24.0	8.1	2.88	1.58	1.30	27.2	7.79	7.3					
5	9806-532	119.15.Eff-10	6/25/98	8:07	6/25/98	16:04	6.92	87	0.47	0.004	24.2	8.0	1.71	0.86	0.85	27.2	7.73	7.2					
6	9806-533	119.15.Eff-11	6/25/98	16:04	6/25/98	23:54	7.25	91	0.56	0.005	25.3	8.1	1.76	0.48	1.28	27.2	7.69	7.2					
7	9806-536	119.15.Eff-14	6/26/98	15:53	6/26/98	23:38	8.24	104	0.73	0.008	27.1	8.2	1.84	0.79	1.05	27.2	7.75	7.2					
7d	9806-557	119.15.Eff-14d	6/26/98	15:53	6/26/98	23:38	8.24	104	0.71	0.008	27.0	8.2	1.84	0.77	1.07	27.2	7.77	7.2					
8	9806-544	119.15.Eff-22	7/1/98	0:49	7/1/98	9:00	12.62	159	0.92	0.012	22.8	8.0	2.24	1.66	0.58	27.3	7.79	7.1					
9	9806-545	119.15.Eff-23	7/3/98	0:36	7/3/98	8:49	14.61	184	1.02	0.015	22.6	8.0	2.09	1.51	0.58	27.2	7.74	7.2					
10	9806-546	119.15.Eff-24	7/4/98	8:52	7/4/98	17:01	15.95	201	1.15	0.018	23.5	8.1	2.21	1.55	0.66	27.2	7.79	7.2					
11	9806-548	119.15.Eff-26	7/5/98	17:21	7/6/98	1:26	17.30	218	1.23	0.020	23.4	8.1	2.29	1.52	0.77	27.2	7.74	7.2					
11d	9806-559	119.15.Eff-26d	7/5/98	17:21	7/6/98	1:26	17.30	218	1.23	0.020	23.4	8.1	2.29	1.49	0.80	27.2	7.76	7.2					
12	9806-551	119.15.Eff-29	7/8/98	3:17	7/8/98	7:54	19.65	247	1.29	0.022	22.7	8.2	2.05	1.22	0.83	26.6	7.72	7.2					
13	9806-552	119.15.Eff-30	7/9/98	8:01	7/9/98	16:12	20.92	263	1.38	0.025	22.6	8.0											
Effluent C		EBCT: 5 min	Carbon Type: Bituminous			Influent pH: 7.4		Scaling Factor: 12.6															
1	9806-483	119.5.Eff-1	6/18/98	15:14	6/18/98	22:55	0.21	3	0.11	0.001	24.8	8.1	2.60	0.66	1.94	26.7	7.73	7.2					
2	9806-484	119.5.Eff-2	6/19/98	14:40	6/19/98	22:23	1.19	15	0.22	0.002	24.7	8.0	2.66	0.85	1.81	26.7	7.79	7.2					
3	9806-485	119.5.Eff-3	6/19/98	22:23	6/20/98	6:15	1.51	19	0.34	0.004	23.3	8.1	2.73	0.87	1.86	26.7	7.78	7.2					
3d	9806-513	119.5.Eff-3d	6/19/98	22:23	6/20/98	6:15	1.51	19	0.34	0.003	23.3	8.1	2.73	1.03	1.70	26.7	7.80	7.5					
4	9806-486	119.5.Eff-4	6/20/98	6:15	6/20/98	13:52	1.83	23	0.53	0.006	23.6	8.0	2.82	0.67	2.15	26.7	7.79	7.1					
5	9806-487	119.5.Eff-5	6/20/98	10:18	6/20/98	13:52	1.92	24	0.57	0.007	23.9	8.1	2.84	0.87	1.97	26.7	7.80	7.1					
6	9806-488	119.5.Eff-6	6/20/98	13:52	6/20/98	17:28	2.07	26	0.68	0.009	25.2	8.1	2.90	1.04	1.86	26.7	7.79	7.1					
7	9806-489	119.5.Eff-7	6/20/98	17:28	6/21/98	1:08	2.30	29	0.81	0.011	24.3	8.2	2.96	0.87	2.09	26.7	7.79	7.0					
7d	9806-514	119.5.Eff-7d	6/20/98	17:28	6/21/98	1:08	2.30	29	0.79	0.011	24.2	8.2	2.96	0.81	2.15	26.7	7.81	7.3					
8	9806-491	119.5.Eff-9	6/21/98	4:55	6/21/98	12:38	2.78	35	0.90	0.016	22.7	8.0	3.02	0.82	2.20	26.7	7.78	6.9					
9	9806-492	119.5.Eff-10	6/21/98	12:38	6/21/98	20:50	3.11	39	1.02	0.019	22.9	8.2	3.08	0.75	2.33	27.2	7.74	7.3					
10	9806-493	119.5.Eff-11	6/21/98	20:50	6/22/98	5:00	3.45	43	1.12	0.021	21.8	8.1	3.14	0.89	2.25	27.2	7.75	7.3					
10d	9806-515	119.5.Eff-11d	6/21/98	20:50	6/22/98	5:00	3.45	43	1.14	0.021	21.7	8.1	3.14	0.76	2.38	27.2	7.78	7.3					
11	9806-495	119.5.Eff-13	6/22/98	13:01	6/22/98	20:57	4.12	52	1.23	0.024	23.7	8.1	3.19	0.85	2.34	27.2	7.78	7.3					
12	9806-498	119.5.Eff-16	6/23/98	13:42	6/23/98	21:44	5.15	65	1.27	0.028	23.6	8.1	3.21	0.80	2.41	27.2	7.78	7.4					

Summers & Hooper, Inc.

RSSCT Sampling Summary Report

Study title: ICR RSSCT #2

Client: Jacksonville Electric Authority

Study#: 119

#	SamplesID	ClientSampleID	F-S L (days)	TOC (mg/L)	TOX (µg Cl-/L)	Trihalomethanes (µg/L)					Haloacetic Acids (µg/L)										NH3-N (mg/L)	Brom (µg/L)	
						CF	BDCM	DBCM	BF	TTHM	MCAA	DCAA	TCAA	MBAA	DBAA	BCAA	BDCAA	DBCAA	TBAA	HAA6			HAA9
Effluent C		EBCT: 15 min	Carbon Type: Bituminous			Influent pH: 7.4		Scaling Factor: 12.6															
1	9806-523	119.15.Eff-1	3	0.10	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	9806-526	119.15.Eff-4	62	0.21	4	ND	1.0	ND	2.6	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3	9806-528	119.15.Eff-6	70	0.28	5	ND	1.3	ND	2.6	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4	9806-529	119.15.Eff-7	74	0.41	7	ND	1.8	ND	3.4	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4d	9806-553	119.15.Eff-7d	74	0.34	6	ND	1.4	ND	3.3	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5	9806-532	119.15.Eff-10	87	0.47	12	ND	1.4	ND	6.1	7.5	ND	ND	ND	ND	1	ND	ND	ND	ND	1	1		
6	9806-533	119.15.Eff-11	91	0.56	43	ND	3.2	ND	14.1	17.3	ND	ND	ND	ND	2	ND	ND	ND	ND	2	2		
7	9806-536	119.15.Eff-14	104	0.73	23	ND	2.3	ND	10.4	12.8	ND	ND	ND	ND	2	ND	ND	ND	ND	2	2		
7d	9806-557	119.15.Eff-14d	104	0.71	21	ND	2.4	ND	10.6	13.0	ND	ND	ND	ND	2	ND	ND	ND	ND	2	2		
8	9806-544	119.15.Eff-22	159	0.92	34	ND	7.5	1.5	14.4	23.5	ND	ND	ND	ND	2	ND	ND	ND	ND	2	2		
9	9806-545	119.15.Eff-23	184	1.02	44	ND	9.6	1.8	18.8	30.2	ND	ND	ND	ND	3	ND	ND	ND	ND	3	3		
10	9806-546	119.15.Eff-24	201	1.15	56	ND	11.5	2.3	22.4	36.1	ND	ND	ND	ND	4	ND	ND	ND	ND	4	4		
11	9806-548	119.15.Eff-26	218	1.23	63	ND	13.9	2.9	25.5	42.4	ND	ND	ND	ND	5	1	ND	ND	ND	6	6		
11d	9806-559	119.15.Eff-26d	218	1.23	63	ND	13.8	3.0	23.9	40.8	ND	ND	ND	ND	4	1	1	ND	ND	5	6		
12	9806-551	119.15.Eff-29	247	1.29	71	ND	13.5	2.7	30.7	46.9	ND	ND	ND	ND	5	1	1	2	ND	7	10		
13	9806-552	119.15.Eff-30	263	1.38																			
Effluent C		EBCT: 5 min	Carbon Type: Bituminous			Influent pH: 7.4		Scaling Factor: 12.6															
1	9806-483	119.5.Eff-1	3	0.11	3	ND	ND	ND	1.5	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	9806-484	119.5.Eff-2	15	0.22	3	ND	ND	ND	2.4	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3	9806-485	119.5.Eff-3	19	0.34	8	ND	1.7	ND	4.3	6.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3d	9806-513	119.5.Eff-3d	19	0.34	7	ND	1.8	ND	4.5	6.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4	9806-486	119.5.Eff-4	23	0.53	15	ND	2.9	ND	5.8	8.7	ND	ND	ND	ND	1	ND	ND	ND	ND	1	1		
5	9806-487	119.5.Eff-5	24	0.57	18	ND	3.8	1.1	8.0	12.9	ND	ND	ND	ND	2	ND	ND	ND	ND	2	2		
6	9806-488	119.5.Eff-6	26	0.68	25	ND	4.7	1.3	9.3	15.3	ND	ND	ND	ND	2	ND	ND	ND	ND	2	2		
7	9806-489	119.5.Eff-7	29	0.81	33	ND	6.0	1.7	11.8	19.5	ND	ND	ND	ND	2	ND	ND	ND	ND	2	2		
7d	9806-514	119.5.Eff-7d	29	0.79	34	ND	6.6	1.8	12.6	21.0	ND	ND	ND	ND	2	ND	ND	ND	ND	2	2		
8	9806-491	119.5.Eff-9	35	0.90	43	ND	8.3	2.3	15.3	25.8	ND	ND	ND	ND	3	1	ND	ND	ND	4	4		
9	9806-492	119.5.Eff-10	39	1.02	53	ND	10.3	2.8	19.0	32.1	ND	ND	ND	ND	4	1	1	ND	ND	5	6		
10	9806-493	119.5.Eff-11	43	1.12	62	ND	12.6	3.4	21.5	37.5	ND	ND	ND	ND	4	1	1	ND	ND	5	6		
10d	9806-515	119.5.Eff-11d	43	1.14	61	ND	12.6	3.4	21.8	37.8	ND	ND	ND	ND	4	1	1	ND	ND	5	6		
11	9806-495	119.5.Eff-13	52	1.23	69	1.2	16.3	4.3	27.3	49.0	ND	ND	ND	ND	4	1	1	ND	ND	6	7		
12	9806-498	119.5.Eff-16	65	1.27	80	1.2	16.6	4.6	27.3	49.7	ND	ND	ND	ND	5	2	1	2	ND	7	10		

Summers & Hooper, Inc.

RSSCT Sampling Summary Report

Study title: ICR RSSCT #2

Client: Jacksonville Electric Authority

Study#: 119

													SDS Chlorination Conditions*										
No.	Sample ID	Client Sample ID	Start Date/Time		End Date/Time		Stop T (days)	Run L (days)	F-S L (days)	TOC (mg/L)	UV254 (1/cm)	Temp (°C)	pH	Dose (mg/L)	Res. (mg/L)	Dem (mg/L)	Temp (°C)	pH	Time hrs	Alk. (mg/L)	Hard-Tot (mg/L as CaCO3)	Hard-CA (ntu)	Turb. (ntu)
13	9806-500	119.5.Eff-18	6/24/98	22:07	6/25/98	1:50		6.41	81	1.43		23.9	8.1										
Effluent C		EBCT: 7.5 min	Carbon Type: Bituminous				Influent pH: 7.4		Scaling Factor: 12.6														
1	9806-563	119.7.5.Eff-1	7/2/98	12:08	7/2/98	20:31		0.23	3	0.08	0.000	24.0	8.1	2.42	0.88	1.54	26.6	7.64	7.1				
2	9806-565	119.7.5.Eff-3	7/4/98	5:59	7/4/98	9:42		1.88	24	0.19	0.001	22.7	8.1	2.52	1.08	1.44	26.6	7.77	7.1				
3	9806-566	119.7.5.Eff-4	7/4/98	9:42	7/4/98	17:49		2.12	27	0.29	0.002	23.5	8.1	2.61	1.13	1.48	26.6	7.77	7.1				
3d	9806-593	119.7.5.Eff-4d	7/4/98	9:42	7/4/98	17:49		2.12	27	0.29	0.002	23.5	8.1	2.61	1.14	1.47	26.6	7.78	7.2				
4	9806-567	119.7.5.Eff-5	7/4/98	17:49	7/5/98	1:50		2.46	31	0.41	0.004	23.3	8.2	2.72	1.25	1.47	26.6	7.75	7.2				
5	9806-568	119.7.5.Eff-6	7/5/98	1:50	7/5/98	5:33		2.70	34	0.51	0.005	22.9	8.2	2.64	1.16	1.48	26.6	7.73	7.2				
6	9806-569	119.7.5.Eff-7	7/5/98	5:33	7/5/98	14:02		2.96	37	0.64	0.007	23.5	8.2	2.73	1.24	1.49	26.6	7.76	7.2				
7	9806-570	119.7.5.Eff-8	7/5/98	14:02	7/5/98	19:29		3.25	41	0.71	0.008	24.1	8.1	2.68	1.19	1.49	26.6	7.73	7.2				
8	9806-571	119.7.5.Eff-9	7/5/98	19:29	7/6/98	3:45		3.53	44	0.80	0.010	23.1	8.1	2.64	1.19	1.45	26.6	7.78	7.3				
8d	9806-594	119.7.5.Eff-9d	7/5/98	19:29	7/6/98	3:45		3.53	44	0.79	0.010	23.1	8.1	2.64	1.19	1.45	26.6	7.75	7.3				
9	9806-573	119.7.5.Eff-11	7/6/98	7:34	7/6/98	15:56		4.04	51	0.92	0.013	23.6	8.1	2.57	1.19	1.38	26.6	7.76	7.3				
10	9806-574	119.7.5.Eff-12	7/6/98	15:56	7/7/98	0:20		4.39	55	0.97	0.015	23.3	8.2	2.46	1.18	1.28	26.6	7.77	7.3				
11	9806-576	119.7.5.Eff-14	7/7/98	17:48	7/8/98	2:16		5.47	69	1.13	0.019	22.8	8.1	2.46	1.33	1.13	26.6	7.73	7.3				
11d	9806-596	119.7.5.Eff-14d	7/7/98	17:48	7/8/98	2:16		5.47	69	1.12	0.019	22.8	8.1	2.46	1.28	1.18	26.6	7.76	7.3				
12	9806-578	119.7.5.Eff-16	7/9/98	4:09	7/9/98	12:40		6.90	87	1.31	0.024	23.3	7.9	2.16	1.10	1.06	26.6	7.75	7.1				
13	9806-580	119.7.5.Eff-18	7/10/98	13:08	7/10/98	21:11		8.26	104	1.44	0.028	23.4	8.1										
Influent A		EBCT:	Carbon Type:				Influent pH: 7.4		Scaling Factor: 12.6														
1	9806-471	119.Inf.A-1	6/18/98	15:10	6/18/98	15:10		0.05	1											127	403	247	
2	9806-472	119.Inf.A-2	6/24/98	12:00	6/24/98	12:00		5.91	74											129	388	232	
Influent B		EBCT:	Carbon Type:				Influent pH: 7.4		Scaling Factor: 12.6														
1	9806-473	119.Inf.B-1	6/18/98	15:10	6/18/98	15:10		0.05	1	1.81	0.046	21.6	7.4	4.00	0.46	3.54	26.7	7.78	6.3				
2	9806-474	119.Inf.B-2	6/20/98	16:30	6/20/98	16:30		2.10	26	1.75		18.9	7.4										
3	9806-475	119.Inf.B-3	6/21/98	17:45	6/21/98	17:45		3.15	40	1.80		18.8	7.4										
4	9806-476	119.Inf.B-4	6/24/98	12:00	6/24/98	12:00		5.91	74	1.73	0.046	15.4	7.4	4.50	1.23	3.27	27.2	7.72	7.4				
5	9806-477	119.Inf.B-5	6/25/98	16:30	6/25/98	16:30		7.10	89	1.90		18.4	7.4										
6	9806-478	119.Inf.B-6	7/2/98	13:30	7/2/98	13:30		13.98	176	1.77	0.046	19.1	7.4										
7	9806-479	119.Inf.B-7	7/8/98	9:40	7/8/98	9:40		19.82	249	1.79	0.046	18.9	7.5	4.20	1.51	2.69	26.6	7.71	7.3				
8	9806-480	119.Inf.B-8	7/10/98	17:20	7/10/98	17:20		22.14	278	1.79	0.047	21.1	7.4	3.70	1.17	2.53	26.6	7.73	7.1				

Summers & Hooper, Inc.

RSSCT Sampling Summary Report

Study title: ICR RSSCT #2

Client: Jacksonville Electric Authority

Study#: 119

#	SamplesID	ClientSampleID	F-S L	TOC	TOX	Trihalomethanes (µg/L)					Haloacetic Acids (µg/L)										NH3-N	Brom		
			(days)	(mg/L)	(µg Cl-/L)	CF	BDCM	DBCM	BF	TTHM	MCAA	DCAA	TCAA	MBAA	DBAA	BCAA	BDCAA	DBCAA	TBAA	HAA6	HAA9	(mg/L)	(µg/L)	
13	9806-500	119.5.Eff-18	81	1.43																				
Effluent C			EBCT: 7.5 min	Carbon Type: Bituminous		Influent pH: 7.4					Scaling Factor: 12.6													
1	9806-563	119.7.5.Eff-1	3	0.08	3	ND	ND	ND	1.1	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
2	9806-565	119.7.5.Eff-3	24	0.19	2	ND	ND	ND	2.1	2.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
3	9806-566	119.7.5.Eff-4	27	0.29	7	ND	ND	ND	2.7	2.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
3d	9806-593	119.7.5.Eff-4d	27	0.29	7	ND	ND	ND	2.4	2.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
4	9806-567	119.7.5.Eff-5	31	0.41	13	ND	1.8	ND	4.2	6.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
5	9806-568	119.7.5.Eff-6	34	0.51	14	ND	2.6	ND	7.0	9.6	ND	ND	ND	ND	2	ND	ND	ND	ND	2	2			
6	9806-569	119.7.5.Eff-7	37	0.64	19	ND	3.7	ND	8.9	12.6	ND	ND	ND	ND	3	ND	ND	ND	ND	3	3			
7	9806-570	119.7.5.Eff-8	41	0.71	24	ND	4.5	ND	11.1	15.6	ND	ND	ND	ND	3	ND	ND	ND	ND	3	3			
8	9806-571	119.7.5.Eff-9	44	0.80	29	ND	5.8	1.2	14.3	21.3	ND	ND	ND	ND	3	ND	ND	ND	ND	3	3			
8d	9806-594	119.7.5.Eff-9d	44	0.79	28	ND	6.1	1.2	14.3	21.6	ND	ND	ND	ND	3	ND	ND	ND	ND	3	3			
9	9806-573	119.7.5.Eff-11	51	0.92	38	ND	7.7	1.5	18.4	27.6	ND	ND	ND	ND	4	ND	ND	ND	ND	4	4			
10	9806-574	119.7.5.Eff-12	55	0.97	45	ND	8.1	1.4	21.7	31.2	ND	ND	ND	ND	4	ND	ND	ND	ND	4	4			
11	9806-576	119.7.5.Eff-14	69	1.13	56	ND	12.0	2.3	27.7	42.0	ND	ND	ND	ND	5	ND	ND	ND	ND	5	5			
11d	9806-596	119.7.5.Eff-14d	69	1.12	59	ND	11.3	2.1	24.6	38.0	ND	ND	ND	ND	4	ND	ND	ND	ND	4	4			
12	9806-578	119.7.5.Eff-16	87	1.31	74	ND	13.8	2.8	31.0	47.6	ND	ND	ND	ND	4	1	1	ND	ND	5	6			
13	9806-580	119.7.5.Eff-18	104	1.44																				
Influent A			EBCT:	Carbon Type:		Influent pH: 7.4					Scaling Factor: 12.6													
1	9806-471	119.Inf.A-1	1																		0.17	400		
2	9806-472	119.Inf.A-2	74																		0.30	390		
Influent B			EBCT:	Carbon Type:		Influent pH: 7.4					Scaling Factor: 12.6													
1	9806-473	119.Inf.B-1	1	1.81	129	2.8	25.3	9.8	29.5	67.4	ND	1	1	ND	8	3	3	4	4	14	25			
2	9806-474	119.Inf.B-2	26	1.75																				
3	9806-475	119.Inf.B-3	40	1.80																				
4	9806-476	119.Inf.B-4	74	1.73	142	3.4	27.6	12.0	27.2	70.2	ND	1	1	ND	6	3	3	4	4	12	23			
5	9806-477	119.Inf.B-5	89	1.90																				
6	9806-478	119.Inf.B-6	176	1.77																				
7	9806-479	119.Inf.B-7	249	1.79	148	2.4	32.5	11.7	29.9	76.5	ND	ND	ND	ND	6	3	3	5	4	9	20			
8	9806-480	119.Inf.B-8	278	1.79	136	2.5	27.4	10.4	34.4	74.7	ND	ND	ND	ND	6	2	2	3	ND	8	14			

Summers & Hooper, Inc.

RSSCT Sampling Summary Report

Study title: ICR RSSCT #2

Client: Jacksonville Electric Authority

Study#: 119

												SDS Chlorination Conditions*									
No.	Sample ID	Client Sample ID	Start Date/Time	End Date/Time	Stop T (days)	Run L (days)	F-S L (days)	TOC (mg/L)	UV254 (1/cm)	Temp (°C)	pH	Dose (mg/L)	Res. (mg/L)	Dem (mg/L)	Temp (°C)	pH	Time hrs	Alk. (mg/L)	Hard-Tot (mg/L as CaCO3)	Hard-CA (ntu)	Turb. (ntu)
PreStudy		EBCT:	Carbon Type:		Influent pH:		Scaling Factor:														
1	9806-352	119.Aerated	6/9/98 16:00	6/9/98 16:00				1.90													
2	9806-353	119.Settled on Arrival	6/12/98 9:20	6/12/98 9:20				1.76													
3	9806-354	119.Filtered.S&H	6/12/98 10:35	6/12/98 10:35				1.86													

***Target SDS Chlorination Conditions**

Free Cl2 Residual: 1.00 mg/L **pH:** 7.7 **Temperature:** 27.0 °C **Holding time:** 7.2 hrs

Study Comments

Summers & Hooper, Inc.

RSSCT Sampling Summary Report

Study title: ICR RSSCT #2

Client: Jacksonville Electric Authority

Study#: 119

#	SamplesID	ClientSampleID	F-S L	TOC	TOX	Trihalomethanes (µg/L)					Haloacetic Acids (µg/L)										NH3-N	Brom		
			(days)	(mg/L)	(µg Cl-/L)	CF	BDCM	DBCM	BF	TTHM	MCAA	DCAA	TCAA	MBAA	DBAA	BCAA	BDCAA	DBCAA	TBAA	HAA6	HAA9	(mg/L)	(µg/L)	
PreStudy		EBCT:	Carbon Type:			Influent pH:					Scaling Factor:													
1	9806-352	119.Aerated		1.90																				
2	9806-353	119.Settled on Arrival		1.76																				
3	9806-354	119.Filtered.S&H		1.86																				

Summers & Hooper, Inc.

RSSCT Sampling Summary Report

Study title: ICR RSSCT #3

Client: Jacksonville Electric Authority

Study#: 126

													SDS Chlorination Conditions*								
No.	Sample ID	Client Sample ID	Start Date/Time	End Date/Time	Stop T (days)	Run L (days)	F-S L (days)	TOC (mg/L)	UV254 (1/cm)	Temp (°C)	pH	Dose (mg/L)	Res. (mg/L)	Dem (mg/L)	Temp (°C)	pH	Time hrs	Alk. (mg/L)	Hard-Tot (mg/L as CaCO3)	Hard-CA (mg/L)	Turb. (ntu)
Effluent C		EBCT: 10 min	Carbon Type: Bituminous			Influent pH: 7		Scaling Factor: 12.6													
1	9807-247	126.10.pH7.0.Eff-1	7/16/98 11:22	7/16/98 19:33			0.22	3	0.11	0.001	24.1	7.4	2.58	1.09	1.49	26.3	7.80	7.5			
2	9807-250	126.10.pH7.0.Eff-4	7/19/98 3:38	7/19/98 11:49			2.90	36	0.16	0.001	23.3	7.8	2.62	0.98	1.64	26.3	7.72	7.4			
3	9807-252	126.10.pH7.0.Eff-6	7/19/98 19:41	7/20/98 3:29			3.56	45	0.26	0.003	23.4	7.9	2.56	1.01	1.55	25.0	7.65	7.1			
3d	9807-277	126.10.pH7.0.Eff-6d	7/19/98 19:41	7/20/98 3:29			3.56	45	0.26	0.002	23.5	7.9	2.56	0.73	1.83	25.0	7.68	7.1			
4	9807-253	126.10.pH7.0.Eff-7	7/20/98 3:29	7/20/98 11:33			3.89	49	0.35	0.003	23.0	7.8	2.62	1.02	1.60	25.0	7.68	7.1			
5	9807-256	126.10.pH7.0.Eff-10	7/21/98 4:04	7/21/98 12:31			4.92	62	0.50	0.006	23.0	7.7	2.58	0.97	1.61	25.8	7.67	7.2			
6	9807-257	126.10.pH7.0.Eff-11	7/22/98 4:46	7/22/98 13:03			5.95	75	0.77	0.009	23.3	7.6	2.71	1.24	1.47	25.8	7.69	7.0			
7	9807-259	126.10.pH7.0.Eff-13	7/22/98 21:00	7/23/98 5:11			6.62	83	0.86	0.013	22.9	7.7	2.74	1.16	1.58	25.8	7.71	7.1			
7d	9807-280	126.10.pH7.0.Eff-13d	7/22/98 21:00	7/23/98 5:11			6.62	83	0.88	0.012	22.9	7.8	2.74	1.22	1.52	25.8	7.74	7.1			
8	9807-260	126.10.pH7.0.Eff-14	7/23/98 5:11	7/23/98 13:26			6.96	88	0.91	0.013	22.9	7.7	2.56	0.94	1.62	26.2	7.65	7.0			
9	9807-261	126.10.pH7.0.Eff-15	7/24/98 5:46	7/24/98 13:55			7.99	100	1.04	0.017	23.2	7.7	2.59	1.03	1.56	26.2	7.65	7.0			
10	9807-264	126.10.pH7.0.Eff-18	7/25/98 5:55	7/25/98 13:58			8.99	113	1.12	0.019	23.6	7.7	2.62	0.86	1.76	26.2	7.65	7.0			
11	9807-266	126.10.pH7.0.Eff-20	7/25/98 22:09	7/26/98 6:31			9.67	122	1.18	0.021	22.7	7.7	2.64	0.78	1.86	26.2	7.63	7.0			
11d	9807-284	126.10.pH7.0.Eff-20d	7/25/98 22:09	7/26/98 6:31			9.67	122	1.18	0.020	22.7	7.7	2.64	0.85	1.79	26.2	7.64	7.1			
12	9807-269	126.10.pH7.0.Eff-23	7/27/98 6:30	7/27/98 14:32			11.01	138	1.27	0.024	23.4	7.6	2.89	1.07	1.82	28.8	7.68	7.1			
13	9807-270	126.10.pH7.0.Eff-24	7/28/98 14:49	7/28/98 22:42			12.36	155	1.38	0.027	23.6	7.7									
Effluent C		EBCT: 10 min	Carbon Type: Bituminous			Influent pH: 7.4		Scaling Factor: 12.6													
1	9807-287	126.10.pH7.4.Eff-1	7/16/98 11:23	7/16/98 19:33			0.20	3	0.08	0.001	23.9	8.1	2.58	1.38	1.20	26.3	7.79	7.5			
2	9807-290	126.10.pH7.4.Eff-4	7/18/98 20:35	7/19/98 4:45			2.59	33	0.18	0.001	22.7	8.0	2.62	0.91	1.71	26.3	7.72	7.6			
3	9807-317	126.10.pH7.4.Eff-6	7/19/98 13:01	7/19/98 21:00			3.27	41	0.33	0.004	24.1	8.2	2.60	1.75	0.85	26.3	7.72	7.7			
4	9807-293	126.10.pH7.4.Eff-7	7/19/98 21:00	7/20/98 5:04			3.60	45	0.41	0.004	22.8	8.1	2.64	1.70	0.94	25.0	7.70	7.1			
5	9807-296	126.10.pH7.4.Eff-10	7/20/98 21:11	7/21/98 5:19			4.61	58	0.52	0.006	22.5	8.0	2.70	1.96	0.74	25.0	7.68	7.2			
5d	9807-318	126.10.pH7.4.Eff-10d	7/20/98 21:11	7/21/98 5:19			4.61	58	0.52	0.006	22.5	8.0	2.70	1.96	0.74	25.0	7.68	7.2			
6	9807-297	126.10.pH7.4.Eff-11	7/21/98 5:19	7/21/98 13:28			4.95	62	0.60	0.007	23.0	7.9	2.51	1.54	0.97	25.8	7.70	7.2			
7	9807-298	126.10.pH7.4.Eff-12	7/21/98 21:26	7/22/98 5:35			5.62	71	0.75	0.009	22.6	8.0	2.55	1.61	0.94	25.8	7.74	7.3			
8	9807-299	126.10.pH7.4.Eff-13	7/22/98 5:35	7/22/98 13:31			5.96	75	0.84	0.011	23.1	7.9	1.92	1.22	0.70	25.8	7.76	7.1			
9	9807-300	126.10.pH7.4.Eff-14	7/22/98 21:07	7/23/98 5:15			6.61	83	0.94	0.013	22.6	8.0	1.90	1.28	0.62	25.8	7.78	7.1			
10	9807-303	126.10.pH7.4.Eff-17	7/23/98 21:34	7/24/98 5:49			7.63	96	1.02	0.016	22.6	8.1	1.55	0.97	0.58	26.2	7.69	6.9			
10d	9807-323	126.10.pH7.4.Eff-17d	7/23/98 21:34	7/24/98 5:49			7.63	96	1.04	0.016	22.6	8.1	1.55	0.93	0.62	26.2	7.74	7.1			
11	9807-305	126.10.pH7.4.Eff-19	7/25/98 5:33	7/25/98 13:34			8.96	113	1.17	0.020	23.3	8.0	1.43	0.75	0.68	26.2	7.75	7.1			
12	9807-307	126.10.pH7.4.Eff-21	7/26/98 14:02	7/26/98 22:02			10.31	130	1.29	0.023	23.1	8.1	1.33	0.55	0.78	26.2	7.73	7.1			
12d	9807-324	126.10.pH7.4.Eff-21d	7/26/98 14:02	7/26/98 22:02			10.31	130	1.29	0.024	23.1	8.2	1.33	0.63	0.70	26.2	7.70	7.2			

Summers & Hooper, Inc.

RSSCT Sampling Summary Report

Study title: ICR RSSCT #3

Client: Jacksonville Electric Authority

Study#: 126

#	SamplesID	ClientSampleID	F-S L	TOC	TOX	Trihalomethanes (µg/L)					Haloacetic Acids (µg/L)										NH3-N	Brom
			(days)	(mg/L)	(µg Cl-/L)	CF	BDCM	DBCM	BF	TTHM	MCAA	DCAA	TCAA	MBAA	DBAA	BCAA	BDCAA	DBCAA	TBAA	HAA6	HAA9	(mg/L)
Effluent C		EBCT: 10 min	Carbon Type: Bituminous			Influent pH: 7					Scaling Factor: 12.6											
1	9807-247	126.10.pH7.0.Eff-1	3	0.11	4	ND	ND	ND	1.4	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	9807-250	126.10.pH7.0.Eff-4	36	0.16	5	ND	ND	ND	2.8	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3	9807-252	126.10.pH7.0.Eff-6	45	0.26	6	ND	1.0	ND	2.6	3.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3d	9807-277	126.10.pH7.0.Eff-6d	45	0.26	5	ND	1.0	ND	2.9	3.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4	9807-253	126.10.pH7.0.Eff-7	49	0.35	9	ND	1.4	ND	3.4	4.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5	9807-256	126.10.pH7.0.Eff-10	62	0.50	15	ND	2.6	ND	6.5	9.1	ND	ND	ND	ND	2	ND	ND	ND	ND	2	2	
6	9807-257	126.10.pH7.0.Eff-11	75	0.77	25	ND	4.5	1.0	8.7	14.2	ND	ND	ND	ND	2	ND	ND	ND	ND	2	2	
7	9807-259	126.10.pH7.0.Eff-13	83	0.86	38	ND	6.3	1.4	11.0	18.7	ND	ND	ND	ND	3	ND	ND	ND	ND	3	3	
7d	9807-280	126.10.pH7.0.Eff-13d	83	0.88	32	ND	5.9	1.3	10.9	18.2	ND	ND	ND	ND	3	ND	ND	ND	ND	3	3	
8	9807-260	126.10.pH7.0.Eff-14	88	0.91	34	ND	6.2	1.4	14.7	22.3	ND	ND	ND	ND	3	ND	ND	ND	ND	3	3	
9	9807-261	126.10.pH7.0.Eff-15	100	1.04	45	ND	8.9	1.9	18.4	29.2	ND	ND	ND	ND	4	1	ND	ND	ND	5	5	
10	9807-264	126.10.pH7.0.Eff-18	113	1.12	54	ND	10.0	2.1	21.6	33.7	ND	ND	ND	ND	5	1	ND	ND	ND	6	6	
11	9807-266	126.10.pH7.0.Eff-20	122	1.18	62	ND	10.8	2.3	22.6	35.7	ND	ND	ND	ND	6	1	ND	ND	ND	7	7	
11d	9807-284	126.10.pH7.0.Eff-20d	122	1.18	55	ND	10.8	2.3	22.3	35.4	ND	ND	ND	ND	5	1	ND	ND	ND	6	6	
12	9807-269	126.10.pH7.0.Eff-23	138	1.27	70	ND	15.8	3.4	28.5	47.6	ND	ND	ND	ND	6	2	1	2	ND	8	11	
13	9807-270	126.10.pH7.0.Eff-24	155	1.38																		
Effluent C		EBCT: 10 min	Carbon Type: Bituminous			Influent pH: 7.4					Scaling Factor: 12.6											
1	9807-287	126.10.pH7.4.Eff-1	3	0.08	3	ND	ND	ND	1.0	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2	9807-290	126.10.pH7.4.Eff-4	33	0.18	4	ND	ND	ND	1.7	1.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3	9807-317	126.10.pH7.4.Eff-6	41	0.33	8	ND	1.5	ND	4.1	5.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4	9807-293	126.10.pH7.4.Eff-7	45	0.41	11	ND	1.5	ND	4.5	6.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5	9807-296	126.10.pH7.4.Eff-10	58	0.52	18	ND	2.6	ND	5.9	8.6	ND	ND	ND	ND	1	ND	ND	ND	ND	1	1	
5d	9807-318	126.10.pH7.4.Eff-10d	58	0.52	19	ND	2.5	ND	5.8	8.3	ND	ND	ND	ND	1	ND	ND	ND	ND	1	1	
6	9807-297	126.10.pH7.4.Eff-11	62	0.60	19	ND	3.4	ND	8.0	11.4	ND	ND	ND	ND	2	ND	ND	ND	ND	2	2	
7	9807-298	126.10.pH7.4.Eff-12	71	0.75	32	ND	5.4	1.2	11.6	18.2	ND	ND	ND	ND	4	ND	ND	ND	ND	4	4	
8	9807-299	126.10.pH7.4.Eff-13	75	0.84	28	ND	4.7	ND	12.4	17.1	ND	ND	ND	ND	3	ND	ND	ND	ND	3	3	
9	9807-300	126.10.pH7.4.Eff-14	83	0.94	38	ND	6.1	1.2	15.2	22.6	ND	ND	ND	ND	3	ND	ND	ND	ND	3	3	
10	9807-303	126.10.pH7.4.Eff-17	96	1.02	44	ND	7.0	1.2	20.0	28.2	ND	ND	ND	ND	4	ND	ND	ND	ND	4	4	
10d	9807-323	126.10.pH7.4.Eff-17d	96	1.04	41	ND	7.4	1.3	21.5	30.2	ND	ND	ND	ND	3	ND	ND	ND	ND	3	3	
11	9807-305	126.10.pH7.4.Eff-19	113	1.17	57	ND	8.6	1.5	26.7	36.7	ND	ND	ND	ND	5	ND	ND	ND	ND	5	5	
12	9807-307	126.10.pH7.4.Eff-21	130	1.29	69	ND	9.4	1.6	33.5	44.5	ND	ND	ND	ND	5	ND	ND	ND	ND	5	5	
12d	9807-324	126.10.pH7.4.Eff-21d	130	1.29	65	ND	9.2	1.6	29.1	39.8	ND	ND	ND	ND	5	ND	ND	ND	ND	5	5	

Summers & Hooper, Inc.

RSSCT Sampling Summary Report

Study title: ICR RSSCT #3

Client: Jacksonville Electric Authority

Study#: 126

													SDS Chlorination Conditions*											
No.	Sample ID	Client Sample ID	Start Date/Time		End Date/Time		Stop T	Run L	F-S L	TOC	UV254	Temp	pH	Dose	Res.	Dem	Temp	pH	Time	Alk.	Hard-Tot	Hard-CA	Turb.	
			(days)	(days)	(days)	(days)	(mg/L)	(1/cm)	(°C)					(mg/L)	(mg/L)	(mg/L)	(°C)		hrs	(mg/L)	(mg/L as CaCO3)	(ntu)		
13	9807-309	126.10.pH7.4.Eff-23	7/27/98	22:11	7/28/98	6:22		11.65	146	1.32	0.025	22.9	8.0											
Effluent C		EBCT: 10 min	Carbon Type: Bituminous			Influent pH: 7.8		Scaling Factor: 12.6																
1	9807-327	126.10.pH7.8.Eff-1	7/16/98	11:22	7/16/98	18:25		0.19	2	0.11	0.001	23.8	8.3	2.48	0.84	1.64	25.0	7.73	7.2					
2	9807-330	126.10.pH7.8.Eff-4	7/18/98	5:04	7/18/98	12:05		1.93	24	0.16	0.001	23.2	8.2	2.51	0.81	1.70	25.0	7.72	7.2					
3	9807-331	126.10.pH7.8.Eff-5	7/18/98	19:00	7/19/98	1:54		2.51	32	0.27	0.002	23.0	8.3	2.57	1.75	0.82	26.3	7.73	7.5					
4	9807-333	126.10.pH7.8.Eff-7	7/19/98	8:54	7/19/98	15:53		3.09	39	0.37	0.004	23.6	8.2	2.62	0.91	1.71	26.3	7.72	7.5					
4d	9807-357	126.10.pH7.8.Eff-7d	7/19/98	8:54	7/19/98	15:53		3.09	39	0.35	0.003	23.5	8.3	2.62	0.93	1.69	26.3	7.75	7.6					
5	9807-335	126.10.pH7.8.Eff-9	7/19/98	22:25	7/20/98	5:09		3.65	46	0.50	0.005	22.8	8.3	2.69	1.11	1.58	25.0	7.70	7.2					
6	9807-337	126.10.pH7.8.Eff-11	7/20/98	12:02	7/20/98	18:55		4.22	53	0.58	0.007	24.1	8.3	2.74	1.08	1.66	25.0	7.70	7.2					
7	9807-339	126.10.pH7.8.Eff-13	7/21/98	1:51	7/21/98	8:58		4.80	60	0.66	0.009	22.4	8.2	2.58	1.15	1.43	25.8	7.73	7.3					
8	9807-340	126.10.pH7.8.Eff-14	7/21/98	8:58	7/21/98	15:54		5.09	64	0.78	0.011	23.9	8.1	2.62	1.16	1.46	25.8	7.68	7.3					
8d	9807-360	126.10.pH7.8.Eff-14d	7/21/98	8:58	7/21/98	15:54		5.09	64	0.76	0.011	23.8	8.2	2.61	1.08	1.53	25.8	7.73	7.3					
9	9807-341	126.10.pH7.8.Eff-15	7/21/98	15:54	7/21/98	22:45		5.38	68	0.82	0.012	23.7	8.3	2.49	1.02	1.47	25.8	7.76	7.2					
10	9807-343	126.10.pH7.8.Eff-17	7/22/98	12:47	7/22/98	19:39		6.25	79	0.96	0.015	24.0	8.3	2.44	0.99	1.45	25.8	7.77	7.2					
11	9807-346	126.10.pH7.8.Eff-20	7/24/98	6:42	7/24/98	13:38		8.00	101	1.12	0.020	23.1	8.2	2.43	0.93	1.50	26.2	7.74	7.2					
11d	9807-361	126.10.pH7.8.Eff-20d	7/24/98	6:42	7/24/98	13:38		8.00	101	1.11	0.020	23.0	8.2	2.43	1.03	1.40	26.2	7.76	7.2					
12	9807-348	126.10.pH7.8.Eff-22	7/26/98	11:38	7/26/98	18:40		10.20	128	1.25	0.024	23.3	8.3	2.41	0.73	1.68	26.2	7.71	7.3					
13	9807-350	126.10.pH7.8.Eff-24	7/27/98	16:13	7/27/98	23:48		11.41	143	1.32	0.025	22.7	8.3											
Influent A		EBCT: 10 min	Carbon Type:			Influent pH: 7		Scaling Factor: 12.6																
1	9807-367	126.10.pH7.0.Inf.A-1	7/16/98	11:45	7/16/98	11:45		0.07	1											113	406	250		
2	9807-368	126.10.pH7.0.Inf.A-2	7/27/98	17:25	7/27/98	17:25		11.30	142											88	406	250		
Influent A		EBCT: 10 min	Carbon Type:			Influent pH: 7.4		Scaling Factor: 12.6																
1	9807-375	126.10.pH7.4.Inf.A-1	7/16/98	11:40	7/16/98	11:40		0.05	1											125	410	250		
2	9807-376	126.10.pH7.4.Inf.A-2	7/27/98	17:15	7/27/98	17:15		11.28	142											117	406	250		
Influent A		EBCT: 10 min	Carbon Type:			Influent pH: 7.8		Scaling Factor: 12.6																
1	9807-383	126.10.pH7.8.Inf.A-1	7/16/98	11:40	7/16/98	11:40		0.06	1											132	406	250		
2	9807-384	126.10.pH7.8.Inf.A-2	7/27/98	17:15	7/27/98	17:15		11.29	142											130	410	250		
Influent B		EBCT: 10 min	Carbon Type:			Influent pH: 7		Scaling Factor: 12.6																
1	9807-369	126.10.pH7.0.Inf.B-1	7/16/98	11:40	7/16/98	11:40		0.06	1	1.78	0.047	21.4	7.0	4.15	0.96	3.19	26.3	7.68	7.5	0.10				

Summers & Hooper, Inc.

RSSCT Sampling Summary Report

Study title: ICR RSSCT #3

Client: Jacksonville Electric Authority

Study#: 126

#	SamplesID	ClientSampleID	F-S L	TOC	TOX	Trihalomethanes (µg/L)					Haloacetic Acids (µg/L)										NH3-N	Brom			
			(days)	(mg/L)	(µg Cl-/L)	CF	BDCM	DBCM	BF	TTHM	MCAA	DCAA	TCAA	MBAA	DBAA	BCAA	BDCAA	DBCAA	TBAA	HAA6	HAA9	(mg/L)	(µg/L)		
13	9807-309	126.10.pH7.4.Eff-23	146	1.32																					
Effluent C			EBCT: 10 min	Carbon Type: Bituminous		Influent pH: 7.8				Scaling Factor: 12.6															
1	9807-327	126.10.pH7.8.Eff-1	2	0.11	6	ND	ND	ND	1.5	1.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
2	9807-330	126.10.pH7.8.Eff-4	24	0.16	5	ND	ND	ND	1.9	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
3	9807-331	126.10.pH7.8.Eff-5	32	0.27	4	ND	ND	ND	2.0	2.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
4	9807-333	126.10.pH7.8.Eff-7	39	0.37	9	ND	1.6	ND	5.0	6.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
4d	9807-357	126.10.pH7.8.Eff-7d	39	0.35	9	ND	1.6	ND	4.1	5.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
5	9807-335	126.10.pH7.8.Eff-9	46	0.50	13	ND	2.1	ND	5.6	7.6	ND	ND	ND	ND	1	ND	ND	ND	ND	1	1				
6	9807-337	126.10.pH7.8.Eff-11	53	0.58	21	ND	2.9	ND	7.8	10.7	ND	ND	ND	ND	2	ND	ND	ND	ND	2	2				
7	9807-339	126.10.pH7.8.Eff-13	60	0.66	23	ND	3.8	ND	8.9	12.7	ND	ND	ND	ND	2	ND	ND	ND	ND	2	2				
8	9807-340	126.10.pH7.8.Eff-14	64	0.78	27	ND	4.8	1.0	10.2	16.0	ND	ND	ND	ND	3	ND	ND	ND	ND	3	3				
8d	9807-360	126.10.pH7.8.Eff-14d	64	0.76	25	ND	5.1	1.1	11.4	17.6	ND	ND	ND	ND	3	ND	ND	ND	ND	3	3				
9	9807-341	126.10.pH7.8.Eff-15	68	0.82	29	ND	5.5	1.1	12.5	19.0	ND	ND	ND	ND	3	ND	ND	ND	ND	3	3				
10	9807-343	126.10.pH7.8.Eff-17	79	0.96	40	ND	7.5	1.4	17.0	25.9	ND	ND	ND	ND	4	ND	ND	ND	ND	4	4				
11	9807-346	126.10.pH7.8.Eff-20	101	1.12	58	ND	9.9	1.8	23.1	34.8	ND	ND	ND	ND	4	ND	ND	ND	ND	4	4				
11d	9807-361	126.10.pH7.8.Eff-20d	101	1.11	56	ND	9.3	1.6	22.6	33.5	ND	ND	ND	ND	4	ND	ND	ND	ND	4	4				
12	9807-348	126.10.pH7.8.Eff-22	128	1.25	67	ND	10.2	1.6	27.1	39.0	ND	ND	ND	ND	5	ND	ND	ND	ND	5	5				
13	9807-350	126.10.pH7.8.Eff-24	143	1.32																					
Influent A			EBCT: 10 min	Carbon Type:		Influent pH: 7				Scaling Factor: 12.6															
1	9807-367	126.10.pH7.0.Inf.A-1	1																		0.13	510			
2	9807-368	126.10.pH7.0.Inf.A-2	142																		0.16	490			
Influent A			EBCT: 10 min	Carbon Type:		Influent pH: 7.4				Scaling Factor: 12.6															
1	9807-375	126.10.pH7.4.Inf.A-1	1																		0.15	500			
2	9807-376	126.10.pH7.4.Inf.A-2	142																		0.22	500			
Influent A			EBCT: 10 min	Carbon Type:		Influent pH: 7.8				Scaling Factor: 12.6															
1	9807-383	126.10.pH7.8.Inf.A-1	1																		0.15	500			
2	9807-384	126.10.pH7.8.Inf.A-2	142																		0.14	490			
Influent B			EBCT: 10 min	Carbon Type:		Influent pH: 7				Scaling Factor: 12.6															
1	9807-369	126.10.pH7.0.Inf.B-1	1	1.78	134	2.9	32.0	11.6	34.7	81.2	ND	1	ND	ND	5	2	2	3	ND	8	13				

Summers & Hooper, Inc.

RSSCT Sampling Summary Report

Study title: ICR RSSCT #3

Client: Jacksonville Electric Authority

Study#: 126

													SDS Chlorination Conditions*									
No.	Sample ID	Client Sample ID	Start Date/Time		End Date/Time		Stop T (days)	Run L (days)	F-S L (days)	TOC (mg/L)	UV254 (1/cm)	Temp (°C)	pH	Dose (mg/L)	Res. (mg/L)	Dem (mg/L)	Temp (°C)	pH	Time hrs	Alk. (mg/L)	Hard-Tot (mg/L as CaCO3)	Hard-CA (ntu)
2	9807-370	126.10.pH7.0.Inf.B-2	7/20/98	15:45	7/20/98	15:45		4.23	53	1.79		20.0	7.1									
3	9807-371	126.10.pH7.0.Inf.B-3	7/24/98	8:55	7/24/98	8:55		7.95	100	1.81		21.2	7.0									
4	9807-372	126.10.pH7.0.Inf.B-4	7/27/98	17:20	7/27/98	17:20		11.30	142	1.76	0.047	18.3	7.0	4.20	1.03	3.17	28.8	7.72	7.2			0.15
Influent B		EBCT: 10 min	Carbon Type:		Influent pH: 7.4		Scaling Factor: 12.6															
1	9807-377	126.10.pH7.4.Inf.B-1	7/16/98	11:40	7/16/98	11:40		0.05	1	1.76	0.048	22.1	7.4									0.15
2	9807-378	126.10.pH7.4.Inf.B-2	7/20/98	15:40	7/20/98	15:40		4.21	53	1.81		20.2	7.4									
3	9807-379	126.10.pH7.4.Inf.B-3	7/24/98	8:20	7/24/98	8:20		7.91	99	1.77	0.047	20.8	7.5									0.15
4	9807-380	126.10.pH7.4.Inf.B-4	7/27/98	17:20	7/27/98	17:20		11.28	142	1.71	0.047	18.5	7.5	4.20	1.16	3.04	28.8	7.72	7.2			0.15
Influent B		EBCT: 10 min	Carbon Type:		Influent pH: 7.8		Scaling Factor: 12.6															
1	9807-385	126.10.pH7.8.Inf.B-1	7/16/98	11:45	7/16/98	11:45		0.06	1	1.76	0.047	20.6	7.8	4.15	0.95	3.20	26.3	7.76	7.1			0.10
2	9807-386	126.10.pH7.8.Inf.B-2	7/20/98	15:45	7/20/98	15:45		4.23	53	1.76		20.3	7.8									
3	9807-387	126.10.pH7.8.Inf.B-3	7/24/98	8:55	7/24/98	8:55		7.94	100			20.4	7.8									
4	9807-388	126.10.pH7.8.Inf.B-4	7/27/98	17:15	7/27/98	17:15		11.29	142	1.79	0.047	20.5	7.8	4.20	1.09	3.11	28.8	7.71	7.3			0.10
PreStudy		EBCT:	Carbon Type:		Influent pH:		Scaling Factor:															
1	9807-193	126.Set.On.Arrival	7/9/98	14:00						1.87												
2	9807-129	126.Aerated TOC	7/7/98	15:30	7/7/98	15:30				1.87												
3	9807-195	126.Filtered	7/10/98	10:55	7/10/98	10:55				1.84												

***Target SDS Chlorination Conditions**

Free Cl2 Residual: 1.00 mg/L **pH:** 7.7 **Temperature:** 27.0 °C **Holding time:** 7.2 hrs

Study Comments

Summers & Hooper, Inc.

RSSCT Sampling Summary Report

Study title: ICR RSSCT #3

Client: Jacksonville Electric Authority

Study#: 126

#	SamplesID	ClientSampleID	F-S L (days)	TOC (mg/L)	TOX (µg Cl-/L)	Trihalomethanes (µg/L)					Haloacetic Acids (µg/L)										NH3-N	Brom		
						CF	BDCM	DBCM	BF	TTHM	MCAA	DCAA	TCAA	MBAA	DBAA	BCAA	BDCAA	DBCAA	TBAA	HAA6	HAA9	(mg/L)	(µg/L)	
2	9807-370	126.10.pH7.0.Inf.B-2	53	1.79																				
3	9807-371	126.10.pH7.0.Inf.B-3	100	1.81																				
4	9807-372	126.10.pH7.0.Inf.B-4	142	1.76	141	3.0	32.0	12.0	36.7	83.7	ND	1	ND	ND	8	3	3	5	5	13	26			
Influent B		EBCT: 10 min	Carbon Type:			Influent pH: 7.4				Scaling Factor: 12.6														
1	9807-377	126.10.pH7.4.Inf.B-1	1	1.76																				
2	9807-378	126.10.pH7.4.Inf.B-2	53	1.81																				
3	9807-379	126.10.pH7.4.Inf.B-3	99	1.77																				
4	9807-380	126.10.pH7.4.Inf.B-4	142	1.71	142	3.1	33.3	12.5	38.6	87.4	ND	1	ND	ND	9	3	3	5	5	14	27			
Influent B		EBCT: 10 min	Carbon Type:			Influent pH: 7.8				Scaling Factor: 12.6														
1	9807-385	126.10.pH7.8.Inf.B-1	1	1.76	134	2.6	28.5	10.1	35.7	76.9	ND	1	ND	ND	5	2	2	3	ND	8	12			
2	9807-386	126.10.pH7.8.Inf.B-2	53	1.76																				
3	9807-387	126.10.pH7.8.Inf.B-3	100																					
4	9807-388	126.10.pH7.8.Inf.B-4	142	1.79	141	3.1	34.2	12.7	40.0	90.0	ND	1	ND	ND	9	3	3	5	5	13	26			
PreStudy		EBCT:	Carbon Type:			Influent pH:				Scaling Factor:														
1	9807-193	126.Set.On.Arrival		1.87																				
2	9807-129	126.Aerated TOC		1.87																				
3	9807-195	126.Filtered		1.84																				

Laboratory Report

Client:

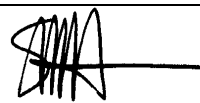
Ms. Sibyl Carley
Jacksonville Electric Authority
Water and Wastewater Treatment
102 Kernan Blvd. North
Jacksonville FL, 32225

Phone: 904-665-4503 Fax: 904-665-4531

Study Title: ICR RSSCT #1

Study #: 110

Reviewed By: _____



Stuart M. Hooper

Date Reviewed: 7/13/99

Laboratory Test ResultsPage 1 of 35
Printed on 7/9/99

Ms. Sibyl Carley
Jacksonville Electric Authority
Ridenhour Regional Water Treatment Plant
102 Kernan Blvd. North
Jacksonville, FL 32225

Phone: 904-665-4503 Fax: 904-665-4531

Study#: 110
Study Title: ICR RSSCT #1

Sample ID: RAW		S&H ID: 9804-121		Date Sampled: 4/6/98 9:10:00 AM					
#	<u>Analysis Type</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>	<u>Dilution</u>	<u>MRL</u>	<u>Samp.</u>	<u>Prep.</u>	<u>Anal.</u> <u>QC Batch</u>
1	TOC-ICR TOC	2.06	mg/L	SM 5310 C	1	0.50	4/6/98		4/9/98 7-0-233
2	TOC-ICR TOC (Dupl)	2.04	mg/L	SM 5310 C	1	0.50	4/6/98		4/9/98 7-0-233
		2.05	mg/L	1.0 % RPD					

Sample ID: Post 1 Micron Filter		S&H ID: 9804-139		Date Sampled: 4/9/98 9:00:00 AM					
#	<u>Analysis Type</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>	<u>Dilution</u>	<u>MRL</u>	<u>Samp.</u>	<u>Prep.</u>	<u>Anal.</u> <u>QC Batch</u>
3	TOC-ICR TOC	2.20	mg/L	SM 5310 C	1	0.50	4/9/98		4/9/98 7-0-233
4	TOC-ICR TOC (Dupl)	2.19	mg/L	SM 5310 C	1	0.50	4/9/98		4/9/98 7-0-233
		2.20	mg/L	0.5 % RPD					

Sample ID: Pre 1 Micron Filter		S&H ID: 9804-140		Date Sampled: 4/9/98 9:00:00 AM					
#	<u>Analysis Type</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>	<u>Dilution</u>	<u>MRL</u>	<u>Samp.</u>	<u>Prep.</u>	<u>Anal.</u> <u>QC Batch</u>
5	TOC-ICR TOC	2.14	mg/L	SM 5310 C	1	0.50	4/9/98		4/9/98 7-0-233
6	TOC-ICR TOC (Dupl)	2.17	mg/L	SM 5310 C	1	0.50	4/9/98		4/9/98 7-0-233
		2.16	mg/L	1.4 % RPD					

Sample ID: 110.INF.A-1		S&H ID: 9804-203		Date Sampled: 4/13/98 4:00:00 PM					
#	<u>Analysis Type</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>	<u>Dilution</u>	<u>MRL</u>	<u>Samp.</u>	<u>Prep.</u>	<u>Anal.</u> <u>QC Batch</u>
7	ALK Alkalinity	132	mg/L	SM 2320 B	1	5	4/13/98		4/14/98 1-0-18
8	ALK Alkalinity (Dupl)	131	mg/L	SM 2320 B	1	5	4/13/98		4/14/98 1-0-18
		132	mg/L	0.8 % RPD					
9	NH3 Ammonia Nitrogen	0.15	mg/L	EPA 350.1	1	0.05	4/13/98		4/27/98 MW76574
10	BR Bromide	0.440	mg/L	EPA 300.0 A	2	0.040	4/13/98		4/23/98 MW76459
11	CaHardM Calcium Hardness	262	mg/L CaCO3	EPA 200.7	1	5	4/13/98		4/20/98 MW n/a
12	CaMW Calcium, Total, ICAP	100	mg/L	EPA 200.7	1	1	4/13/98	4/14/98	4/15/98 MW76028
13	MgMW Magnesium, Total, ICAP	37	mg/L	EPA 200.7	1	0	4/13/98	4/14/98	4/15/98 MW76029
14	TotHard Total Hardness as CaCO3 by ICP	414	mg/L CaCO3	SM 2340B	1	5	4/13/98		4/20/98 MW n/a

Sample ID: 110.INF.B-1		S&H ID: 9804-204		Date Sampled: 4/13/98 4:05:00 PM					
#	<u>Analysis Type</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>	<u>Dilution</u>	<u>MRL</u>	<u>Samp.</u>	<u>Prep.</u>	<u>Anal.</u> <u>QC Batch</u>
15	Cl2Dose Chlorine Dose	4.44	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/17/98		4/17/98 n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

16	Cl2Res	Chlorine Residual	1.05 mg/L as Cl2	SM 4500-Cl F	1	0.10	4/17/98	4/17/98	n/a
17	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	103.2 %	EPA 552.2	1	1.0	4/17/98	4/23/98	4/24/98 0-115-0
18	HAA-ICR	2-Bromopropionic acid (Surrogate)	105.6 %	EPA 552.2	1	1.0	4/17/98	4/23/98	4/24/98 0-115-0
19	HAA-ICR	Bromochloroacetic acid	2.5 µg/L	EPA 552.2	1	1.0	4/17/98	4/23/98	4/24/98 0-115-0
20	HAA-ICR	Bromodichloroacetic acid	3.0 µg/L	EPA 552.2	1	1.0	4/17/98	4/23/98	4/24/98 0-115-0
21	HAA-ICR	Chlorodibromoacetic acid	5.0 µg/L	EPA 552.2	1	2.0	4/17/98	4/23/98	4/24/98 0-115-0
22	HAA-ICR	Dibromoacetic acid	6.6 µg/L	EPA 552.2	1	1.0	4/17/98	4/23/98	4/24/98 0-115-0
23	HAA-ICR	Dichloroacetic acid	1.2 µg/L	EPA 552.2	1	1.0	4/17/98	4/23/98	4/24/98 0-115-0
24	HAA-ICR	Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	4/17/98	4/23/98	4/24/98 0-115-0
25	HAA-ICR	Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	4/17/98	4/23/98	4/24/98 0-115-0
26	HAA-ICR	Tribromoacetic acid	4.3 µg/L	EPA 552.2	1	4.0	4/17/98	4/23/98	4/24/98 0-115-0
27	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/17/98	4/23/98	4/24/98 0-115-0
28	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	4/17/98	4/17/98	n/a
29	pH	Cl2 pH - Initial	7.8 Unit	SM 4500-H+ B	1	n/a	4/17/98	4/17/98	n/a
30	pH	pH	7.4 Unit	SM 4500-H+ B	1	n/a	4/13/98	4/13/98	n/a
31	TEMP	Cl2 Temperature	27.7 °C	SM 2550 B	1	n/a	4/17/98	4/17/98	n/a
32	TEMP	Temperature	20.5 °C	SM 2550 B	1	n/a	4/13/98	4/13/98	n/a
33	TIME	Cl2 Incubation Time	7.5 hrs	n/a	1	n/a	4/17/98	4/17/98	n/a
34	TOC-ICR	TOC	1.85 mg/L	SM 5310 C	1	0.50	4/13/98	4/15/98	7-0-239
35	TOC-ICR	TOC (Dupl)	1.88 mg/L	SM 5310 C	1	0.50	4/13/98	4/15/98	7-0-239
			1.87 mg/L	1.6 % RPD					
36	TOX-ICR	TOX	144 µg Cl-/L	SM 5320 B	1	25	4/17/98	4/22/98	12-0-121
37	TOX-ICR	TOX (Dupl)	141 µg Cl-/L	SM 5320 B	1	25	4/17/98	4/22/98	12-0-121
			143 µg Cl-/L	2.1 % RPD					
38	THM-ICR	1,2,3-Trichloropropane (Surrogate)	102.8 %	EPA 551.1	1	1.0	4/17/98	4/21/98	4/22/98 0-112-0
39	THM-ICR	Bromodichloromethane	11.8 µg/L	EPA 551.1	1	1.0	4/17/98	4/21/98	4/22/98 0-112-0
40	THM-ICR	Bromoform	38.7 µg/L	EPA 551.1	1	1.0	4/17/98	4/21/98	4/22/98 0-112-0
41	THM-ICR	Chloroform	3.3 µg/L	EPA 551.1	1	1.0	4/17/98	4/21/98	4/22/98 0-112-0
42	THM-ICR	Dibromochloromethane	33.1 µg/L	EPA 551.1	1	1.0	4/17/98	4/21/98	4/22/98 0-112-0
43	TURB	Turbidity	0.10 ntu	SM 2130 B	1	0.05	4/13/98	4/13/98	9-0-9
44	UV-ICR	UV	0.048 1/cm	SM 5910 B	1	0.009	4/13/98	4/15/98	8-0-163
45	UV-ICR	UV (Dupl)	0.047 1/cm	SM 5910 B	1	0.009	4/13/98	4/15/98	8-0-163
			0.048 1/cm	2.1 % RPD					

Sample ID: 110.10.Eff-1

S&H ID: 9804-208

Date Sampled: 4/13/98 10:58:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
46	Cl2Dose	Chlorine Dose	2.75	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/17/98		4/17/98	n/a
47	Cl2Res	Chlorine Residual	1.01	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/17/98		4/17/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

48	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	96.4 %	EPA 552.2	1	1.0	4/17/98	4/23/98	4/24/98	0-115-0
49	HAA-ICR	2-Bromopropionic acid (Surrogate)	100.8 %	EPA 552.2	1	1.0	4/17/98	4/23/98	4/24/98	0-115-0
50	HAA-ICR	Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/17/98	4/23/98	4/24/98	0-115-0
51	HAA-ICR	Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/17/98	4/23/98	4/24/98	0-115-0
52	HAA-ICR	Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	4/17/98	4/23/98	4/24/98	0-115-0
53	HAA-ICR	Dibromoacetic acid	ND µg/L	EPA 552.2	1	1.0	4/17/98	4/23/98	4/24/98	0-115-0
54	HAA-ICR	Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/17/98	4/23/98	4/24/98	0-115-0
55	HAA-ICR	Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	4/17/98	4/23/98	4/24/98	0-115-0
56	HAA-ICR	Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	4/17/98	4/23/98	4/24/98	0-115-0
57	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	4/17/98	4/23/98	4/24/98	0-115-0
58	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/17/98	4/23/98	4/24/98	0-115-0
59	pH	Cl2 pH - Final	7.9 Unit	SM 4500-H+ B	1	n/a	4/17/98		4/17/98	n/a
60	pH	Cl2 pH - Initial	7.8 Unit	SM 4500-H+ B	1	n/a	4/17/98		4/17/98	n/a
61	pH	pH	8.1 Unit	SM 4500-H+ B	1	n/a	4/13/98		4/13/98	n/a
62	TEMP	Cl2 Temperature	27.7 °C	SM 2550 B	1	n/a	4/17/98		4/17/98	n/a
63	TEMP	Temperature	23.6 °C	SM 2550 B	1	n/a	4/13/98		4/13/98	n/a
64	TIME	Cl2 Incubation Time	7.4 hrs	n/a	1	n/a	4/17/98		4/17/98	n/a
65	TOC-ICR	TOC	ND mg/L	SM 5310 C	1	0.50	4/13/98		4/14/98	7-0-237
66	TOC-ICR	TOC (Dupl)	ND mg/L ND mg/L	SM 5310 C	1	0.50	4/13/98		4/14/98	7-0-237
67	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	4/17/98		4/22/98	12-0-121
68	TOX-ICR	TOX (Dupl)	ND µg Cl-/L ND µg Cl-/L	SM 5320 B	1	25	4/17/98		4/22/98	12-0-121
69	THM-ICR	1,2,3-Trichloropropane (Surrogate)	100.8 %	EPA 551.1	1	1.0	4/17/98	4/21/98	4/22/98	0-112-0
70	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	4/17/98	4/21/98	4/22/98	0-112-0
71	THM-ICR	Bromoform	1.1 µg/L	EPA 551.1	1	1.0	4/17/98	4/21/98	4/22/98	0-112-0
72	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	4/17/98	4/21/98	4/22/98	0-112-0
73	THM-ICR	Dibromochloromethane	ND µg/L	EPA 551.1	1	1.0	4/17/98	4/21/98	4/22/98	0-112-0
74	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	4/13/98		4/15/98	8-0-163
75	UV-ICR	UV (Dupl)	ND 1/cm ND 1/cm	SM 5910 B	1	0.009	4/13/98		4/15/98	8-0-163

Sample ID: 110.20.Eff-1

S&H ID: 9804-209

Date Sampled: 4/13/98 11:20:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
76	Cl2Dose	Chlorine Dose	2.81	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/17/98		4/17/98	n/a
77	Cl2Res	Chlorine Residual	1.06	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/17/98		4/17/98	n/a
78	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	108.0 %		EPA 552.2	1	1.0	4/17/98	4/29/98	4/30/98	0-119-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

79	HAA-ICR 2-Bromopropionic acid (Surrogate)	95.2 %	EPA 552.2	1	1.0	4/17/98	4/29/98	4/30/98	0-119-0
80	HAA-ICR Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/17/98	4/29/98	4/30/98	0-119-0
81	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/17/98	4/29/98	4/30/98	0-119-0
82	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	4/17/98	4/29/98	4/30/98	0-119-0
83	HAA-ICR Dibromoacetic acid	ND µg/L	EPA 552.2	1	1.0	4/17/98	4/29/98	4/30/98	0-119-0
84	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/17/98	4/29/98	4/30/98	0-119-0
85	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	4/17/98	4/29/98	4/30/98	0-119-0
86	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	4/17/98	4/29/98	4/30/98	0-119-0
87	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	4/17/98	4/29/98	4/30/98	0-119-0
88	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/17/98	4/29/98	4/30/98	0-119-0
89	pH Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	4/17/98		4/17/98	n/a
90	pH Cl2 pH - Initial	7.8 Unit	SM 4500-H+ B	1	n/a	4/17/98		4/17/98	n/a
91	pH pH	8.1 Unit	SM 4500-H+ B	1	n/a	4/13/98		4/13/98	n/a
92	TEMP Cl2 Temperature	27.7 °C	SM 2550 B	1	n/a	4/17/98		4/17/98	n/a
93	TEMP Temperature	23.4 °C	SM 2550 B	1	n/a	4/13/98		4/13/98	n/a
94	TIME Cl2 Incubation Time	7.4 hrs	n/a	1	n/a	4/17/98		4/17/98	n/a
95	TOC-ICR TOC	ND mg/L	SM 5310 C	1	0.50	4/13/98		4/14/98	7-0-237
96	TOC-ICR TOC (Dupl)	ND mg/L	SM 5310 C	1	0.50	4/13/98		4/14/98	7-0-237
		ND mg/L							
97	TOX-ICR TOX	ND µg Cl-/L	SM 5320 B	1	25	4/17/98		4/22/98	12-0-121
98	TOX-ICR TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	4/17/98		4/22/98	12-0-121
		ND µg Cl-/L							
99	THM-ICR 1,2,3-Trichloropropane (Surrogate)	100.0 %	EPA 551.1	1	1.0	4/17/98	4/27/98	4/27/98	0-117-0
100	THM-ICR Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	4/17/98	4/27/98	4/27/98	0-117-0
101	THM-ICR Bromoform	1.2 µg/L	EPA 551.1	1	1.0	4/17/98	4/27/98	4/27/98	0-117-0
102	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	4/17/98	4/27/98	4/27/98	0-117-0
103	THM-ICR Dibromochloromethane	ND µg/L	EPA 551.1	1	1.0	4/17/98	4/27/98	4/27/98	0-117-0
104	UV-ICR UV	ND 1/cm	SM 5910 B	1	0.009	4/13/98		4/15/98	8-0-163
105	UV-ICR UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	4/13/98		4/15/98	8-0-163
		ND 1/cm							

Sample ID: 110.10.Eff-10

S&H ID: 9804-277

Date Sampled: 4/17/98 3:56:00 AM

#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
106	Cl2Dose Chlorine Dose	2.87 mg/L as Cl2	SM 4500-Cl B	1	n/a	4/20/98		4/20/98	n/a
107	Cl2Res Chlorine Residual	1.03 mg/L as Cl2	SM 4500-Cl F	1	0.10	4/20/98		4/20/98	n/a
108	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	111.2 %	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
109	HAA-ICR 2-Bromopropionic acid (Surrogate)	95.6 %	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

110	HAA-ICR	Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
111	HAA-ICR	Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
112	HAA-ICR	Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	4/20/98	4/29/98	4/30/98	0-119-0
113	HAA-ICR	Dibromoacetic acid	ND µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
114	HAA-ICR	Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
115	HAA-ICR	Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
116	HAA-ICR	Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	4/20/98	4/29/98	4/30/98	0-119-0
117	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	4/20/98	4/29/98	4/30/98	0-119-0
118	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
119	pH	Cl2 pH - Final	7.7 Unit	SM 4500-H+ B	1	n/a	4/20/98		4/20/98	n/a
120	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	4/20/98		4/20/98	n/a
121	pH	pH	7.9 Unit	SM 4500-H+ B	1	n/a	4/17/98		4/17/98	n/a
122	TEMP	Cl2 Temperature	27.4 °C	SM 2550 B	1	n/a	4/20/98		4/20/98	n/a
123	TEMP	Temperature	23.1 °C	SM 2550 B	1	n/a	4/17/98		4/17/98	n/a
124	TIME	Cl2 Incubation Time	7.3 hrs	n/a	1	n/a	4/20/98		4/20/98	n/a
125	TOC-ICR	TOC	ND mg/L	SM 5310 C	1	0.50	4/17/98		4/18/98	7-0-240
126	TOC-ICR	TOC (Dupl)	ND mg/L ND mg/L	SM 5310 C	1	0.50	4/17/98		4/18/98	7-0-240
127	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	4/20/98		4/23/98	12-0-122
128	TOX-ICR	TOX (Dupl)	ND µg Cl-/L ND µg Cl-/L	SM 5320 B	1	25	4/20/98		4/23/98	12-0-122
129	THM-ICR	1,2,3-Trichloropropane (Surrogate)	90.4 %	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98	0-117-0
130	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98	0-117-0
131	THM-ICR	Bromoform	4.4 µg/L	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98	0-117-0
132	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98	0-117-0
133	THM-ICR	Dibromochloromethane	1.3 µg/L	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98	0-117-0
134	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	4/17/98		4/17/98	8-0-165
135	UV-ICR	UV (Dupl)	ND 1/cm ND 1/cm	SM 5910 B	1	0.009	4/17/98		4/17/98	8-0-165

Sample ID: 110.10.Eff-11

S&H ID: 9804-287

Date Sampled: 4/17/98 12:01:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
136	Cl2Dose	Chlorine Dose	2.49	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/20/98		4/20/98	n/a
137	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	104.8	%	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
138	HAA-ICR	2-Bromopropionic acid (Surrogate)	102.8	%	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
139	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
140	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
141	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/20/98	4/29/98	4/30/98	0-119-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

142	HAA-ICR	Dibromoacetic acid	ND µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
143	HAA-ICR	Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
144	HAA-ICR	Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
145	HAA-ICR	Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	4/20/98	4/29/98	4/30/98	0-119-0
146	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	4/20/98	4/29/98	4/30/98	0-119-0
147	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
148	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	4/20/98		4/20/98	n/a
149	pH	pH	8.0 Unit	SM 4500-H+ B	1	n/a	4/17/98		4/17/98	n/a
150	TEMP	Cl2 Temperature	27.4 °C	SM 2550 B	1	n/a	4/20/98		4/20/98	n/a
151	TEMP	Temperature	22.1 °C	SM 2550 B	1	n/a	4/17/98		4/17/98	n/a
152	TIME	Cl2 Incubation Time	7.3 hrs	n/a	1	n/a	4/20/98		4/20/98	n/a
153	TOC-ICR	TOC	ND mg/L	SM 5310 C	1	0.50	4/17/98		4/18/98	7-0-240
154	TOC-ICR	TOC (Dupl)	ND mg/L	SM 5310 C	1	0.50	4/17/98		4/18/98	7-0-240
			ND mg/L							
155	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	4/20/98		4/23/98	12-0-122
156	TOX-ICR	TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	4/20/98		4/23/98	12-0-122
			ND µg Cl-/L							
157	THM-ICR	1,2,3-Trichloropropane (Surrogate)	96.8 %	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98	0-117-0
158	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98	0-117-0
159	THM-ICR	Bromoform	5.2 µg/L	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98	0-117-0
160	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98	0-117-0
161	THM-ICR	Dibromochloromethane	1.6 µg/L	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98	0-117-0
162	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	4/17/98		4/18/98	8-0-166
163	UV-ICR	UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	4/17/98		4/18/98	8-0-166
			ND 1/cm							

Sample ID: 110.10.Eff-11d

S&H ID: 9804-288

Date Sampled: 4/17/98 12:01:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
164	Cl2Dose	Chlorine Dose	2.95	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/20/98		4/20/98	n/a
165	Cl2Res	Chlorine Residual	1.06	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/20/98		4/20/98	n/a
166	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	104.0	%	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
167	HAA-ICR	2-Bromopropionic acid (Surrogate)	106.4	%	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
168	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
169	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
170	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/20/98	4/29/98	4/30/98	0-119-0
171	HAA-ICR	Dibromoacetic acid	1.6	µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
172	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
173	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

174	HAA-ICR	Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	4/20/98	4/29/98	4/30/98	0-119-0
175	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	4/20/98	4/29/98	4/30/98	0-119-0
176	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
177	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	4/20/98		4/20/98	n/a
178	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	4/20/98		4/20/98	n/a
179	pH	pH	8.0 Unit	SM 4500-H+ B	1	n/a	4/17/98		4/17/98	n/a
180	TEMP	Cl2 Temperature	27.4 °C	SM 2550 B	1	n/a	4/20/98		4/20/98	n/a
181	TEMP	Temperature	22.1 °C	SM 2550 B	1	n/a	4/17/98		4/17/98	n/a
182	TIME	Cl2 Incubation Time	7.4 hrs	n/a	1	n/a	4/20/98		4/20/98	n/a
183	TOC-ICR	TOC	ND mg/L	SM 5310 C	1	0.50	4/17/98		4/18/98	7-0-240
184	TOC-ICR	TOC (Dupl)	ND mg/L	SM 5310 C	1	0.50	4/17/98		4/18/98	7-0-240
			ND mg/L							
185	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	4/20/98		4/23/98	12-0-122
186	TOX-ICR	TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	4/20/98		4/23/98	12-0-122
			ND µg Cl-/L							
187	THM-ICR	1,2,3-Trichloropropane (Surrogate)	93.6 %	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98	0-117-0
188	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98	0-117-0
189	THM-ICR	Bromoform	5.5 µg/L	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98	0-117-0
190	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98	0-117-0
191	THM-ICR	Dibromochloromethane	2.0 µg/L	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98	0-117-0
192	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	4/17/98		4/18/98	8-0-166
193	UV-ICR	UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	4/17/98		4/18/98	8-0-166
			ND 1/cm							

Sample ID: 110.10.Eff-12

S&H ID: 9804-292

Date Sampled: 4/17/98 5:35:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
194	Cl2Dose	Chlorine Dose	3.06	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/20/98		4/20/98	n/a
195	Cl2Res	Chlorine Residual	1.13	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/20/98		4/20/98	n/a
196	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	107.2	%	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
197	HAA-ICR	2-Bromopropionic acid (Surrogate)	100.4	%	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
198	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
199	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
200	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/20/98	4/29/98	4/30/98	0-119-0
201	HAA-ICR	Dibromoacetic acid	1.2	µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
202	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
203	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
204	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/20/98	4/29/98	4/30/98	0-119-0
205	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	4/20/98	4/29/98	4/30/98	0-119-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

206	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
207	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	4/20/98		4/20/98	n/a
208	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	4/20/98		4/20/98	n/a
209	pH	pH	7.8 Unit	SM 4500-H+ B	1	n/a	4/17/98		4/17/98	n/a
210	TEMP	Cl2 Temperature	27.4 °C	SM 2550 B	1	n/a	4/20/98		4/20/98	n/a
211	TEMP	Temperature	23.7 °C	SM 2550 B	1	n/a	4/17/98		4/17/98	n/a
212	TIME	Cl2 Incubation Time	7.4 hrs	n/a	1	n/a	4/20/98		4/20/98	n/a
213	TOC-ICR	TOC	0.55 mg/L	SM 5310 C	1	0.50	4/17/98		4/18/98	7-0-240
214	TOC-ICR	TOC (Dupl)	0.57 mg/L	SM 5310 C	1	0.50	4/17/98		4/18/98	7-0-240
			0.56 mg/L	3.6 % RPD						
215	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	4/20/98		4/23/98	12-0-122
216	TOX-ICR	TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	4/20/98		4/23/98	12-0-122
			ND µg Cl-/L							
217	THM-ICR	1,2,3-Trichloropropane (Surrogate)	102.4 %	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98	0-117-0
218	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98	0-117-0
219	THM-ICR	Bromoform	7.8 µg/L	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98	0-117-0
220	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98	0-117-0
221	THM-ICR	Dibromochloromethane	2.9 µg/L	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98	0-117-0
222	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	4/17/98		4/17/98	8-0-165
223	UV-ICR	UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	4/17/98		4/17/98	8-0-165
			ND 1/cm							

Sample ID: 110.10.Eff-13

S&H ID: 9804-295

Date Sampled: 4/18/98 1:09:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
224	Cl2Dose	Chlorine Dose	3.18	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/20/98		4/20/98	n/a
225	Cl2Res	Chlorine Residual	1.16	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/20/98		4/20/98	n/a
226	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	106.8	%	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
227	HAA-ICR	2-Bromopropionic acid (Surrogate)	98.8	%	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
228	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
229	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
230	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/20/98	4/29/98	4/30/98	0-119-0
231	HAA-ICR	Dibromoacetic acid	1.4	µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
232	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
233	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
234	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/20/98	4/29/98	4/30/98	0-119-0
235	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	4/20/98	4/29/98	4/30/98	0-119-0
236	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/20/98	4/29/98	4/30/98	0-119-0
237	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	4/20/98		4/20/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

238	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	4/20/98	4/20/98	n/a
239	pH	pH	7.9 Unit	SM 4500-H+ B	1	n/a	4/18/98	4/18/98	n/a
240	TEMP	Cl2 Temperature	27.4 °C	SM 2550 B	1	n/a	4/20/98	4/20/98	n/a
241	TEMP	Temperature	22.8 °C	SM 2550 B	1	n/a	4/18/98	4/18/98	n/a
242	TIME	Cl2 Incubation Time	7.4 hrs	n/a	1	n/a	4/20/98	4/20/98	n/a
243	TOC-ICR	TOC	0.68 mg/L	SM 5310 C	1	0.50	4/18/98	4/18/98	7-0-241
244	TOC-ICR	TOC (Dupl)	0.67 mg/L	SM 5310 C	1	0.50	4/18/98	4/18/98	7-0-241
			0.68 mg/L	1.5 % RPD					
245	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	4/20/98	4/23/98	12-0-122
246	TOX-ICR	TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	4/20/98	4/23/98	12-0-122
			ND µg Cl-/L						
247	THM-ICR	1,2,3-Trichloropropane (Surrogate)	95.6 %	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98 0-117-0
248	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98 0-117-0
249	THM-ICR	Bromoform	7.2 µg/L	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98 0-117-0
250	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98 0-117-0
251	THM-ICR	Dibromochloromethane	3.0 µg/L	EPA 551.1	1	1.0	4/20/98	4/27/98	4/28/98 0-117-0
252	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	4/18/98	4/18/98	8-0-166
253	UV-ICR	UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	4/18/98	4/18/98	8-0-166
			ND 1/cm						

Sample ID: 110.INF.B-2

S&H ID: 9804-305

Date Sampled: 4/18/98 11:00:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
254	pH	pH	7.4	Unit	SM 4500-H+ B	1	n/a	4/18/98		4/18/98	n/a
255	TEMP	Temperature	16.9	°C	SM 2550 B	1	n/a	4/18/98		4/18/98	n/a
256	TOC-ICR	TOC	1.99	mg/L	SM 5310 C	1	0.50	4/18/98		4/18/98	7-0-241
257	TOC-ICR	TOC (Dupl)	2.02	mg/L	SM 5310 C	1	0.50	4/18/98		4/18/98	7-0-241
			2.00 mg/L		1.5 % RPD						

Sample ID: 110.10.Eff-15

S&H ID: 9804-307

Date Sampled: 4/18/98 12:39:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
258	Cl2Dose	Chlorine Dose	3.06	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/23/98		4/23/98	n/a
259	Cl2Res	Chlorine Residual	1.09	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/23/98		4/23/98	n/a
260	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	103.6	%	EPA 552.2	1	1.0	4/23/98	5/4/98	5/4/98	0-121-0
261	HAA-ICR	2-Bromopropionic acid (Surrogate)	99.6	%	EPA 552.2	1	1.0	4/23/98	5/4/98	5/4/98	0-121-0
262	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/4/98	0-121-0
263	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/4/98	0-121-0
264	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/23/98	5/4/98	5/4/98	0-121-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

265	HAA-ICR	Dibromoacetic acid	1.5 µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/4/98	0-121-0
266	HAA-ICR	Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/4/98	0-121-0
267	HAA-ICR	Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/4/98	0-121-0
268	HAA-ICR	Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	4/23/98	5/4/98	5/4/98	0-121-0
269	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	4/23/98	5/4/98	5/4/98	0-121-0
270	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/4/98	0-121-0
271	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	4/23/98		4/23/98	n/a
272	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	4/23/98		4/23/98	n/a
273	pH	pH	8.0 Unit	SM 4500-H+ B	1	n/a	4/18/98		4/18/98	n/a
274	TEMP	Cl2 Temperature	27.4 °C	SM 2550 B	1	n/a	4/23/98		4/23/98	n/a
275	TEMP	Temperature	21.6 °C	SM 2550 B	1	n/a	4/18/98		4/18/98	n/a
276	TIME	Cl2 Incubation Time	7.5 hrs	n/a	1	n/a	4/23/98		4/23/98	n/a
277	TOC-ICR	TOC	0.75 mg/L	SM 5310 C	1	0.50	4/18/98		4/18/98	7-0-241
278	TOC-ICR	TOC (Dupl)	0.74 mg/L	SM 5310 C	1	0.50	4/18/98		4/18/98	7-0-241
			0.75 mg/L	1.3 % RPD						
279	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	4/23/98		4/27/98	12-0-123
280	TOX-ICR	TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	4/23/98		4/27/98	12-0-123
			ND µg Cl-/L							
281	THM-ICR	1,2,3-Trichloropropane (Surrogate)	98.0 %	EPA 551.1	1	1.0	4/23/98	4/30/98	4/30/98	0-120-0
282	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	4/23/98	4/30/98	4/30/98	0-120-0
283	THM-ICR	Bromoform	9.8 µg/L	EPA 551.1	1	1.0	4/23/98	4/30/98	4/30/98	0-120-0
284	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	4/23/98	4/30/98	4/30/98	0-120-0
285	THM-ICR	Dibromochloromethane	3.7 µg/L	EPA 551.1	1	1.0	4/23/98	4/30/98	4/30/98	0-120-0
286	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	4/18/98		4/18/98	8-0-166
287	UV-ICR	UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	4/18/98		4/18/98	8-0-166
			ND 1/cm							

Sample ID: 110.10.Eff-17

S&H ID: 9804-314

Date Sampled: 4/19/98 3:49:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
288	Cl2Dose	Chlorine Dose	3.11	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/23/98		4/23/98	n/a
289	Cl2Res	Chlorine Residual	1.09	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/23/98		4/23/98	n/a
290	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	103.6	%	EPA 552.2	1	1.0	4/23/98	5/4/98	5/4/98	0-121-0
291	HAA-ICR	2-Bromopropionic acid (Surrogate)	99.6	%	EPA 552.2	1	1.0	4/23/98	5/4/98	5/4/98	0-121-0
292	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/4/98	0-121-0
293	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/4/98	0-121-0
294	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/23/98	5/4/98	5/4/98	0-121-0
295	HAA-ICR	Dibromoacetic acid	2.1	µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/4/98	0-121-0
296	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/4/98	0-121-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

297	HAA-ICR	Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/4/98	0-121-0
298	HAA-ICR	Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	4/23/98	5/4/98	5/4/98	0-121-0
299	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	4/23/98	5/4/98	5/4/98	0-121-0
300	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/4/98	0-121-0
301	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	4/23/98		4/23/98	n/a
302	pH	Cl2 pH - Initial	7.8 Unit	SM 4500-H+ B	1	n/a	4/23/98		4/23/98	n/a
303	pH	pH	7.9 Unit	SM 4500-H+ B	1	n/a	4/19/98		4/19/98	n/a
304	TEMP	Cl2 Temperature	27.4 °C	SM 2550 B	1	n/a	4/23/98		4/23/98	n/a
305	TEMP	Temperature	21.4 °C	SM 2550 B	1	n/a	4/19/98		4/19/98	n/a
306	TIME	Cl2 Incubation Time	7.5 hrs	n/a	1	n/a	4/23/98		4/23/98	n/a
307	TOC-ICR	TOC	0.82 mg/L	SM 5310 C	1	0.50	4/19/98		4/20/98	7-0-242
308	TOC-ICR	TOC (Dupl)	0.82 mg/L	SM 5310 C	1	0.50	4/19/98		4/20/98	7-0-242
			0.82 mg/L	0.0 % RPD						
309	TOX-ICR	TOX	29 µg Cl-/L	SM 5320 B	1	25	4/23/98		4/28/98	12-0-124
310	TOX-ICR	TOX (Dupl)	27 µg Cl-/L	SM 5320 B	1	25	4/23/98		4/28/98	12-0-124
			28 µg Cl-/L	7.1 % RPD						
311	THM-ICR	1,2,3-Trichloropropane (Surrogate)	97.2 %	EPA 551.1	1	1.0	4/23/98	4/30/98	4/30/98	0-120-0
312	THM-ICR	Bromodichloromethane	1.1 µg/L	EPA 551.1	1	1.0	4/23/98	4/30/98	4/30/98	0-120-0
313	THM-ICR	Bromoform	12.9 µg/L	EPA 551.1	1	1.0	4/23/98	4/30/98	4/30/98	0-120-0
314	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	4/23/98	4/30/98	4/30/98	0-120-0
315	THM-ICR	Dibromochloromethane	5.4 µg/L	EPA 551.1	1	1.0	4/23/98	4/30/98	4/30/98	0-120-0
316	UV-ICR	UV	0.010 1/cm	SM 5910 B	1	0.009	4/19/98		4/20/98	8-0-167
317	UV-ICR	UV (Dupl)	0.010 1/cm	SM 5910 B	1	0.009	4/19/98		4/20/98	8-0-167
			0.010 1/cm	0.0 % RPD						

Sample ID: 110.10.Eff-17d

S&H ID: 9804-315

Date Sampled: 4/19/98 3:49:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
318	Cl2Dose	Chlorine Dose	3.11	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/23/98		4/23/98	n/a
319	Cl2Res	Chlorine Residual	1.07	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/23/98		4/23/98	n/a
320	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	103.6	%	EPA 552.2	1	1.0	4/23/98	5/4/98	5/5/98	0-121-0
321	HAA-ICR	2-Bromopropionic acid (Surrogate)	95.6	%	EPA 552.2	1	1.0	4/23/98	5/4/98	5/5/98	0-121-0
322	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/5/98	0-121-0
323	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/5/98	0-121-0
324	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/23/98	5/4/98	5/5/98	0-121-0
325	HAA-ICR	Dibromoacetic acid	1.9	µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/5/98	0-121-0
326	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/5/98	0-121-0
327	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/5/98	0-121-0
328	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/23/98	5/4/98	5/5/98	0-121-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

329	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	4/23/98	5/4/98	5/5/98	0-121-0
330	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/5/98	0-121-0
331	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	4/23/98		4/23/98	n/a
332	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	4/23/98		4/23/98	n/a
333	pH	pH	7.9 Unit	SM 4500-H+ B	1	n/a	4/19/98		4/19/98	n/a
334	TEMP	Cl2 Temperature	27.4 °C	SM 2550 B	1	n/a	4/23/98		4/23/98	n/a
335	TEMP	Temperature	21.4 °C	SM 2550 B	1	n/a	4/19/98		4/19/98	n/a
336	TIME	Cl2 Incubation Time	7.3 hrs	n/a	1	n/a	4/23/98		4/23/98	n/a
337	TOC-ICR	TOC	0.82 mg/L	SM 5310 C	1	0.50	4/19/98		4/20/98	7-0-242
338	TOC-ICR	TOC (Dupl)	0.83 mg/L	SM 5310 C	1	0.50	4/19/98		4/20/98	7-0-242
			0.82 mg/L	1.2 % RPD						
339	TOX-ICR	TOX	27 µg Cl-/L	SM 5320 B	1	25	4/23/98		4/28/98	12-0-124
340	TOX-ICR	TOX (Dupl)	27 µg Cl-/L	SM 5320 B	1	25	4/23/98		4/28/98	12-0-124
			27 µg Cl-/L	0.0 % RPD						
341	THM-ICR	1,2,3-Trichloropropane (Surrogate)	91.2 %	EPA 551.1	1	1.0	4/23/98	4/30/98	4/30/98	0-120-0
342	THM-ICR	Bromodichloromethane	1.1 µg/L	EPA 551.1	1	1.0	4/23/98	4/30/98	4/30/98	0-120-0
343	THM-ICR	Bromoform	13.2 µg/L	EPA 551.1	1	1.0	4/23/98	4/30/98	4/30/98	0-120-0
344	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	4/23/98	4/30/98	4/30/98	0-120-0
345	THM-ICR	Dibromochloromethane	5.5 µg/L	EPA 551.1	1	1.0	4/23/98	4/30/98	4/30/98	0-120-0
346	UV-ICR	UV	0.010 1/cm	SM 5910 B	1	0.009	4/19/98		4/20/98	8-0-167
347	UV-ICR	UV (Dupl)	0.010 1/cm	SM 5910 B	1	0.009	4/19/98		4/20/98	8-0-167
			0.010 1/cm	0.0 % RPD						

Sample ID: 110.10.Eff-19

S&H ID: 9804-323

Date Sampled: 4/19/98 6:54:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
348	Cl2Dose	Chlorine Dose	3.30	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/23/98		4/23/98	n/a
349	Cl2Res	Chlorine Residual	1.14	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/23/98		4/23/98	n/a
350	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	112.4	%	EPA 552.2	1	1.0	4/23/98	5/4/98	5/5/98	0-121-0
351	HAA-ICR	2-Bromopropionic acid (Surrogate)	94.0	%	EPA 552.2	1	1.0	4/23/98	5/4/98	5/5/98	0-121-0
352	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/5/98	0-121-0
353	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/5/98	0-121-0
354	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/23/98	5/4/98	5/5/98	0-121-0
355	HAA-ICR	Dibromoacetic acid	2.7	µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/5/98	0-121-0
356	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/5/98	0-121-0
357	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/5/98	0-121-0
358	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/23/98	5/4/98	5/5/98	0-121-0
359	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	4/23/98	5/4/98	5/5/98	0-121-0
360	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/5/98	0-121-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

361	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	4/23/98	4/23/98	n/a
362	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	4/23/98	4/23/98	n/a
363	pH	pH	7.9 Unit	SM 4500-H+ B	1	n/a	4/19/98	4/19/98	n/a
364	TEMP	Cl2 Temperature	27.4 °C	SM 2550 B	1	n/a	4/23/98	4/23/98	n/a
365	TEMP	Temperature	21.7 °C	SM 2550 B	1	n/a	4/19/98	4/19/98	n/a
366	TIME	Cl2 Incubation Time	7.3 hrs	n/a	1	n/a	4/23/98	4/23/98	n/a
367	TOC-ICR	TOC	1.14 mg/L	SM 5310 C	1	0.50	4/19/98	4/20/98	7-0-242
368	TOC-ICR	TOC (Dupl)	1.12 mg/L	SM 5310 C	1	0.50	4/19/98	4/20/98	7-0-242
			1.13 mg/L	1.8 % RPD					
369	TOX-ICR	TOX	37 µg Cl-/L	SM 5320 B	1	25	4/23/98	4/28/98	12-0-124
370	TOX-ICR	TOX (Dupl)	33 µg Cl-/L	SM 5320 B	1	25	4/23/98	4/28/98	12-0-124
			35 µg Cl-/L	11.4 % RPD					
371	THM-ICR	1,2,3-Trichloropropane (Surrogate)	99.2 %	EPA 551.1	1	1.0	4/23/98	4/30/98	0-120-0
372	THM-ICR	Bromodichloromethane	1.7 µg/L	EPA 551.1	1	1.0	4/23/98	4/30/98	0-120-0
373	THM-ICR	Bromoform	16.2 µg/L	EPA 551.1	1	1.0	4/23/98	4/30/98	0-120-0
374	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	4/23/98	4/30/98	0-120-0
375	THM-ICR	Dibromochloromethane	7.7 µg/L	EPA 551.1	1	1.0	4/23/98	4/30/98	0-120-0
376	UV-ICR	UV	0.012 1/cm	SM 5910 B	1	0.009	4/19/98	4/20/98	8-0-167
377	UV-ICR	UV (Dupl)	0.012 1/cm	SM 5910 B	1	0.009	4/19/98	4/20/98	8-0-167
			0.012 1/cm	0.0 % RPD					

Sample ID: 110.10.Eff-21

S&H ID: 9804-332

Date Sampled: 4/20/98 10:18:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
378	Cl2Dose	Chlorine Dose	3.33	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/23/98		4/23/98	n/a
379	Cl2Res	Chlorine Residual	1.16	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/23/98		4/23/98	n/a
380	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	104.4	%	EPA 552.2	1	1.0	4/23/98	5/4/98	5/5/98	0-121-0
381	HAA-ICR	2-Bromopropionic acid (Surrogate)	94.0	%	EPA 552.2	1	1.0	4/23/98	5/4/98	5/5/98	0-121-0
382	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/5/98	0-121-0
383	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/5/98	0-121-0
384	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/23/98	5/4/98	5/5/98	0-121-0
385	HAA-ICR	Dibromoacetic acid	3.3	µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/5/98	0-121-0
386	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/5/98	0-121-0
387	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/5/98	0-121-0
388	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/23/98	5/4/98	5/5/98	0-121-0
389	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	4/23/98	5/4/98	5/5/98	0-121-0
390	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/23/98	5/4/98	5/5/98	0-121-0
391	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	4/23/98		4/23/98	n/a
392	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	4/23/98		4/23/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

