

ICR TREATMENT STUDY ANALYSIS

Base Analysis and Data Review Comments

Treatment Study ID	1083
Study Protocol	GAC RSSCT treatment study
Plant ICR Number	650
PWS Name	Trinity River Authority
City, State, Zip	Arlington, TX 76004-0240

These are general comments that do not need to be responded to directly.

Major comments:

(none)

General Comments:

1. High immediate breakthrough levels of SDS-TOX not reflected by other SDS-DBP data, especially Quarter 1 (20 minute EBCT), Quarter 2 (both EBCTs), and Quarter 4 (20 minute EBCT). Report indicates that high TOX values were measured for the first 1-2 column effluent samples of either EBCT during all quarters, and were not reported "due to contamination."
2. Quarter 3: SDS-THM4 during 20 minute EBCT run exceeds average influent concentration on last sample point.
3. Measured GAC bed density reported as 0.50 g/cm^3 for all runs.

Outlier Data:

No outliers removed.

Cell: A1

Comment: 1083-SAS.xls 2/19/00 14:27

All curve fits reviewed and approved. See below for log of refit datasets.

Cell: C5

Comment: 1083-10-01 - Run 1 (CHBr3) 2/19/00 13:45
Original value (CoefA0) = -0.0906 New value = 0.9972
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D5

Comment: 1083-10-01 - Run 1 (CHBr3) 2/19/00 13:45
Original value (CoefAf) = 4.7336 New value = 3.3328
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E5

Comment: 1083-10-01 - Run 1 (CHBr3) 2/19/00 13:45
Original value (CoefB) = 2.8134 New value = 19.5592
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F5

Comment: 1083-10-01 - Run 1 (CHBr3) 2/19/00 13:45
Original value (CoefD) = 0.1153 New value = 0.3698
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J5

Comment: 1083-10-01 - Run 1 (CHBr3) 2/19/00 13:45
Original value (S) = 0 New value = -0.0673
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C7

Comment: 1083-10-01 - Run 1 (Cl2-D) 2/19/00 13:44
Original value (CoefA0) = 0.3733 New value = 0.5957
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: D7

Comment: 1083-10-01 - Run 1 (Cl2-D) 2/19/00 13:44
Original value (CoefAf) = 6.12 New value = 1.8281
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: E7

Comment: 1083-10-01 - Run 1 (Cl2-D) 2/19/00 13:44
Original value (CoefB) = 53.7794 New value = 222.765
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: F7

Comment: 1083-10-01 - Run 1 (Cl2-D) 2/19/00 13:44
Original value (CoefD) = 0.1006 New value = 0.2188
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: J7

Comment: 1083-10-01 - Run 1 (Cl2-D) 2/19/00 13:44
Original value (S) = 0 New value = 0
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: C27

Comment: 1083-10-02 - Run 3 (CHBr3) 2/19/00 13:50
Original value (CoefA0) = 0 New value = 0.816
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D27

Comment: 1083-10-02 - Run 3 (CHBr3) 2/19/00 13:50
Original value (CoefAf) = 6.339 New value = 5.7646
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E27

Comment: 1083-10-02 - Run 3 (CHBr3) 2/19/00 13:50
Original value (CoefB) = 10 New value = 19.9542
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F27

Comment: 1083-10-02 - Run 3 (CHBr3) 2/19/00 13:50
Original value (CoefD) = 0.15 New value = 1.468
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J27

Comment: 1083-10-02 - Run 3 (CHBr3) 2/19/00 13:50
Original value (S) = 0 New value = -0.1947
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C30

Comment: 1083-10-02 - Run 3 (DBAA) 2/19/00 13:51
Original value (CoefA0) = 0 New value = 0.7169
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D30

Comment: 1083-10-02 - Run 3 (DBAA) 2/19/00 13:51
Original value (CoefAf) = 6.74 New value = 6.2008
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E30

Comment: 1083-10-02 - Run 3 (DBAA) 2/19/00 13:51
Original value (CoefB) = 10 New value = 19.9305
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F30

Comment: 1083-10-02 - Run 3 (DBAA) 2/19/00 13:51
Original value (CoefD) = 0.15 New value = 0.8201
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J30

Comment: 1083-10-02 - Run 3 (DBAA) 2/19/00 13:51
Original value (S) = 0 New value = -0.0744
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C31

Comment: 1083-10-02 - Run 3 (DBCM) 2/19/00 13:48
Original value (CoefA0) = 11.8425 New value = 2.6321
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D31

Comment: 1083-10-02 - Run 3 (DBCM) 2/19/00 13:48
Original value (CoefAf) = 10.1929 New value = 20.7918
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E31

Comment: 1083-10-02 - Run 3 (DBCM) 2/19/00 13:48
Original value (CoefB) = 41.9615 New value = 22.1762
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F31