393	pH	pH	8.0	Unit	SM 4500-H+ B	1	n/a	4/20/98	4/20/98	n/a
394	TEMP	Cl2 Temperature	27.4	°C	SM 2550 B	1	n/a	4/23/98	4/23/98	n/a
395	TEMP	Temperature	20.5	°C	SM 2550 B	1	n/a	4/20/98	4/20/98	n/a
396	TIME	Cl2 Incubation Time	7.4	hrs	n/a	1	n/a	4/23/98	4/23/98	n/a
397	TOC-ICR	TOC	1.23	mg/L	SM 5310 C	1	0.50	4/20/98	4/20/98	7-0-242
398	TOC-ICR	TOC (Dupl)	1.15	mg/L	SM 5310 C	1	0.50	4/20/98	4/21/98	7-0-242
			1.19	mg/L	6.7 % RPD					
399	TOX-ICR	TOX	44	µg Cl-/L	SM 5320 B	1	25	4/23/98	4/28/98	12-0-124
400	TOX-ICR	TOX (Dupl)	42	µg Cl-/L	SM 5320 B	1	25	4/23/98	4/28/98	12-0-124
			43	µg Cl-/L	4.7 % RPD					
401	THM-ICR	1,2,3-Trichloropropane (Surrogate)	98.4	%	EPA 551.1	1	1.0	4/23/98	4/30/98	4/30/98 0-120-0
402	THM-ICR	Bromodichloromethane	2.1	µg/L	EPA 551.1	1	1.0	4/23/98	4/30/98	4/30/98 0-120-0
403	THM-ICR	Bromoform	18.7	µg/L	EPA 551.1	1	1.0	4/23/98	4/30/98	4/30/98 0-120-0
404	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	4/23/98	4/30/98	4/30/98 0-120-0
405	THM-ICR	Dibromochloromethane	9.6	µg/L	EPA 551.1	1	1.0	4/23/98	4/30/98	4/30/98 0-120-0
406	UV-ICR	UV	0.015	1/cm	SM 5910 B	1	0.009	4/20/98	4/22/98	8-0-168
407	UV-ICR	UV (Dupl)	0.015	1/cm	SM 5910 B	1	0.009	4/20/98	4/22/98	8-0-168
			0.015	1/cm	0.0 % RPD					

Sample ID: 110.20.Eff-6 S&H ID: 9804-333 Date Sampled: 4/20/98 10:16:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
408	Cl2Dose	Chlorine Dose	2.85	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/24/98		4/24/98	n/a
409	Cl2Res	Chlorine Residual	1.42	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/24/98		4/24/98	n/a
410	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	110.8	%	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
411	HAA-ICR	2-Bromopropionic acid (Surrogate)	94.4	%	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
412	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
413	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
414	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/24/98	5/4/98	5/5/98	0-121-0
415	HAA-ICR	Dibromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
416	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
417	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
418	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/24/98	5/4/98	5/5/98	0-121-0
419	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	4/24/98	5/4/98	5/5/98	0-121-0
420	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
421	pH	Cl2 pH - Final	7.7	Unit	SM 4500-H+ B	1	n/a	4/24/98		4/24/98	n/a
422	pH	Cl2 pH - Initial	7.6	Unit	SM 4500-H+ B	1	n/a	4/24/98		4/24/98	n/a
423	pH	pH	7.9	Unit	SM 4500-H+ B	1	n/a	4/20/98		4/20/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

424	TEMP	Cl2 Temperature	27.4 °C	SM 2550 B	1	n/a	4/24/98	4/24/98	n/a
425	TEMP	Temperature	20.2 °C	SM 2550 B	1	n/a	4/20/98	4/20/98	n/a
426	TIME	Cl2 Incubation Time	7.3 hrs	n/a	1	n/a	4/24/98	4/24/98	n/a
427	TOC-ICR	TOC	ND mg/L	SM 5310 C	1	0.50	4/20/98	4/20/98	7-0-242
428	TOC-ICR	TOC (Dupl)	ND mg/L	SM 5310 C	1	0.50	4/20/98	4/21/98	7-0-242
			ND mg/L						
429	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	4/24/98	4/28/98	12-0-124
430	TOX-ICR	TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	4/24/98	4/28/98	12-0-124
			ND µg Cl-/L						
431	THM-ICR	1,2,3-Trichloropropane (Surrogate)	93.2 %	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
432	THM-ICR	1,2,3-Trichloropropane (Surrogate) (Lab Dupl)	99.2 %	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
			96.2 %	6.2 % RPD					
433	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
434	THM-ICR	Bromodichloromethane (Lab Dupl)	ND µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
			ND µg/L						
435	THM-ICR	Bromoform	2.2 µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
436	THM-ICR	Bromoform (Lab Dupl)	2.4 µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
			2.3 µg/L	8.7 % RPD					
437	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
438	THM-ICR	Chloroform (Lab Dupl)	ND µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
			ND µg/L						
439	THM-ICR	Dibromochloromethane	ND µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
440	THM-ICR	Dibromochloromethane (Lab Dupl)	ND µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
			ND µg/L						
441	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	4/20/98	4/22/98	8-0-168
442	UV-ICR	UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	4/20/98	4/22/98	8-0-168
			ND 1/cm						

Sample ID: 110.10.Eff-22

S&H ID: 9804-336

Date Sampled: 4/20/98 5:32:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
443	Cl2Dose	Chlorine Dose	3.23	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/25/98		4/25/98	n/a
444	Cl2Res	Chlorine Residual	1.07	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/25/98		4/25/98	n/a
445	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	112.8	%	EPA 552.2	1	1.0	4/25/98	5/4/98	5/5/98	0-121-0
446	HAA-ICR	2-Bromopropionic acid (Surrogate)	93.2	%	EPA 552.2	1	1.0	4/25/98	5/4/98	5/5/98	0-121-0
447	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/25/98	5/4/98	5/5/98	0-121-0
448	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/25/98	5/4/98	5/5/98	0-121-0
449	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/25/98	5/4/98	5/5/98	0-121-0
450	HAA-ICR	Dibromoacetic acid	3.4	µg/L	EPA 552.2	1	1.0	4/25/98	5/4/98	5/5/98	0-121-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

451	HAA-ICR	Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/25/98	5/4/98	5/5/98	0-121-0
452	HAA-ICR	Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	4/25/98	5/4/98	5/5/98	0-121-0
453	HAA-ICR	Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	4/25/98	5/4/98	5/5/98	0-121-0
454	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	4/25/98	5/4/98	5/5/98	0-121-0
455	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/25/98	5/4/98	5/5/98	0-121-0
456	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	4/25/98		4/25/98	n/a
457	pH	Cl2 pH - Initial	7.8 Unit	SM 4500-H+ B	1	n/a	4/25/98		4/25/98	n/a
458	pH	pH	7.9 Unit	SM 4500-H+ B	1	n/a	4/20/98		4/20/98	n/a
459	TEMP	Cl2 Temperature	27.4 °C	SM 2550 B	1	n/a	4/25/98		4/25/98	n/a
460	TEMP	Temperature	23.8 °C	SM 2550 B	1	n/a	4/20/98		4/20/98	n/a
461	TIME	Cl2 Incubation Time	7.3 hrs	n/a	1	n/a	4/25/98		4/25/98	n/a
462	TOC-ICR	TOC	1.26 mg/L	SM 5310 C	1	0.50	4/20/98		4/21/98	7-0-242
463	TOC-ICR	TOC (Dupl)	1.28 mg/L	SM 5310 C	1	0.50	4/20/98			7-0-242
			1.27 mg/L	1.6 % RPD						
464	TOX-ICR	TOX	50 µg Cl-/L	SM 5320 B	1	25	4/25/98		4/28/98	12-0-124
465	TOX-ICR	TOX (Dupl)	50 µg Cl-/L	SM 5320 B	1	25	4/25/98		4/28/98	12-0-124
			50 µg Cl-/L	0.0 % RPD						
466	THM-ICR	1,2,3-Trichloropropane (Surrogate)	84.8 %	EPA 551.1	1	1.0	4/25/98	4/30/98	5/1/98	0-120-0
467	THM-ICR	Bromodichloromethane	2.2 µg/L	EPA 551.1	1	1.0	4/25/98	4/30/98	5/1/98	0-120-0
468	THM-ICR	Bromoform	20.8 µg/L	EPA 551.1	1	1.0	4/25/98	4/30/98	5/1/98	0-120-0
469	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	4/25/98	4/30/98	5/1/98	0-120-0
470	THM-ICR	Dibromochloromethane	10.3 µg/L	EPA 551.1	1	1.0	4/25/98	4/30/98	5/1/98	0-120-0
471	UV-ICR	UV	0.017 1/cm	SM 5910 B	1	0.009	4/20/98		4/22/98	8-0-168
472	UV-ICR	UV (Dupl)	0.017 1/cm	SM 5910 B	1	0.009	4/20/98		4/22/98	8-0-168
			0.017 1/cm	0.0 % RPD						

Sample ID: 110.10.Eff-23

S&H ID: 9804-337

Date Sampled: 4/21/98 12:57:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Sample	Prep.	Anal.	QC Batch
473	Cl2Dose	Chlorine Dose	3.26	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/24/98		4/24/98	n/a
474	Cl2Res	Chlorine Residual	1.02	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/24/98		4/24/98	n/a
475	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	107.2	%	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
476	HAA-ICR	2-Bromopropionic acid (Surrogate)	93.6	%	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
477	HAA-ICR	Bromochloroacetic acid	1.1	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
478	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
479	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/24/98	5/4/98	5/5/98	0-121-0
480	HAA-ICR	Dibromoacetic acid	3.8	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
481	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
482	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

483	HAA-ICR	Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	4/24/98	5/4/98	5/5/98	0-121-0
484	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	4/24/98	5/4/98	5/5/98	0-121-0
485	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
486	pH	Cl2 pH - Final	7.7 Unit	SM 4500-H+ B	1	n/a	4/24/98		4/24/98	n/a
487	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	4/24/98		4/24/98	n/a
488	pH	pH	8.0 Unit	SM 4500-H+ B	1	n/a	4/21/98		4/21/98	n/a
489	TEMP	Cl2 Temperature	27.4 °C	SM 2550 B	1	n/a	4/24/98		4/24/98	n/a
490	TEMP	Temperature	23.3 °C	SM 2550 B	1	n/a	4/21/98		4/21/98	n/a
491	TIME	Cl2 Incubation Time	7.2 hrs	n/a	1	n/a	4/24/98		4/24/98	n/a
492	TOC-ICR	TOC	1.31 mg/L	SM 5310 C	1	0.50	4/21/98		4/21/98	7-0-243
493	TOC-ICR	TOC (Dupl)	1.37 mg/L	SM 5310 C	1	0.50	4/21/98		4/21/98	7-0-243
			1.34 mg/L	4.5 % RPD						
494	TOX-ICR	TOX	58 µg Cl-/L	SM 5320 B	1	25	4/24/98		4/30/98	12-0-126
495	TOX-ICR	TOX (Dupl)	57 µg Cl-/L	SM 5320 B	1	25	4/24/98		4/30/98	12-0-126
			58 µg Cl-/L	1.7 % RPD						
496	THM-ICR	1,2,3-Trichloropropane (Surrogate)	95.2 %	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98	0-120-0
497	THM-ICR	Bromodichloromethane	2.5 µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98	0-120-0
498	THM-ICR	Bromoform	21.8 µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98	0-120-0
499	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98	0-120-0
500	THM-ICR	Dibromochloromethane	11.0 µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98	0-120-0
501	UV-ICR	UV	0.018 1/cm	SM 5910 B	1	0.009	4/21/98		4/22/98	8-0-168
502	UV-ICR	UV (Dupl)	0.018 1/cm	SM 5910 B	1	0.009	4/21/98		4/22/98	8-0-168
			0.018 1/cm	0.0 % RPD						

Sample ID: 110.10.Eff-23d

S&H ID: 9804-338

Date Sampled: 4/21/98 12:57:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
503	Cl2Dose	Chlorine Dose	3.27	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/24/98		4/24/98	n/a
504	Cl2Res	Chlorine Residual	1.11	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/24/98		4/24/98	n/a
505	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	105.6	%	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
506	HAA-ICR	2-Bromopropionic acid (Surrogate)	93.2	%	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
507	HAA-ICR	Bromochloroacetic acid	1.1	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
508	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
509	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/24/98	5/4/98	5/5/98	0-121-0
510	HAA-ICR	Dibromoacetic acid	3.8	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
511	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
512	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
513	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/24/98	5/4/98	5/5/98	0-121-0
514	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	4/24/98	5/4/98	5/5/98	0-121-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

515	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
516	pH	Cl2 pH - Final	7.7 Unit	SM 4500-H+ B	1	n/a	4/24/98		4/24/98	n/a
517	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	4/24/98		4/24/98	n/a
518	pH	pH	7.9 Unit	SM 4500-H+ B	1	n/a	4/21/98		4/21/98	n/a
519	TEMP	Cl2 Temperature	27.4 °C	SM 2550 B	1	n/a	4/24/98		4/24/98	n/a
520	TEMP	Temperature	23.4 °C	SM 2550 B	1	n/a	4/21/98		4/21/98	n/a
521	TIME	Cl2 Incubation Time	7.2 hrs	n/a	1	n/a	4/24/98		4/24/98	n/a
522	TOC-ICR	TOC	1.30 mg/L	SM 5310 C	1	0.50	4/21/98		4/21/98	7-0-243
523	TOC-ICR	TOC (Dupl)	1.39 mg/L	SM 5310 C	1	0.50	4/21/98		4/21/98	7-0-243
			1.35 mg/L	6.7 % RPD						
524	TOX-ICR	TOX	58 µg Cl-/L	SM 5320 B	1	25	4/24/98		4/30/98	12-0-126
525	TOX-ICR	TOX (Dupl)	56 µg Cl-/L	SM 5320 B	1	25	4/24/98		4/30/98	12-0-126
			57 µg Cl-/L	3.5 % RPD						
526	THM-ICR	1,2,3-Trichloropropane (Surrogate)	98.4 %	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98	0-120-0
527	THM-ICR	Bromodichloromethane	2.7 µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98	0-120-0
528	THM-ICR	Bromoform	22.5 µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98	0-120-0
529	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98	0-120-0
530	THM-ICR	Dibromochloromethane	11.7 µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98	0-120-0
531	UV-ICR	UV	0.017 1/cm	SM 5910 B	1	0.009	4/21/98		4/22/98	8-0-168
532	UV-ICR	UV (Dupl)	0.017 1/cm	SM 5910 B	1	0.009	4/21/98		4/22/98	8-0-168
			0.017 1/cm	0.0 % RPD						

Sample ID: 110.20.Eff-8

S&H ID: 9804-345

Date Sampled: 4/21/98 4:01:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
533	Cl2Dose	Chlorine Dose	2.91	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/24/98		4/24/98	n/a
534	Cl2Res	Chlorine Residual	1.67	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/24/98		4/24/98	n/a
535	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	106.4	%	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
536	HAA-ICR	2-Bromopropionic acid (Surrogate)	94.8	%	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
537	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
538	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
539	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/24/98	5/4/98	5/5/98	0-121-0
540	HAA-ICR	Dibromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
541	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
542	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
543	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/24/98	5/4/98	5/5/98	0-121-0
544	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	4/24/98	5/4/98	5/5/98	0-121-0
545	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
546	pH	Cl2 pH - Final	7.7	Unit	SM 4500-H+ B	1	n/a	4/24/98		4/24/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

547	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	4/24/98	4/24/98	n/a
548	pH	pH	8.0 Unit	SM 4500-H+ B	1	n/a	4/21/98	4/21/98	n/a
549	TEMP	Cl2 Temperature	27.4 °C	SM 2550 B	1	n/a	4/24/98	4/24/98	n/a
550	TEMP	Temperature	22.1 °C	SM 2550 B	1	n/a	4/21/98	4/21/98	n/a
551	TIME	Cl2 Incubation Time	7.3 hrs	n/a	1	n/a	4/24/98	4/24/98	n/a
552	TOC-ICR	TOC	0.56 mg/L	SM 5310 C	1	0.50	4/21/98	4/21/98	7-0-243
553	TOC-ICR	TOC (Dupl)	0.54 mg/L	SM 5310 C	1	0.50	4/21/98	4/21/98	7-0-243
			0.55 mg/L	3.6 % RPD					
554	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	4/24/98	4/30/98	12-0-126
555	TOX-ICR	TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	4/24/98	4/30/98	12-0-126
			ND µg Cl-/L						
556	THM-ICR	1,2,3-Trichloropropane (Surrogate)	92.4 %	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
557	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
558	THM-ICR	Bromoform	3.8 µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
559	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
560	THM-ICR	Dibromochloromethane	1.2 µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
561	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	4/21/98	4/22/98	8-0-168
562	UV-ICR	UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	4/21/98	4/22/98	8-0-168
			ND 1/cm						

Sample ID: 110.20.Eff-11

S&H ID: 9804-363

Date Sampled: 4/22/98 1:31:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
563	Cl2Dose	Chlorine Dose	2.94	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/24/98		4/24/98	n/a
564	Cl2Res	Chlorine Residual	1.68	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/24/98		4/24/98	n/a
565	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	101.2	%	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
566	HAA-ICR	2-Bromopropionic acid (Surrogate)	98.0	%	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
567	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
568	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
569	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/24/98	5/4/98	5/5/98	0-121-0
570	HAA-ICR	Dibromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
571	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
572	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
573	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/24/98	5/4/98	5/5/98	0-121-0
574	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	4/24/98	5/4/98	5/5/98	0-121-0
575	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
576	pH	Cl2 pH - Final	7.7	Unit	SM 4500-H+ B	1	n/a	4/24/98		4/24/98	n/a
577	pH	Cl2 pH - Initial	7.6	Unit	SM 4500-H+ B	1	n/a	4/24/98		4/24/98	n/a
578	pH	pH	7.9	Unit	SM 4500-H+ B	1	n/a	4/22/98		4/22/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

579	TEMP	Cl2 Temperature	27.4 °C	SM 2550 B	1	n/a	4/24/98	4/24/98	n/a
580	TEMP	Temperature	21.5 °C	SM 2550 B	1	n/a	4/22/98	4/22/98	n/a
581	TIME	Cl2 Incubation Time	7.3 hrs	n/a	1	n/a	4/24/98	4/24/98	n/a
582	TOC-ICR	TOC	0.63 mg/L	SM 5310 C	1	0.50	4/22/98	4/22/98	7-0-244
583	TOC-ICR	TOC (Dupl)	0.62 mg/L	SM 5310 C	1	0.50	4/22/98	4/22/98	7-0-244
			0.63 mg/L	1.6 % RPD					
584	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	4/24/98	4/29/98	12-0-125
585	TOX-ICR	TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	4/24/98	4/29/98	12-0-125
			ND µg Cl-/L						
586	THM-ICR	1,2,3-Trichloropropane (Surrogate)	102.8 %	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
587	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
588	THM-ICR	Bromoform	4.6 µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
589	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
590	THM-ICR	Dibromochloromethane	1.6 µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
591	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	4/22/98	4/23/98	8-0-169
592	UV-ICR	UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	4/22/98	4/23/98	8-0-169
			ND 1/cm						

Sample ID: 110.20.Eff-11d

S&H ID: 9804-364

Date Sampled: 4/22/98 1:31:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
593	Cl2Dose	Chlorine Dose	2.94	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/24/98		4/24/98	n/a
594	Cl2Res	Chlorine Residual	1.63	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/24/98		4/24/98	n/a
595	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	105.2	%	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
596	HAA-ICR	2-Bromopropionic acid (Surrogate)	77.2	%	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
597	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
598	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
599	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/24/98	5/4/98	5/5/98	0-121-0
600	HAA-ICR	Dibromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
601	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
602	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
603	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/24/98	5/4/98	5/5/98	0-121-0
604	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	4/24/98	5/4/98	5/5/98	0-121-0
605	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
606	pH	Cl2 pH - Final	7.7	Unit	SM 4500-H+ B	1	n/a	4/24/98		4/24/98	n/a
607	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	4/24/98		4/24/98	n/a
608	pH	pH	7.9	Unit	SM 4500-H+ B	1	n/a	4/22/98		4/22/98	n/a
609	TEMP	Cl2 Temperature	27.4	°C	SM 2550 B	1	n/a	4/24/98		4/24/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

610	TEMP	Temperature	21.6 °C	SM 2550 B	1	n/a	4/22/98	4/22/98	n/a
611	TIME	Cl2 Incubation Time	7.4 hrs	n/a	1	n/a	4/24/98	4/24/98	n/a
612	TOC-ICR	TOC	0.61 mg/L	SM 5310 C	1	0.50	4/22/98	4/22/98	7-0-244
613	TOC-ICR	TOC (Dupl)	0.64 mg/L	SM 5310 C	1	0.50	4/22/98	4/22/98	7-0-244
			0.63 mg/L	4.8 % RPD					
614	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	4/24/98	4/29/98	12-0-125
615	TOX-ICR	TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	4/24/98	4/29/98	12-0-125
			ND µg Cl-/L						
616	THM-ICR	1,2,3-Trichloropropane (Surrogate)	96.0 %	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
617	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
618	THM-ICR	Bromoform	4.9 µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
619	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
620	THM-ICR	Dibromochloromethane	1.6 µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
621	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	4/22/98	4/23/98	8-0-169
622	UV-ICR	UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	4/22/98	4/23/98	8-0-169
			ND 1/cm						

Sample ID: 110.INF.B-3

S&H ID: 9804-370

Date Sampled: 4/22/98 12:35:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
623	Cl2Dose	Chlorine Dose	4.49	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/24/98		4/24/98	n/a
624	Cl2Res	Chlorine Residual	1.15	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/24/98		4/24/98	n/a
625	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	108.0	%	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
626	HAA-ICR	2-Bromopropionic acid (Surrogate)	91.2	%	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
627	HAA-ICR	Bromochloroacetic acid	2.6	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
628	HAA-ICR	Bromodichloroacetic acid	2.1	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
629	HAA-ICR	Chlorodibromoacetic acid	3.6	µg/L	EPA 552.2	1	2.0	4/24/98	5/4/98	5/5/98	0-121-0
630	HAA-ICR	Dibromoacetic acid	6.3	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
631	HAA-ICR	Dichloroacetic acid	1.7	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
632	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
633	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/24/98	5/4/98	5/5/98	0-121-0
634	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	4/24/98	5/4/98	5/5/98	0-121-0
635	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
636	pH	Cl2 pH - Final	7.7	Unit	SM 4500-H+ B	1	n/a	4/24/98		4/24/98	n/a
637	pH	Cl2 pH - Initial	7.6	Unit	SM 4500-H+ B	1	n/a	4/24/98		4/24/98	n/a
638	pH	pH	7.4	Unit	SM 4500-H+ B	1	n/a	4/22/98		4/22/98	n/a
639	TEMP	Cl2 Temperature	27.4	°C	SM 2550 B	1	n/a	4/24/98		4/24/98	n/a
640	TEMP	Temperature	15.7	°C	SM 2550 B	1	n/a	4/22/98		4/22/98	n/a
641	TIME	Cl2 Incubation Time	7.4	hrs	n/a	1	n/a	4/24/98		4/24/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

642	TOC-ICR TOC	1.95 mg/L	SM 5310 C	1	0.50	4/22/98	4/22/98	7-0-244
643	TOC-ICR TOC (Dupl)	1.99 mg/L	SM 5310 C	1	0.50	4/22/98	4/22/98	7-0-244
		1.97 mg/L	2.0 % RPD					
644	TOX-ICR TOX	132 µg Cl-/L	SM 5320 B	1	25	4/24/98	4/29/98	12-0-125
645	TOX-ICR TOX (Dupl)	125 µg Cl-/L	SM 5320 B	1	25	4/24/98	4/29/98	12-0-125
		129 µg Cl-/L	5.4 % RPD					
646	THM-ICR 1,2,3-Trichloropropane (Surrogate)	92.0 %	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
647	THM-ICR Bromodichloromethane	11.5 µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
648	THM-ICR Bromoform	33.0 µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
649	THM-ICR Chloroform	3.1 µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
650	THM-ICR Dibromochloromethane	30.7 µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	4/30/98 0-120-0
651	TURB Turbidity	0.10 ntu	SM 2130 B	1	0.05	4/22/98	4/22/98	9-0-9
652	UV-ICR UV	0.046 1/cm	SM 5910 B	1	0.009	4/22/98	4/23/98	8-0-169
653	UV-ICR UV (Dupl)	0.046 1/cm	SM 5910 B	1	0.009	4/22/98	4/23/98	8-0-169
		0.046 1/cm	0.0 % RPD					

Sample ID: 110.INF.A-2

S&H ID: 9804-371

Date Sampled: 4/22/98 12:30:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
654	ALK	Alkalinity	128	mg/L	SM 2320 B	1	5	4/22/98		4/22/98	1-0-19
655	ALK	Alkalinity (Dupl)	130	mg/L	SM 2320 B	1	5	4/22/98		4/22/98	1-0-19
			129 mg/L		1.6 % RPD						
656	NH3	Ammonia Nitrogen	0.13	mg/L	EPA 350.1	1	0.05	4/22/98		5/7/98	MW77103
657	BR	Bromide	0.460	mg/L	EPA 300.0 A	2	0.040	4/22/98		5/11/98	MW77255
658	CaHardM	Calcium Hardness	232	mg/L CaCO3	EPA 200.7	1	5	4/22/98		5/5/98	MW n/a
659	CaMW	Calcium, Total, ICAP	93	mg/L	EPA 200.7	1	1	4/22/98	5/4/98	5/4/98	MW76928
660	MgMW	Magnesium, Total, ICAP	39	mg/L	EPA 200.7	1	0	4/22/98	5/4/98	5/4/98	MW76929
661	TotHard	Total Hardness as CaCO3 by ICP	393	mg/L CaCO3	SM 2340B	1	5	4/22/98		5/5/98	MW n/a

Sample ID: 110.10.Eff-27

S&H ID: 9804-376

Date Sampled: 4/22/98 4:53:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
662	Cl2Dose	Chlorine Dose	3.31	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/24/98		4/24/98	n/a
663	Cl2Res	Chlorine Residual	0.97	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/24/98		4/24/98	n/a
664	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	105.6	%	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
665	HAA-ICR	2-Bromopropionic acid (Surrogate)	94.4	%	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
666	HAA-ICR	Bromochloroacetic acid	1.1	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
667	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

668	HAA-ICR	Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	4/24/98	5/4/98	5/5/98	0-121-0
669	HAA-ICR	Dibromoacetic acid	3.4 µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
670	HAA-ICR	Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
671	HAA-ICR	Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
672	HAA-ICR	Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	4/24/98	5/4/98	5/5/98	0-121-0
673	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	4/24/98	5/4/98	5/5/98	0-121-0
674	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
675	pH	Cl2 pH - Final	7.7 Unit	SM 4500-H+ B	1	n/a	4/24/98		4/24/98	n/a
676	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	4/24/98		4/24/98	n/a
677	pH	pH	7.8 Unit	SM 4500-H+ B	1	n/a	4/22/98		4/22/98	n/a
678	TEMP	Cl2 Temperature	27.4 °C	SM 2550 B	1	n/a	4/24/98		4/24/98	n/a
679	TEMP	Temperature	22.2 °C	SM 2550 B	1	n/a	4/22/98		4/22/98	n/a
680	TIME	Cl2 Incubation Time	7.2 hrs	n/a	1	n/a	4/24/98		4/24/98	n/a
681	TOC-ICR	TOC	1.44 mg/L	SM 5310 C	1	0.50	4/22/98		4/22/98	7-0-244
682	TOC-ICR	TOC (Dupl)	1.43 mg/L	SM 5310 C	1	0.50	4/22/98		4/22/98	7-0-244
			1.44 mg/L	0.7 % RPD						
683	TOX-ICR	TOX	69 µg Cl-/L	SM 5320 B	1	25	4/24/98		4/30/98	12-0-126
684	TOX-ICR	TOX (Dupl)	69 µg Cl-/L	SM 5320 B	1	25	4/24/98		4/30/98	12-0-126
			69 µg Cl-/L	0.0 % RPD						
685	THM-ICR	1,2,3-Trichloropropane (Surrogate)	94.0 %	EPA 551.1	1	1.0	4/24/98	4/30/98	5/1/98	0-120-0
686	THM-ICR	Bromodichloromethane	3.3 µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	5/1/98	0-120-0
687	THM-ICR	Bromoform	24.7 µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	5/1/98	0-120-0
688	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	5/1/98	0-120-0
689	THM-ICR	Dibromochloromethane	13.9 µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	5/1/98	0-120-0
690	UV-ICR	UV	0.022 1/cm	SM 5910 B	1	0.009	4/22/98		4/23/98	8-0-169
691	UV-ICR	UV (Dupl)	0.022 1/cm	SM 5910 B	1	0.009	4/22/98		4/23/98	8-0-169
			0.022 1/cm	0.0 % RPD						

Sample ID: 110.20.Eff-13

S&H ID: 9804-387

Date Sampled: 4/22/98 10:46:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
692	Cl2Dose	Chlorine Dose	2.98	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/24/98		4/24/98	n/a
693	Cl2Res	Chlorine Residual	1.66	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/24/98		4/24/98	n/a
694	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	108.4	%	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
695	HAA-ICR	2-Bromopropionic acid (Surrogate)	94.8	%	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
696	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
697	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
698	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/24/98	5/4/98	5/5/98	0-121-0
699	HAA-ICR	Dibromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

700	HAA-ICR	Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
701	HAA-ICR	Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
702	HAA-ICR	Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	4/24/98	5/4/98	5/5/98	0-121-0
703	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	4/24/98	5/4/98	5/5/98	0-121-0
704	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/24/98	5/4/98	5/5/98	0-121-0
705	pH	Cl2 pH - Final	7.7 Unit	SM 4500-H+ B	1	n/a	4/24/98		4/24/98	n/a
706	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	4/24/98		4/24/98	n/a
707	pH	pH	8.0 Unit	SM 4500-H+ B	1	n/a	4/22/98		4/22/98	n/a
708	TEMP	Cl2 Temperature	27.4 °C	SM 2550 B	1	n/a	4/24/98		4/24/98	n/a
709	TEMP	Temperature	21.6 °C	SM 2550 B	1	n/a	4/22/98		4/22/98	n/a
710	TIME	Cl2 Incubation Time	7.4 hrs	n/a	1	n/a	4/24/98		4/24/98	n/a
711	TOC-ICR	TOC	0.71 mg/L	SM 5310 C	1	0.50	4/22/98		4/23/98	7-0-245
712	TOC-ICR	TOC (Dupl)	0.71 mg/L	SM 5310 C	1	0.50	4/22/98		4/23/98	7-0-245
			0.71 mg/L	0.0 % RPD						
713	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	4/24/98		4/29/98	12-0-125
714	TOX-ICR	TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	4/24/98		4/29/98	12-0-125
			ND µg Cl-/L							
715	THM-ICR	1,2,3-Trichloropropane (Surrogate)	90.8 %	EPA 551.1	1	1.0	4/24/98	4/30/98	5/1/98	0-120-0
716	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	5/1/98	0-120-0
717	THM-ICR	Bromoform	5.4 µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	5/1/98	0-120-0
718	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	5/1/98	0-120-0
719	THM-ICR	Dibromochloromethane	2.0 µg/L	EPA 551.1	1	1.0	4/24/98	4/30/98	5/1/98	0-120-0
720	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	4/22/98		4/23/98	8-0-169
721	UV-ICR	UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	4/22/98		4/23/98	8-0-169
			ND 1/cm							

Sample ID: 110.10.Eff-28

S&H ID: 9804-397

Date Sampled: 4/23/98 11:04:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Sample	Prep.	Anal.	QC Batch
722	pH	pH	7.9	Unit	SM 4500-H+ B	1	n/a	4/23/98		4/23/98	n/a
723	TEMP	Temperature	22.0	°C	SM 2550 B	1	n/a	4/23/98		4/23/98	n/a
724	TOC-ICR	TOC	1.52	mg/L	SM 5310 C	1	0.50	4/23/98		4/24/98	7-0-246
725	TOC-ICR	TOC (Dupl)	1.48	mg/L	SM 5310 C	1	0.50	4/23/98		4/24/98	7-0-246
			1.50 mg/L		2.7 % RPD						

Sample ID: 110.20.Eff-15

S&H ID: 9804-398

Date Sampled: 4/23/98 7:55:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Sample	Prep.	Anal.	QC Batch
726	Cl2Dose	Chlorine Dose	2.44	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/28/98		4/28/98	n/a
727	Cl2Res	Chlorine Residual	1.22	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/28/98		4/28/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

728	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	106.0 %	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
729	HAA-ICR	2-Bromopropionic acid (Surrogate)	90.8 %	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
730	HAA-ICR	Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
731	HAA-ICR	Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
732	HAA-ICR	Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	4/28/98	5/4/98	5/5/98	0-121-0
733	HAA-ICR	Dibromoacetic acid	ND µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
734	HAA-ICR	Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
735	HAA-ICR	Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
736	HAA-ICR	Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	4/28/98	5/4/98	5/5/98	0-121-0
737	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	4/28/98	5/4/98	5/5/98	0-121-0
738	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
739	pH	Cl2 pH - Final	7.7 Unit	SM 4500-H+ B	1	n/a	4/28/98		4/28/98	n/a
740	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	4/28/98		4/28/98	n/a
741	pH	pH	7.8 Unit	SM 4500-H+ B	1	n/a	4/23/98		4/23/98	n/a
742	TEMP	Cl2 Temperature	27.3 °C	SM 2550 B	1	n/a	4/28/98		4/28/98	n/a
743	TEMP	Temperature	21.6 °C	SM 2550 B	1	n/a	4/23/98		4/23/98	n/a
744	TIME	Cl2 Incubation Time	7.2 hrs	n/a	1	n/a	4/28/98		4/28/98	n/a
745	TOC-ICR	TOC	0.85 mg/L	SM 5310 C	1	0.50	4/23/98		4/24/98	7-0-246
746	TOC-ICR	TOC (Dupl)	0.84 mg/L	SM 5310 C	1	0.50	4/23/98		4/24/98	7-0-246
			0.84 mg/L	1.2 % RPD						
747	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	4/28/98		4/30/98	12-0-126
748	TOX-ICR	TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	4/28/98		4/30/98	12-0-126
			ND µg Cl-/L							
749	THM-ICR	1,2,3-Trichloropropane (Surrogate)	90.4 %	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
750	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
751	THM-ICR	Bromoform	7.3 µg/L	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
752	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
753	THM-ICR	Dibromochloromethane	2.1 µg/L	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
754	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	4/23/98		4/25/98	8-0-170
755	UV-ICR	UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	4/23/98		4/25/98	8-0-170
			ND 1/cm							

Sample ID: 110.20.Eff-16

S&H ID: 9804-399

Date Sampled: 4/24/98 2:49:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
756	Cl2Dose	Chlorine Dose	2.50	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/28/98		4/28/98	n/a
757	Cl2Res	Chlorine Residual	1.23	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/28/98		4/28/98	n/a
758	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	114.0 %		EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

759	HAA-ICR	2-Bromopropionic acid (Surrogate)	92.4 %	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
760	HAA-ICR	Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
761	HAA-ICR	Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
762	HAA-ICR	Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	4/28/98	5/4/98	5/5/98	0-121-0
763	HAA-ICR	Dibromoacetic acid	1.0 µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
764	HAA-ICR	Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
765	HAA-ICR	Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
766	HAA-ICR	Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	4/28/98	5/4/98	5/5/98	0-121-0
767	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	4/28/98	5/4/98	5/5/98	0-121-0
768	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
769	pH	Cl2 pH - Final	7.7 Unit	SM 4500-H+ B	1	n/a	4/28/98		4/28/98	n/a
770	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	4/28/98		4/28/98	n/a
771	pH	pH	7.7 Unit	SM 4500-H+ B	1	n/a	4/24/98		4/24/98	n/a
772	TEMP	Cl2 Temperature	27.3 °C	SM 2550 B	1	n/a	4/28/98		4/28/98	n/a
773	TEMP	Temperature	21.8 °C	SM 2550 B	1	n/a	4/24/98		4/24/98	n/a
774	TIME	Cl2 Incubation Time	7.3 hrs	n/a	1	n/a	4/28/98		4/28/98	n/a
775	TOC-ICR	TOC	0.88 mg/L	SM 5310 C	1	0.50	4/24/98		4/24/98	7-0-246
776	TOC-ICR	TOC (Dupl)	0.92 mg/L	SM 5310 C	1	0.50	4/24/98		4/24/98	7-0-246
			0.90 mg/L	4.4 % RPD						
777	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	4/28/98		5/7/98	12-0-128
778	TOX-ICR	TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	4/28/98		5/7/98	12-0-128
			ND µg Cl-/L							
779	THM-ICR	1,2,3-Trichloropropane (Surrogate)	92.0 %	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
780	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
781	THM-ICR	Bromoform	7.5 µg/L	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
782	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
783	THM-ICR	Dibromochloromethane	2.2 µg/L	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
784	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	4/24/98		4/25/98	8-0-170
785	UV-ICR	UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	4/24/98		4/25/98	8-0-170
			ND 1/cm							

Sample ID: 110.20.Eff-20

S&H ID: 9804-420

Date Sampled: 4/25/98 2:18:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
786	pH	pH	7.6	Unit	SM 4500-H+ B	1	n/a	4/25/98		4/25/98	n/a
787	TEMP	Temperature	21.9	°C	SM 2550 B	1	n/a	4/25/98		4/25/98	n/a
788	TOC-ICR	TOC	0.95	mg/L	SM 5310 C	1	0.50	4/25/98		4/26/98	7-0-247
789	TOC-ICR	TOC (Dupl)	0.96	mg/L	SM 5310 C	1	0.50	4/25/98		4/26/98	7-0-247
			0.95 mg/L		1.1 % RPD						
790	UV-ICR	UV	ND	1/cm	SM 5910 B	1	0.009	4/25/98		4/26/98	8-0-171

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

791	UV-ICR	UV (Dupl)	ND 1/cm ND 1/cm	SM 5910 B	1	0.009	4/25/98	4/26/98	8-0-171
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Sample ID: 110.20.Eff-21

S&H ID: 9804-423

Date Sampled: 4/25/98 9:24:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
792	Cl2Dose	Chlorine Dose	2.58	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/28/98		4/28/98	n/a
793	Cl2Res	Chlorine Residual	1.29	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/28/98		4/28/98	n/a
794	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	108.4	%	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
795	HAA-ICR	2-Bromopropionic acid (Surrogate)	92.0	%	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
796	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
797	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
798	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/28/98	5/4/98	5/5/98	0-121-0
799	HAA-ICR	Dibromoacetic acid	1.4	µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
800	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
801	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
802	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/28/98	5/4/98	5/5/98	0-121-0
803	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	4/28/98	5/4/98	5/5/98	0-121-0
804	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
805	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	4/28/98		4/28/98	n/a
806	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	4/28/98		4/28/98	n/a
807	pH	pH	7.3	Unit	SM 4500-H+ B	1	n/a	4/25/98		4/25/98	n/a
808	TEMP	Cl2 Temperature	27.3	°C	SM 2550 B	1	n/a	4/28/98		4/28/98	n/a
809	TEMP	Temperature	21.8	°C	SM 2550 B	1	n/a	4/25/98		4/25/98	n/a
810	TIME	Cl2 Incubation Time	7.3	hrs	n/a	1	n/a	4/28/98		4/28/98	n/a
811	TOC-ICR	TOC	0.96	mg/L	SM 5310 C	1	0.50	4/25/98		4/26/98	7-0-247
812	TOC-ICR	TOC (Dupl)	1.00	mg/L	SM 5310 C	1	0.50	4/25/98		4/26/98	7-0-247
			0.98	mg/L	4.1 % RPD						
813	TOX-ICR	TOX	ND	µg Cl-/L	SM 5320 B	1	25	4/28/98		5/7/98	12-0-128
814	TOX-ICR	TOX (Dupl)	ND	µg Cl-/L	SM 5320 B	1	25	4/28/98		5/7/98	12-0-128
			ND	µg Cl-/L							
815	THM-ICR	1,2,3-Trichloropropane (Surrogate)	87.6	%	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
816	THM-ICR	Bromodichloromethane	ND	µg/L	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
817	THM-ICR	Bromoform	10.8	µg/L	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
818	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
819	THM-ICR	Dibromochloromethane	3.4	µg/L	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
820	UV-ICR	UV	0.010	1/cm	SM 5910 B	1	0.009	4/25/98		4/27/98	8-0-172
821	UV-ICR	UV (Dupl)	0.009	1/cm	SM 5910 B	1	0.009	4/25/98		4/27/98	8-0-172
			0.009	1/cm	11.1 % RPD						

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

Sample ID: 110.20.Eff-21d

S&H ID: 9804-424

Date Sampled: 4/25/98 9:24:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
822	Cl2Dose	Chlorine Dose	2.63	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/28/98		4/28/98	n/a
823	Cl2Res	Chlorine Residual	1.27	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/28/98		4/28/98	n/a
824	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	104.4	%	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
825	HAA-ICR	2-Bromopropionic acid (Surrogate)	91.6	%	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
826	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
827	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
828	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/28/98	5/4/98	5/5/98	0-121-0
829	HAA-ICR	Dibromoacetic acid	1.6	µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
830	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
831	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
832	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/28/98	5/4/98	5/5/98	0-121-0
833	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	4/28/98	5/4/98	5/5/98	0-121-0
834	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
835	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	4/28/98		4/28/98	n/a
836	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	4/28/98		4/28/98	n/a
837	pH	pH	7.3	Unit	SM 4500-H+ B	1	n/a	4/25/98		4/25/98	n/a
838	TEMP	Cl2 Temperature	27.3	°C	SM 2550 B	1	n/a	4/28/98		4/28/98	n/a
839	TEMP	Temperature	21.8	°C	SM 2550 B	1	n/a	4/25/98		4/25/98	n/a
840	TIME	Cl2 Incubation Time	7.3	hrs	n/a	1	n/a	4/28/98		4/28/98	n/a
841	TOC-ICR	TOC	1.03	mg/L	SM 5310 C	1	0.50	4/25/98		4/26/98	7-0-247
842	TOC-ICR	TOC (Dupl)	1.03	mg/L	SM 5310 C	1	0.50	4/25/98		4/26/98	7-0-247
			1.03	mg/L	0.0 % RPD						
843	TOX-ICR	TOX	ND	µg Cl-/L	SM 5320 B	1	25	4/28/98		5/6/98	12-0-127
844	TOX-ICR	TOX (Dupl)	ND	µg Cl-/L	SM 5320 B	1	25	4/28/98		5/6/98	12-0-127
			ND	µg Cl-/L							
845	THM-ICR	1,2,3-Trichloropropane (Surrogate)	85.2	%	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
846	THM-ICR	Bromodichloromethane	ND	µg/L	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
847	THM-ICR	Bromoform	11.6	µg/L	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
848	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
849	THM-ICR	Dibromochloromethane	3.7	µg/L	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
850	UV-ICR	UV	0.009	1/cm	SM 5910 B	1	0.009	4/25/98		4/27/98	8-0-172
851	UV-ICR	UV (Dupl)	0.009	1/cm	SM 5910 B	1	0.009	4/25/98		4/27/98	8-0-172
			0.009	1/cm	0.0 % RPD						

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

Sample ID: 110.20.Eff-24

S&H ID: 9804-430

Date Sampled: 4/26/98 5:51:00 PM

#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
852	Cl2Dose Chlorine Dose	2.72 mg/L as Cl2	SM 4500-Cl B	1	n/a	4/28/98		4/28/98	n/a
853	Cl2Res Chlorine Residual	1.41 mg/L as Cl2	SM 4500-Cl F	1	0.10	4/28/98		4/28/98	n/a
854	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	106.4 %	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
855	HAA-ICR 2-Bromopropionic acid (Surrogate)	95.2 %	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
856	HAA-ICR Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
857	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
858	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	4/28/98	5/4/98	5/5/98	0-121-0
859	HAA-ICR Dibromoacetic acid	1.7 µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
860	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
861	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
862	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	4/28/98	5/4/98	5/5/98	0-121-0
863	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	4/28/98	5/4/98	5/5/98	0-121-0
864	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/28/98	5/4/98	5/5/98	0-121-0
865	pH Cl2 pH - Final	7.7 Unit	SM 4500-H+ B	1	n/a	4/28/98		4/28/98	n/a
866	pH Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	4/28/98		4/28/98	n/a
867	pH pH	7.4 Unit	SM 4500-H+ B	1	n/a	4/26/98		4/26/98	n/a
868	TEMP Cl2 Temperature	27.3 °C	SM 2550 B	1	n/a	4/28/98		4/28/98	n/a
869	TEMP Temperature	21.6 °C	SM 2550 B	1	n/a	4/26/98		4/26/98	n/a
870	TIME Cl2 Incubation Time	7.4 hrs	n/a	1	n/a	4/28/98		4/28/98	n/a
871	TOC-ICR TOC	1.07 mg/L	SM 5310 C	1	0.50	4/26/98		4/27/98	7-0-248
872	TOC-ICR TOC (Dupl)	1.17 mg/L	SM 5310 C	1	0.50	4/26/98		4/27/98	7-0-248
		1.12 mg/L	8.9 % RPD						
873	TOX-ICR TOX	28 µg Cl-/L	SM 5320 B	1	25	4/28/98		5/6/98	12-0-127
874	TOX-ICR TOX (Dupl)	28 µg Cl-/L	SM 5320 B	1	25	4/28/98		5/6/98	12-0-127
		28 µg Cl-/L	0.0 % RPD						
875	THM-ICR 1,2,3-Trichloropropane (Surrogate)	104.0 %	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
876	THM-ICR Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
877	THM-ICR Bromoform	11.4 µg/L	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
878	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
879	THM-ICR Dibromochloromethane	4.3 µg/L	EPA 551.1	1	1.0	4/28/98	4/30/98	5/1/98	0-120-0
880	UV-ICR UV	0.010 1/cm	SM 5910 B	1	0.009	4/26/98		4/27/98	8-0-172
881	UV-ICR UV (Dupl)	0.010 1/cm	SM 5910 B	1	0.009	4/26/98		4/27/98	8-0-172
		0.010 1/cm	0.0 % RPD						

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

Sample ID: 110.INF.B-4		S&H ID: 9804-454		Date Sampled: 4/27/98 12:50:00 PM					
#	Analysis Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal. QC Batch
882	pH pH	7.4	Unit	SM 4500-H+ B	1	n/a	4/27/98		4/27/98 n/a
883	TEMP Temperature	18.9	°C	SM 2550 B	1	n/a	4/27/98		4/27/98 n/a
884	TOC-ICR TOC	2.10	mg/L	SM 5310 C	1	0.50	4/27/98		4/27/98 7-0-248
885	TOC-ICR TOC (Dupl)	2.05	mg/L	SM 5310 C	1	0.50	4/27/98		4/27/98 7-0-248
		2.08	mg/L	2.4 % RPD					

Sample ID: 110.20.Eff-32		S&H ID: 9804-480		Date Sampled: 4/29/98 8:25:00 AM					
#	Analysis Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal. QC Batch
886	Cl2Dose Chlorine Dose	2.45	mg/L as Cl2	SM 4500-Cl B	1	n/a	4/30/98		4/30/98 n/a
887	Cl2Res Chlorine Residual	1.23	mg/L as Cl2	SM 4500-Cl F	1	0.10	4/30/98		4/30/98 n/a
888	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	102.0	%	EPA 552.2	1	1.0	4/30/98	5/7/98	5/8/98 0-123-0
889	HAA-ICR 2-Bromopropionic acid (Surrogate)	95.6	%	EPA 552.2	1	1.0	4/30/98	5/7/98	5/8/98 0-123-0
890	HAA-ICR Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/30/98	5/7/98	5/8/98 0-123-0
891	HAA-ICR Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/30/98	5/7/98	5/8/98 0-123-0
892	HAA-ICR Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/30/98	5/7/98	5/8/98 0-123-0
893	HAA-ICR Dibromoacetic acid	2.1	µg/L	EPA 552.2	1	1.0	4/30/98	5/7/98	5/8/98 0-123-0
894	HAA-ICR Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/30/98	5/7/98	5/8/98 0-123-0
895	HAA-ICR Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/30/98	5/7/98	5/8/98 0-123-0
896	HAA-ICR Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	4/30/98	5/7/98	5/8/98 0-123-0
897	HAA-ICR Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	4/30/98	5/7/98	5/8/98 0-123-0
898	HAA-ICR Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	4/30/98	5/7/98	5/8/98 0-123-0
899	pH Cl2 pH - Final	7.7	Unit	SM 4500-H+ B	1	n/a	4/30/98		4/30/98 n/a
900	pH Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	4/30/98		4/30/98 n/a
901	pH pH	8.1	Unit	SM 4500-H+ B	1	n/a	4/29/98		4/29/98 n/a
902	TEMP Cl2 Temperature	26.6	°C	SM 2550 B	1	n/a	4/30/98		4/30/98 n/a
903	TEMP Temperature	22.0	°C	SM 2550 B	1	n/a	4/29/98		4/29/98 n/a
904	TIME Cl2 Incubation Time	7.1	hrs	n/a	1	n/a	4/30/98		4/30/98 n/a
905	TOC-ICR TOC	1.18	mg/L	SM 5310 C	1	0.50	4/29/98		4/29/98 7-0-250
906	TOC-ICR TOC (Dupl)	1.21	mg/L	SM 5310 C	1	0.50	4/29/98		4/29/98 7-0-250
		1.19	mg/L	2.5 % RPD					
907	TOX-ICR TOX	40	µg Cl-/L	SM 5320 B	1	25	4/30/98		5/7/98 12-0-128
908	TOX-ICR TOX (Dupl)	49	µg Cl-/L	SM 5320 B	1	25	4/30/98		5/7/98 12-0-128
		45	µg Cl-/L	20.0 % RPD					
909	THM-ICR 1,2,3-Trichloropropane (Surrogate)	103.6	%	EPA 551.1	1	1.0	4/30/98	5/5/98	5/5/98 0-122-0
910	THM-ICR Bromodichloromethane	ND	µg/L	EPA 551.1	1	1.0	4/30/98	5/5/98	5/5/98 0-122-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

911	THM-ICR Bromoform	14.7 µg/L	EPA 551.1	1	1.0	4/30/98	5/5/98	5/5/98	0-122-0
912	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	4/30/98	5/5/98	5/5/98	0-122-0
913	THM-ICR Dibromochloromethane	5.7 µg/L	EPA 551.1	1	1.0	4/30/98	5/5/98	5/5/98	0-122-0
914	UV-ICR UV	0.012 1/cm	SM 5910 B	1	0.009	4/29/98		4/29/98	8-0-173
915	UV-ICR UV (Dupl)	0.012 1/cm	SM 5910 B	1	0.009	4/29/98		4/29/98	8-0-173
		0.012 1/cm	0.0 % RPD						

Sample ID: 110.20.Eff-32d

S&H ID: 9804-481

Date Sampled: 4/29/98 8:25:00 AM

#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
916	Cl2Dose Chlorine Dose	2.45 mg/L as Cl2	SM 4500-Cl B	1	n/a	4/30/98		4/30/98	n/a
917	Cl2Res Chlorine Residual	1.24 mg/L as Cl2	SM 4500-Cl F	1	0.10	4/30/98		4/30/98	n/a
918	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	101.2 %	EPA 552.2	1	1.0	4/30/98	5/7/98	5/8/98	0-123-0
919	HAA-ICR 2-Bromopropionic acid (Surrogate)	97.2 %	EPA 552.2	1	1.0	4/30/98	5/7/98	5/8/98	0-123-0
920	HAA-ICR Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/30/98	5/7/98	5/8/98	0-123-0
921	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/30/98	5/7/98	5/8/98	0-123-0
922	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	4/30/98	5/7/98	5/8/98	0-123-0
923	HAA-ICR Dibromoacetic acid	2.2 µg/L	EPA 552.2	1	1.0	4/30/98	5/7/98	5/8/98	0-123-0
924	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/30/98	5/7/98	5/8/98	0-123-0
925	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	4/30/98	5/7/98	5/8/98	0-123-0
926	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	4/30/98	5/7/98	5/8/98	0-123-0
927	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	4/30/98	5/7/98	5/8/98	0-123-0
928	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	4/30/98	5/7/98	5/8/98	0-123-0
929	pH Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	4/30/98		4/30/98	n/a
930	pH Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	4/30/98		4/30/98	n/a
931	pH pH	8.1 Unit	SM 4500-H+ B	1	n/a	4/29/98		4/29/98	n/a
932	TEMP Cl2 Temperature	26.6 °C	SM 2550 B	1	n/a	4/30/98		4/30/98	n/a
933	TEMP Temperature	22.2 °C	SM 2550 B	1	n/a	4/29/98		4/29/98	n/a
934	TIME Cl2 Incubation Time	7.2 hrs	n/a	1	n/a	4/30/98		4/30/98	n/a
935	TOC-ICR TOC	1.22 mg/L	SM 5310 C	1	0.50	4/29/98		4/29/98	7-0-250
936	TOC-ICR TOC (Dupl)	1.16 mg/L	SM 5310 C	1	0.50	4/29/98		4/29/98	7-0-250
		1.19 mg/L	5.0 % RPD						
937	TOX-ICR TOX	32 µg Cl-/L	SM 5320 B	1	25	4/30/98		5/7/98	12-0-128
938	TOX-ICR TOX (Dupl)	35 µg Cl-/L	SM 5320 B	1	25	4/30/98		5/7/98	12-0-128
		34 µg Cl-/L	8.8 % RPD						
939	THM-ICR 1,2,3-Trichloropropane (Surrogate)	104.8 %	EPA 551.1	1	1.0	4/30/98	5/5/98	5/5/98	0-122-0
940	THM-ICR Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	4/30/98	5/5/98	5/5/98	0-122-0
941	THM-ICR Bromoform	16.0 µg/L	EPA 551.1	1	1.0	4/30/98	5/5/98	5/5/98	0-122-0
942	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	4/30/98	5/5/98	5/5/98	0-122-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

943	THM-ICR Dibromochloromethane	5.8 µg/L	EPA 551.1	1	1.0	4/30/98	5/5/98	5/5/98	0-122-0
944	UV-ICR UV	0.012 1/cm	SM 5910 B	1	0.009	4/29/98		4/29/98	8-0-173
945	UV-ICR UV (Dupl)	0.012 1/cm	SM 5910 B	1	0.009	4/29/98		4/29/98	8-0-173
		0.012 1/cm	0.0 % RPD						

Sample ID: 110.20.Eff-35

S&H ID: 9805-48

Date Sampled: 5/2/98 12:02:00 AM

#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
946	Cl2Dose Chlorine Dose	2.35 mg/L as Cl2	SM 4500-Cl B	1	n/a	5/5/98		5/5/98	n/a
947	Cl2Res Chlorine Residual	1.42 mg/L as Cl2	SM 4500-Cl F	1	0.10	5/5/98		5/5/98	n/a
948	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	107.2 %	EPA 552.2	1	1.0	5/5/98	5/12/98	5/13/98	0-127-0
949	HAA-ICR 2-Bromopropionic acid (Surrogate)	94.8 %	EPA 552.2	1	1.0	5/5/98	5/12/98	5/13/98	0-127-0
950	HAA-ICR Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	5/5/98	5/12/98	5/13/98	0-127-0
951	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	5/5/98	5/12/98	5/13/98	0-127-0
952	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	5/5/98	5/12/98	5/13/98	0-127-0
953	HAA-ICR Dibromoacetic acid	3.2 µg/L	EPA 552.2	1	1.0	5/5/98	5/12/98	5/13/98	0-127-0
954	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	5/5/98	5/12/98	5/13/98	0-127-0
955	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	5/5/98	5/12/98	5/13/98	0-127-0
956	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	5/5/98	5/12/98	5/13/98	0-127-0
957	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	5/5/98	5/12/98	5/13/98	0-127-0
958	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	5/5/98	5/12/98	5/13/98	0-127-0
959	pH Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	5/5/98		5/5/98	n/a
960	pH Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	5/5/98		5/5/98	n/a
961	pH pH	8.2 Unit	SM 4500-H+ B	1	n/a	5/2/98		5/2/98	n/a
962	TEMP Cl2 Temperature	26.8 °C	SM 2550 B	1	n/a	5/5/98		5/5/98	n/a
963	TEMP Temperature	22.5 °C	SM 2550 B	1	n/a	5/2/98		5/2/98	n/a
964	TIME Cl2 Incubation Time	7.2 hrs	n/a	1	n/a	5/5/98		5/5/98	n/a
965	TOC-ICR TOC	1.29 mg/L	SM 5310 C	1	0.50	5/2/98		5/3/98	7-0-253
966	TOC-ICR TOC (Dupl)	1.27 mg/L	SM 5310 C	1	0.50	5/2/98		5/3/98	7-0-253
		1.28 mg/L	1.6 % RPD						
967	TOX-ICR TOX	52 µg Cl-/L	SM 5320 B	1	25	5/5/98		5/12/98	12-0-131
968	TOX-ICR TOX (Dupl)	52 µg Cl-/L	SM 5320 B	1	25	5/5/98		5/12/98	12-0-131
		52 µg Cl-/L	0.0 % RPD						
969	THM-ICR 1,2,3-Trichloropropane (Surrogate)	103.2 %	EPA 551.1	1	1.0	5/5/98	5/9/98	5/9/98	0-125-0
970	THM-ICR Bromodichloromethane	1.6 µg/L	EPA 551.1	1	1.0	5/5/98	5/9/98	5/9/98	0-125-0
971	THM-ICR Bromoform	19.9 µg/L	EPA 551.1	1	1.0	5/5/98	5/9/98	5/9/98	0-125-0
972	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	5/5/98	5/9/98	5/9/98	0-125-0
973	THM-ICR Dibromochloromethane	9.0 µg/L	EPA 551.1	1	1.0	5/5/98	5/9/98	5/9/98	0-125-0
974	UV-ICR UV	0.015 1/cm	SM 5910 B	1	0.009	5/2/98		5/3/98	8-0-176

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 110
Study Title: ICR RSSCT #1

975	UV-ICR	UV (Dupl)	0.015	1/cm	SM 5910 B	1	0.009	5/2/98		5/3/98	8-0-176
			0.015	1/cm	0.0 % RPD						
<hr/>											
Sample ID: 110.20.Eff-37			S&H ID: 9805-78		Date Sampled: 5/4/98 7:58:00 AM						
#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
976	Cl2Dose	Chlorine Dose	2.50	mg/L as Cl2	SM 4500-Cl B	1	n/a	5/5/98		5/5/98	n/a
977	Cl2Res	Chlorine Residual	1.74	mg/L as Cl2	SM 4500-Cl F	1	0.10	5/5/98		5/5/98	n/a
978	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	104.4	%	EPA 552.2	1	1.0	5/5/98	5/19/98	5/19/98	0-129-0
979	HAA-ICR	2-Bromopropionic acid (Surrogate)	96.0	%	EPA 552.2	1	1.0	5/5/98	5/19/98	5/19/98	0-129-0
980	HAA-ICR	Bromochloroacetic acid	1.1	µg/L	EPA 552.2	1	1.0	5/5/98	5/19/98	5/19/98	0-129-0
981	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	5/5/98	5/19/98	5/19/98	0-129-0
982	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	5/5/98	5/19/98	5/19/98	0-129-0
983	HAA-ICR	Dibromoacetic acid	3.8	µg/L	EPA 552.2	1	1.0	5/5/98	5/19/98	5/19/98	0-129-0
984	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	5/5/98	5/19/98	5/19/98	0-129-0
985	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	5/5/98	5/19/98	5/19/98	0-129-0
986	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	5/5/98	5/19/98	5/19/98	0-129-0
987	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	5/5/98	5/19/98	5/19/98	0-129-0
988	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	5/5/98	5/19/98	5/19/98	0-129-0
989	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	5/5/98		5/5/98	n/a
990	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	5/5/98		5/5/98	n/a
991	pH	pH	8.2	Unit	SM 4500-H+ B	1	n/a	5/4/98		5/4/98	n/a
992	TEMP	Cl2 Temperature	26.8	°C	SM 2550 B	1	n/a	5/5/98		5/5/98	n/a
993	TEMP	Temperature	20.6	°C	SM 2550 B	1	n/a	5/4/98		5/4/98	n/a
994	TIME	Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	5/5/98		5/5/98	n/a
995	TOC-ICR	TOC	1.38	mg/L	SM 5310 C	1	0.50	5/4/98		5/4/98	7-0-256
996	TOC-ICR	TOC (Dupl)	1.40	mg/L	SM 5310 C	1	0.50	5/4/98		5/4/98	7-0-256
			1.39	mg/L	1.4 % RPD						
997	TOX-ICR	TOX	68	µg Cl-/L	SM 5320 B	1	25	5/5/98		5/13/98	12-0-132
998	TOX-ICR	TOX (Dupl)	58	µg Cl-/L	SM 5320 B	1	25	5/5/98		5/13/98	12-0-132
			63	µg Cl-/L	15.9 % RPD						
999	THM-ICR	1,2,3-Trichloropropane (Surrogate)	102.0	%	EPA 551.1	1	1.0	5/5/98	5/15/98	5/15/98	0-128-0
1000	THM-ICR	Bromodichloromethane	2.3	µg/L	EPA 551.1	1	1.0	5/5/98	5/15/98	5/15/98	0-128-0
1001	THM-ICR	Bromoform	21.9	µg/L	EPA 551.1	1	1.0	5/5/98	5/15/98	5/15/98	0-128-0
1002	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	5/5/98	5/15/98	5/15/98	0-128-0
1003	THM-ICR	Dibromochloromethane	11.3	µg/L	EPA 551.1	1	1.0	5/5/98	5/15/98	5/15/98	0-128-0
1004	UV-ICR	UV	0.018	1/cm	SM 5910 B	1	0.009	5/4/98		5/5/98	8-0-178
1005	UV-ICR	UV (Dupl)	0.018	1/cm	SM 5910 B	1	0.009	5/4/98		5/5/98	8-0-178
			0.018	1/cm	0.0 % RPD						

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

Sample ID: 110.INF.B-5

S&H ID: 9805-89

Date Sampled: 5/4/98 2:35:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1006	Cl2Dose	Chlorine Dose	4.30	mg/L as Cl2	SM 4500-Cl B	1	n/a	5/5/98		5/5/98	n/a
1007	Cl2Res	Chlorine Residual	1.15	mg/L as Cl2	SM 4500-Cl F	1	0.10	5/5/98		5/5/98	n/a
1008	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	104.0	%	EPA 552.2	1	1.0	5/5/98	5/19/98	5/19/98	0-129-0
1009	HAA-ICR	2-Bromopropionic acid (Surrogate)	93.6	%	EPA 552.2	1	1.0	5/5/98	5/19/98	5/19/98	0-129-0
1010	HAA-ICR	Bromochloroacetic acid	3.0	µg/L	EPA 552.2	1	1.0	5/5/98	5/19/98	5/19/98	0-129-0
1011	HAA-ICR	Bromodichloroacetic acid	2.2	µg/L	EPA 552.2	1	1.0	5/5/98	5/19/98	5/19/98	0-129-0
1012	HAA-ICR	Chlorodibromoacetic acid	3.4	µg/L	EPA 552.2	1	2.0	5/5/98	5/19/98	5/19/98	0-129-0
1013	HAA-ICR	Dibromoacetic acid	6.8	µg/L	EPA 552.2	1	1.0	5/5/98	5/19/98	5/19/98	0-129-0
1014	HAA-ICR	Dichloroacetic acid	1.7	µg/L	EPA 552.2	1	1.0	5/5/98	5/19/98	5/19/98	0-129-0
1015	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	5/5/98	5/19/98	5/19/98	0-129-0
1016	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	5/5/98	5/19/98	5/19/98	0-129-0
1017	HAA-ICR	Tribromoacetic acid	4.4	µg/L	EPA 552.2	1	4.0	5/5/98	5/19/98	5/19/98	0-129-0
1018	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	5/5/98	5/19/98	5/19/98	0-129-0
1019	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	5/5/98		5/5/98	n/a
1020	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	5/5/98		5/5/98	n/a
1021	pH	pH	7.4	Unit	SM 4500-H+ B	1	n/a	5/4/98		5/4/98	n/a
1022	TEMP	Cl2 Temperature	26.8	°C	SM 2550 B	1	n/a	5/5/98		5/5/98	n/a
1023	TEMP	Temperature	19.6	°C	SM 2550 B	1	n/a	5/4/98		5/4/98	n/a
1024	TIME	Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	5/5/98		5/5/98	n/a
1025	TOC-ICR	TOC	1.98	mg/L	SM 5310 C	1	0.50	5/4/98		5/4/98	7-0-256
1026	TOC-ICR	TOC (Dupl)	1.98	mg/L	SM 5310 C	1	0.50	5/4/98		5/4/98	7-0-256
			1.98	mg/L	0.0 % RPD						
1027	TOX-ICR	TOX	137	µg Cl-/L	SM 5320 B	1	25	5/5/98		5/13/98	12-0-132
1028	TOX-ICR	TOX (Dupl)	130	µg Cl-/L	SM 5320 B	1	25	5/5/98		5/13/98	12-0-132
			134	µg Cl-/L	5.2 % RPD						
1029	THM-ICR	1,2,3-Trichloropropane (Surrogate)	97.2	%	EPA 551.1	1	1.0	5/5/98	5/15/98	5/15/98	0-128-0
1030	THM-ICR	Bromodichloromethane	11.0	µg/L	EPA 551.1	1	1.0	5/5/98	5/15/98	5/15/98	0-128-0
1031	THM-ICR	Bromoform	36.5	µg/L	EPA 551.1	1	1.0	5/5/98	5/15/98	5/15/98	0-128-0
1032	THM-ICR	Chloroform	3.0	µg/L	EPA 551.1	1	1.0	5/5/98	5/15/98	5/15/98	0-128-0
1033	THM-ICR	Dibromochloromethane	31.3	µg/L	EPA 551.1	1	1.0	5/5/98	5/15/98	5/15/98	0-128-0
1034	TURB	Turbidity	0.10	ntu	SM 2130 B	1	0.05	5/4/98		5/4/98	9-0-10
1035	UV-ICR	UV	0.047	1/cm	SM 5910 B	1	0.009	5/4/98		5/5/98	8-0-178
1036	UV-ICR	UV (Dupl)	0.047	1/cm	SM 5910 B	1	0.009	5/4/98		5/5/98	8-0-178
			0.047	1/cm	0.0 % RPD						

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

Sample ID: 110.20.Eff-38

S&H ID: 9805-105

Date Sampled: 5/5/98 8:52:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1037	pH	pH	8.1	Unit	SM 4500-H+ B	1	n/a	5/5/98		5/5/98	n/a
1038	TEMP	Temperature	21.7	°C	SM 2550 B	1	n/a	5/5/98		5/5/98	n/a
1039	TOC-ICR	TOC	1.41	mg/L	SM 5310 C	1	0.50	5/5/98		5/5/98	7-0-257
1040	TOC-ICR	TOC (Dupl)	1.43	mg/L	SM 5310 C	1	0.50	5/5/98		5/5/98	7-0-257
			1.42	mg/L	1.4 % RPD						
1041	UV-ICR	UV	0.021	1/cm	SM 5910 B	1	0.009	5/5/98		5/5/98	8-0-178
1042	UV-ICR	UV (Dupl)	0.020	1/cm	SM 5910 B	1	0.009	5/5/98		5/5/98	8-0-178
			0.021	1/cm	4.8 % RPD						

End of laboratory test results

Quality Control Report

Ms. Sibyl Carley
Jacksonville Electric Authority
Ridenhour Regional Water Treatment Plant
102 Kernan Blvd. North
Jacksonville, FL 32225

Phone: 904-665-4503 Fax: 904-665-4531

Study#: 110
Study Title: ICR RSSCT #1

Analysis: ALK (Alkalinity)

Method: SM 2320 B

QC Batch ID: 1-0-18

										Acceptance Criteria	
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>Date Run</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	100	101	mg/L	101%		04/14/98	9804-201	5		
Matrix Spike (Dupl)	Matrix Spike	100	98	mg/L	98%		04/14/98	9804-201	5		
		100	100	mg/L	100%	3.0 %					
Method Blank	Method Blank		ND*	mg/L			04/14/98	9804-211	5		
Standard	Standard	100	101	mg/L	101%		04/14/98	9804-212	5		
Standard (Dupl)	Standard	100	101	mg/L	101%		04/14/98	9804-212	5		
		100	101	mg/L	101%	0.0 %					
Matrix Spike	Matrix Spike	100	95	mg/L	95%		04/22/98	9804-356	5		
Matrix Spike (Dupl)	Matrix Spike	100	93	mg/L	93%		04/22/98	9804-356	5		
		100	94	mg/L	94%	2.1 %					
Method Blank	Method Blank		ND*	mg/L			04/22/98	9804-359	5		
Standard	Standard	100	100	mg/L	100%		04/22/98	9804-360	5		
Standard (Dupl)	Standard	100	100	mg/L	100%		04/22/98	9804-360	5		
		100	100	mg/L	100%	0.0 %					

Analysis: ALK (Alkalinity)

Method: SM 2320 B

QC Batch ID: 1-0-19

										Acceptance Criteria	
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>Date Run</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	100	97	mg/L	97%		04/22/98	9804-371	5		
Matrix Spike (Dupl)	Matrix Spike	100	101	mg/L	101%		04/22/98	9804-371	5		
		100	99	mg/L	99%	4.0 %					
Method Blank	Method Blank		ND*	mg/L			04/22/98	9804-374	5		
Standard	Standard	100	100	mg/L	100%		04/22/98	9804-375	5		
Standard (Dupl)	Standard	100	101	mg/L	101%		04/22/98	9804-375	5		
		100	100	mg/L	100%	1.0 %					
Matrix Spike	Matrix Spike	100	92	mg/L	92%		04/30/98	9804-501	5		
Matrix Spike (Dupl)	Matrix Spike	100	96	mg/L	96%		04/30/98	9804-501	5		
		100	94	mg/L	94%	4.3 %					
Method Blank	Method Blank		ND*	mg/L			04/30/98	9804-526	5		
Standard	Standard	100	99	mg/L	99%		04/30/98	9804-527	5		
Standard (Dupl)	Standard	100	101	mg/L	101%		04/30/98	9804-527	5		
		100	100	mg/L	100%	2.0 %					

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-233

								Acceptance Criteria		
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	4.25	mg/L	106%		9804-135	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	4.24	mg/L	106%		9804-135	0.5		
		4.00	4.25	mg/L	106%	0.2 %				
Method Blank	Method Blank		ND*	mg/L			9804-146	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9804-146	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.51	mg/L	102%		9804-59	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.52	mg/L	104%		9804-59	0.5	50-150%	
		0.50	0.51	mg/L	102%	2.0 %			50-150%	20%
Standard	Standard	4.00	4.05	mg/L	101%		9804-60	0.5	90-110%	
Standard (Dupl)	Standard	4.00	4.12	mg/L	103%		9804-60	0.5	90-110%	
		4.00	4.09	mg/L	102%	1.7 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-237

								Acceptance Criteria		
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	4.20	mg/L	105%		9804-213	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	4.26	mg/L	106%		9804-213	0.5		
		4.00	4.23	mg/L	106%	1.4 %				
Method Blank	Method Blank		ND*	mg/L			9804-210	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9804-210	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.52	mg/L	104%		9804-59	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.52	mg/L	104%		9804-59	0.5	50-150%	
		0.50	0.52	mg/L	104%	0.0 %			50-150%	20%
Standard	Standard	4.00	3.91	mg/L	98%		9804-60	0.5	90-110%	
Standard (Dupl)	Standard	4.00	4.07	mg/L	102%		9804-60	0.5	90-110%	
		4.00	3.99	mg/L	100%	4.0 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-239

								Acceptance Criteria		
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	4.83	mg/L	121%		9804-223	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	4.83	mg/L	121%		9804-223	0.5		
		4.00	4.83	mg/L	121%	0.2 %				
Matrix Spike	Matrix Spike	4.00	4.55	mg/L	114%		9804-248	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	4.48	mg/L	112%		9804-248	0.5		
		4.00	4.52	mg/L	113%	1.3 %				

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

Method Blank	Method Blank		ND* mg/L			9804-210	0.5		
Method Blank (Dupl)	Method Blank		ND* mg/L			9804-210	0.5		
			ND* mg/L						
Standard	Standard	0.50	0.56 mg/L	112%		9804-59	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.48 mg/L	96%		9804-59	0.5	50-150%	
		0.50	0.52 mg/L	104%	15.4 %			50-150%	20%
Standard	Standard	4.00	4.23 mg/L	106%		9804-60	0.5	90-110%	
Standard (Dupl)	Standard	4.00	4.16 mg/L	104%		9804-60	0.5	90-110%	
		4.00	4.19 mg/L	105%	1.7 %			90-110%	10%
Standard	Standard	4.00	4.13 mg/L	103%		9804-60	0.5	90-110%	
Standard (Dupl)	Standard	4.00	4.20 mg/L	105%		9804-60	0.5	90-110%	
		4.00	4.17 mg/L	104%	1.7 %			90-110%	10%
Standard	Standard	10.00	10.93 mg/L	109%		9804-73	0.5	90-110%	
Standard (Dupl)	Standard	10.00	11.01 mg/L	110%		9804-73	0.5	90-110%	
		10.00	10.97 mg/L	110%	0.7 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-240

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	4.01	mg/L	100%		9804-276	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	4.01	mg/L	100%		9804-276	0.5		
		4.00	4.01	mg/L	100%	0.2 %				
Method Blank	Method Blank		ND*	mg/L			9804-284	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9804-284	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.50	mg/L	100%		9804-267	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.48	mg/L	96%		9804-267	0.5	50-150%	
		0.50	0.49	mg/L	98%	4.1 %			50-150%	20%
Standard	Standard	4.00	3.96	mg/L	99%		9804-268	0.5	90-110%	
Standard (Dupl)	Standard	4.00	3.92	mg/L	98%		9804-268	0.5	90-110%	
		4.00	3.94	mg/L	98%	1.0 %			90-110%	10%
Standard	Standard	10.00	9.83	mg/L	98%		9804-73	0.5	90-110%	
Standard (Dupl)	Standard	10.00	10.00	mg/L	100%		9804-73	0.5	90-110%	
		10.00	9.91	mg/L	99%	1.7 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-241

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	4.04	mg/L	101%		9804-299	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	4.07	mg/L	102%		9804-299	0.5		
		4.00	4.06	mg/L	101%	0.7 %				
Method Blank	Method Blank		ND*	mg/L			9804-303	0.5		

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 110
Study Title: ICR RSSCT #1

Method Blank (Dupl)	Method Blank		ND* mg/L			9804-303	0.5		
			ND* mg/L						
Standard	Standard	0.50	0.53 mg/L	106%		9804-267	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.53 mg/L	106%		9804-267	0.5	50-150%	
		0.50	0.53 mg/L	106%	0.0 %			50-150%	20%
Standard	Standard	4.00	4.09 mg/L	102%		9804-268	0.5	90-110%	
Standard (Dupl)	Standard	4.00	4.03 mg/L	101%		9804-268	0.5	90-110%	
		4.00	4.06 mg/L	101%	1.5 %			90-110%	10%
Standard	Standard	10.00	10.19 mg/L	102%		9804-73	0.5	90-110%	
Standard (Dupl)	Standard	10.00	10.20 mg/L	102%		9804-73	0.5	90-110%	
		10.00	10.20 mg/L	102%	0.1 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)**Method:** SM 5310 C**QC Batch ID:** 7-0-242

		Acceptance Criteria							
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u> <u>RPD</u>
Matrix Spike	Matrix Spike	4.00	3.97	mg/L	99%		9804-317	0.5	
Method Blank	Method Blank		ND*	mg/L			9804-326	0.5	
Method Blank (Dupl)	Method Blank		ND*	mg/L			9804-326	0.5	
			ND* mg/L						
Standard	Standard	0.50	0.51 mg/L	102%			9804-267	0.5	50-150%
Standard (Dupl)	Standard	0.50	0.51 mg/L	102%			9804-267	0.5	50-150%
		0.50	0.51 mg/L	102%	0.0 %				50-150% 20%
Standard	Standard	4.00	3.92 mg/L	98%			9804-268	0.5	90-110%
Standard (Dupl)	Standard	4.00	3.98 mg/L	100%			9804-268	0.5	90-110%
		4.00	3.95 mg/L	99%	1.5 %				90-110% 10%
Standard	Standard	10.00	10.13 mg/L	101%			9804-73	0.5	90-110%
Standard (Dupl)	Standard	10.00	10.19 mg/L	102%			9804-73	0.5	90-110%
		10.00	10.16 mg/L	102%	0.6 %				90-110% 10%

Analysis: TOC-ICR (Total Organic Carbon)**Method:** SM 5310 C**QC Batch ID:** 7-0-243

		Acceptance Criteria							
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u> <u>RPD</u>
Matrix Spike	Matrix Spike	4.00	3.71	mg/L	93%		9804-340	0.5	
Matrix Spike (Dupl)	Matrix Spike	4.00	3.60	mg/L	90%		9804-340	0.5	
		4.00	3.66 mg/L		92%	3.0 %			
Method Blank	Method Blank		ND*	mg/L			9804-351	0.5	
Method Blank (Dupl)	Method Blank		ND*	mg/L			9804-351	0.5	
			ND* mg/L						
Standard	Standard	0.50	0.43 mg/L	86%			9804-267	0.5	50-150%
Standard (Dupl)	Standard	0.50	0.42 mg/L	84%			9804-267	0.5	50-150%
		0.50	0.42 mg/L	84%	2.4 %				50-150% 20%

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

Standard	Standard	4.00	3.81 mg/L	95%		9804-268	0.5	90-110%	
Standard (Dupl)	Standard	4.00	3.83 mg/L	96%		9804-268	0.5	90-110%	
		4.00	3.82 mg/L	95%	0.5 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)**Method:** SM 5310 C**QC Batch ID:** 7-0-244

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	3.87	mg/L	97%		9804-365	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.92	mg/L	98%		9804-365	0.5		
		4.00	3.89	mg/L	97%	1.5 %				
Method Blank	Method Blank		ND*	mg/L			9804-357	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9804-357	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.42	mg/L	84%		9804-267	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.43	mg/L	86%		9804-267	0.5	50-150%	
		0.50	0.43	mg/L	86%	2.3 %			50-150%	20%
Standard	Standard	4.00	3.94	mg/L	98%		9804-268	0.5	90-110%	
Standard (Dupl)	Standard	4.00	3.93	mg/L	98%		9804-268	0.5	90-110%	
		4.00	3.94	mg/L	98%	0.3 %			90-110%	10%
Standard	Standard	10.00	10.02	mg/L	100%		9804-73	0.5	90-110%	
Standard (Dupl)	Standard	10.00	10.00	mg/L	100%		9804-73	0.5	90-110%	
		10.00	10.01	mg/L	100%	0.2 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)**Method:** SM 5310 C**QC Batch ID:** 7-0-245

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	3.92	mg/L	98%		9804-386	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.84	mg/L	96%		9804-386	0.5		
		4.00	3.88	mg/L	97%	2.1 %				
Method Blank	Method Blank		ND*	mg/L			9804-389	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9804-389	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.49	mg/L	98%		9804-267	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.48	mg/L	96%		9804-267	0.5	50-150%	
		0.50	0.48	mg/L	96%	2.1 %			50-150%	20%
Standard	Standard	4.00	4.00	mg/L	100%		9804-268	0.5	90-110%	
Standard (Dupl)	Standard	4.00	3.98	mg/L	100%		9804-268	0.5	90-110%	
		4.00	3.99	mg/L	100%	0.5 %			90-110%	10%

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-246

								Acceptance Criteria		
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	3.73	mg/L	93%		9804-399	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.77	mg/L	94%		9804-399	0.5		
		4.00	3.75	mg/L	94%	1.1 %				
Method Blank	Method Blank		ND*	mg/L			9804-401	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9804-401	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.56	mg/L	112%		9804-267	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.55	mg/L	110%		9804-267	0.5	50-150%	
		0.50	0.56	mg/L	112%	1.8 %			50-150%	20%
Standard	Standard	4.00	3.93	mg/L	98%		9804-268	0.5	90-110%	
Standard (Dupl)	Standard	4.00	3.94	mg/L	98%		9804-268	0.5	90-110%	
		4.00	3.93	mg/L	98%	0.3 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-247

								Acceptance Criteria		
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	3.67	mg/L	92%		9804-424	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.78	mg/L	94%		9804-424	0.5		
		4.00	3.73	mg/L	93%	2.9 %				
Method Blank	Method Blank		ND*	mg/L			9804-422	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9804-422	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.51	mg/L	102%		9804-267	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.53	mg/L	106%		9804-267	0.5	50-150%	
		0.50	0.52	mg/L	104%	3.8 %			50-150%	20%
Standard	Standard	4.00	4.00	mg/L	100%		9804-268	0.5	90-110%	
Standard (Dupl)	Standard	4.00	4.04	mg/L	101%		9804-268	0.5	90-110%	
		4.00	4.02	mg/L	100%	1.0 %			90-110%	10%
Standard	Standard	10.00	9.99	mg/L	100%		9804-73	0.5	90-110%	
Standard (Dupl)	Standard	10.00	10.14	mg/L	101%		9804-73	0.5	90-110%	
		10.00	10.06	mg/L	101%	1.5 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-248

								Acceptance Criteria		
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	4.03	mg/L	101%		9804-440	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	4.09	mg/L	102%		9804-440	0.5		
		4.00	4.06	mg/L	101%	1.5 %				

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 110
Study Title: ICR RSSCT #1

Method Blank	Method Blank		ND*	mg/L		9804-434	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L		9804-434	0.5		
			ND*	mg/L					
Standard	Standard	0.50	0.53	mg/L	106%	9804-267	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.54	mg/L	108%	9804-267	0.5	50-150%	
		0.50	0.54	mg/L	108%			50-150%	20%
Standard	Standard	4.00	4.00	mg/L	100%	9804-268	0.5	90-110%	
Standard (Dupl)	Standard	4.00	4.02	mg/L	100%	9804-268	0.5	90-110%	
		4.00	4.01	mg/L	100%			90-110%	10%
Standard	Standard	10.00	10.02	mg/L	100%	9804-73	0.5	90-110%	
Standard (Dupl)	Standard	10.00	10.18	mg/L	102%	9804-73	0.5	90-110%	
		10.00	10.10	mg/L	101%			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)**Method:** SM 5310 C**QC Batch ID:** 7-0-250

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	4.09	mg/L	102%		9804-487	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.90	mg/L	97%		9804-487	0.5		
		4.00	4.00	mg/L	100%	4.8 %				
Method Blank	Method Blank		ND*	mg/L			9804-499	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9804-499	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.49	mg/L	98%		9804-474	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.48	mg/L	96%		9804-474	0.5	50-150%	
		0.50	0.49	mg/L	98%	2.0 %			50-150%	20%
Standard	Standard	4.00	3.98	mg/L	100%		9804-475	0.5	90-110%	
Standard (Dupl)	Standard	4.00	4.02	mg/L	100%		9804-475	0.5	90-110%	
		4.00	4.00	mg/L	100%	1.0 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)**Method:** SM 5310 C**QC Batch ID:** 7-0-253

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	3.99	mg/L	100%		9805-45	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.98	mg/L	100%		9805-45	0.5		
		4.00	3.99	mg/L	100%	0.3 %				
Method Blank	Method Blank		ND*	mg/L			9805-27	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9805-27	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.49	mg/L	98%		9804-474	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.47	mg/L	94%		9804-474	0.5	50-150%	
		0.50	0.48	mg/L	96%	4.2 %			50-150%	20%
Standard	Standard	4.00	4.00	mg/L	100%		9804-475	0.5	90-110%	

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 110
Study Title: ICR RSSCT #1

Standard (Dupl)	Standard	4.00	4.02 mg/L	100%		9804-475	0.5	90-110%	
		4.00	4.01 mg/L	100%	0.5 %			90-110%	10%
Standard	Standard	10.00	10.22 mg/L	102%		9804-511	0.5	90-110%	
Standard (Dupl)	Standard	10.00	10.30 mg/L	103%		9804-511	0.5	90-110%	
		10.00	10.26 mg/L	103%	0.8 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)**Method:** SM 5310 C**QC Batch ID:** 7-0-256

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	3.90	mg/L	97%		9805-77	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.91	mg/L	98%		9805-77	0.5		
		4.00	3.91	mg/L	98%	0.3 %				
Method Blank	Method Blank		ND*	mg/L			9805-83	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9805-83	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.50	mg/L	100%		9804-474	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.52	mg/L	104%		9804-474	0.5	50-150%	
		0.50	0.51	mg/L	102%	3.9 %			50-150%	20%
Standard	Standard	4.00	3.95	mg/L	99%		9804-475	0.5	90-110%	
Standard (Dupl)	Standard	4.00	4.02	mg/L	100%		9804-475	0.5	90-110%	
		4.00	3.98	mg/L	100%	1.8 %			90-110%	10%
Standard	Standard	10.00	10.24	mg/L	102%		9804-511	0.5	90-110%	
Standard (Dupl)	Standard	10.00	10.30	mg/L	103%		9804-511	0.5	90-110%	
		10.00	10.27	mg/L	103%	0.6 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)**Method:** SM 5310 C**QC Batch ID:** 7-0-257

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	3.93	mg/L	98%		9805-103	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.90	mg/L	97%		9805-103	0.5		
		4.00	3.91	mg/L	98%	0.8 %				
Method Blank	Method Blank		ND*	mg/L			9805-94	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9805-94	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.52	mg/L	104%		9804-474	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.51	mg/L	102%		9804-474	0.5	50-150%	
		0.50	0.52	mg/L	104%	1.9 %			50-150%	20%
Standard	Standard	4.00	3.88	mg/L	97%		9804-475	0.5	90-110%	
Standard (Dupl)	Standard	4.00	3.96	mg/L	99%		9804-475	0.5	90-110%	
		4.00	3.92	mg/L	98%	2.0 %			90-110%	10%

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-163

C Batch ID: 8-0-163

										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD	
Method Blank	Method Blank		ND*	1/cm			9804-241	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9804-241	0.009			
			ND*	1/cm							
Method Blank	Method Blank		ND*	1/cm			9804-241	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9804-241	0.009			
			ND*	1/cm							
Standard	Standard	0.009	0.008	1/cm	89%		9804-61	0.009	75-125%		
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%		9804-61	0.009	75-125%		
		0.009	0.008	1/cm	89%	0.0 %			75-125%	20%	
Standard	Standard	0.088	0.085	1/cm	97%		9804-62	0.009	85-115%		
Standard (Dupl)	Standard	0.088	0.085	1/cm	97%		9804-62	0.009	85-115%		
		0.088	0.085	1/cm	97%	0.0 %			85-115%	10%	

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-165

C Batch ID: 8-0-165										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD	
Method Blank	Method Blank		ND*	1/cm			9804-290	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9804-290	0.009			
			ND*	1/cm							
Method Blank	Method Blank		ND*	1/cm			9804-290	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9804-290	0.009			
			ND*	1/cm							
Standard	Standard	0.009	0.007	1/cm	78%		9804-269	0.009	75-125%		
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%		9804-269	0.009	75-125%		
		0.009	0.008	1/cm	89%	12.5 %			75-125%	20%	
Standard	Standard	0.088	0.086	1/cm	98%		9804-270	0.009	85-115%		
Standard (Dupl)	Standard	0.088	0.086	1/cm	98%		9804-270	0.009	85-115%		
		0.088	0.086	1/cm	98%	0.0 %			85-115%	10%	

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-166

C Batch ID: 8-0-166									Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Method Blank	Method Blank		ND*	1/cm			9804-306	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9804-306	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9804-306	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9804-306	0.009		
			ND*	1/cm						

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 110
Study Title: ICR RSSCT #1

Standard	Standard	0.009	0.008	1/cm	89%	9804-269	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%	9804-269	0.009	75-125%	
		0.009	0.008	1/cm	89%			75-125%	20%
Standard	Standard	0.088	0.087	1/cm	99%	9804-270	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.087	1/cm	99%	9804-270	0.009	85-115%	
		0.088	0.087	1/cm	99%			85-115%	10%

Analysis: UV-ICR (UV-254)**Method:** SM 5910 B**QC Batch ID:** 8-0-167

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Method Blank	Method Blank		ND*	1/cm			9804-331	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9804-331	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9804-331	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9804-331	0.009		
			ND*	1/cm						
Standard	Standard	0.009	0.008	1/cm	89%		9804-269	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%		9804-269	0.009	75-125%	
		0.009	0.008	1/cm	89%	0.0 %			75-125%	20%
Standard	Standard	0.088	0.086	1/cm	98%		9804-270	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.086	1/cm	98%		9804-270	0.009	85-115%	
		0.088	0.086	1/cm	98%	0.0 %			85-115%	10%

Analysis: UV-ICR (UV-254)**Method:** SM 5910 B**QC Batch ID:** 8-0-168

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Method Blank	Method Blank		ND*	1/cm			9804-358	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9804-358	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9804-358	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9804-358	0.009		
			ND*	1/cm						
Standard	Standard	0.009	0.007	1/cm	78%		9804-269	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.007	1/cm	78%		9804-269	0.009	75-125%	
		0.009	0.007	1/cm	78%	0.0 %			75-125%	20%
Standard	Standard	0.088	0.084	1/cm	95%		9804-270	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.084	1/cm	95%		9804-270	0.009	85-115%	
		0.088	0.084	1/cm	95%	0.0 %			85-115%	10%

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-169

C Batch ID: 8-0-169

										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD	
Method Blank	Method Blank		ND*	1/cm			9804-390	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9804-390	0.009			
			ND*	1/cm							
Method Blank	Method Blank		ND*	1/cm			9804-390	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9804-390	0.009			
			ND*	1/cm							
Standard	Standard	0.009	0.008	1/cm	89%		9804-269	0.009	75-125%		
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%		9804-269	0.009	75-125%		
		0.009	0.008	1/cm	89%	0.0 %			75-125%	20%	
Standard	Standard	0.088	0.085	1/cm	97%		9804-270	0.009	85-115%		
Standard (Dupl)	Standard	0.088	0.085	1/cm	97%		9804-270	0.009	85-115%		
		0.088	0.085	1/cm	97%	0.0 %			85-115%	10%	

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-170

C Batch ID: 8-0-170										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD	
Method Blank	Method Blank		ND*	1/cm			9804-418	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9804-418	0.009			
			ND*	1/cm							
Method Blank	Method Blank		ND*	1/cm			9804-418	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9804-418	0.009			
			ND*	1/cm							
Standard	Standard	0.009	0.008	1/cm	89%		9804-269	0.009	75-125%		
Standard (Dupl)	Standard	0.009	0.007	1/cm	78%		9804-269	0.009	75-125%		
		0.009	0.008	1/cm	89%	12.5 %			75-125%	20%	
Standard	Standard	0.088	0.085	1/cm	97%		9804-270	0.009	85-115%		
Standard (Dupl)	Standard	0.088	0.084	1/cm	95%		9804-270	0.009	85-115%		
		0.088	0.084	1/cm	95%	1.2 %			85-115%	10%	

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-171

C Batch ID: 8-0-171									Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Method Blank	Method Blank		ND*	1/cm			9804-422	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9804-422	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9804-422	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9804-422	0.009		
			ND*	1/cm						

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 110
Study Title: ICR RSSCT #1

Standard	Standard	0.009	0.008	1/cm	89%	9804-269	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%	9804-269	0.009	75-125%	
		0.009	0.008	1/cm	89%			75-125%	20%
Standard	Standard	0.088	0.085	1/cm	97%	9804-270	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.085	1/cm	97%	9804-270	0.009	85-115%	
		0.088	0.085	1/cm	97%			85-115%	10%

Analysis: UV-ICR (UV-254)**Method:** SM 5910 B**QC Batch ID:** 8-0-172

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Method Blank	Method Blank		ND*	1/cm			9804-435	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9804-435	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9804-435	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9804-435	0.009		
			ND*	1/cm						
Standard	Standard	0.009	0.009	1/cm	100%		9804-269	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.009	1/cm	100%		9804-269	0.009	75-125%	
		0.009	0.009	1/cm	100%	0.0 %			75-125%	20%
Standard	Standard	0.088	0.087	1/cm	99%		9804-270	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.088	1/cm	100%		9804-270	0.009	85-115%	
		0.088	0.087	1/cm	99%	1.1 %			85-115%	10%

Analysis: UV-ICR (UV-254)**Method:** SM 5910 B**QC Batch ID:** 8-0-173

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Method Blank	Method Blank		ND*	1/cm			9804-490	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9804-490	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9804-490	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9804-490	0.009		
			ND*	1/cm						
Standard	Standard	0.009	0.007	1/cm	78%		9804-476	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%		9804-476	0.009	75-125%	
		0.009	0.007	1/cm	78%	14.3 %			75-125%	20%
Standard	Standard	0.088	0.086	1/cm	98%		9804-477	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.085	1/cm	97%		9804-477	0.009	85-115%	
		0.088	0.086	1/cm	98%	1.2 %			85-115%	10%

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 110
Study Title: ICR RSSCT #1**Analysis:** UV-ICR (UV-254)**Method:** SM 5910 B**QC Batch ID:** 8-0-176

										Acceptance Criteria	
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>	
Method Blank	Method Blank		ND*	1/cm			9805-70	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9805-70	0.009			
			ND*	1/cm							
Method Blank	Method Blank		ND*	1/cm			9805-70	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9805-70	0.009			
			ND*	1/cm							
Standard	Standard	0.009	0.007	1/cm	78%		9804-476	0.009	75-125%		
Standard (Dupl)	Standard	0.009	0.007	1/cm	78%		9804-476	0.009	75-125%		
		0.009	0.007	1/cm	78%	0.0 %			75-125%	20%	
Standard	Standard	0.088	0.086	1/cm	98%		9804-477	0.009	85-115%		
Standard (Dupl)	Standard	0.088	0.086	1/cm	98%		9804-477	0.009	85-115%		
		0.088	0.086	1/cm	98%	0.0 %			85-115%	10%	

Analysis: UV-ICR (UV-254)**Method:** SM 5910 B**QC Batch ID:** 8-0-178

										Acceptance Criteria	
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>	
Method Blank	Method Blank		ND*	1/cm			9805-107	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9805-107	0.009			
			ND*	1/cm							
Method Blank	Method Blank		ND*	1/cm			9805-107	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9805-107	0.009			
			ND*	1/cm							
Standard	Standard	0.009	0.008	1/cm	89%		9804-476	0.009	75-125%		
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%		9804-476	0.009	75-125%		
		0.009	0.008	1/cm	89%	0.0 %			75-125%	20%	
Standard	Standard	0.088	0.086	1/cm	98%		9804-477	0.009	85-115%		
Standard (Dupl)	Standard	0.088	0.087	1/cm	99%		9804-477	0.009	85-115%		
		0.088	0.087	1/cm	99%	1.1 %			85-115%	10%	

Analysis: TURB (Turbidity)**Method:** SM 2130 B**QC Batch ID:** 9-0-10

										Acceptance Criteria	
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>Date Run</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Standard	Standard	4.51	4.54	ntu	101%		04/27/98	9902-79	0.05		
Standard	Standard	4.51	4.56	ntu	101%		04/29/98	9902-79	0.05		
Standard	Standard	4.51	4.56	ntu	101%		05/04/98	9902-79	0.05		
Standard	Standard	4.51	4.56	ntu	101%		05/06/98	9902-79	0.05		
Standard	Standard	4.51	4.56	ntu	101%		05/08/98	9902-79	0.05		

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 110
Study Title: ICR RSSCT #1

Standard	Standard	4.51	4.56	ntu	101%	05/11/98	9902-79	0.05
Standard	Standard	4.51	4.54	ntu	101%	05/15/98	9902-79	0.05

Analysis: TURB (Turbidity)**Method:** SM 2130 B**QC Batch ID:** 9-0-9

<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>Date Run</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Standard	Standard	4.51	4.61	ntu	102%		03/31/98	9902-79	0.05		
Standard	Standard	4.51	4.57	ntu	101%		04/04/98	9902-79	0.05		
Standard	Standard	4.51	4.56	ntu	101%		04/09/98	9902-79	0.05		
Standard	Standard	4.51	4.57	ntu	101%		04/10/98	9902-79	0.05		
Standard	Standard	4.51	4.59	ntu	102%		04/13/98	9902-79	0.05		
Standard	Standard	4.51	4.59	ntu	102%		04/13/98	9902-79	0.05		
Standard	Standard	4.51	4.62	ntu	102%		04/17/98	9902-79	0.05		
Standard	Standard	4.51	4.58	ntu	102%		04/22/98	9902-79	0.05		

Analysis: TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-121

QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Matrix Spike	Matrix Spike	200	213	µg Cl-/L	106%		9804-257	25		
Matrix Spike (Dupl)	Matrix Spike	200	205	µg Cl-/L	102%		9804-257	25		
		200	209	µg Cl-/L	104%	3.8 %				
Standard - TCP Aqueous	Standard	25	31	µg Cl-/L	124%		9804-379	25	75-125%	
Standard - TCP Aqueous	Standard	200	220	µg Cl-/L	110%		9804-378	25	85-115%	
System Blank	Blank		ND*	µg Cl-/L			9804-380	25		

Analysis: TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-122

<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Standard - TCP Aqueous	Standard	25	25	µg Cl-/L	100%		9804-383	25	75-125%	
Standard - TCP Aqueous (Dupl)	Standard	200	202	µg Cl-/L	101%		9804-382	25	85-115%	
System Blank	Blank		ND*	µg Cl-/L			9804-384	25		

Analysis: TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-123

									Acceptance Criteria		
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>		<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Standard - TCP Aqueous	Standard	25	21	µg Cl-/L	84%			9804-450	25	75-125%	

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 110
Study Title: ICR RSSCT #1

Standard - TCP Aqueous	Standard	200	208	µg Cl-/L	104%	9804-449	25	85-115%
System Blank	Blank		ND*	µg Cl-/L		9804-451	25	

Analysis: TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-124

		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>	Acceptance Criteria
<u>QC Type</u>											
Matrix Spike	Matrix Spike	200	210	µg Cl-/L	105%		9804-332	25			
Matrix Spike (Dupl)	Matrix Spike	200	213	µg Cl-/L	106%		9804-332	25			
		200	212	µg Cl-/L	106%	1.4 %					
Standard - TCP Aqueous	Standard	25	22	µg Cl-/L	88%		9804-468	25	75-125%		
Standard - TCP Aqueous	Standard	200	206	µg Cl-/L	103%		9804-467	25	85-115%		
System Blank	Blank		ND*	µg Cl-/L			9804-469	25			

Analysis: TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-125

		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>	Acceptance Criteria
<u>QC Type</u>											
Standard - TCP Aqueous	Standard	25	22	µg Cl-/L	88%		9804-497	25	75-125%		
Standard - TCP Aqueous	Standard	200	207	µg Cl-/L	103%		9804-496	25	85-115%		
System Blank	Blank		ND*	µg Cl-/L			9804-498	25			

Analysis: TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-126

		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>	Acceptance Criteria
<u>QC Type</u>											
Standard - TCP Aqueous	Standard	25	26	µg Cl-/L	104%		9804-515	25	75-125%		
Standard - TCP Aqueous (Dupl)	Standard	200	227	µg Cl-/L	114%		9804-514	25	85-115%		
System Blank	Blank		ND*	µg Cl-/L			9804-516	25			

Analysis: TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-127

		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>	Acceptance Criteria
<u>QC Type</u>											
Standard - TCP Aqueous (Dupl)	Standard	25	25	µg Cl-/L	100%		9805-114	25	75-125%		
Standard - TCP Aqueous	Standard	200	203	µg Cl-/L	101%		9805-113	25	85-115%		
System Blank	Blank		ND*	µg Cl-/L			9805-115	25			

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

Analysis: TOX-ICR (Total Organic Halide)

Method: SM 5320 B

QC Batch ID: 12-0-128

								Acceptance Criteria		
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Matrix Spike	Matrix Spike	200	203	µg Cl-/L	101%		9804-399	25		
Matrix Spike (Dupl)	Matrix Spike	200	203	µg Cl-/L	101%		9804-399	25		
		200	203	µg Cl-/L	101%	0.0 %				
Standard - TCP Aqueous	Standard	25	24	µg Cl-/L	96%		9805-124	25	75-125%	
Standard - TCP Aqueous	Standard	200	197	µg Cl-/L	98%		9805-123	25	85-115%	
Standard - TCP Aqueous	Standard	500	491	µg Cl-/L	98%		9805-133	25	85-115%	
System Blank	Blank		ND*	µg Cl-/L			9805-125	25		

Analysis: TOX-ICR (Total Organic Halide)

Method: SM 5320 B

QC Batch ID: 12-0-131

								Acceptance Criteria		
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Standard - TCP Aqueous	Standard	25	22	µg Cl-/L	88%		9805-210	25	75-125%	
Standard - TCP Aqueous	Standard	200	203	µg Cl-/L	101%		9805-209	25	85-115%	
Standard - TCP Aqueous	Standard	500	538	µg Cl-/L	108%		9805-222	25	85-115%	
System Blank	Blank		ND*	µg Cl-/L			9805-211	25		

Analysis: TOX-ICR (Total Organic Halide)

Method: SM 5320 B

QC Batch ID: 12-0-132

								Acceptance Criteria		
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Matrix Spike	Matrix Spike	200	205	µg Cl-/L	102%		9805-54	25		
Matrix Spike (Dupl)	Matrix Spike	200	202	µg Cl-/L	101%		9805-54	25		
		200	203	µg Cl-/L	101%	2.0 %				
Standard - TCP Aqueous	Standard	25	26	µg Cl-/L	104%		9805-239	25	75-125%	
Standard - TCP Aqueous	Standard	200	202	µg Cl-/L	101%		9805-238	25	85-115%	
System Blank	Blank		ND*	µg Cl-/L			9805-240	25		

Analysis: THM-ICR (Trihalomethanes (ICR))

Method: EPA 551.1

QC Batch ID: 0-112-0

								Acceptance Criteria		
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Bromodichloromethane	Duplicate	1.9	1.8	µg/L		5.4%	9804-159	1		
Bromodichloromethane	Matrix Spike	40.0	42.8	µg/L	107%		9804-169	1		
Bromodichloromethane	Method Blank		ND*	µg/L			9804-352	1		
Bromodichloromethane	Secondary Source Std	20.0	20.7	µg/L	103%		9804-353	1	70-130%	

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 110
Study Title: ICR RSSCT #1

Bromodichloromethane	Standard	20.0	20.3 µg/L	102%	9804-354	1	80-120%
Bromodichloromethane	Standard	20.0	21.4 µg/L	107%	9804-354	1	80-120%
Bromodichloromethane	Standard	40.0	42.6 µg/L	106%	9804-355	1	80-120%
Bromoform	Duplicate	4.4	4.3 µg/L	2.3%	9804-159	1	
Bromoform	Matrix Spike	40.0	39.3 µg/L	98%	9804-169	1	
Bromoform	Method Blank		ND* µg/L		9804-352	1	
Bromoform	Secondary Source Std	20.0	20.7 µg/L	103%	9804-353	1	70-130%
Bromoform	Standard	20.0	20.9 µg/L	104%	9804-354	1	80-120%
Bromoform	Standard	20.0	21.7 µg/L	109%	9804-354	1	80-120%
Bromoform	Standard	40.0	41.3 µg/L	103%	9804-355	1	80-120%
Chloroform	Duplicate	ND	ND µg/L	NA	9804-159	1	
Chloroform	Matrix Spike	40.0	39.9 µg/L	100%	9804-169	1	
Chloroform	Method Blank		ND* µg/L		9804-352	1	
Chloroform	Secondary Source Std	20.0	20.9 µg/L	104%	9804-353	1	70-130%
Chloroform	Standard	20.0	19.8 µg/L	99%	9804-354	1	80-120%
Chloroform	Standard	20.0	21.1 µg/L	106%	9804-354	1	80-120%
Chloroform	Standard	40.0	42.2 µg/L	106%	9804-355	1	80-120%
Dibromochloromethane	Duplicate	3.4	3.3 µg/L	3.0%	9804-159	1	
Dibromochloromethane	Matrix Spike	40.0	41.9 µg/L	105%	9804-169	1	
Dibromochloromethane	Method Blank		ND* µg/L		9804-352	1	
Dibromochloromethane	Secondary Source Std	20.0	21.5 µg/L	108%	9804-353	1	70-130%
Dibromochloromethane	Standard	20.0	21.4 µg/L	107%	9804-354	1	80-120%
Dibromochloromethane	Standard	20.0	22.5 µg/L	113%	9804-354	1	80-120%
Dibromochloromethane	Standard	40.0	42.5 µg/L	106%	9804-355	1	80-120%

Analysis: THM-ICR (Trihalomethanes (ICR))**Method:** EPA 551.1**QC Batch ID:** 0-117-0

								Acceptance Criteria		
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Bromodichloromethane	Duplicate	2.6	2.5	µg/L		3.9%	9804-245	1		
Bromodichloromethane	Matrix Spike	40.0	42.0	µg/L	105%		9804-288	1		
Bromodichloromethane	Method Blank		ND*	µg/L			9804-436	1		
Bromodichloromethane	Secondary Source Std	20.0	22.2	µg/L	111%		9804-437	1	70-130%	
Bromodichloromethane	Standard	20.0	18.4	µg/L	92%		9804-438	1	80-120%	

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable); RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 110
Study Title: ICR RSSCT #1

Bromodichloromethane	Standard	20.0	18.4	µg/L	92%	9804-438	1	80-120%
Bromodichloromethane	Standard	40.0	41.6	µg/L	104%	9804-439	1	80-120%
Bromoform	Duplicate	5.4	5.6	µg/L	3.6%	9804-245	1	
Bromoform	Matrix Spike	40.0	40.4	µg/L	101%	9804-288	1	
Bromoform	Method Blank		ND*	µg/L		9804-436	1	
Bromoform	Secondary Source Std	20.0	20.7	µg/L	103%	9804-437	1	70-130%
Bromoform	Standard	20.0	18.4	µg/L	92%	9804-438	1	80-120%
Bromoform	Standard	20.0	18.0	µg/L	90%	9804-438	1	80-120%
Bromoform	Standard	40.0	40.2	µg/L	101%	9804-439	1	80-120%
Chloroform	Duplicate	1.3	1.2	µg/L	8.0%	9804-245	1	
Chloroform	Matrix Spike	40.0	40.8	µg/L	102%	9804-288	1	
Chloroform	Method Blank		ND*	µg/L		9804-436	1	
Chloroform	Secondary Source Std	20.0	22.8	µg/L	114%	9804-437	1	70-130%
Chloroform	Standard	20.0	18.5	µg/L	93%	9804-438	1	80-120%
Chloroform	Standard	20.0	18.1	µg/L	91%	9804-438	1	80-120%
Chloroform	Standard	40.0	41.5	µg/L	104%	9804-439	1	80-120%
Dibromochloromethane	Duplicate	4.4	4.5	µg/L	2.2%	9804-245	1	
Dibromochloromethane	Matrix Spike	40.0	41.5	µg/L	104%	9804-288	1	
Dibromochloromethane	Method Blank		ND*	µg/L		9804-436	1	
Dibromochloromethane	Secondary Source Std	20.0	20.6	µg/L	103%	9804-437	1	70-130%
Dibromochloromethane	Standard	20.0	18.6	µg/L	93%	9804-438	1	80-120%
Dibromochloromethane	Standard	20.0	18.6	µg/L	93%	9804-438	1	80-120%
Dibromochloromethane	Standard	40.0	41.4	µg/L	103%	9804-439	1	80-120%

Analysis: THM-ICR (Trihalomethanes (ICR))**Method:** EPA 551.1**QC Batch ID:** 0-120-0

									Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Bromodichloromethane	Duplicate	ND	ND	µg/L		NA	9804-333	1		
Bromodichloromethane	Matrix Spike	40.0	41.6	µg/L	104%		9804-387	1		
Bromodichloromethane	Method Blank		ND*	µg/L			9804-522	1		
Bromodichloromethane	Secondary Source Std	20.0	22.4	µg/L	112%		9804-523	1	70-130%	
Bromodichloromethane	Standard	20.0	19.4	µg/L	97%		9804-524	1	80-120%	
Bromodichloromethane	Standard	20.0	22.3	µg/L	112%		9804-524	1	80-120%	

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 110
Study Title: ICR RSSCT #1

Bromodichloromethane	Standard	40.0	39.9 µg/L	100%	9804-525	1	80-120%
Bromoform	Duplicate	2.2	2.4 µg/L	8.7%	9804-333	1	
Bromoform	Matrix Spike	40.0	37.3 µg/L	93%	9804-387	1	
Bromoform	Method Blank		ND* µg/L		9804-522	1	
Bromoform	Secondary Source Std	20.0	21.4 µg/L	107%	9804-523	1	70-130%
Bromoform	Standard	20.0	19.5 µg/L	97%	9804-524	1	80-120%
Bromoform	Standard	20.0	19.7 µg/L	98%	9804-524	1	80-120%
Bromoform	Standard	40.0	37.1 µg/L	93%	9804-525	1	80-120%
Chloroform	Duplicate	ND	ND µg/L	NA	9804-333	1	
Chloroform	Matrix Spike	40.0	40.6 µg/L	102%	9804-387	1	
Chloroform	Method Blank		ND* µg/L		9804-522	1	
Chloroform	Secondary Source Std	20.0	22.9 µg/L	115%	9804-523	1	70-130%
Chloroform	Standard	20.0	19.1 µg/L	96%	9804-524	1	80-120%
Chloroform	Standard	20.0	21.4 µg/L	107%	9804-524	1	80-120%
Chloroform	Standard	40.0	38.7 µg/L	97%	9804-525	1	80-120%
Dibromochloromethane	Duplicate	ND	ND µg/L	NA	9804-333	1	
Dibromochloromethane	Matrix Spike	40.0	41.3 µg/L	103%	9804-387	1	
Dibromochloromethane	Method Blank		ND* µg/L		9804-522	1	
Dibromochloromethane	Secondary Source Std	20.0	22.0 µg/L	110%	9804-523	1	70-130%
Dibromochloromethane	Standard	20.0	19.8 µg/L	99%	9804-524	1	80-120%
Dibromochloromethane	Standard	20.0	22.7 µg/L	114%	9804-524	1	80-120%
Dibromochloromethane	Standard	40.0	40.3 µg/L	101%	9804-525	1	80-120%

Analysis: THM-ICR (Trihalomethanes (ICR))**Method:** EPA 551.1**QC Batch ID:** 0-122-0

								Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL Range	RPD
Bromodichloromethane	Duplicate	2.2	2.2	µg/L		0.0%	9804-502	1	
Bromodichloromethane	Matrix Spike	40.0	42.1	µg/L	105%		9804-456	1	
Bromodichloromethane	Method Blank		ND*	µg/L			9805-97	1	
Bromodichloromethane	Secondary Source Std	20.0	20.1	µg/L	101%		9805-98	1	70-130%
Bromodichloromethane	Standard	20.0	19.1	µg/L	96%		9805-99	1	80-120%
Bromodichloromethane	Standard	20.0	19.9	µg/L	99%		9805-99	1	80-120%
Bromodichloromethane	Standard	40.0	41.2	µg/L	103%		9805-100	1	80-120%

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable); RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 110
Study Title: ICR RSSCT #1

Bromoform	Duplicate	ND	ND	µg/L	NA	9804-502	1
Bromoform	Matrix Spike	40.0	40.1	µg/L	100%	9804-456	1
Bromoform	Method Blank		ND*	µg/L		9805-97	1
Bromoform	Secondary Source Std	20.0	19.8	µg/L	99%	9805-98	1 70-130%
Bromoform	Standard	20.0	19.2	µg/L	96%	9805-99	1 80-120%
Bromoform	Standard	20.0	18.0	µg/L	90%	9805-99	1 80-120%
Bromoform	Standard	40.0	38.4	µg/L	96%	9805-100	1 80-120%
Chloroform	Duplicate	4.8	4.9	µg/L	2.1%	9804-502	1
Chloroform	Matrix Spike	40.0	41.7	µg/L	104%	9804-456	1
Chloroform	Method Blank		ND*	µg/L		9805-97	1
Chloroform	Secondary Source Std	20.0	20.4	µg/L	102%	9805-98	1 70-130%
Chloroform	Standard	20.0	18.8	µg/L	94%	9805-99	1 80-120%
Chloroform	Standard	20.0	20.4	µg/L	102%	9805-99	1 80-120%
Chloroform	Standard	40.0	41.0	µg/L	102%	9805-100	1 80-120%
Dibromochloromethane	Duplicate	ND	ND	µg/L	NA	9804-502	1
Dibromochloromethane	Matrix Spike	40.0	42.2	µg/L	106%	9804-456	1
Dibromochloromethane	Method Blank		ND*	µg/L		9805-97	1
Dibromochloromethane	Secondary Source Std	20.0	19.9	µg/L	99%	9805-98	1 70-130%
Dibromochloromethane	Standard	20.0	19.1	µg/L	96%	9805-99	1 80-120%
Dibromochloromethane	Standard	20.0	19.9	µg/L	99%	9805-99	1 80-120%
Dibromochloromethane	Standard	40.0	41.4	µg/L	103%	9805-100	1 80-120%

Analysis: THM-ICR (Trihalomethanes (ICR))**Method:** EPA 551.1**QC Batch ID:** 0-125-0

								Acceptance Criteria		
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Bromodichloromethane	Duplicate	ND	ND	µg/L		NA	9805-24	1		
Bromodichloromethane	Matrix Spike	40.0	39.3	µg/L	98%		9805-53	1		
Bromodichloromethane	Method Blank		ND*	µg/L			9805-154	1		
Bromodichloromethane	Secondary Source Std	20.0	21.7	µg/L	109%		9805-155	1	70-130%	
Bromodichloromethane	Standard	20.0	20.4	µg/L	102%		9805-156	1	80-120%	
Bromodichloromethane	Standard	20.0	21.6	µg/L	108%		9805-156	1	80-120%	
Bromodichloromethane	Standard	40.0	42.1	µg/L	105%		9805-157	1	80-120%	
Bromoform	Duplicate	6.8	7.0	µg/L		2.9%	9805-24	1		

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable); RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 110
Study Title: ICR RSSCT #1

Bromoform	Matrix Spike	40.0	35.2	µg/L	88%	9805-53	1
Bromoform	Method Blank		ND*	µg/L		9805-154	1
Bromoform	Secondary Source Std	20.0	20.9	µg/L	104%	9805-155	1 70-130%
Bromoform	Standard	20.0	20.5	µg/L	102%	9805-156	1 80-120%
Bromoform	Standard	20.0	19.5	µg/L	97%	9805-156	1 80-120%
Bromoform	Standard	40.0	37.8	µg/L	94%	9805-157	1 80-120%
Chloroform	Duplicate	ND	ND	µg/L	NA	9805-24	1
Chloroform	Matrix Spike	40.0	41.1	µg/L	103%	9805-53	1
Chloroform	Method Blank		ND*	µg/L		9805-154	1
Chloroform	Secondary Source Std	20.0	22.6	µg/L	113%	9805-155	1 70-130%
Chloroform	Standard	20.0	20.5	µg/L	102%	9805-156	1 80-120%
Chloroform	Standard	20.0	22.6	µg/L	113%	9805-156	1 80-120%
Chloroform	Standard	40.0	43.2	µg/L	108%	9805-157	1 80-120%
Dibromochloromethane	Duplicate	3.1	3.2	µg/L	3.2%	9805-24	1
Dibromochloromethane	Matrix Spike	40.0	38.9	µg/L	97%	9805-53	1
Dibromochloromethane	Method Blank		ND*	µg/L		9805-154	1
Dibromochloromethane	Secondary Source Std	20.0	21.2	µg/L	106%	9805-155	1 70-130%
Dibromochloromethane	Standard	20.0	20.7	µg/L	103%	9805-156	1 80-120%
Dibromochloromethane	Standard	20.0	21.7	µg/L	109%	9805-156	1 80-120%
Dibromochloromethane	Standard	40.0	42.6	µg/L	106%	9805-157	1 80-120%

Analysis: THM-ICR (Trihalomethanes (ICR))**Method:** EPA 551.1**QC Batch ID:** 0-128-0

									Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Bromodichloromethane	Duplicate	2.8	2.8	µg/L		0.0%	9805-106	1		
Bromodichloromethane	Matrix Spike	40.0	44.2	µg/L	111%		9805-139	1		
Bromodichloromethane	Method Blank		ND*	µg/L			9805-297	1		
Bromodichloromethane	Secondary Source Std	20.0	21.2	µg/L	106%		9805-298	1	70-130%	
Bromodichloromethane	Standard	20.0	20.5	µg/L	102%		9805-299	1	80-120%	
Bromodichloromethane	Standard	20.0	22.2	µg/L	111%		9805-299	1	80-120%	
Bromodichloromethane	Standard	20.0	22.6	µg/L	113%		9805-299	1	80-120%	
Bromodichloromethane	Standard	40.0	40.7	µg/L	102%		9805-300	1	80-120%	
Bromodichloromethane	Standard	40.0	42.8	µg/L	107%		9805-300	1	80-120%	

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable); RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 110
Study Title: ICR RSSCT #1

Bromoform	Duplicate	ND	ND	µg/L	NA	9805-106	1
Bromoform	Matrix Spike	40.0	40.2	µg/L	101%	9805-139	1
Bromoform	Method Blank		ND*	µg/L		9805-297	1
Bromoform	Secondary Source Std	20.0	20.0	µg/L	100%	9805-298	1 70-130%
Bromoform	Standard	20.0	21.0	µg/L	105%	9805-299	1 80-120%
Bromoform	Standard	20.0	20.2	µg/L	101%	9805-299	1 80-120%
Bromoform	Standard	20.0	23.1	µg/L	116%	9805-299	1 80-120%
Bromoform	Standard	40.0	40.9	µg/L	102%	9805-300	1 80-120%
Bromoform	Standard	40.0	44.7	µg/L	112%	9805-300	1 80-120%
Chloroform	Duplicate	2.9	3.0	µg/L	3.4%	9805-106	1
Chloroform	Matrix Spike	40.0	44.9	µg/L	112%	9805-139	1
Chloroform	Method Blank		ND*	µg/L		9805-297	1
Chloroform	Secondary Source Std	20.0	21.5	µg/L	108%	9805-298	1 70-130%
Chloroform	Standard	20.0	20.2	µg/L	101%	9805-299	1 80-120%
Chloroform	Standard	20.0	22.4	µg/L	112%	9805-299	1 80-120%
Chloroform	Standard	20.0	21.6	µg/L	108%	9805-299	1 80-120%
Chloroform	Standard	40.0	40.3	µg/L	101%	9805-300	1 80-120%
Chloroform	Standard	40.0	43.8	µg/L	110%	9805-300	1 80-120%
Dibromochloromethane	Duplicate	1.6	1.6	µg/L	0.0%	9805-106	1
Dibromochloromethane	Matrix Spike	40.0	46.8	µg/L	117%	9805-139	1
Dibromochloromethane	Method Blank		ND*	µg/L		9805-297	1
Dibromochloromethane	Secondary Source Std	20.0	20.1	µg/L	101%	9805-298	1 70-130%
Dibromochloromethane	Standard	20.0	21.1	µg/L	106%	9805-299	1 80-120%
Dibromochloromethane	Standard	20.0	22.6	µg/L	113%	9805-299	1 80-120%
Dibromochloromethane	Standard	20.0	23.3	µg/L	117%	9805-299	1 80-120%
Dibromochloromethane	Standard	40.0	41.2	µg/L	103%	9805-300	1 80-120%
Dibromochloromethane	Standard	40.0	43.3	µg/L	108%	9805-300	1 80-120%

Analysis: HAA-ICR (Haloacetic Acids)**Method:** EPA 552.2**QC Batch ID:** 0-115-0

								Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL Range	RPD
Bromochloroacetic acid	Duplicate	ND	ND	µg/L		NA	9804-159	1	
Bromochloroacetic acid	Matrix Spike	40.0	43.3	µg/L	108%		9804-173	1	
Bromochloroacetic acid	Method Blank		ND*	µg/L			9804-391	1	

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable); RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 110
Study Title: ICR RSSCT #1

Bromochloroacetic acid	Secondary Source Std	20.0	16.7 µg/L	83%	9804-392	1 70-130%
Bromochloroacetic acid	Standard	20.0	20.1 µg/L	101%	9804-393	1 80-120%
Bromochloroacetic acid	Standard	20.0	21.9 µg/L	110%	9804-393	1 80-120%
Bromochloroacetic acid	Standard	40.0	40.9 µg/L	102%	9804-394	1 80-120%
Bromodichloroacetic acid	Duplicate	ND	ND µg/L	NA	9804-159	1
Bromodichloroacetic acid	Matrix Spike	40.0	43.6 µg/L	109%	9804-173	1
Bromodichloroacetic acid	Method Blank		ND* µg/L		9804-391	1
Bromodichloroacetic acid	Secondary Source Std		ND µg/L		9804-392	1
Bromodichloroacetic acid	Standard	20.0	21.3 µg/L	106%	9804-393	1 80-120%
Bromodichloroacetic acid	Standard	20.0	23.1 µg/L	116%	9804-393	1 80-120%
Bromodichloroacetic acid	Standard	40.0	41.0 µg/L	102%	9804-394	1 80-120%
Chlorodibromoacetic acid	Duplicate	ND	ND µg/L	NA	9804-159	2
Chlorodibromoacetic acid	Matrix Spike	40.0	43.9 µg/L	110%	9804-173	2
Chlorodibromoacetic acid	Method Blank		ND* µg/L		9804-391	2
Chlorodibromoacetic acid	Secondary Source Std		ND µg/L		9804-392	2
Chlorodibromoacetic acid	Standard	20.0	22.1 µg/L	111%	9804-393	2 80-120%
Chlorodibromoacetic acid	Standard	20.0	23.4 µg/L	117%	9804-393	2 80-120%
Chlorodibromoacetic acid	Standard	40.0	40.4 µg/L	101%	9804-394	2 80-120%
Dibromoacetic acid	Duplicate	1.5	1.4 µg/L	6.9%	9804-159	1
Dibromoacetic acid	Matrix Spike	40.0	43.6 µg/L	109%	9804-173	1
Dibromoacetic acid	Method Blank		ND* µg/L		9804-391	1
Dibromoacetic acid	Secondary Source Std	20.0	17.2 µg/L	86%	9804-392	1 70-130%
Dibromoacetic acid	Standard	20.0	20.2 µg/L	101%	9804-393	1 80-120%
Dibromoacetic acid	Standard	20.0	22.3 µg/L	112%	9804-393	1 80-120%
Dibromoacetic acid	Standard	40.0	41.5 µg/L	104%	9804-394	1 80-120%
Dichloroacetic acid	Duplicate	ND	ND µg/L	NA	9804-159	1
Dichloroacetic acid	Matrix Spike	40.0	42.0 µg/L	105%	9804-173	1
Dichloroacetic acid	Method Blank		ND* µg/L		9804-391	1
Dichloroacetic acid	Secondary Source Std	20.0	17.6 µg/L	88%	9804-392	1 70-130%
Dichloroacetic acid	Standard	20.0	20.9 µg/L	104%	9804-393	1 80-120%
Dichloroacetic acid	Standard	20.0	21.2 µg/L	106%	9804-393	1 80-120%
Dichloroacetic acid	Standard	40.0	40.0 µg/L	100%	9804-394	1 80-120%

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 110
Study Title: ICR RSSCT #1

Monobromoacetic acid	Duplicate	ND	ND	µg/L	NA	9804-159	1
Monobromoacetic acid	Matrix Spike	40.0	39.7	µg/L	99%	9804-173	1
Monobromoacetic acid	Method Blank		ND*	µg/L		9804-391	1
Monobromoacetic acid	Secondary Source Std	20.0	17.2	µg/L	86%	9804-392	1 70-130%
Monobromoacetic acid	Standard	20.0	20.3	µg/L	102%	9804-393	1 80-120%
Monobromoacetic acid	Standard	20.0	20.9	µg/L	104%	9804-393	1 80-120%
Monobromoacetic acid	Standard	40.0	39.3	µg/L	98%	9804-394	1 80-120%
Monochloroacetic acid	Duplicate	ND	ND	µg/L	NA	9804-159	2
Monochloroacetic acid	Matrix Spike	40.0	42.2	µg/L	106%	9804-173	2
Monochloroacetic acid	Method Blank		ND*	µg/L		9804-391	2
Monochloroacetic acid	Secondary Source Std	20.0	21.2	µg/L	106%	9804-392	2 70-130%
Monochloroacetic acid	Standard	20.0	18.6	µg/L	93%	9804-393	2 80-120%
Monochloroacetic acid	Standard	20.0	18.4	µg/L	92%	9804-393	2 80-120%
Monochloroacetic acid	Standard	40.0	39.9	µg/L	100%	9804-394	2 80-120%
Tribromoacetic acid	Duplicate	ND	ND	µg/L	NA	9804-159	4
Tribromoacetic acid	Matrix Spike	40.0	43.2	µg/L	108%	9804-173	4
Tribromoacetic acid	Method Blank		ND*	µg/L		9804-391	4
Tribromoacetic acid	Secondary Source Std		ND	µg/L		9804-392	4
Tribromoacetic acid	Standard	20.0	21.8	µg/L	109%	9804-393	4 80-120%
Tribromoacetic acid	Standard	20.0	22.6	µg/L	113%	9804-393	4 80-120%
Tribromoacetic acid	Standard	40.0	40.2	µg/L	101%	9804-394	4 80-120%
Trichloroacetic acid	Duplicate	ND	ND	µg/L	NA	9804-159	1
Trichloroacetic acid	Matrix Spike	40.0	43.9	µg/L	110%	9804-173	1
Trichloroacetic acid	Method Blank		ND*	µg/L		9804-391	1
Trichloroacetic acid	Secondary Source Std	20.0	17.2	µg/L	86%	9804-392	1 70-130%
Trichloroacetic acid	Standard	20.0	20.7	µg/L	103%	9804-393	1 80-120%
Trichloroacetic acid	Standard	20.0	21.7	µg/L	109%	9804-393	1 80-120%
Trichloroacetic acid	Standard	40.0	40.9	µg/L	102%	9804-394	1 80-120%

Analysis: HAA-ICR (Haloacetic Acids)**Method:** EPA 552.2**QC Batch ID:** 0-119-0

QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD	Acceptance Criteria
Bromochloroacetic acid	Duplicate	1.9	1.9	µg/L		0.0%	9804-257	1			

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable); RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

Bromochloroacetic acid	Matrix Spike	40.0	40.7 µg/L	102%	9804-223	1
Bromochloroacetic acid	Method Blank		ND* µg/L		9804-491	1
Bromochloroacetic acid	Standard	20.0	20.7 µg/L	103%	9804-493	1 80-120%
Bromochloroacetic acid	Standard	20.0	19.7 µg/L	98%	9804-493	1 80-120%
Bromochloroacetic acid	Standard	20.0	21.2 µg/L	106%	9804-493	1 80-120%
Bromochloroacetic acid	Standard	40.0	42.7 µg/L	107%	9804-494	1 80-120%
Bromochloroacetic acid	Standard	40.0	37.5 µg/L	94%	9804-494	1 80-120%
Bromochloroacetic acid	Standard	40.0	43.3 µg/L	108%	9804-494	1 80-120%
Bromodichloroacetic acid	Duplicate	ND	ND µg/L	NA	9804-257	1
Bromodichloroacetic acid	Matrix Spike	40.0	38.1 µg/L	95%	9804-223	1
Bromodichloroacetic acid	Method Blank		ND* µg/L		9804-491	1
Bromodichloroacetic acid	Standard	20.0	21.4 µg/L	107%	9804-493	1 80-120%
Bromodichloroacetic acid	Standard	20.0	21.4 µg/L	107%	9804-493	1 80-120%
Bromodichloroacetic acid	Standard	20.0	20.4 µg/L	102%	9804-493	1 80-120%
Bromodichloroacetic acid	Standard	40.0	47.1 µg/L	118%	9804-494	1 80-120%
Bromodichloroacetic acid	Standard	40.0	41.4 µg/L	103%	9804-494	1 80-120%
Bromodichloroacetic acid	Standard	40.0	41.2 µg/L	103%	9804-494	1 80-120%
Chlorodibromoacetic acid	Duplicate	ND	ND µg/L	NA	9804-257	2
Chlorodibromoacetic acid	Matrix Spike	40.0	41.3 µg/L	103%	9804-223	2
Chlorodibromoacetic acid	Method Blank		ND* µg/L		9804-491	2
Chlorodibromoacetic acid	Standard	20.0	21.1 µg/L	106%	9804-493	2 80-120%
Chlorodibromoacetic acid	Standard	20.0	22.7 µg/L	114%	9804-493	2 80-120%
Chlorodibromoacetic acid	Standard	20.0	20.2 µg/L	101%	9804-493	2 80-120%
Chlorodibromoacetic acid	Standard	40.0	45.4 µg/L	114%	9804-494	2 80-120%
Chlorodibromoacetic acid	Standard	40.0	39.9 µg/L	100%	9804-494	2 80-120%
Chlorodibromoacetic acid	Standard	40.0	40.4 µg/L	101%	9804-494	2 80-120%
Dibromoacetic acid	Duplicate	3.1	3.2 µg/L	3.2%	9804-257	1
Dibromoacetic acid	Matrix Spike	40.0	38.0 µg/L	95%	9804-223	1
Dibromoacetic acid	Method Blank		ND* µg/L		9804-491	1
Dibromoacetic acid	Standard	20.0	21.0 µg/L	105%	9804-493	1 80-120%
Dibromoacetic acid	Standard	20.0	20.8 µg/L	104%	9804-493	1 80-120%
Dibromoacetic acid	Standard	20.0	21.2 µg/L	106%	9804-493	1 80-120%
Dibromoacetic acid	Standard	40.0	45.4 µg/L	114%	9804-494	1 80-120%
Dibromoacetic acid	Standard	40.0	40.9 µg/L	102%	9804-494	1 80-120%
Dibromoacetic acid	Standard	40.0	44.7 µg/L	112%	9804-494	1 80-120%

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 110
Study Title: ICR RSSCT #1

Dichloroacetic acid	Duplicate	1.4	1.3 µg/L	7.4%	9804-257	1
Dichloroacetic acid	Matrix Spike	40.0	40.4 µg/L	101%	9804-223	1
Dichloroacetic acid	Method Blank		ND* µg/L		9804-491	1
Dichloroacetic acid	Standard	20.0	20.3 µg/L	102%	9804-493	1 80-120%
Dichloroacetic acid	Standard	20.0	18.9 µg/L	94%	9804-493	1 80-120%
Dichloroacetic acid	Standard	20.0	21.7 µg/L	109%	9804-493	1 80-120%
Dichloroacetic acid	Standard	40.0	39.7 µg/L	99%	9804-494	1 80-120%
Dichloroacetic acid	Standard	40.0	33.4 µg/L	83%	9804-494	1 80-120%
Dichloroacetic acid	Standard	40.0	41.5 µg/L	104%	9804-494	1 80-120%
Monobromoacetic acid	Duplicate	ND	ND µg/L	NA	9804-257	1
Monobromoacetic acid	Matrix Spike	40.0	42.3 µg/L	106%	9804-223	1
Monobromoacetic acid	Method Blank		ND* µg/L		9804-491	1
Monobromoacetic acid	Standard	20.0	20.1 µg/L	101%	9804-493	1 80-120%
Monobromoacetic acid	Standard	20.0	20.2 µg/L	101%	9804-493	1 80-120%
Monobromoacetic acid	Standard	20.0	21.7 µg/L	109%	9804-493	1 80-120%
Monobromoacetic acid	Standard	40.0	35.9 µg/L	90%	9804-494	1 80-120%
Monobromoacetic acid	Standard	40.0	34.9 µg/L	87%	9804-494	1 80-120%
Monobromoacetic acid	Standard	40.0	40.5 µg/L	101%	9804-494	1 80-120%
Monochloroacetic acid	Duplicate	ND	ND µg/L	NA	9804-257	2
Monochloroacetic acid	Matrix Spike	40.0	39.3 µg/L	98%	9804-223	2
Monochloroacetic acid	Method Blank		ND* µg/L		9804-491	2
Monochloroacetic acid	Standard	20.0	19.2 µg/L	96%	9804-493	2 80-120%
Monochloroacetic acid	Standard	20.0	21.2 µg/L	106%	9804-493	2 80-120%
Monochloroacetic acid	Standard	20.0	20.7 µg/L	103%	9804-493	2 80-120%
Monochloroacetic acid	Standard	40.0	42.5 µg/L	106%	9804-494	2 80-120%
Monochloroacetic acid	Standard	40.0	34.1 µg/L	85%	9804-494	2 80-120%
Monochloroacetic acid	Standard	40.0	42.3 µg/L	106%	9804-494	2 80-120%
Tribromoacetic acid	Duplicate	ND	ND µg/L	NA	9804-257	4
Tribromoacetic acid	Matrix Spike	40.0	40.7 µg/L	102%	9804-223	4
Tribromoacetic acid	Method Blank		ND* µg/L		9804-491	4
Tribromoacetic acid	Standard	20.0	22.1 µg/L	111%	9804-493	4 80-120%
Tribromoacetic acid	Standard	20.0	22.3 µg/L	112%	9804-493	4 80-120%
Tribromoacetic acid	Standard	20.0	21.1 µg/L	106%	9804-493	4 80-120%
Tribromoacetic acid	Standard	40.0	46.4 µg/L	116%	9804-494	4 80-120%
Tribromoacetic acid	Standard	40.0	42.0 µg/L	105%	9804-494	4 80-120%

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 110
Study Title: ICR RSSCT #1

Tribromoacetic acid	Standard	40.0	41.9	µg/L	105%	9804-494	4	80-120%
Trichloroacetic acid	Duplicate	ND	ND	µg/L	NA	9804-257	1	
Trichloroacetic acid	Matrix Spike	40.0	36.2	µg/L	91%	9804-223	1	
Trichloroacetic acid	Method Blank		ND*	µg/L		9804-491	1	
Trichloroacetic acid	Standard	20.0	21.2	µg/L	106%	9804-493	1	80-120%
Trichloroacetic acid	Standard	20.0	19.9	µg/L	99%	9804-493	1	80-120%
Trichloroacetic acid	Standard	20.0	21.7	µg/L	109%	9804-493	1	80-120%
Trichloroacetic acid	Standard	40.0	46.7	µg/L	117%	9804-494	1	80-120%
Trichloroacetic acid	Standard	40.0	38.9	µg/L	97%	9804-494	1	80-120%
Trichloroacetic acid	Standard	40.0	41.6	µg/L	104%	9804-494	1	80-120%

Analysis: HAA-ICR (Haloacetic Acids)**Method:** EPA 552.2**QC Batch ID:** 0-121-0

									Acceptance Criteria	
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Bromochloroacetic acid	Duplicate	4.9	4.6	µg/L		6.3%	9804-369	1		
Bromochloroacetic acid	Matrix Spike	40.0	38.3	µg/L	96%		9804-387	1		
Bromochloroacetic acid	Method Blank		ND*	µg/L			9805-84	1		
Bromochloroacetic acid	Secondary Source Std	20.0	23.9	µg/L	119%		9805-85	1	70-130%	
Bromochloroacetic acid	Standard	20.0	21.3	µg/L	106%		9805-86	1	80-120%	
Bromochloroacetic acid	Standard	20.0	20.8	µg/L	104%		9805-86	1	80-120%	
Bromochloroacetic acid	Standard	40.0	37.3	µg/L	93%		9805-87	1	80-120%	
Bromodichloroacetic acid	Duplicate	2.3	2.3	µg/L		0.0%	9804-369	1		
Bromodichloroacetic acid	Matrix Spike	40.0	46.7	µg/L	117%		9804-387	1		
Bromodichloroacetic acid	Method Blank		ND*	µg/L			9805-84	1		
Bromodichloroacetic acid	Secondary Source Std		ND	µg/L			9805-85	1		
Bromodichloroacetic acid	Standard	20.0	23.4	µg/L	117%		9805-86	1	80-120%	
Bromodichloroacetic acid	Standard	20.0	23.5	µg/L	118%		9805-86	1	80-120%	
Bromodichloroacetic acid	Standard	40.0	37.5	µg/L	94%		9805-87	1	80-120%	
Chlorodibromoacetic acid	Duplicate	ND	ND	µg/L		NA	9804-369	2		
Chlorodibromoacetic acid	Matrix Spike	40.0	47.9	µg/L	120%		9804-387	2		
Chlorodibromoacetic acid	Method Blank		ND*	µg/L			9805-84	2		
Chlorodibromoacetic acid	Secondary Source Std		ND	µg/L			9805-85	2		
Chlorodibromoacetic acid	Standard	20.0	23.7	µg/L	119%		9805-86	2	80-120%	
Chlorodibromoacetic acid	Standard	20.0	23.7	µg/L	119%		9805-86	2	80-120%	

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 110
Study Title: ICR RSSCT #1

Chlorodibromoacetic acid	Standard	40.0	37.6 µg/L	94%	9805-87	2 80-120%
Dibromoacetic acid	Duplicate	3.5	3.4 µg/L	2.9%	9804-369	1
Dibromoacetic acid	Matrix Spike	40.0	41.0 µg/L	102%	9804-387	1
Dibromoacetic acid	Method Blank		ND* µg/L		9805-84	1
Dibromoacetic acid	Secondary Source Std	20.0	24.5 µg/L	123%	9805-85	1 70-130%
Dibromoacetic acid	Standard	20.0	22.0 µg/L	110%	9805-86	1 80-120%
Dibromoacetic acid	Standard	20.0	21.9 µg/L	110%	9805-86	1 80-120%
Dibromoacetic acid	Standard	40.0	38.5 µg/L	96%	9805-87	1 80-120%
Dichloroacetic acid	Duplicate	7.1	6.6 µg/L	7.3%	9804-369	1
Dichloroacetic acid	Matrix Spike	40.0	36.2 µg/L	91%	9804-387	1
Dichloroacetic acid	Method Blank		ND* µg/L		9805-84	1
Dichloroacetic acid	Secondary Source Std	20.0	24.0 µg/L	120%	9805-85	1 70-130%
Dichloroacetic acid	Standard	20.0	21.4 µg/L	107%	9805-86	1 80-120%
Dichloroacetic acid	Standard	20.0	21.4 µg/L	107%	9805-86	1 80-120%
Dichloroacetic acid	Standard	40.0	37.1 µg/L	93%	9805-87	1 80-120%
Monobromoacetic acid	Duplicate	ND	ND µg/L	NA	9804-369	1
Monobromoacetic acid	Matrix Spike	40.0	35.6 µg/L	89%	9804-387	1
Monobromoacetic acid	Method Blank		ND* µg/L		9805-84	1
Monobromoacetic acid	Secondary Source Std	20.0	24.6 µg/L	123%	9805-85	1 70-130%
Monobromoacetic acid	Standard	20.0	20.2 µg/L	101%	9805-86	1 80-120%
Monobromoacetic acid	Standard	20.0	19.7 µg/L	98%	9805-86	1 80-120%
Monobromoacetic acid	Standard	40.0	38.4 µg/L	96%	9805-87	1 80-120%
Monochloroacetic acid	Duplicate	ND	ND µg/L	NA	9804-369	2
Monochloroacetic acid	Matrix Spike	40.0	36.2 µg/L	91%	9804-387	2
Monochloroacetic acid	Method Blank		ND* µg/L		9805-84	2
Monochloroacetic acid	Secondary Source Std	20.0	20.3 µg/L	102%	9805-85	2 70-130%
Monochloroacetic acid	Standard	20.0	20.8 µg/L	104%	9805-86	2 80-120%
Monochloroacetic acid	Standard	20.0	19.2 µg/L	96%	9805-86	2 80-120%
Monochloroacetic acid	Standard	40.0	37.8 µg/L	94%	9805-87	2 80-120%
Tribromoacetic acid	Duplicate	ND	ND µg/L	NA	9804-369	4
Tribromoacetic acid	Matrix Spike	40.0	49.3 µg/L	123%	9804-387	4
Tribromoacetic acid	Method Blank		ND* µg/L		9805-84	4

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 110
Study Title: ICR RSSCT #1

Tribromoacetic acid	Secondary Source Std		ND	µg/L		9805-85	4
Tribromoacetic acid	Standard	20.0	23.4	µg/L	117%	9805-86	4 80-120%
Tribromoacetic acid	Standard	20.0	23.7	µg/L	119%	9805-86	4 80-120%
Tribromoacetic acid	Standard	40.0	36.8	µg/L	92%	9805-87	4 80-120%
Trichloroacetic acid	Duplicate	3.1	3.3	µg/L	6.2%	9804-369	1
Trichloroacetic acid	Matrix Spike	40.0	43.5	µg/L	109%	9804-387	1
Trichloroacetic acid	Method Blank		ND*	µg/L		9805-84	1
Trichloroacetic acid	Secondary Source Std	20.0	25.7	µg/L	128%	9805-85	1 70-130%
Trichloroacetic acid	Standard	20.0	22.8	µg/L	114%	9805-86	1 80-120%
Trichloroacetic acid	Standard	20.0	22.9	µg/L	115%	9805-86	1 80-120%
Trichloroacetic acid	Standard	40.0	37.2	µg/L	93%	9805-87	1 80-120%

Analysis: HAA-ICR (Haloacetic Acids)**Method:** EPA 552.2**QC Batch ID:** 0-123-0

										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD	
Bromochloroacetic acid	Duplicate	1.5	1.6	µg/L		6.5%	9804-453	1			
Bromochloroacetic acid	Matrix Spike	40.0	40.9	µg/L	102%		9804-507	1			
Bromochloroacetic acid	Method Blank		ND*	µg/L			9805-129	1			
Bromochloroacetic acid	Secondary Source Std	20.0	20.5	µg/L	102%		9805-130	1	70-130%		
Bromochloroacetic acid	Standard	20.0	20.6	µg/L	103%		9805-131	1	80-120%		
Bromochloroacetic acid	Standard	20.0	20.9	µg/L	104%		9805-131	1	80-120%		
Bromochloroacetic acid	Standard	40.0	40.5	µg/L	101%		9805-132	1	80-120%		
Bromodichloroacetic acid	Duplicate	1.5	1.5	µg/L		0.0%	9804-453	1			
Bromodichloroacetic acid	Matrix Spike	40.0	43.3	µg/L	108%		9804-507	1			
Bromodichloroacetic acid	Method Blank		ND*	µg/L			9805-129	1			
Bromodichloroacetic acid	Secondary Source Std		ND	µg/L			9805-130	1			
Bromodichloroacetic acid	Standard	20.0	20.6	µg/L	103%		9805-131	1	80-120%		
Bromodichloroacetic acid	Standard	20.0	20.3	µg/L	102%		9805-131	1	80-120%		
Bromodichloroacetic acid	Standard	40.0	40.8	µg/L	102%		9805-132	1	80-120%		
Chlorodibromoacetic acid	Duplicate	ND	ND	µg/L		NA	9804-453	2			
Chlorodibromoacetic acid	Matrix Spike	40.0	42.8	µg/L	107%		9804-507	2			
Chlorodibromoacetic acid	Method Blank		ND*	µg/L			9805-129	2			
Chlorodibromoacetic acid	Secondary Source Std		ND	µg/L			9805-130	2			

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 110
Study Title: ICR RSSCT #1

Chlorodibromoacetic acid	Standard	20.0	20.9 µg/L	104%	9805-131	2 80-120%
Chlorodibromoacetic acid	Standard	20.0	20.5 µg/L	102%	9805-131	2 80-120%
Chlorodibromoacetic acid	Standard	40.0	41.1 µg/L	103%	9805-132	2 80-120%
Dibromoacetic acid	Duplicate	ND	ND µg/L	NA	9804-453	1
Dibromoacetic acid	Matrix Spike	40.0	42.7 µg/L	107%	9804-507	1
Dibromoacetic acid	Method Blank		ND* µg/L		9805-129	1
Dibromoacetic acid	Secondary Source Std	20.0	21.4 µg/L	107%	9805-130	1 70-130%
Dibromoacetic acid	Standard	20.0	20.8 µg/L	104%	9805-131	1 80-120%
Dibromoacetic acid	Standard	20.0	21.4 µg/L	107%	9805-131	1 80-120%
Dibromoacetic acid	Standard	40.0	41.0 µg/L	102%	9805-132	1 80-120%
Dichloroacetic acid	Duplicate	8.9	9.2 µg/L	3.3%	9804-453	1
Dichloroacetic acid	Matrix Spike	40.0	40.5 µg/L	101%	9804-507	1
Dichloroacetic acid	Method Blank		ND* µg/L		9805-129	1
Dichloroacetic acid	Secondary Source Std	20.0	22.4 µg/L	112%	9805-130	1 70-130%
Dichloroacetic acid	Standard	20.0	21.5 µg/L	108%	9805-131	1 80-120%
Dichloroacetic acid	Standard	20.0	21.5 µg/L	108%	9805-131	1 80-120%
Dichloroacetic acid	Standard	40.0	40.2 µg/L	101%	9805-132	1 80-120%
Monobromoacetic acid	Duplicate	ND	ND µg/L	NA	9804-453	1
Monobromoacetic acid	Matrix Spike	40.0	40.4 µg/L	101%	9804-507	1
Monobromoacetic acid	Method Blank		ND* µg/L		9805-129	1
Monobromoacetic acid	Secondary Source Std	20.0	17.4 µg/L	87%	9805-130	1 70-130%
Monobromoacetic acid	Standard	20.0	21.5 µg/L	108%	9805-131	1 80-120%
Monobromoacetic acid	Standard	20.0	22.1 µg/L	111%	9805-131	1 80-120%
Monobromoacetic acid	Standard	40.0	38.5 µg/L	96%	9805-132	1 80-120%
Monochloroacetic acid	Duplicate	ND	ND µg/L	NA	9804-453	2
Monochloroacetic acid	Matrix Spike	40.0	37.5 µg/L	94%	9804-507	2
Monochloroacetic acid	Method Blank		ND* µg/L		9805-129	2
Monochloroacetic acid	Secondary Source Std	20.0	19.0 µg/L	95%	9805-130	2 70-130%
Monochloroacetic acid	Standard	20.0	21.5 µg/L	108%	9805-131	2 80-120%
Monochloroacetic acid	Standard	20.0	18.8 µg/L	94%	9805-131	2 80-120%
Monochloroacetic acid	Standard	40.0	38.3 µg/L	96%	9805-132	2 80-120%
Tribromoacetic acid	Duplicate	ND	ND µg/L	NA	9804-453	4
Tribromoacetic acid	Matrix Spike	40.0	40.9 µg/L	102%	9804-507	4

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 110
Study Title: ICR RSSCT #1

Tribromoacetic acid	Method Blank		ND*	µg/L		9805-129	4
Tribromoacetic acid	Secondary Source Std		ND	µg/L		9805-130	4
Tribromoacetic acid	Standard	20.0	21.0	µg/L	105%	9805-131	4 80-120%
Tribromoacetic acid	Standard	20.0	19.9	µg/L	99%	9805-131	4 80-120%
Tribromoacetic acid	Standard	40.0	40.3	µg/L	101%	9805-132	4 80-120%
Trichloroacetic acid	Duplicate	6.8	7.0	µg/L	2.9%	9804-453	1
Trichloroacetic acid	Matrix Spike	40.0	42.5	µg/L	106%	9804-507	1
Trichloroacetic acid	Method Blank		ND*	µg/L		9805-129	1
Trichloroacetic acid	Secondary Source Std	20.0	23.6	µg/L	118%	9805-130	1 70-130%
Trichloroacetic acid	Standard	20.0	20.5	µg/L	102%	9805-131	1 80-120%
Trichloroacetic acid	Standard	20.0	20.1	µg/L	101%	9805-131	1 80-120%
Trichloroacetic acid	Standard	40.0	40.4	µg/L	101%	9805-132	1 80-120%

Analysis: HAA-ICR (Haloacetic Acids)**Method:** EPA 552.2**QC Batch ID:** 0-127-0

										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD	
Bromochloroacetic acid	Duplicate	3.8	3.6	µg/L		5.4%	9805-29	1			
Bromochloroacetic acid	Matrix Spike	40.0	40.5	µg/L	101%		9805-57	1			
Bromochloroacetic acid	Method Blank		ND*	µg/L			9805-97	1			
Bromochloroacetic acid	Secondary Source Std	20.0	19.5	µg/L	97%		9805-98	1	70-130%		
Bromochloroacetic acid	Standard	20.0	20.2	µg/L	101%		9805-99	1	80-120%		
Bromochloroacetic acid	Standard	20.0	20.4	µg/L	102%		9805-99	1	80-120%		
Bromochloroacetic acid	Standard	40.0	41.5	µg/L	104%		9805-100	1	80-120%		
Bromodichloroacetic acid	Duplicate	ND	ND	µg/L		NA	9805-29	1			
Bromodichloroacetic acid	Matrix Spike	40.0	36.9	µg/L	92%		9805-57	1			
Bromodichloroacetic acid	Method Blank		ND*	µg/L			9805-97	1			
Bromodichloroacetic acid	Secondary Source Std		ND	µg/L			9805-98	1			
Bromodichloroacetic acid	Standard	20.0	20.6	µg/L	103%		9805-99	1	80-120%		
Bromodichloroacetic acid	Standard	20.0	19.5	µg/L	97%		9805-99	1	80-120%		
Bromodichloroacetic acid	Standard	40.0	45.1	µg/L	113%		9805-100	1	80-120%		
Chlorodibromoacetic acid	Duplicate	ND	ND	µg/L		NA	9805-29	2			
Chlorodibromoacetic acid	Matrix Spike	40.0	34.1	µg/L	85%		9805-57	2			
Chlorodibromoacetic acid	Method Blank		ND*	µg/L			9805-97	2			

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

Chlorodibromoacetic acid	Secondary Source Std		ND	µg/L		9805-98	2
Chlorodibromoacetic acid	Standard	20.0	20.4	µg/L	102%	9805-99	2 80-120%
Chlorodibromoacetic acid	Standard	20.0	18.2	µg/L	91%	9805-99	2 80-120%
Chlorodibromoacetic acid	Standard	40.0	43.4	µg/L	109%	9805-100	2 80-120%
Dibromoacetic acid	Duplicate	4.5	4.3	µg/L	4.5%	9805-29	1
Dibromoacetic acid	Matrix Spike	40.0	41.4	µg/L	103%	9805-57	1
Dibromoacetic acid	Method Blank		ND*	µg/L		9805-97	1
Dibromoacetic acid	Secondary Source Std	20.0	20.5	µg/L	102%	9805-98	1 70-130%
Dibromoacetic acid	Standard	20.0	20.3	µg/L	102%	9805-99	1 80-120%
Dibromoacetic acid	Standard	20.0	21.0	µg/L	105%	9805-99	1 80-120%
Dibromoacetic acid	Standard	40.0	43.9	µg/L	110%	9805-100	1 80-120%
Dichloroacetic acid	Duplicate	7.9	7.5	µg/L	5.2%	9805-29	1
Dichloroacetic acid	Matrix Spike	40.0	39.5	µg/L	99%	9805-57	1
Dichloroacetic acid	Method Blank		ND*	µg/L		9805-97	1
Dichloroacetic acid	Secondary Source Std	20.0	19.9	µg/L	99%	9805-98	1 70-130%
Dichloroacetic acid	Standard	20.0	19.9	µg/L	99%	9805-99	1 80-120%
Dichloroacetic acid	Standard	20.0	20.2	µg/L	101%	9805-99	1 80-120%
Dichloroacetic acid	Standard	40.0	39.5	µg/L	99%	9805-100	1 80-120%
Monobromoacetic acid	Duplicate	ND	ND	µg/L	NA	9805-29	1
Monobromoacetic acid	Matrix Spike	40.0	36.6	µg/L	92%	9805-57	1
Monobromoacetic acid	Method Blank		ND*	µg/L		9805-97	1
Monobromoacetic acid	Secondary Source Std	20.0	18.1	µg/L	91%	9805-98	1 70-130%
Monobromoacetic acid	Standard	20.0	19.4	µg/L	97%	9805-99	1 80-120%
Monobromoacetic acid	Standard	20.0	18.1	µg/L	91%	9805-99	1 80-120%
Monobromoacetic acid	Standard	40.0	37.1	µg/L	93%	9805-100	1 80-120%
Monochloroacetic acid	Duplicate	ND	ND	µg/L	NA	9805-29	2
Monochloroacetic acid	Matrix Spike	40.0	41.2	µg/L	103%	9805-57	2
Monochloroacetic acid	Method Blank		ND*	µg/L		9805-97	2
Monochloroacetic acid	Secondary Source Std	20.0	17.5	µg/L	88%	9805-98	2 70-130%
Monochloroacetic acid	Standard	20.0	19.1	µg/L	96%	9805-99	2 80-120%
Monochloroacetic acid	Standard	20.0	19.3	µg/L	97%	9805-99	2 80-120%
Monochloroacetic acid	Standard	40.0	35.1	µg/L	88%	9805-100	2 80-120%

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 110
Study Title: ICR RSSCT #1

Tribromoacetic acid	Duplicate	ND	ND	µg/L	NA	9805-29	4
Tribromoacetic acid	Matrix Spike	40.0	33.1	µg/L	83%	9805-57	4
Tribromoacetic acid	Method Blank		ND*	µg/L		9805-97	4
Tribromoacetic acid	Secondary Source Std		ND	µg/L		9805-98	4
Tribromoacetic acid	Standard	20.0	20.2	µg/L	101%	9805-99	4 80-120%
Tribromoacetic acid	Standard	20.0	17.7	µg/L	89%	9805-99	4 80-120%
Tribromoacetic acid	Standard	40.0	40.8	µg/L	102%	9805-100	4 80-120%
Trichloroacetic acid	Duplicate	ND	ND	µg/L	NA	9805-29	1
Trichloroacetic acid	Matrix Spike	40.0	39.0	µg/L	97%	9805-57	1
Trichloroacetic acid	Method Blank		ND*	µg/L		9805-97	1
Trichloroacetic acid	Secondary Source Std	20.0	19.7	µg/L	98%	9805-98	1 70-130%
Trichloroacetic acid	Standard	20.0	20.0	µg/L	100%	9805-99	1 80-120%
Trichloroacetic acid	Standard	20.0	21.5	µg/L	108%	9805-99	1 80-120%
Trichloroacetic acid	Standard	40.0	45.6	µg/L	114%	9805-100	1 80-120%

Analysis: HAA-ICR (Haloacetic Acids)**Method:** EPA 552.2**QC Batch ID:** 0-129-0

									Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Bromochloroacetic acid	Duplicate	1.3	1.2	µg/L		8.0%	9805-118	1		
Bromochloroacetic acid	Matrix Spike	40.0	40.9	µg/L	102%		9805-158	1		
Bromochloroacetic acid	Method Blank		ND*	µg/L			9805-413	1		
Bromochloroacetic acid	Secondary Source Std	20.0	18.7	µg/L	93%		9805-414	1	70-130%	
Bromochloroacetic acid	Standard	20.0	19.3	µg/L	97%		9805-415	1	80-120%	
Bromochloroacetic acid	Standard	20.0	19.3	µg/L	97%		9805-415	1	80-120%	
Bromochloroacetic acid	Standard	40.0	38.3	µg/L	96%		9805-416	1	80-120%	
Bromodichloroacetic acid	Duplicate	1.0	1.0	µg/L		0.0%	9805-118	1		
Bromodichloroacetic acid	Matrix Spike	40.0	35.6	µg/L	89%		9805-158	1		
Bromodichloroacetic acid	Method Blank		ND*	µg/L			9805-413	1		
Bromodichloroacetic acid	Secondary Source Std		ND	µg/L			9805-414	1		
Bromodichloroacetic acid	Standard	20.0	18.1	µg/L	91%		9805-415	1	80-120%	
Bromodichloroacetic acid	Standard	20.0	19.0	µg/L	95%		9805-415	1	80-120%	
Bromodichloroacetic acid	Standard	40.0	38.5	µg/L	96%		9805-416	1	80-120%	
Chlorodibromoacetic acid	Duplicate	ND	ND	µg/L		NA	9805-118	2		

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable); RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

Chlorodibromoacetic acid	Matrix Spike	40.0	35.2 µg/L	88%	9805-158	2
Chlorodibromoacetic acid	Method Blank		ND* µg/L		9805-413	2
Chlorodibromoacetic acid	Secondary Source Std		ND µg/L		9805-414	2
Chlorodibromoacetic acid	Standard	20.0	18.0 µg/L	90%	9805-415	2 80-120%
Chlorodibromoacetic acid	Standard	20.0	19.9 µg/L	99%	9805-415	2 80-120%
Chlorodibromoacetic acid	Standard	40.0	38.3 µg/L	96%	9805-416	2 80-120%
Dibromoacetic acid	Duplicate	ND	ND µg/L	NA	9805-118	1
Dibromoacetic acid	Matrix Spike	40.0	38.3 µg/L	96%	9805-158	1
Dibromoacetic acid	Method Blank		ND* µg/L		9805-413	1
Dibromoacetic acid	Secondary Source Std	20.0	18.3 µg/L	92%	9805-414	1 70-130%
Dibromoacetic acid	Standard	20.0	19.0 µg/L	95%	9805-415	1 80-120%
Dibromoacetic acid	Standard	20.0	18.9 µg/L	94%	9805-415	1 80-120%
Dibromoacetic acid	Standard	40.0	37.7 µg/L	94%	9805-416	1 80-120%
Dichloroacetic acid	Duplicate	1.9	1.8 µg/L	5.4%	9805-118	1
Dichloroacetic acid	Matrix Spike	40.0	41.3 µg/L	103%	9805-158	1
Dichloroacetic acid	Method Blank		ND* µg/L		9805-413	1
Dichloroacetic acid	Secondary Source Std	20.0	20.0 µg/L	100%	9805-414	1 70-130%
Dichloroacetic acid	Standard	20.0	19.4 µg/L	97%	9805-415	1 80-120%
Dichloroacetic acid	Standard	20.0	19.5 µg/L	97%	9805-415	1 80-120%
Dichloroacetic acid	Standard	40.0	37.2 µg/L	93%	9805-416	1 80-120%
Monobromoacetic acid	Duplicate	ND	ND µg/L	NA	9805-118	1
Monobromoacetic acid	Matrix Spike	40.0	39.4 µg/L	98%	9805-158	1
Monobromoacetic acid	Method Blank		ND* µg/L		9805-413	1
Monobromoacetic acid	Secondary Source Std	20.0	19.2 µg/L	96%	9805-414	1 70-130%
Monobromoacetic acid	Standard	20.0	18.5 µg/L	93%	9805-415	1 80-120%
Monobromoacetic acid	Standard	20.0	18.7 µg/L	93%	9805-415	1 80-120%
Monobromoacetic acid	Standard	40.0	37.1 µg/L	93%	9805-416	1 80-120%
Monochloroacetic acid	Duplicate	ND	ND µg/L	NA	9805-118	2
Monochloroacetic acid	Matrix Spike	40.0	40.2 µg/L	101%	9805-158	2
Monochloroacetic acid	Method Blank		ND* µg/L		9805-413	2
Monochloroacetic acid	Secondary Source Std	20.0	18.1 µg/L	91%	9805-414	2 70-130%
Monochloroacetic acid	Standard	20.0	19.2 µg/L	96%	9805-415	2 80-120%

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

Monochloroacetic acid	Standard	20.0	19.4 µg/L	97%	9805-415	2 80-120%
Monochloroacetic acid	Standard	40.0	38.8 µg/L	97%	9805-416	2 80-120%
Tribromoacetic acid	Duplicate	ND	ND µg/L	NA	9805-118	4
Tribromoacetic acid	Matrix Spike	40.0	35.1 µg/L	88%	9805-158	4
Tribromoacetic acid	Method Blank		ND* µg/L		9805-413	4
Tribromoacetic acid	Secondary Source Std		ND µg/L		9805-414	4
Tribromoacetic acid	Standard	20.0	18.5 µg/L	93%	9805-415	4 80-120%
Tribromoacetic acid	Standard	20.0	20.3 µg/L	102%	9805-415	4 80-120%
Tribromoacetic acid	Standard	40.0	37.9 µg/L	95%	9805-416	4 80-120%
Trichloroacetic acid	Duplicate	1.2	1.2 µg/L	0.0%	9805-118	1
Trichloroacetic acid	Matrix Spike	40.0	36.0 µg/L	90%	9805-158	1
Trichloroacetic acid	Method Blank		ND* µg/L		9805-413	1
Trichloroacetic acid	Secondary Source Std	20.0	18.0 µg/L	90%	9805-414	1 70-130%
Trichloroacetic acid	Standard	20.0	19.2 µg/L	96%	9805-415	1 80-120%
Trichloroacetic acid	Standard	20.0	19.0 µg/L	95%	9805-415	1 80-120%
Trichloroacetic acid	Standard	40.0	38.0 µg/L	95%	9805-416	1 80-120%

End of quality control report

QC Results from Montgomery Watson Laboratories

Page 1 of 2

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Ms. Sibyl Carley
Jacksonville Electric Authority
Ridenhour Regional Water Treatment Plant
102 Kernan Blvd. North
Jacksonville, FL 32225

Study#: 110
Study Title: ICR RSSCT #1

Phone: 904-665-4503 Fax: 904-665-4531

QC Batch ID: 76028**Report #:** 42152**Analysis:** CA**Method:** EPA/ML 200.7

<u>QC</u>	<u>Analyte</u>	<u>Spike</u>	<u>Recovery</u>	<u>Yield</u>	<u>RPD</u>	<u>Acceptance Criteria Range</u>
LCS1	Calcium, Total, ICAP	50	52.7	105.0%		(90 - 110)
LCS2	Calcium, Total, ICAP	50	52.9	106.0%		(90 - 110)
MS	Calcium, Total, ICAP	50	53.2	106.0%		(80 - 120)

QC Batch ID: 76029**Report #:** 42152**Analysis:** MG**Method:** ML/EPA 200.7

<u>QC</u>	<u>Analyte</u>	<u>Spike</u>	<u>Recovery</u>	<u>Yield</u>	<u>RPD</u>	<u>Acceptance Criteria Range</u>
LCS1	Magnesium, Total, ICAP	20	18.1	90.0%		(80 - 120)
LCS2	Magnesium, Total, ICAP	20	17.9	90.0%		(80 - 120)
MS	Magnesium, Total, ICAP	20	20.4	102.0%		(80 - 120)

QC Batch ID: 76459**Report #:** 42152**Analysis:** BR**Method:** ML/EPA 300

<u>QC</u>	<u>Analyte</u>	<u>Spike</u>	<u>Recovery</u>	<u>Yield</u>	<u>RPD</u>	<u>Acceptance Criteria Range</u>
LCS1	Bromide	0.02	0.015	75.0%		(50 - 150)
LCS2	Bromide	0.1	0.095	95.0%		(90 - 110)
MS	Bromide	0.3	0.299	100.0%		(70 - 130)
MSD	Bromide	0.3	0.299	100.0%		(70 - 130)

QC Batch ID: 76574**Report #:** 42152**Analysis:** NH3**Method:** ML/EPA 350.1

<u>QC</u>	<u>Analyte</u>	<u>Spike</u>	<u>Recovery</u>	<u>Yield</u>	<u>RPD</u>	<u>Acceptance Criteria Range</u>
LCS1	Ammonia Nitrogen	1	1.01	101.0%		(80 - 120)
LCS2	Ammonia Nitrogen	1	1.02	102.0%		(80 - 120)
MS	Ammonia Nitrogen	1	1.13	113.0%		(80 - 120)
MSD	Ammonia Nitrogen	1	1.12	112.0%		(80 - 120)

QC Batch ID: 76928**Report #:** 42488**Analysis:** CA**Method:** EPA/ML 200.7

<u>QC</u>	<u>Analyte</u>	<u>Spike</u>	<u>Recovery</u>	<u>Yield</u>	<u>RPD</u>	<u>Acceptance Criteria Range</u>
LCS1	Calcium, Total, ICAP	50	48.7	97.0%		(90 - 110)

ND (non-detect): Result is below 1/2 minimum reporting level (MRL).

QC Results from Montgomery Watson LaboratoriesMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 110
Study Title: ICR RSSCT #1

LCS2	Calcium, Total, ICAP	50	48.6	97.0%	(90 - 110)
MS	Calcium, Total, ICAP	50	46.1	92.0%	(80 - 120)

QC Batch ID: 76929

Report #: 42488

Analysis: MG

Method: ML/EPA 200.7

QC	Analyte	Spike	Recovery	Yield	RPD	Acceptance Criteria Range
LCS1	Magnesium, Total, ICAP	20	19.5	98.0%		(80 - 120)
LCS2	Magnesium, Total, ICAP	20	19.7	98.0%		(80 - 120)
MS	Magnesium, Total, ICAP	20	19.2	96.0%		(80 - 120)

QC Batch ID: 77103

Report #: 42488

Analysis: NH3

Method: ML/EPA 350.1

QC	Analyte	Spike	Recovery	Yield	RPD	Acceptance Criteria Range
LCS1	Ammonia Nitrogen	1	0.98	98.0%		(80 - 120)
LCS2	Ammonia Nitrogen	1	1.04	104.0%		(80 - 120)
MS	Ammonia Nitrogen	1	1.04	104.0%		(80 - 120)
MSD	Ammonia Nitrogen	1	1.03	103.0%		(80 - 120)

QC Batch ID: 77255

Report #: 42488

Analysis: BR

Method: ML/EPA 300

QC	Analyte	Spike	Recovery	Yield	RPD	Acceptance Criteria Range
LCS1	Bromide	0.02	0.021	105.0%		(50 - 150)
LCS2	Bromide	0.1	0.1	100.0%		(90 - 110)
MS	Bromide	0.1	0.114	114.0%		(70 - 130)
MSD	Bromide	0.1	0.114	114.0%		(70 - 130)

End of MW QC report

Comments

Ms. Sibyl Carley
Jacksonville Electric Authority
Ridenhour Regional Water Treatment Plant
102 Kernan Blvd. North
Jacksonville, FL 32225

Phone: 904-665-4503 Fax: 904-665-4531

Study#: 110
Study Title: ICR RSSCT #1

Study comments

Sample 9804-287: Chlorine residual and final chlorination pH were not measured because sample bottle broke. Samples were collected for TOX, THM4, and HAA9 analysis.

Analysis comments

Analysis: Turbidity
Method: SM 2130 B

Reported turbidity data has been rounded following the requirements of SM 2130 B, reproduced in the table below (Standard Methods, 1995). Note that the reported digits are not necessarily significant.

Turbidity Range	Report to Nearest
0-1.0	0.05
1-10	0.1
10-40	1
40-100	5
100-400	10
400-1000	50
> 1000	100

QC comments

QCBatch: 0-124-0 **Description:** SDS Chlorination

Sample 9804-287: 1L bottle broke during DBP sampling. No sample was available to measure chlorine residual and therefore no result is available for chlorine demand, chlorine residual, and average pH.

End of comments

Laboratory Report

Client:

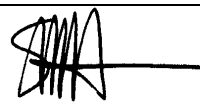
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Study Title: ICR RSSCT #2

Study #: 119

Reviewed By: _____



Stuart M. Hooper

Date Reviewed: 7/13/99

Laboratory Test ResultsPage 1 of 52
Printed on 7/9/99

Ms. Sibyl Carley
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Phone: 904-665-4503 Fax: 904-665-4531

Study#: 119

Study Title: ICR RSSCT #2

Sample ID: 119.Aerated			S&H ID: 9806-352		Date Sampled: 6/9/98 4:00:00 PM						
#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1	TOC-ICR	TOC	1.89	mg/L	SM 5310 C	1	0.50	6/9/98		6/12/98	7-0-295
2	TOC-ICR	TOC (Dupl)	1.92	mg/L	SM 5310 C	1	0.50	6/9/98		6/12/98	7-0-295
			1.90	mg/L	1.6 % RPD						

Sample ID: 119.Settled on Arrival			S&H ID: 9806-353		Date Sampled: 6/12/98 9:20:00 AM						
#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
3	TOC-ICR	TOC	1.77	mg/L	SM 5310 C	1	0.50	6/12/98		6/13/98	7-0-296
4	TOC-ICR	TOC (Dupl)	1.75	mg/L	SM 5310 C	1	0.50	6/12/98		6/13/98	7-0-296
			1.76	mg/L	1.1 % RPD						

Sample ID: 119.Filtered.S&H			S&H ID: 9806-354		Date Sampled: 6/12/98 10:35:00 AM						
#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
5	TOC-ICR	TOC	1.85	mg/L	SM 5310 C	1	0.50	6/12/98		6/12/98	7-0-295
6	TOC-ICR	TOC (Dupl)	1.86	mg/L	SM 5310 C	1	0.50	6/12/98		6/12/98	7-0-295
			1.86	mg/L	0.5 % RPD						

Sample ID: 119.Inf.A-1			S&H ID: 9806-471		Date Sampled: 6/18/98 3:10:00 PM						
#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
7	ALK	Alkalinity	127	mg/L	SM 2320 B	1	5	6/18/98		6/19/98	1-0-23
8	ALK	Alkalinity (Dupl)	127	mg/L	SM 2320 B	1	5	6/18/98		6/19/98	1-0-23
			127	mg/L	0.0 % RPD						
9	NH3	Ammonia Nitrogen	0.17	mg/L	EPA 350.1	1	0.05	6/18/98		6/26/98	MW79765
10	BR	Bromide	0.400	mg/L	EPA 300.0 A	2	0.040	6/18/98		7/7/98	MW80235
11	CaHardM	Calcium Hardness	247	mg/L CaCO3	EPA 200.7	1	5	6/18/98		7/10/98	MW n/a
12	CaMW	Calcium, Total, ICAP	99	mg/L	EPA 200.7	1	1	6/18/98	7/10/98	7/10/98	MW80410
13	MgMW	Magnesium, Total, ICAP	38	mg/L	EPA 200.7	1	0	6/18/98	7/10/98	7/10/98	MW80413
14	TotHard	Total Hardness as CaCO3 by ICP	403	mg/L CaCO3	SM 2340B	1	7	6/18/98		7/10/98	MW n/a

Sample ID: 119.Inf.A-2			S&H ID: 9806-472		Date Sampled: 6/24/98 12:00:00 PM						
#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
15	ALK	Alkalinity	128	mg/L	SM 2320 B	1	5	6/24/98		6/24/98	1-0-26

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

16	ALK	Alkalinity (Dupl)	129 mg/L 129 mg/L	SM 2320 B 0.8 % RPD	1	5	6/24/98	6/24/98	1-0-26
17	NH3	Ammonia Nitrogen	0.30 mg/L	EPA 350.1	1	0.05	6/24/98	7/13/98	MW80526
18	BR	Bromide	0.390 mg/L	EPA 300.0 A	1	0.020	6/24/98	7/15/98	MW80694
19	CaHardM	Calcium Hardness	232 mg/L CaCO3	EPA 200.7	1	5	6/24/98	7/29/98	MW n/a
20	CaMW	Calcium, Total, ICAP	93 mg/L	EPA 200.7	1	1	6/24/98	7/29/98	MW81464
21	MgMW	Magnesium, Total, ICAP	38 mg/L	EPA 200.7	1	0	6/24/98	7/29/98	MW81465
22	TotHard	Total Hardness as CaCO3 by ICP	388 mg/L CaCO3	SM 2340B	1	7	6/24/98	7/29/98	MW n/a

Sample ID: 119.Inf.B-1

S&H ID: 9806-473

Date Sampled: 6/18/98 3:10:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
23	Cl2Dose	Chlorine Dose	4.00	mg/L as Cl2	SM 4500-Cl B	1	n/a	6/22/98		6/22/98	n/a
24	Cl2Res	Chlorine Residual	0.46	mg/L as Cl2	SM 4500-Cl F	1	0.10	6/22/98		6/22/98	n/a
25	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	106.8	%	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
26	HAA-ICR	2-Bromopropionic acid (Surrogate)	92.8	%	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
27	HAA-ICR	Bromochloroacetic acid	3.1	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
28	HAA-ICR	Bromodichloroacetic acid	2.9	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
29	HAA-ICR	Chlorodibromoacetic acid	4.0	µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/6/98	0-164-0
30	HAA-ICR	Dibromoacetic acid	8.3	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
31	HAA-ICR	Dichloroacetic acid	1.4	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
32	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
33	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/6/98	0-164-0
34	HAA-ICR	Tribromoacetic acid	4.5	µg/L	EPA 552.2	1	4.0	6/22/98	7/6/98	7/6/98	0-164-0
35	HAA-ICR	Trichloroacetic acid	1.0	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
36	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
37	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
38	pH	pH	7.4	Unit	SM 4500-H+ B	1	n/a	6/18/98		6/18/98	n/a
39	TEMP	Cl2 Temperature	26.7	°C	SM 2550 B	1	n/a	6/22/98		6/22/98	n/a
40	TEMP	Temperature	21.6	°C	SM 2550 B	1	n/a	6/18/98		6/18/98	n/a
41	TIME	Cl2 Incubation Time	6.3	hrs	n/a	1	n/a	6/22/98		6/22/98	n/a
42	TOC-ICR	TOC	1.81	mg/L	SM 5310 C	1	0.50	6/18/98		6/19/98	7-0-300
43	TOC-ICR	TOC (Dupl)	1.81 mg/L 1.81 mg/L		SM 5310 C 0.0 % RPD	1	0.50	6/18/98		6/19/98	7-0-300
44	TOX-ICR	TOX	127	µg Cl-/L	SM 5320 B	1	25	6/22/98		6/26/98	12-0-156
45	TOX-ICR	TOX (Dupl)	131 µg Cl-/L 129 µg Cl-/L		SM 5320 B 3.1 % RPD	1	25	6/22/98		6/26/98	12-0-156

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

46	THM-ICR 1,2,3-Trichloropropane (Surrogate)	101.2 %	EPA 551.1	1	1.0	6/22/98	7/2/98	7/3/98	0-163-0
47	THM-ICR Bromodichloromethane	9.8 µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/3/98	0-163-0
48	THM-ICR Bromoform	29.5 µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/3/98	0-163-0
49	THM-ICR Chloroform	2.8 µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/3/98	0-163-0
50	THM-ICR Dibromochloromethane	25.3 µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/3/98	0-163-0
51	TURB Turbidity	0.15 ntu	SM 2130 B	1	0.05	6/18/98		6/18/98	9-0-12
52	UV-ICR UV	0.046 1/cm	SM 5910 B	1	0.009	6/22/98		6/19/98	8-0-203
53	UV-ICR UV (Dupl)	0.046 1/cm	SM 5910 B	1	0.009	6/22/98		6/19/98	8-0-203
		0.046 1/cm	0.0 % RPD						

Sample ID: 119.Inf.B-2

S&H ID: 9806-474

Date Sampled: 6/20/98 4:30:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
54	pH	pH	7.4	Unit	SM 4500-H+ B	1	n/a	6/20/98		6/20/98	n/a
55	TEMP	Temperature	18.9	°C	SM 2550 B	1	n/a	6/20/98		6/20/98	n/a
56	TOC-ICR	TOC	1.74	mg/L	SM 5310 C	1	0.50	6/20/98		6/21/98	7-0-302
57	TOC-ICR	TOC (Dupl)	1.76	mg/L	SM 5310 C	1	0.50	6/20/98		6/21/98	7-0-302
			1.75	mg/L	1.1 % RPD						

Sample ID: 119.Inf.B-3

S&H ID: 9806-475

Date Sampled: 6/21/98 5:45:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
58	pH	pH	7.4	Unit	SM 4500-H+ B	1	n/a	6/21/98		6/21/98	n/a
59	TEMP	Temperature	18.8	°C	SM 2550 B	1	n/a	6/21/98		6/21/98	n/a
60	TOC-ICR	TOC	1.83	mg/L	SM 5310 C	1	0.50	6/21/98		6/21/98	7-0-302
61	TOC-ICR	TOC (Dupl)	1.77	mg/L	SM 5310 C	1	0.50	6/21/98		6/21/98	7-0-302
			1.80	mg/L	3.3 % RPD						

Sample ID: 119.Inf.B-4

S&H ID: 9806-476

Date Sampled: 6/24/98 12:00:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
62	Cl2Dose	Chlorine Dose	4.50	mg/L as Cl2	SM 4500-Cl B	1	n/a	6/25/98		6/25/98	n/a
63	Cl2Res	Chlorine Residual	1.23	mg/L as Cl2	SM 4500-Cl F	1	0.10	6/25/98		6/25/98	n/a
64	HAA-ICR 1,2,3-Trichloropropane (IS)	(Internal Standard)	98.8	%	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
65	HAA-ICR 2-Bromopropionic acid	(Surrogate)	93.2	%	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
66	HAA-ICR Bromochloroacetic acid		2.9	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
67	HAA-ICR Bromodichloroacetic acid		2.9	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
68	HAA-ICR Chlorodibromoacetic acid		4.1	µg/L	EPA 552.2	1	2.0	6/25/98	7/6/98	7/7/98	0-164-0
69	HAA-ICR Dibromoacetic acid		6.4	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
70	HAA-ICR Dichloroacetic acid		1.5	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

71	HAA-ICR	Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
72	HAA-ICR	Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	6/25/98	7/6/98	7/7/98	0-164-0
73	HAA-ICR	Tribromoacetic acid	4.4 µg/L	EPA 552.2	1	4.0	6/25/98	7/6/98	7/7/98	0-164-0
74	HAA-ICR	Trichloroacetic acid	1.1 µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
75	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	6/25/98		6/25/98	n/a
76	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	6/25/98		6/25/98	n/a
77	pH	pH	7.4 Unit	SM 4500-H+ B	1	n/a	6/24/98		6/24/98	n/a
78	TEMP	Cl2 Temperature	27.2 °C	SM 2550 B	1	n/a	6/25/98		6/25/98	n/a
79	TEMP	Temperature	15.4 °C	SM 2550 B	1	n/a	6/24/98		6/24/98	n/a
80	TIME	Cl2 Incubation Time	7.4 hrs	n/a	1	n/a	6/25/98		6/25/98	n/a
81	TOC-ICR	TOC	1.76 mg/L	SM 5310 C	1	0.50	6/24/98		6/24/98	7-0-305
82	TOC-ICR	TOC (Dupl)	1.71 mg/L	SM 5310 C	1	0.50	6/24/98		6/24/98	7-0-305
			1.73 mg/L	2.9 % RPD						
83	TOX-ICR	TOX	143 µg Cl-/L	SM 5320 B	1	25	6/25/98		6/30/98	12-0-158
84	TOX-ICR	TOX (Dupl)	142 µg Cl-/L	SM 5320 B	1	25	6/25/98		6/30/98	12-0-158
			143 µg Cl-/L	0.7 % RPD						
85	THM-ICR	1,2,3-Trichloropropane (Surrogate)	102.4 %	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
86	THM-ICR	Bromodichloromethane	12.0 µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
87	THM-ICR	Bromoform	27.2 µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
88	THM-ICR	Chloroform	3.4 µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
89	THM-ICR	Dibromochloromethane	27.6 µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
90	TURB	Turbidity	0.10 ntu	SM 2130 B	1	0.05	6/24/98		6/24/98	9-0-13
91	UV-ICR	UV	0.046 1/cm	SM 5910 B	1	0.009	6/25/98		6/24/98	8-0-207
92	UV-ICR	UV (Dupl)	0.046 1/cm	SM 5910 B	1	0.009	6/25/98		6/24/98	8-0-207
			0.046 1/cm	0.0 % RPD						

Sample ID: 119.Inf.B-5

S&H ID: 9806-477

Date Sampled: 6/25/98 4:30:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
93	pH	pH	7.4	Unit	SM 4500-H+ B	1	n/a	6/25/98		6/25/98	n/a
94	TEMP	Temperature	18.4	°C	SM 2550 B	1	n/a	6/25/98		6/25/98	n/a
95	TOC-ICR	TOC	1.88	mg/L	SM 5310 C	1	0.50	6/25/98		6/26/98	7-0-307
96	TOC-ICR	TOC (Dupl)	1.92	mg/L	SM 5310 C	1	0.50	6/25/98		6/26/98	7-0-307
			1.90 mg/L		2.1 % RPD						

Sample ID: 119.Inf.B-6

S&H ID: 9806-478

Date Sampled: 7/2/98 1:30:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
97	pH	pH	7.4	Unit	SM 4500-H+ B	1	n/a	7/2/98		7/2/98	n/a
98	TEMP	Temperature	19.1	°C	SM 2550 B	1	n/a	7/2/98		7/2/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

99	TOC-ICR	TOC	1.75	mg/L	SM 5310 C	1	0.50	7/2/98	7/2/98	7-0-317
100	TOC-ICR	TOC (Dupl)	1.79	mg/L	SM 5310 C	1	0.50	7/2/98	7/2/98	7-0-317
			1.77	mg/L	2.3 % RPD					
101	TURB	Turbidity	0.10	ntu	SM 2130 B	1	0.05	7/2/98	7/2/98	9-0-13
102	UV-ICR	UV	0.046	1/cm	SM 5910 B	1	0.009	7/2/98	7/2/98	8-0-214
103	UV-ICR	UV (Dupl)	0.046	1/cm	SM 5910 B	1	0.009	7/2/98	7/2/98	8-0-214
			0.046	1/cm	0.0 % RPD					

Sample ID: 119.Inf.B-7

S&H ID: 9806-479

Date Sampled: 7/8/98 9:40:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
104	Cl2Dose	Chlorine Dose	4.20	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/9/98		7/9/98	n/a
105	Cl2Res	Chlorine Residual	1.51	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/9/98		7/9/98	n/a
106	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	99.2	%	EPA 552.2	1	1.0	7/9/98	7/15/98	7/16/98	0-176-0
107	HAA-ICR	2-Bromopropionic acid (Surrogate)	87.6	%	EPA 552.2	1	1.0	7/9/98	7/15/98	7/16/98	0-176-0
108	HAA-ICR	Bromochloroacetic acid	2.6	µg/L	EPA 552.2	1	1.0	7/9/98	7/15/98	7/16/98	0-176-0
109	HAA-ICR	Bromodichloroacetic acid	3.0	µg/L	EPA 552.2	1	1.0	7/9/98	7/15/98	7/16/98	0-176-0
110	HAA-ICR	Chlorodibromoacetic acid	4.5	µg/L	EPA 552.2	1	2.0	7/9/98	7/15/98	7/16/98	0-176-0
111	HAA-ICR	Dibromoacetic acid	6.5	µg/L	EPA 552.2	1	1.0	7/9/98	7/15/98	7/16/98	0-176-0
112	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/15/98	7/16/98	0-176-0
113	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/15/98	7/16/98	0-176-0
114	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/9/98	7/15/98	7/16/98	0-176-0
115	HAA-ICR	Tribromoacetic acid	4.0	µg/L	EPA 552.2	1	4.0	7/9/98	7/15/98	7/16/98	0-176-0
116	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/15/98	7/16/98	0-176-0
117	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	7/9/98		7/9/98	n/a
118	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/9/98		7/9/98	n/a
119	pH	pH	7.5	Unit	SM 4500-H+ B	1	n/a	7/8/98		7/8/98	n/a
120	TEMP	Cl2 Temperature	26.6	°C	SM 2550 B	1	n/a	7/9/98		7/9/98	n/a
121	TEMP	Temperature	18.9	°C	SM 2550 B	1	n/a	7/8/98		7/8/98	n/a
122	TIME	Cl2 Incubation Time	7.3	hrs	n/a	1	n/a	7/9/98		7/9/98	n/a
123	TOC-ICR	TOC	1.76	mg/L	SM 5310 C	1	0.50	7/8/98		7/8/98	7-0-331
124	TOC-ICR	TOC (Dupl)	1.81	mg/L	SM 5310 C	1	0.50	7/8/98		7/8/98	7-0-331
			1.79	mg/L	2.8 % RPD						
125	TOX-ICR	TOX	153	µg Cl-/L	SM 5320 B	1	25	7/9/98		7/21/98	12-0-172
126	TOX-ICR	TOX (Dupl)	144	µg Cl-/L	SM 5320 B	1	25	7/9/98		7/21/98	12-0-172
			149	µg Cl-/L	6.0 % RPD						
127	THM-ICR	1,2,3-Trichloropropane (Surrogate)	100.0	%	EPA 551.1	1	1.0	7/9/98	7/16/98	7/17/98	0-177-0
128	THM-ICR	Bromodichloromethane	11.7	µg/L	EPA 551.1	1	1.0	7/9/98	7/16/98	7/17/98	0-177-0
129	THM-ICR	Bromoform	29.9	µg/L	EPA 551.1	1	1.0	7/9/98	7/16/98	7/17/98	0-177-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

130	THM-ICR	Chloroform	2.4	µg/L	EPA 551.1	1	1.0	7/9/98	7/16/98	7/17/98	0-177-0
131	THM-ICR	Dibromochloromethane	32.5	µg/L	EPA 551.1	1	1.0	7/9/98	7/16/98	7/17/98	0-177-0
132	TURB	Turbidity	0.10	ntu	SM 2130 B	1	0.05	7/8/98		7/8/98	9-0-14
133	UV-ICR	UV	0.046	1/cm	SM 5910 B	1	0.009	7/8/98		7/8/98	8-0-222
134	UV-ICR	UV (Dupl)	0.046	1/cm	SM 5910 B	1	0.009	7/8/98		7/8/98	8-0-222
			0.046	1/cm	0.0 % RPD						
<hr/>											
Sample ID: 119.Inf.B-8			S&H ID: 9806-480		Date Sampled: 7/10/98 5:20:00 PM						
#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
135	Cl2Dose	Chlorine Dose	3.70	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/13/98		7/13/98	n/a
136	Cl2Res	Chlorine Residual	1.17	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/13/98		7/13/98	n/a
137	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	94.4	%	EPA 552.2	1	1.0	7/13/98	7/23/98	7/23/98	0-181-0
138	HAA-ICR	2-Bromopropionic acid (Surrogate)	100.8	%	EPA 552.2	1	1.0	7/13/98	7/23/98	7/23/98	0-181-0
139	HAA-ICR	Bromochloroacetic acid	2.3	µg/L	EPA 552.2	1	1.0	7/13/98	7/23/98	7/23/98	0-181-0
140	HAA-ICR	Bromodichloroacetic acid	2.3	µg/L	EPA 552.2	1	1.0	7/13/98	7/23/98	7/23/98	0-181-0
141	HAA-ICR	Chlorodibromoacetic acid	3.3	µg/L	EPA 552.2	1	2.0	7/13/98	7/23/98	7/23/98	0-181-0
142	HAA-ICR	Dibromoacetic acid	5.6	µg/L	EPA 552.2	1	1.0	7/13/98	7/23/98	7/23/98	0-181-0
143	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/13/98	7/23/98	7/23/98	0-181-0
144	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/13/98	7/23/98	7/23/98	0-181-0
145	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/13/98	7/23/98	7/23/98	0-181-0
146	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/13/98	7/23/98	7/23/98	0-181-0
147	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/13/98	7/23/98	7/23/98	0-181-0
148	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	7/13/98		7/13/98	n/a
149	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/13/98		7/13/98	n/a
150	pH	pH	7.4	Unit	SM 4500-H+ B	1	n/a	7/10/98		7/10/98	n/a
151	TEMP	Cl2 Temperature	26.6	°C	SM 2550 B	1	n/a	7/13/98		7/13/98	n/a
152	TEMP	Temperature	21.1	°C	SM 2550 B	1	n/a	7/10/98		7/10/98	n/a
153	TIME	Cl2 Incubation Time	7.1	hrs	n/a	1	n/a	7/13/98		7/13/98	n/a
154	TOC-ICR	TOC	1.81	mg/L	SM 5310 C	1	0.50	7/10/98		7/13/98	7-0-337
155	TOC-ICR	TOC (Dupl)	1.78	mg/L	SM 5310 C	1	0.50	7/10/98		7/13/98	7-0-337
			1.79	mg/L	1.7 % RPD						
156	TOX-ICR	TOX	136	µg Cl-/L	SM 5320 B	1	25	7/13/98		7/23/98	12-0-174
157	TOX-ICR	TOX (Dupl)	136	µg Cl-/L	SM 5320 B	1	25	7/13/98		7/23/98	12-0-174
			136	µg Cl-/L	0.0 % RPD						
158	THM-ICR	1,2,3-Trichloropropane (Surrogate)	94.4	%	EPA 551.1	1	1.0	7/13/98	7/27/98	7/27/98	0-182-0
159	THM-ICR	Bromodichloromethane	10.4	µg/L	EPA 551.1	1	1.0	7/13/98	7/27/98	7/27/98	0-182-0
160	THM-ICR	Bromoform	34.4	µg/L	EPA 551.1	1	1.0	7/13/98	7/27/98	7/27/98	0-182-0
161	THM-ICR	Chloroform	2.5	µg/L	EPA 551.1	1	1.0	7/13/98	7/27/98	7/27/98	0-182-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

162	THM-ICR	Dibromochloromethane	27.4	µg/L	EPA 551.1	1	1.0	7/13/98	7/27/98	7/27/98	0-182-0
163	TURB	Turbidity	0.10	ntu	SM 2130 B	1	0.05	7/10/98		7/10/98	9-0-14
164	UV-ICR	UV	0.046	1/cm	SM 5910 B	1	0.009	7/10/98		7/11/98	8-0-224
165	UV-ICR	UV (Dupl)	0.046	1/cm	SM 5910 B	1	0.009	7/10/98		7/11/98	8-0-224
			0.046	1/cm	0.0 % RPD						
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Sample ID: 119.5.Eff-1			S&H ID: 9806-483			Date Sampled: 6/18/98 10:55:00 PM					
#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
166	Cl2Dose	Chlorine Dose	2.60	mg/L as Cl2	SM 4500-Cl B	1	n/a	6/22/98		6/22/98	n/a
167	Cl2Res	Chlorine Residual	0.66	mg/L as Cl2	SM 4500-Cl F	1	0.10	6/22/98		6/22/98	n/a
168	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	104.4	%	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
169	HAA-ICR	2-Bromopropionic acid (Surrogate)	93.2	%	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
170	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
171	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
172	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/6/98	0-164-0
173	HAA-ICR	Dibromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
174	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
175	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
176	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/6/98	0-164-0
177	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	6/22/98	7/6/98	7/6/98	0-164-0
178	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
179	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
180	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
181	pH	pH	8.1	Unit	SM 4500-H+ B	1	n/a	6/18/98		6/18/98	n/a
182	TEMP	Cl2 Temperature	26.7	°C	SM 2550 B	1	n/a	6/22/98		6/22/98	n/a
183	TEMP	Temperature	24.8	°C	SM 2550 B	1	n/a	6/18/98		6/18/98	n/a
184	TIME	Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	6/22/98		6/22/98	n/a
185	TOC-ICR	TOC	ND	mg/L	SM 5310 C	1	0.50	6/18/98		6/19/98	7-0-300
186	TOC-ICR	TOC (Dupl)	ND	mg/L	SM 5310 C	1	0.50	6/18/98		6/19/98	7-0-300
			ND	mg/L							
187	TOX-ICR	TOX	ND	µg Cl-/L	SM 5320 B	1	25	6/22/98		6/26/98	12-0-156
188	TOX-ICR	TOX (Dupl)	ND	µg Cl-/L	SM 5320 B	1	25	6/22/98		6/26/98	12-0-156
			ND	µg Cl-/L							
189	THM-ICR	1,2,3-Trichloropropane (Surrogate)	98.0	%	EPA 551.1	1	1.0	6/22/98	7/2/98	7/3/98	0-163-0
190	THM-ICR	Bromodichloromethane	ND	µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/3/98	0-163-0
191	THM-ICR	Bromoform	1.5	µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/3/98	0-163-0
192	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/3/98	0-163-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

193	THM-ICR Dibromochloromethane	ND µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/3/98	0-163-0
194	UV-ICR UV	ND 1/cm	SM 5910 B	1	0.009	6/18/98		6/19/98	8-0-203
195	UV-ICR UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	6/18/98		6/19/98	8-0-203
		ND 1/cm							