Comment: 1083-10-02 - Run 3 (DBCM) 2/19/00 13:48
Original value (CoefD) = 1.9894 New value = 0.7886
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J31

Comment: 1083-10-02 - Run 3 (DBCM) 2/19/00 13:48
Original value (S) = -0.0598 New value = -0.0901
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C43

Comment: 1083-10-02 - Run 3 (TOX) 2/19/00 13:52
Original value (CoefA0) = -48.6228 New value = -86.507
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D43

Comment: 1083-10-02 - Run 3 (TOX) 2/19/00 13:52
Original value (CoefAf) = 457.5 New value = 916.3309
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E43

Comment: 1083-10-02 - Run 3 (TOX) 2/19/00 13:52
Original value (CoefB) = 5.0703 New value = 7.9286
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F43

Comment: 1083-10-02 - Run 3 (TOX) 2/19/00 13:52
Original value (CoefD) = 0.134 New value = 0.0918
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J43

Comment: 1083-10-02 - Run 3 (TOX) 2/19/00 13:52

Original value (S) = 0 New value = -1.0584
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C44

Comment: 1083-10-02 - Run 3 (TSUVA) 2/19/00 13:47
Original value (CoefA0) = -0.8337 New value = 0.7529
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: D44

Comment: 1083-10-02 - Run 3 (TSUVA) 2/19/00 13:47
Original value (CoefAf) = 2.501 New value = 0.7725
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: E44

Comment: 1083-10-02 - Run 3 (TSUVA) 2/19/00 13:47
Original value (CoefB) = 2.6226 New value = 19.9502
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: F44

Comment: 1083-10-02 - Run 3 (TSUVA) 2/19/00 13:47
Original value (CoefD) = 0.2637 New value = 0.3806
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: J44

Comment: 1083-10-02 - Run 3 (TSUVA) 2/19/00 13:47
Original value (S) = 0 New value = 0
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: C49

Comment: 1083-10-03 - Run 5 (CHBr3) 2/19/00 14:06
Original value (CoefA0) = 0.1175 New value = 2.2558
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D49

Comment: 1083-10-03 - Run 5 (CHBr3) 2/19/00 14:06
Original value (CoefAf) = 8.6723 New value = 5.8015
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E49

Comment: 1083-10-03 - Run 5 (CHBr3) 2/19/00 14:06
Original value (CoefB) = 9.5169 New value = 31.0775
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F49

Comment: 1083-10-03 - Run 5 (CHBr3) 2/19/00 14:06
Original value (CoefD) = 0.163 New value = 0.5023
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J49

Comment: 1083-10-03 - Run 5 (CHBr3) 2/19/00 14:06
Original value (S) = -0.0319 New value = -0.1556

Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C53

Comment: 1083-10-03 - Run 5 (DBCM) 2/19/00 14:00

Original value (CoefA0) = 5.2299 New value = 4.4235

Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D53

Comment: 1083-10-03 - Run 5 (DBCM) 2/19/00 14:00

Original value (CoefAf) = 15.9465 New value = 19.858

Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E53

Comment: 1083-10-03 - Run 5 (DBCM) 2/19/00 14:00

Original value (CoefB) = 236936.761012426 New value = 792.0201

Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F53

Comment: 1083-10-03 - Run 5 (DBCM) 2/19/00 14:00

Original value (CoefD) = 1.4312 New value = 0.6524

Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J53

Comment: 1083-10-03 - Run 5 (DBCM) 2/19/00 14:00

Original value (S) = 0 New value = -0.1346

Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C60

Comment: 1083-10-03 - Run 5 (MCAA) 2/19/00 14:07

Original value (CoefA0) = 0 New value = -0.2045

Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: D60

Comment: 1083-10-03 - Run 5 (MCAA) 2/19/00 14:07

Original value (CoefAf) = 0 New value = 5.823

Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: E60

Comment: 1083-10-03 - Run 5 (MCAA) 2/19/00 14:07

Original value (CoefB) = 0 New value = 279.9485

Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: F60

Comment: 1083-10-03 - Run 5 (MCAA) 2/19/00 14:07

Original value (CoefD) = 0 New value = 0.1754

Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: J60

Comment: 1083-10-03 - Run 5 (MCAA) 2/19/00 14:07

Original value (S) = 0 New value = 0

Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: C71

Comment: 1083-10-04 - Run 7 (CHBr3) 2/19/00 14:13
Original value (CoefA0) = 0.0497 New value = 1.1363
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D71

Comment: 1083-10-04 - Run 7 (CHBr3) 2/19/00 14:13
Original value (CoefAf) = 4.7678 New value = 5.1756
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E71