Sample ID: 119.5.Eff-2

S&H ID: 9806-484

Date Sampled: 6/19/98 10:23:00 PM

#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
196	Cl2Dose Chlorine Dose	2.66 mg/L as Cl2	SM 4500-Cl B	1	n/a	6/22/98		6/22/98	n/a
197	Cl2Res Chlorine Residual	0.85 mg/L as Cl2	SM 4500-Cl F	1	0.10	6/22/98		6/22/98	n/a
198	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	100.4 %	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
199	HAA-ICR 2-Bromopropionic acid (Surrogate)	98.4 %	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
200	HAA-ICR Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
201	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
202	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/6/98	0-164-0
203	HAA-ICR Dibromoacetic acid	ND µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
204	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
205	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
206	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/6/98	0-164-0
207	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	6/22/98	7/6/98	7/6/98	0-164-0
208	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
209	pH Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
210	pH Cl2 pH - Initial	7.8 Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
211	pH pH	8.0 Unit	SM 4500-H+ B	1	n/a	6/19/98		6/19/98	n/a
212	TEMP Cl2 Temperature	26.7 °C	SM 2550 B	1	n/a	6/22/98		6/22/98	n/a
213	TEMP Temperature	24.7 °C	SM 2550 B	1	n/a	6/19/98		6/19/98	n/a
214	TIME Cl2 Incubation Time	7.2 hrs	n/a	1	n/a	6/22/98		6/22/98	n/a
215	TOC-ICR TOC	ND mg/L	SM 5310 C	1	0.50	6/19/98		6/20/98	7-0-301
216	TOC-ICR TOC (Dupl)	ND mg/L	SM 5310 C	1	0.50	6/19/98		6/20/98	7-0-301
		ND mg/L							
217	TOX-ICR TOX	ND µg Cl-/L	SM 5320 B	1	25	6/22/98		6/26/98	12-0-156
218	TOX-ICR TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	6/22/98		6/26/98	12-0-156
		ND µg Cl-/L							
219	THM-ICR 1,2,3-Trichloropropane (Surrogate)	102.4 %	EPA 551.1	1	1.0	6/22/98	7/2/98	7/3/98	0-163-0
220	THM-ICR Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/3/98	0-163-0
221	THM-ICR Bromoform	2.4 µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/3/98	0-163-0
222	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/3/98	0-163-0
223	THM-ICR Dibromochloromethane	ND µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/3/98	0-163-0
224	UV-ICR UV	ND 1/cm	SM 5910 B	1	0.009	6/19/98		6/20/98	8-0-204

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

225	UV-ICR	UV (Dupl)	ND 1/cm ND 1/cm	SM 5910 B	1	0.009	6/19/98	6/20/98	8-0-204
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Sample ID: 119.5.Eff-3

S&H ID: 9806-485

Date Sampled: 6/20/98 6:15:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
226	Cl2Dose	Chlorine Dose	2.73	mg/L as Cl2	SM 4500-Cl B	1	n/a	6/22/98		6/22/98	n/a
227	Cl2Res	Chlorine Residual	0.87	mg/L as Cl2	SM 4500-Cl F	1	0.10	6/22/98		6/22/98	n/a
228	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	99.2	%	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
229	HAA-ICR	2-Bromopropionic acid (Surrogate)	98.4	%	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
230	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
231	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
232	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/6/98	0-164-0
233	HAA-ICR	Dibromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
234	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
235	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
236	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/6/98	0-164-0
237	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	6/22/98	7/6/98	7/6/98	0-164-0
238	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
239	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
240	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
241	pH	pH	8.1	Unit	SM 4500-H+ B	1	n/a	6/20/98		6/20/98	n/a
242	TEMP	Cl2 Temperature	26.7	°C	SM 2550 B	1	n/a	6/22/98		6/22/98	n/a
243	TEMP	Temperature	23.3	°C	SM 2550 B	1	n/a	6/20/98		6/20/98	n/a
244	TIME	Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	6/22/98		6/22/98	n/a
245	TOC-ICR	TOC	ND	mg/L	SM 5310 C	1	0.50	6/20/98		6/21/98	7-0-302
246	TOC-ICR	TOC (Dupl)	ND	mg/L	SM 5310 C	1	0.50	6/20/98		6/21/98	7-0-302
			ND	mg/L							
247	TOX-ICR	TOX	ND	µg Cl-/L	SM 5320 B	1	25	6/22/98		6/26/98	12-0-156
248	TOX-ICR	TOX (Dupl)	ND	µg Cl-/L	SM 5320 B	1	25	6/22/98		6/26/98	12-0-156
			ND	µg Cl-/L							
249	THM-ICR	1,2,3-Trichloropropane (Surrogate)	105.2	%	EPA 551.1	1	1.0	6/22/98	7/2/98	7/3/98	0-163-0
250	THM-ICR	Bromodichloromethane	ND	µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/3/98	0-163-0
251	THM-ICR	Bromoform	4.3	µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/3/98	0-163-0
252	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/3/98	0-163-0
253	THM-ICR	Dibromochloromethane	1.7	µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/3/98	0-163-0
254	UV-ICR	UV	ND	1/cm	SM 5910 B	1	0.009	6/20/98		6/20/98	8-0-204
255	UV-ICR	UV (Dupl)	ND	1/cm	SM 5910 B	1	0.009	6/20/98		6/20/98	8-0-204
			ND	1/cm							

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

Sample ID: 119.5.Eff-4

S&H ID: 9806-486

Date Sampled: 6/20/98 1:52:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
256	Cl2Dose	Chlorine Dose	2.82	mg/L as Cl2	SM 4500-Cl B	1	n/a	6/22/98		6/22/98	n/a
257	Cl2Res	Chlorine Residual	0.67	mg/L as Cl2	SM 4500-Cl F	1	0.10	6/22/98		6/22/98	n/a
258	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	100.4	%	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
259	HAA-ICR	2-Bromopropionic acid (Surrogate)	95.6	%	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
260	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
261	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
262	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/6/98	0-164-0
263	HAA-ICR	Dibromoacetic acid	1.3	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
264	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
265	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
266	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/6/98	0-164-0
267	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	6/22/98	7/6/98	7/6/98	0-164-0
268	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/6/98	0-164-0
269	pH	Cl2 pH - Final	7.9	Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
270	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
271	pH	pH	8.0	Unit	SM 4500-H+ B	1	n/a	6/20/98		6/20/98	n/a
272	TEMP	Cl2 Temperature	26.7	°C	SM 2550 B	1	n/a	6/22/98		6/22/98	n/a
273	TEMP	Temperature	23.6	°C	SM 2550 B	1	n/a	6/20/98		6/20/98	n/a
274	TIME	Cl2 Incubation Time	7.1	hrs	n/a	1	n/a	6/22/98		6/22/98	n/a
275	TOC-ICR	TOC	0.53	mg/L	SM 5310 C	1	0.50	6/20/98		6/20/98	7-0-301
276	TOC-ICR	TOC (Dupl)	0.53	mg/L	SM 5310 C	1	0.50	6/20/98		6/20/98	7-0-301
			0.53	mg/L	0.0 % RPD						
277	TOX-ICR	TOX	ND	µg Cl-/L	SM 5320 B	1	25	6/22/98		6/29/98	12-0-157
278	TOX-ICR	TOX (Dupl)	ND	µg Cl-/L	SM 5320 B	1	25	6/22/98		6/29/98	12-0-157
			ND	µg Cl-/L							
279	THM-ICR	1,2,3-Trichloropropane (Surrogate)	95.6	%	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
280	THM-ICR	Bromodichloromethane	ND	µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
281	THM-ICR	Bromoform	5.8	µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
282	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
283	THM-ICR	Dibromochloromethane	2.9	µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
284	UV-ICR	UV	ND	1/cm	SM 5910 B	1	0.009	6/20/98		6/20/98	8-0-204
285	UV-ICR	UV (Dupl)	ND	1/cm	SM 5910 B	1	0.009	6/20/98		6/20/98	8-0-204
			ND	1/cm							

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

Sample ID: 119.5.Eff-5		S&H ID: 9806-487		Date Sampled: 6/20/98 1:52:00 PM						
#	Analysis Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
286	Cl2Dose Chlorine Dose	2.84	mg/L as Cl2	SM 4500-Cl B	1	n/a	6/22/98		6/22/98	n/a
287	Cl2Res Chlorine Residual	0.87	mg/L as Cl2	SM 4500-Cl F	1	0.10	6/22/98		6/22/98	n/a
288	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	103.6	%	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
289	HAA-ICR 2-Bromopropionic acid (Surrogate)	92.8	%	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
290	HAA-ICR Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
291	HAA-ICR Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
292	HAA-ICR Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/7/98	0-164-0
293	HAA-ICR Dibromoacetic acid	2.0	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
294	HAA-ICR Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
295	HAA-ICR Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
296	HAA-ICR Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/7/98	0-164-0
297	HAA-ICR Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	6/22/98	7/6/98	7/7/98	0-164-0
298	HAA-ICR Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
299	pH Cl2 pH - Final	7.9	Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
300	pH Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
301	pH pH	8.1	Unit	SM 4500-H+ B	1	n/a	6/20/98		6/20/98	n/a
302	TEMP Cl2 Temperature	26.7	°C	SM 2550 B	1	n/a	6/22/98		6/22/98	n/a
303	TEMP Temperature	23.9	°C	SM 2550 B	1	n/a	6/20/98		6/20/98	n/a
304	TIME Cl2 Incubation Time	7.1	hrs	n/a	1	n/a	6/22/98		6/22/98	n/a
305	TOC-ICR TOC	0.57	mg/L	SM 5310 C	1	0.50	6/20/98		6/21/98	7-0-302
306	TOC-ICR TOC (Dupl)	0.57	mg/L	SM 5310 C	1	0.50	6/20/98		6/21/98	7-0-302
		0.57 mg/L		0.0 % RPD						
307	TOX-ICR TOX	ND	µg Cl-/L	SM 5320 B	1	25	6/22/98		6/29/98	12-0-157
308	TOX-ICR TOX (Dupl)	ND	µg Cl-/L	SM 5320 B	1	25	6/22/98		6/29/98	12-0-157
		ND µg Cl-/L								
309	THM-ICR 1,2,3-Trichloropropane (Surrogate)	100.0	%	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
310	THM-ICR Bromodichloromethane	1.1	µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
311	THM-ICR Bromoform	8.0	µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
312	THM-ICR Chloroform	ND	µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
313	THM-ICR Dibromochloromethane	3.8	µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
314	UV-ICR UV	ND	1/cm	SM 5910 B	1	0.009	6/20/98		6/20/98	8-0-204
315	UV-ICR UV (Dupl)	ND	1/cm	SM 5910 B	1	0.009	6/20/98		6/20/98	8-0-204
		ND 1/cm								

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

Sample ID: 119.5.Eff-6			S&H ID: 9806-488		Date Sampled: 6/20/98 5:28:00 PM						
#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
316	Cl2Dose	Chlorine Dose	2.90	mg/L as Cl2	SM 4500-Cl B	1	n/a	6/22/98		6/22/98	n/a
317	Cl2Res	Chlorine Residual	1.04	mg/L as Cl2	SM 4500-Cl F	1	0.10	6/22/98		6/22/98	n/a
318	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	101.2	%	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
319	HAA-ICR	2-Bromopropionic acid (Surrogate)	94.0	%	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
320	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
321	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
322	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/7/98	0-164-0
323	HAA-ICR	Dibromoacetic acid	2.0	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
324	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
325	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
326	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/7/98	0-164-0
327	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	6/22/98	7/6/98	7/7/98	0-164-0
328	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
329	pH	Cl2 pH - Final	7.9	Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
330	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
331	pH	pH	8.1	Unit	SM 4500-H+ B	1	n/a	6/20/98		6/20/98	n/a
332	TEMP	Cl2 Temperature	26.7	°C	SM 2550 B	1	n/a	6/22/98		6/22/98	n/a
333	TEMP	Temperature	25.2	°C	SM 2550 B	1	n/a	6/20/98		6/20/98	n/a
334	TIME	Cl2 Incubation Time	7.1	hrs	n/a	1	n/a	6/22/98		6/22/98	n/a
335	TOC-ICR	TOC	0.68	mg/L	SM 5310 C	1	0.50	6/20/98		6/21/98	7-0-302
336	TOC-ICR	TOC (Dupl)	0.67	mg/L	SM 5310 C	1	0.50	6/20/98		6/21/98	7-0-302
			0.68	mg/L	1.5 % RPD						
337	TOX-ICR	TOX	ND	µg Cl-/L	SM 5320 B	1	25	6/22/98		6/29/98	12-0-157
338	TOX-ICR	TOX (Dupl)	26	µg Cl-/L	SM 5320 B	1	25	6/22/98		6/29/98	12-0-157
			25	µg Cl-/L	8.0 % RPD						
339	THM-ICR	1,2,3-Trichloropropane (Surrogate)	97.6	%	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
340	THM-ICR	1,2,3-Trichloropropane (Surrogate) (Lab Dupl)	100.4	%	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
			99.0	%	2.8 % RPD						
341	THM-ICR	Bromodichloromethane	1.3	µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
342	THM-ICR	Bromodichloromethane (Lab Dupl)	1.3	µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
			1.3	µg/L	0.0 % RPD						
343	THM-ICR	Bromoform	9.2	µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
344	THM-ICR	Bromoform (Lab Dupl)	9.4	µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
			9.3	µg/L	2.2 % RPD						
345	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
346	THM-ICR	Chloroform (Lab Dupl)	ND	µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

		ND µg/L							
347	THM-ICR Dibromochloromethane	4.7 µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
348	THM-ICR Dibromochloromethane (Lab Dupl)	4.6 µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
		4.7 µg/L	2.1 % RPD						
349	UV-ICR UV	0.009 1/cm	SM 5910 B	1	0.009	6/20/98		6/21/98	8-0-205
350	UV-ICR UV (Dupl)	0.009 1/cm	SM 5910 B	1	0.009	6/20/98		6/21/98	8-0-205
		0.009 1/cm	0.0 % RPD						

Sample ID: 119.5.Eff-7

S&H ID: 9806-489

Date Sampled: 6/21/98 1:08:00 AM

#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
351	Cl2Dose Chlorine Dose	2.96 mg/L as Cl2	SM 4500-Cl B	1	n/a	6/22/98		6/22/98	n/a
352	Cl2Res Chlorine Residual	0.87 mg/L as Cl2	SM 4500-Cl F	1	0.10	6/22/98		6/22/98	n/a
353	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	102.0 %	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
354	HAA-ICR 2-Bromopropionic acid (Surrogate)	93.2 %	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
355	HAA-ICR Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
356	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
357	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/7/98	0-164-0
358	HAA-ICR Dibromoacetic acid	2.3 µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
359	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
360	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
361	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/7/98	0-164-0
362	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	6/22/98	7/6/98	7/7/98	0-164-0
363	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
364	pH Cl2 pH - Final	7.9 Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
365	pH Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
366	pH pH	8.2 Unit	SM 4500-H+ B	1	n/a	6/21/98		6/21/98	n/a
367	TEMP Cl2 Temperature	26.7 °C	SM 2550 B	1	n/a	6/22/98		6/22/98	n/a
368	TEMP Temperature	24.3 °C	SM 2550 B	1	n/a	6/21/98		6/21/98	n/a
369	TIME Cl2 Incubation Time	7.0 hrs	n/a	1	n/a	6/22/98		6/22/98	n/a
370	TOC-ICR TOC	0.81 mg/L	SM 5310 C	1	0.50	6/21/98		6/21/98	7-0-302
371	TOC-ICR TOC (Dupl)	0.80 mg/L	SM 5310 C	1	0.50	6/21/98		6/21/98	7-0-302
		0.81 mg/L	1.2 % RPD						
372	TOX-ICR TOX	32 µg Cl-/L	SM 5320 B	1	25	6/22/98		6/29/98	12-0-157
373	TOX-ICR TOX (Dupl)	34 µg Cl-/L	SM 5320 B	1	25	6/22/98		6/29/98	12-0-157
		33 µg Cl-/L	6.1 % RPD						
374	THM-ICR 1,2,3-Trichloropropane (Surrogate)	99.2 %	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
375	THM-ICR Bromodichloromethane	1.7 µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
376	THM-ICR Bromoform	11.8 µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

377	THM-ICR Chloroform	ND	µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
378	THM-ICR Dibromochloromethane	6.0	µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
379	UV-ICR UV	0.011	1/cm	SM 5910 B	1	0.009	6/21/98		6/21/98	8-0-205
380	UV-ICR UV (Dupl)	0.011	1/cm	SM 5910 B	1	0.009	6/21/98		6/21/98	8-0-205
		0.011	1/cm	0.0 % RPD						

Sample ID: 119.5.Eff-9

S&H ID: 9806-491

Date Sampled: 6/21/98 12:38:00 PM

#	Analysis Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
381	Cl2Dose Chlorine Dose	3.02	mg/L as Cl2	SM 4500-Cl B	1	n/a	6/22/98		6/22/98	n/a
382	Cl2Res Chlorine Residual	0.82	mg/L as Cl2	SM 4500-Cl F	1	0.10	6/22/98		6/22/98	n/a
383	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	104.8	%	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
384	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard) (Lab Dupl)	105.2	%	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
		105.0	%	0.4 % RPD						
385	HAA-ICR 2-Bromopropionic acid (Surrogate)	98.0	%	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
386	HAA-ICR 2-Bromopropionic acid (Surrogate) (Lab Dupl)	88.4	%	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
		93.2	%	10.3 % RPD						
387	HAA-ICR Bromochloroacetic acid	1.1	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
388	HAA-ICR Bromochloroacetic acid (Lab Dupl)	1.0	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
		1.1	µg/L	9.1 % RPD						
389	HAA-ICR Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
390	HAA-ICR Bromodichloroacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
		ND	µg/L							
391	HAA-ICR Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/7/98	0-164-0
392	HAA-ICR Chlorodibromoacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/7/98	0-164-0
		ND	µg/L							
393	HAA-ICR Dibromoacetic acid	3.5	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
394	HAA-ICR Dibromoacetic acid (Lab Dupl)	3.4	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
		3.5	µg/L	2.9 % RPD						
395	HAA-ICR Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
396	HAA-ICR Dichloroacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
		ND	µg/L							
397	HAA-ICR Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
398	HAA-ICR Monobromoacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
		ND	µg/L							
399	HAA-ICR Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/7/98	0-164-0
400	HAA-ICR Monochloroacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/7/98	0-164-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

			ND µg/L							
401	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	6/22/98	7/6/98	7/7/98	0-164-0
402	HAA-ICR	Tribromoacetic acid (Lab Dupl)	ND µg/L	EPA 552.2	1	4.0	6/22/98	7/6/98	7/7/98	0-164-0
			ND µg/L							
403	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
404	HAA-ICR	Trichloroacetic acid (Lab Dupl)	ND µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
			ND µg/L							
405	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
406	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
407	pH	pH	8.0 Unit	SM 4500-H+ B	1	n/a	6/21/98		6/21/98	n/a
408	TEMP	Cl2 Temperature	26.7 °C	SM 2550 B	1	n/a	6/22/98		6/22/98	n/a
409	TEMP	Temperature	22.7 °C	SM 2550 B	1	n/a	6/21/98		6/21/98	n/a
410	TIME	Cl2 Incubation Time	6.9 hrs	n/a	1	n/a	6/22/98		6/22/98	n/a
411	TOC-ICR	TOC	0.89 mg/L	SM 5310 C	1	0.50	6/21/98		6/21/98	7-0-302
412	TOC-ICR	TOC (Dupl)	0.91 mg/L	SM 5310 C	1	0.50	6/21/98		6/21/98	7-0-302
			0.90 mg/L	2.2 % RPD						
413	TOX-ICR	TOX	44 µg Cl-/L	SM 5320 B	1	25	6/22/98		6/29/98	12-0-157
414	TOX-ICR	TOX (Dupl)	43 µg Cl-/L	SM 5320 B	1	25	6/22/98		6/29/98	12-0-157
			44 µg Cl-/L	2.3 % RPD						
415	THM-ICR	1,2,3-Trichloropropane (Surrogate)	101.2 %	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
416	THM-ICR	Bromodichloromethane	2.3 µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
417	THM-ICR	Bromoform	15.3 µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
418	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
419	THM-ICR	Dibromochloromethane	8.3 µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
420	UV-ICR	UV	0.016 1/cm	SM 5910 B	1	0.009	6/21/98		6/22/98	8-0-206
421	UV-ICR	UV (Dupl)	0.016 1/cm	SM 5910 B	1	0.009	6/21/98		6/22/98	8-0-206
			0.016 1/cm	0.0 % RPD						

Sample ID: 119.5.Eff-10

S&H ID: 9806-492

Date Sampled: 6/21/98 8:50:00 PM

#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
422	Cl2Dose Chlorine Dose	3.08 mg/L as Cl2	SM 4500-Cl B	1	n/a	6/25/98		6/25/98	n/a
423	Cl2Res Chlorine Residual	0.75 mg/L as Cl2	SM 4500-Cl F	1	0.10	6/25/98		6/25/98	n/a
424	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	104.0 %	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
425	HAA-ICR 2-Bromopropionic acid (Surrogate)	94.8 %	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
426	HAA-ICR Bromochloroacetic acid	1.1 µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
427	HAA-ICR Bromodichloroacetic acid	1.0 µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
428	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	6/25/98	7/6/98	7/7/98	0-164-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

429	HAA-ICR	Dibromoacetic acid	3.6 µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
430	HAA-ICR	Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
431	HAA-ICR	Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
432	HAA-ICR	Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	6/25/98	7/6/98	7/7/98	0-164-0
433	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	6/25/98	7/6/98	7/7/98	0-164-0
434	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
435	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	6/25/98		6/25/98	n/a
436	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	6/25/98		6/25/98	n/a
437	pH	pH	8.2 Unit	SM 4500-H+ B	1	n/a	6/21/98		6/21/98	n/a
438	TEMP	Cl2 Temperature	27.2 °C	SM 2550 B	1	n/a	6/25/98		6/25/98	n/a
439	TEMP	Temperature	22.9 °C	SM 2550 B	1	n/a	6/21/98		6/21/98	n/a
440	TIME	Cl2 Incubation Time	7.3 hrs	n/a	1	n/a	6/25/98		6/25/98	n/a
441	TOC-ICR	TOC	1.02 mg/L	SM 5310 C	1	0.50	6/21/98		6/22/98	7-0-303
442	TOC-ICR	TOC (Dupl)	1.02 mg/L	SM 5310 C	1	0.50	6/21/98		6/22/98	7-0-303
			1.02 mg/L	0.0 % RPD						
443	TOX-ICR	TOX	52 µg Cl-/L	SM 5320 B	1	25	6/25/98		6/30/98	12-0-158
444	TOX-ICR	TOX (Dupl)	53 µg Cl-/L	SM 5320 B	1	25	6/25/98		6/30/98	12-0-158
			53 µg Cl-/L	1.9 % RPD						
445	THM-ICR	1,2,3-Trichloropropane (Surrogate)	97.6 %	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
446	THM-ICR	Bromodichloromethane	2.8 µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
447	THM-ICR	Bromoform	19.0 µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
448	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
449	THM-ICR	Dibromochloromethane	10.3 µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
450	UV-ICR	UV	0.019 1/cm	SM 5910 B	1	0.009	6/21/98		6/22/98	8-0-206
451	UV-ICR	UV (Dupl)	0.018 1/cm	SM 5910 B	1	0.009	6/21/98		6/22/98	8-0-206
			0.018 1/cm	5.6 % RPD						

Sample ID: 119.5.Eff-11

S&H ID: 9806-493

Date Sampled: 6/22/98 5:00:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
452	Cl2Dose	Chlorine Dose	3.14	mg/L as Cl2	SM 4500-Cl B	1	n/a	6/25/98		6/25/98	n/a
453	Cl2Res	Chlorine Residual	0.89	mg/L as Cl2	SM 4500-Cl F	1	0.10	6/25/98		6/25/98	n/a
454	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	101.6	%	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
455	HAA-ICR	2-Bromopropionic acid (Surrogate)	93.2	%	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
456	HAA-ICR	Bromochloroacetic acid	1.3	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
457	HAA-ICR	Bromodichloroacetic acid	1.1	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
458	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/25/98	7/6/98	7/7/98	0-164-0
459	HAA-ICR	Dibromoacetic acid	3.9	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
460	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

461	HAA-ICR	Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
462	HAA-ICR	Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	6/25/98	7/6/98	7/7/98	0-164-0
463	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	6/25/98	7/6/98	7/7/98	0-164-0
464	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
465	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	6/25/98		6/25/98	n/a
466	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	6/25/98		6/25/98	n/a
467	pH	pH	8.1 Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
468	TEMP	Cl2 Temperature	27.2 °C	SM 2550 B	1	n/a	6/25/98		6/25/98	n/a
469	TEMP	Temperature	21.8 °C	SM 2550 B	1	n/a	6/22/98		6/22/98	n/a
470	TIME	Cl2 Incubation Time	7.3 hrs	n/a	1	n/a	6/25/98		6/25/98	n/a
471	TOC-ICR	TOC	1.11 mg/L	SM 5310 C	1	0.50	6/22/98		6/22/98	7-0-303
472	TOC-ICR	TOC (Dupl)	1.12 mg/L	SM 5310 C	1	0.50	6/22/98		6/22/98	7-0-303
			1.12 mg/L	0.9 % RPD						
473	TOX-ICR	TOX	63 µg Cl-/L	SM 5320 B	1	25	6/25/98		7/1/98	12-0-159
474	TOX-ICR	TOX (Dupl)	60 µg Cl-/L	SM 5320 B	1	25	6/25/98		7/1/98	12-0-159
			62 µg Cl-/L	4.8 % RPD						
475	THM-ICR	1,2,3-Trichloropropane (Surrogate)	100.8 %	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
476	THM-ICR	Bromodichloromethane	3.4 µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
477	THM-ICR	Bromoform	21.5 µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
478	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
479	THM-ICR	Dibromochloromethane	12.6 µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
480	UV-ICR	UV	0.021 1/cm	SM 5910 B	1	0.009	6/22/98		6/22/98	8-0-206
481	UV-ICR	UV (Dupl)	0.021 1/cm	SM 5910 B	1	0.009	6/22/98		6/22/98	8-0-206
			0.021 1/cm	0.0 % RPD						

Sample ID: 119.5.Eff-13

S&H ID: 9806-495

Date Sampled: 6/22/98 8:57:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
482	Cl2Dose	Chlorine Dose	3.19	mg/L as Cl2	SM 4500-Cl B	1	n/a	6/25/98		6/25/98	n/a
483	Cl2Res	Chlorine Residual	0.85	mg/L as Cl2	SM 4500-Cl F	1	0.10	6/25/98		6/25/98	n/a
484	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	104.0	%	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
485	HAA-ICR	2-Bromopropionic acid (Surrogate)	94.0	%	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
486	HAA-ICR	Bromochloroacetic acid	1.4	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
487	HAA-ICR	Bromodichloroacetic acid	1.2	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
488	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/25/98	7/6/98	7/7/98	0-164-0
489	HAA-ICR	Dibromoacetic acid	4.3	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
490	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
491	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
492	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/25/98	7/6/98	7/7/98	0-164-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

493	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	6/25/98	7/6/98	7/7/98	0-164-0
494	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
495	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	6/25/98		6/25/98	n/a
496	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	6/25/98		6/25/98	n/a
497	pH	pH	8.1 Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
498	TEMP	Cl2 Temperature	27.2 °C	SM 2550 B	1	n/a	6/25/98		6/25/98	n/a
499	TEMP	Temperature	23.7 °C	SM 2550 B	1	n/a	6/22/98		6/22/98	n/a
500	TIME	Cl2 Incubation Time	7.3 hrs	n/a	1	n/a	6/25/98		6/25/98	n/a
501	TOC-ICR	TOC	1.22 mg/L	SM 5310 C	1	0.50	6/22/98		6/23/98	7-0-304
502	TOC-ICR	TOC (Dupl)	1.23 mg/L	SM 5310 C	1	0.50	6/22/98		6/23/98	7-0-304
			1.23 mg/L	0.8 % RPD						
503	TOX-ICR	TOX	69 µg Cl-/L	SM 5320 B	1	25	6/25/98		7/1/98	12-0-159
504	TOX-ICR	TOX (Dupl)	70 µg Cl-/L	SM 5320 B	1	25	6/25/98		7/1/98	12-0-159
			70 µg Cl-/L	1.4 % RPD						
505	THM-ICR	1,2,3-Trichloropropane (Surrogate)	101.2 %	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
506	THM-ICR	Bromodichloromethane	4.3 µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
507	THM-ICR	Bromoform	27.3 µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
508	THM-ICR	Chloroform	1.2 µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
509	THM-ICR	Dibromochloromethane	16.3 µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
510	UV-ICR	UV	0.024 1/cm	SM 5910 B	1	0.009	6/22/98		6/24/98	8-0-207
511	UV-ICR	UV (Dupl)	0.024 1/cm	SM 5910 B	1	0.009	6/22/98		6/24/98	8-0-207
			0.024 1/cm	0.0 % RPD						

Sample ID: 119.5.Eff-16

S&H ID: 9806-498

Date Sampled: 6/23/98 9:44:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
512	Cl2Dose	Chlorine Dose	3.21	mg/L as Cl2	SM 4500-Cl B	1	n/a	6/25/98		6/25/98	n/a
513	Cl2Res	Chlorine Residual	0.80	mg/L as Cl2	SM 4500-Cl F	1	0.10	6/25/98		6/25/98	n/a
514	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	104.0	%	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
515	HAA-ICR	2-Bromopropionic acid (Surrogate)	92.4	%	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
516	HAA-ICR	Bromochloroacetic acid	1.6	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
517	HAA-ICR	Bromodichloroacetic acid	1.4	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
518	HAA-ICR	Chlorodibromoacetic acid	2.3	µg/L	EPA 552.2	1	2.0	6/25/98	7/6/98	7/7/98	0-164-0
519	HAA-ICR	Dibromoacetic acid	5.0	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
520	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
521	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
522	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/25/98	7/6/98	7/7/98	0-164-0
523	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	6/25/98	7/6/98	7/7/98	0-164-0
524	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

525	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	6/25/98	6/25/98	n/a
526	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	6/25/98	6/25/98	n/a
527	pH	pH	8.1	Unit	SM 4500-H+ B	1	n/a	6/23/98	6/23/98	n/a
528	TEMP	Cl2 Temperature	27.2	°C	SM 2550 B	1	n/a	6/25/98	6/25/98	n/a
529	TEMP	Temperature	23.6	°C	SM 2550 B	1	n/a	6/23/98	6/23/98	n/a
530	TIME	Cl2 Incubation Time	7.4	hrs	n/a	1	n/a	6/25/98	6/25/98	n/a
531	TOC-ICR	TOC	1.28	mg/L	SM 5310 C	1	0.50	6/23/98	6/24/98	7-0-305
532	TOC-ICR	TOC (Dupl)	1.26	mg/L	SM 5310 C	1	0.50	6/23/98	6/24/98	7-0-305
			1.27	mg/L	1.6 % RPD					
533	TOX-ICR	TOX	81	µg Cl-/L	SM 5320 B	1	25	6/25/98	7/1/98	12-0-159
534	TOX-ICR	TOX (Dupl)	79	µg Cl-/L	SM 5320 B	1	25	6/25/98	7/1/98	12-0-159
			80	µg Cl-/L	2.5 % RPD					
535	THM-ICR	1,2,3-Trichloropropane (Surrogate)	100.8	%	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98 0-163-0
536	THM-ICR	Bromodichloromethane	4.6	µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98 0-163-0
537	THM-ICR	Bromoform	27.3	µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98 0-163-0
538	THM-ICR	Chloroform	1.2	µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98 0-163-0
539	THM-ICR	Dibromochloromethane	16.6	µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98 0-163-0
540	UV-ICR	UV	0.028	1/cm	SM 5910 B	1	0.009	6/23/98	6/24/98	8-0-207
541	UV-ICR	UV (Dupl)	0.028	1/cm	SM 5910 B	1	0.009	6/23/98	6/24/98	8-0-207
			0.028	1/cm	0.0 % RPD					

Sample ID: 119.5.Eff-18

S&H ID: 9806-500

Date Sampled: 6/25/98 1:50:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
542	pH	pH	8.1	Unit	SM 4500-H+ B	1	n/a	6/25/98		6/25/98	n/a
543	TEMP	Temperature	23.9	°C	SM 2550 B	1	n/a	6/25/98		6/25/98	n/a
544	TOC-ICR	TOC	1.43	mg/L	SM 5310 C	1	0.50	6/25/98		6/25/98	7-0-306
545	TOC-ICR	TOC (Dupl)	1.43	mg/L	SM 5310 C	1	0.50	6/25/98		6/25/98	7-0-306
			1.43	mg/L	0.0 % RPD						

Sample ID: 119.5.Eff-3d

S&H ID: 9806-513

Date Sampled: 6/20/98 6:15:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
546	Cl2Dose	Chlorine Dose	2.73	mg/L as Cl2	SM 4500-Cl B	1	n/a	6/22/98		6/22/98	n/a
547	Cl2Res	Chlorine Residual	1.03	mg/L as Cl2	SM 4500-Cl F	1	0.10	6/22/98		6/22/98	n/a
548	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	105.2	%	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
549	HAA-ICR	2-Bromopropionic acid (Surrogate)	93.6	%	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
550	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
551	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

552	HAA-ICR	Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/7/98	0-164-0
553	HAA-ICR	Dibromoacetic acid	ND µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
554	HAA-ICR	Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
555	HAA-ICR	Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
556	HAA-ICR	Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/7/98	0-164-0
557	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	6/22/98	7/6/98	7/7/98	0-164-0
558	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
559	pH	Cl2 pH - Final	7.9 Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
560	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
561	pH	pH	8.1 Unit	SM 4500-H+ B	1	n/a	6/20/98		6/20/98	n/a
562	TEMP	Cl2 Temperature	26.7 °C	SM 2550 B	1	n/a	6/22/98		6/22/98	n/a
563	TEMP	Temperature	23.3 °C	SM 2550 B	1	n/a	6/20/98		6/20/98	n/a
564	TIME	Cl2 Incubation Time	7.5 hrs	n/a	1	n/a	6/22/98		6/22/98	n/a
565	TOC-ICR	TOC	ND mg/L	SM 5310 C	1	0.50	6/20/98		6/21/98	7-0-302
566	TOC-ICR	TOC (Dupl)	ND mg/L	SM 5310 C	1	0.50	6/20/98		6/21/98	7-0-302
			ND mg/L							
567	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	6/22/98		6/29/98	12-0-157
568	TOX-ICR	TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	6/22/98		6/29/98	12-0-157
			ND µg Cl-/L							
569	THM-ICR	1,2,3-Trichloropropane (Surrogate)	99.2 %	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
570	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
571	THM-ICR	Bromoform	4.5 µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
572	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
573	THM-ICR	Dibromochloromethane	1.8 µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
574	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	6/20/98		6/20/98	8-0-204
575	UV-ICR	UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	6/20/98		6/20/98	8-0-204
			ND 1/cm							

Sample ID: 119.5.Eff-7d

S&H ID: 9806-514

Date Sampled: 6/21/98 1:08:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
576	Cl2Dose	Chlorine Dose	2.96	mg/L as Cl2	SM 4500-Cl B	1	n/a	6/22/98		6/22/98	n/a
577	Cl2Res	Chlorine Residual	0.81	mg/L as Cl2	SM 4500-Cl F	1	0.10	6/22/98		6/22/98	n/a
578	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	107.6	%	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
579	HAA-ICR	2-Bromopropionic acid (Surrogate)	94.8	%	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
580	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
581	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
582	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/7/98	0-164-0
583	HAA-ICR	Dibromoacetic acid	2.5	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

584	HAA-ICR	Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
585	HAA-ICR	Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
586	HAA-ICR	Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/7/98	0-164-0
587	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	6/22/98	7/6/98	7/7/98	0-164-0
588	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
589	pH	Cl2 pH - Final	7.9 Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
590	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
591	pH	pH	8.2 Unit	SM 4500-H+ B	1	n/a	6/21/98		6/21/98	n/a
592	TEMP	Cl2 Temperature	26.7 °C	SM 2550 B	1	n/a	6/22/98		6/22/98	n/a
593	TEMP	Temperature	24.2 °C	SM 2550 B	1	n/a	6/21/98		6/21/98	n/a
594	TIME	Cl2 Incubation Time	7.3 hrs	n/a	1	n/a	6/22/98		6/22/98	n/a
595	TOC-ICR	TOC	0.80 mg/L	SM 5310 C	1	0.50	6/21/98		6/21/98	7-0-302
596	TOC-ICR	TOC (Dupl)	0.78 mg/L	SM 5310 C	1	0.50	6/21/98		6/21/98	7-0-302
			0.79 mg/L	2.5 % RPD						
597	TOX-ICR	TOX	33 µg Cl-/L	SM 5320 B	1	25	6/22/98		6/30/98	12-0-158
598	TOX-ICR	TOX (Dupl)	35 µg Cl-/L	SM 5320 B	1	25	6/22/98		6/30/98	12-0-158
			34 µg Cl-/L	5.9 % RPD						
599	THM-ICR	1,2,3-Trichloropropane (Surrogate)	102.8 %	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
600	THM-ICR	Bromodichloromethane	1.8 µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
601	THM-ICR	Bromoform	12.6 µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
602	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
603	THM-ICR	Dibromochloromethane	6.6 µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
604	UV-ICR	UV	0.011 1/cm	SM 5910 B	1	0.009	6/21/98		6/21/98	8-0-205
605	UV-ICR	UV (Dupl)	0.011 1/cm	SM 5910 B	1	0.009	6/21/98		6/21/98	8-0-205
			0.011 1/cm	0.0 % RPD						

Sample ID: 119.5.Eff-11d

S&H ID: 9806-515

Date Sampled: 6/22/98 5:00:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
606	Cl2Dose	Chlorine Dose	3.14	mg/L as Cl2	SM 4500-Cl B	1	n/a	6/25/98		6/25/98	n/a
607	Cl2Res	Chlorine Residual	0.76	mg/L as Cl2	SM 4500-Cl F	1	0.10	6/25/98		6/25/98	n/a
608	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	104.8	%	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
609	HAA-ICR	2-Bromopropionic acid (Surrogate)	92.8	%	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
610	HAA-ICR	Bromochloroacetic acid	1.2	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
611	HAA-ICR	Bromodichloroacetic acid	1.2	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
612	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/25/98	7/6/98	7/7/98	0-164-0
613	HAA-ICR	Dibromoacetic acid	3.8	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
614	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
615	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

616	HAA-ICR	Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	6/25/98	7/6/98	7/7/98	0-164-0
617	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	6/25/98	7/6/98	7/7/98	0-164-0
618	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
619	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	6/25/98		6/25/98	n/a
620	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	6/25/98		6/25/98	n/a
621	pH	pH	8.1 Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
622	TEMP	Cl2 Temperature	27.2 °C	SM 2550 B	1	n/a	6/25/98		6/25/98	n/a
623	TEMP	Temperature	21.7 °C	SM 2550 B	1	n/a	6/22/98		6/22/98	n/a
624	TIME	Cl2 Incubation Time	7.3 hrs	n/a	1	n/a	6/25/98		6/25/98	n/a
625	TOC-ICR	TOC	1.14 mg/L	SM 5310 C	1	0.50	6/22/98		6/22/98	7-0-303
626	TOC-ICR	TOC (Dupl)	1.14 mg/L	SM 5310 C	1	0.50	6/22/98		6/22/98	7-0-303
			1.14 mg/L	0.0 % RPD						
627	TOX-ICR	TOX	61 µg Cl-/L	SM 5320 B	1	25	6/25/98		7/1/98	12-0-159
628	TOX-ICR	TOX (Dupl)	60 µg Cl-/L	SM 5320 B	1	25	6/25/98		7/1/98	12-0-159
			61 µg Cl-/L	1.6 % RPD						
629	THM-ICR	1,2,3-Trichloropropane (Surrogate)	101.6 %	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
630	THM-ICR	Bromodichloromethane	3.4 µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
631	THM-ICR	Bromoform	21.8 µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
632	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
633	THM-ICR	Dibromochloromethane	12.6 µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98	0-163-0
634	UV-ICR	UV	0.021 1/cm	SM 5910 B	1	0.009	6/22/98		6/22/98	8-0-206
635	UV-ICR	UV (Dupl)	0.021 1/cm	SM 5910 B	1	0.009	6/22/98		6/22/98	8-0-206
			0.021 1/cm	0.0 % RPD						

Sample ID: 119.15.Eff-1

S&H ID: 9806-523

Date Sampled: 6/18/98 11:16:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
636	Cl2Dose	Chlorine Dose	2.59	mg/L as Cl2	SM 4500-Cl B	1	n/a	6/22/98		6/22/98	n/a
637	Cl2Res	Chlorine Residual	0.80	mg/L as Cl2	SM 4500-Cl F	1	0.10	6/22/98		6/22/98	n/a
638	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	103.6	%	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
639	HAA-ICR	2-Bromopropionic acid (Surrogate)	97.2	%	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
640	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
641	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
642	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/7/98	0-164-0
643	HAA-ICR	Dibromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
644	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
645	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
646	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/22/98	7/6/98	7/7/98	0-164-0
647	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	6/22/98	7/6/98	7/7/98	0-164-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

648	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	6/22/98	7/6/98	7/7/98	0-164-0
649	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
650	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	6/22/98		6/22/98	n/a
651	pH	pH	8.1 Unit	SM 4500-H+ B	1	n/a	6/18/98		6/18/98	n/a
652	TEMP	Cl2 Temperature	26.7 °C	SM 2550 B	1	n/a	6/22/98		6/22/98	n/a
653	TEMP	Temperature	24.7 °C	SM 2550 B	1	n/a	6/18/98		6/18/98	n/a
654	TIME	Cl2 Incubation Time	7.2 hrs	n/a	1	n/a	6/22/98		6/22/98	n/a
655	TOC-ICR	TOC	ND mg/L	SM 5310 C	1	0.50	6/18/98		6/19/98	7-0-300
656	TOC-ICR	TOC (Dupl)	ND mg/L	SM 5310 C	1	0.50	6/18/98		6/19/98	7-0-300
			ND mg/L							
657	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	6/22/98		6/29/98	12-0-157
658	TOX-ICR	TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	6/22/98		6/29/98	12-0-157
			ND µg Cl-/L							
659	THM-ICR	1,2,3-Trichloropropane (Surrogate)	98.4 %	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
660	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
661	THM-ICR	Bromoform	ND µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
662	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
663	THM-ICR	Dibromochloromethane	ND µg/L	EPA 551.1	1	1.0	6/22/98	7/2/98	7/4/98	0-163-0
664	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	6/18/98		6/19/98	8-0-203
665	UV-ICR	UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	6/18/98		6/19/98	8-0-203
			ND 1/cm							

Sample ID: 119.15.Eff-4

S&H ID: 9806-526

Date Sampled: 6/23/98 4:28:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
666	Cl2Dose	Chlorine Dose	2.65	mg/L as Cl2	SM 4500-Cl B	1	n/a	6/25/98		6/25/98	n/a
667	Cl2Res	Chlorine Residual	1.11	mg/L as Cl2	SM 4500-Cl F	1	0.10	6/25/98		6/25/98	n/a
668	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	102.8	%	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
669	HAA-ICR	2-Bromopropionic acid (Surrogate)	92.4	%	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
670	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
671	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
672	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/25/98	7/6/98	7/7/98	0-164-0
673	HAA-ICR	Dibromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
674	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
675	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
676	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/25/98	7/6/98	7/7/98	0-164-0
677	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	6/25/98	7/6/98	7/7/98	0-164-0
678	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/25/98	7/6/98	7/7/98	0-164-0
679	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	6/25/98		6/25/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

680	pH	Cl2 pH - Initial	7.8 Unit	SM 4500-H+ B	1	n/a	6/25/98	6/25/98	n/a
681	pH	pH	8.2 Unit	SM 4500-H+ B	1	n/a	6/23/98	6/23/98	n/a
682	TEMP	Cl2 Temperature	27.2 °C	SM 2550 B	1	n/a	6/25/98	6/25/98	n/a
683	TEMP	Temperature	22.4 °C	SM 2550 B	1	n/a	6/23/98	6/23/98	n/a
684	TIME	Cl2 Incubation Time	7.4 hrs	n/a	1	n/a	6/25/98	6/25/98	n/a
685	TOC-ICR	TOC	ND mg/L	SM 5310 C	1	0.50	6/23/98	6/24/98	7-0-305
686	TOC-ICR	TOC (Dupl)	ND mg/L	SM 5310 C	1	0.50	6/23/98	6/24/98	7-0-305
			ND mg/L						
687	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	6/25/98	7/1/98	12-0-159
688	TOX-ICR	TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	6/25/98	7/1/98	12-0-159
			ND µg Cl-/L						
689	THM-ICR	1,2,3-Trichloropropane (Surrogate)	101.2 %	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98 0-163-0
690	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98 0-163-0
691	THM-ICR	Bromoform	2.6 µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98 0-163-0
692	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98 0-163-0
693	THM-ICR	Dibromochloromethane	1.0 µg/L	EPA 551.1	1	1.0	6/25/98	7/2/98	7/4/98 0-163-0
694	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	6/23/98	6/24/98	8-0-207
695	UV-ICR	UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	6/23/98	6/24/98	8-0-207
			ND 1/cm						

Sample ID: 119.15.Eff-6

S&H ID: 9806-528

Date Sampled: 6/24/98 8:12:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
696	Cl2Dose	Chlorine Dose	2.82	mg/L as Cl2	SM 4500-Cl B	1	n/a	6/26/98		6/26/98	n/a
697	Cl2Res	Chlorine Residual	1.40	mg/L as Cl2	SM 4500-Cl F	1	0.10	6/26/98		6/26/98	n/a
698	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	103.2	%	EPA 552.2	1	1.0	6/26/98	7/6/98	7/7/98	0-164-0
699	HAA-ICR	2-Bromopropionic acid (Surrogate)	90.4	%	EPA 552.2	1	1.0	6/26/98	7/6/98	7/7/98	0-164-0
700	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/26/98	7/6/98	7/7/98	0-164-0
701	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/26/98	7/6/98	7/7/98	0-164-0
702	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/26/98	7/6/98	7/7/98	0-164-0
703	HAA-ICR	Dibromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/26/98	7/6/98	7/7/98	0-164-0
704	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/26/98	7/6/98	7/7/98	0-164-0
705	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/26/98	7/6/98	7/7/98	0-164-0
706	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/26/98	7/6/98	7/7/98	0-164-0
707	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	6/26/98	7/6/98	7/7/98	0-164-0
708	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/26/98	7/6/98	7/7/98	0-164-0
709	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	6/26/98		6/26/98	n/a
710	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	6/26/98		6/26/98	n/a
711	pH	pH	8.1	Unit	SM 4500-H+ B	1	n/a	6/24/98		6/24/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

712	TEMP	Cl2 Temperature	27.2 °C	SM 2550 B	1	n/a	6/26/98	6/26/98	n/a
713	TEMP	Temperature	21.5 °C	SM 2550 B	1	n/a	6/24/98	6/24/98	n/a
714	TIME	Cl2 Incubation Time	7.1 hrs	n/a	1	n/a	6/26/98	6/26/98	n/a
715	TOC-ICR	TOC	ND mg/L	SM 5310 C	1	0.50	6/24/98	6/24/98	7-0-305
716	TOC-ICR	TOC (Dupl)	ND mg/L	SM 5310 C	1	0.50	6/24/98	6/24/98	7-0-305
			ND mg/L						
717	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	6/26/98	7/2/98	12-0-160
718	TOX-ICR	TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	6/26/98	7/2/98	12-0-160
			ND µg Cl-/L						
719	THM-ICR	1,2,3-Trichloropropane (Surrogate)	99.2 %	EPA 551.1	1	1.0	6/26/98	7/2/98	7/4/98 0-163-0
720	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	6/26/98	7/2/98	7/4/98 0-163-0
721	THM-ICR	Bromoform	2.6 µg/L	EPA 551.1	1	1.0	6/26/98	7/2/98	7/4/98 0-163-0
722	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	6/26/98	7/2/98	7/4/98 0-163-0
723	THM-ICR	Dibromochloromethane	1.3 µg/L	EPA 551.1	1	1.0	6/26/98	7/2/98	7/4/98 0-163-0
724	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	6/24/98	6/24/98	8-0-207
725	UV-ICR	UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	6/24/98	6/24/98	8-0-207
			ND 1/cm						

Sample ID: 119.15.Eff-7

S&H ID: 9806-529

Date Sampled: 6/24/98 4:16:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
726	Cl2Dose	Chlorine Dose	2.88	mg/L as Cl2	SM 4500-Cl B	1	n/a	6/26/98		6/26/98	n/a
727	Cl2Res	Chlorine Residual	1.52	mg/L as Cl2	SM 4500-Cl F	1	0.10	6/26/98		6/26/98	n/a
728	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	101.2	%	EPA 552.2	1	1.0	6/26/98	7/6/98	7/7/98	0-164-0
729	HAA-ICR	2-Bromopropionic acid (Surrogate)	95.6	%	EPA 552.2	1	1.0	6/26/98	7/6/98	7/7/98	0-164-0
730	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/26/98	7/6/98	7/7/98	0-164-0
731	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/26/98	7/6/98	7/7/98	0-164-0
732	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/26/98	7/6/98	7/7/98	0-164-0
733	HAA-ICR	Dibromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/26/98	7/6/98	7/7/98	0-164-0
734	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/26/98	7/6/98	7/7/98	0-164-0
735	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/26/98	7/6/98	7/7/98	0-164-0
736	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/26/98	7/6/98	7/7/98	0-164-0
737	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	6/26/98	7/6/98	7/7/98	0-164-0
738	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/26/98	7/6/98	7/7/98	0-164-0
739	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	6/26/98		6/26/98	n/a
740	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	6/26/98		6/26/98	n/a
741	pH	pH	8.0	Unit	SM 4500-H+ B	1	n/a	6/24/98		6/24/98	n/a
742	TEMP	Cl2 Temperature	27.2	°C	SM 2550 B	1	n/a	6/26/98		6/26/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

743	TEMP	Temperature	23.8 °C	SM 2550 B	1	n/a	6/24/98	6/24/98	n/a
744	TIME	Cl2 Incubation Time	7.2 hrs	n/a	1	n/a	6/26/98	6/26/98	n/a
745	TOC-ICR	TOC	ND mg/L	SM 5310 C	1	0.50	6/24/98	6/25/98	7-0-306
746	TOC-ICR	TOC (Dupl)	ND mg/L	SM 5310 C	1	0.50	6/24/98	6/25/98	7-0-306
			ND mg/L						
747	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	6/26/98	7/2/98	12-0-160
748	TOX-ICR	TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	6/26/98	7/2/98	12-0-160
			ND µg Cl-/L						
749	THM-ICR	1,2,3-Trichloropropane (Surrogate)	105.2 %	EPA 551.1	1	1.0	6/26/98	7/2/98	7/4/98 0-163-0
750	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	6/26/98	7/2/98	7/4/98 0-163-0
751	THM-ICR	Bromoform	3.4 µg/L	EPA 551.1	1	1.0	6/26/98	7/2/98	7/4/98 0-163-0
752	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	6/26/98	7/2/98	7/4/98 0-163-0
753	THM-ICR	Dibromochloromethane	1.8 µg/L	EPA 551.1	1	1.0	6/26/98	7/2/98	7/4/98 0-163-0
754	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	6/24/98	6/26/98	8-0-208
755	UV-ICR	UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	6/24/98	6/26/98	8-0-208
			ND 1/cm						

Sample ID: 119.15.Eff-10

S&H ID: 9806-532

Date Sampled: 6/25/98 4:04:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
756	Cl2Dose	Chlorine Dose	1.71	mg/L as Cl2	SM 4500-Cl B	1	n/a	6/30/98		6/30/98	n/a
757	Cl2Res	Chlorine Residual	0.86	mg/L as Cl2	SM 4500-Cl F	1	0.10	6/30/98		6/30/98	n/a
758	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	109.2	%	EPA 552.2	1	1.0	6/30/98	7/9/98	7/9/98	0-170-0
759	HAA-ICR	2-Bromopropionic acid (Surrogate)	94.8	%	EPA 552.2	1	1.0	6/30/98	7/9/98	7/9/98	0-170-0
760	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/30/98	7/9/98	7/9/98	0-170-0
761	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/30/98	7/9/98	7/9/98	0-170-0
762	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/30/98	7/9/98	7/9/98	0-170-0
763	HAA-ICR	Dibromoacetic acid	1.3	µg/L	EPA 552.2	1	1.0	6/30/98	7/9/98	7/9/98	0-170-0
764	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/30/98	7/9/98	7/9/98	0-170-0
765	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/30/98	7/9/98	7/9/98	0-170-0
766	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/30/98	7/9/98	7/9/98	0-170-0
767	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	6/30/98	7/9/98	7/9/98	0-170-0
768	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/30/98	7/9/98	7/9/98	0-170-0
769	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	6/30/98		6/30/98	n/a
770	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	6/30/98		6/30/98	n/a
771	pH	pH	8.0	Unit	SM 4500-H+ B	1	n/a	6/25/98		6/25/98	n/a
772	TEMP	Cl2 Temperature	27.2	°C	SM 2550 B	1	n/a	6/30/98		6/30/98	n/a
773	TEMP	Temperature	24.2	°C	SM 2550 B	1	n/a	6/25/98		6/25/98	n/a
774	TIME	Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	6/30/98		6/30/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2

775	TOC-ICR TOC	ND mg/L	SM 5310 C	1	0.50	6/25/98	6/26/98	7-0-307
776	TOC-ICR TOC (Dupl)	ND mg/L	SM 5310 C	1	0.50	6/25/98	6/26/98	7-0-307
		ND mg/L						
777	TOX-ICR TOX	ND µg Cl-/L	SM 5320 B	1	25	6/30/98	7/6/98	12-0-161
778	TOX-ICR TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	6/30/98	7/6/98	12-0-161
		ND µg Cl-/L						
779	THM-ICR 1,2,3-Trichloropropane (Surrogate)	95.6 %	EPA 551.1	1	1.0	6/30/98	7/8/98	7/8/98 0-166-0
780	THM-ICR Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	6/30/98	7/8/98	7/8/98 0-166-0
781	THM-ICR Bromoform	6.1 µg/L	EPA 551.1	1	1.0	6/30/98	7/8/98	7/8/98 0-166-0
782	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	6/30/98	7/8/98	7/8/98 0-166-0
783	THM-ICR Dibromochloromethane	1.4 µg/L	EPA 551.1	1	1.0	6/30/98	7/8/98	7/8/98 0-166-0
784	UV-ICR UV	ND 1/cm	SM 5910 B	1	0.009	6/25/98	6/26/98	8-0-208
785	UV-ICR UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	6/25/98	6/26/98	8-0-208
		ND 1/cm						

Sample ID: 119.15.Eff-11**S&H ID:** 9806-533**Date Sampled:** 6/25/98 11:54:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
786	Cl2Dose	Chlorine Dose	1.76	mg/L as Cl2	SM 4500-Cl B	1	n/a	6/30/98		6/30/98	n/a
787	Cl2Res	Chlorine Residual	0.48	mg/L as Cl2	SM 4500-Cl F	1	0.10	6/30/98		6/30/98	n/a
788	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	100.4	%	EPA 552.2	1	1.0	6/30/98	7/9/98	7/10/98	0-170-0
789	HAA-ICR	2-Bromopropionic acid (Surrogate)	104.0	%	EPA 552.2	1	1.0	6/30/98	7/9/98	7/10/98	0-170-0
790	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/30/98	7/9/98	7/10/98	0-170-0
791	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/30/98	7/9/98	7/10/98	0-170-0
792	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/30/98	7/9/98	7/10/98	0-170-0
793	HAA-ICR	Dibromoacetic acid	2.2	µg/L	EPA 552.2	1	1.0	6/30/98	7/9/98	7/10/98	0-170-0
794	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/30/98	7/9/98	7/10/98	0-170-0
795	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/30/98	7/9/98	7/10/98	0-170-0
796	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/30/98	7/9/98	7/10/98	0-170-0
797	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	6/30/98	7/9/98	7/10/98	0-170-0
798	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/30/98	7/9/98	7/10/98	0-170-0
799	pH	Cl2 pH - Final	7.7	Unit	SM 4500-H+ B	1	n/a	6/30/98		6/30/98	n/a
800	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	6/30/98		6/30/98	n/a
801	pH	pH	8.1	Unit	SM 4500-H+ B	1	n/a	6/25/98		6/25/98	n/a
802	TEMP	Cl2 Temperature	27.2	°C	SM 2550 B	1	n/a	6/30/98		6/30/98	n/a
803	TEMP	Temperature	25.3	°C	SM 2550 B	1	n/a	6/25/98		6/25/98	n/a
804	TIME	Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	6/30/98		6/30/98	n/a
805	TOC-ICR TOC		0.56	mg/L	SM 5310 C	1	0.50	6/25/98		6/26/98	7-0-307
806	TOC-ICR TOC (Dupl)		0.57	mg/L	SM 5310 C	1	0.50	6/25/98		6/26/98	7-0-307

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

		0.56 mg/L	1.8 % RPD						
807	TOX-ICR TOX	43 µg Cl-/L	SM 5320 B	1	25	6/30/98		7/6/98	12-0-161
808	TOX-ICR TOX (Dupl)	43 µg Cl-/L	SM 5320 B	1	25	6/30/98		7/6/98	12-0-161
		43 µg Cl-/L	0.0 % RPD						
809	THM-ICR 1,2,3-Trichloropropane (Surrogate)	96.4 %	EPA 551.1	1	1.0	6/30/98	7/8/98	7/8/98	0-166-0
810	THM-ICR Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	6/30/98	7/8/98	7/8/98	0-166-0
811	THM-ICR Bromoform	14.1 µg/L	EPA 551.1	1	1.0	6/30/98	7/8/98	7/8/98	0-166-0
812	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	6/30/98	7/8/98	7/8/98	0-166-0
813	THM-ICR Dibromochloromethane	3.2 µg/L	EPA 551.1	1	1.0	6/30/98	7/8/98	7/8/98	0-166-0
814	UV-ICR UV	ND 1/cm	SM 5910 B	1	0.009	6/25/98		6/26/98	8-0-208
815	UV-ICR UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	6/25/98		6/26/98	8-0-208
		ND 1/cm							

Sample ID: 119.15.Eff-14

S&H ID: 9806-536

Date Sampled: 6/26/98 11:38:00 PM

#	Analysis Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
816	Cl2Dose Chlorine Dose	1.84	mg/L as Cl2	SM 4500-Cl B	1	n/a	6/30/98		6/30/98	n/a
817	Cl2Res Chlorine Residual	0.79	mg/L as Cl2	SM 4500-Cl F	1	0.10	6/30/98		6/30/98	n/a
818	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	100.4	%	EPA 552.2	1	1.0	6/30/98	7/9/98	7/10/98	0-170-0
819	HAA-ICR 2-Bromopropionic acid (Surrogate)	103.2	%	EPA 552.2	1	1.0	6/30/98	7/9/98	7/10/98	0-170-0
820	HAA-ICR Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/30/98	7/9/98	7/10/98	0-170-0
821	HAA-ICR Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/30/98	7/9/98	7/10/98	0-170-0
822	HAA-ICR Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/30/98	7/9/98	7/10/98	0-170-0
823	HAA-ICR Dibromoacetic acid	1.8	µg/L	EPA 552.2	1	1.0	6/30/98	7/9/98	7/10/98	0-170-0
824	HAA-ICR Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/30/98	7/9/98	7/10/98	0-170-0
825	HAA-ICR Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/30/98	7/9/98	7/10/98	0-170-0
826	HAA-ICR Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/30/98	7/9/98	7/10/98	0-170-0
827	HAA-ICR Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	6/30/98	7/9/98	7/10/98	0-170-0
828	HAA-ICR Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/30/98	7/9/98	7/10/98	0-170-0
829	pH Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	6/30/98		6/30/98	n/a
830	pH Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	6/30/98		6/30/98	n/a
831	pH pH	8.2	Unit	SM 4500-H+ B	1	n/a	6/26/98		6/26/98	n/a
832	TEMP Cl2 Temperature	27.2	°C	SM 2550 B	1	n/a	6/30/98		6/30/98	n/a
833	TEMP Temperature	27.1	°C	SM 2550 B	1	n/a	6/26/98		6/26/98	n/a
834	TIME Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	6/30/98		6/30/98	n/a
835	TOC-ICR TOC	0.73	mg/L	SM 5310 C	1	0.50	6/26/98		6/27/98	7-0-309
836	TOC-ICR TOC (Dupl)	0.74	mg/L	SM 5310 C	1	0.50	6/26/98		6/27/98	7-0-309
		0.73 mg/L		1.4 % RPD						
837	TOX-ICR TOX	ND	µg Cl-/L	SM 5320 B	1	25	6/30/98		7/6/98	12-0-161

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

838	TOX-ICR TOX (Dupl)	ND µg Cl-/L ND µg Cl-/L	SM 5320 B	1	25	6/30/98	7/6/98	12-0-161
839	THM-ICR 1,2,3-Trichloropropane (Surrogate)	94.8 %	EPA 551.1	1	1.0	6/30/98	7/8/98	7/8/98 0-166-0
840	THM-ICR Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	6/30/98	7/8/98	7/8/98 0-166-0
841	THM-ICR Bromoform	10.4 µg/L	EPA 551.1	1	1.0	6/30/98	7/8/98	7/8/98 0-166-0
842	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	6/30/98	7/8/98	7/8/98 0-166-0
843	THM-ICR Dibromochloromethane	2.3 µg/L	EPA 551.1	1	1.0	6/30/98	7/8/98	7/8/98 0-166-0
844	UV-ICR UV	ND 1/cm	SM 5910 B	1	0.009	6/26/98	6/28/98	8-0-210
845	UV-ICR UV (Dupl)	ND 1/cm ND 1/cm	SM 5910 B	1	0.009	6/26/98	6/28/98	8-0-210

Sample ID: 119.15.Eff-22

S&H ID: 9806-544

Date Sampled: 7/1/98 9:00:00 AM

#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
846	Cl2Dose Chlorine Dose	2.24 mg/L as Cl2	SM 4500-Cl B	1	n/a	7/2/98		7/2/98	n/a
847	Cl2Res Chlorine Residual	1.66 mg/L as Cl2	SM 4500-Cl F	1	0.10	7/2/98		7/2/98	n/a
848	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	102.4 %	EPA 552.2	1	1.0	7/2/98	7/13/98	7/13/98	0-171-0
849	HAA-ICR 2-Bromopropionic acid (Surrogate)	99.2 %	EPA 552.2	1	1.0	7/2/98	7/13/98	7/13/98	0-171-0
850	HAA-ICR Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/2/98	7/13/98	7/13/98	0-171-0
851	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/2/98	7/13/98	7/13/98	0-171-0
852	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	7/2/98	7/13/98	7/13/98	0-171-0
853	HAA-ICR Dibromoacetic acid	2.4 µg/L	EPA 552.2	1	1.0	7/2/98	7/13/98	7/13/98	0-171-0
854	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/2/98	7/13/98	7/13/98	0-171-0
855	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/2/98	7/13/98	7/13/98	0-171-0
856	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/2/98	7/13/98	7/13/98	0-171-0
857	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/2/98	7/13/98	7/13/98	0-171-0
858	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/2/98	7/13/98	7/13/98	0-171-0
859	pH Cl2 pH - Final	7.9 Unit	SM 4500-H+ B	1	n/a	7/2/98		7/2/98	n/a
860	pH Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	7/2/98		7/2/98	n/a
861	pH pH	8.0 Unit	SM 4500-H+ B	1	n/a	7/1/98		7/1/98	n/a
862	TEMP Cl2 Temperature	27.3 °C	SM 2550 B	1	n/a	7/2/98		7/2/98	n/a
863	TEMP Temperature	22.8 °C	SM 2550 B	1	n/a	7/1/98		7/1/98	n/a
864	TIME Cl2 Incubation Time	7.1 hrs	n/a	1	n/a	7/2/98		7/2/98	n/a
865	TOC-ICR TOC	0.92 mg/L	SM 5310 C	1	0.50	7/1/98		7/1/98	7-0-316
866	TOC-ICR TOC (Dupl)	0.92 mg/L 0.92 mg/L	SM 5310 C 0.0 % RPD	1	0.50	7/1/98		7/1/98	7-0-316
867	TOX-ICR TOX	32 µg Cl-/L	SM 5320 B	1	25	7/2/98		7/9/98	12-0-164
868	TOX-ICR TOX (Dupl)	36 µg Cl-/L 34 µg Cl-/L	SM 5320 B 11.8 % RPD	1	25	7/2/98		7/9/98	12-0-164

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

869	THM-ICR 1,2,3-Trichloropropane (Surrogate)	95.2 %	EPA 551.1	1	1.0	7/2/98	7/14/98	7/14/98	0-172-0
870	THM-ICR Bromodichloromethane	1.5 µg/L	EPA 551.1	1	1.0	7/2/98	7/14/98	7/14/98	0-172-0
871	THM-ICR Bromoform	14.4 µg/L	EPA 551.1	1	1.0	7/2/98	7/14/98	7/14/98	0-172-0
872	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	7/2/98	7/14/98	7/14/98	0-172-0
873	THM-ICR Dibromochloromethane	7.5 µg/L	EPA 551.1	1	1.0	7/2/98	7/14/98	7/14/98	0-172-0
874	UV-ICR UV	0.012 1/cm	SM 5910 B	1	0.009	7/1/98		7/1/98	8-0-213
875	UV-ICR UV (Dupl)	0.012 1/cm	SM 5910 B	1	0.009	7/1/98		7/1/98	8-0-213
		0.012 1/cm	0.0 % RPD						

Sample ID: 119.15.Eff-23

S&H ID: 9806-545

Date Sampled: 7/3/98 8:49:00 AM

#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
876	Cl2Dose Chlorine Dose	2.09 mg/L as Cl2	SM 4500-Cl B	1	n/a	7/7/98		7/7/98	n/a
877	Cl2Res Chlorine Residual	1.51 mg/L as Cl2	SM 4500-Cl F	1	0.10	7/7/98		7/7/98	n/a
878	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	98.4 %	EPA 552.2	1	1.0	7/7/98	7/15/98	7/15/98	0-176-0
879	HAA-ICR 2-Bromopropionic acid (Surrogate)	98.8 %	EPA 552.2	1	1.0	7/7/98	7/15/98	7/15/98	0-176-0
880	HAA-ICR Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/7/98	7/15/98	7/15/98	0-176-0
881	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/7/98	7/15/98	7/15/98	0-176-0
882	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	7/7/98	7/15/98	7/15/98	0-176-0
883	HAA-ICR Dibromoacetic acid	3.2 µg/L	EPA 552.2	1	1.0	7/7/98	7/15/98	7/15/98	0-176-0
884	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/7/98	7/15/98	7/15/98	0-176-0
885	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/7/98	7/15/98	7/15/98	0-176-0
886	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/7/98	7/15/98	7/15/98	0-176-0
887	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/7/98	7/15/98	7/15/98	0-176-0
888	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/7/98	7/15/98	7/15/98	0-176-0
889	pH Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	7/7/98		7/7/98	n/a
890	pH Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	7/7/98		7/7/98	n/a
891	pH pH	8.0 Unit	SM 4500-H+ B	1	n/a	7/3/98		7/3/98	n/a
892	TEMP Cl2 Temperature	27.2 °C	SM 2550 B	1	n/a	7/7/98		7/7/98	n/a
893	TEMP Temperature	22.6 °C	SM 2550 B	1	n/a	7/3/98		7/3/98	n/a
894	TIME Cl2 Incubation Time	7.2 hrs	n/a	1	n/a	7/7/98		7/7/98	n/a
895	TOC-ICR TOC	1.03 mg/L	SM 5310 C	1	0.50	7/3/98		7/3/98	7-0-319
896	TOC-ICR TOC (Dupl)	1.00 mg/L	SM 5310 C	1	0.50	7/3/98		7/3/98	7-0-319
		1.02 mg/L	2.9 % RPD						
897	TOX-ICR TOX	44 µg Cl-/L	SM 5320 B	1	25	7/7/98		7/14/98	12-0-167
898	TOX-ICR TOX (Dupl)	44 µg Cl-/L	SM 5320 B	1	25	7/7/98		7/14/98	12-0-167
		44 µg Cl-/L	0.0 % RPD						
899	THM-ICR 1,2,3-Trichloropropane (Surrogate)	100.4 %	EPA 551.1	1	1.0	7/7/98	7/16/98	7/16/98	0-177-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

900	THM-ICR Bromodichloromethane	1.8 µg/L	EPA 551.1	1	1.0	7/7/98	7/16/98	7/16/98	0-177-0
901	THM-ICR Bromoform	18.8 µg/L	EPA 551.1	1	1.0	7/7/98	7/16/98	7/16/98	0-177-0
902	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	7/7/98	7/16/98	7/16/98	0-177-0
903	THM-ICR Dibromochloromethane	9.6 µg/L	EPA 551.1	1	1.0	7/7/98	7/16/98	7/16/98	0-177-0
904	UV-ICR UV	0.015 1/cm	SM 5910 B	1	0.009	7/3/98		7/3/98	8-0-216
905	UV-ICR UV (Dupl)	0.015 1/cm	SM 5910 B	1	0.009	7/3/98		7/3/98	8-0-216
		0.015 1/cm	0.0 % RPD						

Sample ID: 119.15.Eff-24

S&H ID: 9806-546

Date Sampled: 7/4/98 5:01:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
906	Cl2Dose	Chlorine Dose	2.21	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/7/98		7/7/98	n/a
907	Cl2Res	Chlorine Residual	1.55	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/7/98		7/7/98	n/a
908	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	97.6	%	EPA 552.2	1	1.0	7/7/98	7/15/98	7/15/98	0-176-0
909	HAA-ICR	2-Bromopropionic acid (Surrogate)	100.4	%	EPA 552.2	1	1.0	7/7/98	7/15/98	7/15/98	0-176-0
910	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/7/98	7/15/98	7/15/98	0-176-0
911	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/7/98	7/15/98	7/15/98	0-176-0
912	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/7/98	7/15/98	7/15/98	0-176-0
913	HAA-ICR	Dibromoacetic acid	4.4	µg/L	EPA 552.2	1	1.0	7/7/98	7/15/98	7/15/98	0-176-0
914	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/7/98	7/15/98	7/15/98	0-176-0
915	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/7/98	7/15/98	7/15/98	0-176-0
916	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/7/98	7/15/98	7/15/98	0-176-0
917	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/7/98	7/15/98	7/15/98	0-176-0
918	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/7/98	7/15/98	7/15/98	0-176-0
919	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	7/7/98		7/7/98	n/a
920	pH	Cl2 pH - Initial	7.8	Unit	SM 4500-H+ B	1	n/a	7/7/98		7/7/98	n/a
921	pH	pH	8.1	Unit	SM 4500-H+ B	1	n/a	7/4/98		7/4/98	n/a
922	TEMP	Cl2 Temperature	27.2	°C	SM 2550 B	1	n/a	7/7/98		7/7/98	n/a
923	TEMP	Temperature	23.5	°C	SM 2550 B	1	n/a	7/4/98		7/4/98	n/a
924	TIME	Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	7/7/98		7/7/98	n/a
925	TOC-ICR	TOC	1.14	mg/L	SM 5310 C	1	0.50	7/4/98		7/5/98	7-0-324
926	TOC-ICR	TOC (Dupl)	1.15	mg/L	SM 5310 C	1	0.50	7/4/98		7/5/98	7-0-324
			1.15 mg/L		0.9 % RPD						
927	TOX-ICR	TOX	56	µg Cl-/L	SM 5320 B	1	25	7/7/98		7/14/98	12-0-167
928	TOX-ICR	TOX (Dupl)	56	µg Cl-/L	SM 5320 B	1	25	7/7/98		7/14/98	12-0-167
			56 µg Cl-/L		0.0 % RPD						
929	THM-ICR	1,2,3-Trichloropropane (Surrogate)	100.8	%	EPA 551.1	1	1.0	7/7/98	7/16/98	7/16/98	0-177-0
930	THM-ICR	Bromodichloromethane	2.3	µg/L	EPA 551.1	1	1.0	7/7/98	7/16/98	7/16/98	0-177-0
931	THM-ICR	Bromoform	22.4	µg/L	EPA 551.1	1	1.0	7/7/98	7/16/98	7/16/98	0-177-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

932	THM-ICR Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/7/98	7/16/98	7/16/98	0-177-0
933	THM-ICR Dibromochloromethane	11.5	µg/L	EPA 551.1	1	1.0	7/7/98	7/16/98	7/16/98	0-177-0
934	UV-ICR UV	0.018	1/cm	SM 5910 B	1	0.009	7/4/98		7/5/98	8-0-217
935	UV-ICR UV (Dupl)	0.018	1/cm	SM 5910 B	1	0.009	7/4/98		7/5/98	8-0-217
		0.018	1/cm	0.0 % RPD						

Sample ID: 119.15.Eff-26

S&H ID: 9806-548

Date Sampled: 7/6/98 1:26:00 AM

#	Analysis Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
936	Cl2Dose Chlorine Dose	2.29	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/7/98		7/7/98	n/a
937	Cl2Res Chlorine Residual	1.52	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/7/98		7/7/98	n/a
938	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	95.6	%	EPA 552.2	1	1.0	7/7/98	7/15/98	7/15/98	0-176-0
939	HAA-ICR 2-Bromopropionic acid (Surrogate)	101.6	%	EPA 552.2	1	1.0	7/7/98	7/15/98	7/15/98	0-176-0
940	HAA-ICR Bromochloroacetic acid	1.1	µg/L	EPA 552.2	1	1.0	7/7/98	7/15/98	7/15/98	0-176-0
941	HAA-ICR Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/7/98	7/15/98	7/15/98	0-176-0
942	HAA-ICR Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/7/98	7/15/98	7/15/98	0-176-0
943	HAA-ICR Dibromoacetic acid	4.8	µg/L	EPA 552.2	1	1.0	7/7/98	7/15/98	7/15/98	0-176-0
944	HAA-ICR Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/7/98	7/15/98	7/15/98	0-176-0
945	HAA-ICR Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/7/98	7/15/98	7/15/98	0-176-0
946	HAA-ICR Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/7/98	7/15/98	7/15/98	0-176-0
947	HAA-ICR Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/7/98	7/15/98	7/15/98	0-176-0
948	HAA-ICR Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/7/98	7/15/98	7/15/98	0-176-0
949	pH Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	7/7/98		7/7/98	n/a
950	pH Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/7/98		7/7/98	n/a
951	pH pH	8.1	Unit	SM 4500-H+ B	1	n/a	7/6/98		7/6/98	n/a
952	TEMP Cl2 Temperature	27.2	°C	SM 2550 B	1	n/a	7/7/98		7/7/98	n/a
953	TEMP Temperature	23.4	°C	SM 2550 B	1	n/a	7/6/98		7/6/98	n/a
954	TIME Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	7/7/98		7/7/98	n/a
955	TOC-ICR TOC	1.24	mg/L	SM 5310 C	1	0.50	7/6/98		7/6/98	7-0-326
956	TOC-ICR TOC (Dupl)	1.22	mg/L	SM 5310 C	1	0.50	7/6/98		7/6/98	7-0-326
		1.23	mg/L	1.6 % RPD						
957	TOX-ICR TOX	64	µg Cl-/L	SM 5320 B	1	25	7/7/98		7/14/98	12-0-167
958	TOX-ICR TOX (Dupl)	62	µg Cl-/L	SM 5320 B	1	25	7/7/98		7/14/98	12-0-167
		63	µg Cl-/L	3.2 % RPD						
959	THM-ICR 1,2,3-Trichloropropane (Surrogate)	100.0	%	EPA 551.1	1	1.0	7/7/98	7/16/98	7/16/98	0-177-0
960	THM-ICR Bromodichloromethane	2.9	µg/L	EPA 551.1	1	1.0	7/7/98	7/16/98	7/16/98	0-177-0
961	THM-ICR Bromoform	25.5	µg/L	EPA 551.1	1	1.0	7/7/98	7/16/98	7/16/98	0-177-0
962	THM-ICR Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/7/98	7/16/98	7/16/98	0-177-0
963	THM-ICR Dibromochloromethane	13.9	µg/L	EPA 551.1	1	1.0	7/7/98	7/16/98	7/16/98	0-177-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

964	UV-ICR	UV	0.020	1/cm	SM 5910 B	1	0.009	7/6/98	7/6/98	8-0-219
965	UV-ICR	UV (Dupl)	0.020	1/cm	SM 5910 B	1	0.009	7/6/98	7/6/98	8-0-219
			0.020	1/cm	0.0 % RPD					

Sample ID: 119.15.Eff-29

S&H ID: 9806-551

Date Sampled: 7/8/98 7:54:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
966	Cl2Dose	Chlorine Dose	2.05	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/9/98		7/9/98	n/a
967	Cl2Res	Chlorine Residual	1.22	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/9/98		7/9/98	n/a
968	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	99.2	%	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
969	HAA-ICR	2-Bromopropionic acid (Surrogate)	99.2	%	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
970	HAA-ICR	Bromochloroacetic acid	1.2	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
971	HAA-ICR	Bromodichloroacetic acid	1.1	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
972	HAA-ICR	Chlorodibromoacetic acid	2.0	µg/L	EPA 552.2	1	2.0	7/9/98	7/21/98	7/21/98	0-179-0
973	HAA-ICR	Dibromoacetic acid	5.3	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
974	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
975	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
976	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/9/98	7/21/98	7/21/98	0-179-0
977	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/9/98	7/21/98	7/21/98	0-179-0
978	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
979	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	7/9/98		7/9/98	n/a
980	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/9/98		7/9/98	n/a
981	pH	pH	8.2	Unit	SM 4500-H+ B	1	n/a	7/8/98		7/8/98	n/a
982	TEMP	Cl2 Temperature	26.6	°C	SM 2550 B	1	n/a	7/9/98		7/9/98	n/a
983	TEMP	Temperature	22.7	°C	SM 2550 B	1	n/a	7/8/98		7/8/98	n/a
984	TIME	Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	7/9/98		7/9/98	n/a
985	TOC-ICR	TOC	1.31	mg/L	SM 5310 C	1	0.50	7/8/98		7/8/98	7-0-331
986	TOC-ICR	TOC (Dupl)	1.28	mg/L	SM 5310 C	1	0.50	7/8/98		7/8/98	7-0-331
			1.29	mg/L	2.3 % RPD						
987	TOX-ICR	TOX	72	µg Cl-/L	SM 5320 B	1	25	7/9/98		7/21/98	12-0-172
988	TOX-ICR	TOX (Dupl)	70	µg Cl-/L	SM 5320 B	1	25	7/9/98		7/21/98	12-0-172
			71	µg Cl-/L	2.8 % RPD						
989	THM-ICR	1,2,3-Trichloropropane (Surrogate)	98.4	%	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
990	THM-ICR	Bromodichloromethane	2.7	µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
991	THM-ICR	Bromoform	30.7	µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
992	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
993	THM-ICR	Dibromochloromethane	13.5	µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
994	UV-ICR	UV	0.022	1/cm	SM 5910 B	1	0.009	7/8/98		7/8/98	8-0-222
995	UV-ICR	UV (Dupl)	0.022	1/cm	SM 5910 B	1	0.009	7/8/98		7/8/98	8-0-222

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

0.022 1/cm

0.0 % RPD

Sample ID: 119.15.Eff-30

S&H ID: 9806-552

Date Sampled: 7/9/98 4:12:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
996	pH	pH	8.0	Unit	SM 4500-H+ B	1	n/a	7/9/98		7/9/98	n/a
997	TEMP	Temperature	22.6	°C	SM 2550 B	1	n/a	7/9/98		7/9/98	n/a
998	TOC-ICR	TOC	1.38	mg/L	SM 5310 C	1	0.50	7/9/98		7/10/98	7-0-333
999	TOC-ICR	TOC (Dupl)	1.37	mg/L	SM 5310 C	1	0.50	7/9/98		7/10/98	7-0-333
			1.38	mg/L	0.7 % RPD						
1000	UV-ICR	UV	0.025	1/cm	SM 5910 B	1	0.009	7/9/98		7/10/98	8-0-225
1001	UV-ICR	UV (Dupl)	0.025	1/cm	SM 5910 B	1	0.009	7/9/98		7/10/98	8-0-225
			0.025	1/cm	0.0 % RPD						

Sample ID: 119.15.Eff-7d

S&H ID: 9806-553

Date Sampled: 6/24/98 4:16:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1002	Cl2Dose	Chlorine Dose	2.88	mg/L as Cl2	SM 4500-Cl B	1	n/a	6/26/98		6/26/98	n/a
1003	Cl2Res	Chlorine Residual	1.58	mg/L as Cl2	SM 4500-Cl F	1	0.10	6/26/98		6/26/98	n/a
1004	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	103.6	%	EPA 552.2	1	1.0	6/26/98	7/9/98	7/9/98	0-170-0
1005	HAA-ICR	2-Bromopropionic acid (Surrogate)	99.6	%	EPA 552.2	1	1.0	6/26/98	7/9/98	7/9/98	0-170-0
1006	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/26/98	7/9/98	7/9/98	0-170-0
1007	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/26/98	7/9/98	7/9/98	0-170-0
1008	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/26/98	7/9/98	7/9/98	0-170-0
1009	HAA-ICR	Dibromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/26/98	7/9/98	7/9/98	0-170-0
1010	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/26/98	7/9/98	7/9/98	0-170-0
1011	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/26/98	7/9/98	7/9/98	0-170-0
1012	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	6/26/98	7/9/98	7/9/98	0-170-0
1013	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	6/26/98	7/9/98	7/9/98	0-170-0
1014	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	6/26/98	7/9/98	7/9/98	0-170-0
1015	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	6/26/98		6/26/98	n/a
1016	pH	Cl2 pH - Initial	7.8	Unit	SM 4500-H+ B	1	n/a	6/26/98		6/26/98	n/a
1017	pH	pH	8.1	Unit	SM 4500-H+ B	1	n/a	6/24/98		6/24/98	n/a
1018	TEMP	Cl2 Temperature	27.2	°C	SM 2550 B	1	n/a	6/26/98		6/26/98	n/a
1019	TEMP	Temperature	24.0	°C	SM 2550 B	1	n/a	6/24/98		6/24/98	n/a
1020	TIME	Cl2 Incubation Time	7.3	hrs	n/a	1	n/a	6/26/98		6/26/98	n/a
1021	TOC-ICR	TOC	ND	mg/L	SM 5310 C	1	0.50	6/24/98		6/25/98	7-0-306
1022	TOC-ICR	TOC (Dupl)	ND	mg/L	SM 5310 C	1	0.50	6/24/98		6/25/98	7-0-306
			ND	mg/L							
1023	TOX-ICR	TOX	ND	µg Cl-/L	SM 5320 B	1	25	6/26/98		7/2/98	12-0-160

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

1024	TOX-ICR TOX (Dupl)	ND µg Cl-/L ND µg Cl-/L	SM 5320 B	1	25	6/26/98	7/2/98	12-0-160
1025	THM-ICR 1,2,3-Trichloropropane (Surrogate)	98.4 %	EPA 551.1	1	1.0	6/26/98	7/8/98	7/8/98 0-166-0
1026	THM-ICR Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	6/26/98	7/8/98	7/8/98 0-166-0
1027	THM-ICR Bromoform	3.3 µg/L	EPA 551.1	1	1.0	6/26/98	7/8/98	7/8/98 0-166-0
1028	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	6/26/98	7/8/98	7/8/98 0-166-0
1029	THM-ICR Dibromochloromethane	1.4 µg/L	EPA 551.1	1	1.0	6/26/98	7/8/98	7/8/98 0-166-0
1030	UV-ICR UV	ND 1/cm	SM 5910 B	1	0.009	6/24/98	6/26/98	8-0-208
1031	UV-ICR UV (Dupl)	ND 1/cm ND 1/cm	SM 5910 B	1	0.009	6/24/98	6/26/98	8-0-208

Sample ID: 119.15.Eff-14d

S&H ID: 9806-557

Date Sampled: 6/26/98 11:38:00 PM

#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1032	Cl2Dose Chlorine Dose	1.84 mg/L as Cl2	SM 4500-Cl B	1	n/a	6/30/98		6/30/98	n/a
1033	Cl2Res Chlorine Residual	0.77 mg/L as Cl2	SM 4500-Cl F	1	0.10	6/30/98		6/30/98	n/a
1034	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	103.2 %	EPA 552.2	1	1.0	6/30/98	7/9/98	7/10/98	0-170-0
1035	HAA-ICR 2-Bromopropionic acid (Surrogate)	94.4 %	EPA 552.2	1	1.0	6/30/98	7/9/98	7/10/98	0-170-0
1036	HAA-ICR Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	6/30/98	7/9/98	7/10/98	0-170-0
1037	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	6/30/98	7/9/98	7/10/98	0-170-0
1038	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	6/30/98	7/9/98	7/10/98	0-170-0
1039	HAA-ICR Dibromoacetic acid	1.8 µg/L	EPA 552.2	1	1.0	6/30/98	7/9/98	7/10/98	0-170-0
1040	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	6/30/98	7/9/98	7/10/98	0-170-0
1041	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	6/30/98	7/9/98	7/10/98	0-170-0
1042	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	6/30/98	7/9/98	7/10/98	0-170-0
1043	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	6/30/98	7/9/98	7/10/98	0-170-0
1044	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	6/30/98	7/9/98	7/10/98	0-170-0
1045	pH Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	6/30/98		6/30/98	n/a
1046	pH Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	6/30/98		6/30/98	n/a
1047	pH pH	8.2 Unit	SM 4500-H+ B	1	n/a	6/26/98		6/26/98	n/a
1048	TEMP Cl2 Temperature	27.2 °C	SM 2550 B	1	n/a	6/30/98		6/30/98	n/a
1049	TEMP Temperature	27.0 °C	SM 2550 B	1	n/a	6/26/98		6/26/98	n/a
1050	TIME Cl2 Incubation Time	7.2 hrs	n/a	1	n/a	6/30/98		6/30/98	n/a
1051	TOC-ICR TOC	0.72 mg/L	SM 5310 C	1	0.50	6/26/98		6/27/98	7-0-309
1052	TOC-ICR TOC (Dupl)	0.71 mg/L 0.71 mg/L	SM 5310 C 1.4 % RPD	1	0.50	6/26/98		6/27/98	7-0-309
1053	TOX-ICR TOX	ND µg Cl-/L	SM 5320 B	1	25	6/30/98		7/6/98	12-0-161
1054	TOX-ICR TOX (Dupl)	ND µg Cl-/L ND µg Cl-/L	SM 5320 B	1	25	6/30/98		7/6/98	12-0-161

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

1055	THM-ICR 1,2,3-Trichloropropane (Surrogate)	98.4 %	EPA 551.1	1	1.0	6/30/98	7/8/98	7/8/98	0-166-0
1056	THM-ICR Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	6/30/98	7/8/98	7/8/98	0-166-0
1057	THM-ICR Bromoform	10.6 µg/L	EPA 551.1	1	1.0	6/30/98	7/8/98	7/8/98	0-166-0
1058	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	6/30/98	7/8/98	7/8/98	0-166-0
1059	THM-ICR Dibromochloromethane	2.4 µg/L	EPA 551.1	1	1.0	6/30/98	7/8/98	7/8/98	0-166-0
1060	UV-ICR UV	ND 1/cm	SM 5910 B	1	0.009	6/26/98		6/28/98	8-0-210
1061	UV-ICR UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	6/26/98		6/28/98	8-0-210
		ND 1/cm							

Sample ID: 119.15.Eff-26d

S&H ID: 9806-559

Date Sampled: 7/6/98 1:26:00 AM

#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1062	Cl2Dose Chlorine Dose	2.29 mg/L as Cl2	SM 4500-Cl B	1	n/a	7/7/98		7/7/98	n/a
1063	Cl2Res Chlorine Residual	1.49 mg/L as Cl2	SM 4500-Cl F	1	0.10	7/7/98		7/7/98	n/a
1064	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	100.4 %	EPA 552.2	1	1.0	7/7/98	7/13/98	7/14/98	0-171-0
1065	HAA-ICR 2-Bromopropionic acid (Surrogate)	94.8 %	EPA 552.2	1	1.0	7/7/98	7/13/98	7/14/98	0-171-0
1066	HAA-ICR Bromochloroacetic acid	1.3 µg/L	EPA 552.2	1	1.0	7/7/98	7/13/98	7/14/98	0-171-0
1067	HAA-ICR Bromodichloroacetic acid	1.1 µg/L	EPA 552.2	1	1.0	7/7/98	7/13/98	7/14/98	0-171-0
1068	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	7/7/98	7/13/98	7/14/98	0-171-0
1069	HAA-ICR Dibromoacetic acid	4.0 µg/L	EPA 552.2	1	1.0	7/7/98	7/13/98	7/14/98	0-171-0
1070	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/7/98	7/13/98	7/14/98	0-171-0
1071	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/7/98	7/13/98	7/14/98	0-171-0
1072	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/7/98	7/13/98	7/14/98	0-171-0
1073	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/7/98	7/13/98	7/14/98	0-171-0
1074	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/7/98	7/13/98	7/14/98	0-171-0
1075	pH Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	7/7/98		7/7/98	n/a
1076	pH Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	7/7/98		7/7/98	n/a
1077	pH pH	8.2 Unit	SM 4500-H+ B	1	n/a	7/6/98		7/6/98	n/a
1078	TEMP Cl2 Temperature	27.2 °C	SM 2550 B	1	n/a	7/7/98		7/7/98	n/a
1079	TEMP Temperature	23.4 °C	SM 2550 B	1	n/a	7/6/98		7/6/98	n/a
1080	TIME Cl2 Incubation Time	7.2 hrs	n/a	1	n/a	7/7/98		7/7/98	n/a
1081	TOC-ICR TOC	1.23 mg/L	SM 5310 C	1	0.50	7/6/98		7/6/98	7-0-326
1082	TOC-ICR TOC (Dupl)	1.24 mg/L	SM 5310 C	1	0.50	7/6/98		7/6/98	7-0-326
		1.23 mg/L	0.8 % RPD						
1083	TOX-ICR TOX	62 µg Cl-/L	SM 5320 B	1	25	7/7/98		7/14/98	12-0-167
1084	TOX-ICR TOX (Dupl)	63 µg Cl-/L	SM 5320 B	1	25	7/7/98		7/14/98	12-0-167
		63 µg Cl-/L	1.6 % RPD						
1085	THM-ICR 1,2,3-Trichloropropane (Surrogate)	99.2 %	EPA 551.1	1	1.0	7/7/98	7/14/98	7/15/98	0-172-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

1086	THM-ICR Bromodichloromethane	3.0 µg/L	EPA 551.1	1	1.0	7/7/98	7/14/98	7/15/98	0-172-0
1087	THM-ICR Bromoform	23.9 µg/L	EPA 551.1	1	1.0	7/7/98	7/14/98	7/15/98	0-172-0
1088	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	7/7/98	7/14/98	7/15/98	0-172-0
1089	THM-ICR Dibromochloromethane	13.8 µg/L	EPA 551.1	1	1.0	7/7/98	7/14/98	7/15/98	0-172-0
1090	UV-ICR UV	0.020 1/cm	SM 5910 B	1	0.009	7/6/98		7/6/98	8-0-219
1091	UV-ICR UV (Dupl)	0.020 1/cm	SM 5910 B	1	0.009	7/6/98		7/6/98	8-0-219
		0.020 1/cm	0.0 % RPD						

Sample ID: 119.7.5.Eff-1

S&H ID: 9806-563

Date Sampled: 7/2/98 8:31:00 PM

#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1092	Cl2Dose Chlorine Dose	2.42 mg/L as Cl2	SM 4500-Cl B	1	n/a	7/8/98		7/8/98	n/a
1093	Cl2Res Chlorine Residual	0.88 mg/L as Cl2	SM 4500-Cl F	1	0.10	7/8/98		7/8/98	n/a
1094	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	96.8 %	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1095	HAA-ICR 2-Bromopropionic acid (Surrogate)	99.6 %	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1096	HAA-ICR Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1097	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1098	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	7/8/98	7/15/98	7/16/98	0-176-0
1099	HAA-ICR Dibromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1100	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1101	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1102	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/8/98	7/15/98	7/16/98	0-176-0
1103	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/8/98	7/15/98	7/16/98	0-176-0
1104	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1105	pH Cl2 pH - Final	7.7 Unit	SM 4500-H+ B	1	n/a	7/8/98		7/8/98	n/a
1106	pH Cl2 pH - Initial	7.6 Unit	SM 4500-H+ B	1	n/a	7/8/98		7/8/98	n/a
1107	pH pH	8.1 Unit	SM 4500-H+ B	1	n/a	7/2/98		7/2/98	n/a
1108	TEMP Cl2 Temperature	26.6 °C	SM 2550 B	1	n/a	7/8/98		7/8/98	n/a
1109	TEMP Temperature	24.0 °C	SM 2550 B	1	n/a	7/2/98		7/2/98	n/a
1110	TIME Cl2 Incubation Time	7.1 hrs	n/a	1	n/a	7/8/98		7/8/98	n/a
1111	TOC-ICR TOC	ND mg/L	SM 5310 C	1	0.50	7/2/98		7/3/98	7-0-319
1112	TOC-ICR TOC (Dupl)	ND mg/L	SM 5310 C	1	0.50	7/2/98		7/3/98	7-0-319
		ND mg/L							
1113	TOX-ICR TOX	ND µg Cl-/L	SM 5320 B	1	25	7/8/98		7/16/98	12-0-169
1114	TOX-ICR TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	7/8/98		7/16/98	12-0-169
		ND µg Cl-/L							
1115	THM-ICR 1,2,3-Trichloropropane (Surrogate)	106.8 %	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0
1116	THM-ICR Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0
1117	THM-ICR Bromoform	1.1 µg/L	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

1118	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0
1119	THM-ICR Dibromochloromethane	ND µg/L	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0
1120	UV-ICR UV	ND 1/cm	SM 5910 B	1	0.009	7/2/98		7/3/98	8-0-216
1121	UV-ICR UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	7/2/98		7/3/98	8-0-216
		ND 1/cm							

Sample ID: 119.7.5.Eff-3

S&H ID: 9806-565

Date Sampled: 7/4/98 9:42:00 AM

#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1122	Cl2Dose Chlorine Dose	2.52 mg/L as Cl2	SM 4500-Cl B	1	n/a	7/8/98		7/8/98	n/a
1123	Cl2Res Chlorine Residual	1.08 mg/L as Cl2	SM 4500-Cl F	1	0.10	7/8/98		7/8/98	n/a
1124	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	92.4 %	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1125	HAA-ICR 2-Bromopropionic acid (Surrogate)	98.0 %	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1126	HAA-ICR Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1127	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1128	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	7/8/98	7/15/98	7/16/98	0-176-0
1129	HAA-ICR Dibromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1130	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1131	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1132	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/8/98	7/15/98	7/16/98	0-176-0
1133	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/8/98	7/15/98	7/16/98	0-176-0
1134	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1135	pH Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	7/8/98		7/8/98	n/a
1136	pH Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	7/8/98		7/8/98	n/a
1137	pH pH	8.1 Unit	SM 4500-H+ B	1	n/a	7/4/98		7/4/98	n/a
1138	TEMP Cl2 Temperature	26.6 °C	SM 2550 B	1	n/a	7/8/98		7/8/98	n/a
1139	TEMP Temperature	22.7 °C	SM 2550 B	1	n/a	7/4/98		7/4/98	n/a
1140	TIME Cl2 Incubation Time	7.1 hrs	n/a	1	n/a	7/8/98		7/8/98	n/a
1141	TOC-ICR TOC	ND mg/L	SM 5310 C	1	0.50	7/4/98		7/4/98	7-0-322
1142	TOC-ICR TOC (Dupl)	ND mg/L	SM 5310 C	1	0.50	7/4/98		7/4/98	7-0-322
		ND mg/L							
1143	TOX-ICR TOX	ND µg Cl-/L	SM 5320 B	1	25	7/8/98		7/16/98	12-0-169
1144	TOX-ICR TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	7/8/98		7/16/98	12-0-169
		ND µg Cl-/L							
1145	THM-ICR 1,2,3-Trichloropropane (Surrogate)	105.6 %	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0
1146	THM-ICR Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0
1147	THM-ICR Bromoform	2.1 µg/L	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0
1148	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0
1149	THM-ICR Dibromochloromethane	ND µg/L	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

1150	UV-ICR	UV	ND	1/cm	SM 5910 B	1	0.009	7/4/98	7/5/98	8-0-217
1151	UV-ICR	UV (Dupl)	ND	1/cm	SM 5910 B	1	0.009	7/4/98	7/5/98	8-0-217
			ND	1/cm						

Sample ID: 119.7.5.Eff-4

S&H ID: 9806-566

Date Sampled: 7/4/98 5:49:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1152	Cl2Dose	Chlorine Dose	2.61	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/8/98		7/8/98	n/a
1153	Cl2Res	Chlorine Residual	1.13	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/8/98		7/8/98	n/a
1154	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	92.0	%	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1155	HAA-ICR	2-Bromopropionic acid (Surrogate)	100.4	%	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1156	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1157	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1158	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/8/98	7/15/98	7/16/98	0-176-0
1159	HAA-ICR	Dibromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1160	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1161	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1162	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/8/98	7/15/98	7/16/98	0-176-0
1163	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/8/98	7/15/98	7/16/98	0-176-0
1164	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1165	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	7/8/98		7/8/98	n/a
1166	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/8/98		7/8/98	n/a
1167	pH	pH	8.1	Unit	SM 4500-H+ B	1	n/a	7/4/98		7/4/98	n/a
1168	TEMP	Cl2 Temperature	26.6	°C	SM 2550 B	1	n/a	7/8/98		7/8/98	n/a
1169	TEMP	Temperature	23.5	°C	SM 2550 B	1	n/a	7/4/98		7/4/98	n/a
1170	TIME	Cl2 Incubation Time	7.1	hrs	n/a	1	n/a	7/8/98		7/8/98	n/a
1171	TOC-ICR	TOC	ND	mg/L	SM 5310 C	1	0.50	7/4/98		7/5/98	7-0-324
1172	TOC-ICR	TOC (Dupl)	ND	mg/L	SM 5310 C	1	0.50	7/4/98		7/5/98	7-0-324
			ND	mg/L							
1173	TOX-ICR	TOX	ND	µg Cl-/L	SM 5320 B	1	25	7/8/98		7/17/98	12-0-170
1174	TOX-ICR	TOX (Dupl)	ND	µg Cl-/L	SM 5320 B	1	25	7/8/98		7/17/98	12-0-170
			ND	µg Cl-/L							
1175	THM-ICR	1,2,3-Trichloropropane (Surrogate)	91.2	%	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0
1176	THM-ICR	Bromodichloromethane	ND	µg/L	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0
1177	THM-ICR	Bromoform	2.7	µg/L	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0
1178	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0
1179	THM-ICR	Dibromochloromethane	ND	µg/L	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0
1180	UV-ICR	UV	ND	1/cm	SM 5910 B	1	0.009	7/4/98		7/5/98	8-0-217
1181	UV-ICR	UV (Dupl)	ND	1/cm	SM 5910 B	1	0.009	7/4/98		7/5/98	8-0-217

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

ND 1/cm

Sample ID: 119.7.5.Eff-5

S&H ID: 9806-567

Date Sampled: 7/5/98 1:50:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1182	Cl2Dose	Chlorine Dose	2.72	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/8/98		7/8/98	n/a
1183	Cl2Res	Chlorine Residual	1.25	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/8/98		7/8/98	n/a
1184	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	95.2	%	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1185	HAA-ICR	2-Bromopropionic acid (Surrogate)	101.6	%	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1186	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1187	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1188	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/8/98	7/15/98	7/16/98	0-176-0
1189	HAA-ICR	Dibromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1190	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1191	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1192	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/8/98	7/15/98	7/16/98	0-176-0
1193	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/8/98	7/15/98	7/16/98	0-176-0
1194	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1195	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	7/8/98		7/8/98	n/a
1196	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/8/98		7/8/98	n/a
1197	pH	pH	8.2	Unit	SM 4500-H+ B	1	n/a	7/5/98		7/5/98	n/a
1198	TEMP	Cl2 Temperature	26.6	°C	SM 2550 B	1	n/a	7/8/98		7/8/98	n/a
1199	TEMP	Temperature	23.3	°C	SM 2550 B	1	n/a	7/5/98		7/5/98	n/a
1200	TIME	Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	7/8/98		7/8/98	n/a
1201	TOC-ICR	TOC	ND	mg/L	SM 5310 C	1	0.50	7/5/98		7/5/98	7-0-324
1202	TOC-ICR	TOC (Dupl)	ND	mg/L	SM 5310 C	1	0.50	7/5/98		7/5/98	7-0-324
			ND	µg Cl-/L							
1203	TOX-ICR	TOX	ND	µg Cl-/L	SM 5320 B	1	25	7/8/98		7/17/98	12-0-170
1204	TOX-ICR	TOX (Dupl)	ND	µg Cl-/L	SM 5320 B	1	25	7/8/98		7/17/98	12-0-170
			ND	µg Cl-/L							
1205	THM-ICR	1,2,3-Trichloropropane (Surrogate)	90.0	%	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0
1206	THM-ICR	Bromodichloromethane	ND	µg/L	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0
1207	THM-ICR	Bromoform	4.2	µg/L	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0
1208	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0
1209	THM-ICR	Dibromochloromethane	1.8	µg/L	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0
1210	UV-ICR	UV	ND	1/cm	SM 5910 B	1	0.009	7/5/98		7/5/98	8-0-218
1211	UV-ICR	UV (Dupl)	ND	1/cm	SM 5910 B	1	0.009	7/5/98		7/5/98	8-0-218
			ND	1/cm							

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

Sample ID: 119.7.5.Eff-6

S&H ID: 9806-568

Date Sampled: 7/5/98 5:33:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1212	Cl2Dose	Chlorine Dose	2.64	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/9/98		7/9/98	n/a
1213	Cl2Res	Chlorine Residual	1.16	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/9/98		7/9/98	n/a
1214	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	100.8	%	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1215	HAA-ICR	2-Bromopropionic acid (Surrogate)	103.2	%	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1216	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1217	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1218	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/9/98	7/21/98	7/21/98	0-179-0
1219	HAA-ICR	Dibromoacetic acid	1.9	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1220	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1221	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1222	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/9/98	7/21/98	7/21/98	0-179-0
1223	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/9/98	7/21/98	7/21/98	0-179-0
1224	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1225	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	7/9/98		7/9/98	n/a
1226	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/9/98		7/9/98	n/a
1227	pH	pH	8.2	Unit	SM 4500-H+ B	1	n/a	7/5/98		7/5/98	n/a
1228	TEMP	Cl2 Temperature	26.6	°C	SM 2550 B	1	n/a	7/9/98		7/9/98	n/a
1229	TEMP	Temperature	22.9	°C	SM 2550 B	1	n/a	7/5/98		7/5/98	n/a
1230	TIME	Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	7/9/98		7/9/98	n/a
1231	TOC-ICR	TOC	0.51	mg/L	SM 5310 C	1	0.50	7/5/98		7/5/98	7-0-324
1232	TOC-ICR	TOC (Dupl)	0.51	mg/L	SM 5310 C	1	0.50	7/5/98		7/5/98	7-0-324
			0.51	mg/L	0.0 % RPD						
1233	TOX-ICR	TOX	ND	µg Cl-/L	SM 5320 B	1	25	7/9/98		7/20/98	12-0-171
1234	TOX-ICR	TOX (Dupl)	ND	µg Cl-/L	SM 5320 B	1	25	7/9/98		7/20/98	12-0-171
			ND	µg Cl-/L							
1235	THM-ICR	1,2,3-Trichloropropane (Surrogate)	99.6	%	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1236	THM-ICR	Bromodichloromethane	ND	µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1237	THM-ICR	Bromoform	7.0	µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1238	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1239	THM-ICR	Dibromochloromethane	2.6	µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1240	UV-ICR	UV	ND	1/cm	SM 5910 B	1	0.009	7/5/98		7/5/98	8-0-218
1241	UV-ICR	UV (Dupl)	ND	1/cm	SM 5910 B	1	0.009	7/5/98		7/5/98	8-0-218
			ND	1/cm							

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

Sample ID: 119.7.5.Eff-7			S&H ID: 9806-569		Date Sampled: 7/5/98 2:02:00 PM						
#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1242	Cl2Dose	Chlorine Dose	2.73	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/9/98		7/9/98	n/a
1243	Cl2Res	Chlorine Residual	1.24	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/9/98		7/9/98	n/a
1244	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	101.6	%	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1245	HAA-ICR	2-Bromopropionic acid (Surrogate)	99.2	%	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1246	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1247	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1248	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/9/98	7/21/98	7/21/98	0-179-0
1249	HAA-ICR	Dibromoacetic acid	2.6	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1250	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1251	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1252	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/9/98	7/21/98	7/21/98	0-179-0
1253	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/9/98	7/21/98	7/21/98	0-179-0
1254	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1255	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	7/9/98		7/9/98	n/a
1256	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/9/98		7/9/98	n/a
1257	pH	pH	8.2	Unit	SM 4500-H+ B	1	n/a	7/5/98		7/5/98	n/a
1258	TEMP	Cl2 Temperature	26.6	°C	SM 2550 B	1	n/a	7/9/98		7/9/98	n/a
1259	TEMP	Temperature	23.5	°C	SM 2550 B	1	n/a	7/5/98		7/5/98	n/a
1260	TIME	Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	7/9/98		7/9/98	n/a
1261	TOC-ICR	TOC	0.64	mg/L	SM 5310 C	1	0.50	7/5/98		7/5/98	7-0-324
1262	TOC-ICR	TOC (Dupl)	0.63	mg/L	SM 5310 C	1	0.50	7/5/98		7/5/98	7-0-324
			0.64	mg/L	1.6 % RPD						
1263	TOX-ICR	TOX	ND	µg Cl-/L	SM 5320 B	1	25	7/9/98		7/20/98	12-0-171
1264	TOX-ICR	TOX (Dupl)	ND	µg Cl-/L	SM 5320 B	1	25	7/9/98		7/20/98	12-0-171
			ND	µg Cl-/L							
1265	THM-ICR	1,2,3-Trichloropropane (Surrogate)	101.6	%	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1266	THM-ICR	Bromodichloromethane	ND	µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1267	THM-ICR	Bromoform	8.9	µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1268	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1269	THM-ICR	Dibromochloromethane	3.7	µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1270	UV-ICR	UV	ND	1/cm	SM 5910 B	1	0.009	7/5/98		7/6/98	8-0-219
1271	UV-ICR	UV (Dupl)	ND	1/cm	SM 5910 B	1	0.009	7/5/98		7/6/98	8-0-219
			ND	1/cm							

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

Sample ID: 119.7.5.Eff-8		S&H ID: 9806-570		Date Sampled: 7/5/98 7:29:00 PM						
#	Analysis Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1272	Cl2Dose Chlorine Dose	2.68	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/9/98		7/9/98	n/a
1273	Cl2Res Chlorine Residual	1.19	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/9/98		7/9/98	n/a
1274	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	100.8	%	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1275	HAA-ICR 2-Bromopropionic acid (Surrogate)	102.0	%	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1276	HAA-ICR Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1277	HAA-ICR Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1278	HAA-ICR Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/9/98	7/21/98	7/21/98	0-179-0
1279	HAA-ICR Dibromoacetic acid	2.6	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1280	HAA-ICR Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1281	HAA-ICR Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1282	HAA-ICR Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/9/98	7/21/98	7/21/98	0-179-0
1283	HAA-ICR Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/9/98	7/21/98	7/21/98	0-179-0
1284	HAA-ICR Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1285	pH Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	7/9/98		7/9/98	n/a
1286	pH Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/9/98		7/9/98	n/a
1287	pH pH	8.1	Unit	SM 4500-H+ B	1	n/a	7/5/98		7/5/98	n/a
1288	TEMP Cl2 Temperature	26.6	°C	SM 2550 B	1	n/a	7/9/98		7/9/98	n/a
1289	TEMP Temperature	24.1	°C	SM 2550 B	1	n/a	7/5/98		7/5/98	n/a
1290	TIME Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	7/9/98		7/9/98	n/a
1291	TOC-ICR TOC	0.72	mg/L	SM 5310 C	1	0.50	7/5/98		7/6/98	7-0-324
1292	TOC-ICR TOC (Dupl)	0.71	mg/L	SM 5310 C	1	0.50	7/5/98		7/6/98	7-0-324
		0.71	mg/L	1.4 % RPD						
1293	TOX-ICR TOX	ND	µg Cl-/L	SM 5320 B	1	25	7/9/98		7/20/98	12-0-171
1294	TOX-ICR TOX (Dupl)	ND	µg Cl-/L	SM 5320 B	1	25	7/9/98		7/20/98	12-0-171
		ND	µg Cl-/L							
1295	THM-ICR 1,2,3-Trichloropropane (Surrogate)	98.4	%	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1296	THM-ICR Bromodichloromethane	ND	µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1297	THM-ICR Bromoform	11.1	µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1298	THM-ICR Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1299	THM-ICR Dibromochloromethane	4.5	µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1300	UV-ICR UV	ND	1/cm	SM 5910 B	1	0.009	7/5/98		7/6/98	8-0-219
1301	UV-ICR UV (Dupl)	ND	1/cm	SM 5910 B	1	0.009	7/5/98		7/6/98	8-0-219
		ND	1/cm							

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

Sample ID: 119.7.5.Eff-9			S&H ID: 9806-571		Date Sampled: 7/6/98 3:45:00 AM				
#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1302	Cl2Dose Chlorine Dose	2.64 mg/L as Cl2	SM 4500-Cl B	1	n/a	7/9/98		7/9/98	n/a
1303	Cl2Res Chlorine Residual	1.19 mg/L as Cl2	SM 4500-Cl F	1	0.10	7/9/98		7/9/98	n/a
1304	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	101.2 %	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1305	HAA-ICR 2-Bromopropionic acid (Surrogate)	105.2 %	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1306	HAA-ICR Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1307	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1308	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	7/9/98	7/21/98	7/21/98	0-179-0
1309	HAA-ICR Dibromoacetic acid	3.2 µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1310	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1311	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1312	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/9/98	7/21/98	7/21/98	0-179-0
1313	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/9/98	7/21/98	7/21/98	0-179-0
1314	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1315	pH Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	7/9/98		7/9/98	n/a
1316	pH Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	7/9/98		7/9/98	n/a
1317	pH pH	8.1 Unit	SM 4500-H+ B	1	n/a	7/6/98		7/6/98	n/a
1318	TEMP Cl2 Temperature	26.6 °C	SM 2550 B	1	n/a	7/9/98		7/9/98	n/a
1319	TEMP Temperature	23.1 °C	SM 2550 B	1	n/a	7/6/98		7/6/98	n/a
1320	TIME Cl2 Incubation Time	7.3 hrs	n/a	1	n/a	7/9/98		7/9/98	n/a
1321	TOC-ICR TOC	0.79 mg/L	SM 5310 C	1	0.50	7/6/98		7/6/98	7-0-326
1322	TOC-ICR TOC (Dupl)	0.81 mg/L	SM 5310 C	1	0.50	7/6/98		7/6/98	7-0-326
		0.80 mg/L	2.5 % RPD						
1323	TOX-ICR TOX	30 µg Cl-/L	SM 5320 B	1	25	7/9/98		7/20/98	12-0-171
1324	TOX-ICR TOX (Dupl)	28 µg Cl-/L	SM 5320 B	1	25	7/9/98		7/20/98	12-0-171
		29 µg Cl-/L	6.9 % RPD						
1325	THM-ICR 1,2,3-Trichloropropane (Surrogate)	98.8 %	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1326	THM-ICR Bromodichloromethane	1.2 µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1327	THM-ICR Bromoform	14.3 µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1328	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1329	THM-ICR Dibromochloromethane	5.8 µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1330	UV-ICR UV	0.010 1/cm	SM 5910 B	1	0.009	7/6/98		7/6/98	8-0-220
1331	UV-ICR UV (Dupl)	0.010 1/cm	SM 5910 B	1	0.009	7/6/98		7/6/98	8-0-220
		0.010 1/cm	0.0 % RPD						

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

Sample ID: 119.7.5.Eff-11			S&H ID: 9806-573		Date Sampled: 7/6/98 3:56:00 PM				
#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1332	Cl2Dose Chlorine Dose	2.57 mg/L as Cl2	SM 4500-Cl B	1	n/a	7/9/98		7/9/98	n/a
1333	Cl2Res Chlorine Residual	1.19 mg/L as Cl2	SM 4500-Cl F	1	0.10	7/9/98		7/9/98	n/a
1334	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	102.0 %	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1335	HAA-ICR 2-Bromopropionic acid (Surrogate)	101.2 %	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1336	HAA-ICR Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1337	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1338	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	7/9/98	7/21/98	7/21/98	0-179-0
1339	HAA-ICR Dibromoacetic acid	4.4 µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1340	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1341	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1342	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/9/98	7/21/98	7/21/98	0-179-0
1343	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/9/98	7/21/98	7/21/98	0-179-0
1344	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1345	pH Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	7/9/98		7/9/98	n/a
1346	pH Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	7/9/98		7/9/98	n/a
1347	pH pH	8.1 Unit	SM 4500-H+ B	1	n/a	7/6/98		7/6/98	n/a
1348	TEMP Cl2 Temperature	26.6 °C	SM 2550 B	1	n/a	7/9/98		7/9/98	n/a
1349	TEMP Temperature	23.6 °C	SM 2550 B	1	n/a	7/6/98		7/6/98	n/a
1350	TIME Cl2 Incubation Time	7.3 hrs	n/a	1	n/a	7/9/98		7/9/98	n/a
1351	TOC-ICR TOC	0.92 mg/L	SM 5310 C	1	0.50	7/6/98		7/7/98	7-0-328
1352	TOC-ICR TOC (Dupl)	0.91 mg/L	SM 5310 C	1	0.50	7/6/98		7/7/98	7-0-328
		0.92 mg/L	1.1 % RPD						
1353	TOX-ICR TOX	38 µg Cl-/L	SM 5320 B	1	25	7/9/98		7/20/98	12-0-171
1354	TOX-ICR TOX (Dupl)	38 µg Cl-/L	SM 5320 B	1	25	7/9/98		7/20/98	12-0-171
		38 µg Cl-/L	0.0 % RPD						
1355	THM-ICR 1,2,3-Trichloropropane (Surrogate)	100.8 %	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1356	THM-ICR Bromodichloromethane	1.5 µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1357	THM-ICR Bromoform	18.4 µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1358	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1359	THM-ICR Dibromochloromethane	7.7 µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1360	UV-ICR UV	0.013 1/cm	SM 5910 B	1	0.009	7/6/98		7/7/98	8-0-221
1361	UV-ICR UV (Dupl)	0.013 1/cm	SM 5910 B	1	0.009	7/6/98		7/7/98	8-0-221
		0.013 1/cm	0.0 % RPD						

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

Sample ID: 119.7.5.Eff-12			S&H ID: 9806-574		Date Sampled: 7/7/98 12:20:00 AM						
#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1362	Cl2Dose	Chlorine Dose	2.46	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/9/98		7/9/98	n/a
1363	Cl2Res	Chlorine Residual	1.18	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/9/98		7/9/98	n/a
1364	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	103.2	%	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1365	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard) (Lab Dupl)	106.8	%	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
			105.0	%	3.4 % RPD						
1366	HAA-ICR	2-Bromopropionic acid (Surrogate)	100.4	%	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1367	HAA-ICR	2-Bromopropionic acid (Surrogate) (Lab Dupl)	99.6	%	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
			100.0	%	0.8 % RPD						
1368	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1369	HAA-ICR	Bromochloroacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
			ND	µg/L							
1370	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1371	HAA-ICR	Bromodichloroacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
			ND	µg/L							
1372	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/9/98	7/21/98	7/21/98	0-179-0
1373	HAA-ICR	Chlorodibromoacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	2.0	7/9/98	7/21/98	7/21/98	0-179-0
			ND	µg/L							
1374	HAA-ICR	Dibromoacetic acid	4.5	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1375	HAA-ICR	Dibromoacetic acid (Lab Dupl)	4.3	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
			4.4	µg/L	4.5 % RPD						
1376	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1377	HAA-ICR	Dichloroacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
			ND	µg/L							
1378	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1379	HAA-ICR	Monobromoacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
			ND	µg/L							
1380	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/9/98	7/21/98	7/21/98	0-179-0
1381	HAA-ICR	Monochloroacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	2.0	7/9/98	7/21/98	7/21/98	0-179-0
			ND	µg/L							
1382	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/9/98	7/21/98	7/21/98	0-179-0
1383	HAA-ICR	Tribromoacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	4.0	7/9/98	7/21/98	7/21/98	0-179-0
			ND	µg/L							
1384	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0
1385	HAA-ICR	Trichloroacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/21/98	0-179-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

			ND µg/L						
1386	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	7/9/98	7/9/98	n/a
1387	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	7/9/98	7/9/98	n/a
1388	pH	pH	8.2 Unit	SM 4500-H+ B	1	n/a	7/7/98	7/7/98	n/a
1389	TEMP	Cl2 Temperature	26.6 °C	SM 2550 B	1	n/a	7/9/98	7/9/98	n/a
1390	TEMP	Temperature	23.3 °C	SM 2550 B	1	n/a	7/7/98	7/7/98	n/a
1391	TIME	Cl2 Incubation Time	7.3 hrs	n/a	1	n/a	7/9/98	7/9/98	n/a
1392	TOC-ICR	TOC	0.97 mg/L	SM 5310 C	1	0.50	7/7/98	7/7/98	7-0-328
1393	TOC-ICR	TOC (Dupl)	0.98 mg/L	SM 5310 C	1	0.50	7/7/98	7/7/98	7-0-328
			0.97 mg/L	1.0 % RPD					
1394	TOX-ICR	TOX	46 µg Cl-/L	SM 5320 B	1	25	7/9/98	7/17/98	12-0-170
1395	TOX-ICR	TOX (Dupl)	44 µg Cl-/L	SM 5320 B	1	25	7/9/98	7/17/98	12-0-170
			45 µg Cl-/L	4.4 % RPD					
1396	THM-ICR	1,2,3-Trichloropropane (Surrogate)	100.0 %	EPA 551.1	1	1.0	7/9/98	7/20/98	0-178-0
1397	THM-ICR	Bromodichloromethane	1.4 µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	0-178-0
1398	THM-ICR	Bromoform	21.7 µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	0-178-0
1399	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	0-178-0
1400	THM-ICR	Dibromochloromethane	8.1 µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	0-178-0
1401	UV-ICR	UV	0.015 1/cm	SM 5910 B	1	0.009	7/7/98	7/7/98	8-0-221
1402	UV-ICR	UV (Dupl)	0.015 1/cm	SM 5910 B	1	0.009	7/7/98	7/7/98	8-0-221
			0.015 1/cm	0.0 % RPD					

Sample ID: 119.7.5.Eff-14

S&H ID: 9806-576

Date Sampled: 7/8/98 2:16:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1403	Cl2Dose	Chlorine Dose	2.46	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/9/98		7/9/98	n/a
1404	Cl2Res	Chlorine Residual	1.33	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/9/98		7/9/98	n/a
1405	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	109.2	%	EPA 552.2	1	1.0	7/9/98	7/21/98	7/22/98	0-179-0
1406	HAA-ICR	2-Bromopropionic acid (Surrogate)	97.6	%	EPA 552.2	1	1.0	7/9/98	7/21/98	7/22/98	0-179-0
1407	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/22/98	0-179-0
1408	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/22/98	0-179-0
1409	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/9/98	7/21/98	7/22/98	0-179-0
1410	HAA-ICR	Dibromoacetic acid	5.5	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/22/98	0-179-0
1411	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/22/98	0-179-0
1412	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/22/98	0-179-0
1413	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/9/98	7/21/98	7/22/98	0-179-0
1414	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/9/98	7/21/98	7/22/98	0-179-0
1415	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/22/98	0-179-0
1416	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	7/9/98		7/9/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

1417	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/9/98	7/9/98	n/a
1418	pH	pH	8.1	Unit	SM 4500-H+ B	1	n/a	7/8/98	7/8/98	n/a
1419	TEMP	Cl2 Temperature	26.6	°C	SM 2550 B	1	n/a	7/9/98	7/9/98	n/a
1420	TEMP	Temperature	22.8	°C	SM 2550 B	1	n/a	7/8/98	7/8/98	n/a
1421	TIME	Cl2 Incubation Time	7.3	hrs	n/a	1	n/a	7/9/98	7/9/98	n/a
1422	TOC-ICR	TOC	1.11	mg/L	SM 5310 C	1	0.50	7/8/98	7/8/98	7-0-331
1423	TOC-ICR	TOC (Dupl)	1.14	mg/L	SM 5310 C	1	0.50	7/8/98	7/8/98	7-0-331
			1.13	mg/L	2.7 % RPD					
1424	TOX-ICR	TOX	55	µg Cl-/L	SM 5320 B	1	25	7/9/98	7/20/98	12-0-171
1425	TOX-ICR	TOX (Dupl)	57	µg Cl-/L	SM 5320 B	1	25	7/9/98	7/20/98	12-0-171
			56	µg Cl-/L	3.6 % RPD					
1426	THM-ICR	1,2,3-Trichloropropane (Surrogate)	97.6	%	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98 0-178-0
1427	THM-ICR	Bromodichloromethane	2.3	µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98 0-178-0
1428	THM-ICR	Bromoform	27.7	µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98 0-178-0
1429	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98 0-178-0
1430	THM-ICR	Dibromochloromethane	12.0	µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98 0-178-0
1431	UV-ICR	UV	0.019	1/cm	SM 5910 B	1	0.009	7/8/98	7/8/98	8-0-222
1432	UV-ICR	UV (Dupl)	0.019	1/cm	SM 5910 B	1	0.009	7/8/98	7/8/98	8-0-222
			0.019	1/cm	0.0 % RPD					

Sample ID: 119.7.5.Eff-16

S&H ID: 9806-578

Date Sampled: 7/9/98 12:40:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1433	Cl2Dose	Chlorine Dose	2.16	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/13/98		7/13/98	n/a
1434	Cl2Res	Chlorine Residual	1.10	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/13/98		7/13/98	n/a
1435	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	96.4	%	EPA 552.2	1	1.0	7/13/98	7/23/98	7/23/98	0-181-0
1436	HAA-ICR	2-Bromopropionic acid (Surrogate)	98.0	%	EPA 552.2	1	1.0	7/13/98	7/23/98	7/23/98	0-181-0
1437	HAA-ICR	Bromochloroacetic acid	1.1	µg/L	EPA 552.2	1	1.0	7/13/98	7/23/98	7/23/98	0-181-0
1438	HAA-ICR	Bromodichloroacetic acid	1.1	µg/L	EPA 552.2	1	1.0	7/13/98	7/23/98	7/23/98	0-181-0
1439	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/13/98	7/23/98	7/23/98	0-181-0
1440	HAA-ICR	Dibromoacetic acid	4.0	µg/L	EPA 552.2	1	1.0	7/13/98	7/23/98	7/23/98	0-181-0
1441	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/13/98	7/23/98	7/23/98	0-181-0
1442	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/13/98	7/23/98	7/23/98	0-181-0
1443	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/13/98	7/23/98	7/23/98	0-181-0
1444	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/13/98	7/23/98	7/23/98	0-181-0
1445	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/13/98	7/23/98	7/23/98	0-181-0
1446	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	7/13/98		7/13/98	n/a
1447	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/13/98		7/13/98	n/a
1448	pH	pH	7.9	Unit	SM 4500-H+ B	1	n/a	7/9/98		7/9/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

1449	TEMP	Cl2 Temperature	26.6 °C	SM 2550 B	1	n/a	7/13/98	7/13/98	n/a
1450	TEMP	Temperature	23.3 °C	SM 2550 B	1	n/a	7/9/98	7/9/98	n/a
1451	TIME	Cl2 Incubation Time	7.1 hrs	n/a	1	n/a	7/13/98	7/13/98	n/a
1452	TOC-ICR	TOC	1.31 mg/L	SM 5310 C	1	0.50	7/9/98	7/10/98	7-0-333
1453	TOC-ICR	TOC (Dupl)	1.32 mg/L	SM 5310 C	1	0.50	7/9/98	7/10/98	7-0-333
			1.31 mg/L	0.8 % RPD					
1454	TOX-ICR	TOX	74 µg Cl-/L	SM 5320 B	1	25	7/13/98	7/23/98	12-0-174
1455	TOX-ICR	TOX (Dupl)	74 µg Cl-/L	SM 5320 B	1	25	7/13/98	7/23/98	12-0-174
			74 µg Cl-/L	0.0 % RPD					
1456	THM-ICR	1,2,3-Trichloropropane (Surrogate)	91.2 %	EPA 551.1	1	1.0	7/13/98	7/27/98	7/27/98 0-182-0
1457	THM-ICR	Bromodichloromethane	2.8 µg/L	EPA 551.1	1	1.0	7/13/98	7/27/98	7/27/98 0-182-0
1458	THM-ICR	Bromoform	31.0 µg/L	EPA 551.1	1	1.0	7/13/98	7/27/98	7/27/98 0-182-0
1459	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	7/13/98	7/27/98	7/27/98 0-182-0
1460	THM-ICR	Dibromochloromethane	13.8 µg/L	EPA 551.1	1	1.0	7/13/98	7/27/98	7/27/98 0-182-0
1461	UV-ICR	UV	0.024 1/cm	SM 5910 B	1	0.009	7/9/98	7/9/98	8-0-223
1462	UV-ICR	UV (Dupl)	0.024 1/cm	SM 5910 B	1	0.009	7/9/98	7/9/98	8-0-223
			0.024 1/cm	0.0 % RPD					

Sample ID: 119.7.5.Eff-18

S&H ID: 9806-580

Date Sampled: 7/10/98 9:11:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1463	pH	pH	8.1	Unit	SM 4500-H+ B	1	n/a	7/10/98		7/10/98	n/a
1464	TEMP	Temperature	23.4	°C	SM 2550 B	1	n/a	7/10/98		7/10/98	n/a
1465	TOC-ICR	TOC	1.42	mg/L	SM 5310 C	1	0.50	7/10/98		7/13/98	7-0-337
1466	TOC-ICR	TOC (Dupl)	1.47	mg/L	SM 5310 C	1	0.50	7/10/98		7/13/98	7-0-337
			1.44 mg/L		3.5 % RPD						
1467	UV-ICR	UV	0.028	1/cm	SM 5910 B	1	0.009	7/10/98		7/11/98	8-0-224
1468	UV-ICR	UV (Dupl)	0.028	1/cm	SM 5910 B	1	0.009	7/10/98		7/11/98	8-0-224
			0.028 1/cm		0.0 % RPD						

Sample ID: 119.7.5.Eff-4d

S&H ID: 9806-593

Date Sampled: 7/4/98 5:49:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1469	Cl2Dose	Chlorine Dose	2.61	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/8/98		7/8/98	n/a
1470	Cl2Res	Chlorine Residual	1.14	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/8/98		7/8/98	n/a
1471	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	96.4	%	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1472	HAA-ICR	2-Bromopropionic acid (Surrogate)	97.6	%	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1473	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1474	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

1475	HAA-ICR	Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	7/8/98	7/15/98	7/16/98	0-176-0
1476	HAA-ICR	Dibromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1477	HAA-ICR	Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1478	HAA-ICR	Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1479	HAA-ICR	Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/8/98	7/15/98	7/16/98	0-176-0
1480	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/8/98	7/15/98	7/16/98	0-176-0
1481	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/8/98	7/15/98	7/16/98	0-176-0
1482	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	7/8/98		7/8/98	n/a
1483	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	7/8/98		7/8/98	n/a
1484	pH	pH	8.1 Unit	SM 4500-H+ B	1	n/a	7/4/98		7/4/98	n/a
1485	TEMP	Cl2 Temperature	26.6 °C	SM 2550 B	1	n/a	7/8/98		7/8/98	n/a
1486	TEMP	Temperature	23.5 °C	SM 2550 B	1	n/a	7/4/98		7/4/98	n/a
1487	TIME	Cl2 Incubation Time	7.2 hrs	n/a	1	n/a	7/8/98		7/8/98	n/a
1488	TOC-ICR	TOC	ND mg/L	SM 5310 C	1	0.50	7/4/98		7/5/98	7-0-324
1489	TOC-ICR	TOC (Dupl)	ND mg/L	SM 5310 C	1	0.50	7/4/98		7/5/98	7-0-324
			ND mg/L							
1490	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	7/8/98		7/17/98	12-0-170
1491	TOX-ICR	TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	7/8/98		7/17/98	12-0-170
			ND µg Cl-/L							
1492	THM-ICR	1,2,3-Trichloropropane (Surrogate)	89.2 %	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0
1493	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0
1494	THM-ICR	Bromoform	2.4 µg/L	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0
1495	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0
1496	THM-ICR	Dibromochloromethane	ND µg/L	EPA 551.1	1	1.0	7/8/98	7/16/98	7/16/98	0-177-0
1497	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	7/4/98		7/5/98	8-0-217
1498	UV-ICR	UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	7/4/98		7/5/98	8-0-217
			ND 1/cm							

Sample ID: 119.7.5.Eff-9d

S&H ID: 9806-594

Date Sampled: 7/6/98 3:45:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1499	Cl2Dose	Chlorine Dose	2.64	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/9/98		7/9/98	n/a
1500	Cl2Res	Chlorine Residual	1.19	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/9/98		7/9/98	n/a
1501	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	100.0	%	EPA 552.2	1	1.0	7/9/98	7/21/98	7/22/98	0-179-0
1502	HAA-ICR	2-Bromopropionic acid (Surrogate)	99.6	%	EPA 552.2	1	1.0	7/9/98	7/21/98	7/22/98	0-179-0
1503	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/22/98	0-179-0
1504	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/22/98	0-179-0
1505	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/9/98	7/21/98	7/22/98	0-179-0
1506	HAA-ICR	Dibromoacetic acid	3.2	µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/22/98	0-179-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

1507	HAA-ICR	Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/22/98	0-179-0
1508	HAA-ICR	Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/22/98	0-179-0
1509	HAA-ICR	Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/9/98	7/21/98	7/22/98	0-179-0
1510	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/9/98	7/21/98	7/22/98	0-179-0
1511	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/9/98	7/21/98	7/22/98	0-179-0
1512	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	7/9/98		7/9/98	n/a
1513	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	7/9/98		7/9/98	n/a
1514	pH	pH	8.2 Unit	SM 4500-H+ B	1	n/a	7/6/98		7/6/98	n/a
1515	TEMP	Cl2 Temperature	26.6 °C	SM 2550 B	1	n/a	7/9/98		7/9/98	n/a
1516	TEMP	Temperature	23.1 °C	SM 2550 B	1	n/a	7/6/98		7/6/98	n/a
1517	TIME	Cl2 Incubation Time	7.3 hrs	n/a	1	n/a	7/9/98		7/9/98	n/a
1518	TOC-ICR	TOC	0.78 mg/L	SM 5310 C	1	0.50	7/6/98		7/6/98	7-0-326
1519	TOC-ICR	TOC (Dupl)	0.79 mg/L	SM 5310 C	1	0.50	7/6/98		7/6/98	7-0-326
			0.79 mg/L	1.3 % RPD						
1520	TOX-ICR	TOX	30 µg Cl-/L	SM 5320 B	1	25	7/9/98		7/20/98	12-0-171
1521	TOX-ICR	TOX (Dupl)	27 µg Cl-/L	SM 5320 B	1	25	7/9/98		7/20/98	12-0-171
			29 µg Cl-/L	10.3 % RPD						
1522	THM-ICR	1,2,3-Trichloropropane (Surrogate)	103.2 %	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1523	THM-ICR	Bromodichloromethane	1.2 µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1524	THM-ICR	Bromoform	14.3 µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1525	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1526	THM-ICR	Dibromochloromethane	6.1 µg/L	EPA 551.1	1	1.0	7/9/98	7/20/98	7/20/98	0-178-0
1527	UV-ICR	UV	0.010 1/cm	SM 5910 B	1	0.009	7/6/98		7/6/98	8-0-220
1528	UV-ICR	UV (Dupl)	0.010 1/cm	SM 5910 B	1	0.009	7/6/98		7/6/98	8-0-220
			0.010 1/cm	0.0 % RPD						

Sample ID: 119.7.5.Eff-14d

S&H ID: 9806-596

Date Sampled: 7/8/98 2:16:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Sample	Prep.	Anal.	QC Batch
1529	Cl2Dose	Chlorine Dose	2.46	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/9/98		7/9/98	n/a
1530	Cl2Res	Chlorine Residual	1.28	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/9/98		7/9/98	n/a
1531	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	94.8	%	EPA 552.2	1	1.0	7/9/98	7/15/98	7/16/98	0-176-0
1532	HAA-ICR	2-Bromopropionic acid (Surrogate)	96.0	%	EPA 552.2	1	1.0	7/9/98	7/15/98	7/16/98	0-176-0
1533	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/15/98	7/16/98	0-176-0
1534	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/15/98	7/16/98	0-176-0
1535	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/9/98	7/15/98	7/16/98	0-176-0
1536	HAA-ICR	Dibromoacetic acid	3.8	µg/L	EPA 552.2	1	1.0	7/9/98	7/15/98	7/16/98	0-176-0
1537	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/15/98	7/16/98	0-176-0
1538	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/9/98	7/15/98	7/16/98	0-176-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

1539	HAA-ICR	Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/9/98	7/15/98	7/16/98	0-176-0
1540	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/9/98	7/15/98	7/16/98	0-176-0
1541	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/9/98	7/15/98	7/16/98	0-176-0
1542	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	7/9/98		7/9/98	n/a
1543	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	7/9/98		7/9/98	n/a
1544	pH	pH	8.1 Unit	SM 4500-H+ B	1	n/a	7/8/98		7/8/98	n/a
1545	TEMP	Cl2 Temperature	26.6 °C	SM 2550 B	1	n/a	7/9/98		7/9/98	n/a
1546	TEMP	Temperature	22.8 °C	SM 2550 B	1	n/a	7/8/98		7/8/98	n/a
1547	TIME	Cl2 Incubation Time	7.3 hrs	n/a	1	n/a	7/9/98		7/9/98	n/a
1548	TOC-ICR	TOC	1.12 mg/L	SM 5310 C	1	0.50	7/8/98		7/8/98	7-0-331
1549	TOC-ICR	TOC (Dupl)	1.11 mg/L	SM 5310 C	1	0.50	7/8/98		7/8/98	7-0-331
			1.12 mg/L	0.9 % RPD						
1550	TOX-ICR	TOX	58 µg Cl-/L	SM 5320 B	1	25	7/9/98		7/17/98	12-0-170
1551	TOX-ICR	TOX (Dupl)	59 µg Cl-/L	SM 5320 B	1	25	7/9/98		7/17/98	12-0-170
			59 µg Cl-/L	1.7 % RPD						
1552	THM-ICR	1,2,3-Trichloropropane (Surrogate)	100.0 %	EPA 551.1	1	1.0	7/9/98	7/16/98	7/17/98	0-177-0
1553	THM-ICR	Bromodichloromethane	2.1 µg/L	EPA 551.1	1	1.0	7/9/98	7/16/98	7/17/98	0-177-0
1554	THM-ICR	Bromoform	24.6 µg/L	EPA 551.1	1	1.0	7/9/98	7/16/98	7/17/98	0-177-0
1555	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	7/9/98	7/16/98	7/17/98	0-177-0
1556	THM-ICR	Dibromochloromethane	11.3 µg/L	EPA 551.1	1	1.0	7/9/98	7/16/98	7/17/98	0-177-0
1557	UV-ICR	UV	0.019 1/cm	SM 5910 B	1	0.009	7/8/98		7/8/98	8-0-222
1558	UV-ICR	UV (Dupl)	0.019 1/cm	SM 5910 B	1	0.009	7/8/98		7/8/98	8-0-222
			0.019 1/cm	0.0 % RPD						

End of laboratory test results

Quality Control Report

Ms. Sibyl Carley
Jacksonville Electric Authority
Ridenhour Regional Water Treatment Plant
102 Kernan Blvd. North
Jacksonville, FL 32225

Phone: 904-665-4503 Fax: 904-665-4531

Study#: 119
Study Title: ICR RSSCT #2

Analysis: ALK (Alkalinity)

Method: SM 2320 B

QC Batch ID: 1-0-23

										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	Date Run	S&H ID	MRL	Range	RPD
Matrix Spike	Matrix Spike	100	98	mg/L	98%		06/10/98	9806-86	5		
Matrix Spike (Dupl)	Matrix Spike	100	96	mg/L	96%		06/10/98	9806-86	5		
		100	97	mg/L	97%	2.1 %					
Method Blank	Method Blank		ND*	mg/L			06/10/98	9806-339	5		
Standard	Standard	100	99	mg/L	99%		06/10/98	9806-340	5		
Standard (Dupl)	Standard	100	99	mg/L	99%		06/10/98	9806-340	5		
		100	99	mg/L	99%	0.0 %					
Matrix Spike	Matrix Spike	100	96	mg/L	96%		06/19/98	9806-471	5		
Matrix Spike (Dupl)	Matrix Spike	100	94	mg/L	94%		06/19/98	9806-471	5		
		100	95	mg/L	95%	2.1 %					
Method Blank	Method Blank		ND*	mg/L			06/19/98	9806-604	5		
Standard	Standard	100	105	mg/L	105%		06/19/98	9806-605	5		
Standard (Dupl)	Standard	100	98	mg/L	98%		06/19/98	9806-605	5		
		100	101	mg/L	101%	6.9 %					

Analysis: ALK (Alkalinity)

Method: SM 2320 B

QC Batch ID: 1-0-26

										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	Date Run	S&H ID	MRL	Range	RPD
Matrix Spike	Matrix Spike	100	92	mg/L	92%		06/24/98	9806-472	5		
Matrix Spike (Dupl)	Matrix Spike	100	93	mg/L	93%		06/24/98	9806-472	5		
		100	93	mg/L	93%	1.1 %					
Method Blank	Method Blank		ND*	mg/L			06/24/98	9806-745	5		
Standard	Standard	100	96	mg/L	96%		06/24/98	9806-746	5		
Standard (Dupl)	Standard	100	97	mg/L	97%		06/24/98	9806-746	5		
		100	96	mg/L	96%	1.0 %					
Matrix Spike	Matrix Spike	100	97	mg/L	97%		06/27/98	9806-803	5		
Matrix Spike (Dupl)	Matrix Spike	100	97	mg/L	97%		06/27/98	9806-803	5		
		100	97	mg/L	97%	0.0 %					
Method Blank	Method Blank		ND*	mg/L			06/27/98	9806-811	5		
Standard	Standard	100	100	mg/L	100%		06/27/98	9806-812	5		
Standard (Dupl)	Standard	100	102	mg/L	102%		06/27/98	9806-812	5		
		100	101	mg/L	101%	2.0 %					

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-295

QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Matrix Spike	Matrix Spike	4.00	4.02	mg/L	100%		9806-72	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	4.05	mg/L	101%		9806-72	0.5		
		4.00	4.04	mg/L	101%	0.7 %				
Method Blank	Method Blank		ND*	mg/L			9806-355	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9806-355	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.53	mg/L	106%		9806-111	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.52	mg/L	104%		9806-111	0.5	50-150%	
		0.50	0.52	mg/L	104%	1.9 %			50-150%	20%
Standard	Standard	4.00	3.96	mg/L	99%		9806-296	0.5	90-110%	
Standard (Dupl)	Standard	4.00	4.02	mg/L	100%		9806-296	0.5	90-110%	
		4.00	3.99	mg/L	100%	1.5 %			90-110%	10%
Standard	Standard	10.00	9.92	mg/L	99%		9806-118	0.5	90-110%	
Standard (Dupl)	Standard	10.00	9.93	mg/L	99%		9806-118	0.5	90-110%	
		10.00	9.92	mg/L	99%	0.1 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-296

QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Matrix Spike	Matrix Spike	4.00	3.74	mg/L	94%		9806-251	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.83	mg/L	96%		9806-251	0.5		
		4.00	3.79	mg/L	95%	2.4 %				
Method Blank	Method Blank		ND*	mg/L			9806-369	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9806-369	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.54	mg/L	108%		9806-111	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.54	mg/L	108%		9806-111	0.5	50-150%	
		0.50	0.54	mg/L	108%	0.0 %			50-150%	20%
Standard	Standard	4.00	3.93	mg/L	98%		9806-357	0.5	90-110%	
Standard (Dupl)	Standard	4.00	3.94	mg/L	98%		9806-357	0.5	90-110%	
		4.00	3.93	mg/L	98%	0.3 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-300

QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Matrix Spike	Matrix Spike	4.00	4.23	mg/L	106%		9806-259	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	4.32	mg/L	108%		9806-259	0.5		
		4.00	4.27	mg/L	107%	2.1 %				

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

Method Blank	Method Blank		ND*	mg/L		9806-603	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L		9806-603	0.5		
			ND*	mg/L					
Standard	Standard	0.50	0.54	mg/L	108%	9806-111	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.54	mg/L	108%	9806-111	0.5	50-150%	
		0.50	0.54	mg/L	108%			50-150%	20%
Standard	Standard	4.00	3.98	mg/L	100%	9806-357	0.5	90-110%	
Standard (Dupl)	Standard	4.00	4.02	mg/L	100%	9806-357	0.5	90-110%	
		4.00	4.00	mg/L	100%			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-301

										Acceptance Criteria
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Matrix Spike	Matrix Spike	4.00	3.96	mg/L	99%		9806-484	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.92	mg/L	98%		9806-484	0.5		
		4.00	3.94	mg/L	98%	1.3 %				
Method Blank	Method Blank		ND*	mg/L			9806-706	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9806-706	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.56	mg/L	112%		9806-111	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.55	mg/L	110%		9806-111	0.5	50-150%	
		0.50	0.55	mg/L	110%	1.8 %			50-150%	20%
Standard	Standard	4.00	4.02	mg/L	100%		9806-357	0.5	90-110%	
Standard (Dupl)	Standard	4.00	4.02	mg/L	100%		9806-357	0.5	90-110%	
		4.00	4.02	mg/L	100%	0.0 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-302

										Acceptance Criteria
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Matrix Spike	Matrix Spike	4.00	3.99	mg/L	100%		9806-514	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.97	mg/L	99%		9806-514	0.5		
		4.00	3.98	mg/L	100%	0.5 %				
Method Blank	Method Blank		ND*	mg/L			9806-712	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9806-712	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.53	mg/L	106%		9806-111	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.52	mg/L	104%		9806-111	0.5	50-150%	
		0.50	0.52	mg/L	104%	1.9 %			50-150%	20%
Standard	Standard	4.00	3.94	mg/L	98%		9806-357	0.5	90-110%	
Standard (Dupl)	Standard	4.00	3.94	mg/L	98%		9806-357	0.5	90-110%	
		4.00	3.94	mg/L	98%	0.0 %			90-110%	10%
Standard	Standard	10.00	9.80	mg/L	98%		9806-118	0.5	90-110%	

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

Standard (Dupl)	Standard	10.00	9.91 mg/L	99%		9806-118	0.5	90-110%	
		10.00	9.86 mg/L	99%	1.1 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-303

		Acceptance Criteria							
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range
Matrix Spike	Matrix Spike	4.00	4.28	mg/L	107%		9806-493	0.5	
Matrix Spike (Dupl)	Matrix Spike	4.00	4.37	mg/L	109%		9806-493	0.5	
		4.00	4.33	mg/L	108%	2.1 %			
Method Blank	Method Blank		ND*	mg/L			9806-714	0.5	
Method Blank (Dupl)	Method Blank		ND*	mg/L			9806-714	0.5	
			ND*	mg/L					
Standard	Standard	0.50	0.53	mg/L	106%		9806-111	0.5	50-150%
Standard (Dupl)	Standard	0.50	0.52	mg/L	104%		9806-111	0.5	50-150%
		0.50	0.53	mg/L	106%	1.9 %			50-150% 20%
Standard	Standard	4.00	4.01	mg/L	100%		9806-357	0.5	90-110%
Standard (Dupl)	Standard	4.00	4.04	mg/L	101%		9806-357	0.5	90-110%
		4.00	4.03	mg/L	101%	0.7 %			90-110% 10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-304

		Acceptance Criteria							
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range
Matrix Spike	Matrix Spike	4.00	4.32	mg/L	108%		9806-525	0.5	
Matrix Spike (Dupl)	Matrix Spike	4.00	4.17	mg/L	104%		9806-525	0.5	
		4.00	4.24	mg/L	106%	3.5 %			
Method Blank	Method Blank		ND*	mg/L			9806-732	0.5	
Method Blank (Dupl)	Method Blank		ND*	mg/L			9806-732	0.5	
			ND*	mg/L					
Standard	Standard	0.50	0.53	mg/L	106%		9806-111	0.5	50-150%
Standard (Dupl)	Standard	0.50	0.53	mg/L	106%		9806-111	0.5	50-150%
		0.50	0.53	mg/L	106%	0.0 %			50-150% 20%
Standard	Standard	4.00	3.93	mg/L	98%		9806-357	0.5	90-110%
Standard (Dupl)	Standard	4.00	3.98	mg/L	100%		9806-357	0.5	90-110%
		4.00	3.96	mg/L	99%	1.3 %			90-110% 10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-305

		Acceptance Criteria							
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range
Matrix Spike	Matrix Spike	4.00	4.08	mg/L	102%		9806-526	0.5	
Matrix Spike (Dupl)	Matrix Spike	4.00	3.84	mg/L	96%		9806-526	0.5	
		4.00	3.96	mg/L	99%	6.3 %			

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

Method Blank	Method Blank		ND*	mg/L		9806-738	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L		9806-738	0.5		
			ND*	mg/L					
Standard	Standard	0.50	0.54	mg/L	108%	9806-111	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.57	mg/L	114%	9806-111	0.5	50-150%	
		0.50	0.56	mg/L	112%			50-150%	20%
					5.4 %				
Standard	Standard	4.00	3.91	mg/L	98%	9806-357	0.5	90-110%	
Standard (Dupl)	Standard	4.00	3.95	mg/L	99%	9806-357	0.5	90-110%	
		4.00	3.93	mg/L	98%			90-110%	10%
					1.0 %				

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-306

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	4.06	mg/L	101%		9806-531	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	4.06	mg/L	101%		9806-531	0.5		
		4.00	4.06	mg/L	101%	0.0 %				
Method Blank	Method Blank		ND*	mg/L			9806-752	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9806-752	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.53	mg/L	106%		9806-111	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.54	mg/L	108%		9806-111	0.5	50-150%	
		0.50	0.53	mg/L	106%	1.9 %			50-150%	20%
Standard	Standard	4.00	4.01	mg/L	100%		9806-357	0.5	90-110%	
Standard (Dupl)	Standard	4.00	4.06	mg/L	101%		9806-357	0.5	90-110%	
		4.00	4.04	mg/L	101%	1.2 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-307

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	4.01	mg/L	100%		9806-629	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	4.02	mg/L	100%		9806-629	0.5		
		4.00	4.01	mg/L	100%	0.2 %				
Method Blank	Method Blank		ND*	mg/L			9806-756	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9806-756	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.54	mg/L	108%		9806-111	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.53	mg/L	106%		9806-111	0.5	50-150%	
		0.50	0.54	mg/L	108%	1.9 %			50-150%	20%
Standard	Standard	4.00	3.97	mg/L	99%		9806-751	0.5	90-110%	
Standard (Dupl)	Standard	4.00	4.02	mg/L	100%		9806-751	0.5	90-110%	
		4.00	4.00	mg/L	100%	1.2 %			90-110%	10%

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-309

C Batch ID: 7-0-309

									Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Matrix Spike	Matrix Spike	4.00	4.04	mg/L	101%		9806-537	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	4.02	mg/L	100%		9806-537	0.5		
		4.00	4.03	mg/L	101%	0.5 %				
Method Blank	Method Blank		ND*	mg/L			9806-814	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9806-814	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.56	mg/L	112%		9806-615	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.56	mg/L	112%		9806-615	0.5	50-150%	
		0.50	0.56	mg/L	112%	0.0 %			50-150%	20%
Standard	Standard	4.00	4.00	mg/L	100%		9806-751	0.5	90-110%	
Standard (Dupl)	Standard	4.00	3.98	mg/L	100%		9806-751	0.5	90-110%	
		4.00	3.99	mg/L	100%	0.5 %			90-110%	10%
Standard	Standard	10.00	9.92	mg/L	99%		9806-118	0.5	90-110%	
Standard (Dupl)	Standard	10.00	9.99	mg/L	100%		9806-118	0.5	90-110%	
		10.00	9.96	mg/L	100%	0.7 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-316

C Batch ID: 7-0-316									Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Matrix Spike	Matrix Spike	4.00	4.05	mg/L	101%		9806-544	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.82	mg/L	95%		9806-544	0.5		
		4.00	3.94	mg/L	98%	5.8 %				
Method Blank	Method Blank		ND*	mg/L			9806-851	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9806-851	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.55	mg/L	110%		9806-615	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.55	mg/L	110%		9806-615	0.5	50-150%	
		0.50	0.55	mg/L	110%	0.0 %			50-150%	20%
Standard	Standard	4.00	3.97	mg/L	99%		9806-751	0.5	90-110%	
Standard (Dupl)	Standard	4.00	4.01	mg/L	100%		9806-751	0.5	90-110%	
		4.00	3.99	mg/L	100%	1.0 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-317

C Batch ID: 7-0-317									Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Matrix Spike	Matrix Spike	4.00	3.86	mg/L	96%		9806-674	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.98	mg/L	100%		9806-674	0.5		
		4.00	3.92	mg/L	98%	3.1 %				

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

Method Blank	Method Blank		ND*	mg/L		9807-8	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L		9807-8	0.5		
			ND*	mg/L					
Standard	Standard	0.50	0.57	mg/L	114%	9806-615	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.56	mg/L	112%	9806-615	0.5	50-150%	
		0.50	0.57	mg/L	114%			50-150%	20%
Standard	Standard	4.00	3.97	mg/L	99%	9806-751	0.5	90-110%	
Standard (Dupl)	Standard	4.00	4.00	mg/L	100%	9806-751	0.5	90-110%	
		4.00	3.99	mg/L	100%			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-319

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	3.90	mg/L	97%		9806-643	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.85	mg/L	96%		9806-643	0.5		
		4.00	3.88	mg/L	97%	1.3 %				
Method Blank	Method Blank		ND*	mg/L			9807-70	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9807-70	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.56	mg/L	112%		9806-615	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.57	mg/L	114%		9806-615	0.5	50-150%	
		0.50	0.57	mg/L	114%	1.8 %			50-150%	20%
Standard	Standard	4.00	4.01	mg/L	100%		9806-751	0.5	90-110%	
Standard (Dupl)	Standard	4.00	3.99	mg/L	100%		9806-751	0.5	90-110%	
		4.00	4.00	mg/L	100%	0.5 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-322

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	3.90	mg/L	97%		9806-565	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.91	mg/L	98%		9806-565	0.5		
		4.00	3.91	mg/L	98%	0.3 %				
Method Blank	Method Blank		ND*	mg/L			9807-79	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9807-79	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.60	mg/L	120%		9806-615	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.58	mg/L	116%		9806-615	0.5	50-150%	
		0.50	0.59	mg/L	118%	3.4 %			50-150%	20%
Standard	Standard	4.00	3.96	mg/L	99%		9806-751	0.5	90-110%	
Standard (Dupl)	Standard	4.00	3.94	mg/L	98%		9806-751	0.5	90-110%	
		4.00	3.95	mg/L	99%	0.5 %			90-110%	10%

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-324

								Acceptance Criteria		
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	3.97	mg/L	99%		9806-566	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	4.01	mg/L	100%		9806-566	0.5		
		4.00	3.99	mg/L	100%	0.8 %				
Method Blank	Method Blank		ND*	mg/L			9807-89	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9807-89	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.58	mg/L	116%		9806-615	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.57	mg/L	114%		9806-615	0.5	50-150%	
		0.50	0.58	mg/L	116%	1.7 %			50-150%	20%
Standard	Standard	4.00	3.95	mg/L	99%		9806-751	0.5	90-110%	
Standard (Dupl)	Standard	4.00	4.02	mg/L	100%		9806-751	0.5	90-110%	
		4.00	3.98	mg/L	100%	1.8 %			90-110%	10%
Standard	Standard	10.00	10.04	mg/L	100%		9807-78	0.5	90-110%	
Standard (Dupl)	Standard	10.00	10.10	mg/L	101%		9807-78	0.5	90-110%	
		10.00	10.07	mg/L	101%	0.6 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-326

								Acceptance Criteria		
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	3.93	mg/L	98%		9807-82	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.86	mg/L	96%		9807-82	0.5		
		4.00	3.89	mg/L	97%	1.5 %				
Method Blank	Method Blank		ND*	mg/L			9807-102	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9807-102	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.60	mg/L	120%		9806-615	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.57	mg/L	114%		9806-615	0.5	50-150%	
		0.50	0.59	mg/L	118%	5.1 %			50-150%	20%
Standard	Standard	4.00	3.98	mg/L	100%		9806-751	0.5	90-110%	
Standard (Dupl)	Standard	4.00	4.04	mg/L	101%		9806-751	0.5	90-110%	
		4.00	4.01	mg/L	100%	1.5 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-328

								Acceptance Criteria		
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	3.86	mg/L	96%		9806-683	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.95	mg/L	99%		9806-683	0.5		
		4.00	3.91	mg/L	98%	2.3 %				

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

Method Blank	Method Blank		ND*	mg/L		9807-109	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L		9807-109	0.5		
			ND*	mg/L					
Standard	Standard	0.50	0.55	mg/L	110%	9806-615	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.55	mg/L	110%	9806-615	0.5	50-150%	
		0.50	0.55	mg/L	110%			50-150%	20%
Standard	Standard	4.00	3.93	mg/L	98%	9807-101	0.5	90-110%	
Standard (Dupl)	Standard	4.00	3.99	mg/L	100%	9807-101	0.5	90-110%	
		4.00	3.96	mg/L	99%			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-331

										Acceptance Criteria
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Matrix Spike	Matrix Spike	4.00	3.85	mg/L	96%		9806-576	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.96	mg/L	99%		9806-576	0.5		
		4.00	3.90	mg/L	97%	2.6 %				
Method Blank	Method Blank		ND*	mg/L			9807-124	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9807-124	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.57	mg/L	114%		9806-615	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.58	mg/L	116%		9806-615	0.5	50-150%	
		0.50	0.57	mg/L	114%	1.8 %			50-150%	20%
Standard	Standard	4.00	3.94	mg/L	98%		9807-101	0.5	90-110%	
Standard (Dupl)	Standard	4.00	3.97	mg/L	99%		9807-101	0.5	90-110%	
		4.00	3.96	mg/L	99%	0.8 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-333

										Acceptance Criteria
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Matrix Spike	Matrix Spike	4.00	4.00	mg/L	100%		9806-579	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.94	mg/L	98%		9806-579	0.5		
		4.00	3.97	mg/L	99%	1.5 %				
Method Blank	Method Blank		ND*	mg/L			9807-194	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9807-194	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.54	mg/L	108%		9807-92	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.54	mg/L	108%		9807-92	0.5	50-150%	
		0.50	0.54	mg/L	108%	0.0 %			50-150%	20%
Standard	Standard	4.00	3.93	mg/L	98%		9807-101	0.5	90-110%	
Standard (Dupl)	Standard	4.00	3.95	mg/L	99%		9807-101	0.5	90-110%	
		4.00	3.94	mg/L	98%	0.5 %			90-110%	10%
Standard	Standard	10.00	9.74	mg/L	97%		9807-78	0.5	90-110%	

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2

Standard (Dupl)	Standard	10.00	9.89 mg/L	99%		9807-78	0.5	90-110%	
		10.00	9.82 mg/L	98%	1.5 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)**Method:** SM 5310 C**QC Batch ID:** 7-0-337

		Acceptance Criteria							
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u> <u>RPD</u>
Matrix Spike	Matrix Spike	4.00	3.96	mg/L	99%		9806-686	0.5	
Matrix Spike (Dupl)	Matrix Spike	4.00	4.01	mg/L	100%		9806-686	0.5	
		4.00	3.99	mg/L	100%	1.3 %			
Method Blank	Method Blank		ND*	mg/L			9807-208	0.5	
Method Blank (Dupl)	Method Blank		ND*	mg/L			9807-208	0.5	
			ND*	mg/L					
Standard	Standard	0.50	0.54	mg/L	108%		9807-92	0.5	50-150%
Standard (Dupl)	Standard	0.50	0.54	mg/L	108%		9807-92	0.5	50-150%
		0.50	0.54	mg/L	108%	0.0 %			50-150% 20%
Standard	Standard	4.00	3.93	mg/L	98%		9807-101	0.5	90-110%
Standard (Dupl)	Standard	4.00	3.92	mg/L	98%		9807-101	0.5	90-110%
		4.00	3.92	mg/L	98%	0.3 %			90-110% 10%

Analysis: UV-ICR (UV-254)**Method:** SM 5910 B**QC Batch ID:** 8-0-203

		Acceptance Criteria							
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u> <u>RPD</u>
Method Blank	Method Blank		ND*	1/cm			9806-616	0.009	
Method Blank (Dupl)	Method Blank		ND*	1/cm			9806-616	0.009	
			ND*	1/cm					
Method Blank	Method Blank		ND*	1/cm			9806-616	0.009	
Method Blank (Dupl)	Method Blank		ND*	1/cm			9806-616	0.009	
			ND*	1/cm					
Standard	Standard	0.009	0.008	1/cm	89%		9806-614	0.009	75-125%
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%		9806-614	0.009	75-125%
		0.009	0.008	1/cm	89%	0.0 %			75-125% 20%
Standard	Standard	0.088	0.086	1/cm	98%		9806-613	0.009	85-115%
Standard (Dupl)	Standard	0.088	0.085	1/cm	97%		9806-613	0.009	85-115%
		0.088	0.086	1/cm	98%	1.2 %			85-115% 10%

Analysis: UV-ICR (UV-254)**Method:** SM 5910 B**QC Batch ID:** 8-0-204

		Acceptance Criteria							
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u> <u>RPD</u>
Method Blank	Method Blank		ND*	1/cm			9806-709	0.009	
Method Blank (Dupl)	Method Blank		ND*	1/cm			9806-709	0.009	
			ND*	1/cm					

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

Method Blank	Method Blank	ND*	1/cm			9806-709	0.009		
Method Blank (Dupl)	Method Blank	ND*	1/cm			9806-709	0.009		
		ND*	1/cm						
Standard	Standard	0.009	0.008	1/cm	89%	9806-614	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%	9806-614	0.009	75-125%	
		0.009	0.008	1/cm	89%			75-125%	20%
Standard	Standard	0.088	0.086	1/cm	98%	9806-613	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.086	1/cm	98%	9806-613	0.009	85-115%	
		0.088	0.086	1/cm	98%			85-115%	10%

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-205

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Method Blank	Method Blank	ND*	1/cm				9806-710	0.009		
Method Blank (Dupl)	Method Blank	ND*	1/cm				9806-710	0.009		
		ND*	1/cm							
Method Blank	Method Blank	ND*	1/cm				9806-710	0.009		
Method Blank (Dupl)	Method Blank	ND*	1/cm				9806-710	0.009		
		ND*	1/cm							
Standard	Standard	0.009	0.008	1/cm	89%		9806-614	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%		9806-614	0.009	75-125%	
		0.009	0.008	1/cm	89%	0.0 %			75-125%	20%
Standard	Standard	0.088	0.086	1/cm	98%		9806-613	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.086	1/cm	98%		9806-613	0.009	85-115%	
		0.088	0.086	1/cm	98%	0.0 %			85-115%	10%

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-206

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Method Blank	Method Blank	ND*	1/cm				9806-715	0.009		
Method Blank (Dupl)	Method Blank	ND*	1/cm				9806-715	0.009		
		ND*	1/cm							
Method Blank	Method Blank	ND*	1/cm				9806-715	0.009		
Method Blank (Dupl)	Method Blank	ND*	1/cm				9806-715	0.009		
		ND*	1/cm							
Standard	Standard	0.009	0.008	1/cm	89%		9806-614	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%		9806-614	0.009	75-125%	
		0.009	0.008	1/cm	89%	0.0 %			75-125%	20%
Standard	Standard	0.088	0.087	1/cm	99%		9806-613	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.087	1/cm	99%		9806-613	0.009	85-115%	
		0.088	0.087	1/cm	99%	0.0 %			85-115%	10%

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-207

C Batch ID: 8-0-207

										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD	
Method Blank	Method Blank		ND*	1/cm			9806-739	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9806-739	0.009			
			ND*	1/cm							
Method Blank	Method Blank		ND*	1/cm			9806-739	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9806-739	0.009			
			ND*	1/cm							
Standard	Standard	0.009	0.008	1/cm	89%		9806-614	0.009	75-125%		
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%		9806-614	0.009	75-125%		
		0.009	0.008	1/cm	89%	0.0 %			75-125%	20%	
Standard	Standard	0.088	0.086	1/cm	98%		9806-613	0.009	85-115%		
Standard (Dupl)	Standard	0.088	0.086	1/cm	98%		9806-613	0.009	85-115%		
		0.088	0.086	1/cm	98%	0.0 %			85-115%	10%	

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-208

C Batch ID: 8-0-208

										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD	
Method Blank	Method Blank		ND*	1/cm			9806-761	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9806-761	0.009			
			ND*	1/cm							
Method Blank	Method Blank		ND*	1/cm			9806-761	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9806-761	0.009			
			ND*	1/cm							
Standard	Standard	0.009	0.008	1/cm	89%		9806-736	0.009	75-125%		
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%		9806-736	0.009	75-125%		
		0.009	0.008	1/cm	89%	0.0 %			75-125%	20%	
Standard	Standard	0.088	0.086	1/cm	98%		9806-613	0.009	85-115%		
Standard (Dupl)	Standard	0.088	0.087	1/cm	99%		9806-613	0.009	85-115%		
		0.088	0.086	1/cm	98%	1.2 %			85-115%	10%	

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-210

C Batch ID: 8-0-210									Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Method Blank	Method Blank		ND*	1/cm			9806-817	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9806-817	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9806-817	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9806-817	0.009		
			ND*	1/cm						

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2

Standard	Standard	0.009	0.008	1/cm	89%	9806-736	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%	9806-736	0.009	75-125%	
		0.009	0.008	1/cm	89%			75-125%	20%
Standard	Standard	0.088	0.084	1/cm	95%	9806-737	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.084	1/cm	95%	9806-737	0.009	85-115%	
		0.088	0.084	1/cm	95%			85-115%	10%

Analysis: UV-ICR (UV-254)**Method:** SM 5910 B**QC Batch ID:** 8-0-213

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Method Blank	Method Blank		ND*	1/cm			9807-1	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-1	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9807-1	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-1	0.009		
			ND*	1/cm						
Standard	Standard	0.009	0.008	1/cm	89%		9806-736	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%		9806-736	0.009	75-125%	
		0.009	0.008	1/cm	89%	0.0 %			75-125%	20%
Standard	Standard	0.088	0.086	1/cm	98%		9806-859	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.086	1/cm	98%		9806-859	0.009	85-115%	
		0.088	0.086	1/cm	98%	0.0 %			85-115%	10%

Analysis: UV-ICR (UV-254)**Method:** SM 5910 B**QC Batch ID:** 8-0-214

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Method Blank	Method Blank		ND*	1/cm			9807-65	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-65	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9807-65	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-65	0.009		
			ND*	1/cm						
Standard	Standard	0.009	0.007	1/cm	78%		9806-736	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.007	1/cm	78%		9806-736	0.009	75-125%	
		0.009	0.007	1/cm	78%	0.0 %			75-125%	20%
Standard	Standard	0.088	0.086	1/cm	98%		9806-859	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.086	1/cm	98%		9806-859	0.009	85-115%	
		0.088	0.086	1/cm	98%	0.0 %			85-115%	10%

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-216

C Batch ID: 8-0-216

										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD	
Method Blank	Method Blank		ND*	1/cm			9807-71	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-71	0.009			
			ND*	1/cm							
Method Blank	Method Blank		ND*	1/cm			9807-71	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-71	0.009			
			ND*	1/cm							
Standard	Standard	0.009	0.008	1/cm	89%		9806-736	0.009	75-125%		
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%		9806-736	0.009	75-125%		
		0.009	0.008	1/cm	89%	0.0 %			75-125%	20%	
Standard	Standard	0.088	0.086	1/cm	98%		9806-859	0.009	85-115%		
Standard (Dupl)	Standard	0.088	0.086	1/cm	98%		9806-859	0.009	85-115%		
		0.088	0.086	1/cm	98%	0.0 %			85-115%	10%	

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-217

C Batch ID: 8-0-217

										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD	
Method Blank	Method Blank		ND*	1/cm			9807-90	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-90	0.009			
			ND*	1/cm							
Method Blank	Method Blank		ND*	1/cm			9807-90	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-90	0.009			
			ND*	1/cm							
Standard	Standard	0.009	0.008	1/cm	89%		9806-736	0.009	75-125%		
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%		9806-736	0.009	75-125%		
		0.009	0.008	1/cm	89%	0.0 %			75-125%	20%	
Standard	Standard	0.088	0.087	1/cm	99%		9806-859	0.009	85-115%		
Standard (Dupl)	Standard	0.088	0.087	1/cm	99%		9806-859	0.009	85-115%		
		0.088	0.087	1/cm	99%	0.0 %			85-115%	10%	

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-218

C Batch ID: 8-0-218									Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Method Blank	Method Blank		ND*	1/cm			9807-91	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-91	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9807-91	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-91	0.009		
			ND*	1/cm						

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2

Standard	Standard	0.009	0.008	1/cm	89%	9806-736	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%	9806-736	0.009	75-125%	
		0.009	0.008	1/cm	89%			75-125%	20%
Standard	Standard	0.088	0.086	1/cm	98%	9806-859	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.086	1/cm	98%	9806-859	0.009	85-115%	
		0.088	0.086	1/cm	98%			85-115%	10%

Analysis: UV-ICR (UV-254)**Method:** SM 5910 B**QC Batch ID:** 8-0-219

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Method Blank	Method Blank		ND*	1/cm			9807-99	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-99	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9807-99	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-99	0.009		
			ND*	1/cm						
Standard	Standard	0.009	0.008	1/cm	89%		9807-93	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.007	1/cm	78%		9807-93	0.009	75-125%	
		0.009	0.008	1/cm	89%	12.5 %			75-125%	20%
Standard	Standard	0.088	0.086	1/cm	98%		9806-859	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.086	1/cm	98%		9806-859	0.009	85-115%	
		0.088	0.086	1/cm	98%	0.0 %			85-115%	10%

Analysis: UV-ICR (UV-254)**Method:** SM 5910 B**QC Batch ID:** 8-0-220

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Method Blank	Method Blank		ND*	1/cm			9807-107	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-107	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9807-107	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-107	0.009		
			ND*	1/cm						
Standard	Standard	0.009	0.008	1/cm	89%		9807-93	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%		9807-93	0.009	75-125%	
		0.009	0.008	1/cm	89%	0.0 %			75-125%	20%
Standard	Standard	0.088	0.086	1/cm	98%		9806-859	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.087	1/cm	99%		9806-859	0.009	85-115%	
		0.088	0.086	1/cm	98%	1.2 %			85-115%	10%

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-221

C Batch ID: 8-0-221

										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD	
Method Blank	Method Blank		ND*	1/cm			9807-120	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-120	0.009			
			ND*	1/cm							
Method Blank	Method Blank		ND*	1/cm			9807-120	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-120	0.009			
			ND*	1/cm							
Standard	Standard	0.009	0.008	1/cm	89%		9807-93	0.009	75-125%		
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%		9807-93	0.009	75-125%		
		0.009	0.008	1/cm	89%	0.0 %			75-125%	20%	
Standard	Standard	0.088	0.087	1/cm	99%		9806-859	0.009	85-115%		
Standard (Dupl)	Standard	0.088	0.087	1/cm	99%		9806-859	0.009	85-115%		
		0.088	0.087	1/cm	99%	0.0 %			85-115%	10%	

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-222

C Batch ID: 8-0-222										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD	
Method Blank	Method Blank		ND*	1/cm			9807-123	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-123	0.009			
			ND*	1/cm							
Method Blank	Method Blank		ND*	1/cm			9807-123	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-123	0.009			
			ND*	1/cm							
Standard	Standard	0.009	0.007	1/cm	78%		9807-93	0.009	75-125%		
Standard (Dupl)	Standard	0.009	0.007	1/cm	78%		9807-93	0.009	75-125%		
		0.009	0.007	1/cm	78%	0.0 %			75-125%	20%	
Standard	Standard	0.088	0.086	1/cm	98%		9807-98	0.009	85-115%		
Standard (Dupl)	Standard	0.088	0.086	1/cm	98%		9807-98	0.009	85-115%		
		0.088	0.086	1/cm	98%	0.0 %			85-115%	10%	

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-223

C Batch ID: 8-0-223									Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Method Blank	Method Blank		ND*	1/cm			9807-192	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-192	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9807-192	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-192	0.009		
			ND*	1/cm						

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2

Standard	Standard	0.009	0.008	1/cm	89%	9807-93	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%	9807-93	0.009	75-125%	
		0.009	0.008	1/cm	89%			75-125%	20%
Standard	Standard	0.088	0.086	1/cm	98%	9807-98	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.086	1/cm	98%	9807-98	0.009	85-115%	
		0.088	0.086	1/cm	98%			85-115%	10%

Analysis: UV-ICR (UV-254)**Method:** SM 5910 B**QC Batch ID:** 8-0-224

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Method Blank	Method Blank		ND*	1/cm			9807-204	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-204	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9807-204	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-204	0.009		
			ND*	1/cm						
Standard	Standard	0.009	0.008	1/cm	89%		9807-93	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%		9807-93	0.009	75-125%	
		0.009	0.008	1/cm	89%	0.0 %			75-125%	20%
Standard	Standard	0.088	0.085	1/cm	97%		9807-98	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.085	1/cm	97%		9807-98	0.009	85-115%	
		0.088	0.085	1/cm	97%	0.0 %			85-115%	10%

Analysis: UV-ICR (UV-254)**Method:** SM 5910 B**QC Batch ID:** 8-0-225

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Method Blank	Method Blank		ND*	1/cm			9807-201	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-201	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9807-201	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-201	0.009		
			ND*	1/cm						
Standard	Standard	0.009	0.008	1/cm	89%		9807-93	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%		9807-93	0.009	75-125%	
		0.009	0.008	1/cm	89%	0.0 %			75-125%	20%
Standard	Standard	0.088	0.086	1/cm	98%		9807-98	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.086	1/cm	98%		9807-98	0.009	85-115%	
		0.088	0.086	1/cm	98%	0.0 %			85-115%	10%

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

Analysis: TURB (Turbidity)

Method: SM 2130 B

QC Batch ID: 9-0-12

										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	Date Run	S&H ID	MRL	Range	RPD
Standard	Standard	5.41	5.52	ntu	102%		06/09/98	9807-108	0.05		
Standard	Standard	5.41	5.54	ntu	102%		06/10/98	9807-108	0.05		
Standard	Standard	5.41	5.48	ntu	101%		06/18/98	9807-108	0.05		

Analysis: TURB (Turbidity)

Method: SM 2130 B

QC Batch ID: 9-0-13

										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	Date Run	S&H ID	MRL	Range	RPD
Standard	Standard	5.41	5.50	ntu	102%		06/20/98	9807-108	0.05		
Standard	Standard	5.41	5.50	ntu	102%		06/21/98	9807-108	0.05		
Standard	Standard	5.41	5.50	ntu	102%		06/24/98	9807-108	0.05		
Standard	Standard	5.41	5.52	ntu	102%		06/26/98	9807-108	0.05		
Standard	Standard	5.41	5.45	ntu	101%		07/02/98	9807-108	0.05		
Standard	Standard	5.41	5.48	ntu	101%		07/02/98	9807-108	0.05		

Analysis: TURB (Turbidity)

Method: SM 2130 B

QC Batch ID: 9-0-14

										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	Date Run	S&H ID	MRL	Range	RPD
Standard	Standard	5.41	5.49	ntu	101%		07/08/98	9807-108	0.05		
Standard	Standard	5.41	5.48	ntu	101%		07/10/98	9807-108	0.05		
Standard	Standard	5.41	5.47	ntu	101%		07/13/98	9807-108	0.05		
Standard	Standard	5.41	5.46	ntu	101%		07/16/98	9807-108	0.05		
Standard	Standard	5.41	5.46	ntu	101%		07/20/98	9807-108	0.05		
Standard	Standard	5.41	5.48	ntu	101%		07/24/98	9807-108	0.05		
Standard	Standard	5.41	5.45	ntu	101%		07/27/98	9807-108	0.05		
Standard	Standard	5.41	5.47	ntu	101%		07/27/98	9807-108	0.05		

Analysis: TOX-ICR (Total Organic Halide)

Method: SM 5320 B

QC Batch ID: 12-0-156

										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD		S&H ID	MRL	Range	RPD
Standard - TCP Aqueous	Standard	25	24	µg Cl-/L	96%			9806-759	25	75-125%	
Standard - TCP Aqueous	Standard	200	206	µg Cl-/L	103%			9806-758	25	85-115%	
System Blank	Blank		ND*	µg Cl-/L				9806-760	25		

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2**Analysis:** TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-157

<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Standard - TCP Aqueous	Standard	25	26	µg Cl-/L	104%		9806-820	25	75-125%	
Standard - TCP Aqueous	Standard	200	210	µg Cl-/L	105%		9806-819	25	85-115%	
System Blank	Blank		ND*	µg Cl-/L			9806-821	25		

Acceptance
Criteria**Analysis:** TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-158

<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	200	212	µg Cl-/L	106%		9806-492	25		
Matrix Spike (Dupl)	Matrix Spike	200	207	µg Cl-/L	103%		9806-492	25		
		200	210	µg Cl-/L	105%	1.9 %				
Standard - TCP Aqueous	Standard	25	23	µg Cl-/L	92%		9806-841	25	75-125%	
Standard - TCP Aqueous	Standard	200	208	µg Cl-/L	104%		9806-840	25	85-115%	
System Blank	Blank		ND*	µg Cl-/L			9806-842	25		

Acceptance
Criteria**Analysis:** TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-159

<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Standard - TCP Aqueous	Standard	25	22	µg Cl-/L	88%		9806-857	25	75-125%	
Standard - TCP Aqueous	Standard	200	209	µg Cl-/L	104%		9806-856	25	85-115%	
System Blank	Blank		ND*	µg Cl-/L			9806-858	25		

Acceptance
Criteria**Analysis:** TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-160

<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Standard - TCP Aqueous	Standard	25	24	µg Cl-/L	96%		9807-6	25	75-125%	
Standard - TCP Aqueous	Standard	200	205	µg Cl-/L	102%		9807-5	25	85-115%	
System Blank	Blank		ND*	µg Cl-/L			9807-7	25		

Acceptance
Criteria**Analysis:** TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-161

<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	200	217	µg Cl-/L	109%		9806-532	25		
Matrix Spike (Dupl)	Matrix Spike	200	214	µg Cl-/L	107%		9806-532	25		

Acceptance
Criteria

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2

		200	216 µg Cl-/L	108%	1.4 %		
Standard - TCP Aqueous	Standard	25	28 µg Cl-/L	112%		9807-96	25 75-125%
Standard - TCP Aqueous	Standard	200	209 µg Cl-/L	104%		9807-95	25 85-115%
System Blank	Blank		ND* µg Cl-/L			9807-97	25

Analysis: TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-164

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Standard - TCP Aqueous	Standard	25	20	µg Cl-/L	80%		9807-186	25	75-125%	
Standard - TCP Aqueous	Standard	200	208	µg Cl-/L	104%		9807-185	25	85-115%	
System Blank	Blank		ND*	µg Cl-/L			9807-187	25		

Analysis: TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-167

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Standard - TCP Aqueous	Standard	25	24	µg Cl-/L	96%		9807-225	25	75-125%	
Standard - TCP Aqueous	Standard	200	194	µg Cl-/L	97%		9807-224	25	85-115%	
System Blank	Blank		ND*	µg Cl-/L			9807-226	25		

Analysis: TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-169

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Standard - TCP Aqueous	Standard	25	23	µg Cl-/L	92%		9807-245	25	75-125%	
Standard - TCP Aqueous	Standard	200	198	µg Cl-/L	99%		9807-244	25	85-115%	
System Blank	Blank		ND*	µg Cl-/L			9807-246	25		

Analysis: TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-170

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	200	200	µg Cl-/L	100%		9806-596	25		
Matrix Spike (Dupl)	Matrix Spike	200	192	µg Cl-/L	96%		9806-596	25		
		200	196	µg Cl-/L	98%	4.1 %				
Standard - TCP Aqueous	Standard	25	23	µg Cl-/L	92%		9807-396	25	75-125%	
Standard - TCP Aqueous	Standard	200	197	µg Cl-/L	98%		9807-395	25	85-115%	
System Blank	Blank		ND*	µg Cl-/L			9807-397	25		

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2**Analysis:** TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-171

								Acceptance Criteria	
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>
Standard - TCP Aqueous	Standard	25	25	µg Cl-/L	100%		9807-409	25	75-125%
Standard - TCP Aqueous	Standard	200	196	µg Cl-/L	98%		9807-408	25	85-115%
System Blank	Blank		ND*	µg Cl-/L			9807-410	25	

Analysis: TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-172

								Acceptance Criteria	
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>
Standard - TCP Aqueous	Standard	25	23	µg Cl-/L	92%		9807-421	25	75-125%
Standard - TCP Aqueous	Standard	200	199	µg Cl-/L	100%		9807-420	25	85-115%
System Blank	Blank		ND*	µg Cl-/L			9807-422	25	

Analysis: TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-174

								Acceptance Criteria	
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>
Standard - TCP Aqueous	Standard	25	24	µg Cl-/L	96%		9807-444	25	75-125%
Standard - TCP Aqueous	Standard	200	204	µg Cl-/L	102%		9807-443	25	85-115%
System Blank	Blank		ND*	µg Cl-/L			9807-445	25	

Analysis: THM-ICR (Trihalomethanes (ICR))**Method:** EPA 551.1**QC Batch ID:** 0-163-0

								Acceptance Criteria	
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>
Bromodichloromethane	Duplicate	1.3	1.3	µg/L		0.0%	9806-488	1	
Bromodichloromethane	Matrix Spike	40.0	43.1	µg/L	108%		9806-495	1	
Bromodichloromethane	Method Blank		ND*	µg/L			9807-59	1	
Bromodichloromethane	Secondary Source Std	20.0	18.9	µg/L	94%		9807-60	1	70-130%
Bromodichloromethane	Standard	20.0	19.9	µg/L	99%		9807-61	1	80-120%
Bromodichloromethane	Standard	20.0	20.7	µg/L	103%		9807-61	1	80-120%
Bromodichloromethane	Standard	40.0	42.3	µg/L	106%		9807-62	1	80-120%
Bromoform	Duplicate	9.2	9.4	µg/L		2.2%	9806-488	1	
Bromoform	Matrix Spike	40.0	44.7	µg/L	112%		9806-495	1	
Bromoform	Method Blank		ND*	µg/L			9807-59	1	

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2

Bromoform	Secondary Source Std	20.0	18.0 µg/L	90%	9807-60	1	70-130%
Bromoform	Standard	20.0	19.0 µg/L	95%	9807-61	1	80-120%
Bromoform	Standard	20.0	20.2 µg/L	101%	9807-61	1	80-120%
Bromoform	Standard	40.0	41.4 µg/L	103%	9807-62	1	80-120%
Chloroform	Duplicate	ND	ND µg/L	NA	9806-488	1	
Chloroform	Matrix Spike	40.0	44.5 µg/L	111%	9806-495	1	
Chloroform	Method Blank		ND* µg/L		9807-59	1	
Chloroform	Secondary Source Std	20.0	18.8 µg/L	94%	9807-60	1	70-130%
Chloroform	Standard	20.0	18.9 µg/L	94%	9807-61	1	80-120%
Chloroform	Standard	20.0	19.7 µg/L	98%	9807-61	1	80-120%
Chloroform	Standard	40.0	43.2 µg/L	108%	9807-62	1	80-120%
Dibromochloromethane	Duplicate	4.7	4.6 µg/L	2.2%	9806-488	1	
Dibromochloromethane	Matrix Spike	40.0	44.0 µg/L	110%	9806-495	1	
Dibromochloromethane	Method Blank		ND* µg/L		9807-59	1	
Dibromochloromethane	Secondary Source Std	20.0	18.5 µg/L	93%	9807-60	1	70-130%
Dibromochloromethane	Standard	20.0	19.4 µg/L	97%	9807-61	1	80-120%
Dibromochloromethane	Standard	20.0	20.9 µg/L	104%	9807-61	1	80-120%
Dibromochloromethane	Standard	40.0	42.4 µg/L	106%	9807-62	1	80-120%

Analysis: THM-ICR (Trihalomethanes (ICR))**Method:** EPA 551.1**QC Batch ID:** 0-166-0

								Acceptance Criteria		
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Bromodichloromethane	Duplicate	5.8	5.9	µg/L		1.7%	9806-630	1		
Bromodichloromethane	Matrix Spike	40.0	40.5	µg/L	101%		9806-771	1		
Bromodichloromethane	Method Blank		ND*	µg/L			9807-125	1		
Bromodichloromethane	Secondary Source Std	20.0	20.8	µg/L	104%		9807-126	1	70-130%	
Bromodichloromethane	Standard	20.0	20.0	µg/L	100%		9807-127	1	80-120%	
Bromodichloromethane	Standard	20.0	20.5	µg/L	102%		9807-127	1	80-120%	
Bromodichloromethane	Standard	40.0	40.5	µg/L	101%		9807-128	1	80-120%	
Bromoform	Duplicate	ND	ND	µg/L		NA	9806-630	1		
Bromoform	Matrix Spike	40.0	45.7	µg/L	114%		9806-771	1		
Bromoform	Method Blank		ND*	µg/L			9807-125	1		
Bromoform	Secondary Source Std	20.0	19.8	µg/L	99%		9807-126	1	70-130%	

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable); RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2

Bromoform	Standard	20.0	19.3 µg/L	97%	9807-127	1	80-120%
Bromoform	Standard	20.0	18.3 µg/L	92%	9807-127	1	80-120%
Bromoform	Standard	40.0	38.2 µg/L	96%	9807-128	1	80-120%
Chloroform	Duplicate	6.8	6.9 µg/L	1.5%	9806-630	1	
Chloroform	Matrix Spike	40.0	43.9 µg/L	110%	9806-771	1	
Chloroform	Method Blank		ND* µg/L		9807-125	1	
Chloroform	Secondary Source Std	20.0	20.7 µg/L	103%	9807-126	1	70-130%
Chloroform	Standard	20.0	19.3 µg/L	97%	9807-127	1	80-120%
Chloroform	Standard	20.0	19.9 µg/L	99%	9807-127	1	80-120%
Chloroform	Standard	40.0	41.2 µg/L	103%	9807-128	1	80-120%
Dibromochloromethane	Duplicate	2.8	2.9 µg/L	3.5%	9806-630	1	
Dibromochloromethane	Matrix Spike	40.0	41.9 µg/L	105%	9806-771	1	
Dibromochloromethane	Method Blank		ND* µg/L		9807-125	1	
Dibromochloromethane	Secondary Source Std	20.0	20.4 µg/L	102%	9807-126	1	70-130%
Dibromochloromethane	Standard	20.0	20.1 µg/L	101%	9807-127	1	80-120%
Dibromochloromethane	Standard	20.0	21.1 µg/L	106%	9807-127	1	80-120%
Dibromochloromethane	Standard	40.0	41.2 µg/L	103%	9807-128	1	80-120%

Analysis: THM-ICR (Trihalomethanes (ICR))**Method:** EPA 551.1**QC Batch ID:** 0-172-0

								Acceptance Criteria	
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>RPD</u>
Bromodichloromethane	Duplicate	14.8	15.0	µg/L		1.3%	9806-780	1	
Bromodichloromethane	Matrix Spike	40.0	40.4	µg/L	101%		9806-667	1	
Bromodichloromethane	Method Blank		ND*	µg/L			9807-227	1	
Bromodichloromethane	Secondary Source Std	20.0	21.9	µg/L	110%		9807-228	1	70-130%
Bromodichloromethane	Standard	20.0	19.4	µg/L	97%		9807-229	1	80-120%
Bromodichloromethane	Standard	20.0	19.8	µg/L	99%		9807-229	1	80-120%
Bromodichloromethane	Standard	40.0	40.8	µg/L	102%		9807-230	1	80-120%
Bromoform	Duplicate	11.0	11.5	µg/L		4.4%	9806-780	1	
Bromoform	Matrix Spike	40.0	38.8	µg/L	97%		9806-667	1	
Bromoform	Method Blank		ND*	µg/L			9807-227	1	
Bromoform	Secondary Source Std	20.0	18.4	µg/L	92%		9807-228	1	70-130%
Bromoform	Standard	20.0	17.1	µg/L	86%		9807-229	1	80-120%

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2

Bromoform	Standard	20.0	17.7 µg/L	89%	9807-229	1	80-120%
Bromoform	Standard	40.0	37.3 µg/L	93%	9807-230	1	80-120%
Chloroform	Duplicate	6.5	6.6 µg/L	1.5%	9806-780	1	
Chloroform	Matrix Spike	40.0	41.6 µg/L	104%	9806-667	1	
Chloroform	Method Blank		ND* µg/L		9807-227	1	
Chloroform	Secondary Source Std	20.0	22.2 µg/L	111%	9807-228	1	70-130%
Chloroform	Standard	20.0	18.6 µg/L	93%	9807-229	1	80-120%
Chloroform	Standard	20.0	19.1 µg/L	96%	9807-229	1	80-120%
Chloroform	Standard	40.0	41.2 µg/L	103%	9807-230	1	80-120%
Dibromochloromethane	Duplicate	22.0	22.2 µg/L	0.9%	9806-780	1	
Dibromochloromethane	Matrix Spike	40.0	41.6 µg/L	104%	9806-667	1	
Dibromochloromethane	Method Blank		ND* µg/L		9807-227	1	
Dibromochloromethane	Secondary Source Std	20.0	21.6 µg/L	108%	9807-228	1	70-130%
Dibromochloromethane	Standard	20.0	19.6 µg/L	98%	9807-229	1	80-120%
Dibromochloromethane	Standard	20.0	20.4 µg/L	102%	9807-229	1	80-120%
Dibromochloromethane	Standard	40.0	41.2 µg/L	103%	9807-230	1	80-120%

Analysis: THM-ICR (Trihalomethanes (ICR))**Method:** EPA 551.1**QC Batch ID:** 0-177-0

									Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Bromodichloromethane	Duplicate	26.0	25.2	µg/L		3.1%	9807-54	1		
Bromodichloromethane	Matrix Spike	40.0	40.7	µg/L	102%		9807-24	1		
Bromodichloromethane	Method Blank		ND*	µg/L			9807-239	1		
Bromodichloromethane	Secondary Source Std	20.0	21.4	µg/L	107%		9807-240	1	70-130%	
Bromodichloromethane	Standard	20.0	20.8	µg/L	104%		9807-241	1	80-120%	
Bromodichloromethane	Standard	20.0	21.0	µg/L	105%		9807-241	1	80-120%	
Bromodichloromethane	Standard	40.0	39.2	µg/L	98%		9807-242	1	80-120%	
Bromoform	Duplicate	5.6	5.5	µg/L		1.8%	9807-54	1		
Bromoform	Matrix Spike	40.0	36.6	µg/L	92%		9807-24	1		
Bromoform	Method Blank		ND*	µg/L			9807-239	1		
Bromoform	Secondary Source Std	20.0	20.9	µg/L	104%		9807-240	1	70-130%	
Bromoform	Standard	20.0	21.0	µg/L	105%		9807-241	1	80-120%	
Bromoform	Standard	20.0	18.4	µg/L	92%		9807-241	1	80-120%	

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2

Bromoform	Standard	40.0	34.4 µg/L	86%	9807-242	1	80-120%
Chloroform	Duplicate	24.1	23.9 µg/L	0.8%	9807-54	1	
Chloroform	Matrix Spike	40.0	41.8 µg/L	104%	9807-24	1	
Chloroform	Method Blank		ND* µg/L		9807-239	1	
Chloroform	Secondary Source Std	20.0	21.4 µg/L	107%	9807-240	1	70-130%
Chloroform	Standard	20.0	20.1 µg/L	101%	9807-241	1	80-120%
Chloroform	Standard	20.0	20.3 µg/L	102%	9807-241	1	80-120%
Chloroform	Standard	40.0	39.9 µg/L	100%	9807-242	1	80-120%
Dibromochloromethane	Duplicate	21.6	21.2 µg/L	1.9%	9807-54	1	
Dibromochloromethane	Matrix Spike	40.0	42.6 µg/L	106%	9807-24	1	
Dibromochloromethane	Method Blank		ND* µg/L		9807-239	1	
Dibromochloromethane	Secondary Source Std	20.0	21.1 µg/L	106%	9807-240	1	70-130%
Dibromochloromethane	Standard	20.0	21.2 µg/L	106%	9807-241	1	80-120%
Dibromochloromethane	Standard	20.0	21.8 µg/L	109%	9807-241	1	80-120%
Dibromochloromethane	Standard	40.0	40.0 µg/L	100%	9807-242	1	80-120%

Analysis: THM-ICR (Trihalomethanes (ICR))**Method:** EPA 551.1**QC Batch ID:** 0-178-0

C Batch ID: 0-178-0									Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Bromodichloromethane	Duplicate	ND	ND	µg/L		NA	9807-135	1		
Bromodichloromethane	Matrix Spike	40.0	41.3	µg/L	103%		9807-150	1		
Bromodichloromethane	Method Blank		ND*	µg/L			9807-412	1		
Bromodichloromethane	Secondary Source Std	20.0	20.9	µg/L	104%		9807-413	1	70-130%	
Bromodichloromethane	Standard	20.0	19.7	µg/L	98%		9807-414	1	80-120%	
Bromodichloromethane	Standard	20.0	21.2	µg/L	106%		9807-414	1	80-120%	
Bromodichloromethane	Standard	40.0	37.8	µg/L	94%		9807-415	1	80-120%	
Bromoform	Duplicate	1.2	1.1	µg/L		8.7%	9807-135	1		
Bromoform	Matrix Spike	40.0	43.2	µg/L	108%		9807-150	1		
Bromoform	Method Blank		ND*	µg/L			9807-412	1		
Bromoform	Secondary Source Std	20.0	19.8	µg/L	99%		9807-413	1	70-130%	
Bromoform	Standard	20.0	19.9	µg/L	99%		9807-414	1	80-120%	
Bromoform	Standard	20.0	21.6	µg/L	108%		9807-414	1	80-120%	
Bromoform	Standard	40.0	39.5	µg/L	99%		9807-415	1	80-120%	

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2

Chloroform	Duplicate	ND	ND	µg/L	NA	9807-135	1
Chloroform	Matrix Spike	40.0	44.0	µg/L	110%	9807-150	1
Chloroform	Method Blank		ND*	µg/L		9807-412	1
Chloroform	Secondary Source Std	20.0	21.1	µg/L	106%	9807-413	1 70-130%
Chloroform	Standard	20.0	19.5	µg/L	97%	9807-414	1 80-120%
Chloroform	Standard	20.0	21.1	µg/L	106%	9807-414	1 80-120%
Chloroform	Standard	40.0	38.1	µg/L	95%	9807-415	1 80-120%
Dibromochloromethane	Duplicate	ND	ND	µg/L	NA	9807-135	1
Dibromochloromethane	Matrix Spike	40.0	42.7	µg/L	107%	9807-150	1
Dibromochloromethane	Method Blank		ND*	µg/L		9807-412	1
Dibromochloromethane	Secondary Source Std	20.0	20.3	µg/L	102%	9807-413	1 70-130%
Dibromochloromethane	Standard	20.0	19.9	µg/L	99%	9807-414	1 80-120%
Dibromochloromethane	Standard	20.0	21.6	µg/L	108%	9807-414	1 80-120%
Dibromochloromethane	Standard	40.0	38.8	µg/L	97%	9807-415	1 80-120%

Analysis: THM-ICR (Trihalomethanes (ICR))**Method:** EPA 551.1**QC Batch ID:** 0-182-0

C Batch ID: 0-182-0

									Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Bromodichloromethane	Duplicate	7.2	7.4	µg/L		2.7%	9806-686	1		
Bromodichloromethane	Matrix Spike	40.0	45.5	µg/L	114%		9807-333	1		
Bromodichloromethane	Method Blank		ND*	µg/L			9807-466	1		
Bromodichloromethane	Secondary Source Std	20.0	22.1	µg/L	111%		9807-467	1	70-130%	
Bromodichloromethane	Standard	20.0	20.7	µg/L	103%		9807-468	1	80-120%	
Bromodichloromethane	Standard	20.0	20.4	µg/L	102%		9807-468	1	80-120%	
Bromodichloromethane	Standard	40.0	36.4	µg/L	91%		9807-469	1	80-120%	
Bromoform	Duplicate	ND	ND	µg/L		NA	9806-686	1		
Bromoform	Matrix Spike	40.0	39.3	µg/L	98%		9807-333	1		
Bromoform	Method Blank		ND*	µg/L			9807-466	1		
Bromoform	Secondary Source Std	20.0	18.9	µg/L	94%		9807-467	1	70-130%	
Bromoform	Standard	20.0	18.3	µg/L	92%		9807-468	1	80-120%	
Bromoform	Standard	20.0	16.9	µg/L	84%		9807-468	1	80-120%	
Bromoform	Standard	40.0	38.0	µg/L	95%		9807-469	1	80-120%	
Chloroform	Duplicate	11.1	11.5	µg/L		3.5%	9806-686	1		

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable); RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2

Chloroform	Matrix Spike	40.0	44.4 µg/L	111%	9807-333	1
Chloroform	Method Blank		ND* µg/L		9807-466	1
Chloroform	Secondary Source Std	20.0	22.1 µg/L	111%	9807-467	1 70-130%
Chloroform	Standard	20.0	20.4 µg/L	102%	9807-468	1 80-120%
Chloroform	Standard	20.0	20.1 µg/L	101%	9807-468	1 80-120%
Chloroform	Standard	40.0	36.2 µg/L	91%	9807-469	1 80-120%
Dibromochloromethane	Duplicate	2.7	2.7 µg/L	0.0%	9806-686	1
Dibromochloromethane	Matrix Spike	40.0	45.8 µg/L	115%	9807-333	1
Dibromochloromethane	Method Blank		ND* µg/L		9807-466	1
Dibromochloromethane	Secondary Source Std	20.0	21.5 µg/L	108%	9807-467	1 70-130%
Dibromochloromethane	Standard	20.0	20.8 µg/L	104%	9807-468	1 80-120%
Dibromochloromethane	Standard	20.0	20.3 µg/L	102%	9807-468	1 80-120%
Dibromochloromethane	Standard	40.0	37.7 µg/L	94%	9807-469	1 80-120%

Analysis: HAA-ICR (Haloacetic Acids)**Method:** EPA 552.2**QC Batch ID:** 0-164-0

								Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL Range	RPD
Bromochloroacetic acid	Duplicate	1.1	1.0	µg/L		9.5%	9806-491	1	
Bromochloroacetic acid	Matrix Spike	40.0	33.2	µg/L	83%		9806-515	1	
Bromochloroacetic acid	Method Blank		ND*	µg/L			9807-103	1	
Bromochloroacetic acid	Secondary Source Std	20.0	18.5	µg/L	93%		9807-104	1 70-130%	
Bromochloroacetic acid	Standard	20.0	18.8	µg/L	94%		9807-105	1 80-120%	
Bromochloroacetic acid	Standard	20.0	18.8	µg/L	94%		9807-105	1 80-120%	
Bromochloroacetic acid	Standard	40.0	40.5	µg/L	101%		9807-106	1 80-120%	
Bromodichloroacetic acid	Duplicate	ND	ND	µg/L		NA	9806-491	1	
Bromodichloroacetic acid	Matrix Spike	40.0	35.4	µg/L	89%		9806-515	1	
Bromodichloroacetic acid	Method Blank		ND*	µg/L			9807-103	1	
Bromodichloroacetic acid	Secondary Source Std		ND	µg/L			9807-104	1 70-130%	
Bromodichloroacetic acid	Standard	20.0	17.0	µg/L	85%		9807-105	1 80-120%	
Bromodichloroacetic acid	Standard	20.0	17.2	µg/L	86%		9807-105	1 80-120%	
Bromodichloroacetic acid	Standard	40.0	42.0	µg/L	105%		9807-106	1 80-120%	
Chlorodibromoacetic acid	Duplicate	ND	ND	µg/L		NA	9806-491	2	
Chlorodibromoacetic acid	Matrix Spike	40.0	35.3	µg/L	88%		9806-515	2	

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2

Chlorodibromoacetic acid	Method Blank		ND*	µg/L		9807-103	2
Chlorodibromoacetic acid	Secondary Source Std		ND	µg/L		9807-104	2 70-130%
Chlorodibromoacetic acid	Standard	20.0	16.2	µg/L	81%	9807-105	2 80-120%
Chlorodibromoacetic acid	Standard	20.0	16.9	µg/L	84%	9807-105	2 80-120%
Chlorodibromoacetic acid	Standard	40.0	42.1	µg/L	105%	9807-106	2 80-120%
Dibromoacetic acid	Duplicate	3.5	3.4	µg/L	2.9%	9806-491	1
Dibromoacetic acid	Matrix Spike	40.0	32.0	µg/L	80%	9806-515	1
Dibromoacetic acid	Method Blank		ND*	µg/L		9807-103	1
Dibromoacetic acid	Secondary Source Std	20.0	19.0	µg/L	95%	9807-104	1 70-130%
Dibromoacetic acid	Standard	20.0	18.3	µg/L	92%	9807-105	1 80-120%
Dibromoacetic acid	Standard	20.0	18.5	µg/L	93%	9807-105	1 80-120%
Dibromoacetic acid	Standard	40.0	41.2	µg/L	103%	9807-106	1 80-120%
Dichloroacetic acid	Duplicate	ND	ND	µg/L	NA	9806-491	1
Dichloroacetic acid	Matrix Spike	40.0	36.7	µg/L	92%	9806-515	1
Dichloroacetic acid	Method Blank		ND*	µg/L		9807-103	1
Dichloroacetic acid	Secondary Source Std	20.0	19.3	µg/L	97%	9807-104	1 70-130%
Dichloroacetic acid	Standard	20.0	19.1	µg/L	96%	9807-105	1 80-120%
Dichloroacetic acid	Standard	20.0	18.8	µg/L	94%	9807-105	1 80-120%
Dichloroacetic acid	Standard	40.0	39.1	µg/L	98%	9807-106	1 80-120%
Monobromoacetic acid	Duplicate	ND	ND	µg/L	NA	9806-491	1
Monobromoacetic acid	Matrix Spike	40.0	43.8	µg/L	110%	9806-515	1
Monobromoacetic acid	Method Blank		ND*	µg/L		9807-103	1
Monobromoacetic acid	Secondary Source Std	20.0	18.5	µg/L	93%	9807-104	1 70-130%
Monobromoacetic acid	Standard	20.0	19.4	µg/L	97%	9807-105	1 80-120%
Monobromoacetic acid	Standard	20.0	19.4	µg/L	97%	9807-105	1 80-120%
Monobromoacetic acid	Standard	40.0	39.4	µg/L	98%	9807-106	1 80-120%
Monochloroacetic acid	Duplicate	ND	ND	µg/L	NA	9806-491	2
Monochloroacetic acid	Matrix Spike	40.0	42.2	µg/L	106%	9806-515	2
Monochloroacetic acid	Method Blank		ND*	µg/L		9807-103	2
Monochloroacetic acid	Secondary Source Std	20.0	18.1	µg/L	91%	9807-104	2 70-130%
Monochloroacetic acid	Standard	20.0	20.3	µg/L	102%	9807-105	2 80-120%
Monochloroacetic acid	Standard	20.0	20.3	µg/L	102%	9807-105	2 80-120%

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2

Monochloroacetic acid	Standard	40.0	40.1 µg/L	100%	9807-106	2 80-120%
Tribromoacetic acid	Duplicate	ND	ND µg/L	NA	9806-491	4
Tribromoacetic acid	Matrix Spike	40.0	39.2 µg/L	98%	9806-515	4
Tribromoacetic acid	Method Blank		ND* µg/L		9807-103	4
Tribromoacetic acid	Secondary Source Std		ND µg/L		9807-104	4 70-130%
Tribromoacetic acid	Standard	20.0	17.5 µg/L	88%	9807-105	4 80-120%
Tribromoacetic acid	Standard	20.0	16.3 µg/L	82%	9807-105	4 80-120%
Tribromoacetic acid	Standard	40.0	43.6 µg/L	109%	9807-106	4 80-120%
Trichloroacetic acid	Duplicate	ND	ND µg/L	NA	9806-491	1
Trichloroacetic acid	Matrix Spike	40.0	32.4 µg/L	81%	9806-515	1
Trichloroacetic acid	Method Blank		ND* µg/L		9807-103	1
Trichloroacetic acid	Secondary Source Std	20.0	17.7 µg/L	89%	9807-104	1 70-130%
Trichloroacetic acid	Standard	20.0	17.5 µg/L	88%	9807-105	1 80-120%
Trichloroacetic acid	Standard	20.0	17.5 µg/L	88%	9807-105	1 80-120%
Trichloroacetic acid	Standard	40.0	41.2 µg/L	103%	9807-106	1 80-120%

Analysis: HAA-ICR (Haloacetic Acids)**Method:** EPA 552.2**QC Batch ID:** 0-170-0

								Acceptance Criteria		
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Bromochloroacetic acid	Duplicate	1.3	1.2	µg/L		8.0%	9806-648	1		
Bromochloroacetic acid	Matrix Spike	20.0	23.6	µg/L	118%		9806-664	1		
Bromochloroacetic acid	Method Blank		ND*	µg/L			9807-188	1		
Bromochloroacetic acid	Secondary Source Std	20.0	18.2	µg/L	91%		9807-189	1	70-130%	
Bromochloroacetic acid	Standard	20.0	19.6	µg/L	98%		9807-190	1	80-120%	
Bromochloroacetic acid	Standard	20.0	19.7	µg/L	98%		9807-190	1	80-120%	
Bromochloroacetic acid	Standard	40.0	39.6	µg/L	99%		9807-191	1	80-120%	
Bromodichloroacetic acid	Duplicate	1.1	1.1	µg/L		0.0%	9806-648	1		
Bromodichloroacetic acid	Matrix Spike	20.0	17.3	µg/L	86%		9806-664	1		
Bromodichloroacetic acid	Method Blank		ND*	µg/L			9807-188	1		
Bromodichloroacetic acid	Secondary Source Std		ND	µg/L			9807-189	1	70-130%	
Bromodichloroacetic acid	Standard	20.0	19.0	µg/L	95%		9807-190	1	80-120%	
Bromodichloroacetic acid	Standard	20.0	18.5	µg/L	93%		9807-190	1	80-120%	
Bromodichloroacetic acid	Standard	40.0	39.9	µg/L	100%		9807-191	1	80-120%	

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable); RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2

Chlorodibromoacetic acid	Duplicate	ND	ND	µg/L	NA	9806-648	2
Chlorodibromoacetic acid	Matrix Spike	20.0	15.1	µg/L	76%	9806-664	2
Chlorodibromoacetic acid	Method Blank		ND*	µg/L		9807-188	2
Chlorodibromoacetic acid	Secondary Source Std		ND	µg/L		9807-189	2 70-130%
Chlorodibromoacetic acid	Standard	20.0	19.1	µg/L	96%	9807-190	2 80-120%
Chlorodibromoacetic acid	Standard	20.0	18.6	µg/L	93%	9807-190	2 80-120%
Chlorodibromoacetic acid	Standard	40.0	39.8	µg/L	99%	9807-191	2 80-120%
Dibromoacetic acid	Duplicate	ND	ND	µg/L	NA	9806-648	1
Dibromoacetic acid	Matrix Spike	20.0	22.8	µg/L	114%	9806-664	1
Dibromoacetic acid	Method Blank		ND*	µg/L		9807-188	1
Dibromoacetic acid	Secondary Source Std	20.0	17.8	µg/L	89%	9807-189	1 70-130%
Dibromoacetic acid	Standard	20.0	19.6	µg/L	98%	9807-190	1 80-120%
Dibromoacetic acid	Standard	20.0	19.7	µg/L	98%	9807-190	1 80-120%
Dibromoacetic acid	Standard	40.0	39.8	µg/L	99%	9807-191	1 80-120%
Dichloroacetic acid	Duplicate	1.3	1.1	µg/L	16.7%	9806-648	1
Dichloroacetic acid	Matrix Spike	20.0	22.0	µg/L	110%	9806-664	1
Dichloroacetic acid	Method Blank		ND*	µg/L		9807-188	1
Dichloroacetic acid	Secondary Source Std	20.0	19.9	µg/L	99%	9807-189	1 70-130%
Dichloroacetic acid	Standard	20.0	19.8	µg/L	99%	9807-190	1 80-120%
Dichloroacetic acid	Standard	20.0	19.7	µg/L	98%	9807-190	1 80-120%
Dichloroacetic acid	Standard	40.0	38.4	µg/L	96%	9807-191	1 80-120%
Monobromoacetic acid	Duplicate	ND	ND	µg/L	NA	9806-648	1
Monobromoacetic acid	Matrix Spike	20.0	23.2	µg/L	116%	9806-664	1
Monobromoacetic acid	Method Blank		ND*	µg/L		9807-188	1
Monobromoacetic acid	Secondary Source Std	20.0	20.9	µg/L	104%	9807-189	1 70-130%
Monobromoacetic acid	Standard	20.0	20.2	µg/L	101%	9807-190	1 80-120%
Monobromoacetic acid	Standard	20.0	20.1	µg/L	101%	9807-190	1 80-120%
Monobromoacetic acid	Standard	40.0	39.0	µg/L	97%	9807-191	1 80-120%
Monochloroacetic acid	Duplicate	ND	ND	µg/L	NA	9806-648	2
Monochloroacetic acid	Matrix Spike	20.0	18.3	µg/L	92%	9806-664	2
Monochloroacetic acid	Method Blank		ND*	µg/L		9807-188	2
Monochloroacetic acid	Secondary Source Std	20.0	20.6	µg/L	103%	9807-189	2 70-130%

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2

Monochloroacetic acid	Standard	20.0	20.7 µg/L	103%	9807-190	2 80-120%
Monochloroacetic acid	Standard	20.0	22.7 µg/L	114%	9807-190	2 80-120%
Monochloroacetic acid	Standard	40.0	38.1 µg/L	95%	9807-191	2 80-120%
Tribromoacetic acid	Duplicate	ND	ND µg/L	NA	9806-648	4
Tribromoacetic acid	Matrix Spike	20.0	15.1 µg/L	76%	9806-664	4
Tribromoacetic acid	Method Blank		ND* µg/L		9807-188	4
Tribromoacetic acid	Secondary Source Std		ND µg/L		9807-189	4 70-130%
Tribromoacetic acid	Standard	20.0	19.8 µg/L	99%	9807-190	4 80-120%
Tribromoacetic acid	Standard	20.0	18.8 µg/L	94%	9807-190	4 80-120%
Tribromoacetic acid	Standard	40.0	38.7 µg/L	97%	9807-191	4 80-120%
Trichloroacetic acid	Duplicate	ND	ND µg/L	NA	9806-648	1
Trichloroacetic acid	Matrix Spike	20.0	20.4 µg/L	102%	9806-664	1
Trichloroacetic acid	Method Blank		ND* µg/L		9807-188	1
Trichloroacetic acid	Secondary Source Std	20.0	16.2 µg/L	81%	9807-189	1 70-130%
Trichloroacetic acid	Standard	20.0	19.6 µg/L	98%	9807-190	1 80-120%
Trichloroacetic acid	Standard	20.0	19.7 µg/L	98%	9807-190	1 80-120%
Trichloroacetic acid	Standard	40.0	39.5 µg/L	99%	9807-191	1 80-120%

Analysis: HAA-ICR (Haloacetic Acids)**Method:** EPA 552.2**QC Batch ID:** 0-171-0

								Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL Range	RPD
Bromochloroacetic acid	Duplicate	1.0	1.0	µg/L		0.0%	9806-688	1	
Bromochloroacetic acid	Matrix Spike	40.0	39.0	µg/L	97%		9806-808	1	
Bromochloroacetic acid	Method Blank		ND*	µg/L			9807-209	1	
Bromochloroacetic acid	Secondary Source Std	20.0	19.7	µg/L	98%		9807-210	1 70-130%	
Bromochloroacetic acid	Standard	20.0	18.6	µg/L	93%		9807-211	1 80-120%	
Bromochloroacetic acid	Standard	20.0	18.7	µg/L	93%		9807-211	1 80-120%	
Bromochloroacetic acid	Standard	40.0	41.0	µg/L	102%		9807-212	1 80-120%	
Bromodichloroacetic acid	Duplicate	1.0	1.1	µg/L		9.5%	9806-688	1	
Bromodichloroacetic acid	Matrix Spike	40.0	41.9	µg/L	105%		9806-808	1	
Bromodichloroacetic acid	Method Blank		ND*	µg/L			9807-209	1	
Bromodichloroacetic acid	Secondary Source Std		ND	µg/L			9807-210	1 70-130%	
Bromodichloroacetic acid	Standard	20.0	18.1	µg/L	91%		9807-211	1 80-120%	

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable); RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2

Bromodichloroacetic acid	Standard	20.0	18.6 µg/L	93%	9807-211	1 80-120%
Bromodichloroacetic acid	Standard	40.0	42.5 µg/L	106%	9807-212	1 80-120%
Chlorodibromoacetic acid	Duplicate	ND	ND µg/L	NA	9806-688	2
Chlorodibromoacetic acid	Matrix Spike	40.0	42.5 µg/L	106%	9806-808	2
Chlorodibromoacetic acid	Method Blank		ND* µg/L		9807-209	2
Chlorodibromoacetic acid	Secondary Source Std		ND µg/L		9807-210	2 70-130%
Chlorodibromoacetic acid	Standard	20.0	18.1 µg/L	91%	9807-211	2 80-120%
Chlorodibromoacetic acid	Standard	20.0	19.2 µg/L	96%	9807-211	2 80-120%
Chlorodibromoacetic acid	Standard	40.0	43.0 µg/L	108%	9807-212	2 80-120%
Dibromoacetic acid	Duplicate	ND	ND µg/L	NA	9806-688	1
Dibromoacetic acid	Matrix Spike	40.0	38.4 µg/L	96%	9806-808	1
Dibromoacetic acid	Method Blank		ND* µg/L		9807-209	1
Dibromoacetic acid	Secondary Source Std	20.0	20.8 µg/L	104%	9807-210	1 70-130%
Dibromoacetic acid	Standard	20.0	18.4 µg/L	92%	9807-211	1 80-120%
Dibromoacetic acid	Standard	20.0	18.6 µg/L	93%	9807-211	1 80-120%
Dibromoacetic acid	Standard	40.0	41.3 µg/L	103%	9807-212	1 80-120%
Dichloroacetic acid	Duplicate	ND	ND µg/L	NA	9806-688	1
Dichloroacetic acid	Matrix Spike	40.0	38.8 µg/L	97%	9806-808	1
Dichloroacetic acid	Method Blank		ND* µg/L		9807-209	1
Dichloroacetic acid	Secondary Source Std	20.0	20.2 µg/L	101%	9807-210	1 70-130%
Dichloroacetic acid	Standard	20.0	19.2 µg/L	96%	9807-211	1 80-120%
Dichloroacetic acid	Standard	20.0	19.0 µg/L	95%	9807-211	1 80-120%
Dichloroacetic acid	Standard	40.0	40.7 µg/L	102%	9807-212	1 80-120%
Monobromoacetic acid	Duplicate	ND	ND µg/L	NA	9806-688	1
Monobromoacetic acid	Matrix Spike	40.0	41.3 µg/L	103%	9806-808	1
Monobromoacetic acid	Method Blank		ND* µg/L		9807-209	1
Monobromoacetic acid	Secondary Source Std	20.0	18.7 µg/L	93%	9807-210	1 70-130%
Monobromoacetic acid	Standard	20.0	20.1 µg/L	101%	9807-211	1 80-120%
Monobromoacetic acid	Standard	20.0	20.1 µg/L	101%	9807-211	1 80-120%
Monobromoacetic acid	Standard	40.0	39.3 µg/L	98%	9807-212	1 80-120%
Monochloroacetic acid	Duplicate	ND	ND µg/L	NA	9806-688	2
Monochloroacetic acid	Matrix Spike	40.0	43.7 µg/L	109%	9806-808	2
Monochloroacetic acid	Method Blank		ND* µg/L		9807-209	2

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2

Monochloroacetic acid	Secondary Source Std	20.0	20.2 µg/L	101%	9807-210	2	70-130%
Monochloroacetic acid	Standard	20.0	21.3 µg/L	106%	9807-211	2	80-120%
Monochloroacetic acid	Standard	20.0	21.0 µg/L	105%	9807-211	2	80-120%
Monochloroacetic acid	Standard	40.0	41.0 µg/L	102%	9807-212	2	80-120%
Tribromoacetic acid	Duplicate	ND	ND µg/L	NA	9806-688	4	
Tribromoacetic acid	Matrix Spike	40.0	44.2 µg/L	111%	9806-808	4	
Tribromoacetic acid	Method Blank		ND* µg/L		9807-209	4	
Tribromoacetic acid	Secondary Source Std		ND µg/L		9807-210	4	70-130%
Tribromoacetic acid	Standard	20.0	18.2 µg/L	91%	9807-211	4	80-120%
Tribromoacetic acid	Standard	20.0	19.5 µg/L	97%	9807-211	4	80-120%
Tribromoacetic acid	Standard	40.0	42.4 µg/L	106%	9807-212	4	80-120%
Trichloroacetic acid	Duplicate	ND	ND µg/L	NA	9806-688	1	
Trichloroacetic acid	Matrix Spike	40.0	37.6 µg/L	94%	9806-808	1	
Trichloroacetic acid	Method Blank		ND* µg/L		9807-209	1	
Trichloroacetic acid	Secondary Source Std	20.0	20.0 µg/L	100%	9807-210	1	70-130%
Trichloroacetic acid	Standard	20.0	18.1 µg/L	91%	9807-211	1	80-120%
Trichloroacetic acid	Standard	20.0	18.2 µg/L	91%	9807-211	1	80-120%
Trichloroacetic acid	Standard	40.0	41.3 µg/L	103%	9807-212	1	80-120%

Analysis: HAA-ICR (Haloacetic Acids)**Method:** EPA 552.2**QC Batch ID:** 0-176-0

									Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Bromochloroacetic acid	Duplicate	ND	ND	µg/L		NA	9807-18	1		
Bromochloroacetic acid	Matrix Spike	40.0	38.0	µg/L	95%		9806-593	1		
Bromochloroacetic acid	Method Blank		ND*	µg/L			9807-235	1		
Bromochloroacetic acid	Secondary Source Std	20.0	18.4	µg/L	92%		9807-236	1	70-130%	
Bromochloroacetic acid	Standard	20.0	19.1	µg/L	96%		9807-237	1	80-120%	
Bromochloroacetic acid	Standard	20.0	19.4	µg/L	97%		9807-237	1	80-120%	
Bromochloroacetic acid	Standard	40.0	40.4	µg/L	101%		9807-238	1	80-120%	
Bromodichloroacetic acid	Duplicate	ND	ND	µg/L		NA	9807-18	1		
Bromodichloroacetic acid	Matrix Spike	40.0	39.8	µg/L	99%		9806-593	1		
Bromodichloroacetic acid	Method Blank		ND*	µg/L			9807-235	1		
Bromodichloroacetic acid	Secondary Source Std		ND	µg/L			9807-236	1	70-130%	

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2

Bromodichloroacetic acid	Standard	20.0	18.5 µg/L	93%	9807-237	1 80-120%
Bromodichloroacetic acid	Standard	20.0	18.2 µg/L	91%	9807-237	1 80-120%
Bromodichloroacetic acid	Standard	40.0	41.4 µg/L	103%	9807-238	1 80-120%
Chlorodibromoacetic acid	Duplicate	ND	ND µg/L	NA	9807-18	2
Chlorodibromoacetic acid	Matrix Spike	40.0	37.7 µg/L	94%	9806-593	2
Chlorodibromoacetic acid	Method Blank		ND* µg/L		9807-235	2
Chlorodibromoacetic acid	Secondary Source Std		ND µg/L		9807-236	2 70-130%
Chlorodibromoacetic acid	Standard	20.0	18.1 µg/L	91%	9807-237	2 80-120%
Chlorodibromoacetic acid	Standard	20.0	17.8 µg/L	89%	9807-237	2 80-120%
Chlorodibromoacetic acid	Standard	40.0	41.7 µg/L	104%	9807-238	2 80-120%
Dibromoacetic acid	Duplicate	3.1	2.6 µg/L	17.5%	9807-18	1
Dibromoacetic acid	Matrix Spike	40.0	38.6 µg/L	97%	9806-593	1
Dibromoacetic acid	Method Blank		ND* µg/L		9807-235	1
Dibromoacetic acid	Secondary Source Std	20.0	18.9 µg/L	94%	9807-236	1 70-130%
Dibromoacetic acid	Standard	20.0	19.2 µg/L	96%	9807-237	1 80-120%
Dibromoacetic acid	Standard	20.0	19.3 µg/L	97%	9807-237	1 80-120%
Dibromoacetic acid	Standard	40.0	41.0 µg/L	102%	9807-238	1 80-120%
Dichloroacetic acid	Duplicate	1.7	1.4 µg/L	19.4%	9807-18	1
Dichloroacetic acid	Matrix Spike	40.0	39.0 µg/L	97%	9806-593	1
Dichloroacetic acid	Method Blank		ND* µg/L		9807-235	1
Dichloroacetic acid	Secondary Source Std	20.0	18.7 µg/L	93%	9807-236	1 70-130%
Dichloroacetic acid	Standard	20.0	18.8 µg/L	94%	9807-237	1 80-120%
Dichloroacetic acid	Standard	20.0	19.7 µg/L	98%	9807-237	1 80-120%
Dichloroacetic acid	Standard	40.0	39.6 µg/L	99%	9807-238	1 80-120%
Monobromoacetic acid	Duplicate	ND	ND µg/L	NA	9807-18	1
Monobromoacetic acid	Matrix Spike	40.0	40.5 µg/L	101%	9806-593	1
Monobromoacetic acid	Method Blank		ND* µg/L		9807-235	1
Monobromoacetic acid	Secondary Source Std	20.0	18.9 µg/L	94%	9807-236	1 70-130%
Monobromoacetic acid	Standard	20.0	19.6 µg/L	98%	9807-237	1 80-120%
Monobromoacetic acid	Standard	20.0	19.9 µg/L	99%	9807-237	1 80-120%
Monobromoacetic acid	Standard	40.0	39.9 µg/L	100%	9807-238	1 80-120%
Monochloroacetic acid	Duplicate	ND	ND µg/L	NA	9807-18	2
Monochloroacetic acid	Matrix Spike	40.0	37.7 µg/L	94%	9806-593	2

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2

Monochloroacetic acid	Method Blank		ND*	µg/L		9807-235	2
Monochloroacetic acid	Secondary Source Std	20.0	18.6	µg/L	93%	9807-236	2 70-130%
Monochloroacetic acid	Standard	20.0	19.7	µg/L	98%	9807-237	2 80-120%
Monochloroacetic acid	Standard	20.0	18.7	µg/L	93%	9807-237	2 80-120%
Monochloroacetic acid	Standard	40.0	40.0	µg/L	100%	9807-238	2 80-120%
Tribromoacetic acid	Duplicate	ND	ND	µg/L	NA	9807-18	4
Tribromoacetic acid	Matrix Spike	40.0	36.3	µg/L	91%	9806-593	4
Tribromoacetic acid	Method Blank		ND*	µg/L		9807-235	4
Tribromoacetic acid	Secondary Source Std		ND	µg/L		9807-236	4 70-130%
Tribromoacetic acid	Standard	20.0	18.1	µg/L	91%	9807-237	4 80-120%
Tribromoacetic acid	Standard	20.0	17.8	µg/L	89%	9807-237	4 80-120%
Tribromoacetic acid	Standard	40.0	41.0	µg/L	102%	9807-238	4 80-120%
Trichloroacetic acid	Duplicate	ND	ND	µg/L	NA	9807-18	1
Trichloroacetic acid	Matrix Spike	40.0	38.5	µg/L	96%	9806-593	1
Trichloroacetic acid	Method Blank		ND*	µg/L		9807-235	1
Trichloroacetic acid	Secondary Source Std	20.0	17.8	µg/L	89%	9807-236	1 70-130%
Trichloroacetic acid	Standard	20.0	18.5	µg/L	93%	9807-237	1 80-120%
Trichloroacetic acid	Standard	20.0	18.7	µg/L	93%	9807-237	1 80-120%
Trichloroacetic acid	Standard	40.0	40.5	µg/L	101%	9807-238	1 80-120%

Analysis: HAA-ICR (Haloacetic Acids)**Method:** EPA 552.2**QC Batch ID:** 0-179-0

										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD	
Bromochloroacetic acid	Duplicate	ND	ND	µg/L		NA	9806-574	1			
Bromochloroacetic acid	Matrix Spike	40.0	43.9	µg/L	110%		9807-142	1			
Bromochloroacetic acid	Method Blank		ND*	µg/L			9807-424	1			
Bromochloroacetic acid	Secondary Source Std	20.0	19.0	µg/L	95%		9807-425	1	70-130%		
Bromochloroacetic acid	Standard	20.0	18.5	µg/L	93%		9807-426	1	80-120%		
Bromochloroacetic acid	Standard	20.0	18.2	µg/L	91%		9807-426	1	80-120%		
Bromochloroacetic acid	Standard	40.0	40.0	µg/L	100%		9807-427	1	80-120%		
Bromodichloroacetic acid	Duplicate	ND	ND	µg/L		NA	9806-574	1			
Bromodichloroacetic acid	Matrix Spike	40.0	49.4	µg/L	123%		9807-142	1			
Bromodichloroacetic acid	Method Blank		ND*	µg/L			9807-424	1			

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable); RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2

Bromodichloroacetic acid	Secondary Source Std		ND	µg/L		9807-425	1	70-130%
Bromodichloroacetic acid	Standard	20.0	18.0	µg/L	90%	9807-426	1	80-120%
Bromodichloroacetic acid	Standard	20.0	17.5	µg/L	88%	9807-426	1	80-120%
Bromodichloroacetic acid	Standard	40.0	42.0	µg/L	105%	9807-427	1	80-120%
Chlorodibromoacetic acid	Duplicate	ND	ND	µg/L	NA	9806-574	2	
Chlorodibromoacetic acid	Matrix Spike	40.0	46.9	µg/L	117%	9807-142	2	
Chlorodibromoacetic acid	Method Blank		ND*	µg/L		9807-424	2	
Chlorodibromoacetic acid	Secondary Source Std		ND	µg/L		9807-425	2	70-130%
Chlorodibromoacetic acid	Standard	20.0	17.7	µg/L	89%	9807-426	2	80-120%
Chlorodibromoacetic acid	Standard	20.0	17.3	µg/L	86%	9807-426	2	80-120%
Chlorodibromoacetic acid	Standard	40.0	42.8	µg/L	107%	9807-427	2	80-120%
Dibromoacetic acid	Duplicate	4.5	4.3	µg/L	4.5%	9806-574	1	
Dibromoacetic acid	Matrix Spike	40.0	46.8	µg/L	117%	9807-142	1	
Dibromoacetic acid	Method Blank		ND*	µg/L		9807-424	1	
Dibromoacetic acid	Secondary Source Std	20.0	20.4	µg/L	102%	9807-425	1	70-130%
Dibromoacetic acid	Standard	20.0	18.5	µg/L	93%	9807-426	1	80-120%
Dibromoacetic acid	Standard	20.0	18.5	µg/L	93%	9807-426	1	80-120%
Dibromoacetic acid	Standard	40.0	40.9	µg/L	102%	9807-427	1	80-120%
Dichloroacetic acid	Duplicate	ND	ND	µg/L	NA	9806-574	1	
Dichloroacetic acid	Matrix Spike	40.0	40.7	µg/L	102%	9807-142	1	
Dichloroacetic acid	Method Blank		ND*	µg/L		9807-424	1	
Dichloroacetic acid	Secondary Source Std	20.0	19.1	µg/L	96%	9807-425	1	70-130%
Dichloroacetic acid	Standard	20.0	19.0	µg/L	95%	9807-426	1	80-120%
Dichloroacetic acid	Standard	20.0	17.6	µg/L	88%	9807-426	1	80-120%
Dichloroacetic acid	Standard	40.0	38.8	µg/L	97%	9807-427	1	80-120%
Monobromoacetic acid	Duplicate	ND	ND	µg/L	NA	9806-574	1	
Monobromoacetic acid	Matrix Spike	40.0	37.8	µg/L	94%	9807-142	1	
Monobromoacetic acid	Method Blank		ND*	µg/L		9807-424	1	
Monobromoacetic acid	Secondary Source Std	20.0	17.3	µg/L	86%	9807-425	1	70-130%
Monobromoacetic acid	Standard	20.0	19.4	µg/L	97%	9807-426	1	80-120%
Monobromoacetic acid	Standard	20.0	19.6	µg/L	98%	9807-426	1	80-120%
Monobromoacetic acid	Standard	40.0	39.6	µg/L	99%	9807-427	1	80-120%

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2

Monochloroacetic acid	Duplicate	ND	ND	µg/L	NA	9806-574	2
Monochloroacetic acid	Matrix Spike	40.0	37.0	µg/L	93%	9807-142	2
Monochloroacetic acid	Method Blank		ND*	µg/L		9807-424	2
Monochloroacetic acid	Secondary Source Std	20.0	18.2	µg/L	91%	9807-425	2 70-130%
Monochloroacetic acid	Standard	20.0	18.9	µg/L	94%	9807-426	2 80-120%
Monochloroacetic acid	Standard	20.0	18.6	µg/L	93%	9807-426	2 80-120%
Monochloroacetic acid	Standard	40.0	38.4	µg/L	96%	9807-427	2 80-120%
Tribromoacetic acid	Duplicate	ND	ND	µg/L	NA	9806-574	4
Tribromoacetic acid	Matrix Spike	40.0	47.8	µg/L	119%	9807-142	4
Tribromoacetic acid	Method Blank		ND*	µg/L		9807-424	4
Tribromoacetic acid	Secondary Source Std		ND	µg/L		9807-425	4 70-130%
Tribromoacetic acid	Standard	20.0	18.0	µg/L	90%	9807-426	4 80-120%
Tribromoacetic acid	Standard	20.0	17.2	µg/L	86%	9807-426	4 80-120%
Tribromoacetic acid	Standard	40.0	43.1	µg/L	108%	9807-427	4 80-120%
Trichloroacetic acid	Duplicate	ND	ND	µg/L	NA	9806-574	1
Trichloroacetic acid	Matrix Spike	40.0	48.4	µg/L	121%	9807-142	1
Trichloroacetic acid	Method Blank		ND*	µg/L		9807-424	1
Trichloroacetic acid	Secondary Source Std	20.0	19.4	µg/L	97%	9807-425	1 70-130%
Trichloroacetic acid	Standard	20.0	17.9	µg/L	89%	9807-426	1 80-120%
Trichloroacetic acid	Standard	20.0	17.0	µg/L	85%	9807-426	1 80-120%
Trichloroacetic acid	Standard	40.0	39.6	µg/L	99%	9807-427	1 80-120%

Analysis: HAA-ICR (Haloacetic Acids)**Method:** EPA 552.2**QC Batch ID:** 0-181-0

								Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range RPD
Bromochloroacetic acid	Duplicate	2.0	2.0	µg/L		0.0%	9806-685	1	
Bromochloroacetic acid	Matrix Spike	40.0	40.4	µg/L	101%		9807-402	1	
Bromochloroacetic acid	Method Blank		ND*	µg/L			9807-447	1	
Bromochloroacetic acid	Secondary Source Std	20.0	17.7	µg/L	89%		9807-448	1	70-130%
Bromochloroacetic acid	Standard	20.0	18.8	µg/L	94%		9807-449	1	80-120%
Bromochloroacetic acid	Standard	20.0	18.9	µg/L	94%		9807-449	1	80-120%
Bromochloroacetic acid	Standard	20.0	18.9	µg/L	94%		9807-449	1	80-120%
Bromochloroacetic acid	Standard	40.0	40.8	µg/L	102%		9807-450	1	80-120%

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable); RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2

Bromochloroacetic acid	Standard	40.0	42.6 µg/L	106%	9807-450	1	80-120%
Bromodichloroacetic acid	Duplicate	2.0	2.2 µg/L	9.5%	9806-685	1	
Bromodichloroacetic acid	Matrix Spike	40.0	44.0 µg/L	110%	9807-402	1	
Bromodichloroacetic acid	Method Blank		ND* µg/L		9807-447	1	
Bromodichloroacetic acid	Secondary Source Std		ND µg/L		9807-448	1	70-130%
Bromodichloroacetic acid	Standard	20.0	18.2 µg/L	91%	9807-449	1	80-120%
Bromodichloroacetic acid	Standard	20.0	19.1 µg/L	96%	9807-449	1	80-120%
Bromodichloroacetic acid	Standard	20.0	18.3 µg/L	92%	9807-449	1	80-120%
Bromodichloroacetic acid	Standard	40.0	43.2 µg/L	108%	9807-450	1	80-120%
Bromodichloroacetic acid	Standard	40.0	40.4 µg/L	101%	9807-450	1	80-120%
Chlorodibromoacetic acid	Duplicate	ND	ND µg/L	NA	9806-685	2	
Chlorodibromoacetic acid	Matrix Spike	40.0	42.6 µg/L	106%	9807-402	2	
Chlorodibromoacetic acid	Method Blank		ND* µg/L		9807-447	2	
Chlorodibromoacetic acid	Secondary Source Std		ND µg/L		9807-448	2	70-130%
Chlorodibromoacetic acid	Standard	20.0	18.4 µg/L	92%	9807-449	2	80-120%
Chlorodibromoacetic acid	Standard	20.0	19.5 µg/L	97%	9807-449	2	80-120%
Chlorodibromoacetic acid	Standard	20.0	18.8 µg/L	94%	9807-449	2	80-120%
Chlorodibromoacetic acid	Standard	40.0	43.4 µg/L	109%	9807-450	2	80-120%
Chlorodibromoacetic acid	Standard	40.0	40.9 µg/L	102%	9807-450	2	80-120%
Dibromoacetic acid	Duplicate	ND	ND µg/L	NA	9806-685	1	
Dibromoacetic acid	Matrix Spike	40.0	40.5 µg/L	101%	9807-402	1	
Dibromoacetic acid	Method Blank		ND* µg/L		9807-447	1	
Dibromoacetic acid	Secondary Source Std	20.0	18.5 µg/L	93%	9807-448	1	70-130%
Dibromoacetic acid	Standard	20.0	18.3 µg/L	92%	9807-449	1	80-120%
Dibromoacetic acid	Standard	20.0	18.4 µg/L	92%	9807-449	1	80-120%
Dibromoacetic acid	Standard	20.0	18.3 µg/L	92%	9807-449	1	80-120%
Dibromoacetic acid	Standard	40.0	41.0 µg/L	102%	9807-450	1	80-120%
Dibromoacetic acid	Standard	40.0	42.4 µg/L	106%	9807-450	1	80-120%
Dichloroacetic acid	Duplicate	3.8	4.0 µg/L	5.1%	9806-685	1	
Dichloroacetic acid	Matrix Spike	40.0	38.8 µg/L	97%	9807-402	1	
Dichloroacetic acid	Method Blank		ND* µg/L		9807-447	1	
Dichloroacetic acid	Secondary Source Std	20.0	18.2 µg/L	91%	9807-448	1	70-130%
Dichloroacetic acid	Standard	20.0	18.9 µg/L	94%	9807-449	1	80-120%

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

Dichloroacetic acid	Standard	20.0	19.0 µg/L	95%	9807-449	1 80-120%
Dichloroacetic acid	Standard	20.0	19.3 µg/L	97%	9807-449	1 80-120%
Dichloroacetic acid	Standard	40.0	38.9 µg/L	97%	9807-450	1 80-120%
Dichloroacetic acid	Standard	40.0	42.0 µg/L	105%	9807-450	1 80-120%
Monobromoacetic acid	Duplicate	ND	ND µg/L	NA	9806-685	1
Monobromoacetic acid	Matrix Spike	40.0	40.3 µg/L	101%	9807-402	1
Monobromoacetic acid	Method Blank		ND* µg/L		9807-447	1
Monobromoacetic acid	Secondary Source Std	20.0	18.4 µg/L	92%	9807-448	1 70-130%
Monobromoacetic acid	Standard	20.0	19.4 µg/L	97%	9807-449	1 80-120%
Monobromoacetic acid	Standard	20.0	19.4 µg/L	97%	9807-449	1 80-120%
Monobromoacetic acid	Standard	20.0	19.6 µg/L	98%	9807-449	1 80-120%
Monobromoacetic acid	Standard	40.0	39.8 µg/L	99%	9807-450	1 80-120%
Monobromoacetic acid	Standard	40.0	41.6 µg/L	104%	9807-450	1 80-120%
Monochloroacetic acid	Duplicate	ND	ND µg/L	NA	9806-685	2
Monochloroacetic acid	Matrix Spike	40.0	41.9 µg/L	105%	9807-402	2
Monochloroacetic acid	Method Blank		ND* µg/L		9807-447	2
Monochloroacetic acid	Secondary Source Std	20.0	19.9 µg/L	99%	9807-448	2 70-130%
Monochloroacetic acid	Standard	20.0	19.3 µg/L	97%	9807-449	2 80-120%
Monochloroacetic acid	Standard	20.0	19.0 µg/L	95%	9807-449	2 80-120%
Monochloroacetic acid	Standard	20.0	19.4 µg/L	97%	9807-449	2 80-120%
Monochloroacetic acid	Standard	40.0	38.1 µg/L	95%	9807-450	2 80-120%
Monochloroacetic acid	Standard	40.0	40.9 µg/L	102%	9807-450	2 80-120%
Tribromoacetic acid	Duplicate	ND	ND µg/L	NA	9806-685	4
Tribromoacetic acid	Matrix Spike	40.0	41.6 µg/L	104%	9807-402	4
Tribromoacetic acid	Method Blank		ND* µg/L		9807-447	4
Tribromoacetic acid	Secondary Source Std		ND µg/L		9807-448	4 70-130%
Tribromoacetic acid	Standard	20.0	19.1 µg/L	96%	9807-449	4 80-120%
Tribromoacetic acid	Standard	20.0	20.5 µg/L	102%	9807-449	4 80-120%
Tribromoacetic acid	Standard	20.0	20.2 µg/L	101%	9807-449	4 80-120%
Tribromoacetic acid	Standard	40.0	44.0 µg/L	110%	9807-450	4 80-120%
Tribromoacetic acid	Standard	40.0	42.7 µg/L	107%	9807-450	4 80-120%
Trichloroacetic acid	Duplicate	3.2	3.4 µg/L	6.1%	9806-685	1
Trichloroacetic acid	Matrix Spike	40.0	41.5 µg/L	104%	9807-402	1

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable); RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 119
Study Title: ICR RSSCT #2

Trichloroacetic acid	Method Blank		ND*	µg/L		9807-447	1
Trichloroacetic acid	Secondary Source Std	20.0	18.1	µg/L	91%	9807-448	1 70-130%
Trichloroacetic acid	Standard	20.0	17.7	µg/L	89%	9807-449	1 80-120%
Trichloroacetic acid	Standard	20.0	17.9	µg/L	89%	9807-449	1 80-120%
Trichloroacetic acid	Standard	20.0	17.7	µg/L	89%	9807-449	1 80-120%
Trichloroacetic acid	Standard	40.0	41.6	µg/L	104%	9807-450	1 80-120%
Trichloroacetic acid	Standard	40.0	42.7	µg/L	107%	9807-450	1 80-120%

End of quality control report

QC Results from Montgomery Watson Laboratories

Page 1 of 2

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Ms. Sibyl Carley
Jacksonville Electric Authority
Ridenhour Regional Water Treatment Plant
102 Kernan Blvd. North
Jacksonville, FL 32225

Study#: 119
Study Title: ICR RSSCT #2

Phone: 904-665-4503 Fax: 904-665-4531

QC Batch ID: 79765 **Report #:** 44318

Analysis: NH3 **Method:** ML/EPA 350.1

<u>QC</u>	<u>Analyte</u>	<u>Spike</u>	<u>Recovery</u>	<u>Yield</u>	<u>RPD</u>	<u>Acceptance Criteria Range</u>
LCS1	Ammonia Nitrogen	1	0.9	90.0%		(80 - 120)
LCS2	Ammonia Nitrogen	1	0.97	97.0%		(80 - 120)
MS	Ammonia Nitrogen	1	1.17	117.0%		(80 - 120)
MSD	Ammonia Nitrogen	1	1.18	118.0%		(80 - 120)

QC Batch ID: 80235 **Report #:** 44318

Analysis: BR **Method:** ML/EPA 300

<u>QC</u>	<u>Analyte</u>	<u>Spike</u>	<u>Recovery</u>	<u>Yield</u>	<u>RPD</u>	<u>Acceptance Criteria Range</u>
LCS1	Bromide	0.02	0.022	110.0%		(50 - 150)
LCS2	Bromide	0.1	0.107	107.0%		(90 - 110)
MS	Bromide	0.1	0.095	95.0%		(80 - 120)
MSD	Bromide	0.1	0.094	94.0%		(80 - 120)

QC Batch ID: 80410 **Report #:** 44318

Analysis: CA **Method:** EPA/ML 200.7

<u>QC</u>	<u>Analyte</u>	<u>Spike</u>	<u>Recovery</u>	<u>Yield</u>	<u>RPD</u>	<u>Acceptance Criteria Range</u>
LCS1	Calcium, Total, ICAP	50	52.6	105.0%		(90 - 110)
LCS2	Calcium, Total, ICAP	50	52.6	105.0%		(90 - 110)
MS	Calcium, Total, ICAP	50	47.5	95.0%		(80 - 120)

QC Batch ID: 80413 **Report #:** 44318

Analysis: MG **Method:** ML/EPA 200.7

<u>QC</u>	<u>Analyte</u>	<u>Spike</u>	<u>Recovery</u>	<u>Yield</u>	<u>RPD</u>	<u>Acceptance Criteria Range</u>
LCS1	Magnesium, Total, ICAP	20	20.9	104.0%		(85 - 115)
LCS2	Magnesium, Total, ICAP	20	21	105.0%		(85 - 115)
MS	Magnesium, Total, ICAP	20	19.5	98.0%		(70 - 130)

QC Batch ID: 80526 **Report #:** 44848
44849

Analysis: NH3 **Method:** ML/EPA 350.1

<u>QC</u>	<u>Analyte</u>	<u>Spike</u>	<u>Recovery</u>	<u>Yield</u>	<u>RPD</u>	<u>Acceptance Criteria Range</u>
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ND (non-detect): Result is below 1/2 minimum reporting level (MRL).

QC Results from Montgomery Watson LaboratoriesMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 119
Study Title: ICR RSSCT #2

LCS1	Ammonia Nitrogen	1	1.05	105.0%	(80 - 120)
LCS2	Ammonia Nitrogen	1	1.05	105.0%	(80 - 120)
MS	Ammonia Nitrogen	1	0.93	93.0%	(80 - 120)
MSD	Ammonia Nitrogen	1	0.83	83.0%	(80 - 120)

QC Batch ID: 80694

Report #: 44849

Analysis: BR

Method: ML/EPA 300

QC	Analyte	Spike	Recovery	Yield	RPD	Acceptance Criteria Range
LCS1	Bromide	0.02	0.02	100.0%		(50 - 150)
LCS2	Bromide	0.1	0.099	99.0%		(90 - 110)
MS	Bromide	0.1	0.107	107.0%		(80 - 120)
MSD	Bromide	0.1	0.108	108.0%		(80 - 120)

QC Batch ID: 81464

Report #: 44848

44849

44850

Analysis: CA

Method: EPA/ML 200.7

QC	Analyte	Spike	Recovery	Yield	RPD	Acceptance Criteria Range
LCS1	Calcium, Total, ICAP	50	48	96.0%		(90 - 110)
LCS2	Calcium, Total, ICAP	50	48.3	97.0%		(90 - 110)
MS	Calcium, Total, ICAP	50	49.7	99.0%		(80 - 120)

QC Batch ID: 81465

Report #: 44848

44849

44850

Analysis: MG

Method: ML/EPA 200.7

QC	Analyte	Spike	Recovery	Yield	RPD	Acceptance Criteria Range
LCS1	Magnesium, Total, ICAP	20	19.7	98.0%		(85 - 115)
LCS2	Magnesium, Total, ICAP	20	20	100.0%		(85 - 115)
MS	Magnesium, Total, ICAP	20	20.7	104.0%		(70 - 130)

End of MW QC report

CommentsPage 1 of 1
Printed on 7/9/99

Ms. Sibyl Carley
Jacksonville Electric Authority
Ridenhour Regional Water Treatment Plant
102 Kernan Blvd. North
Jacksonville, FL 32225

Phone: 904-665-4503 Fax: 904-665-4531

Study#: 119
Study Title: ICR RSSCT #2

Analysis comments**Analysis:** Turbidity**Method:** SM 2130 B

Reported turbidity data has been rounded following the requirements of SM 2130 B, reproduced in the table below (Standard Methods, 1995). Note that the reported digits are not necessarily significant.

Turbidity Range	Report to Nearest
0-1.0	0.05
1-10	0.1
10-40	1
40-100	5
100-400	10
400-1000	50
> 1000	100

End of comments

Laboratory Report

Client:

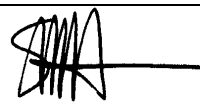
Ms. Sibyl Carley
Jacksonville Electric Authority
Water and Wastewater Treatment
102 Kernan Blvd. North
Jacksonville FL, 32225

Phone: 904-665-4503 Fax: 904-665-4531

Study Title: ICR RSSCT #3

Study #: 126

Reviewed By: _____



Stuart M. Hooper

Date Reviewed: 7/13/99

Laboratory Test ResultsPage 1 of 56
Printed on 7/9/99Ms. Sibyl Carley
Jacksonville Electric Authority
Ridenhour Regional Water Treatment Plant
102 Kernan Blvd. North
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Phone: 904-665-4503 Fax: 904-665-4531

Study#: 126
Study Title: ICR RSSCT #3

Sample ID: 126.Aerated TOC		S&H ID: 9807-129		Date Sampled: 7/7/98 3:30:00 PM						
#	Analysis Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1	TOC-ICR TOC	1.88	mg/L	SM 5310 C	1	0.50	7/7/98		7/10/98	7-0-333
2	TOC-ICR TOC (Dupl)	1.86	mg/L	SM 5310 C	1	0.50	7/7/98		7/10/98	7-0-333
		1.87	mg/L	1.1 % RPD						

Sample ID: 126.Set.On.Arrival			S&H ID: 9807-193		Date Sampled: 7/9/98 2:00:00 PM						
#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
3	TOC-ICR	TOC	1.86	mg/L	SM 5310 C	1	0.50	7/9/98		7/10/98	7-0-333
4	TOC-ICR	TOC (Dupl)	1.87	mg/L	SM 5310 C	1	0.50	7/9/98		7/10/98	7-0-333
			1.87	mg/L	0.5 % RPD						

Sample ID: 126.Filtered			S&H ID: 9807-195		Date Sampled: 7/10/98 10:55:00 AM						
#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
5	TOC-ICR	TOC	1.82	mg/L	SM 5310 C	1	0.50	7/10/98		7/10/98	7-0-333
6	TOC-ICR	TOC (Dupl)	1.86	mg/L	SM 5310 C	1	0.50	7/10/98		7/10/98	7-0-333
			1.84	mg/L	2.2 % RPD						

Sample ID: 126.10.pH7.0.Eff-1			S&H ID: 9807-247		Date Sampled: 7/16/98 7:33:00 PM						
#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
7	Cl2Dose	Chlorine Dose	2.58	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/21/98		7/21/98	n/a
8	Cl2Res	Chlorine Residual	1.09	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/21/98		7/21/98	n/a
9	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	96.4	%	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
10	HAA-ICR	2-Bromopropionic acid (Surrogate)	100.8	%	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
11	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
12	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
13	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/21/98	7/23/98	7/24/98	0-181-0
14	HAA-ICR	Dibromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
15	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
16	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
17	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/21/98	7/23/98	7/24/98	0-181-0
18	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/21/98	7/23/98	7/24/98	0-181-0
19	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

20	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	7/21/98	7/21/98	n/a
21	pH	Cl2 pH - Initial	7.8 Unit	SM 4500-H+ B	1	n/a	7/21/98	7/21/98	n/a
22	pH	pH	7.4 Unit	SM 4500-H+ B	1	n/a	7/16/98	7/16/98	n/a
23	TEMP	Cl2 Temperature	26.3 °C	SM 2550 B	1	n/a	7/21/98	7/21/98	n/a
24	TEMP	Temperature	24.1 °C	SM 2550 B	1	n/a	7/16/98	7/16/98	n/a
25	TIME	Cl2 Incubation Time	7.5 hrs	n/a	1	n/a	7/21/98	7/21/98	n/a
26	TOC-ICR	TOC	ND mg/L	SM 5310 C	1	0.50	7/21/98	7/17/98	7-0-340
27	TOC-ICR	TOC (Dupl)	ND mg/L	SM 5310 C	1	0.50	7/21/98	7/17/98	7-0-340
			ND mg/L						
28	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	7/21/98	7/27/98	12-0-176
29	TOX-ICR	TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	7/21/98	7/27/98	12-0-176
			ND µg Cl-/L						
30	THM-ICR	1,2,3-Trichloropropane (Surrogate)	96.4 %	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98 0-182-0
31	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98 0-182-0
32	THM-ICR	Bromoform	1.4 µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98 0-182-0
33	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98 0-182-0
34	THM-ICR	Dibromochloromethane	ND µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98 0-182-0
35	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	7/16/98	7/17/98	8-0-229
36	UV-ICR	UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	7/16/98	7/17/98	8-0-229
			ND 1/cm						

Sample ID: 126.10.pH7.0.Eff-4

S&H ID: 9807-250

Date Sampled: 7/19/98 11:49:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
37	Cl2Dose	Chlorine Dose	2.62	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/21/98		7/21/98	n/a
38	Cl2Res	Chlorine Residual	0.98	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/21/98		7/21/98	n/a
39	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	100.0	%	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
40	HAA-ICR	2-Bromopropionic acid (Surrogate)	96.4	%	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
41	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
42	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
43	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/21/98	7/23/98	7/24/98	0-181-0
44	HAA-ICR	Dibromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
45	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
46	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
47	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/21/98	7/23/98	7/24/98	0-181-0
48	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/21/98	7/23/98	7/24/98	0-181-0
49	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
50	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a
51	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

52	pH	pH	7.8 Unit	SM 4500-H+ B	1	n/a	7/19/98	7/19/98	n/a
53	TEMP	Cl2 Temperature	26.3 °C	SM 2550 B	1	n/a	7/21/98	7/21/98	n/a
54	TEMP	Temperature	23.3 °C	SM 2550 B	1	n/a	7/19/98	7/19/98	n/a
55	TIME	Cl2 Incubation Time	7.4 hrs	n/a	1	n/a	7/21/98	7/21/98	n/a
56	TOC-ICR	TOC	ND mg/L	SM 5310 C	1	0.50	7/19/98	7/19/98	7-0-342
57	TOC-ICR	TOC (Dupl)	ND mg/L	SM 5310 C	1	0.50	7/19/98	7/19/98	7-0-342
			ND mg/L						
58	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	7/21/98	7/27/98	12-0-176
59	TOX-ICR	TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	7/21/98	7/27/98	12-0-176
			ND µg Cl-/L						
60	THM-ICR	1,2,3-Trichloropropane (Surrogate)	88.8 %	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98 0-182-0
61	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98 0-182-0
62	THM-ICR	Bromoform	2.8 µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98 0-182-0
63	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98 0-182-0
64	THM-ICR	Dibromochloromethane	ND µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98 0-182-0
65	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	7/19/98	7/20/98	8-0-231
66	UV-ICR	UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	7/19/98	7/20/98	8-0-231
			ND 1/cm						

Sample ID: 126.10.pH7.0.Eff-6

S&H ID: 9807-252

Date Sampled: 7/20/98 3:29:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
67	Cl2Dose	Chlorine Dose	2.56	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/22/98		7/22/98	n/a
68	Cl2Res	Chlorine Residual	1.01	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/22/98		7/22/98	n/a
69	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	103.6	%	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
70	HAA-ICR	2-Bromopropionic acid (Surrogate)	99.2	%	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
71	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
72	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
73	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/22/98	7/23/98	7/24/98	0-181-0
74	HAA-ICR	Dibromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
75	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
76	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
77	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/22/98	7/23/98	7/24/98	0-181-0
78	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/22/98	7/23/98	7/24/98	0-181-0
79	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
80	pH	Cl2 pH - Final	7.7	Unit	SM 4500-H+ B	1	n/a	7/22/98		7/22/98	n/a
81	pH	Cl2 pH - Initial	7.6	Unit	SM 4500-H+ B	1	n/a	7/22/98		7/22/98	n/a
82	pH	pH	7.9	Unit	SM 4500-H+ B	1	n/a	7/20/98		7/20/98	n/a
83	TEMP	Cl2 Temperature	25.0	°C	SM 2550 B	1	n/a	7/22/98		7/22/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

84	TEMP	Temperature	23.4 °C	SM 2550 B	1	n/a	7/20/98	7/20/98	n/a
85	TIME	Cl2 Incubation Time	7.1 hrs	n/a	1	n/a	7/22/98	7/22/98	n/a
86	TOC-ICR	TOC	ND mg/L	SM 5310 C	1	0.50	7/20/98	7/20/98	7-0-343
87	TOC-ICR	TOC (Dupl)	ND mg/L	SM 5310 C	1	0.50	7/20/98	7/20/98	7-0-343
			ND mg/L						
88	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	7/22/98	7/29/98	12-0-178
89	TOX-ICR	TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	7/22/98	7/29/98	12-0-178
			ND µg Cl-/L						
90	THM-ICR	1,2,3-Trichloropropane (Surrogate)	93.6 %	EPA 551.1	1	1.0	7/22/98	7/27/98	7/28/98 0-182-0
91	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	7/22/98	7/27/98	7/28/98 0-182-0
92	THM-ICR	Bromoform	2.6 µg/L	EPA 551.1	1	1.0	7/22/98	7/27/98	7/28/98 0-182-0
93	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	7/22/98	7/27/98	7/28/98 0-182-0
94	THM-ICR	Dibromochloromethane	1.0 µg/L	EPA 551.1	1	1.0	7/22/98	7/27/98	7/28/98 0-182-0
95	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	7/20/98	7/20/98	8-0-231
96	UV-ICR	UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	7/20/98	7/20/98	8-0-231
			ND 1/cm						

Sample ID: 126.10.pH7.0.Eff-7

S&H ID: 9807-253

Date Sampled: 7/20/98 11:33:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
97	Cl2Dose	Chlorine Dose	2.62	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/22/98		7/22/98	n/a
98	Cl2Res	Chlorine Residual	1.02	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/22/98		7/22/98	n/a
99	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	105.2	%	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
100	HAA-ICR	2-Bromopropionic acid (Surrogate)	100.8	%	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
101	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
102	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
103	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/22/98	7/23/98	7/24/98	0-181-0
104	HAA-ICR	Dibromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
105	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
106	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
107	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/22/98	7/23/98	7/24/98	0-181-0
108	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/22/98	7/23/98	7/24/98	0-181-0
109	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
110	pH	Cl2 pH - Final	7.7	Unit	SM 4500-H+ B	1	n/a	7/22/98		7/22/98	n/a
111	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/22/98		7/22/98	n/a
112	pH	pH	7.8	Unit	SM 4500-H+ B	1	n/a	7/20/98		7/20/98	n/a
113	TEMP	Cl2 Temperature	25.0	°C	SM 2550 B	1	n/a	7/22/98		7/22/98	n/a
114	TEMP	Temperature	23.0	°C	SM 2550 B	1	n/a	7/20/98		7/20/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

115	TIME	Cl2 Incubation Time	7.1 hrs	n/a	1	n/a	7/22/98	7/22/98	n/a
116	TOC-ICR	TOC	ND mg/L	SM 5310 C	1	0.50	7/20/98	7/20/98	7-0-343
117	TOC-ICR	TOC (Dupl)	ND mg/L	SM 5310 C	1	0.50	7/20/98	7/20/98	7-0-343
			ND mg/L						
118	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	7/22/98	7/29/98	12-0-178
119	TOX-ICR	TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	7/22/98	7/29/98	12-0-178
			ND µg Cl-/L						
120	THM-ICR	1,2,3-Trichloropropane (Surrogate)	96.8 %	EPA 551.1	1	1.0	7/22/98	7/27/98	7/28/98 0-182-0
121	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	7/22/98	7/27/98	7/28/98 0-182-0
122	THM-ICR	Bromoform	3.4 µg/L	EPA 551.1	1	1.0	7/22/98	7/27/98	7/28/98 0-182-0
123	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	7/22/98	7/27/98	7/28/98 0-182-0
124	THM-ICR	Dibromochloromethane	1.4 µg/L	EPA 551.1	1	1.0	7/22/98	7/27/98	7/28/98 0-182-0
125	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	7/20/98	7/20/98	8-0-231
126	UV-ICR	UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	7/20/98	7/20/98	8-0-231
			ND 1/cm						

Sample ID: 126.10.pH7.0.Eff-10

S&H ID: 9807-256

Date Sampled: 7/21/98 12:31:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
127	Cl2Dose	Chlorine Dose	2.58	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/23/98		7/23/98	n/a
128	Cl2Res	Chlorine Residual	0.97	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/23/98		7/23/98	n/a
129	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	113.2	%	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
130	HAA-ICR	2-Bromopropionic acid (Surrogate)	99.2	%	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
131	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
132	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
133	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/23/98	7/29/98	7/30/98	0-183-0
134	HAA-ICR	Dibromoacetic acid	1.6	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
135	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
136	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
137	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/23/98	7/29/98	7/30/98	0-183-0
138	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/23/98	7/29/98	7/30/98	0-183-0
139	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
140	pH	Cl2 pH - Final	7.7	Unit	SM 4500-H+ B	1	n/a	7/23/98		7/23/98	n/a
141	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/23/98		7/23/98	n/a
142	pH	pH	7.7	Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a
143	TEMP	Cl2 Temperature	25.8	°C	SM 2550 B	1	n/a	7/23/98		7/23/98	n/a
144	TEMP	Temperature	23.0	°C	SM 2550 B	1	n/a	7/21/98		7/21/98	n/a
145	TIME	Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	7/23/98		7/23/98	n/a
146	TOC-ICR	TOC	ND	mg/L	SM 5310 C	1	0.50	7/21/98		7/21/98	7-0-344

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

147	TOC-ICR TOC (Dupl)	0.50 mg/L ND mg/L	SM 5310 C	1	0.50	7/21/98	7/21/98	7-0-344
148	TOX-ICR TOX	ND µg Cl-/L	SM 5320 B	1	25	7/23/98	7/30/98	12-0-179
149	TOX-ICR TOX (Dupl)	ND µg Cl-/L ND µg Cl-/L	SM 5320 B	1	25	7/23/98	7/30/98	12-0-179
150	THM-ICR 1,2,3-Trichloropropane (Surrogate)	101.2 %	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98 0-184-0
151	THM-ICR Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98 0-184-0
152	THM-ICR Bromoform	6.5 µg/L	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98 0-184-0
153	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98 0-184-0
154	THM-ICR Dibromochloromethane	2.6 µg/L	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98 0-184-0
155	UV-ICR UV	ND 1/cm	SM 5910 B	1	0.009	7/21/98	7/21/98	8-0-234
156	UV-ICR UV (Dupl)	ND 1/cm ND 1/cm	SM 5910 B	1	0.009	7/21/98	7/21/98	8-0-234

Sample ID: 126.10.pH7.0.Eff-11

S&H ID: 9807-257

Date Sampled: 7/22/98 1:03:00 PM

#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
157	Cl2Dose Chlorine Dose	2.71 mg/L as Cl2	SM 4500-Cl B	1	n/a	7/24/98		7/24/98	n/a
158	Cl2Res Chlorine Residual	1.24 mg/L as Cl2	SM 4500-Cl F	1	0.10	7/24/98		7/24/98	n/a
159	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	102.4 %	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
160	HAA-ICR 2-Bromopropionic acid (Surrogate)	97.2 %	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
161	HAA-ICR Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
162	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
163	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	7/24/98	7/29/98	7/30/98	0-183-0
164	HAA-ICR Dibromoacetic acid	2.1 µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
165	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
166	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
167	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/24/98	7/29/98	7/30/98	0-183-0
168	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/24/98	7/29/98	7/30/98	0-183-0
169	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
170	pH Cl2 pH - Final	7.7 Unit	SM 4500-H+ B	1	n/a	7/24/98		7/24/98	n/a
171	pH Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	7/24/98		7/24/98	n/a
172	pH pH	7.6 Unit	SM 4500-H+ B	1	n/a	7/22/98		7/22/98	n/a
173	TEMP Cl2 Temperature	25.8 °C	SM 2550 B	1	n/a	7/24/98		7/24/98	n/a
174	TEMP Temperature	23.3 °C	SM 2550 B	1	n/a	7/22/98		7/22/98	n/a
175	TIME Cl2 Incubation Time	7.0 hrs	n/a	1	n/a	7/24/98		7/24/98	n/a
176	TOC-ICR TOC	0.77 mg/L	SM 5310 C	1	0.50	7/22/98		7/23/98	7-0-346
177	TOC-ICR TOC (Dupl)	0.77 mg/L 0.77 mg/L	SM 5310 C	1	0.50	7/22/98		7/23/98	7-0-346

0.0 % RPD

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

178	TOX-ICR TOX	25 µg Cl-/L	SM 5320 B	1	25	7/24/98	8/3/98	12-0-181
179	TOX-ICR TOX (Dupl)	25 µg Cl-/L	SM 5320 B	1	25	7/24/98	8/3/98	12-0-181
		25 µg Cl-/L	0.0 % RPD					
180	THM-ICR 1,2,3-Trichloropropane (Surrogate)	86.0 %	EPA 551.1	1	1.0	7/24/98 7/30/98	7/31/98	0-184-0
181	THM-ICR Bromodichloromethane	1.0 µg/L	EPA 551.1	1	1.0	7/24/98 7/30/98	7/31/98	0-184-0
182	THM-ICR Bromoform	8.7 µg/L	EPA 551.1	1	1.0	7/24/98 7/30/98	7/31/98	0-184-0
183	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	7/24/98 7/30/98	7/31/98	0-184-0
184	THM-ICR Dibromochloromethane	4.5 µg/L	EPA 551.1	1	1.0	7/24/98 7/30/98	7/31/98	0-184-0
185	UV-ICR UV	0.010 1/cm	SM 5910 B	1	0.009	7/22/98	7/22/98	8-0-235
186	UV-ICR UV (Dupl)	0.010 1/cm	SM 5910 B	1	0.009	7/22/98	7/22/98	8-0-235
		0.010 1/cm	0.0 % RPD					

Sample ID: 126.10.pH7.0.Eff-13

S&H ID: 9807-259

Date Sampled: 7/23/98 5:11:00 AM

#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
187	Cl2Dose Chlorine Dose	2.74 mg/L as Cl2	SM 4500-Cl B	1	n/a	7/24/98		7/24/98	n/a
188	Cl2Res Chlorine Residual	1.16 mg/L as Cl2	SM 4500-Cl F	1	0.10	7/24/98		7/24/98	n/a
189	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	97.2 %	EPA 552.2	1	1.0	7/24/98 7/29/98	7/30/98	7/30/98	0-183-0
190	HAA-ICR 2-Bromopropionic acid (Surrogate)	98.4 %	EPA 552.2	1	1.0	7/24/98 7/29/98	7/30/98	7/30/98	0-183-0
191	HAA-ICR Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/24/98 7/29/98	7/30/98	7/30/98	0-183-0
192	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/24/98 7/29/98	7/30/98	7/30/98	0-183-0
193	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	7/24/98 7/29/98	7/30/98	7/30/98	0-183-0
194	HAA-ICR Dibromoacetic acid	2.8 µg/L	EPA 552.2	1	1.0	7/24/98 7/29/98	7/30/98	7/30/98	0-183-0
195	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/24/98 7/29/98	7/30/98	7/30/98	0-183-0
196	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/24/98 7/29/98	7/30/98	7/30/98	0-183-0
197	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/24/98 7/29/98	7/30/98	7/30/98	0-183-0
198	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/24/98 7/29/98	7/30/98	7/30/98	0-183-0
199	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/24/98 7/29/98	7/30/98	7/30/98	0-183-0
200	pH Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	7/24/98		7/24/98	n/a
201	pH Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	7/24/98		7/24/98	n/a
202	pH pH	7.8 Unit	SM 4500-H+ B	1	n/a	7/23/98		7/23/98	n/a
203	TEMP Cl2 Temperature	25.8 °C	SM 2550 B	1	n/a	7/24/98		7/24/98	n/a
204	TEMP Temperature	22.9 °C	SM 2550 B	1	n/a	7/23/98		7/23/98	n/a
205	TIME Cl2 Incubation Time	7.1 hrs	n/a	1	n/a	7/24/98		7/24/98	n/a
206	TOC-ICR TOC	0.86 mg/L	SM 5310 C	1	0.50	7/23/98		7/23/98	7-0-346
207	TOC-ICR TOC (Dupl)	0.86 mg/L	SM 5310 C	1	0.50	7/23/98		7/23/98	7-0-346
		0.86 mg/L	0.0 % RPD						
208	TOX-ICR TOX	42 µg Cl-/L	SM 5320 B	1	25	7/24/98		8/3/98	12-0-181
209	TOX-ICR TOX (Dupl)	33 µg Cl-/L	SM 5320 B	1	25	7/24/98		8/3/98	12-0-181

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

		38 µg Cl-/L	23.7 % RPD						
210	THM-ICR 1,2,3-Trichloropropane (Surrogate)	92.8 %	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98	0-184-0
211	THM-ICR Bromodichloromethane	1.4 µg/L	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98	0-184-0
212	THM-ICR Bromoform	11.0 µg/L	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98	0-184-0
213	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98	0-184-0
214	THM-ICR Dibromochloromethane	6.3 µg/L	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98	0-184-0
215	UV-ICR UV	0.013 1/cm	SM 5910 B	1	0.009	7/23/98		7/23/98	8-0-236
216	UV-ICR UV (Dupl)	0.013 1/cm	SM 5910 B	1	0.009	7/23/98		7/23/98	8-0-236
		0.013 1/cm	0.0 % RPD						

Sample ID: 126.10.pH7.0.Eff-14

S&H ID: 9807-260

Date Sampled: 7/23/98 1:26:00 PM

#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
217	Cl2Dose Chlorine Dose	2.56 mg/L as Cl2	SM 4500-Cl B	1	n/a	7/28/98		7/28/98	n/a
218	Cl2Res Chlorine Residual	0.94 mg/L as Cl2	SM 4500-Cl F	1	0.10	7/28/98		7/28/98	n/a
219	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	102.8 %	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
220	HAA-ICR 2-Bromopropionic acid (Surrogate)	99.2 %	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
221	HAA-ICR Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
222	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
223	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	7/28/98	8/6/98	8/6/98	0-191-0
224	HAA-ICR Dibromoacetic acid	3.0 µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
225	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
226	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
227	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/28/98	8/6/98	8/6/98	0-191-0
228	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/28/98	8/6/98	8/6/98	0-191-0
229	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
230	pH Cl2 pH - Final	7.7 Unit	SM 4500-H+ B	1	n/a	7/28/98		7/28/98	n/a
231	pH Cl2 pH - Initial	7.6 Unit	SM 4500-H+ B	1	n/a	7/28/98		7/28/98	n/a
232	pH pH	7.7 Unit	SM 4500-H+ B	1	n/a	7/23/98		7/23/98	n/a
233	TEMP Cl2 Temperature	26.2 °C	SM 2550 B	1	n/a	7/28/98		7/28/98	n/a
234	TEMP Temperature	22.9 °C	SM 2550 B	1	n/a	7/23/98		7/23/98	n/a
235	TIME Cl2 Incubation Time	7.0 hrs	n/a	1	n/a	7/28/98		7/28/98	n/a
236	TOC-ICR TOC	0.90 mg/L	SM 5310 C	1	0.50	7/23/98		7/24/98	7-0-347
237	TOC-ICR TOC (Dupl)	0.92 mg/L	SM 5310 C	1	0.50	7/23/98		7/24/98	7-0-347
		0.91 mg/L	2.2 % RPD						
238	TOX-ICR TOX	34 µg Cl-/L	SM 5320 B	1	25	7/28/98		8/3/98	12-0-181
239	TOX-ICR TOX (Dupl)	34 µg Cl-/L	SM 5320 B	1	25	7/28/98		8/3/98	12-0-181
		34 µg Cl-/L	0.0 % RPD						

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

240	THM-ICR 1,2,3-Trichloropropane (Surrogate)	101.6 %	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
241	THM-ICR Bromodichloromethane	1.4 µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
242	THM-ICR Bromoform	14.7 µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
243	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
244	THM-ICR Dibromochloromethane	6.2 µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
245	UV-ICR UV	0.013 1/cm	SM 5910 B	1	0.009	7/23/98		7/23/98	8-0-236
246	UV-ICR UV (Dupl)	0.013 1/cm	SM 5910 B	1	0.009	7/23/98		7/23/98	8-0-236
		0.013 1/cm	0.0 % RPD						

Sample ID: 126.10.pH7.0.Eff-15

S&H ID: 9807-261

Date Sampled: 7/24/98 1:55:00 PM

#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
247	Cl2Dose Chlorine Dose	2.59 mg/L as Cl2	SM 4500-Cl B	1	n/a	7/28/98		7/28/98	n/a
248	Cl2Res Chlorine Residual	1.03 mg/L as Cl2	SM 4500-Cl F	1	0.10	7/28/98		7/28/98	n/a
249	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	102.8 %	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
250	HAA-ICR 2-Bromopropionic acid (Surrogate)	98.8 %	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
251	HAA-ICR Bromochloroacetic acid	1.1 µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
252	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
253	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	7/28/98	8/6/98	8/6/98	0-191-0
254	HAA-ICR Dibromoacetic acid	4.0 µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
255	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
256	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
257	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/28/98	8/6/98	8/6/98	0-191-0
258	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/28/98	8/6/98	8/6/98	0-191-0
259	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
260	pH Cl2 pH - Final	7.7 Unit	SM 4500-H+ B	1	n/a	7/28/98		7/28/98	n/a
261	pH Cl2 pH - Initial	7.6 Unit	SM 4500-H+ B	1	n/a	7/28/98		7/28/98	n/a
262	pH pH	7.7 Unit	SM 4500-H+ B	1	n/a	7/24/98		7/24/98	n/a
263	TEMP Cl2 Temperature	26.2 °C	SM 2550 B	1	n/a	7/28/98		7/28/98	n/a
264	TEMP Temperature	23.2 °C	SM 2550 B	1	n/a	7/24/98		7/24/98	n/a
265	TIME Cl2 Incubation Time	7.0 hrs	n/a	1	n/a	7/28/98		7/28/98	n/a
266	TOC-ICR TOC	1.03 mg/L	SM 5310 C	1	0.50	7/24/98		7/25/98	7-0-348
267	TOC-ICR TOC (Dupl)	1.04 mg/L	SM 5310 C	1	0.50	7/24/98		7/25/98	7-0-348
		1.04 mg/L	1.0 % RPD						
268	TOX-ICR TOX	47 µg Cl-/L	SM 5320 B	1	25	7/28/98		8/4/98	12-0-182
269	TOX-ICR TOX (Dupl)	43 µg Cl-/L	SM 5320 B	1	25	7/28/98		8/4/98	12-0-182
		45 µg Cl-/L	8.9 % RPD						
270	THM-ICR 1,2,3-Trichloropropane (Surrogate)	102.4 %	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

271	THM-ICR Bromodichloromethane	1.9 µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
272	THM-ICR Bromoform	18.4 µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
273	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
274	THM-ICR Dibromochloromethane	8.9 µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
275	UV-ICR UV	0.017 1/cm	SM 5910 B	1	0.009	7/24/98		7/25/98	8-0-238
276	UV-ICR UV (Dupl)	0.017 1/cm	SM 5910 B	1	0.009	7/24/98		7/25/98	8-0-238
		0.017 1/cm	0.0 % RPD						

Sample ID: 126.10.pH7.0.Eff-18

S&H ID: 9807-264

Date Sampled: 7/25/98 1:58:00 PM

#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
277	Cl2Dose Chlorine Dose	2.62 mg/L as Cl2	SM 4500-Cl B	1	n/a	7/28/98		7/28/98	n/a
278	Cl2Res Chlorine Residual	0.86 mg/L as Cl2	SM 4500-Cl F	1	0.10	7/28/98		7/28/98	n/a
279	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	95.2 %	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
280	HAA-ICR 2-Bromopropionic acid (Surrogate)	103.6 %	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
281	HAA-ICR Bromochloroacetic acid	1.2 µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
282	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
283	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	7/28/98	8/6/98	8/6/98	0-191-0
284	HAA-ICR Dibromoacetic acid	4.9 µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
285	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
286	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
287	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/28/98	8/6/98	8/6/98	0-191-0
288	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/28/98	8/6/98	8/6/98	0-191-0
289	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
290	pH Cl2 pH - Final	7.7 Unit	SM 4500-H+ B	1	n/a	7/28/98		7/28/98	n/a
291	pH Cl2 pH - Initial	7.6 Unit	SM 4500-H+ B	1	n/a	7/28/98		7/28/98	n/a
292	pH pH	7.7 Unit	SM 4500-H+ B	1	n/a	7/25/98		7/25/98	n/a
293	TEMP Cl2 Temperature	26.2 °C	SM 2550 B	1	n/a	7/28/98		7/28/98	n/a
294	TEMP Temperature	23.6 °C	SM 2550 B	1	n/a	7/25/98		7/25/98	n/a
295	TIME Cl2 Incubation Time	7.0 hrs	n/a	1	n/a	7/28/98		7/28/98	n/a
296	TOC-ICR TOC	1.11 mg/L	SM 5310 C	1	0.50	7/25/98		7/26/98	7-0-349
297	TOC-ICR TOC (Dupl)	1.12 mg/L	SM 5310 C	1	0.50	7/25/98		7/26/98	7-0-349
		1.12 mg/L	0.9 % RPD						
298	TOX-ICR TOX	52 µg Cl-/L	SM 5320 B	1	25	7/28/98		8/4/98	12-0-182
299	TOX-ICR TOX (Dupl)	55 µg Cl-/L	SM 5320 B	1	25	7/28/98		8/4/98	12-0-182
		54 µg Cl-/L	5.6 % RPD						
300	THM-ICR 1,2,3-Trichloropropane (Surrogate)	104.8 %	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
301	THM-ICR Bromodichloromethane	2.1 µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
302	THM-ICR Bromoform	21.6 µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

303	THM-ICR Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
304	THM-ICR Dibromochloromethane	10.0	µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
305	UV-ICR UV	0.019	1/cm	SM 5910 B	1	0.009	7/25/98		7/26/98	8-0-239
306	UV-ICR UV (Dupl)	0.019	1/cm	SM 5910 B	1	0.009	7/25/98		7/26/98	8-0-239
		0.019	1/cm	0.0 % RPD						

Sample ID: 126.10.pH7.0.Eff-20

S&H ID: 9807-266

Date Sampled: 7/26/98 6:31:00 AM

#	Analysis Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
307	Cl2Dose Chlorine Dose	2.64	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/28/98		7/28/98	n/a
308	Cl2Res Chlorine Residual	0.78	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/28/98		7/28/98	n/a
309	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	100.8	%	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
310	HAA-ICR 2-Bromopropionic acid (Surrogate)	103.2	%	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
311	HAA-ICR Bromochloroacetic acid	1.4	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
312	HAA-ICR Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
313	HAA-ICR Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/28/98	8/6/98	8/6/98	0-191-0
314	HAA-ICR Dibromoacetic acid	5.6	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
315	HAA-ICR Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
316	HAA-ICR Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
317	HAA-ICR Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/28/98	8/6/98	8/6/98	0-191-0
318	HAA-ICR Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/28/98	8/6/98	8/6/98	0-191-0
319	HAA-ICR Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
320	pH Cl2 pH - Final	7.6	Unit	SM 4500-H+ B	1	n/a	7/28/98		7/28/98	n/a
321	pH Cl2 pH - Initial	7.6	Unit	SM 4500-H+ B	1	n/a	7/28/98		7/28/98	n/a
322	pH pH	7.7	Unit	SM 4500-H+ B	1	n/a	7/26/98		7/26/98	n/a
323	TEMP Cl2 Temperature	26.2	°C	SM 2550 B	1	n/a	7/28/98		7/28/98	n/a
324	TEMP Temperature	22.7	°C	SM 2550 B	1	n/a	7/26/98		7/26/98	n/a
325	TIME Cl2 Incubation Time	7.0	hrs	n/a	1	n/a	7/28/98		7/28/98	n/a
326	TOC-ICR TOC	1.17	mg/L	SM 5310 C	1	0.50	7/26/98		7/26/98	7-0-349
327	TOC-ICR TOC (Dupl)	1.19	mg/L	SM 5310 C	1	0.50	7/26/98		7/26/98	7-0-349
		1.18	mg/L	1.7 % RPD						
328	TOX-ICR TOX	58	µg Cl-/L	SM 5320 B	1	25	7/28/98		8/4/98	12-0-182
329	TOX-ICR TOX (Dupl)	65	µg Cl-/L	SM 5320 B	1	25	7/28/98		8/4/98	12-0-182
		62	µg Cl-/L	11.3 % RPD						
330	THM-ICR 1,2,3-Trichloropropane (Surrogate)	99.6	%	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
331	THM-ICR Bromodichloromethane	2.3	µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
332	THM-ICR Bromoform	22.6	µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
333	THM-ICR Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
334	THM-ICR Dibromochloromethane	10.8	µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

335	UV-ICR	UV	0.021	1/cm	SM 5910 B	1	0.009	7/26/98	7/26/98	8-0-239
336	UV-ICR	UV (Dupl)	0.021	1/cm	SM 5910 B	1	0.009	7/26/98	7/26/98	8-0-239
			0.021	1/cm	0.0 % RPD					

Sample ID: 126.10.pH7.0.Eff-23

S&H ID: 9807-269

Date Sampled: 7/27/98 2:32:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
337	Cl2Dose	Chlorine Dose	2.89	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/31/98		7/31/98	n/a
338	Cl2Res	Chlorine Residual	1.07	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/31/98		7/31/98	n/a
339	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	100.0	%	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
340	HAA-ICR	2-Bromopropionic acid (Surrogate)	99.6	%	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
341	HAA-ICR	Bromochloroacetic acid	1.5	µg/L	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
342	HAA-ICR	Bromodichloroacetic acid	1.2	µg/L	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
343	HAA-ICR	Chlorodibromoacetic acid	2.4	µg/L	EPA 552.2	1	2.0	7/31/98	8/6/98	8/7/98	0-191-0
344	HAA-ICR	Dibromoacetic acid	6.0	µg/L	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
345	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
346	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
347	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/31/98	8/6/98	8/7/98	0-191-0
348	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/31/98	8/6/98	8/7/98	0-191-0
349	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
350	pH	Cl2 pH - Final	7.7	Unit	SM 4500-H+ B	1	n/a	7/31/98		7/31/98	n/a
351	pH	Cl2 pH - Initial	7.6	Unit	SM 4500-H+ B	1	n/a	7/31/98		7/31/98	n/a
352	pH	pH	7.6	Unit	SM 4500-H+ B	1	n/a	7/27/98		7/27/98	n/a
353	TEMP	Cl2 Temperature	28.8	°C	SM 2550 B	1	n/a	7/31/98		7/31/98	n/a
354	TEMP	Temperature	23.4	°C	SM 2550 B	1	n/a	7/27/98		7/27/98	n/a
355	TIME	Cl2 Incubation Time	7.1	hrs	n/a	1	n/a	7/31/98		7/31/98	n/a
356	TOC-ICR	TOC	1.27	mg/L	SM 5310 C	1	0.50	7/27/98		7/28/98	7-0-351
357	TOC-ICR	TOC (Dupl)	1.27	mg/L	SM 5310 C	1	0.50	7/27/98		7/28/98	7-0-351
			1.27	mg/L	0.0 % RPD						
358	TOX-ICR	TOX	69	µg Cl-/L	SM 5320 B	1	25	7/31/98		8/5/98	12-0-183
359	TOX-ICR	TOX (Dupl)	72	µg Cl-/L	SM 5320 B	1	25	7/31/98		8/5/98	12-0-183
			71	µg Cl-/L	4.2 % RPD						
360	THM-ICR	1,2,3-Trichloropropane (Surrogate)	99.2	%	EPA 551.1	1	1.0	7/31/98	8/7/98	8/7/98	0-192-0
361	THM-ICR	Bromodichloromethane	3.4	µg/L	EPA 551.1	1	1.0	7/31/98	8/7/98	8/7/98	0-192-0
362	THM-ICR	Bromoform	28.5	µg/L	EPA 551.1	1	1.0	7/31/98	8/7/98	8/7/98	0-192-0
363	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/31/98	8/7/98	8/7/98	0-192-0
364	THM-ICR	Dibromochloromethane	15.8	µg/L	EPA 551.1	1	1.0	7/31/98	8/7/98	8/7/98	0-192-0
365	UV-ICR	UV	0.024	1/cm	SM 5910 B	1	0.009	7/27/98		7/27/98	8-0-240
366	UV-ICR	UV (Dupl)	0.024	1/cm	SM 5910 B	1	0.009	7/27/98		7/27/98	8-0-240

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

0.024 1/cm

0.0 % RPD

Sample ID: 126.10.pH7.0.Eff-24

S&H ID: 9807-270

Date Sampled: 7/28/98 10:42:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
367	pH	pH	7.7	Unit	SM 4500-H+ B	1	n/a	7/28/98		7/28/98	n/a
368	TEMP	Temperature	23.6	°C	SM 2550 B	1	n/a	7/28/98		7/28/98	n/a
369	TOC-ICR	TOC	1.39	mg/L	SM 5310 C	1	0.50	7/28/98		7/29/98	7-0-352
370	TOC-ICR	TOC (Dupl)	1.38	mg/L	SM 5310 C	1	0.50	7/28/98		7/29/98	7-0-352
			1.38	mg/L	0.7 % RPD						
371	UV-ICR	UV	0.027	1/cm	SM 5910 B	1	0.009	7/28/98		7/29/98	8-0-242
372	UV-ICR	UV (Dupl)	0.027	1/cm	SM 5910 B	1	0.009	7/28/98		7/29/98	8-0-242
			0.027	1/cm	0.0 % RPD						

Sample ID: 126.10.pH7.0.Eff-6d

S&H ID: 9807-277

Date Sampled: 7/20/98 3:29:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
373	Cl2Dose	Chlorine Dose	2.56	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/22/98		7/22/98	n/a
374	Cl2Res	Chlorine Residual	0.73	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/22/98		7/22/98	n/a
375	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	104.8	%	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
376	HAA-ICR	2-Bromopropionic acid (Surrogate)	104.0	%	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
377	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
378	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
379	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/22/98	7/23/98	7/24/98	0-181-0
380	HAA-ICR	Dibromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
381	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
382	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
383	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/22/98	7/23/98	7/24/98	0-181-0
384	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/22/98	7/23/98	7/24/98	0-181-0
385	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
386	pH	Cl2 pH - Final	7.7	Unit	SM 4500-H+ B	1	n/a	7/22/98		7/22/98	n/a
387	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/22/98		7/22/98	n/a
388	pH	pH	7.9	Unit	SM 4500-H+ B	1	n/a	7/20/98		7/20/98	n/a
389	TEMP	Cl2 Temperature	25.0	°C	SM 2550 B	1	n/a	7/22/98		7/22/98	n/a
390	TEMP	Temperature	23.5	°C	SM 2550 B	1	n/a	7/20/98		7/20/98	n/a
391	TIME	Cl2 Incubation Time	7.1	hrs	n/a	1	n/a	7/22/98		7/22/98	n/a
392	TOC-ICR	TOC	ND	mg/L	SM 5310 C	1	0.50	7/20/98		7/20/98	7-0-343
393	TOC-ICR	TOC (Dupl)	ND	mg/L	SM 5310 C	1	0.50	7/20/98		7/20/98	7-0-343
			ND	mg/L							
394	TOX-ICR	TOX	ND	µg Cl-/L	SM 5320 B	1	25	7/22/98		7/29/98	12-0-178

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

395	TOX-ICR TOX (Dupl)	ND	µg Cl-/L	SM 5320 B	1	25	7/22/98	7/29/98	12-0-178
		ND	µg Cl-/L						
396	THM-ICR 1,2,3-Trichloropropane (Surrogate)	92.4	%	EPA 551.1	1	1.0	7/22/98	7/27/98	7/28/98 0-182-0
397	THM-ICR Bromodichloromethane	ND	µg/L	EPA 551.1	1	1.0	7/22/98	7/27/98	7/28/98 0-182-0
398	THM-ICR Bromoform	2.9	µg/L	EPA 551.1	1	1.0	7/22/98	7/27/98	7/28/98 0-182-0
399	THM-ICR Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/22/98	7/27/98	7/28/98 0-182-0
400	THM-ICR Dibromochloromethane	1.0	µg/L	EPA 551.1	1	1.0	7/22/98	7/27/98	7/28/98 0-182-0
401	UV-ICR UV	ND	1/cm	SM 5910 B	1	0.009	7/20/98	7/20/98	8-0-231
402	UV-ICR UV (Dupl)	ND	1/cm	SM 5910 B	1	0.009	7/20/98	7/20/98	8-0-231
		ND	1/cm						

Sample ID: 126.10.pH7.0.Eff-13d S&H ID: 9807-280 Date Sampled: 7/23/98 5:11:00 AM

#	Analysis Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
403	Cl2Dose Chlorine Dose	2.74	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/24/98		7/24/98	n/a
404	Cl2Res Chlorine Residual	1.22	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/24/98		7/24/98	n/a
405	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	102.8	%	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
406	HAA-ICR 2-Bromopropionic acid (Surrogate)	100.8	%	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
407	HAA-ICR Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
408	HAA-ICR Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
409	HAA-ICR Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/24/98	7/29/98	7/30/98	0-183-0
410	HAA-ICR Dibromoacetic acid	2.7	µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
411	HAA-ICR Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
412	HAA-ICR Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
413	HAA-ICR Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/24/98	7/29/98	7/30/98	0-183-0
414	HAA-ICR Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/24/98	7/29/98	7/30/98	0-183-0
415	HAA-ICR Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
416	pH Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	7/24/98		7/24/98	n/a
417	pH Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/24/98		7/24/98	n/a
418	pH pH	7.8	Unit	SM 4500-H+ B	1	n/a	7/23/98		7/23/98	n/a
419	TEMP Cl2 Temperature	25.8	°C	SM 2550 B	1	n/a	7/24/98		7/24/98	n/a
420	TEMP Temperature	22.9	°C	SM 2550 B	1	n/a	7/23/98		7/23/98	n/a
421	TIME Cl2 Incubation Time	7.1	hrs	n/a	1	n/a	7/24/98		7/24/98	n/a
422	TOC-ICR TOC	0.87	mg/L	SM 5310 C	1	0.50	7/23/98		7/23/98	7-0-346
423	TOC-ICR TOC (Dupl)	0.89	mg/L	SM 5310 C	1	0.50	7/23/98		7/23/98	7-0-346
		0.88	mg/L	2.3 % RPD						
424	TOX-ICR TOX	33	µg Cl-/L	SM 5320 B	1	25	7/24/98		7/31/98	12-0-180
425	TOX-ICR TOX (Dupl)	32	µg Cl-/L	SM 5320 B	1	25	7/24/98		7/31/98	12-0-180
		33	µg Cl-/L	3.0 % RPD						

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

426	THM-ICR 1,2,3-Trichloropropane (Surrogate)	84.0 %	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98	0-184-0
427	THM-ICR Bromodichloromethane	1.3 µg/L	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98	0-184-0
428	THM-ICR Bromoform	10.9 µg/L	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98	0-184-0
429	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98	0-184-0
430	THM-ICR Dibromochloromethane	5.9 µg/L	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98	0-184-0
431	UV-ICR UV	0.012 1/cm	SM 5910 B	1	0.009	7/23/98		7/23/98	8-0-236
432	UV-ICR UV (Dupl)	0.012 1/cm	SM 5910 B	1	0.009	7/23/98		7/23/98	8-0-236
		0.012 1/cm	0.0 % RPD						

Sample ID: 126.10.pH7.0.Eff-20d

S&H ID: 9807-284

Date Sampled: 7/26/98 6:31:00 AM

#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
433	Cl2Dose Chlorine Dose	2.64 mg/L as Cl2	SM 4500-Cl B	1	n/a	7/28/98		7/28/98	n/a
434	Cl2Res Chlorine Residual	0.85 mg/L as Cl2	SM 4500-Cl F	1	0.10	7/28/98		7/28/98	n/a
435	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	100.0 %	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
436	HAA-ICR 2-Bromopropionic acid (Surrogate)	98.0 %	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
437	HAA-ICR Bromochloroacetic acid	1.2 µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
438	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
439	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	7/28/98	8/6/98	8/6/98	0-191-0
440	HAA-ICR Dibromoacetic acid	4.9 µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
441	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
442	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
443	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/28/98	8/6/98	8/6/98	0-191-0
444	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/28/98	8/6/98	8/6/98	0-191-0
445	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
446	pH Cl2 pH - Final	7.6 Unit	SM 4500-H+ B	1	n/a	7/28/98		7/28/98	n/a
447	pH Cl2 pH - Initial	7.6 Unit	SM 4500-H+ B	1	n/a	7/28/98		7/28/98	n/a
448	pH pH	7.7 Unit	SM 4500-H+ B	1	n/a	7/26/98		7/26/98	n/a
449	TEMP Cl2 Temperature	26.2 °C	SM 2550 B	1	n/a	7/28/98		7/28/98	n/a
450	TEMP Temperature	22.7 °C	SM 2550 B	1	n/a	7/26/98		7/26/98	n/a
451	TIME Cl2 Incubation Time	7.1 hrs	n/a	1	n/a	7/28/98		7/28/98	n/a
452	TOC-ICR TOC	1.17 mg/L	SM 5310 C	1	0.50	7/26/98		7/26/98	7-0-349
453	TOC-ICR TOC (Dupl)	1.19 mg/L	SM 5310 C	1	0.50	7/26/98		7/26/98	7-0-349
		1.18 mg/L	1.7 % RPD						
454	TOX-ICR TOX	55 µg Cl-/L	SM 5320 B	1	25	7/28/98		8/3/98	12-0-181
455	TOX-ICR TOX (Dupl)	54 µg Cl-/L	SM 5320 B	1	25	7/28/98		8/3/98	12-0-181
		55 µg Cl-/L	1.8 % RPD						
456	THM-ICR 1,2,3-Trichloropropane (Surrogate)	102.0 %	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

457	THM-ICR Bromodichloromethane	2.3 µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
458	THM-ICR Bromoform	22.3 µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
459	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
460	THM-ICR Dibromochloromethane	10.8 µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
461	UV-ICR UV	0.020 1/cm	SM 5910 B	1	0.009	7/26/98		7/26/98	8-0-239
462	UV-ICR UV (Dupl)	0.020 1/cm	SM 5910 B	1	0.009	7/26/98		7/26/98	8-0-239
		0.020 1/cm	0.0 % RPD						

Sample ID: 126.10.pH7.4.Eff-1

S&H ID: 9807-287

Date Sampled: 7/16/98 7:33:00 PM

#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
463	Cl2Dose Chlorine Dose	2.58 mg/L as Cl2	SM 4500-Cl B	1	n/a	7/21/98		7/21/98	n/a
464	Cl2Res Chlorine Residual	1.38 mg/L as Cl2	SM 4500-Cl F	1	0.10	7/21/98		7/21/98	n/a
465	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	96.4 %	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
466	HAA-ICR 2-Bromopropionic acid (Surrogate)	100.4 %	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
467	HAA-ICR Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
468	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
469	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	7/21/98	7/23/98	7/24/98	0-181-0
470	HAA-ICR Dibromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
471	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
472	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
473	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/21/98	7/23/98	7/24/98	0-181-0
474	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/21/98	7/23/98	7/24/98	0-181-0
475	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
476	pH Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a
477	pH Cl2 pH - Initial	7.8 Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a
478	pH pH	8.1 Unit	SM 4500-H+ B	1	n/a	7/16/98		7/16/98	n/a
479	TEMP Cl2 Temperature	26.3 °C	SM 2550 B	1	n/a	7/21/98		7/21/98	n/a
480	TEMP Temperature	23.9 °C	SM 2550 B	1	n/a	7/16/98		7/16/98	n/a
481	TIME Cl2 Incubation Time	7.5 hrs	n/a	1	n/a	7/21/98		7/21/98	n/a
482	TOC-ICR TOC	ND mg/L	SM 5310 C	1	0.50	7/16/98		7/17/98	7-0-340
483	TOC-ICR TOC (Dupl)	ND mg/L	SM 5310 C	1	0.50	7/16/98		7/17/98	7-0-340
		ND mg/L							
484	TOX-ICR TOX	ND µg Cl-/L	SM 5320 B	1	25	7/21/98		7/28/98	12-0-177
485	TOX-ICR TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	7/21/98		7/28/98	12-0-177
		ND µg Cl-/L							
486	THM-ICR 1,2,3-Trichloropropane (Surrogate)	96.0 %	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
487	THM-ICR Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
488	THM-ICR Bromoform	1.0 µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

489	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
490	THM-ICR Dibromochloromethane	ND µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
491	UV-ICR UV	ND 1/cm	SM 5910 B	1	0.009	7/16/98		7/17/98	8-0-229
492	UV-ICR UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	7/16/98		7/17/98	8-0-229
		ND 1/cm							

Sample ID: 126.10.pH7.4.Eff-4

S&H ID: 9807-290

Date Sampled: 7/19/98 4:45:00 AM

#	Analysis Type	Result Units	Method	Dilution	MRL	Sample	Prep.	Anal.	QC Batch
493	Cl2Dose Chlorine Dose	2.62 mg/L as Cl2	SM 4500-Cl B	1	n/a	7/21/98		7/21/98	n/a
494	Cl2Res Chlorine Residual	0.91 mg/L as Cl2	SM 4500-Cl F	1	0.10	7/21/98		7/21/98	n/a
495	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	101.2 %	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
496	HAA-ICR 2-Bromopropionic acid (Surrogate)	99.2 %	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
497	HAA-ICR Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
498	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
499	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	7/21/98	7/23/98	7/24/98	0-181-0
500	HAA-ICR Dibromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
501	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
502	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
503	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/21/98	7/23/98	7/24/98	0-181-0
504	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/21/98	7/23/98	7/24/98	0-181-0
505	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
506	pH Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a
507	pH Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a
508	pH pH	8.0 Unit	SM 4500-H+ B	1	n/a	7/19/98		7/19/98	n/a
509	TEMP Cl2 Temperature	26.3 °C	SM 2550 B	1	n/a	7/21/98		7/21/98	n/a
510	TEMP Temperature	22.7 °C	SM 2550 B	1	n/a	7/19/98		7/19/98	n/a
511	TIME Cl2 Incubation Time	7.6 hrs	n/a	1	n/a	7/21/98		7/21/98	n/a
512	TOC-ICR TOC	ND mg/L	SM 5310 C	1	0.50	7/19/98		7/19/98	7-0-342
513	TOC-ICR TOC (Dupl)	ND mg/L	SM 5310 C	1	0.50	7/19/98		7/19/98	7-0-342
		ND mg/L							
514	TOX-ICR TOX	ND µg Cl-/L	SM 5320 B	1	25	7/21/98		7/28/98	12-0-177
515	TOX-ICR TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	7/21/98		7/28/98	12-0-177
		ND µg Cl-/L							
516	THM-ICR 1,2,3-Trichloropropane (Surrogate)	92.0 %	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
517	THM-ICR Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
518	THM-ICR Bromoform	1.7 µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
519	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
520	THM-ICR Dibromochloromethane	ND µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

521	UV-ICR	UV	ND	1/cm	SM 5910 B	1	0.009	7/19/98	7/19/98	8-0-230
522	UV-ICR	UV (Dupl)	ND	1/cm	SM 5910 B	1	0.009	7/19/98	7/19/98	8-0-230
			ND	1/cm						

Sample ID: 126.10.pH7.4.Eff-7

S&H ID: 9807-293

Date Sampled: 7/20/98 5:04:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
523	Cl2Dose	Chlorine Dose	2.64	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/22/98		7/22/98	n/a
524	Cl2Res	Chlorine Residual	1.70	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/22/98		7/22/98	n/a
525	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	101.2	%	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
526	HAA-ICR	2-Bromopropionic acid (Surrogate)	99.6	%	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
527	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
528	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
529	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/22/98	7/23/98	7/24/98	0-181-0
530	HAA-ICR	Dibromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
531	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
532	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
533	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/22/98	7/23/98	7/24/98	0-181-0
534	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/22/98	7/23/98	7/24/98	0-181-0
535	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/23/98	7/24/98	0-181-0
536	pH	Cl2 pH - Final	7.7	Unit	SM 4500-H+ B	1	n/a	7/22/98		7/22/98	n/a
537	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/22/98		7/22/98	n/a
538	pH	pH	8.1	Unit	SM 4500-H+ B	1	n/a	7/20/98		7/20/98	n/a
539	TEMP	Cl2 Temperature	25.0	°C	SM 2550 B	1	n/a	7/22/98		7/22/98	n/a
540	TEMP	Temperature	22.8	°C	SM 2550 B	1	n/a	7/20/98		7/20/98	n/a
541	TIME	Cl2 Incubation Time	7.1	hrs	n/a	1	n/a	7/22/98		7/22/98	n/a
542	TOC-ICR	TOC	ND	mg/L	SM 5310 C	1	0.50	7/20/98		7/20/98	7-0-343
543	TOC-ICR	TOC (Dupl)	ND	mg/L	SM 5310 C	1	0.50	7/20/98		7/20/98	7-0-343
			ND	mg/L							
544	TOX-ICR	TOX	ND	µg Cl-/L	SM 5320 B	1	25	7/22/98		7/29/98	12-0-178
545	TOX-ICR	TOX (Dupl)	ND	µg Cl-/L	SM 5320 B	1	25	7/22/98		7/29/98	12-0-178
			ND	µg Cl-/L							
546	THM-ICR	1,2,3-Trichloropropane (Surrogate)	93.6	%	EPA 551.1	1	1.0	7/22/98	7/27/98	7/28/98	0-182-0
547	THM-ICR	Bromodichloromethane	ND	µg/L	EPA 551.1	1	1.0	7/22/98	7/27/98	7/28/98	0-182-0
548	THM-ICR	Bromoform	4.5	µg/L	EPA 551.1	1	1.0	7/22/98	7/27/98	7/28/98	0-182-0
549	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/22/98	7/27/98	7/28/98	0-182-0
550	THM-ICR	Dibromochloromethane	1.5	µg/L	EPA 551.1	1	1.0	7/22/98	7/27/98	7/28/98	0-182-0
551	UV-ICR	UV	ND	1/cm	SM 5910 B	1	0.009	7/20/98		7/20/98	8-0-231
552	UV-ICR	UV (Dupl)	ND	1/cm	SM 5910 B	1	0.009	7/20/98		7/20/98	8-0-231

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

ND 1/cm

Sample ID: 126.10.pH7.4.Eff-10

S&H ID: 9807-296

Date Sampled: 7/21/98 5:19:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
553	Cl2Dose	Chlorine Dose	2.70	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/22/98		7/22/98	n/a
554	Cl2Res	Chlorine Residual	1.96	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/22/98		7/22/98	n/a
555	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	95.6	%	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
556	HAA-ICR	2-Bromopropionic acid (Surrogate)	105.6	%	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
557	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
558	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
559	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/22/98	7/29/98	7/29/98	0-183-0
560	HAA-ICR	Dibromoacetic acid	1.3	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
561	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
562	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
563	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/22/98	7/29/98	7/29/98	0-183-0
564	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/22/98	7/29/98	7/29/98	0-183-0
565	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
566	pH	Cl2 pH - Final	7.7	Unit	SM 4500-H+ B	1	n/a	7/22/98		7/22/98	n/a
567	pH	Cl2 pH - Initial	7.6	Unit	SM 4500-H+ B	1	n/a	7/22/98		7/22/98	n/a
568	pH	pH	8.0	Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a
569	TEMP	Cl2 Temperature	25.0	°C	SM 2550 B	1	n/a	7/22/98		7/22/98	n/a
570	TEMP	Temperature	22.5	°C	SM 2550 B	1	n/a	7/21/98		7/21/98	n/a
571	TIME	Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	7/22/98		7/22/98	n/a
572	TOC-ICR	TOC	0.52	mg/L	SM 5310 C	1	0.50	7/21/98		7/21/98	7-0-344
573	TOC-ICR	TOC (Dupl)	0.52	mg/L	SM 5310 C	1	0.50	7/21/98		7/21/98	7-0-344
			0.52	mg/L	0.0 % RPD						
574	TOX-ICR	TOX	ND	µg Cl-/L	SM 5320 B	1	25	7/22/98		7/29/98	12-0-178
575	TOX-ICR	TOX (Dupl)	ND	µg Cl-/L	SM 5320 B	1	25	7/22/98		7/29/98	12-0-178
			ND	µg Cl-/L							
576	THM-ICR	1,2,3-Trichloropropane (Surrogate)	94.8	%	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
577	THM-ICR	Bromodichloromethane	ND	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
578	THM-ICR	Bromoform	5.9	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
579	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
580	THM-ICR	Dibromochloromethane	2.6	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
581	UV-ICR	UV	ND	1/cm	SM 5910 B	1	0.009	7/21/98		7/21/98	8-0-233
582	UV-ICR	UV (Dupl)	ND	1/cm	SM 5910 B	1	0.009	7/21/98		7/21/98	8-0-233
			ND	1/cm							

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

Sample ID: 126.10.pH7.4.Eff-11

S&H ID: 9807-297

Date Sampled: 7/21/98 1:28:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
583	Cl2Dose	Chlorine Dose	2.51	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/23/98		7/23/98	n/a
584	Cl2Res	Chlorine Residual	1.54	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/23/98		7/23/98	n/a
585	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	97.2	%	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
586	HAA-ICR	2-Bromopropionic acid (Surrogate)	100.4	%	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
587	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
588	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
589	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/23/98	7/29/98	7/30/98	0-183-0
590	HAA-ICR	Dibromoacetic acid	2.3	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
591	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
592	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
593	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/23/98	7/29/98	7/30/98	0-183-0
594	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/23/98	7/29/98	7/30/98	0-183-0
595	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
596	pH	Cl2 pH - Final	7.7	Unit	SM 4500-H+ B	1	n/a	7/23/98		7/23/98	n/a
597	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/23/98		7/23/98	n/a
598	pH	pH	7.9	Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a
599	TEMP	Cl2 Temperature	25.8	°C	SM 2550 B	1	n/a	7/23/98		7/23/98	n/a
600	TEMP	Temperature	23.0	°C	SM 2550 B	1	n/a	7/21/98		7/21/98	n/a
601	TIME	Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	7/23/98		7/23/98	n/a
602	TOC-ICR	TOC	0.58	mg/L	SM 5310 C	1	0.50	7/21/98		7/21/98	7-0-344
603	TOC-ICR	TOC (Dupl)	0.63	mg/L	SM 5310 C	1	0.50	7/21/98		7/21/98	7-0-344
			0.60	mg/L	8.3 % RPD						
604	TOX-ICR	TOX	ND	µg Cl-/L	SM 5320 B	1	25	7/23/98		7/30/98	12-0-179
605	TOX-ICR	TOX (Dupl)	ND	µg Cl-/L	SM 5320 B	1	25	7/23/98		7/30/98	12-0-179
			ND	µg Cl-/L							
606	THM-ICR	1,2,3-Trichloropropane (Surrogate)	95.6	%	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
607	THM-ICR	Bromodichloromethane	ND	µg/L	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
608	THM-ICR	Bromoform	8.0	µg/L	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
609	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
610	THM-ICR	Dibromochloromethane	3.4	µg/L	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
611	UV-ICR	UV	ND	1/cm	SM 5910 B	1	0.009	7/21/98		7/21/98	8-0-234
612	UV-ICR	UV (Dupl)	ND	1/cm	SM 5910 B	1	0.009	7/21/98		7/21/98	8-0-234
			ND	1/cm							

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

Sample ID: 126.10.pH7.4.Eff-12			S&H ID: 9807-298		Date Sampled: 7/22/98 5:35:00 AM						
#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
613	Cl2Dose	Chlorine Dose	2.55	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/23/98		7/23/98	n/a
614	Cl2Res	Chlorine Residual	1.61	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/23/98		7/23/98	n/a
615	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	99.2	%	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
616	HAA-ICR	2-Bromopropionic acid (Surrogate)	102.0	%	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
617	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
618	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
619	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/23/98	7/29/98	7/30/98	0-183-0
620	HAA-ICR	Dibromoacetic acid	3.5	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
621	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
622	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
623	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/23/98	7/29/98	7/30/98	0-183-0
624	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/23/98	7/29/98	7/30/98	0-183-0
625	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
626	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	7/23/98		7/23/98	n/a
627	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/23/98		7/23/98	n/a
628	pH	pH	8.0	Unit	SM 4500-H+ B	1	n/a	7/22/98		7/22/98	n/a
629	TEMP	Cl2 Temperature	25.8	°C	SM 2550 B	1	n/a	7/23/98		7/23/98	n/a
630	TEMP	Temperature	22.6	°C	SM 2550 B	1	n/a	7/22/98		7/22/98	n/a
631	TIME	Cl2 Incubation Time	7.3	hrs	n/a	1	n/a	7/23/98		7/23/98	n/a
632	TOC-ICR	TOC	0.73	mg/L	SM 5310 C	1	0.50	7/22/98		7/22/98	7-0-345
633	TOC-ICR	TOC (Dupl)	0.77	mg/L	SM 5310 C	1	0.50	7/22/98		7/22/98	7-0-345
			0.75	mg/L	5.3 % RPD						
634	TOX-ICR	TOX	32	µg Cl-/L	SM 5320 B	1	25	7/23/98		7/30/98	12-0-179
635	TOX-ICR	TOX (Dupl)	31	µg Cl-/L	SM 5320 B	1	25	7/23/98		7/30/98	12-0-179
			32	µg Cl-/L	3.1 % RPD						
636	THM-ICR	1,2,3-Trichloropropane (Surrogate)	87.6	%	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
637	THM-ICR	Bromodichloromethane	1.2	µg/L	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
638	THM-ICR	Bromoform	11.6	µg/L	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
639	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
640	THM-ICR	Dibromochloromethane	5.4	µg/L	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
641	UV-ICR	UV	0.009	1/cm	SM 5910 B	1	0.009	7/22/98		7/22/98	8-0-235
642	UV-ICR	UV (Dupl)	0.009	1/cm	SM 5910 B	1	0.009	7/22/98		7/22/98	8-0-235
			0.009	1/cm	0.0 % RPD						

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

Sample ID: 126.10.pH7.4.Eff-13

S&H ID: 9807-299

Date Sampled: 7/22/98 1:31:00 PM

#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
643	Cl2Dose Chlorine Dose	1.92 mg/L as Cl2	SM 4500-Cl B	1	n/a	7/24/98		7/24/98	n/a
644	Cl2Res Chlorine Residual	1.22 mg/L as Cl2	SM 4500-Cl F	1	0.10	7/24/98		7/24/98	n/a
645	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	100.0 %	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
646	HAA-ICR 2-Bromopropionic acid (Surrogate)	100.4 %	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
647	HAA-ICR Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
648	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
649	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	7/24/98	7/29/98	7/30/98	0-183-0
650	HAA-ICR Dibromoacetic acid	2.8 µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
651	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
652	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
653	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/24/98	7/29/98	7/30/98	0-183-0
654	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/24/98	7/29/98	7/30/98	0-183-0
655	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
656	pH Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	7/24/98		7/24/98	n/a
657	pH Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	7/24/98		7/24/98	n/a
658	pH pH	7.9 Unit	SM 4500-H+ B	1	n/a	7/22/98		7/22/98	n/a
659	TEMP Cl2 Temperature	25.8 °C	SM 2550 B	1	n/a	7/24/98		7/24/98	n/a
660	TEMP Temperature	23.1 °C	SM 2550 B	1	n/a	7/22/98		7/22/98	n/a
661	TIME Cl2 Incubation Time	7.1 hrs	n/a	1	n/a	7/24/98		7/24/98	n/a
662	TOC-ICR TOC	0.84 mg/L	SM 5310 C	1	0.50	7/22/98		7/23/98	7-0-346
663	TOC-ICR TOC (Dupl)	0.84 mg/L	SM 5310 C	1	0.50	7/22/98		7/23/98	7-0-346
		0.84 mg/L	0.0 % RPD						
664	TOX-ICR TOX	27 µg Cl-/L	SM 5320 B	1	25	7/24/98		7/31/98	12-0-180
665	TOX-ICR TOX (Dupl)	30 µg Cl-/L	SM 5320 B	1	25	7/24/98		7/31/98	12-0-180
		29 µg Cl-/L	10.3 % RPD						
666	THM-ICR 1,2,3-Trichloropropane (Surrogate)	85.6 %	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98	0-184-0
667	THM-ICR Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98	0-184-0
668	THM-ICR Bromoform	12.4 µg/L	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98	0-184-0
669	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98	0-184-0
670	THM-ICR Dibromochloromethane	4.7 µg/L	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98	0-184-0
671	UV-ICR UV	0.011 1/cm	SM 5910 B	1	0.009	7/22/98		7/22/98	8-0-235
672	UV-ICR UV (Dupl)	0.011 1/cm	SM 5910 B	1	0.009	7/22/98		7/22/98	8-0-235
		0.011 1/cm	0.0 % RPD						

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

Sample ID: 126.10.pH7.4.Eff-14

S&H ID: 9807-300

Date Sampled: 7/23/98 5:15:00 AM

#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
673	Cl2Dose Chlorine Dose	1.90 mg/L as Cl2	SM 4500-Cl B	1	n/a	7/24/98		7/24/98	n/a
674	Cl2Res Chlorine Residual	1.28 mg/L as Cl2	SM 4500-Cl F	1	0.10	7/24/98		7/24/98	n/a
675	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	96.4 %	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
676	HAA-ICR 2-Bromopropionic acid (Surrogate)	100.4 %	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
677	HAA-ICR Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
678	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
679	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	7/24/98	7/29/98	7/30/98	0-183-0
680	HAA-ICR Dibromoacetic acid	3.2 µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
681	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
682	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
683	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/24/98	7/29/98	7/30/98	0-183-0
684	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/24/98	7/29/98	7/30/98	0-183-0
685	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
686	pH Cl2 pH - Final	7.9 Unit	SM 4500-H+ B	1	n/a	7/24/98		7/24/98	n/a
687	pH Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	7/24/98		7/24/98	n/a
688	pH pH	8.0 Unit	SM 4500-H+ B	1	n/a	7/23/98		7/23/98	n/a
689	TEMP Cl2 Temperature	25.8 °C	SM 2550 B	1	n/a	7/24/98		7/24/98	n/a
690	TEMP Temperature	22.6 °C	SM 2550 B	1	n/a	7/23/98		7/23/98	n/a
691	TIME Cl2 Incubation Time	7.1 hrs	n/a	1	n/a	7/24/98		7/24/98	n/a
692	TOC-ICR TOC	0.94 mg/L	SM 5310 C	1	0.50	7/23/98		7/23/98	7-0-346
693	TOC-ICR TOC (Dupl)	0.93 mg/L	SM 5310 C	1	0.50	7/23/98		7/23/98	7-0-346
		0.94 mg/L	1.1 % RPD						
694	TOX-ICR TOX	38 µg Cl-/L	SM 5320 B	1	25	7/24/98		7/31/98	12-0-180
695	TOX-ICR TOX (Dupl)	38 µg Cl-/L	SM 5320 B	1	25	7/24/98		7/31/98	12-0-180
		38 µg Cl-/L	0.0 % RPD						
696	THM-ICR 1,2,3-Trichloropropane (Surrogate)	87.2 %	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98	0-184-0
697	THM-ICR Bromodichloromethane	1.2 µg/L	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98	0-184-0
698	THM-ICR Bromoform	15.2 µg/L	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98	0-184-0
699	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98	0-184-0
700	THM-ICR Dibromochloromethane	6.1 µg/L	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98	0-184-0
701	UV-ICR UV	0.013 1/cm	SM 5910 B	1	0.009	7/23/98		7/23/98	8-0-236
702	UV-ICR UV (Dupl)	0.013 1/cm	SM 5910 B	1	0.009	7/23/98		7/23/98	8-0-236
		0.013 1/cm	0.0 % RPD						

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

Sample ID: 126.10.pH7.4.Eff-17

S&H ID: 9807-303

Date Sampled: 7/24/98 5:49:00 AM

#	Analysis Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
703	Cl2Dose Chlorine Dose	1.55	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/28/98		7/28/98	n/a
704	Cl2Res Chlorine Residual	0.97	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/28/98		7/28/98	n/a
705	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	100.4	%	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
706	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard) (Lab Dupl)	100.4	%	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
		100.4	%	0.0 % RPD						
707	HAA-ICR 2-Bromopropionic acid (Surrogate)	99.2	%	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
708	HAA-ICR 2-Bromopropionic acid (Surrogate) (Lab Dupl)	98.8	%	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
		99.0	%	0.4 % RPD						
709	HAA-ICR Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
710	HAA-ICR Bromochloroacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
		ND	µg/L							
711	HAA-ICR Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
712	HAA-ICR Bromodichloroacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
		ND	µg/L							
713	HAA-ICR Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/28/98	8/6/98	8/6/98	0-191-0
714	HAA-ICR Chlorodibromoacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	2.0	7/28/98	8/6/98	8/6/98	0-191-0
		ND	µg/L							
715	HAA-ICR Dibromoacetic acid	4.0	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
716	HAA-ICR Dibromoacetic acid (Lab Dupl)	3.7	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
		3.9	µg/L	7.7 % RPD						
717	HAA-ICR Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
718	HAA-ICR Dichloroacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
		ND	µg/L							
719	HAA-ICR Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
720	HAA-ICR Monobromoacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
		ND	µg/L							
721	HAA-ICR Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/28/98	8/6/98	8/6/98	0-191-0
722	HAA-ICR Monochloroacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	2.0	7/28/98	8/6/98	8/6/98	0-191-0
		ND	µg/L							
723	HAA-ICR Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/28/98	8/6/98	8/6/98	0-191-0
724	HAA-ICR Tribromoacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	4.0	7/28/98	8/6/98	8/6/98	0-191-0
		ND	µg/L							
725	HAA-ICR Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
726	HAA-ICR Trichloroacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

			ND µg/L						
727	pH	Cl2 pH - Final	7.7 Unit	SM 4500-H+ B	1	n/a	7/28/98	7/28/98	n/a
728	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	7/28/98	7/28/98	n/a
729	pH	pH	8.1 Unit	SM 4500-H+ B	1	n/a	7/24/98	7/24/98	n/a
730	TEMP	Cl2 Temperature	26.2 °C	SM 2550 B	1	n/a	7/28/98	7/28/98	n/a
731	TEMP	Temperature	22.6 °C	SM 2550 B	1	n/a	7/24/98	7/24/98	n/a
732	TIME	Cl2 Incubation Time	6.9 hrs	n/a	1	n/a	7/28/98	7/28/98	n/a
733	TOC-ICR	TOC	1.02 mg/L	SM 5310 C	1	0.50	7/24/98	7/24/98	7-0-347
734	TOC-ICR	TOC (Dupl)	1.03 mg/L	SM 5310 C	1	0.50	7/24/98	7/24/98	7-0-347
			1.02 mg/L	1.0 % RPD					
735	TOX-ICR	TOX	44 µg Cl-/L	SM 5320 B	1	25	7/28/98	8/3/98	12-0-181
736	TOX-ICR	TOX (Dupl)	44 µg Cl-/L	SM 5320 B	1	25	7/28/98	8/3/98	12-0-181
			44 µg Cl-/L	0.0 % RPD					
737	THM-ICR	1,2,3-Trichloropropane (Surrogate)	104.4 %	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98 0-192-0
738	THM-ICR	Bromodichloromethane	1.2 µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98 0-192-0
739	THM-ICR	Bromoform	20.0 µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98 0-192-0
740	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98 0-192-0
741	THM-ICR	Dibromochloromethane	7.0 µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98 0-192-0
742	UV-ICR	UV	0.016 1/cm	SM 5910 B	1	0.009	7/24/98	7/24/98	8-0-237
743	UV-ICR	UV (Dupl)	0.016 1/cm	SM 5910 B	1	0.009	7/24/98	7/24/98	8-0-237
			0.016 1/cm	0.0 % RPD					

Sample ID: 126.10.pH7.4.Eff-19

S&H ID: 9807-305

Date Sampled: 7/25/98 1:34:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
744	Cl2Dose	Chlorine Dose	1.43	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/28/98		7/28/98	n/a
745	Cl2Res	Chlorine Residual	0.75	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/28/98		7/28/98	n/a
746	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	102.0	%	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
747	HAA-ICR	2-Bromopropionic acid (Surrogate)	98.4	%	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
748	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
749	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
750	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/28/98	8/6/98	8/6/98	0-191-0
751	HAA-ICR	Dibromoacetic acid	4.5	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
752	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
753	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
754	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/28/98	8/6/98	8/6/98	0-191-0
755	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/28/98	8/6/98	8/6/98	0-191-0
756	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/6/98	0-191-0
757	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	7/28/98		7/28/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

758	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/28/98	7/28/98	n/a
759	pH	pH	8.0	Unit	SM 4500-H+ B	1	n/a	7/25/98	7/25/98	n/a
760	TEMP	Cl2 Temperature	26.2	°C	SM 2550 B	1	n/a	7/28/98	7/28/98	n/a
761	TEMP	Temperature	23.3	°C	SM 2550 B	1	n/a	7/25/98	7/25/98	n/a
762	TIME	Cl2 Incubation Time	7.1	hrs	n/a	1	n/a	7/28/98	7/28/98	n/a
763	TOC-ICR	TOC	1.18	mg/L	SM 5310 C	1	0.50	7/25/98	7/26/98	7-0-349
764	TOC-ICR	TOC (Dupl)	1.16	mg/L	SM 5310 C	1	0.50	7/25/98	7/26/98	7-0-349
			1.17	mg/L	1.7 % RPD					
765	TOX-ICR	TOX	60	µg Cl-/L	SM 5320 B	1	25	7/28/98	8/5/98	12-0-183
766	TOX-ICR	TOX (Dupl)	55	µg Cl-/L	SM 5320 B	1	25	7/28/98	8/5/98	12-0-183
			58	µg Cl-/L	8.6 % RPD					
767	THM-ICR	1,2,3-Trichloropropane (Surrogate)	96.0	%	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98 0-192-0
768	THM-ICR	Bromodichloromethane	1.5	µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98 0-192-0
769	THM-ICR	Bromoform	26.7	µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98 0-192-0
770	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98 0-192-0
771	THM-ICR	Dibromochloromethane	8.6	µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98 0-192-0
772	UV-ICR	UV	0.020	1/cm	SM 5910 B	1	0.009	7/25/98	7/26/98	8-0-239
773	UV-ICR	UV (Dupl)	0.020	1/cm	SM 5910 B	1	0.009	7/25/98	7/26/98	8-0-239
			0.020	1/cm	0.0 % RPD					

Sample ID: 126.10.pH7.4.Eff-21

S&H ID: 9807-307

Date Sampled: 7/26/98 10:02:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
774	Cl2Dose	Chlorine Dose	1.33	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/28/98		7/28/98	n/a
775	Cl2Res	Chlorine Residual	0.55	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/28/98		7/28/98	n/a
776	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	102.4	%	EPA 552.2	1	1.0	7/28/98	8/6/98	8/7/98	0-191-0
777	HAA-ICR	2-Bromopropionic acid (Surrogate)	96.8	%	EPA 552.2	1	1.0	7/28/98	8/6/98	8/7/98	0-191-0
778	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/7/98	0-191-0
779	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/7/98	0-191-0
780	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/28/98	8/6/98	8/7/98	0-191-0
781	HAA-ICR	Dibromoacetic acid	5.2	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/7/98	0-191-0
782	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/7/98	0-191-0
783	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/7/98	0-191-0
784	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/28/98	8/6/98	8/7/98	0-191-0
785	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/28/98	8/6/98	8/7/98	0-191-0
786	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/7/98	0-191-0
787	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	7/28/98		7/28/98	n/a
788	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/28/98		7/28/98	n/a
789	pH	pH	8.1	Unit	SM 4500-H+ B	1	n/a	7/26/98		7/26/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

790	TEMP	Cl2 Temperature	26.2 °C	SM 2550 B	1	n/a	7/28/98	7/28/98	n/a
791	TEMP	Temperature	23.1 °C	SM 2550 B	1	n/a	7/26/98	7/26/98	n/a
792	TIME	Cl2 Incubation Time	7.1 hrs	n/a	1	n/a	7/28/98	7/28/98	n/a
793	TOC-ICR	TOC	1.29 mg/L	SM 5310 C	1	0.50	7/26/98	7/27/98	7-0-350
794	TOC-ICR	TOC (Dupl)	1.30 mg/L	SM 5310 C	1	0.50	7/26/98	7/27/98	7-0-350
			1.29 mg/L	0.8 % RPD					
795	TOX-ICR	TOX	69 µg Cl-/L	SM 5320 B	1	25	7/28/98	8/4/98	12-0-182
796	TOX-ICR	TOX (Dupl)	69 µg Cl-/L	SM 5320 B	1	25	7/28/98	8/4/98	12-0-182
			69 µg Cl-/L	0.0 % RPD					
797	THM-ICR	1,2,3-Trichloropropane (Surrogate)	94.8 %	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98 0-192-0
798	THM-ICR	1,2,3-Trichloropropane (Surrogate) (Lab Dupl)	99.6 %	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98 0-192-0
			97.2 %	4.9 % RPD					
799	THM-ICR	Bromodichloromethane	1.6 µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98 0-192-0
800	THM-ICR	Bromodichloromethane (Lab Dupl)	1.6 µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98 0-192-0
			1.6 µg/L	0.0 % RPD					
801	THM-ICR	Bromoform	33.7 µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98 0-192-0
802	THM-ICR	Bromoform (Lab Dupl)	33.2 µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98 0-192-0
			33.5 µg/L	1.5 % RPD					
803	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98 0-192-0
804	THM-ICR	Chloroform (Lab Dupl)	ND µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98 0-192-0
			ND µg/L						
805	THM-ICR	Dibromochloromethane	9.7 µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98 0-192-0
806	THM-ICR	Dibromochloromethane (Lab Dupl)	9.2 µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98 0-192-0
			9.4 µg/L	5.3 % RPD					
807	UV-ICR	UV	0.023 1/cm	SM 5910 B	1	0.009	7/26/98	7/27/98	8-0-240
808	UV-ICR	UV (Dupl)	0.023 1/cm	SM 5910 B	1	0.009	7/26/98	7/27/98	8-0-240
			0.023 1/cm	0.0 % RPD					

Sample ID: 126.10.pH7.4.Eff-23

S&H ID: 9807-309

Date Sampled: 7/28/98 6:22:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
809	pH	pH	8.0	Unit	SM 4500-H+ B	1	n/a	7/28/98		7/28/98	n/a
810	TEMP	Temperature	22.9	°C	SM 2550 B	1	n/a	7/28/98		7/28/98	n/a
811	TOC-ICR	TOC	1.32	mg/L	SM 5310 C	1	0.50	7/28/98		7/28/98	7-0-351
812	TOC-ICR	TOC (Dupl)	1.32	mg/L	SM 5310 C	1	0.50	7/28/98		7/28/98	7-0-351
			1.32 mg/L		0.0 % RPD						
813	UV-ICR	UV	0.025	1/cm	SM 5910 B	1	0.009	7/28/98		7/28/98	8-0-241
814	UV-ICR	UV (Dupl)	0.025	1/cm	SM 5910 B	1	0.009	7/28/98		7/28/98	8-0-241
			0.025 1/cm		0.0 % RPD						

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

Sample ID: 126.10.pH7.4.Eff-6			S&H ID: 9807-317		Date Sampled: 7/19/98 9:00:00 PM						
#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
815	Cl2Dose	Chlorine Dose	2.60	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/21/98		7/21/98	n/a
816	Cl2Res	Chlorine Residual	1.75	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/21/98		7/21/98	n/a
817	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	98.4	%	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
818	HAA-ICR	2-Bromopropionic acid (Surrogate)	101.2	%	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
819	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
820	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
821	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/21/98	7/23/98	7/24/98	0-181-0
822	HAA-ICR	Dibromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
823	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
824	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
825	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/21/98	7/23/98	7/24/98	0-181-0
826	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/21/98	7/23/98	7/24/98	0-181-0
827	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
828	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a
829	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a
830	pH	pH	8.2	Unit	SM 4500-H+ B	1	n/a	7/19/98		7/19/98	n/a
831	TEMP	Cl2 Temperature	26.3	°C	SM 2550 B	1	n/a	7/21/98		7/21/98	n/a
832	TEMP	Temperature	24.1	°C	SM 2550 B	1	n/a	7/19/98		7/19/98	n/a
833	TIME	Cl2 Incubation Time	7.7	hrs	n/a	1	n/a	7/21/98		7/21/98	n/a
834	TOC-ICR	TOC	ND	mg/L	SM 5310 C	1	0.50	7/19/98		7/20/98	7-0-343
835	TOC-ICR	TOC (Dupl)	ND	mg/L	SM 5310 C	1	0.50	7/19/98		7/20/98	7-0-343
			ND	mg/L							
836	TOX-ICR	TOX	ND	µg Cl-/L	SM 5320 B	1	25	7/21/98		7/27/98	12-0-176
837	TOX-ICR	TOX (Dupl)	ND	µg Cl-/L	SM 5320 B	1	25	7/21/98		7/27/98	12-0-176
			ND	µg Cl-/L							
838	THM-ICR	1,2,3-Trichloropropane (Surrogate)	96.4	%	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
839	THM-ICR	Bromodichloromethane	ND	µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
840	THM-ICR	Bromoform	4.1	µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
841	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
842	THM-ICR	Dibromochloromethane	1.5	µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
843	UV-ICR	UV	ND	1/cm	SM 5910 B	1	0.009	7/19/98		7/20/98	8-0-231
844	UV-ICR	UV (Dupl)	ND	1/cm	SM 5910 B	1	0.009	7/19/98		7/20/98	8-0-231
			ND	1/cm							

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

Sample ID: 126.10.pH7.4.Eff-10d			S&H ID: 9807-318		Date Sampled: 7/21/98 5:19:00 AM						
#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
845	Cl2Dose	Chlorine Dose	2.70	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/22/98		7/22/98	n/a
846	Cl2Res	Chlorine Residual	1.96	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/22/98		7/22/98	n/a
847	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	97.6	%	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
848	HAA-ICR	2-Bromopropionic acid (Surrogate)	101.6	%	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
849	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
850	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
851	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/22/98	7/29/98	7/29/98	0-183-0
852	HAA-ICR	Dibromoacetic acid	1.2	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
853	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
854	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
855	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/22/98	7/29/98	7/29/98	0-183-0
856	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/22/98	7/29/98	7/29/98	0-183-0
857	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
858	pH	Cl2 pH - Final	7.7	Unit	SM 4500-H+ B	1	n/a	7/22/98		7/22/98	n/a
859	pH	Cl2 pH - Initial	7.6	Unit	SM 4500-H+ B	1	n/a	7/22/98		7/22/98	n/a
860	pH	pH	8.0	Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a
861	TEMP	Cl2 Temperature	25.0	°C	SM 2550 B	1	n/a	7/22/98		7/22/98	n/a
862	TEMP	Temperature	22.5	°C	SM 2550 B	1	n/a	7/21/98		7/21/98	n/a
863	TIME	Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	7/22/98		7/22/98	n/a
864	TOC-ICR	TOC	0.52	mg/L	SM 5310 C	1	0.50	7/21/98		7/21/98	7-0-344
865	TOC-ICR	TOC (Dupl)	0.52	mg/L	SM 5310 C	1	0.50	7/21/98		7/21/98	7-0-344
			0.52	mg/L	0.0 % RPD						
866	TOX-ICR	TOX	ND	µg Cl-/L	SM 5320 B	1	25	7/22/98		7/29/98	12-0-178
867	TOX-ICR	TOX (Dupl)	ND	µg Cl-/L	SM 5320 B	1	25	7/22/98		7/29/98	12-0-178
			ND	µg Cl-/L							
868	THM-ICR	1,2,3-Trichloropropane (Surrogate)	103.2	%	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
869	THM-ICR	Bromodichloromethane	ND	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
870	THM-ICR	Bromoform	5.8	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
871	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
872	THM-ICR	Dibromochloromethane	2.5	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
873	UV-ICR	UV	ND	1/cm	SM 5910 B	1	0.009	7/21/98		7/21/98	8-0-233
874	UV-ICR	UV (Dupl)	ND	1/cm	SM 5910 B	1	0.009	7/21/98		7/21/98	8-0-233
			ND	1/cm							

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

Sample ID: 126.10.pH7.4.Eff-17d			S&H ID: 9807-323		Date Sampled: 7/24/98 5:49:00 AM				
#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
875	Cl2Dose Chlorine Dose	1.55 mg/L as Cl2	SM 4500-Cl B	1	n/a	7/28/98		7/28/98	n/a
876	Cl2Res Chlorine Residual	0.93 mg/L as Cl2	SM 4500-Cl F	1	0.10	7/28/98		7/28/98	n/a
877	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	97.6 %	EPA 552.2	1	1.0	7/28/98	8/6/98	8/7/98	0-191-0
878	HAA-ICR 2-Bromopropionic acid (Surrogate)	96.0 %	EPA 552.2	1	1.0	7/28/98	8/6/98	8/7/98	0-191-0
879	HAA-ICR Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/7/98	0-191-0
880	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/7/98	0-191-0
881	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	7/28/98	8/6/98	8/7/98	0-191-0
882	HAA-ICR Dibromoacetic acid	3.5 µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/7/98	0-191-0
883	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/7/98	0-191-0
884	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/7/98	0-191-0
885	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/28/98	8/6/98	8/7/98	0-191-0
886	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/28/98	8/6/98	8/7/98	0-191-0
887	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/28/98	8/6/98	8/7/98	0-191-0
888	pH Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	7/28/98		7/28/98	n/a
889	pH Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	7/28/98		7/28/98	n/a
890	pH pH	8.1 Unit	SM 4500-H+ B	1	n/a	7/24/98		7/24/98	n/a
891	TEMP Cl2 Temperature	26.2 °C	SM 2550 B	1	n/a	7/28/98		7/28/98	n/a
892	TEMP Temperature	22.6 °C	SM 2550 B	1	n/a	7/24/98		7/24/98	n/a
893	TIME Cl2 Incubation Time	7.1 hrs	n/a	1	n/a	7/28/98		7/28/98	n/a
894	TOC-ICR TOC	1.03 mg/L	SM 5310 C	1	0.50	7/24/98		7/24/98	7-0-347
895	TOC-ICR TOC (Dupl)	1.04 mg/L	SM 5310 C	1	0.50	7/24/98		7/24/98	7-0-347
		1.04 mg/L	1.0 % RPD						
896	TOX-ICR TOX	39 µg Cl-/L	SM 5320 B	1	25	7/28/98		8/4/98	12-0-182
897	TOX-ICR TOX (Dupl)	43 µg Cl-/L	SM 5320 B	1	25	7/28/98		8/4/98	12-0-182
		41 µg Cl-/L	9.8 % RPD						
898	THM-ICR 1,2,3-Trichloropropane (Surrogate)	100.4 %	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
899	THM-ICR Bromodichloromethane	1.3 µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
900	THM-ICR Bromoform	21.5 µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
901	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
902	THM-ICR Dibromochloromethane	7.4 µg/L	EPA 551.1	1	1.0	7/28/98	8/7/98	8/7/98	0-192-0
903	UV-ICR UV	0.016 1/cm	SM 5910 B	1	0.009	7/24/98		7/24/98	8-0-237
904	UV-ICR UV (Dupl)	0.015 1/cm	SM 5910 B	1	0.009	7/24/98		7/24/98	8-0-237
		0.016 1/cm	6.3 % RPD						

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

Sample ID: 126.10.pH7.4.Eff-21d			S&H ID: 9807-324		Date Sampled: 7/26/98 10:02:00 PM						
#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
905	Cl2Dose	Chlorine Dose	1.33	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/28/98		7/28/98	n/a
906	Cl2Res	Chlorine Residual	0.63	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/28/98		7/28/98	n/a
907	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	99.6	%	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
908	HAA-ICR	2-Bromopropionic acid (Surrogate)	95.2	%	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
909	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
910	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
911	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/28/98	7/29/98	7/30/98	0-183-0
912	HAA-ICR	Dibromoacetic acid	5.3	µg/L	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
913	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
914	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
915	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/28/98	7/29/98	7/30/98	0-183-0
916	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/28/98	7/29/98	7/30/98	0-183-0
917	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
918	pH	Cl2 pH - Final	7.7	Unit	SM 4500-H+ B	1	n/a	7/28/98		7/28/98	n/a
919	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/28/98		7/28/98	n/a
920	pH	pH	8.2	Unit	SM 4500-H+ B	1	n/a	7/26/98		7/26/98	n/a
921	TEMP	Cl2 Temperature	26.2	°C	SM 2550 B	1	n/a	7/28/98		7/28/98	n/a
922	TEMP	Temperature	23.1	°C	SM 2550 B	1	n/a	7/26/98		7/26/98	n/a
923	TIME	Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	7/28/98		7/28/98	n/a
924	TOC-ICR	TOC	1.29	mg/L	SM 5310 C	1	0.50	7/26/98		7/27/98	7-0-350
925	TOC-ICR	TOC (Dupl)	1.28	mg/L	SM 5310 C	1	0.50	7/26/98		7/27/98	7-0-350
			1.29	mg/L	0.8 % RPD						
926	TOX-ICR	TOX	64	µg Cl-/L	SM 5320 B	1	25	7/28/98		8/3/98	12-0-181
927	TOX-ICR	TOX (Dupl)	67	µg Cl-/L	SM 5320 B	1	25	7/28/98		8/3/98	12-0-181
			66	µg Cl-/L	4.5 % RPD						
928	THM-ICR	1,2,3-Trichloropropane (Surrogate)	85.6	%	EPA 551.1	1	1.0	7/28/98	7/30/98	7/31/98	0-184-0
929	THM-ICR	Bromodichloromethane	1.6	µg/L	EPA 551.1	1	1.0	7/28/98	7/30/98	7/31/98	0-184-0
930	THM-ICR	Bromoform	29.1	µg/L	EPA 551.1	1	1.0	7/28/98	7/30/98	7/31/98	0-184-0
931	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/28/98	7/30/98	7/31/98	0-184-0
932	THM-ICR	Dibromochloromethane	9.2	µg/L	EPA 551.1	1	1.0	7/28/98	7/30/98	7/31/98	0-184-0
933	UV-ICR	UV	0.024	1/cm	SM 5910 B	1	0.009	7/26/98		7/27/98	8-0-240
934	UV-ICR	UV (Dupl)	0.024	1/cm	SM 5910 B	1	0.009	7/26/98		7/27/98	8-0-240
			0.024	1/cm	0.0 % RPD						

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

Sample ID: 126.10.pH7.8.Eff-1			S&H ID: 9807-327		Date Sampled: 7/16/98 6:25:00 PM						
#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
935	Cl2Dose	Chlorine Dose	2.48	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/22/98		7/22/98	n/a
936	Cl2Res	Chlorine Residual	0.84	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/22/98		7/22/98	n/a
937	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	97.2	%	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
938	HAA-ICR	2-Bromopropionic acid (Surrogate)	98.4	%	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
939	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
940	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
941	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/22/98	7/29/98	7/29/98	0-183-0
942	HAA-ICR	Dibromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
943	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
944	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
945	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/22/98	7/29/98	7/29/98	0-183-0
946	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/22/98	7/29/98	7/29/98	0-183-0
947	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
948	pH	Cl2 pH - Final	7.7	Unit	SM 4500-H+ B	1	n/a	7/22/98		7/22/98	n/a
949	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/22/98		7/22/98	n/a
950	pH	pH	8.3	Unit	SM 4500-H+ B	1	n/a	7/16/98		7/16/98	n/a
951	TEMP	Cl2 Temperature	25.0	°C	SM 2550 B	1	n/a	7/22/98		7/22/98	n/a
952	TEMP	Temperature	23.8	°C	SM 2550 B	1	n/a	7/16/98		7/16/98	n/a
953	TIME	Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	7/22/98		7/22/98	n/a
954	TOC-ICR	TOC	ND	mg/L	SM 5310 C	1	0.50	7/22/98		7/17/98	7-0-340
955	TOC-ICR	TOC (Dupl)	ND	mg/L	SM 5310 C	1	0.50	7/22/98		7/17/98	7-0-340
			ND	mg/L							
956	TOX-ICR	TOX	ND	µg Cl-/L	SM 5320 B	1	25	7/22/98		7/30/98	12-0-179
957	TOX-ICR	TOX (Dupl)	ND	µg Cl-/L	SM 5320 B	1	25	7/22/98		7/30/98	12-0-179
			ND	µg Cl-/L							
958	THM-ICR	1,2,3-Trichloropropane (Surrogate)	98.4	%	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
959	THM-ICR	Bromodichloromethane	ND	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
960	THM-ICR	Bromoform	1.5	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
961	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
962	THM-ICR	Dibromochloromethane	ND	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
963	UV-ICR	UV	ND	1/cm	SM 5910 B	1	0.009	7/16/98		7/17/98	8-0-229
964	UV-ICR	UV (Dupl)	ND	1/cm	SM 5910 B	1	0.009	7/16/98		7/17/98	8-0-229
			ND	1/cm							

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

Sample ID: 126.10.pH7.8.Eff-4			S&H ID: 9807-330		Date Sampled: 7/18/98 12:05:00 PM						
#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
965	Cl2Dose	Chlorine Dose	2.51	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/22/98		7/22/98	n/a
966	Cl2Res	Chlorine Residual	0.81	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/22/98		7/22/98	n/a
967	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	99.6	%	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
968	HAA-ICR	2-Bromopropionic acid (Surrogate)	97.2	%	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
969	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
970	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
971	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/22/98	7/29/98	7/29/98	0-183-0
972	HAA-ICR	Dibromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
973	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
974	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
975	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/22/98	7/29/98	7/29/98	0-183-0
976	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/22/98	7/29/98	7/29/98	0-183-0
977	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/29/98	0-183-0
978	pH	Cl2 pH - Final	7.7	Unit	SM 4500-H+ B	1	n/a	7/22/98		7/22/98	n/a
979	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/22/98		7/22/98	n/a
980	pH	pH	8.2	Unit	SM 4500-H+ B	1	n/a	7/18/98		7/18/98	n/a
981	TEMP	Cl2 Temperature	25.0	°C	SM 2550 B	1	n/a	7/22/98		7/22/98	n/a
982	TEMP	Temperature	23.2	°C	SM 2550 B	1	n/a	7/18/98		7/18/98	n/a
983	TIME	Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	7/22/98		7/22/98	n/a
984	TOC-ICR	TOC	ND	mg/L	SM 5310 C	1	0.50	7/18/98		7/18/98	7-0-341
985	TOC-ICR	TOC (Dupl)	ND	mg/L	SM 5310 C	1	0.50	7/18/98		7/18/98	7-0-341
			ND	mg/L							
986	TOX-ICR	TOX	ND	µg Cl-/L	SM 5320 B	1	25	7/22/98		7/30/98	12-0-179
987	TOX-ICR	TOX (Dupl)	ND	µg Cl-/L	SM 5320 B	1	25	7/22/98		7/30/98	12-0-179
			ND	µg Cl-/L							
988	THM-ICR	1,2,3-Trichloropropane (Surrogate)	102.8	%	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
989	THM-ICR	1,2,3-Trichloropropane (Surrogate) (Lab Dupl)	98.0	%	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
			100.4	%	4.8 % RPD						
990	THM-ICR	Bromodichloromethane	ND	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
991	THM-ICR	Bromodichloromethane (Lab Dupl)	ND	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
			ND	µg/L							
992	THM-ICR	Bromoform	1.9	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
993	THM-ICR	Bromoform (Lab Dupl)	1.9	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
			1.9	µg/L	0.0 % RPD						
994	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
995	THM-ICR	Chloroform (Lab Dupl)	ND	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

		ND µg/L							
996	THM-ICR Dibromochloromethane	ND µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
997	THM-ICR Dibromochloromethane (Lab Dupl)	ND µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
		ND µg/L							
998	UV-ICR UV	ND 1/cm	SM 5910 B	1	0.009	7/18/98		7/19/98	8-0-230
999	UV-ICR UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	7/18/98		7/19/98	8-0-230
		ND 1/cm							

Sample ID: 126.10.pH7.8.Eff-5		S&H ID: 9807-331	Date Sampled: 7/19/98 1:54:00 AM						
#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1000	Cl2Dose Chlorine Dose	2.57 mg/L as Cl2	SM 4500-Cl B	1	n/a	7/21/98		7/21/98	n/a
1001	Cl2Res Chlorine Residual	1.75 mg/L as Cl2	SM 4500-Cl F	1	0.10	7/21/98		7/21/98	n/a
1002	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	97.2 %	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1003	HAA-ICR 2-Bromopropionic acid (Surrogate)	102.4 %	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1004	HAA-ICR Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1005	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1006	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	7/21/98	7/23/98	7/24/98	0-181-0
1007	HAA-ICR Dibromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1008	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1009	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1010	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/21/98	7/23/98	7/24/98	0-181-0
1011	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/21/98	7/23/98	7/24/98	0-181-0
1012	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1013	pH Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a
1014	pH Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a
1015	pH pH	8.3 Unit	SM 4500-H+ B	1	n/a	7/19/98		7/19/98	n/a
1016	TEMP Cl2 Temperature	26.3 °C	SM 2550 B	1	n/a	7/21/98		7/21/98	n/a
1017	TEMP Temperature	23.0 °C	SM 2550 B	1	n/a	7/19/98		7/19/98	n/a
1018	TIME Cl2 Incubation Time	7.5 hrs	n/a	1	n/a	7/21/98		7/21/98	n/a
1019	TOC-ICR TOC	ND mg/L	SM 5310 C	1	0.50	7/19/98		7/19/98	7-0-342
1020	TOC-ICR TOC (Dupl)	ND mg/L	SM 5310 C	1	0.50	7/19/98		7/19/98	7-0-342
		ND mg/L							
1021	TOX-ICR TOX	ND µg Cl-/L	SM 5320 B	1	25	7/21/98		7/27/98	12-0-176
1022	TOX-ICR TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	7/21/98		7/27/98	12-0-176
		ND µg Cl-/L							
1023	THM-ICR 1,2,3-Trichloropropane (Surrogate)	96.8 %	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
1024	THM-ICR Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
1025	THM-ICR Bromoform	2.0 µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

1026	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
1027	THM-ICR Dibromochloromethane	ND µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
1028	UV-ICR UV	ND 1/cm	SM 5910 B	1	0.009	7/19/98		7/19/98	8-0-230
1029	UV-ICR UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	7/19/98		7/19/98	8-0-230
		ND 1/cm							

Sample ID: 126.10.pH7.8.Eff-7

S&H ID: 9807-333

Date Sampled: 7/19/98 3:53:00 PM

#	Analysis Type	Result Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1030	Cl2Dose Chlorine Dose	2.62 mg/L as Cl2	SM 4500-Cl B	1	n/a	7/21/98		7/21/98	n/a
1031	Cl2Res Chlorine Residual	0.91 mg/L as Cl2	SM 4500-Cl F	1	0.10	7/21/98		7/21/98	n/a
1032	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)	96.4 %	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1033	HAA-ICR 2-Bromopropionic acid (Surrogate)	98.8 %	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1034	HAA-ICR Bromochloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1035	HAA-ICR Bromodichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1036	HAA-ICR Chlorodibromoacetic acid	ND µg/L	EPA 552.2	1	2.0	7/21/98	7/23/98	7/24/98	0-181-0
1037	HAA-ICR Dibromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1038	HAA-ICR Dichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1039	HAA-ICR Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1040	HAA-ICR Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/21/98	7/23/98	7/24/98	0-181-0
1041	HAA-ICR Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/21/98	7/23/98	7/24/98	0-181-0
1042	HAA-ICR Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1043	pH Cl2 pH - Final	7.7 Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a
1044	pH Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a
1045	pH pH	8.2 Unit	SM 4500-H+ B	1	n/a	7/19/98		7/19/98	n/a
1046	TEMP Cl2 Temperature	26.3 °C	SM 2550 B	1	n/a	7/21/98		7/21/98	n/a
1047	TEMP Temperature	23.6 °C	SM 2550 B	1	n/a	7/19/98		7/19/98	n/a
1048	TIME Cl2 Incubation Time	7.5 hrs	n/a	1	n/a	7/21/98		7/21/98	n/a
1049	TOC-ICR TOC	ND mg/L	SM 5310 C	1	0.50	7/19/98		7/19/98	7-0-342
1050	TOC-ICR TOC (Dupl)	ND mg/L	SM 5310 C	1	0.50	7/19/98		7/19/98	7-0-342
		ND mg/L							
1051	TOX-ICR TOX	ND µg Cl-/L	SM 5320 B	1	25	7/21/98		7/27/98	12-0-176
1052	TOX-ICR TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	7/21/98		7/27/98	12-0-176
		ND µg Cl-/L							
1053	THM-ICR 1,2,3-Trichloropropane (Surrogate)	89.2 %	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
1054	THM-ICR Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
1055	THM-ICR Bromoform	5.0 µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
1056	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
1057	THM-ICR Dibromochloromethane	1.6 µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

1058	UV-ICR	UV	ND	1/cm	SM 5910 B	1	0.009	7/19/98	7/20/98	8-0-232
1059	UV-ICR	UV (Dupl)	ND	1/cm	SM 5910 B	1	0.009	7/19/98	7/20/98	8-0-232
			ND	1/cm						

Sample ID: 126.10.pH7.8.Eff-9			S&H ID: 9807-335		Date Sampled: 7/20/98 5:09:00 AM					
#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal. QC Batch
1060	Cl2Dose	Chlorine Dose	2.69	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/22/98		7/22/98 n/a
1061	Cl2Res	Chlorine Residual	1.11	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/22/98		7/22/98 n/a
1062	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	98.4	%	EPA 552.2	1	1.0	7/22/98	7/29/98	7/30/98 0-183-0
1063	HAA-ICR	2-Bromopropionic acid (Surrogate)	95.6	%	EPA 552.2	1	1.0	7/22/98	7/29/98	7/30/98 0-183-0
1064	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/30/98 0-183-0
1065	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/30/98 0-183-0
1066	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/22/98	7/29/98	7/30/98 0-183-0
1067	HAA-ICR	Dibromoacetic acid	1.1	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/30/98 0-183-0
1068	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/30/98 0-183-0
1069	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/30/98 0-183-0
1070	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/22/98	7/29/98	7/30/98 0-183-0
1071	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/22/98	7/29/98	7/30/98 0-183-0
1072	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/30/98 0-183-0
1073	pH	Cl2 pH - Final	7.7	Unit	SM 4500-H+ B	1	n/a	7/22/98		7/22/98 n/a
1074	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/22/98		7/22/98 n/a
1075	pH	pH	8.3	Unit	SM 4500-H+ B	1	n/a	7/20/98		7/20/98 n/a
1076	TEMP	Cl2 Temperature	25.0	°C	SM 2550 B	1	n/a	7/22/98		7/22/98 n/a
1077	TEMP	Temperature	22.8	°C	SM 2550 B	1	n/a	7/20/98		7/20/98 n/a
1078	TIME	Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	7/22/98		7/22/98 n/a
1079	TOC-ICR	TOC	0.51	mg/L	SM 5310 C	1	0.50	7/20/98		7/20/98 7-0-343
1080	TOC-ICR	TOC (Dupl)	ND	mg/L	SM 5310 C	1	0.50	7/20/98		7/20/98 7-0-343
			ND	mg/L						
1081	TOX-ICR	TOX	ND	µg Cl-/L	SM 5320 B	1	25	7/22/98		7/30/98 12-0-179
1082	TOX-ICR	TOX (Dupl)	ND	µg Cl-/L	SM 5320 B	1	25	7/22/98		7/30/98 12-0-179
			ND	µg Cl-/L						
1083	THM-ICR	1,2,3-Trichloropropane (Surrogate)	92.0	%	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98 0-184-0
1084	THM-ICR	Bromodichloromethane	ND	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98 0-184-0
1085	THM-ICR	Bromoform	5.6	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98 0-184-0
1086	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98 0-184-0
1087	THM-ICR	Dibromochloromethane	2.1	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98 0-184-0
1088	UV-ICR	UV	ND	1/cm	SM 5910 B	1	0.009	7/20/98		7/20/98 8-0-232
1089	UV-ICR	UV (Dupl)	ND	1/cm	SM 5910 B	1	0.009	7/20/98		7/20/98 8-0-232

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

ND 1/cm

Sample ID: 126.10.pH7.8.Eff-11

S&H ID: 9807-337

Date Sampled: 7/20/98 6:55:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1090	Cl2Dose	Chlorine Dose	2.74	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/22/98		7/22/98	n/a
1091	Cl2Res	Chlorine Residual	1.08	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/22/98		7/22/98	n/a
1092	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	100.0	%	EPA 552.2	1	1.0	7/22/98	7/29/98	7/30/98	0-183-0
1093	HAA-ICR	2-Bromopropionic acid (Surrogate)	97.2	%	EPA 552.2	1	1.0	7/22/98	7/29/98	7/30/98	0-183-0
1094	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/30/98	0-183-0
1095	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/30/98	0-183-0
1096	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/22/98	7/29/98	7/30/98	0-183-0
1097	HAA-ICR	Dibromoacetic acid	1.7	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/30/98	0-183-0
1098	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/30/98	0-183-0
1099	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/30/98	0-183-0
1100	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/22/98	7/29/98	7/30/98	0-183-0
1101	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/22/98	7/29/98	7/30/98	0-183-0
1102	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/22/98	7/29/98	7/30/98	0-183-0
1103	pH	Cl2 pH - Final	7.7	Unit	SM 4500-H+ B	1	n/a	7/22/98		7/22/98	n/a
1104	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/22/98		7/22/98	n/a
1105	pH	pH	8.3	Unit	SM 4500-H+ B	1	n/a	7/20/98		7/20/98	n/a
1106	TEMP	Cl2 Temperature	25.0	°C	SM 2550 B	1	n/a	7/22/98		7/22/98	n/a
1107	TEMP	Temperature	24.1	°C	SM 2550 B	1	n/a	7/20/98		7/20/98	n/a
1108	TIME	Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	7/22/98		7/22/98	n/a
1109	TOC-ICR	TOC	0.58	mg/L	SM 5310 C	1	0.50	7/20/98		7/21/98	7-0-344
1110	TOC-ICR	TOC (Dupl)	0.59	mg/L	SM 5310 C	1	0.50	7/20/98		7/21/98	7-0-344
			0.58	mg/L	1.7 % RPD						
1111	TOX-ICR	TOX	ND	µg Cl-/L	SM 5320 B	1	25	7/22/98		7/29/98	12-0-178
1112	TOX-ICR	TOX (Dupl)	ND	µg Cl-/L	SM 5320 B	1	25	7/22/98		7/29/98	12-0-178
			ND	µg Cl-/L							
1113	THM-ICR	1,2,3-Trichloropropane (Surrogate)	102.0	%	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
1114	THM-ICR	Bromodichloromethane	ND	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
1115	THM-ICR	Bromoform	7.8	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
1116	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
1117	THM-ICR	Dibromochloromethane	2.9	µg/L	EPA 551.1	1	1.0	7/22/98	7/30/98	7/30/98	0-184-0
1118	UV-ICR	UV	ND	1/cm	SM 5910 B	1	0.009	7/20/98		7/21/98	8-0-233
1119	UV-ICR	UV (Dupl)	ND	1/cm	SM 5910 B	1	0.009	7/20/98		7/21/98	8-0-233
			ND	1/cm							

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

Sample ID: 126.10.pH7.8.Eff-13

S&H ID: 9807-339

Date Sampled: 7/21/98 8:58:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1120	Cl2Dose	Chlorine Dose	2.58	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/23/98		7/23/98	n/a
1121	Cl2Res	Chlorine Residual	1.15	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/23/98		7/23/98	n/a
1122	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	102.8	%	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
1123	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard) (Lab Dupl)	101.2	%	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
			102.0	%	1.6 % RPD						
1124	HAA-ICR	2-Bromopropionic acid (Surrogate)	99.6	%	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
1125	HAA-ICR	2-Bromopropionic acid (Surrogate) (Lab Dupl)	96.8	%	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
			98.2	%	2.9 % RPD						
1126	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
1127	HAA-ICR	Bromochloroacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
			ND	µg/L							
1128	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
1129	HAA-ICR	Bromodichloroacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
			ND	µg/L							
1130	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/23/98	7/29/98	7/30/98	0-183-0
1131	HAA-ICR	Chlorodibromoacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	2.0	7/23/98	7/29/98	7/30/98	0-183-0
			ND	µg/L							
1132	HAA-ICR	Dibromoacetic acid	2.3	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
1133	HAA-ICR	Dibromoacetic acid (Lab Dupl)	2.4	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
			2.3	µg/L	4.3 % RPD						
1134	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
1135	HAA-ICR	Dichloroacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
			ND	µg/L							
1136	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
1137	HAA-ICR	Monobromoacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
			ND	µg/L							
1138	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/23/98	7/29/98	7/30/98	0-183-0
1139	HAA-ICR	Monochloroacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	2.0	7/23/98	7/29/98	7/30/98	0-183-0
			ND	µg/L							
1140	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/23/98	7/29/98	7/30/98	0-183-0
1141	HAA-ICR	Tribromoacetic acid (Lab Dupl)	ND	µg/L	EPA 552.2	1	4.0	7/23/98	7/29/98	7/30/98	0-183-0
			ND	µg/L							
1142	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

1143	HAA-ICR	Trichloroacetic acid (Lab Dupl)	ND µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
			ND µg/L							
1144	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	7/23/98		7/23/98	n/a
1145	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	7/23/98		7/23/98	n/a
1146	pH	pH	8.2 Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a
1147	TEMP	Cl2 Temperature	25.8 °C	SM 2550 B	1	n/a	7/23/98		7/23/98	n/a
1148	TEMP	Temperature	22.4 °C	SM 2550 B	1	n/a	7/21/98		7/21/98	n/a
1149	TIME	Cl2 Incubation Time	7.3 hrs	n/a	1	n/a	7/23/98		7/23/98	n/a
1150	TOC-ICR	TOC	0.65 mg/L	SM 5310 C	1	0.50	7/21/98		7/21/98	7-0-344
1151	TOC-ICR	TOC (Dupl)	0.66 mg/L	SM 5310 C	1	0.50	7/21/98		7/21/98	7-0-344
			0.66 mg/L	1.5 % RPD						
1152	TOX-ICR	TOX	25 µg Cl-/L	SM 5320 B	1	25	7/23/98		7/30/98	12-0-179
1153	TOX-ICR	TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	7/23/98		7/30/98	12-0-179
			ND µg Cl-/L							
1154	THM-ICR	1,2,3-Trichloropropane (Surrogate)	87.2 %	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
1155	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
1156	THM-ICR	Bromoform	8.9 µg/L	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
1157	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
1158	THM-ICR	Dibromochloromethane	3.8 µg/L	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
1159	UV-ICR	UV	0.009 1/cm	SM 5910 B	1	0.009	7/21/98		7/21/98	8-0-233
1160	UV-ICR	UV (Dupl)	0.009 1/cm	SM 5910 B	1	0.009	7/21/98		7/21/98	8-0-233
			0.009 1/cm	0.0 % RPD						

Sample ID: 126.10.pH7.8.Eff-14

S&H ID: 9807-340

Date Sampled: 7/21/98 3:54:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1161	Cl2Dose	Chlorine Dose	2.62	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/23/98		7/23/98	n/a
1162	Cl2Res	Chlorine Residual	1.16	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/23/98		7/23/98	n/a
1163	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	103.6	%	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
1164	HAA-ICR	2-Bromopropionic acid (Surrogate)	97.6	%	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
1165	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
1166	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
1167	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/23/98	7/29/98	7/30/98	0-183-0
1168	HAA-ICR	Dibromoacetic acid	2.8	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
1169	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
1170	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
1171	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/23/98	7/29/98	7/30/98	0-183-0
1172	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/23/98	7/29/98	7/30/98	0-183-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

1173	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
1174	pH	Cl2 pH - Final	7.7 Unit	SM 4500-H+ B	1	n/a	7/23/98		7/23/98	n/a
1175	pH	Cl2 pH - Initial	7.6 Unit	SM 4500-H+ B	1	n/a	7/23/98		7/23/98	n/a
1176	pH	pH	8.2 Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a
1177	TEMP	Cl2 Temperature	25.8 °C	SM 2550 B	1	n/a	7/23/98		7/23/98	n/a
1178	TEMP	Temperature	23.9 °C	SM 2550 B	1	n/a	7/21/98		7/21/98	n/a
1179	TIME	Cl2 Incubation Time	7.3 hrs	n/a	1	n/a	7/23/98		7/23/98	n/a
1180	TOC-ICR	TOC	0.76 mg/L	SM 5310 C	1	0.50	7/21/98		7/22/98	7-0-345
1181	TOC-ICR	TOC (Dupl)	0.78 mg/L	SM 5310 C	1	0.50	7/21/98		7/22/98	7-0-345
			0.77 mg/L	2.6 % RPD						
1182	TOX-ICR	TOX	28 µg Cl-/L	SM 5320 B	1	25	7/23/98		7/31/98	12-0-180
1183	TOX-ICR	TOX (Dupl)	27 µg Cl-/L	SM 5320 B	1	25	7/23/98		7/31/98	12-0-180
			28 µg Cl-/L	3.6 % RPD						
1184	THM-ICR	1,2,3-Trichloropropane (Surrogate)	85.6 %	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
1185	THM-ICR	Bromodichloromethane	1.0 µg/L	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
1186	THM-ICR	Bromoform	10.2 µg/L	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
1187	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
1188	THM-ICR	Dibromochloromethane	4.8 µg/L	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
1189	UV-ICR	UV	0.011 1/cm	SM 5910 B	1	0.009	7/21/98		7/21/98	8-0-234
1190	UV-ICR	UV (Dupl)	0.011 1/cm	SM 5910 B	1	0.009	7/21/98		7/21/98	8-0-234
			0.011 1/cm	0.0 % RPD						

Sample ID: 126.10.pH7.8.Eff-15

S&H ID: 9807-341

Date Sampled: 7/21/98 10:45:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1191	Cl2Dose	Chlorine Dose	2.49	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/24/98		7/24/98	n/a
1192	Cl2Res	Chlorine Residual	1.02	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/24/98		7/24/98	n/a
1193	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	101.2	%	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
1194	HAA-ICR	2-Bromopropionic acid (Surrogate)	96.0	%	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
1195	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
1196	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
1197	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/24/98	7/29/98	7/30/98	0-183-0
1198	HAA-ICR	Dibromoacetic acid	2.6	µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
1199	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
1200	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
1201	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/24/98	7/29/98	7/30/98	0-183-0
1202	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/24/98	7/29/98	7/30/98	0-183-0
1203	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
1204	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	7/24/98		7/24/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

1205	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/24/98	7/24/98	n/a
1206	pH	pH	8.3	Unit	SM 4500-H+ B	1	n/a	7/21/98	7/21/98	n/a
1207	TEMP	Cl2 Temperature	25.8	°C	SM 2550 B	1	n/a	7/24/98	7/24/98	n/a
1208	TEMP	Temperature	23.7	°C	SM 2550 B	1	n/a	7/21/98	7/21/98	n/a
1209	TIME	Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	7/24/98	7/24/98	n/a
1210	TOC-ICR	TOC	0.83	mg/L	SM 5310 C	1	0.50	7/21/98	7/22/98	7-0-345
1211	TOC-ICR	TOC (Dupl)	0.82	mg/L	SM 5310 C	1	0.50	7/21/98	7/22/98	7-0-345
			0.82	mg/L	1.2 % RPD					
1212	TOX-ICR	TOX	31	µg Cl-/L	SM 5320 B	1	25	7/24/98	7/31/98	12-0-180
1213	TOX-ICR	TOX (Dupl)	28	µg Cl-/L	SM 5320 B	1	25	7/24/98	7/31/98	12-0-180
			30	µg Cl-/L	10.0 % RPD					
1214	THM-ICR	1,2,3-Trichloropropane (Surrogate)	88.0	%	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98 0-184-0
1215	THM-ICR	Bromodichloromethane	1.1	µg/L	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98 0-184-0
1216	THM-ICR	Bromoform	12.5	µg/L	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98 0-184-0
1217	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98 0-184-0
1218	THM-ICR	Dibromochloromethane	5.5	µg/L	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98 0-184-0
1219	UV-ICR	UV	0.012	1/cm	SM 5910 B	1	0.009	7/21/98	7/22/98	8-0-235
1220	UV-ICR	UV (Dupl)	0.012	1/cm	SM 5910 B	1	0.009	7/21/98	7/22/98	8-0-235
			0.012	1/cm	0.0 % RPD					

Sample ID: 126.10.pH7.8.Eff-17

S&H ID: 9807-343

Date Sampled: 7/22/98 7:39:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1221	Cl2Dose	Chlorine Dose	2.44	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/24/98		7/24/98	n/a
1222	Cl2Res	Chlorine Residual	0.99	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/24/98		7/24/98	n/a
1223	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	99.2	%	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
1224	HAA-ICR	2-Bromopropionic acid (Surrogate)	95.2	%	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
1225	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
1226	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
1227	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/24/98	7/29/98	7/30/98	0-183-0
1228	HAA-ICR	Dibromoacetic acid	3.8	µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
1229	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
1230	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
1231	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/24/98	7/29/98	7/30/98	0-183-0
1232	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/24/98	7/29/98	7/30/98	0-183-0
1233	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/24/98	7/29/98	7/30/98	0-183-0
1234	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	7/24/98		7/24/98	n/a
1235	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/24/98		7/24/98	n/a
1236	pH	pH	8.3	Unit	SM 4500-H+ B	1	n/a	7/22/98		7/22/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

1237	TEMP	Cl2 Temperature	25.8 °C	SM 2550 B	1	n/a	7/24/98	7/24/98	n/a
1238	TEMP	Temperature	24.0 °C	SM 2550 B	1	n/a	7/22/98	7/22/98	n/a
1239	TIME	Cl2 Incubation Time	7.2 hrs	n/a	1	n/a	7/24/98	7/24/98	n/a
1240	TOC-ICR	TOC	0.96 mg/L	SM 5310 C	1	0.50	7/22/98	7/23/98	7-0-346
1241	TOC-ICR	TOC (Dupl)	0.97 mg/L	SM 5310 C	1	0.50	7/22/98	7/23/98	7-0-346
			0.96 mg/L	1.0 % RPD					
1242	TOX-ICR	TOX	39 µg Cl-/L	SM 5320 B	1	25	7/24/98	7/31/98	12-0-180
1243	TOX-ICR	TOX (Dupl)	40 µg Cl-/L	SM 5320 B	1	25	7/24/98	7/31/98	12-0-180
			40 µg Cl-/L	2.5 % RPD					
1244	THM-ICR	1,2,3-Trichloropropane (Surrogate)	88.0 %	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98 0-184-0
1245	THM-ICR	Bromodichloromethane	1.4 µg/L	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98 0-184-0
1246	THM-ICR	Bromoform	17.0 µg/L	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98 0-184-0
1247	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98 0-184-0
1248	THM-ICR	Dibromochloromethane	7.5 µg/L	EPA 551.1	1	1.0	7/24/98	7/30/98	7/31/98 0-184-0
1249	UV-ICR	UV	0.015 1/cm	SM 5910 B	1	0.009	7/22/98	7/23/98	8-0-236
1250	UV-ICR	UV (Dupl)	0.015 1/cm	SM 5910 B	1	0.009	7/22/98	7/23/98	8-0-236
			0.015 1/cm	0.0 % RPD					

Sample ID: 126.10.pH7.8.Eff-20

S&H ID: 9807-346

Date Sampled: 7/24/98 1:38:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1251	Cl2Dose	Chlorine Dose	2.43	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/28/98		7/28/98	n/a
1252	Cl2Res	Chlorine Residual	0.93	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/28/98		7/28/98	n/a
1253	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	103.6	%	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
1254	HAA-ICR	2-Bromopropionic acid (Surrogate)	94.8	%	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
1255	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
1256	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
1257	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/28/98	7/29/98	7/30/98	0-183-0
1258	HAA-ICR	Dibromoacetic acid	4.5	µg/L	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
1259	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
1260	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
1261	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/28/98	7/29/98	7/30/98	0-183-0
1262	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/28/98	7/29/98	7/30/98	0-183-0
1263	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
1264	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	7/28/98		7/28/98	n/a
1265	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/28/98		7/28/98	n/a
1266	pH	pH	8.2	Unit	SM 4500-H+ B	1	n/a	7/24/98		7/24/98	n/a
1267	TEMP	Cl2 Temperature	26.2	°C	SM 2550 B	1	n/a	7/28/98		7/28/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

1268	TEMP	Temperature	23.1 °C	SM 2550 B	1	n/a	7/24/98	7/24/98	n/a
1269	TIME	Cl2 Incubation Time	7.2 hrs	n/a	1	n/a	7/28/98	7/28/98	n/a
1270	TOC-ICR	TOC	1.12 mg/L	SM 5310 C	1	0.50	7/24/98	7/25/98	7-0-348
1271	TOC-ICR	TOC (Dupl)	1.12 mg/L	SM 5310 C	1	0.50	7/24/98	7/25/98	7-0-348
			1.12 mg/L	0.0 % RPD					
1272	TOX-ICR	TOX	57 µg Cl-/L	SM 5320 B	1	25	7/28/98	8/4/98	12-0-182
1273	TOX-ICR	TOX (Dupl)	59 µg Cl-/L	SM 5320 B	1	25	7/28/98	8/4/98	12-0-182
			58 µg Cl-/L	3.4 % RPD					
1274	THM-ICR	1,2,3-Trichloropropane (Surrogate)	88.4 %	EPA 551.1	1	1.0	7/28/98	7/30/98	7/31/98 0-184-0
1275	THM-ICR	Bromodichloromethane	1.8 µg/L	EPA 551.1	1	1.0	7/28/98	7/30/98	7/31/98 0-184-0
1276	THM-ICR	Bromoform	23.1 µg/L	EPA 551.1	1	1.0	7/28/98	7/30/98	7/31/98 0-184-0
1277	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	7/28/98	7/30/98	7/31/98 0-184-0
1278	THM-ICR	Dibromochloromethane	9.9 µg/L	EPA 551.1	1	1.0	7/28/98	7/30/98	7/31/98 0-184-0
1279	UV-ICR	UV	0.020 1/cm	SM 5910 B	1	0.009	7/24/98	7/25/98	8-0-238
1280	UV-ICR	UV (Dupl)	0.020 1/cm	SM 5910 B	1	0.009	7/24/98	7/25/98	8-0-238
			0.020 1/cm	0.0 % RPD					

Sample ID: 126.10.pH7.8.Eff-22

S&H ID: 9807-348

Date Sampled: 7/26/98 6:40:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1281	Cl2Dose	Chlorine Dose	2.41	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/28/98		7/28/98	n/a
1282	Cl2Res	Chlorine Residual	0.73	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/28/98		7/28/98	n/a
1283	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	98.8	%	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
1284	HAA-ICR	2-Bromopropionic acid (Surrogate)	96.8	%	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
1285	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
1286	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
1287	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/28/98	7/29/98	7/30/98	0-183-0
1288	HAA-ICR	Dibromoacetic acid	5.4	µg/L	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
1289	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
1290	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
1291	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/28/98	7/29/98	7/30/98	0-183-0
1292	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/28/98	7/29/98	7/30/98	0-183-0
1293	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
1294	pH	Cl2 pH - Final	7.7	Unit	SM 4500-H+ B	1	n/a	7/28/98		7/28/98	n/a
1295	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/28/98		7/28/98	n/a
1296	pH	pH	8.3	Unit	SM 4500-H+ B	1	n/a	7/26/98		7/26/98	n/a
1297	TEMP	Cl2 Temperature	26.2	°C	SM 2550 B	1	n/a	7/28/98		7/28/98	n/a
1298	TEMP	Temperature	23.3	°C	SM 2550 B	1	n/a	7/26/98		7/26/98	n/a
1299	TIME	Cl2 Incubation Time	7.3	hrs	n/a	1	n/a	7/28/98		7/28/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

1300	TOC-ICR TOC	1.26 mg/L	SM 5310 C	1	0.50	7/26/98	7/27/98	7-0-350
1301	TOC-ICR TOC (Dupl)	1.25 mg/L	SM 5310 C	1	0.50	7/26/98	7/27/98	7-0-350
		1.25 mg/L	0.8 % RPD					
1302	TOX-ICR TOX	67 µg Cl-/L	SM 5320 B	1	25	7/28/98	8/3/98	12-0-181
1303	TOX-ICR TOX (Dupl)	66 µg Cl-/L	SM 5320 B	1	25	7/28/98	8/3/98	12-0-181
		67 µg Cl-/L	1.5 % RPD					
1304	THM-ICR 1,2,3-Trichloropropane (Surrogate)	88.8 %	EPA 551.1	1	1.0	7/28/98	7/30/98	7/31/98 0-184-0
1305	THM-ICR Bromodichloromethane	1.6 µg/L	EPA 551.1	1	1.0	7/28/98	7/30/98	7/31/98 0-184-0
1306	THM-ICR Bromoform	27.1 µg/L	EPA 551.1	1	1.0	7/28/98	7/30/98	7/31/98 0-184-0
1307	THM-ICR Chloroform	ND µg/L	EPA 551.1	1	1.0	7/28/98	7/30/98	7/31/98 0-184-0
1308	THM-ICR Dibromochloromethane	10.2 µg/L	EPA 551.1	1	1.0	7/28/98	7/30/98	7/31/98 0-184-0
1309	UV-ICR UV	0.024 1/cm	SM 5910 B	1	0.009	7/26/98	7/27/98	8-0-240
1310	UV-ICR UV (Dupl)	0.024 1/cm	SM 5910 B	1	0.009	7/26/98	7/27/98	8-0-240
		0.024 1/cm	0.0 % RPD					

Sample ID: 126.10.pH7.8.Eff-24 S&H ID: 9807-350 Date Sampled: 7/27/98 11:48:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1311	pH	pH	8.3	Unit	SM 4500-H+ B	1	n/a	7/27/98		7/27/98	n/a
1312	TEMP	Temperature	22.7	°C	SM 2550 B	1	n/a	7/27/98		7/27/98	n/a
1313	TOC-ICR TOC		1.31	mg/L	SM 5310 C	1	0.50	7/27/98		7/28/98	7-0-351
1314	TOC-ICR TOC (Dupl)		1.33	mg/L	SM 5310 C	1	0.50	7/27/98		7/28/98	7-0-351
			1.32 mg/L		1.5 % RPD						
1315	UV-ICR UV		0.026	1/cm	SM 5910 B	1	0.009	7/27/98		7/28/98	8-0-241
1316	UV-ICR UV (Dupl)		0.025	1/cm	SM 5910 B	1	0.009	7/27/98		7/28/98	8-0-241
			0.026 1/cm		3.8 % RPD						

Sample ID: 126.10.pH7.8.Eff-7d S&H ID: 9807-357 Date Sampled: 7/19/98 3:53:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1317	Cl2Dose	Chlorine Dose	2.62	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/21/98		7/21/98	n/a
1318	Cl2Res	Chlorine Residual	0.93	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/21/98		7/21/98	n/a
1319	HAA-ICR 1,2,3-Trichloropropane (IS) (Internal Standard)		99.2	%	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1320	HAA-ICR 2-Bromopropionic acid (Surrogate)		96.8	%	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1321	HAA-ICR Bromochloroacetic acid		ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1322	HAA-ICR Bromodichloroacetic acid		ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1323	HAA-ICR Chlorodibromoacetic acid		ND	µg/L	EPA 552.2	1	2.0	7/21/98	7/23/98	7/24/98	0-181-0
1324	HAA-ICR Dibromoacetic acid		ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1325	HAA-ICR Dichloroacetic acid		ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1326	HAA-ICR Monobromoacetic acid		ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

1327	HAA-ICR	Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/21/98	7/23/98	7/24/98	0-181-0
1328	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/21/98	7/23/98	7/24/98	0-181-0
1329	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1330	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a
1331	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a
1332	pH	pH	8.3 Unit	SM 4500-H+ B	1	n/a	7/19/98		7/19/98	n/a
1333	TEMP	Cl2 Temperature	26.3 °C	SM 2550 B	1	n/a	7/21/98		7/21/98	n/a
1334	TEMP	Temperature	23.5 °C	SM 2550 B	1	n/a	7/19/98		7/19/98	n/a
1335	TIME	Cl2 Incubation Time	7.6 hrs	n/a	1	n/a	7/21/98		7/21/98	n/a
1336	TOC-ICR	TOC	ND mg/L	SM 5310 C	1	0.50	7/19/98		7/19/98	7-0-342
1337	TOC-ICR	TOC (Dupl)	ND mg/L	SM 5310 C	1	0.50	7/19/98		7/19/98	7-0-342
			ND mg/L							
1338	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	7/21/98		7/28/98	12-0-177
1339	TOX-ICR	TOX (Dupl)	ND µg Cl-/L	SM 5320 B	1	25	7/21/98		7/28/98	12-0-177
			ND µg Cl-/L							
1340	THM-ICR	1,2,3-Trichloropropane (Surrogate)	94.0 %	EPA 551.1	1	1.0	7/21/98	7/27/98		0-182-0
1341	THM-ICR	Bromodichloromethane	ND µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98		0-182-0
1342	THM-ICR	Bromoform	4.1 µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98		0-182-0
1343	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98		0-182-0
1344	THM-ICR	Dibromochloromethane	1.6 µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98		0-182-0
1345	UV-ICR	UV	ND 1/cm	SM 5910 B	1	0.009	7/19/98		7/20/98	8-0-232
1346	UV-ICR	UV (Dupl)	ND 1/cm	SM 5910 B	1	0.009	7/19/98		7/20/98	8-0-232
			ND 1/cm							

Sample ID: 126.10.pH7.8.Eff-14d

S&H ID: 9807-360

Date Sampled: 7/21/98 3:54:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1347	Cl2Dose	Chlorine Dose	2.61	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/23/98		7/23/98	n/a
1348	Cl2Res	Chlorine Residual	1.08	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/23/98		7/23/98	n/a
1349	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	102.4	%	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
1350	HAA-ICR	2-Bromopropionic acid (Surrogate)	97.6	%	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
1351	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
1352	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
1353	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/23/98	7/29/98	7/30/98	0-183-0
1354	HAA-ICR	Dibromoacetic acid	3.1	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
1355	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
1356	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
1357	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/23/98	7/29/98	7/30/98	0-183-0
1358	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/23/98	7/29/98	7/30/98	0-183-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

1359	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/23/98	7/29/98	7/30/98	0-183-0
1360	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	7/23/98		7/23/98	n/a
1361	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	7/23/98		7/23/98	n/a
1362	pH	pH	8.2 Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a
1363	TEMP	Cl2 Temperature	25.8 °C	SM 2550 B	1	n/a	7/23/98		7/23/98	n/a
1364	TEMP	Temperature	23.8 °C	SM 2550 B	1	n/a	7/21/98		7/21/98	n/a
1365	TIME	Cl2 Incubation Time	7.3 hrs	n/a	1	n/a	7/23/98		7/23/98	n/a
1366	TOC-ICR	TOC	0.76 mg/L	SM 5310 C	1	0.50	7/21/98		7/22/98	7-0-345
1367	TOC-ICR	TOC (Dupl)	0.76 mg/L	SM 5310 C	1	0.50	7/21/98		7/22/98	7-0-345
			0.76 mg/L	0.0 % RPD						
1368	TOX-ICR	TOX	ND µg Cl-/L	SM 5320 B	1	25	7/23/98		7/31/98	12-0-180
1369	TOX-ICR	TOX (Dupl)	27 µg Cl-/L	SM 5320 B	1	25	7/23/98		7/31/98	12-0-180
			25 µg Cl-/L	16.0 % RPD						
1370	THM-ICR	1,2,3-Trichloropropane (Surrogate)	86.0 %	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
1371	THM-ICR	Bromodichloromethane	1.1 µg/L	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
1372	THM-ICR	Bromoform	11.4 µg/L	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
1373	THM-ICR	Chloroform	ND µg/L	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
1374	THM-ICR	Dibromochloromethane	5.1 µg/L	EPA 551.1	1	1.0	7/23/98	7/30/98	7/30/98	0-184-0
1375	UV-ICR	UV	0.011 1/cm	SM 5910 B	1	0.009	7/21/98		7/21/98	8-0-234
1376	UV-ICR	UV (Dupl)	0.010 1/cm	SM 5910 B	1	0.009	7/21/98		7/21/98	8-0-234
			0.010 1/cm	10.0 % RPD						

Sample ID: 126.10.pH7.8.Eff-20d S&H ID: 9807-361 Date Sampled: 7/24/98 1:38:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1377	Cl2Dose	Chlorine Dose	2.43	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/28/98		7/28/98	n/a
1378	Cl2Res	Chlorine Residual	1.03	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/28/98		7/28/98	n/a
1379	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	99.2	%	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
1380	HAA-ICR	2-Bromopropionic acid (Surrogate)	96.0	%	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
1381	HAA-ICR	Bromochloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
1382	HAA-ICR	Bromodichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
1383	HAA-ICR	Chlorodibromoacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/28/98	7/29/98	7/30/98	0-183-0
1384	HAA-ICR	Dibromoacetic acid	4.3	µg/L	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
1385	HAA-ICR	Dichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
1386	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
1387	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/28/98	7/29/98	7/30/98	0-183-0
1388	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/28/98	7/29/98	7/30/98	0-183-0
1389	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/28/98	7/29/98	7/30/98	0-183-0
1390	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	7/28/98		7/28/98	n/a

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

1391	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/28/98	7/28/98	n/a
1392	pH	pH	8.2	Unit	SM 4500-H+ B	1	n/a	7/24/98	7/24/98	n/a
1393	TEMP	Cl2 Temperature	26.2	°C	SM 2550 B	1	n/a	7/28/98	7/28/98	n/a
1394	TEMP	Temperature	23.0	°C	SM 2550 B	1	n/a	7/24/98	7/24/98	n/a
1395	TIME	Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	7/28/98	7/28/98	n/a
1396	TOC-ICR	TOC	1.10	mg/L	SM 5310 C	1	0.50	7/24/98	7/25/98	7-0-348
1397	TOC-ICR	TOC (Dupl)	1.11	mg/L	SM 5310 C	1	0.50	7/24/98	7/25/98	7-0-348
			1.11 mg/L		0.9 % RPD					
1398	TOX-ICR	TOX	56	µg Cl-/L	SM 5320 B	1	25	7/28/98	8/4/98	12-0-182
1399	TOX-ICR	TOX (Dupl)	56	µg Cl-/L	SM 5320 B	1	25	7/28/98	8/4/98	12-0-182
			56 µg Cl-/L		0.0 % RPD					
1400	THM-ICR	1,2,3-Trichloropropane (Surrogate)	86.8	%	EPA 551.1	1	1.0	7/28/98	7/30/98	7/31/98 0-184-0
1401	THM-ICR	Bromodichloromethane	1.6	µg/L	EPA 551.1	1	1.0	7/28/98	7/30/98	7/31/98 0-184-0
1402	THM-ICR	Bromoform	22.6	µg/L	EPA 551.1	1	1.0	7/28/98	7/30/98	7/31/98 0-184-0
1403	THM-ICR	Chloroform	ND	µg/L	EPA 551.1	1	1.0	7/28/98	7/30/98	7/31/98 0-184-0
1404	THM-ICR	Dibromochloromethane	9.3	µg/L	EPA 551.1	1	1.0	7/28/98	7/30/98	7/31/98 0-184-0
1405	UV-ICR	UV	0.020	1/cm	SM 5910 B	1	0.009	7/24/98	7/25/98	8-0-238
1406	UV-ICR	UV (Dupl)	0.020	1/cm	SM 5910 B	1	0.009	7/24/98	7/25/98	8-0-238
			0.020 1/cm		0.0 % RPD					

Sample ID: 126.10.pH7.0.Inf.A-1

S&H ID: 9807-367

Date Sampled: 7/16/98 11:45:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1407	ALK	Alkalinity	110	mg/L	SM 2320 B	1	5	7/16/98		7/16/98	1-0-28
1408	ALK	Alkalinity (Dupl)	116	mg/L	SM 2320 B	1	5	7/16/98		7/16/98	1-0-28
			113 mg/L		5.3 % RPD						
1409	NH3	Ammonia Nitrogen	0.13	mg/L	EPA 350.1	1	0.05	7/16/98		7/29/98	MW81493
1410	BR	Bromide	0.510	mg/L	EPA 300.0 A	2	0.040	7/16/98		8/3/98	MW81702
1411	CaHardM	Calcium Hardness	250	mg/L CaCO3	EPA 200.7	1	5	7/16/98		7/30/98	MW n/a
1412	CaMW	Calcium, Total, ICAP	100	mg/L	EPA 200.7	1	1	7/16/98	7/30/98	7/30/98	MW81489
1413	MgMW	Magnesium, Total, ICAP	38	mg/L	EPA 200.7	1	0	7/16/98	7/30/98	7/30/98	MW81491
1414	TotHard	Total Hardness as CaCO3 by ICP	406	mg/L CaCO3	SM 2340B	1	7	7/16/98		7/30/98	MW n/a

Sample ID: 126.10.pH7.0.Inf.A-2

S&H ID: 9807-368

Date Sampled: 7/27/98 5:25:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1415	ALK	Alkalinity	88	mg/L	SM 2320 B	1	5	7/27/98		7/28/98	1-0-29
1416	ALK	Alkalinity (Dupl)	88	mg/L	SM 2320 B	1	5	7/27/98		7/28/98	1-0-29
			88 mg/L		0.0 % RPD						
1417	NH3	Ammonia Nitrogen	0.16	mg/L	EPA 350.1	1	0.05	7/27/98		8/10/98	MW82272

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

1418	BR	Bromide	0.490 mg/L	EPA 300.0 A	2	0.040	7/27/98	8/11/98	MW82317
1419	CaHardM	Calcium Hardness	250 mg/L CaCO3	EPA 200.7	1	5	7/27/98	8/5/98	MW n/a
1420	CaMW	Calcium, Total, ICAP	100 mg/L	EPA 200.7	1	1	7/27/98	8/5/98	MW81814
1421	MgMW	Magnesium, Total, ICAP	38 mg/L	EPA 200.7	1	0	7/27/98	8/10/98	8/5/98 MW82109
1422	TotHard	Total Hardness as CaCO3 by ICP	406 mg/L CaCO3	SM 2340B	1	7	7/27/98	8/5/98	MW n/a

Sample ID: 126.10.pH7.0.Inf.B-1

S&H ID: 9807-369

Date Sampled: 7/16/98 11:40:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1423	Cl2Dose	Chlorine Dose	4.15	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/21/98		7/21/98	n/a
1424	Cl2Res	Chlorine Residual	0.96	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/21/98		7/21/98	n/a
1425	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	100.0	%	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1426	HAA-ICR	2-Bromopropionic acid (Surrogate)	95.2	%	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1427	HAA-ICR	Bromochloroacetic acid	2.3	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1428	HAA-ICR	Bromodichloroacetic acid	2.1	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1429	HAA-ICR	Chlorodibromoacetic acid	3.1	µg/L	EPA 552.2	1	2.0	7/21/98	7/23/98	7/24/98	0-181-0
1430	HAA-ICR	Dibromoacetic acid	4.8	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1431	HAA-ICR	Dichloroacetic acid	1.0	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1432	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1433	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/21/98	7/23/98	7/24/98	0-181-0
1434	HAA-ICR	Tribromoacetic acid	ND	µg/L	EPA 552.2	1	4.0	7/21/98	7/23/98	7/24/98	0-181-0
1435	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1436	pH	Cl2 pH - Final	7.7	Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a
1437	pH	Cl2 pH - Initial	7.6	Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a
1438	pH	pH	7.0	Unit	SM 4500-H+ B	1	n/a	7/16/98		7/16/98	n/a
1439	TEMP	Cl2 Temperature	26.3	°C	SM 2550 B	1	n/a	7/21/98		7/21/98	n/a
1440	TEMP	Temperature	21.4	°C	SM 2550 B	1	n/a	7/16/98		7/16/98	n/a
1441	TIME	Cl2 Incubation Time	7.5	hrs	n/a	1	n/a	7/21/98		7/21/98	n/a
1442	TOC-ICR	TOC	1.78	mg/L	SM 5310 C	1	0.50	7/21/98		7/17/98	7-0-340
1443	TOC-ICR	TOC (Dupl)	1.78	mg/L	SM 5310 C	1	0.50	7/21/98		7/17/98	7-0-340
			1.78	mg/L	0.0 % RPD						
1444	TOX-ICR	TOX	134	µg Cl-/L	SM 5320 B	1	25	7/21/98		7/28/98	12-0-177
1445	TOX-ICR	TOX (Dupl)	134	µg Cl-/L	SM 5320 B	1	25	7/21/98		7/28/98	12-0-177
			134	µg Cl-/L	0.0 % RPD						
1446	THM-ICR	1,2,3-Trichloropropane (Surrogate)	92.4	%	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
1447	THM-ICR	Bromodichloromethane	11.6	µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
1448	THM-ICR	Bromoform	34.7	µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

1449	THM-ICR Chloroform	2.9 µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
1450	THM-ICR Dibromochloromethane	32.0 µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/27/98	0-182-0
1451	TURB Turbidity	0.10 ntu	SM 2130 B	1	0.05	7/16/98		7/16/98	9-0-14
1452	UV-ICR UV	0.047 1/cm	SM 5910 B	1	0.009	7/16/98		7/16/98	8-0-228
1453	UV-ICR UV (Dupl)	0.047 1/cm	SM 5910 B	1	0.009	7/16/98		7/16/98	8-0-228
		0.047 1/cm	0.0 % RPD						

Sample ID: 126.10.pH7.0.Inf.B-2 S&H ID: 9807-370 Date Sampled: 7/20/98 3:45:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1454	pH	pH	7.1	Unit	SM 4500-H+ B	1	n/a	7/20/98		7/20/98	n/a
1455	TEMP	Temperature	20.0	°C	SM 2550 B	1	n/a	7/20/98		7/20/98	n/a
1456	TOC-ICR	TOC	1.78	mg/L	SM 5310 C	1	0.50	7/20/98		7/20/98	7-0-343
1457	TOC-ICR	TOC (Dupl)	1.79	mg/L	SM 5310 C	1	0.50	7/20/98		7/20/98	7-0-343
			1.79	mg/L	0.6 % RPD						

Sample ID: 126.10.pH7.0.Inf.B-3 S&H ID: 9807-371 Date Sampled: 7/24/98 8:55:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1458	pH	pH	7.0	Unit	SM 4500-H+ B	1	n/a	7/24/98		7/24/98	n/a
1459	TEMP	Temperature	21.2	°C	SM 2550 B	1	n/a	7/24/98		7/24/98	n/a
1460	TOC-ICR	TOC	1.80	mg/L	SM 5310 C	1	0.50	7/24/98		7/31/98	7-0-354
1461	TOC-ICR	TOC (Dupl)	1.82	mg/L	SM 5310 C	1	0.50	7/24/98		7/31/98	7-0-354
			1.81	mg/L	1.1 % RPD						

Sample ID: 126.10.pH7.0.Inf.B-4 S&H ID: 9807-372 Date Sampled: 7/27/98 5:20:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1462	Cl2Dose	Chlorine Dose	4.20	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/31/98		7/31/98	n/a
1463	Cl2Res	Chlorine Residual	1.03	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/31/98		7/31/98	n/a
1464	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	103.6	%	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
1465	HAA-ICR	2-Bromopropionic acid (Surrogate)	97.2	%	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
1466	HAA-ICR	Bromochloroacetic acid	3.3	µg/L	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
1467	HAA-ICR	Bromodichloroacetic acid	3.0	µg/L	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
1468	HAA-ICR	Chlorodibromoacetic acid	4.9	µg/L	EPA 552.2	1	2.0	7/31/98	8/6/98	8/7/98	0-191-0
1469	HAA-ICR	Dibromoacetic acid	8.3	µg/L	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
1470	HAA-ICR	Dichloroacetic acid	1.2	µg/L	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
1471	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
1472	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/31/98	8/6/98	8/7/98	0-191-0
1473	HAA-ICR	Tribromoacetic acid	4.9	µg/L	EPA 552.2	1	4.0	7/31/98	8/6/98	8/7/98	0-191-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

1474	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
1475	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	7/31/98		7/31/98	n/a
1476	pH	Cl2 pH - Initial	7.7 Unit	SM 4500-H+ B	1	n/a	7/31/98		7/31/98	n/a
1477	pH	pH	7.0 Unit	SM 4500-H+ B	1	n/a	7/27/98		7/27/98	n/a
1478	TEMP	Cl2 Temperature	28.8 °C	SM 2550 B	1	n/a	7/31/98		7/31/98	n/a
1479	TEMP	Temperature	18.3 °C	SM 2550 B	1	n/a	7/27/98		7/27/98	n/a
1480	TIME	Cl2 Incubation Time	7.2 hrs	n/a	1	n/a	7/31/98		7/31/98	n/a
1481	TOC-ICR	TOC	1.77 mg/L	SM 5310 C	1	0.50	7/27/98		7/28/98	7-0-351
1482	TOC-ICR	TOC (Dupl)	1.75 mg/L	SM 5310 C	1	0.50	7/27/98		7/28/98	7-0-351
			1.76 mg/L	1.1 % RPD						
1483	TOX-ICR	TOX	141 µg Cl-/L	SM 5320 B	1	25	7/31/98		8/5/98	12-0-183
1484	TOX-ICR	TOX (Dupl)	141 µg Cl-/L	SM 5320 B	1	25	7/31/98		8/5/98	12-0-183
			141 µg Cl-/L	0.0 % RPD						
1485	THM-ICR	1,2,3-Trichloropropane (Surrogate)	106.8 %	EPA 551.1	1	1.0	7/31/98	8/7/98	8/7/98	0-192-0
1486	THM-ICR	Bromodichloromethane	12.0 µg/L	EPA 551.1	1	1.0	7/31/98	8/7/98	8/7/98	0-192-0
1487	THM-ICR	Bromoform	36.7 µg/L	EPA 551.1	1	1.0	7/31/98	8/7/98	8/7/98	0-192-0
1488	THM-ICR	Chloroform	3.0 µg/L	EPA 551.1	1	1.0	7/31/98	8/7/98	8/7/98	0-192-0
1489	THM-ICR	Dibromochloromethane	32.0 µg/L	EPA 551.1	1	1.0	7/31/98	8/7/98	8/7/98	0-192-0
1490	TURB	Turbidity	0.15 ntu	SM 2130 B	1	0.05	7/27/98		7/27/98	9-0-14
1491	UV-ICR	UV	0.047 1/cm	SM 5910 B	1	0.009	7/27/98		7/28/98	8-0-241
1492	UV-ICR	UV (Dupl)	0.047 1/cm	SM 5910 B	1	0.009	7/27/98		7/28/98	8-0-241
			0.047 1/cm	0.0 % RPD						

Sample ID: 126.10.pH7.4.Inf.A-1 S&H ID: 9807-375 Date Sampled: 7/16/98 11:40:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1493	ALK	Alkalinity	125	mg/L	SM 2320 B	1	5	7/16/98		7/16/98	1-0-28
1494	ALK	Alkalinity (Dupl)	124	mg/L	SM 2320 B	1	5	7/16/98		7/16/98	1-0-28
			125 mg/L		0.8 % RPD						
1495	NH3	Ammonia Nitrogen	0.15	mg/L	EPA 350.1	1	0.05	7/16/98		7/29/98	MW81493
1496	BR	Bromide	0.500	mg/L	EPA 300.0 A	2	0.040	7/16/98		8/3/98	MW81702
1497	CaHardM	Calcium Hardness	250	mg/L CaCO3	EPA 200.7	1	5	7/16/98		7/30/98	MW n/a
1498	CaMW	Calcium, Total, ICAP	100	mg/L	EPA 200.7	1	1	7/16/98	7/30/98	7/30/98	MW81489
1499	MgMW	Magnesium, Total, ICAP	39	mg/L	EPA 200.7	1	0	7/16/98	7/30/98	7/30/98	MW81491
1500	TotHard	Total Hardness as CaCO3 by ICP	410	mg/L CaCO3	SM 2340B	1	7	7/16/98		7/30/98	MW n/a

Sample ID: 126.10.pH7.4.Inf.A-2 S&H ID: 9807-376 Date Sampled: 7/27/98 5:15:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
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ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

1501	ALK	Alkalinity	116 mg/L	SM 2320 B	1	5	7/27/98	7/28/98	1-0-29
1502	ALK	Alkalinity (Dupl)	119 mg/L	SM 2320 B	1	5	7/27/98	7/28/98	1-0-29
			118 mg/L	2.5 % RPD					
1503	NH3	Ammonia Nitrogen	0.22 mg/L	EPA 350.1	1	0.05	7/27/98	8/10/98	MW82272
1504	BR	Bromide	0.500 mg/L	EPA 300.0 A	2	0.040	7/27/98	8/11/98	MW82317
1505	CaHardM	Calcium Hardness	250 mg/L CaCO3	EPA 200.7	1	5	7/27/98	8/5/98	MW n/a
1506	CaMW	Calcium, Total, ICAP	100 mg/L	EPA 200.7	1	1	7/27/98	8/5/98	8/5/98 MW81814
1507	MgMW	Magnesium, Total, ICAP	38 mg/L	EPA 200.7	1	0	7/27/98	8/10/98	8/5/98 MW82109
1508	TotHard	Total Hardness as CaCO3 by ICP	406 mg/L CaCO3	SM 2340B	1	7	7/27/98	8/5/98	MW n/a

Sample ID: 126.10.pH7.4.Inf.B-1 S&H ID: 9807-377 Date Sampled: 7/16/98 11:40:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1509	pH	pH	7.4	Unit	SM 4500-H+ B	1	n/a	7/16/98		7/16/98	n/a
1510	TEMP	Temperature	22.1	°C	SM 2550 B	1	n/a	7/16/98		7/16/98	n/a
1511	TOC-ICR	TOC	1.76	mg/L	SM 5310 C	1	0.50	7/16/98		7/17/98	7-0-340
1512	TOC-ICR	TOC (Dupl)	1.76	mg/L	SM 5310 C	1	0.50	7/16/98		7/17/98	7-0-340
			1.76 mg/L		0.0 % RPD						
1513	TURB	Turbidity	0.15	ntu	SM 2130 B	1	0.05	7/16/98		7/16/98	9-0-14
1514	UV-ICR	UV	0.048	1/cm	SM 5910 B	1	0.009	7/16/98		7/16/98	8-0-228
1515	UV-ICR	UV (Dupl)	0.048	1/cm	SM 5910 B	1	0.009	7/16/98		7/16/98	8-0-228
			0.048 1/cm		0.0 % RPD						

Sample ID: 126.10.pH7.4.Inf.B-2 S&H ID: 9807-378 Date Sampled: 7/20/98 3:40:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1516	pH	pH	7.4	Unit	SM 4500-H+ B	1	n/a	7/20/98		7/20/98	n/a
1517	TEMP	Temperature	20.2	°C	SM 2550 B	1	n/a	7/20/98		7/20/98	n/a
1518	TOC-ICR	TOC	1.81	mg/L	SM 5310 C	1	0.50	7/20/98		7/20/98	7-0-343
1519	TOC-ICR	TOC (Dupl)	1.82	mg/L	SM 5310 C	1	0.50	7/20/98		7/20/98	7-0-343
			1.81 mg/L		0.6 % RPD						

Sample ID: 126.10.pH7.4.Inf.B-3 S&H ID: 9807-379 Date Sampled: 7/24/98 8:20:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1520	pH	pH	7.5	Unit	SM 4500-H+ B	1	n/a	7/24/98		7/24/98	n/a
1521	TEMP	Temperature	20.8	°C	SM 2550 B	1	n/a	7/24/98		7/24/98	n/a
1522	TOC-ICR	TOC	1.76	mg/L	SM 5310 C	1	0.50	7/24/98		7/31/98	7-0-354
1523	TOC-ICR	TOC (Dupl)	1.78	mg/L	SM 5310 C	1	0.50	7/24/98		7/31/98	7-0-354
			1.77 mg/L		1.1 % RPD						

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

1524	TURB	Turbidity	0.15	ntu	SM 2130 B	1	0.05	7/24/98	7/24/98	9-0-14
1525	UV-ICR	UV	0.047	1/cm	SM 5910 B	1	0.009	7/24/98	7/24/98	8-0-237
1526	UV-ICR	UV (Dupl)	0.047	1/cm	SM 5910 B	1	0.009	7/24/98	7/24/98	8-0-237
			0.047	1/cm	0.0 % RPD					

Sample ID: 126.10.pH7.4.Inf.B-4

S&H ID: 9807-380

Date Sampled: 7/27/98 5:20:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1527	Cl2Dose	Chlorine Dose	4.20	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/31/98		7/31/98	n/a
1528	Cl2Res	Chlorine Residual	1.16	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/31/98		7/31/98	n/a
1529	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	101.6	%	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
1530	HAA-ICR	2-Bromopropionic acid (Surrogate)	98.8	%	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
1531	HAA-ICR	Bromochloroacetic acid	3.5	µg/L	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
1532	HAA-ICR	Bromodichloroacetic acid	2.9	µg/L	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
1533	HAA-ICR	Chlorodibromoacetic acid	5.1	µg/L	EPA 552.2	1	2.0	7/31/98	8/6/98	8/7/98	0-191-0
1534	HAA-ICR	Dibromoacetic acid	8.9	µg/L	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
1535	HAA-ICR	Dichloroacetic acid	1.3	µg/L	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
1536	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
1537	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/31/98	8/6/98	8/7/98	0-191-0
1538	HAA-ICR	Tribromoacetic acid	5.2	µg/L	EPA 552.2	1	4.0	7/31/98	8/6/98	8/7/98	0-191-0
1539	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
1540	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	7/31/98		7/31/98	n/a
1541	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/31/98		7/31/98	n/a
1542	pH	pH	7.5	Unit	SM 4500-H+ B	1	n/a	7/27/98		7/27/98	n/a
1543	TEMP	Cl2 Temperature	28.8	°C	SM 2550 B	1	n/a	7/31/98		7/31/98	n/a
1544	TEMP	Temperature	18.5	°C	SM 2550 B	1	n/a	7/27/98		7/27/98	n/a
1545	TIME	Cl2 Incubation Time	7.2	hrs	n/a	1	n/a	7/31/98		7/31/98	n/a
1546	TOC-ICR	TOC	1.73	mg/L	SM 5310 C	1	0.50	7/27/98		7/28/98	7-0-351
1547	TOC-ICR	TOC (Dupl)	1.70	mg/L	SM 5310 C	1	0.50	7/27/98		7/28/98	7-0-351
			1.71	mg/L	1.8 % RPD						
1548	TOX-ICR	TOX	143	µg Cl-/L	SM 5320 B	1	25	7/31/98		8/5/98	12-0-183
1549	TOX-ICR	TOX (Dupl)	142	µg Cl-/L	SM 5320 B	1	25	7/31/98		8/5/98	12-0-183
			143	µg Cl-/L	0.7 % RPD						
1550	THM-ICR	1,2,3-Trichloropropane (Surrogate)	89.2	%	EPA 551.1	1	1.0	7/31/98	8/7/98	8/7/98	0-192-0
1551	THM-ICR	Bromodichloromethane	12.5	µg/L	EPA 551.1	1	1.0	7/31/98	8/7/98	8/7/98	0-192-0
1552	THM-ICR	Bromoform	38.6	µg/L	EPA 551.1	1	1.0	7/31/98	8/7/98	8/7/98	0-192-0
1553	THM-ICR	Chloroform	3.1	µg/L	EPA 551.1	1	1.0	7/31/98	8/7/98	8/7/98	0-192-0
1554	THM-ICR	Dibromochloromethane	33.3	µg/L	EPA 551.1	1	1.0	7/31/98	8/7/98	8/7/98	0-192-0
1555	TURB	Turbidity	0.15	ntu	SM 2130 B	1	0.05	7/27/98		7/27/98	9-0-14

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

1556	UV-ICR	UV	0.047	1/cm	SM 5910 B	1	0.009	7/27/98	7/28/98	8-0-241
1557	UV-ICR	UV (Dupl)	0.047	1/cm	SM 5910 B	1	0.009	7/27/98	7/28/98	8-0-241
			0.047	1/cm	0.0 % RPD					

Sample ID: 126.10.pH7.8.Inf.A-1 S&H ID: 9807-383 Date Sampled: 7/16/98 11:40:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1558	ALK	Alkalinity	132	mg/L	SM 2320 B	1	5	7/16/98		7/16/98	1-0-28
1559	ALK	Alkalinity (Dupl)	131	mg/L	SM 2320 B	1	5	7/16/98		7/16/98	1-0-28
			132	mg/L	0.8 % RPD						
1560	NH3	Ammonia Nitrogen	0.15	mg/L	EPA 350.1	1	0.05	7/16/98		7/29/98	MW81493
1561	BR	Bromide	0.500	mg/L	EPA 300.0 A	2	0.040	7/16/98		8/3/98	MW81702
1562	CaHardM	Calcium Hardness	250	mg/L CaCO3	EPA 200.7	1	5	7/16/98		7/30/98	MW n/a
1563	CaMW	Calcium, Total, ICAP	100	mg/L	EPA 200.7	1	1	7/16/98	7/30/98	7/30/98	MW81490
1564	MgMW	Magnesium, Total, ICAP	38	mg/L	EPA 200.7	1	0	7/16/98	7/30/98	7/30/98	MW81492
1565	TotHard	Total Hardness as CaCO3 by ICP	406	mg/L CaCO3	SM 2340B	1	7	7/16/98		7/30/98	MW n/a

Sample ID: 126.10.pH7.8.Inf.A-2 S&H ID: 9807-384 Date Sampled: 7/27/98 5:15:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1566	ALK	Alkalinity	130	mg/L	SM 2320 B	1	5	7/27/98		7/28/98	1-0-29
1567	ALK	Alkalinity (Dupl)	130	mg/L	SM 2320 B	1	5	7/27/98		7/28/98	1-0-29
			130	mg/L	0.0 % RPD						
1568	NH3	Ammonia Nitrogen	0.14	mg/L	EPA 350.1	1	0.05	7/27/98		8/10/98	MW82272
1569	BR	Bromide	0.490	mg/L	EPA 300.0 A	2	0.040	7/27/98		8/11/98	MW82317
1570	CaHardM	Calcium Hardness	250	mg/L CaCO3	EPA 200.7	1	5	7/27/98		8/5/98	MW n/a
1571	CaMW	Calcium, Total, ICAP	100	mg/L	EPA 200.7	1	1	7/27/98	8/5/98	8/5/98	MW81814
1572	MgMW	Magnesium, Total, ICAP	39	mg/L	EPA 200.7	1	0	7/27/98	8/10/98	8/5/98	MW82109
1573	TotHard	Total Hardness as CaCO3 by ICP	410	mg/L CaCO3	SM 2340B	1	7	7/27/98		8/5/98	MW n/a

Sample ID: 126.10.pH7.8.Inf.B-1 S&H ID: 9807-385 Date Sampled: 7/16/98 11:45:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1574	Cl2Dose	Chlorine Dose	4.15	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/21/98		7/21/98	n/a
1575	Cl2Res	Chlorine Residual	0.95	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/21/98		7/21/98	n/a
1576	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	97.2	%	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1577	HAA-ICR	2-Bromopropionic acid (Surrogate)	98.8	%	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

1578	HAA-ICR	Bromochloroacetic acid	2.0 µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1579	HAA-ICR	Bromodichloroacetic acid	2.0 µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1580	HAA-ICR	Chlorodibromoacetic acid	2.7 µg/L	EPA 552.2	1	2.0	7/21/98	7/23/98	7/24/98	0-181-0
1581	HAA-ICR	Dibromoacetic acid	4.6 µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1582	HAA-ICR	Dichloroacetic acid	1.1 µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1583	HAA-ICR	Monobromoacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1584	HAA-ICR	Monochloroacetic acid	ND µg/L	EPA 552.2	1	2.0	7/21/98	7/23/98	7/24/98	0-181-0
1585	HAA-ICR	Tribromoacetic acid	ND µg/L	EPA 552.2	1	4.0	7/21/98	7/23/98	7/24/98	0-181-0
1586	HAA-ICR	Trichloroacetic acid	ND µg/L	EPA 552.2	1	1.0	7/21/98	7/23/98	7/24/98	0-181-0
1587	pH	Cl2 pH - Final	7.8 Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a
1588	pH	Cl2 pH - Initial	7.8 Unit	SM 4500-H+ B	1	n/a	7/21/98		7/21/98	n/a
1589	pH	pH	7.8 Unit	SM 4500-H+ B	1	n/a	7/16/98		7/16/98	n/a
1590	TEMP	Cl2 Temperature	26.3 °C	SM 2550 B	1	n/a	7/21/98		7/21/98	n/a
1591	TEMP	Temperature	20.6 °C	SM 2550 B	1	n/a	7/16/98		7/16/98	n/a
1592	TIME	Cl2 Incubation Time	7.1 hrs	n/a	1	n/a	7/21/98		7/21/98	n/a
1593	TOC-ICR	TOC	1.75 mg/L	SM 5310 C	1	0.50	7/21/98		7/17/98	7-0-340
1594	TOC-ICR	TOC (Dupl)	1.77 mg/L	SM 5310 C	1	0.50	7/21/98		7/17/98	7-0-340
			1.76 mg/L	1.1 % RPD						
1595	TOX-ICR	TOX	134 µg Cl-/L	SM 5320 B	1	25	7/21/98		7/27/98	12-0-176
1596	TOX-ICR	TOX (Dupl)	134 µg Cl-/L	SM 5320 B	1	25	7/21/98		7/27/98	12-0-176
			134 µg Cl-/L	0.0 % RPD						
1597	THM-ICR	1,2,3-Trichloropropane (Surrogate)	103.6 %	EPA 551.1	1	1.0	7/21/98	7/27/98	7/28/98	0-182-0
1598	THM-ICR	Bromodichloromethane	10.1 µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/28/98	0-182-0
1599	THM-ICR	Bromoform	35.7 µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/28/98	0-182-0
1600	THM-ICR	Chloroform	2.6 µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/28/98	0-182-0
1601	THM-ICR	Dibromochloromethane	28.5 µg/L	EPA 551.1	1	1.0	7/21/98	7/27/98	7/28/98	0-182-0
1602	TURB	Turbidity	0.10 ntu	SM 2130 B	1	0.05	7/16/98		7/16/98	9-0-14
1603	UV-ICR	UV	0.047 1/cm	SM 5910 B	1	0.009	7/16/98		7/16/98	8-0-228
1604	UV-ICR	UV (Dupl)	0.047 1/cm	SM 5910 B	1	0.009	7/16/98		7/16/98	8-0-228
			0.047 1/cm	0.0 % RPD						

Sample ID: 126.10.pH7.8.Inf.B-2

S&H ID: 9807-386

Date Sampled: 7/20/98 3:45:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Sample	Prep.	Anal.	QC Batch
1605	pH	pH	7.8	Unit	SM 4500-H+ B	1	n/a	7/20/98		7/20/98	n/a
1606	TEMP	Temperature	20.3	°C	SM 2550 B	1	n/a	7/20/98		7/20/98	n/a
1607	TOC-ICR	TOC	1.82	mg/L	SM 5310 C	1	0.50	7/20/98		7/31/98	7-0-354
1608	TOC-ICR	TOC	1.77	mg/L	SM 5310 C	1	0.50	7/20/98		7/20/98	7-0-343
1609	TOC-ICR	TOC (Dupl)	1.81	mg/L	SM 5310 C	1	0.50	7/20/98		7/31/98	7-0-354
1610	TOC-ICR	TOC (Dupl)	1.75	mg/L	SM 5310 C	1	0.50	7/20/98		7/20/98	7-0-343

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

1.79 mg/L

1.8 % RPD

Sample ID: 126.10.pH7.8.Inf.B-3 S&H ID: 9807-387 Date Sampled: 7/24/98 8:55:00 AM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1611	pH	pH	7.8	Unit	SM 4500-H+ B	1	n/a	7/24/98		7/24/98	n/a
1612	TEMP	Temperature	20.4	°C	SM 2550 B	1	n/a	7/24/98		7/24/98	n/a

Sample ID: 126.10.pH7.8.Inf.B-4 S&H ID: 9807-388 Date Sampled: 7/27/98 5:15:00 PM

#	Analysis	Type	Result	Units	Method	Dilution	MRL	Samp.	Prep.	Anal.	QC Batch
1613	Cl2Dose	Chlorine Dose	4.20	mg/L as Cl2	SM 4500-Cl B	1	n/a	7/31/98		7/31/98	n/a
1614	Cl2Res	Chlorine Residual	1.09	mg/L as Cl2	SM 4500-Cl F	1	0.10	7/31/98		7/31/98	n/a
1615	HAA-ICR	1,2,3-Trichloropropane (IS) (Internal Standard)	102.8	%	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
1616	HAA-ICR	2-Bromopropionic acid (Surrogate)	99.6	%	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
1617	HAA-ICR	Bromochloroacetic acid	3.3	µg/L	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
1618	HAA-ICR	Bromodichloroacetic acid	3.0	µg/L	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
1619	HAA-ICR	Chlorodibromoacetic acid	4.8	µg/L	EPA 552.2	1	2.0	7/31/98	8/6/98	8/7/98	0-191-0
1620	HAA-ICR	Dibromoacetic acid	8.6	µg/L	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
1621	HAA-ICR	Dichloroacetic acid	1.3	µg/L	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
1622	HAA-ICR	Monobromoacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
1623	HAA-ICR	Monochloroacetic acid	ND	µg/L	EPA 552.2	1	2.0	7/31/98	8/6/98	8/7/98	0-191-0
1624	HAA-ICR	Tribromoacetic acid	4.7	µg/L	EPA 552.2	1	4.0	7/31/98	8/6/98	8/7/98	0-191-0
1625	HAA-ICR	Trichloroacetic acid	ND	µg/L	EPA 552.2	1	1.0	7/31/98	8/6/98	8/7/98	0-191-0
1626	pH	Cl2 pH - Final	7.8	Unit	SM 4500-H+ B	1	n/a	7/31/98		7/31/98	n/a
1627	pH	Cl2 pH - Initial	7.7	Unit	SM 4500-H+ B	1	n/a	7/31/98		7/31/98	n/a
1628	pH	pH	7.8	Unit	SM 4500-H+ B	1	n/a	7/27/98		7/27/98	n/a
1629	TEMP	Cl2 Temperature	28.8	°C	SM 2550 B	1	n/a	7/31/98		7/31/98	n/a
1630	TEMP	Temperature	20.5	°C	SM 2550 B	1	n/a	7/27/98		7/27/98	n/a
1631	TIME	Cl2 Incubation Time	7.3	hrs	n/a	1	n/a	7/31/98		7/31/98	n/a
1632	TOC-ICR	TOC	1.80	mg/L	SM 5310 C	1	0.50	7/27/98		8/1/98	7-0-355
1633	TOC-ICR	TOC (Dupl)	1.77	mg/L	SM 5310 C	1	0.50	7/27/98		8/1/98	7-0-355
			1.79 mg/L		1.7 % RPD						
1634	TOX-ICR	TOX	139	µg Cl-/L	SM 5320 B	1	25	7/31/98		8/5/98	12-0-183
1635	TOX-ICR	TOX (Dupl)	142	µg Cl-/L	SM 5320 B	1	25	7/31/98		8/5/98	12-0-183
			141 µg Cl-/L		2.1 % RPD						
1636	THM-ICR	1,2,3-Trichloropropane (Surrogate)	90.4	%	EPA 551.1	1	1.0	7/31/98	8/7/98	8/7/98	0-192-0
1637	THM-ICR	Bromodichloromethane	12.7	µg/L	EPA 551.1	1	1.0	7/31/98	8/7/98	8/7/98	0-192-0
1638	THM-ICR	Bromoform	40.0	µg/L	EPA 551.1	1	1.0	7/31/98	8/7/98	8/7/98	0-192-0

ND (non-detect): Result is below minimum reporting level (MRL).

NR (not reportable): Result did not meet QC criteria.

Laboratory Test ResultsMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 126
Study Title: ICR RSSCT #3

1639	THM-ICR Chloroform	3.1 µg/L	EPA 551.1	1	1.0	7/31/98	8/7/98	8/7/98	0-192-0
1640	THM-ICR Dibromochloromethane	34.2 µg/L	EPA 551.1	1	1.0	7/31/98	8/7/98	8/7/98	0-192-0
1641	TURB Turbidity	0.10 ntu	SM 2130 B	1	0.05	7/27/98		7/27/98	9-0-14
1642	UV-ICR UV	0.047 1/cm	SM 5910 B	1	0.009	7/27/98		7/28/98	8-0-241
1643	UV-ICR UV (Dupl)	0.047 1/cm	SM 5910 B	1	0.009	7/27/98		7/28/98	8-0-241
		0.047 1/cm	0.0 % RPD						

End of laboratory test results

Quality Control Report

Ms. Sibyl Carley
Jacksonville Electric Authority
Ridenhour Regional Water Treatment Plant
102 Kernan Blvd. North
Jacksonville, FL 32225

Phone: 904-665-4503 Fax: 904-665-4531

Study#: 126
Study Title: ICR RSSCT #3

Analysis: ALK (Alkalinity)**Method:** SM 2320 B**QC Batch ID:** 1-0-28

										Acceptance Criteria	
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>Date Run</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	100	95	mg/L	95%		07/16/98	9807-367	5		
Matrix Spike (Dupl)	Matrix Spike	100	94	mg/L	94%		07/16/98	9807-367	5		
		100	95	mg/L	95%	1.1 %					
Method Blank	Method Blank		ND*	mg/L			07/16/98	9807-391	5		
Standard	Standard	100	100	mg/L	100%		07/16/98	9807-392	5		
Standard (Dupl)	Standard	100	99	mg/L	99%		07/16/98	9807-392	5		
		100	99	mg/L	99%	1.0 %					
Matrix Spike	Matrix Spike	100	96	mg/L	96%		07/27/98	9807-553	5		
Matrix Spike (Dupl)	Matrix Spike	100	96	mg/L	96%		07/27/98	9807-553	5		
		100	96	mg/L	96%	0.0 %					
Method Blank	Method Blank		ND*	mg/L			07/27/98	9807-471	5		
Standard	Standard	100	98	mg/L	98%		07/27/98	9807-472	5		
Standard (Dupl)	Standard	100	96	mg/L	96%		07/27/98	9807-472	5		
		100	97	mg/L	97%	2.1 %					

Analysis: ALK (Alkalinity)**Method:** SM 2320 B**QC Batch ID:** 1-0-29

										Acceptance Criteria	
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>Date Run</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	100	98	mg/L	98%		07/28/98	9807-368	5		
Matrix Spike (Dupl)	Matrix Spike	100	99	mg/L	99%		07/28/98	9807-368	5		
		100	99	mg/L	99%	1.0 %					
Method Blank	Method Blank		ND*	mg/L			07/28/98	9807-567	5		
Standard	Standard	100	99	mg/L	99%		07/28/98	9807-568	5		
Standard (Dupl)	Standard	100	100	mg/L	100%		07/28/98	9807-568	5		
		100	99	mg/L	99%	1.0 %					

Analysis: TOC-ICR (Total Organic Carbon)**Method:** SM 5310 C**QC Batch ID:** 7-0-333

										Acceptance Criteria	
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>		<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	4.00	mg/L	100%			9806-579	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.94	mg/L	98%			9806-579	0.5		
		4.00	3.97	mg/L	99%	1.5 %					

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

Method Blank	Method Blank		ND*	mg/L		9807-194	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L		9807-194	0.5		
			ND*	mg/L					
Standard	Standard	0.50	0.54	mg/L	108%	9807-92	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.54	mg/L	108%	9807-92	0.5	50-150%	
		0.50	0.54	mg/L	108%			50-150%	20%
Standard	Standard	4.00	3.93	mg/L	98%	9807-101	0.5	90-110%	
Standard (Dupl)	Standard	4.00	3.95	mg/L	99%	9807-101	0.5	90-110%	
		4.00	3.94	mg/L	98%			90-110%	10%
Standard	Standard	10.00	9.74	mg/L	97%	9807-78	0.5	90-110%	
Standard (Dupl)	Standard	10.00	9.89	mg/L	99%	9807-78	0.5	90-110%	
		10.00	9.82	mg/L	98%			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-340

								Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range
Matrix Spike	Matrix Spike	4.00	3.88	mg/L	97%		9807-247	0.5	
Matrix Spike (Dupl)	Matrix Spike	4.00	4.00	mg/L	100%		9807-247	0.5	
		4.00	3.94	mg/L	98%	3.3 %			
Method Blank	Method Blank		ND*	mg/L			9807-398	0.5	
Method Blank (Dupl)	Method Blank		ND*	mg/L			9807-398	0.5	
			ND*	mg/L					
Standard	Standard	0.50	0.54	mg/L	108%		9807-92	0.5	50-150%
Standard (Dupl)	Standard	0.50	0.53	mg/L	106%		9807-92	0.5	50-150%
		0.50	0.54	mg/L	108%	1.9 %			50-150% 20%
Standard	Standard	4.00	3.98	mg/L	100%		9807-101	0.5	90-110%
Standard (Dupl)	Standard	4.00	3.96	mg/L	99%		9807-101	0.5	90-110%
		4.00	3.97	mg/L	99%	0.5 %			90-110% 10%
Standard	Standard	10.00	9.97	mg/L	100%		9807-78	0.5	90-110%
Standard (Dupl)	Standard	10.00	9.96	mg/L	100%		9807-78	0.5	90-110%
		10.00	9.96	mg/L	100%	0.1 %			90-110% 10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-341

								Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range
Matrix Spike	Matrix Spike	4.00	3.99	mg/L	100%		9806-704	0.5	
Matrix Spike (Dupl)	Matrix Spike	4.00	4.00	mg/L	100%		9806-704	0.5	
		4.00	3.99	mg/L	100%	0.3 %			
Method Blank	Method Blank		ND*	mg/L			9807-400	0.5	
Method Blank (Dupl)	Method Blank		ND*	mg/L			9807-400	0.5	
			ND*	mg/L					
Standard	Standard	0.50	0.55	mg/L	110%		9807-92	0.5	50-150%

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

Standard (Dupl)	Standard	0.50	0.55 mg/L	110%		9807-92	0.5	50-150%	
		0.50	0.55 mg/L	110%	0.0 %			50-150%	20%
Standard	Standard	4.00	3.93 mg/L	98%		9807-101	0.5	90-110%	
Standard (Dupl)	Standard	4.00	3.94 mg/L	98%		9807-101	0.5	90-110%	
		4.00	3.93 mg/L	98%	0.3 %			90-110%	10%
Standard	Standard	10.00	9.94 mg/L	99%		9807-78	0.5	90-110%	
Standard (Dupl)	Standard	10.00	9.93 mg/L	99%		9807-78	0.5	90-110%	
		10.00	9.94 mg/L	99%	0.1 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-342

		Acceptance Criteria							
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range RPD
Matrix Spike	Matrix Spike	4.00	3.92	mg/L	98%		9807-332	0.5	
Matrix Spike (Dupl)	Matrix Spike	4.00	3.94	mg/L	98%		9807-332	0.5	
		4.00	3.93	mg/L	98%	0.5 %			
Method Blank	Method Blank		ND*	mg/L			9807-401	0.5	
Method Blank (Dupl)	Method Blank		ND*	mg/L			9807-401	0.5	
			ND*	mg/L					
Standard	Standard	0.50	0.56 mg/L	112%			9807-92	0.5	50-150%
Standard (Dupl)	Standard	0.50	0.55 mg/L	110%			9807-92	0.5	50-150%
		0.50	0.56 mg/L	112%	1.8 %				50-150% 20%
Standard	Standard	4.00	4.01 mg/L	100%			9807-101	0.5	90-110%
Standard (Dupl)	Standard	4.00	4.03 mg/L	101%			9807-101	0.5	90-110%
		4.00	4.02 mg/L	100%	0.5 %				90-110% 10%
Standard	Standard	4.00	3.96 mg/L	99%			9807-101	0.5	90-110%
Standard (Dupl)	Standard	4.00	4.00 mg/L	100%			9807-101	0.5	90-110%
		4.00	3.98 mg/L	100%	1.0 %				90-110% 10%
Standard	Standard	10.00	9.96 mg/L	100%			9807-78	0.5	90-110%
Standard (Dupl)	Standard	10.00	10.10 mg/L	101%			9807-78	0.5	90-110%
		10.00	10.03 mg/L	100%	1.4 %				90-110% 10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-343

		Acceptance Criteria							
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range RPD
Matrix Spike	Matrix Spike	4.00	4.14	mg/L	103%		9807-334	0.5	
Matrix Spike (Dupl)	Matrix Spike	4.00	4.18	mg/L	104%		9807-334	0.5	
		4.00	4.16	mg/L	104%	1.0 %			
Method Blank	Method Blank		ND*	mg/L			9807-411	0.5	
Method Blank (Dupl)	Method Blank		ND*	mg/L			9807-411	0.5	
			ND*	mg/L					
Standard	Standard	0.50	0.52 mg/L	104%			9807-92	0.5	50-150%
Standard (Dupl)	Standard	0.50	0.54 mg/L	108%			9807-92	0.5	50-150%

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

		0.50	0.53 mg/L	106%	3.8 %		50-150%	20%
Standard	Standard	4.00	3.96 mg/L	99%		9807-101	0.5 90-110%	
Standard (Dupl)	Standard	4.00	4.00 mg/L	100%		9807-101	0.5 90-110%	
		4.00	3.98 mg/L	100%	1.0 %		90-110%	10%
Standard	Standard	10.00	9.75 mg/L	97%		9807-78	0.5 90-110%	
Standard (Dupl)	Standard	10.00	9.80 mg/L	98%		9807-78	0.5 90-110%	
		10.00	9.77 mg/L	98%	0.5 %		90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-344

								Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range RPD
Matrix Spike	Matrix Spike	4.00	4.05	mg/L	101%		9807-254	0.5	
Matrix Spike (Dupl)	Matrix Spike	4.00	3.98	mg/L	100%		9807-254	0.5	
		4.00	4.02	mg/L	100%	1.7 %			
Method Blank	Method Blank		ND*	mg/L			9807-423	0.5	
Method Blank (Dupl)	Method Blank		ND*	mg/L			9807-423	0.5	
			ND*	mg/L					
Standard	Standard	0.50	0.51	mg/L	102%		9807-92	0.5 50-150%	
Standard (Dupl)	Standard	0.50	0.51	mg/L	102%		9807-92	0.5 50-150%	
		0.50	0.51	mg/L	102%	0.0 %		50-150%	20%
Standard	Standard	4.00	3.99	mg/L	100%		9807-101	0.5 90-110%	
Standard (Dupl)	Standard	4.00	4.03	mg/L	101%		9807-101	0.5 90-110%	
		4.00	4.01	mg/L	100%	1.0 %		90-110%	10%
Standard	Standard	10.00	10.03	mg/L	100%		9807-78	0.5 90-110%	
Standard (Dupl)	Standard	10.00	10.17	mg/L	102%		9807-78	0.5 90-110%	
		10.00	10.10	mg/L	101%	1.4 %		90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-345

								Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range RPD
Matrix Spike	Matrix Spike	4.00	4.12	mg/L	103%		9807-342	0.5	
Matrix Spike (Dupl)	Matrix Spike	4.00	4.28	mg/L	107%		9807-342	0.5	
		4.00	4.20	mg/L	105%	3.6 %			
Method Blank	Method Blank		ND*	mg/L			9807-432	0.5	
Method Blank (Dupl)	Method Blank		ND*	mg/L			9807-432	0.5	
			ND*	mg/L					
Standard	Standard	0.50	0.52	mg/L	104%		9807-92	0.5 50-150%	
Standard (Dupl)	Standard	0.50	0.51	mg/L	102%		9807-92	0.5 50-150%	
		0.50	0.52	mg/L	104%	1.9 %		50-150%	20%
Standard	Standard	4.00	3.96	mg/L	99%		9807-101	0.5 90-110%	
Standard (Dupl)	Standard	4.00	4.03	mg/L	101%		9807-101	0.5 90-110%	
		4.00	4.00	mg/L	100%	1.7 %		90-110%	10%

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-346

C Batch ID: 7-0-346									Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Matrix Spike	Matrix Spike	4.00	3.91	mg/L	98%		9807-300	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.96	mg/L	99%		9807-300	0.5		
		4.00	3.94	mg/L	98%	1.0 %				
Method Blank	Method Blank		ND*	mg/L			9807-446	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9807-446	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.54	mg/L	108%		9807-92	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.54	mg/L	108%		9807-92	0.5	50-150%	
		0.50	0.54	mg/L	108%	0.0 %			50-150%	20%
Standard	Standard	4.00	3.97	mg/L	99%		9807-434	0.5	90-110%	
Standard (Dupl)	Standard	4.00	3.98	mg/L	100%		9807-434	0.5	90-110%	
		4.00	3.97	mg/L	99%	0.3 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-347

C Batch ID: 7-0-347									Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Matrix Spike	Matrix Spike	4.00	3.95	mg/L	99%		9807-303	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.91	mg/L	98%		9807-303	0.5		
		4.00	3.93	mg/L	98%	1.3 %				
Method Blank	Method Blank		ND*	mg/L			9807-451	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9807-451	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.54	mg/L	108%		9807-92	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.55	mg/L	110%		9807-92	0.5	50-150%	
		0.50	0.55	mg/L	110%	1.8 %			50-150%	20%
Standard	Standard	4.00	3.97	mg/L	99%		9807-434	0.5	90-110%	
Standard (Dupl)	Standard	4.00	3.98	mg/L	100%		9807-434	0.5	90-110%	
		4.00	3.97	mg/L	99%	0.3 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-348

C Batch ID: 7-0-348									Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Matrix Spike	Matrix Spike	4.00	3.90	mg/L	97%		9807-262	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.97	mg/L	99%		9807-262	0.5		
		4.00	3.94	mg/L	98%	1.5 %				
Method Blank	Method Blank		ND*	mg/L			9807-457	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9807-457	0.5		

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

		ND* mg/L					
Standard	Standard	0.50	0.53 mg/L	106%	9807-92	0.5	50-150%
Standard (Dupl)	Standard	0.50	0.53 mg/L	106%	9807-92	0.5	50-150%
		0.50	0.53 mg/L	106%			50-150% 20%
Standard	Standard	4.00	3.94 mg/L	98%	9807-434	0.5	90-110%
Standard (Dupl)	Standard	4.00	3.95 mg/L	99%	9807-434	0.5	90-110%
		4.00	3.95 mg/L	99%			90-110% 10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-349

										Acceptance Criteria
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Matrix Spike	Matrix Spike	4.00	3.92	mg/L	98%		9807-283	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.96	mg/L	99%		9807-283	0.5		
		4.00	3.94	mg/L	98%	1.0 %				
Method Blank	Method Blank			ND* mg/L			9807-459	0.5		
Method Blank (Dupl)	Method Blank			ND* mg/L			9807-459	0.5		
				ND* mg/L						
Standard	Standard	0.50	0.54	mg/L	108%		9807-92	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.56	mg/L	112%		9807-92	0.5	50-150%	
		0.50	0.55	mg/L	110%	3.6 %			50-150%	20%
Standard	Standard	4.00	3.98	mg/L	100%		9807-434	0.5	90-110%	
Standard (Dupl)	Standard	4.00	4.04	mg/L	101%		9807-434	0.5	90-110%	
		4.00	4.01	mg/L	100%	1.5 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-350

										Acceptance Criteria
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Matrix Spike	Matrix Spike	4.00	3.91	mg/L	98%		9807-268	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.84	mg/L	96%		9807-268	0.5		
		4.00	3.87	mg/L	97%	1.8 %				
Method Blank	Method Blank			ND* mg/L			9807-465	0.5		
Method Blank (Dupl)	Method Blank			ND* mg/L			9807-465	0.5		
				ND* mg/L						
Standard	Standard	0.50	0.54	mg/L	108%		9807-92	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.55	mg/L	110%		9807-92	0.5	50-150%	
		0.50	0.55	mg/L	110%	1.8 %			50-150%	20%
Standard	Standard	4.00	3.96	mg/L	99%		9807-434	0.5	90-110%	
Standard (Dupl)	Standard	4.00	4.06	mg/L	101%		9807-434	0.5	90-110%	
		4.00	4.01	mg/L	100%	2.5 %			90-110%	10%

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-351

								Acceptance Criteria		
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	3.86	mg/L	96%		9807-513	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.85	mg/L	96%		9807-513	0.5		
		4.00	3.85	mg/L	96%	0.5 %				
Method Blank	Method Blank		ND*	mg/L			9807-561	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9807-561	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.55	mg/L	110%		9807-92	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.54	mg/L	108%		9807-92	0.5	50-150%	
		0.50	0.54	mg/L	108%	1.9 %			50-150%	20%
Standard	Standard	4.00	3.94	mg/L	98%		9807-434	0.5	90-110%	
Standard (Dupl)	Standard	4.00	3.94	mg/L	98%		9807-434	0.5	90-110%	
		4.00	3.94	mg/L	98%	0.0 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-352

								Acceptance Criteria		
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	3.93	mg/L	98%		9807-514	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.98	mg/L	100%		9807-514	0.5		
		4.00	3.95	mg/L	99%	1.3 %				
Method Blank	Method Blank		ND*	mg/L			9807-575	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9807-575	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.54	mg/L	108%		9807-92	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.54	mg/L	108%		9807-92	0.5	50-150%	
		0.50	0.54	mg/L	108%	0.0 %			50-150%	20%
Standard	Standard	4.00	3.99	mg/L	100%		9807-434	0.5	90-110%	
Standard (Dupl)	Standard	4.00	4.04	mg/L	101%		9807-434	0.5	90-110%	
		4.00	4.02	mg/L	100%	1.2 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)

Method: SM 5310 C

QC Batch ID: 7-0-354

								Acceptance Criteria		
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	3.88	mg/L	97%		9807-480	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.88	mg/L	97%		9807-480	0.5		
		4.00	3.88	mg/L	97%	0.0 %				
Method Blank	Method Blank		ND*	mg/L			9807-601	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9807-601	0.5		
			ND*	mg/L						

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 126
Study Title: ICR RSSCT #3

Standard	Standard	0.50	0.52 mg/L	104%		9807-587	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.53 mg/L	106%		9807-587	0.5	50-150%	
		0.50	0.52 mg/L	104%	1.9 %			50-150%	20%
Standard	Standard	4.00	3.95 mg/L	99%		9807-101	0.5	90-110%	
Standard (Dupl)	Standard	4.00	3.95 mg/L	99%		9807-101	0.5	90-110%	
		4.00	3.95 mg/L	99%	0.0 %			90-110%	10%

Analysis: TOC-ICR (Total Organic Carbon)**Method:** SM 5310 C**QC Batch ID:** 7-0-355

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	4.00	3.88	mg/L	97%		9807-482	0.5		
Matrix Spike (Dupl)	Matrix Spike	4.00	3.98	mg/L	100%		9807-482	0.5		
		4.00	3.93	mg/L	98%	2.3 %				
Method Blank	Method Blank		ND*	mg/L			9808-1	0.5		
Method Blank (Dupl)	Method Blank		ND*	mg/L			9808-1	0.5		
			ND*	mg/L						
Standard	Standard	0.50	0.55 mg/L	110%			9807-587	0.5	50-150%	
Standard (Dupl)	Standard	0.50	0.53 mg/L	106%			9807-587	0.5	50-150%	
		0.50	0.54 mg/L	108%	3.7 %				50-150%	20%
Standard	Standard	4.00	3.94 mg/L	98%			9807-434	0.5	90-110%	
Standard (Dupl)	Standard	4.00	3.97 mg/L	99%			9807-434	0.5	90-110%	
		4.00	3.95 mg/L	99%	0.8 %				90-110%	10%

Analysis: UV-ICR (UV-254)**Method:** SM 5910 B**QC Batch ID:** 8-0-228

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Method Blank	Method Blank		ND*	1/cm			9807-393	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-393	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9807-393	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-393	0.009		
			ND*	1/cm						
Standard	Standard	0.009	0.008 1/cm	89%			9807-93	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.008 1/cm	89%			9807-93	0.009	75-125%	
		0.009	0.008 1/cm	89%	0.0 %				75-125%	20%
Standard	Standard	0.088	0.086 1/cm	98%			9807-98	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.086 1/cm	98%			9807-98	0.009	85-115%	
		0.088	0.086 1/cm	98%	0.0 %				85-115%	10%

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-229

C Batch ID: 8-0-229

										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD	
Method Blank	Method Blank		ND*	1/cm			9807-399	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-399	0.009			
			ND*	1/cm							
Method Blank	Method Blank		ND*	1/cm			9807-399	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-399	0.009			
			ND*	1/cm							
Standard	Standard	0.009	0.007	1/cm	78%		9807-93	0.009	75-125%		
Standard (Dupl)	Standard	0.009	0.007	1/cm	78%		9807-93	0.009	75-125%		
		0.009	0.007	1/cm	78%	0.0 %			75-125%	20%	
Standard	Standard	0.088	0.086	1/cm	98%		9807-98	0.009	85-115%		
Standard (Dupl)	Standard	0.088	0.086	1/cm	98%		9807-98	0.009	85-115%		
		0.088	0.086	1/cm	98%	0.0 %			85-115%	10%	

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-230

C Batch ID: 8-0-230

										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD	
Method Blank	Method Blank		ND*	1/cm			9807-404	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-404	0.009			
			ND*	1/cm							
Method Blank	Method Blank		ND*	1/cm			9807-404	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-404	0.009			
			ND*	1/cm							
Standard	Standard	0.009	0.007	1/cm	78%		9807-93	0.009	75-125%		
Standard (Dupl)	Standard	0.009	0.007	1/cm	78%		9807-93	0.009	75-125%		
		0.009	0.007	1/cm	78%	0.0 %			75-125%	20%	
Standard	Standard	0.088	0.086	1/cm	98%		9807-98	0.009	85-115%		
Standard (Dupl)	Standard	0.088	0.087	1/cm	99%		9807-98	0.009	85-115%		
		0.088	0.086	1/cm	98%	1.2 %			85-115%	10%	

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-231

C Batch ID: 8-0-231									Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Method Blank	Method Blank		ND*	1/cm			9807-418	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-418	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9807-418	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-418	0.009		
			ND*	1/cm						

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 126
Study Title: ICR RSSCT #3

Standard	Standard	0.009	0.009	1/cm	100%	9807-416	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.008	1/cm	89%	9807-416	0.009	75-125%	
		0.009	0.009	1/cm	100%			75-125%	20%
Standard	Standard	0.088	0.095	1/cm	108%	9807-417	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.096	1/cm	109%	9807-417	0.009	85-115%	
		0.088	0.095	1/cm	108%			85-115%	10%

Analysis: UV-ICR (UV-254)**Method:** SM 5910 B**QC Batch ID:** 8-0-232

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Method Blank	Method Blank		ND*	1/cm			9807-418	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-418	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9807-418	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-418	0.009		
			ND*	1/cm						
Standard	Standard	0.009	0.010	1/cm	111%		9807-416	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.009	1/cm	100%		9807-416	0.009	75-125%	
		0.009	0.009	1/cm	100%	11.1 %			75-125%	20%
Standard	Standard	0.088	0.096	1/cm	109%		9807-417	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.096	1/cm	109%		9807-417	0.009	85-115%	
		0.088	0.096	1/cm	109%	0.0 %			85-115%	10%

Analysis: UV-ICR (UV-254)**Method:** SM 5910 B**QC Batch ID:** 8-0-233

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Method Blank	Method Blank		ND*	1/cm			9807-428	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-428	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9807-428	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-428	0.009		
			ND*	1/cm						
Standard	Standard	0.009	0.009	1/cm	100%		9807-416	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.009	1/cm	100%		9807-416	0.009	75-125%	
		0.009	0.009	1/cm	100%	0.0 %			75-125%	20%
Standard	Standard	0.088	0.097	1/cm	110%		9807-417	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.096	1/cm	109%		9807-417	0.009	85-115%	
		0.088	0.097	1/cm	110%	1.0 %			85-115%	10%

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-234

C Batch ID: 8-0-234										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD	
Method Blank	Method Blank		ND*	1/cm			9807-428	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-428	0.009			
			ND*	1/cm							
Method Blank	Method Blank		ND*	1/cm			9807-428	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-428	0.009			
			ND*	1/cm							
Standard	Standard	0.009	0.009	1/cm	100%		9807-416	0.009	75-125%		
Standard (Dupl)	Standard	0.009	0.009	1/cm	100%		9807-416	0.009	75-125%		
		0.009	0.009	1/cm	100%	0.0 %			75-125%	20%	
Standard	Standard	0.088	0.096	1/cm	109%		9807-417	0.009	85-115%		
Standard (Dupl)	Standard	0.088	0.096	1/cm	109%		9807-417	0.009	85-115%		
		0.088	0.096	1/cm	109%	0.0 %			85-115%	10%	

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-235

C Batch ID: 8-0-235									Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Method Blank	Method Blank		ND*	1/cm			9807-433	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-433	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9807-433	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-433	0.009		
			ND*	1/cm						
Standard	Standard	0.009	0.009	1/cm	100%		9807-416	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.009	1/cm	100%		9807-416	0.009	75-125%	
		0.009	0.009	1/cm	100%	0.0 %			75-125%	20%
Standard	Standard	0.088	0.096	1/cm	109%		9807-417	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.096	1/cm	109%		9807-417	0.009	85-115%	
		0.088	0.096	1/cm	109%	0.0 %			85-115%	10%

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-236

C Batch ID: 8-0-236									Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Method Blank	Method Blank		ND*	1/cm			9807-441	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-441	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9807-441	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-441	0.009		
			ND*	1/cm						

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 126
Study Title: ICR RSSCT #3

Standard	Standard	0.009	0.009	1/cm	100%	9807-416	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.009	1/cm	100%	9807-416	0.009	75-125%	
		0.009	0.009	1/cm	100%			75-125%	20%
Standard	Standard	0.088	0.096	1/cm	109%	9807-417	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.096	1/cm	109%	9807-417	0.009	85-115%	
		0.088	0.096	1/cm	109%			85-115%	10%

Analysis: UV-ICR (UV-254)**Method:** SM 5910 B**QC Batch ID:** 8-0-237

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Method Blank	Method Blank		ND*	1/cm			9807-456	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-456	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9807-456	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-456	0.009		
			ND*	1/cm						
Standard	Standard	0.009	0.009	1/cm	100%		9807-416	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.009	1/cm	100%		9807-416	0.009	75-125%	
		0.009	0.009	1/cm	100%	0.0 %			75-125%	20%
Standard	Standard	0.088	0.095	1/cm	108%		9807-417	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.095	1/cm	108%		9807-417	0.009	85-115%	
		0.088	0.095	1/cm	108%	0.0 %			85-115%	10%

Analysis: UV-ICR (UV-254)**Method:** SM 5910 B**QC Batch ID:** 8-0-238

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Method Blank	Method Blank		ND*	1/cm			9807-458	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-458	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9807-458	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-458	0.009		
			ND*	1/cm						
Standard	Standard	0.009	0.009	1/cm	100%		9807-416	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.009	1/cm	100%		9807-416	0.009	75-125%	
		0.009	0.009	1/cm	100%	0.0 %			75-125%	20%
Standard	Standard	0.088	0.094	1/cm	107%		9807-417	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.095	1/cm	108%		9807-417	0.009	85-115%	
		0.088	0.095	1/cm	108%	1.1 %			85-115%	10%

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-239

C Batch ID: 8-0-239

										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD	
Method Blank	Method Blank		ND*	1/cm			9807-460	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-460	0.009			
			ND*	1/cm							
Method Blank	Method Blank		ND*	1/cm			9807-460	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-460	0.009			
			ND*	1/cm							
Standard	Standard	0.009	0.009	1/cm	100%		9807-416	0.009	75-125%		
Standard (Dupl)	Standard	0.009	0.009	1/cm	100%		9807-416	0.009	75-125%		
		0.009	0.009	1/cm	100%	0.0 %			75-125%	20%	
Standard	Standard	0.088	0.095	1/cm	108%		9807-417	0.009	85-115%		
Standard (Dupl)	Standard	0.088	0.095	1/cm	108%		9807-417	0.009	85-115%		
		0.088	0.095	1/cm	108%	0.0 %			85-115%	10%	

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-240

C Batch ID: 8-0-240										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD	
Method Blank	Method Blank		ND*	1/cm			9807-470	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-470	0.009			
			ND*	1/cm							
Method Blank	Method Blank		ND*	1/cm			9807-470	0.009			
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-470	0.009			
			ND*	1/cm							
Standard	Standard	0.009	0.009	1/cm	100%		9807-416	0.009	75-125%		
Standard (Dupl)	Standard	0.009	0.009	1/cm	100%		9807-416	0.009	75-125%		
		0.009	0.009	1/cm	100%	0.0 %			75-125%	20%	
Standard	Standard	0.088	0.095	1/cm	108%		9807-417	0.009	85-115%		
Standard (Dupl)	Standard	0.088	0.095	1/cm	108%		9807-417	0.009	85-115%		
		0.088	0.095	1/cm	108%	0.0 %			85-115%	10%	

Analysis: UV-ICR (UV-254)

Method: SM 5910 B

QC Batch ID: 8-0-241

C Batch ID: 8-0-241									Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Method Blank	Method Blank		ND*	1/cm			9807-566	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-566	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9807-566	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-566	0.009		
			ND*	1/cm						

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 126
Study Title: ICR RSSCT #3

Standard	Standard	0.009	0.009	1/cm	100%	9807-416	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.009	1/cm	100%	9807-416	0.009	75-125%	
		0.009	0.009	1/cm	100%			75-125%	20%
Standard	Standard	0.088	0.096	1/cm	109%	9807-417	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.096	1/cm	109%	9807-417	0.009	85-115%	
		0.088	0.096	1/cm	109%			85-115%	10%

Analysis: UV-ICR (UV-254)**Method:** SM 5910 B**QC Batch ID:** 8-0-242

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Method Blank	Method Blank		ND*	1/cm			9807-570	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-570	0.009		
			ND*	1/cm						
Method Blank	Method Blank		ND*	1/cm			9807-570	0.009		
Method Blank (Dupl)	Method Blank		ND*	1/cm			9807-570	0.009		
			ND*	1/cm						
Standard	Standard	0.009	0.009	1/cm	100%		9807-416	0.009	75-125%	
Standard (Dupl)	Standard	0.009	0.009	1/cm	100%		9807-416	0.009	75-125%	
		0.009	0.009	1/cm	100%	0.0 %			75-125%	20%
Standard	Standard	0.088	0.094	1/cm	107%		9807-417	0.009	85-115%	
Standard (Dupl)	Standard	0.088	0.095	1/cm	108%		9807-417	0.009	85-115%	
		0.088	0.095	1/cm	108%	1.1 %			85-115%	10%

Analysis: TURB (Turbidity)**Method:** SM 2130 B**QC Batch ID:** 9-0-14

C Batch ID: 9-0-14

										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	Date Run	S&H ID	MRL	Range	RPD
Standard	Standard	5.41	5.49	ntu	101%		07/08/98	9807-108	0.05		
Standard	Standard	5.41	5.48	ntu	101%		07/10/98	9807-108	0.05		
Standard	Standard	5.41	5.47	ntu	101%		07/13/98	9807-108	0.05		
Standard	Standard	5.41	5.46	ntu	101%		07/16/98	9807-108	0.05		
Standard	Standard	5.41	5.46	ntu	101%		07/20/98	9807-108	0.05		
Standard	Standard	5.41	5.48	ntu	101%		07/24/98	9807-108	0.05		
Standard	Standard	5.41	5.45	ntu	101%		07/27/98	9807-108	0.05		
Standard	Standard	5.41	5.47	ntu	101%		07/27/98	9807-108	0.05		

Analysis: TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-176

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	200	202	µg Cl-/L	101%		9807-317	25		

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 126
Study Title: ICR RSSCT #3

Matrix Spike (Dupl)	Matrix Spike	200	204	µg Cl-/L	102%		9807-317	25
		200	203	µg Cl-/L	101%	1.0 %		
Standard - TCP Aqueous	Standard	25	24	µg Cl-/L	96%		9807-463	25 75-125%
Standard - TCP Aqueous	Standard	200	198	µg Cl-/L	99%		9807-462	25 85-115%
System Blank	Blank		ND*	µg Cl-/L			9807-464	25

Analysis: TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-177

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Standard - TCP Aqueous	Standard	25	24	µg Cl-/L	96%		9807-564	25	75-125%	
Standard - TCP Aqueous	Standard	200	198	µg Cl-/L	99%		9807-563	25	85-115%	
System Blank	Blank		ND*	µg Cl-/L			9807-565	25		

Analysis: TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-178

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Standard - TCP Aqueous	Standard	25	22	µg Cl-/L	88%		9807-573	25	75-125%	
Standard - TCP Aqueous (Dupl)	Standard	200	213	µg Cl-/L	106%		9807-572	25	85-115%	
System Blank	Blank		ND*	µg Cl-/L			9807-574	25		

Analysis: TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-179

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Matrix Spike	Matrix Spike	200	196	µg Cl-/L	98%		9807-335	25		
Matrix Spike (Dupl)	Matrix Spike	200	199	µg Cl-/L	100%		9807-335	25		
		200	197	µg Cl-/L	98%	1.5 %				
Standard - TCP Aqueous	Standard	25	23	µg Cl-/L	92%		9807-595	25	75-125%	
Standard - TCP Aqueous	Standard	200	195	µg Cl-/L	97%		9807-594	25	85-115%	
System Blank	Blank		ND*	µg Cl-/L			9807-596	25		

Analysis: TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-180

										Acceptance Criteria
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>
Standard - TCP Aqueous	Standard	25	24	µg Cl-/L	96%		9807-604	25	75-125%	
Standard - TCP Aqueous	Standard	200	193	µg Cl-/L	96%		9807-603	25	85-115%	
System Blank	Blank		ND*	µg Cl-/L			9807-605	25		

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 126
Study Title: ICR RSSCT #3**Analysis:** TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-181

										Acceptance Criteria	
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>	
Standard - TCP Aqueous	Standard	25	23	µg Cl-/L	92%		9808-8	25	75-125%		
Standard - TCP Aqueous	Standard	200	221	µg Cl-/L	111%		9808-7	25	85-115%		
System Blank	Blank		ND*	µg Cl-/L			9808-9	25			

Analysis: TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-182

										Acceptance Criteria	
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>	
Matrix Spike	Matrix Spike	200	197	µg Cl-/L	98%		9807-261	25			
Matrix Spike (Dupl)	Matrix Spike	200	197	µg Cl-/L	98%		9807-261	25			
		200	197	µg Cl-/L	98%	0.5 %					
Standard - TCP Aqueous	Standard	25	23	µg Cl-/L	92%		9808-17	25	75-125%		
Standard - TCP Aqueous	Standard	200	189	µg Cl-/L	94%		9808-16	25	85-115%		
System Blank	Blank		ND*	µg Cl-/L			9808-18	25			

Analysis: TOX-ICR (Total Organic Halide)**Method:** SM 5320 B**QC Batch ID:** 12-0-183

										Acceptance Criteria	
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>	
Standard - TCP Aqueous	Standard	25	23	µg Cl-/L	92%		9808-151	25	75-125%		
Standard - TCP Aqueous	Standard	200	196	µg Cl-/L	98%		9808-150	25	85-115%		
System Blank	Blank		ND*	µg Cl-/L			9808-152	25			

Analysis: THM-ICR (Trihalomethanes (ICR))**Method:** EPA 551.1**QC Batch ID:** 0-182-0

										Acceptance Criteria	
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>	
Bromodichloromethane	Duplicate	7.2	7.4	µg/L		2.7%	9806-686	1			
Bromodichloromethane	Matrix Spike	40.0	45.5	µg/L	114%		9807-333	1			
Bromodichloromethane	Method Blank		ND*	µg/L			9807-466	1			
Bromodichloromethane	Secondary Source Std	20.0	22.1	µg/L	111%		9807-467	1	70-130%		
Bromodichloromethane	Standard	20.0	20.7	µg/L	103%		9807-468	1	80-120%		
Bromodichloromethane	Standard	20.0	20.4	µg/L	102%		9807-468	1	80-120%		
Bromodichloromethane	Standard	40.0	36.4	µg/L	91%		9807-469	1	80-120%		
Bromoform	Duplicate	ND	ND	µg/L		NA	9806-686	1			

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 126
Study Title: ICR RSSCT #3

Bromoform	Matrix Spike	40.0	39.3 µg/L	98%	9807-333	1
Bromoform	Method Blank		ND* µg/L		9807-466	1
Bromoform	Secondary Source Std	20.0	18.9 µg/L	94%	9807-467	1 70-130%
Bromoform	Standard	20.0	18.3 µg/L	92%	9807-468	1 80-120%
Bromoform	Standard	20.0	16.9 µg/L	84%	9807-468	1 80-120%
Bromoform	Standard	40.0	38.0 µg/L	95%	9807-469	1 80-120%
Chloroform	Duplicate	11.1	11.5 µg/L	3.5%	9806-686	1
Chloroform	Matrix Spike	40.0	44.4 µg/L	111%	9807-333	1
Chloroform	Method Blank		ND* µg/L		9807-466	1
Chloroform	Secondary Source Std	20.0	22.1 µg/L	111%	9807-467	1 70-130%
Chloroform	Standard	20.0	20.4 µg/L	102%	9807-468	1 80-120%
Chloroform	Standard	20.0	20.1 µg/L	101%	9807-468	1 80-120%
Chloroform	Standard	40.0	36.2 µg/L	91%	9807-469	1 80-120%
Dibromochloromethane	Duplicate	2.7	2.7 µg/L	0.0%	9806-686	1
Dibromochloromethane	Matrix Spike	40.0	45.8 µg/L	115%	9807-333	1
Dibromochloromethane	Method Blank		ND* µg/L		9807-466	1
Dibromochloromethane	Secondary Source Std	20.0	21.5 µg/L	108%	9807-467	1 70-130%
Dibromochloromethane	Standard	20.0	20.8 µg/L	104%	9807-468	1 80-120%
Dibromochloromethane	Standard	20.0	20.3 µg/L	102%	9807-468	1 80-120%
Dibromochloromethane	Standard	40.0	37.7 µg/L	94%	9807-469	1 80-120%

Analysis: THM-ICR (Trihalomethanes (ICR))**Method:** EPA 551.1**QC Batch ID:** 0-184-0

									Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Bromodichloromethane	Duplicate	ND	ND	µg/L		NA	9807-330	1		
Bromodichloromethane	Matrix Spike	40.0	41.0	µg/L	102%		9807-360	1		
Bromodichloromethane	Method Blank		ND*	µg/L			9807-589	1		
Bromodichloromethane	Secondary Source Std	20.0	20.5	µg/L	102%		9807-590	1	70-130%	
Bromodichloromethane	Standard	20.0	20.0	µg/L	100%		9807-591	1	80-120%	
Bromodichloromethane	Standard	20.0	20.0	µg/L	100%		9807-591	1	80-120%	
Bromodichloromethane	Standard	40.0	40.7	µg/L	102%		9807-592	1	80-120%	
Bromoform	Duplicate	1.9	1.9	µg/L		0.0%	9807-330	1		
Bromoform	Matrix Spike	40.0	37.0	µg/L	93%		9807-360	1		

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 126
Study Title: ICR RSSCT #3

Bromoform	Method Blank		ND*	µg/L		9807-589	1
Bromoform	Secondary Source Std	20.0	18.6	µg/L	93%	9807-590	1 70-130%
Bromoform	Standard	20.0	18.7	µg/L	93%	9807-591	1 80-120%
Bromoform	Standard	20.0	16.9	µg/L	84%	9807-591	1 80-120%
Bromoform	Standard	40.0	35.4	µg/L	89%	9807-592	1 80-120%
Chloroform	Duplicate	ND	ND	µg/L	NA	9807-330	1
Chloroform	Matrix Spike	40.0	41.2	µg/L	103%	9807-360	1
Chloroform	Method Blank		ND*	µg/L		9807-589	1
Chloroform	Secondary Source Std	20.0	20.7	µg/L	103%	9807-590	1 70-130%
Chloroform	Standard	20.0	19.2	µg/L	96%	9807-591	1 80-120%
Chloroform	Standard	20.0	19.1	µg/L	96%	9807-591	1 80-120%
Chloroform	Standard	40.0	40.9	µg/L	102%	9807-592	1 80-120%
Dibromochloromethane	Duplicate	ND	ND	µg/L	NA	9807-330	1
Dibromochloromethane	Matrix Spike	40.0	42.7	µg/L	107%	9807-360	1
Dibromochloromethane	Method Blank		ND*	µg/L		9807-589	1
Dibromochloromethane	Secondary Source Std	20.0	19.7	µg/L	98%	9807-590	1 70-130%
Dibromochloromethane	Standard	20.0	20.4	µg/L	102%	9807-591	1 80-120%
Dibromochloromethane	Standard	20.0	20.4	µg/L	102%	9807-591	1 80-120%
Dibromochloromethane	Standard	40.0	41.5	µg/L	104%	9807-592	1 80-120%

Analysis: THM-ICR (Trihalomethanes (ICR))**Method:** EPA 551.1**QC Batch ID:** 0-192-0

								Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range
Bromodichloromethane	Duplicate	1.6	1.6	µg/L		0.0%	9807-307	1	
Bromodichloromethane	Matrix Spike	40.0	40.6	µg/L	102%		9807-477	1	
Bromodichloromethane	Method Blank		ND*	µg/L			9808-193	1	
Bromodichloromethane	Secondary Source Std	20.0	23.2	µg/L	116%		9808-194	1	70-130%
Bromodichloromethane	Standard	20.0	20.1	µg/L	101%		9808-195	1	80-120%
Bromodichloromethane	Standard	20.0	19.9	µg/L	99%		9808-195	1	80-120%
Bromodichloromethane	Standard	40.0	41.1	µg/L	103%		9808-196	1	80-120%
Bromoform	Duplicate	33.7	33.2	µg/L		1.5%	9807-307	1	
Bromoform	Matrix Spike	40.0	39.8	µg/L	99%		9807-477	1	
Bromoform	Method Blank		ND*	µg/L			9808-193	1	

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable); RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 126
Study Title: ICR RSSCT #3

Bromoform	Secondary Source Std	20.0	20.7 µg/L	103%	9808-194	1	70-130%
Bromoform	Standard	20.0	19.2 µg/L	96%	9808-195	1	80-120%
Bromoform	Standard	20.0	18.1 µg/L	91%	9808-195	1	80-120%
Bromoform	Standard	40.0	37.7 µg/L	94%	9808-196	1	80-120%
Chloroform	Duplicate	ND	ND µg/L	NA	9807-307	1	
Chloroform	Matrix Spike	40.0	41.7 µg/L	104%	9807-477	1	
Chloroform	Method Blank		ND* µg/L		9808-193	1	
Chloroform	Secondary Source Std	20.0	23.3 µg/L	117%	9808-194	1	70-130%
Chloroform	Standard	20.0	18.8 µg/L	94%	9808-195	1	80-120%
Chloroform	Standard	20.0	18.6 µg/L	93%	9808-195	1	80-120%
Chloroform	Standard	40.0	41.6 µg/L	104%	9808-196	1	80-120%
Dibromochloromethane	Duplicate	9.7	9.2 µg/L	5.3%	9807-307	1	
Dibromochloromethane	Matrix Spike	40.0	41.8 µg/L	104%	9807-477	1	
Dibromochloromethane	Method Blank		ND* µg/L		9808-193	1	
Dibromochloromethane	Secondary Source Std	20.0	22.1 µg/L	111%	9808-194	1	70-130%
Dibromochloromethane	Standard	20.0	20.8 µg/L	104%	9808-195	1	80-120%
Dibromochloromethane	Standard	20.0	20.7 µg/L	103%	9808-195	1	80-120%
Dibromochloromethane	Standard	40.0	41.7 µg/L	104%	9808-196	1	80-120%

Analysis: HAA-ICR (Haloacetic Acids)**Method:** EPA 552.2**QC Batch ID:** 0-181-0

								Acceptance Criteria		
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD
Bromochloroacetic acid	Duplicate	2.0	2.0	µg/L		0.0%	9806-685	1		
Bromochloroacetic acid	Matrix Spike	40.0	40.4	µg/L	101%		9807-402	1		
Bromochloroacetic acid	Method Blank		ND*	µg/L			9807-447	1		
Bromochloroacetic acid	Secondary Source Std	20.0	17.7	µg/L	89%		9807-448	1	70-130%	
Bromochloroacetic acid	Standard	20.0	18.8	µg/L	94%		9807-449	1	80-120%	
Bromochloroacetic acid	Standard	20.0	18.9	µg/L	94%		9807-449	1	80-120%	
Bromochloroacetic acid	Standard	20.0	18.9	µg/L	94%		9807-449	1	80-120%	
Bromochloroacetic acid	Standard	40.0	40.8	µg/L	102%		9807-450	1	80-120%	
Bromochloroacetic acid	Standard	40.0	42.6	µg/L	106%		9807-450	1	80-120%	
Bromodichloroacetic acid	Duplicate	2.0	2.2	µg/L		9.5%	9806-685	1		
Bromodichloroacetic acid	Matrix Spike	40.0	44.0	µg/L	110%		9807-402	1		

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable); RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

Bromodichloroacetic acid	Method Blank		ND*	µg/L		9807-447	1
Bromodichloroacetic acid	Secondary Source Std		ND	µg/L		9807-448	1 70-130%
Bromodichloroacetic acid	Standard	20.0	18.2	µg/L	91%	9807-449	1 80-120%
Bromodichloroacetic acid	Standard	20.0	19.1	µg/L	96%	9807-449	1 80-120%
Bromodichloroacetic acid	Standard	20.0	18.3	µg/L	92%	9807-449	1 80-120%
Bromodichloroacetic acid	Standard	40.0	43.2	µg/L	108%	9807-450	1 80-120%
Bromodichloroacetic acid	Standard	40.0	40.4	µg/L	101%	9807-450	1 80-120%
Chlorodibromoacetic acid	Duplicate	ND	ND	µg/L	NA	9806-685	2
Chlorodibromoacetic acid	Matrix Spike	40.0	42.6	µg/L	106%	9807-402	2
Chlorodibromoacetic acid	Method Blank		ND*	µg/L		9807-447	2
Chlorodibromoacetic acid	Secondary Source Std		ND	µg/L		9807-448	2 70-130%
Chlorodibromoacetic acid	Standard	20.0	18.4	µg/L	92%	9807-449	2 80-120%
Chlorodibromoacetic acid	Standard	20.0	19.5	µg/L	97%	9807-449	2 80-120%
Chlorodibromoacetic acid	Standard	20.0	18.8	µg/L	94%	9807-449	2 80-120%
Chlorodibromoacetic acid	Standard	40.0	43.4	µg/L	109%	9807-450	2 80-120%
Chlorodibromoacetic acid	Standard	40.0	40.9	µg/L	102%	9807-450	2 80-120%
Dibromoacetic acid	Duplicate	ND	ND	µg/L	NA	9806-685	1
Dibromoacetic acid	Matrix Spike	40.0	40.5	µg/L	101%	9807-402	1
Dibromoacetic acid	Method Blank		ND*	µg/L		9807-447	1
Dibromoacetic acid	Secondary Source Std	20.0	18.5	µg/L	93%	9807-448	1 70-130%
Dibromoacetic acid	Standard	20.0	18.3	µg/L	92%	9807-449	1 80-120%
Dibromoacetic acid	Standard	20.0	18.4	µg/L	92%	9807-449	1 80-120%
Dibromoacetic acid	Standard	20.0	18.3	µg/L	92%	9807-449	1 80-120%
Dibromoacetic acid	Standard	40.0	41.0	µg/L	102%	9807-450	1 80-120%
Dibromoacetic acid	Standard	40.0	42.4	µg/L	106%	9807-450	1 80-120%
Dichloroacetic acid	Duplicate	3.8	4.0	µg/L	5.1%	9806-685	1
Dichloroacetic acid	Matrix Spike	40.0	38.8	µg/L	97%	9807-402	1
Dichloroacetic acid	Method Blank		ND*	µg/L		9807-447	1
Dichloroacetic acid	Secondary Source Std	20.0	18.2	µg/L	91%	9807-448	1 70-130%
Dichloroacetic acid	Standard	20.0	18.9	µg/L	94%	9807-449	1 80-120%
Dichloroacetic acid	Standard	20.0	19.0	µg/L	95%	9807-449	1 80-120%
Dichloroacetic acid	Standard	20.0	19.3	µg/L	97%	9807-449	1 80-120%
Dichloroacetic acid	Standard	40.0	38.9	µg/L	97%	9807-450	1 80-120%

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 126
Study Title: ICR RSSCT #3

Dichloroacetic acid	Standard	40.0	42.0	µg/L	105%	9807-450	1	80-120%
Monobromoacetic acid	Duplicate	ND	ND	µg/L	NA	9806-685	1	
Monobromoacetic acid	Matrix Spike	40.0	40.3	µg/L	101%	9807-402	1	
Monobromoacetic acid	Method Blank		ND*	µg/L		9807-447	1	
Monobromoacetic acid	Secondary Source Std	20.0	18.4	µg/L	92%	9807-448	1	70-130%
Monobromoacetic acid	Standard	20.0	19.4	µg/L	97%	9807-449	1	80-120%
Monobromoacetic acid	Standard	20.0	19.4	µg/L	97%	9807-449	1	80-120%
Monobromoacetic acid	Standard	20.0	19.6	µg/L	98%	9807-449	1	80-120%
Monobromoacetic acid	Standard	40.0	39.8	µg/L	99%	9807-450	1	80-120%
Monobromoacetic acid	Standard	40.0	41.6	µg/L	104%	9807-450	1	80-120%
Monochloroacetic acid	Duplicate	ND	ND	µg/L	NA	9806-685	2	
Monochloroacetic acid	Matrix Spike	40.0	41.9	µg/L	105%	9807-402	2	
Monochloroacetic acid	Method Blank		ND*	µg/L		9807-447	2	
Monochloroacetic acid	Secondary Source Std	20.0	19.9	µg/L	99%	9807-448	2	70-130%
Monochloroacetic acid	Standard	20.0	19.3	µg/L	97%	9807-449	2	80-120%
Monochloroacetic acid	Standard	20.0	19.0	µg/L	95%	9807-449	2	80-120%
Monochloroacetic acid	Standard	20.0	19.4	µg/L	97%	9807-449	2	80-120%
Monochloroacetic acid	Standard	40.0	38.1	µg/L	95%	9807-450	2	80-120%
Monochloroacetic acid	Standard	40.0	40.9	µg/L	102%	9807-450	2	80-120%
Tribromoacetic acid	Duplicate	ND	ND	µg/L	NA	9806-685	4	
Tribromoacetic acid	Matrix Spike	40.0	41.6	µg/L	104%	9807-402	4	
Tribromoacetic acid	Method Blank		ND*	µg/L		9807-447	4	
Tribromoacetic acid	Secondary Source Std		ND	µg/L		9807-448	4	70-130%
Tribromoacetic acid	Standard	20.0	19.1	µg/L	96%	9807-449	4	80-120%
Tribromoacetic acid	Standard	20.0	20.5	µg/L	102%	9807-449	4	80-120%
Tribromoacetic acid	Standard	20.0	20.2	µg/L	101%	9807-449	4	80-120%
Tribromoacetic acid	Standard	40.0	44.0	µg/L	110%	9807-450	4	80-120%
Tribromoacetic acid	Standard	40.0	42.7	µg/L	107%	9807-450	4	80-120%
Trichloroacetic acid	Duplicate	3.2	3.4	µg/L	6.1%	9806-685	1	
Trichloroacetic acid	Matrix Spike	40.0	41.5	µg/L	104%	9807-402	1	
Trichloroacetic acid	Method Blank		ND*	µg/L		9807-447	1	
Trichloroacetic acid	Secondary Source Std	20.0	18.1	µg/L	91%	9807-448	1	70-130%
Trichloroacetic acid	Standard	20.0	17.7	µg/L	89%	9807-449	1	80-120%

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 126
Study Title: ICR RSSCT #3

Trichloroacetic acid	Standard	20.0	17.9	µg/L	89%	9807-449	1	80-120%
Trichloroacetic acid	Standard	20.0	17.7	µg/L	89%	9807-449	1	80-120%
Trichloroacetic acid	Standard	40.0	41.6	µg/L	104%	9807-450	1	80-120%
Trichloroacetic acid	Standard	40.0	42.7	µg/L	107%	9807-450	1	80-120%

Analysis: HAA-ICR (Haloacetic Acids)**Method:** EPA 552.2**QC Batch ID:** 0-183-0

										Acceptance Criteria	
<u>QC Type</u>		<u>Spike</u>	<u>Recovery</u>	<u>Unit</u>	<u>Yield</u>	<u>RPD</u>	<u>S&H ID</u>	<u>MRL</u>	<u>Range</u>	<u>RPD</u>	
Bromochloroacetic acid	Duplicate	ND	ND	µg/L		NA	9807-339	1			
Bromochloroacetic acid	Matrix Spike	40.0	43.7	µg/L	109%		9807-348	1			
Bromochloroacetic acid	Method Blank		ND*	µg/L			9807-583	1			
Bromochloroacetic acid	Secondary Source Std	20.0	22.7	µg/L	114%		9807-584	1	70-130%		
Bromochloroacetic acid	Standard	20.0	21.2	µg/L	106%		9807-585	1	80-120%		
Bromochloroacetic acid	Standard	20.0	21.3	µg/L	106%		9807-585	1	80-120%		
Bromochloroacetic acid	Standard	40.0	38.9	µg/L	97%		9807-586	1	80-120%		
Bromodichloroacetic acid	Duplicate	ND	ND	µg/L		NA	9807-339	1			
Bromodichloroacetic acid	Matrix Spike	40.0	45.7	µg/L	114%		9807-348	1			
Bromodichloroacetic acid	Method Blank		ND*	µg/L			9807-583	1			
Bromodichloroacetic acid	Secondary Source Std		ND	µg/L			9807-584	1	70-130%		
Bromodichloroacetic acid	Standard	20.0	19.9	µg/L	99%		9807-585	1	80-120%		
Bromodichloroacetic acid	Standard	20.0	20.1	µg/L	101%		9807-585	1	80-120%		
Bromodichloroacetic acid	Standard	40.0	36.8	µg/L	92%		9807-586	1	80-120%		
Chlorodibromoacetic acid	Duplicate	ND	ND	µg/L		NA	9807-339	2			
Chlorodibromoacetic acid	Matrix Spike	40.0	46.2	µg/L	116%		9807-348	2			
Chlorodibromoacetic acid	Method Blank		ND*	µg/L			9807-583	2			
Chlorodibromoacetic acid	Secondary Source Std		ND	µg/L			9807-584	2	70-130%		
Chlorodibromoacetic acid	Standard	20.0	18.7	µg/L	93%		9807-585	2	80-120%		
Chlorodibromoacetic acid	Standard	20.0	19.2	µg/L	96%		9807-585	2	80-120%		
Chlorodibromoacetic acid	Standard	40.0	36.0	µg/L	90%		9807-586	2	80-120%		
Dibromoacetic acid	Duplicate	2.3	2.4	µg/L		4.3%	9807-339	1			
Dibromoacetic acid	Matrix Spike	40.0	42.7	µg/L	107%		9807-348	1			
Dibromoacetic acid	Method Blank		ND*	µg/L			9807-583	1			
Dibromoacetic acid	Secondary Source Std	20.0	25.4	µg/L	127%		9807-584	1	70-130%		

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 126
Study Title: ICR RSSCT #3

Dibromoacetic acid	Standard	20.0	21.8 µg/L	109%	9807-585	1 80-120%
Dibromoacetic acid	Standard	20.0	21.3 µg/L	106%	9807-585	1 80-120%
Dibromoacetic acid	Standard	40.0	38.5 µg/L	96%	9807-586	1 80-120%
Dichloroacetic acid	Duplicate	ND	ND µg/L	NA	9807-339	1
Dichloroacetic acid	Matrix Spike	40.0	41.8 µg/L	104%	9807-348	1
Dichloroacetic acid	Method Blank		ND* µg/L		9807-583	1
Dichloroacetic acid	Secondary Source Std	20.0	22.1 µg/L	111%	9807-584	1 70-130%
Dichloroacetic acid	Standard	20.0	21.0 µg/L	105%	9807-585	1 80-120%
Dichloroacetic acid	Standard	20.0	21.1 µg/L	106%	9807-585	1 80-120%
Dichloroacetic acid	Standard	40.0	39.2 µg/L	98%	9807-586	1 80-120%
Monobromoacetic acid	Duplicate	ND	ND µg/L	NA	9807-339	1
Monobromoacetic acid	Matrix Spike	40.0	40.9 µg/L	102%	9807-348	1
Monobromoacetic acid	Method Blank		ND* µg/L		9807-583	1
Monobromoacetic acid	Secondary Source Std	20.0	21.1 µg/L	106%	9807-584	1 70-130%
Monobromoacetic acid	Standard	20.0	20.8 µg/L	104%	9807-585	1 80-120%
Monobromoacetic acid	Standard	20.0	21.0 µg/L	105%	9807-585	1 80-120%
Monobromoacetic acid	Standard	40.0	39.4 µg/L	98%	9807-586	1 80-120%
Monochloroacetic acid	Duplicate	ND	ND µg/L	NA	9807-339	2
Monochloroacetic acid	Matrix Spike	40.0	41.9 µg/L	105%	9807-348	2
Monochloroacetic acid	Method Blank		ND* µg/L		9807-583	2
Monochloroacetic acid	Secondary Source Std	20.0	21.0 µg/L	105%	9807-584	2 70-130%
Monochloroacetic acid	Standard	20.0	19.8 µg/L	99%	9807-585	2 80-120%
Monochloroacetic acid	Standard	20.0	21.5 µg/L	108%	9807-585	2 80-120%
Monochloroacetic acid	Standard	40.0	37.4 µg/L	93%	9807-586	2 80-120%
Tribromoacetic acid	Duplicate	ND	ND µg/L	NA	9807-339	4
Tribromoacetic acid	Matrix Spike	40.0	47.1 µg/L	118%	9807-348	4
Tribromoacetic acid	Method Blank		ND* µg/L		9807-583	4
Tribromoacetic acid	Secondary Source Std		ND µg/L		9807-584	4 70-130%
Tribromoacetic acid	Standard	20.0	18.0 µg/L	90%	9807-585	4 80-120%
Tribromoacetic acid	Standard	20.0	18.6 µg/L	93%	9807-585	4 80-120%
Tribromoacetic acid	Standard	40.0	34.8 µg/L	87%	9807-586	4 80-120%
Trichloroacetic acid	Duplicate	ND	ND µg/L	NA	9807-339	1
Trichloroacetic acid	Matrix Spike	40.0	45.0 µg/L	113%	9807-348	1

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 126
Study Title: ICR RSSCT #3

Trichloroacetic acid	Method Blank		ND*	µg/L		9807-583	1
Trichloroacetic acid	Secondary Source Std	20.0	24.7	µg/L	123%	9807-584	1 70-130%
Trichloroacetic acid	Standard	20.0	21.2	µg/L	106%	9807-585	1 80-120%
Trichloroacetic acid	Standard	20.0	21.4	µg/L	107%	9807-585	1 80-120%
Trichloroacetic acid	Standard	40.0	38.7	µg/L	97%	9807-586	1 80-120%

Analysis: HAA-ICR (Haloacetic Acids)**Method:** EPA 552.2**QC Batch ID:** 0-191-0

										Acceptance Criteria	
QC Type		Spike	Recovery	Unit	Yield	RPD	S&H ID	MRL	Range	RPD	
Bromochloroacetic acid	Duplicate	ND	ND	µg/L		NA	9807-303	1			
Bromochloroacetic acid	Matrix Spike	40.0	43.5	µg/L	109%		9807-513	1			
Bromochloroacetic acid	Method Blank		ND*	µg/L			9808-165	1			
Bromochloroacetic acid	Secondary Source Std	20.0	19.1	µg/L	96%		9808-166	1	70-130%		
Bromochloroacetic acid	Standard	20.0	19.7	µg/L	98%		9808-167	1	80-120%		
Bromochloroacetic acid	Standard	20.0	20.0	µg/L	100%		9808-167	1	80-120%		
Bromochloroacetic acid	Standard	40.0	39.7	µg/L	99%		9808-168	1	80-120%		
Bromodichloroacetic acid	Duplicate	ND	ND	µg/L		NA	9807-303	1			
Bromodichloroacetic acid	Matrix Spike	40.0	44.5	µg/L	111%		9807-513	1			
Bromodichloroacetic acid	Method Blank		ND*	µg/L			9808-165	1			
Bromodichloroacetic acid	Secondary Source Std		ND	µg/L			9808-166	1	70-130%		
Bromodichloroacetic acid	Standard	20.0	19.3	µg/L	97%		9808-167	1	80-120%		
Bromodichloroacetic acid	Standard	20.0	21.5	µg/L	108%		9808-167	1	80-120%		
Bromodichloroacetic acid	Standard	40.0	40.8	µg/L	102%		9808-168	1	80-120%		
Chlorodibromoacetic acid	Duplicate	ND	ND	µg/L		NA	9807-303	2			
Chlorodibromoacetic acid	Matrix Spike	40.0	43.3	µg/L	108%		9807-513	2			
Chlorodibromoacetic acid	Method Blank		ND*	µg/L			9808-165	2			
Chlorodibromoacetic acid	Secondary Source Std		ND	µg/L			9808-166	2	70-130%		
Chlorodibromoacetic acid	Standard	20.0	18.8	µg/L	94%		9808-167	2	80-120%		
Chlorodibromoacetic acid	Standard	20.0	22.1	µg/L	111%		9808-167	2	80-120%		
Chlorodibromoacetic acid	Standard	40.0	40.1	µg/L	100%		9808-168	2	80-120%		
Dibromoacetic acid	Duplicate	4.0	3.7	µg/L		7.8%	9807-303	1			
Dibromoacetic acid	Matrix Spike	40.0	42.5	µg/L	106%		9807-513	1			
Dibromoacetic acid	Method Blank		ND*	µg/L			9808-165	1			

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable); RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 126
Study Title: ICR RSSCT #3

Dibromoacetic acid	Secondary Source Std	20.0	19.7 µg/L	98%	9808-166	1 70-130%
Dibromoacetic acid	Standard	20.0	20.2 µg/L	101%	9808-167	1 80-120%
Dibromoacetic acid	Standard	20.0	20.5 µg/L	102%	9808-167	1 80-120%
Dibromoacetic acid	Standard	40.0	40.5 µg/L	101%	9808-168	1 80-120%
Dichloroacetic acid	Duplicate	ND	ND µg/L	NA	9807-303	1
Dichloroacetic acid	Matrix Spike	40.0	42.8 µg/L	107%	9807-513	1
Dichloroacetic acid	Method Blank		ND* µg/L		9808-165	1
Dichloroacetic acid	Secondary Source Std	20.0	19.8 µg/L	99%	9808-166	1 70-130%
Dichloroacetic acid	Standard	20.0	19.8 µg/L	99%	9808-167	1 80-120%
Dichloroacetic acid	Standard	20.0	20.3 µg/L	102%	9808-167	1 80-120%
Dichloroacetic acid	Standard	40.0	39.3 µg/L	98%	9808-168	1 80-120%
Monobromoacetic acid	Duplicate	ND	ND µg/L	NA	9807-303	1
Monobromoacetic acid	Matrix Spike	40.0	40.4 µg/L	101%	9807-513	1
Monobromoacetic acid	Method Blank		ND* µg/L		9808-165	1
Monobromoacetic acid	Secondary Source Std	20.0	20.7 µg/L	103%	9808-166	1 70-130%
Monobromoacetic acid	Standard	20.0	20.5 µg/L	102%	9808-167	1 80-120%
Monobromoacetic acid	Standard	20.0	20.6 µg/L	103%	9808-167	1 80-120%
Monobromoacetic acid	Standard	40.0	39.5 µg/L	99%	9808-168	1 80-120%
Monochloroacetic acid	Duplicate	ND	ND µg/L	NA	9807-303	2
Monochloroacetic acid	Matrix Spike	40.0	43.1 µg/L	108%	9807-513	2
Monochloroacetic acid	Method Blank		ND* µg/L		9808-165	2
Monochloroacetic acid	Secondary Source Std	20.0	20.1 µg/L	101%	9808-166	2 70-130%
Monochloroacetic acid	Standard	20.0	20.0 µg/L	100%	9808-167	2 80-120%
Monochloroacetic acid	Standard	20.0	20.3 µg/L	102%	9808-167	2 80-120%
Monochloroacetic acid	Standard	40.0	41.3 µg/L	103%	9808-168	2 80-120%
Tribromoacetic acid	Duplicate	ND	ND µg/L	NA	9807-303	4
Tribromoacetic acid	Matrix Spike	40.0	38.8 µg/L	97%	9807-513	4
Tribromoacetic acid	Method Blank		ND* µg/L		9808-165	4
Tribromoacetic acid	Secondary Source Std		ND µg/L		9808-166	4 70-130%
Tribromoacetic acid	Standard	20.0	18.5 µg/L	93%	9808-167	4 80-120%
Tribromoacetic acid	Standard	20.0	21.3 µg/L	106%	9808-167	4 80-120%
Tribromoacetic acid	Standard	40.0	38.3 µg/L	96%	9808-168	4 80-120%

ND: non-detect. *Recovery is below 1/2 minimum reporting level (MRL). NA (not applicable): RPD calculation is not applicable.

Quality Control ReportMs. Sibyl Carley
Jacksonville Electric Authority**Study#:** 126
Study Title: ICR RSSCT #3

Trichloroacetic acid	Duplicate	ND	ND	µg/L	NA	9807-303	1
Trichloroacetic acid	Matrix Spike	40.0	44.8	µg/L	112%	9807-513	1
Trichloroacetic acid	Method Blank		ND*	µg/L		9808-165	1
Trichloroacetic acid	Secondary Source Std	20.0	18.8	µg/L	94%	9808-166	1 70-130%
Trichloroacetic acid	Standard	20.0	19.8	µg/L	99%	9808-167	1 80-120%
Trichloroacetic acid	Standard	20.0	20.3	µg/L	102%	9808-167	1 80-120%
Trichloroacetic acid	Standard	40.0	39.2	µg/L	98%	9808-168	1 80-120%

End of quality control report

QC Results from Montgomery Watson Laboratories

Page 1 of 3

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Study#: 126
Study Title: ICR RSSCT #3

Phone: 904-665-4503 Fax: 904-665-4531

QC Batch ID: 81489**Report #:** 45252**Analysis:** CA**Method:** EPA/ML 200.7

<u>QC</u>	<u>Analyte</u>	<u>Spike</u>	<u>Recovery</u>	<u>Yield</u>	<u>RPD</u>	<u>Acceptance Criteria Range</u>
LCS1	Calcium, Total, ICAP	50	52.2	104.0%		(90 - 110)
LCS2	Calcium, Total, ICAP	50	52.3	105.0%		(90 - 110)
MS	Calcium, Total, ICAP	50	53.8	108.0%		(80 - 120)

QC Batch ID: 81490**Report #:** 45252**Analysis:** CA**Method:** EPA/ML 200.7

<u>QC</u>	<u>Analyte</u>	<u>Spike</u>	<u>Recovery</u>	<u>Yield</u>	<u>RPD</u>	<u>Acceptance Criteria Range</u>
LCS1	Calcium, Total, ICAP	50	51.8	104.0%		(90 - 110)
LCS2	Calcium, Total, ICAP	50	52.3	105.0%		(90 - 110)
MS	Calcium, Total, ICAP	50	49	98.0%		(80 - 120)

QC Batch ID: 81491**Report #:** 45252**Analysis:** MG**Method:** ML/EPA 200.7

<u>QC</u>	<u>Analyte</u>	<u>Spike</u>	<u>Recovery</u>	<u>Yield</u>	<u>RPD</u>	<u>Acceptance Criteria Range</u>
LCS1	Magnesium, Total, ICAP	20	20.3	102.0%		(85 - 115)
LCS2	Magnesium, Total, ICAP	20	20.3	102.0%		(85 - 115)
MS	Magnesium, Total, ICAP	20	22	110.0%		(70 - 130)

QC Batch ID: 81492**Report #:** 45252**Analysis:** MG**Method:** ML/EPA 200.7

<u>QC</u>	<u>Analyte</u>	<u>Spike</u>	<u>Recovery</u>	<u>Yield</u>	<u>RPD</u>	<u>Acceptance Criteria Range</u>
LCS1	Magnesium, Total, ICAP	20	20.2	101.0%		(85 - 115)
LCS2	Magnesium, Total, ICAP	20	20.4	102.0%		(85 - 115)
MS	Magnesium, Total, ICAP	20	19.1	96.0%		(70 - 130)

QC Batch ID: 81493**Report #:** 45252**Analysis:** NH3**Method:** ML/EPA 350.1

<u>QC</u>	<u>Analyte</u>	<u>Spike</u>	<u>Recovery</u>	<u>Yield</u>	<u>RPD</u>	<u>Acceptance Criteria Range</u>
LCS1	Ammonia Nitrogen	1	1.08	108.0%		(80 - 120)
LCS2	Ammonia Nitrogen	1	1.13	113.0%		(80 - 120)
MS	Ammonia Nitrogen	1	0.95	95.0%		(80 - 120)

ND (non-detect): Result is below 1/2 minimum reporting level (MRL).

QC Results from Montgomery Watson LaboratoriesMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

MSD	Ammonia Nitrogen	1	0.98	98.0%	(80 - 120)
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QC Batch ID: 81702

Report #: 45252

Analysis: BR

Method: ML/EPA 300

QC	Analyte	Spike	Recovery	Yield	RPD	Acceptance Criteria Range
LCS1	Bromide	0.02	0.02	100.0%		(50 - 150)
LCS2	Bromide	0.1	0.102	102.0%		(90 - 110)
MS	Bromide	0.1	0.099	99.0%		(80 - 120)
MSD	Bromide	0.1	0.1	100.0%		(80 - 120)

QC Batch ID: 81814

Report #: 45546
45548

Analysis: CA

Method: EPA/ML 200.7

QC	Analyte	Spike	Recovery	Yield	RPD	Acceptance Criteria Range
LCS1	Calcium, Total, ICAP	50	50.4	101.0%		(90 - 110)
LCS2	Calcium, Total, ICAP	50	50	100.0%		(90 - 110)
MBLK	Calcium, Total, ICAP	ND	ND			
MS	Calcium, Total, ICAP	50	47	94.0%		(80 - 120)

QC Batch ID: 82109

Report #: 45546
45548

Analysis: MG

Method: ML/EPA 200.7

QC	Analyte	Spike	Recovery	Yield	RPD	Acceptance Criteria Range
LCS1	Magnesium, Total, ICAP	20	20	100.0%		(85 - 115)
LCS2	Magnesium, Total, ICAP	20	19.8	99.0%		(85 - 115)
MBLK	Magnesium, Total, ICAP	ND	ND			
MS	Magnesium, Total, ICAP	20	19.1	96.0%		(70 - 130)

QC Batch ID: 82272

Report #: 45546
45548

Analysis: NH3

Method: ML/EPA 350.1

QC	Analyte	Spike	Recovery	Yield	RPD	Acceptance Criteria Range
LCS1	Ammonia Nitrogen	1	1.07	107.0%		(80 - 120)
LCS2	Ammonia Nitrogen	1	1.08	108.0%		(80 - 120)
MBLK	Ammonia Nitrogen	ND	ND			
MS	Ammonia Nitrogen	1	0.88	88.0%		(80 - 120)
MSD	Ammonia Nitrogen	1	0.91	91.0%		(80 - 120)

ND (non-detect): Result is below 1/2 minimum reporting level (MRL).

QC Results from Montgomery Watson LaboratoriesMs. Sibyl Carley
Jacksonville Electric AuthorityStudy#: 126
Study Title: ICR RSSCT #3

QC Batch ID: 82317

Report #: 45546
45548

Analysis: BR

Method: ML/EPA 300

						Acceptance Criteria
<u>QC</u>	<u>Analyte</u>	<u>Spike</u>	<u>Recovery</u>	<u>Yield</u>	<u>RPD</u>	<u>Range</u>
LCS1	Bromide	0.02	0.019	95.0%		(50 - 150)
LCS2	Bromide	0.1	0.1	100.0%		(90 - 110)
MBLK	Bromide	ND	ND			(70 - 130)
MS	Bromide	0.1	0.101	101.0%		(80 - 120)
MSD	Bromide	0.1	0.102	102.0%		(80 - 120)

End of MW QC report

CommentsPage 1 of 1
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Study#: 126
Study Title: ICR RSSCT #3

Analysis comments**Analysis:** Turbidity**Method:** SM 2130 B

Reported turbidity data has been rounded following the requirements of SM 2130 B, reproduced in the table below (Standard Methods, 1995). Note that the reported digits are not necessarily significant.

Turbidity Range	Report to Nearest
0-1.0	0.05
1-10	0.1
10-40	1
40-100	5
100-400	10
400-1000	50
> 1000	100

End of comments