Comment: 1083-10-04 - Run 7 (CHBr3) 2/19/00 14:13
Original value (CoefB) = 9.8867 New value = 20.0809
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F71

Comment: 1083-10-04 - Run 7 (CHBr3) 2/19/00 14:13
Original value (CoefD) = 0.1594 New value = 0.2927
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J71

Comment: 1083-10-04 - Run 7 (CHBr3) 2/19/00 14:13
Original value (S) = -0.0128 New value = -0.0982
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C74

Comment: 1083-10-04 - Run 7 (DBAA) 2/19/00 14:15
Original value (CoefA0) = 0 New value = 0.0837
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D74

Comment: 1083-10-04 - Run 7 (DBAA) 2/19/00 14:15
Original value (CoefAf) = 5.48 New value = 11.8259
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E74

Comment: 1083-10-04 - Run 7 (DBAA) 2/19/00 14:15
Original value (CoefB) = 10 New value = 21.3462
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F74

Comment: 1083-10-04 - Run 7 (DBAA) 2/19/00 14:15
Original value (CoefD) = 0.15 New value = 0.1902
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J74

Comment: 1083-10-04 - Run 7 (DBAA) 2/19/00 14:15
Original value (S) = 0 New value = -0.0438
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C75

Comment: 1083-10-04 - Run 7 (DBCM) 2/19/00 14:10
Original value (CoefA0) = 0 New value = 2.0402
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D75

Comment: 1083-10-04 - Run 7 (DBCM) 2/19/00 14:10
Original value (CoefAf) = 16.624 New value = 15.723
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E75

Comment: 1083-10-04 - Run 7 (DBCM) 2/19/00 14:10
Original value (CoefB) = 10 New value = 217.5365
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F75

Comment: 1083-10-04 - Run 7 (DBCM) 2/19/00 14:10
Original value (CoefD) = 0.15 New value = 0.4746
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J75

Comment: 1083-10-04 - Run 7 (DBCM) 2/19/00 14:10
Original value (S) = 0 New value = -0.1089
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C81

Comment: 1083-10-04 - Run 7 (MBAA) 2/19/00 14:12
Original value (CoefA0) = 0.0491 New value = -0.0503
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: D81

Comment: 1083-10-04 - Run 7 (MBAA) 2/19/00 14:12
Original value (CoefAf) = 1.1553 New value = 1.2179
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: E81

Comment: 1083-10-04 - Run 7 (MBAA) 2/19/00 14:12
Original value (CoefB) = 965587.611558995 New value = 8274.829
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: F81

Comment: 1083-10-04 - Run 7 (MBAA) 2/19/00 14:12
Original value (CoefD) = 1.439 New value = 0.7953
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: J81

Comment: 1083-10-04 - Run 7 (MBAA) 2/19/00 14:12
Original value (S) = -0.0084 New value = 0
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: C82

Comment: 1083-10-04 - Run 7 (MCAA) 2/19/00 14:14

Original value (CoefA0) = 0 New value = -0.9008
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: D82

Comment: 1083-10-04 - Run 7 (MCAA) 2/19/00 14:14
Original value (CoefAf) = 0 New value = 11.5017
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: E82

Comment: 1083-10-04 - Run 7 (MCAA) 2/19/00 14:14
Original value (CoefB) = 0 New value = 23.26
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: F82

Comment: 1083-10-04 - Run 7 (MCAA) 2/19/00 14:14
Original value (CoefD) = 0 New value = 0.0425
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: J82

Comment: 1083-10-04 - Run 7 (MCAA) 2/19/00 14:14
Original value (S) = 0 New value = 0
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: C104

Comment: 1083-20-01 - Run 2 (MCAA) 2/19/00 13:15
Original value (CoefA0) = 0 New value = 2.557
Fewer than 6 points above MRL. Step function applied.

Cell: D104

Comment: 1083-20-01 - Run 2 (MCAA) 2/19/00 13:15
Original value (CoefAf) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: E104

Comment: 1083-20-01 - Run 2 (MCAA) 2/19/00 13:15
Original value (CoefB) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: F104

Comment: 1083-20-01 - Run 2 (MCAA) 2/19/00 13:15
Original value (CoefD) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: J104

Comment: 1083-20-01 - Run 2 (MCAA) 2/19/00 13:15
Original value (S) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: K104

Comment: 1083-20-01 - Run 2 (MCAA) 2/19/00 13:15
Original value (t0) = 0 New value = 121.55

Fewer than 6 points above MRL. Step function applied.

Cell: C110

Comment: 1083-20-01 - Run 2 (TSUVA) 2/19/00 13:46
Original value (CoefA0) = 0 New value = -0.0256
Fewer than 6 points. Logistic function (type 1) applied.

Cell: D110

Comment: 1083-20-01 - Run 2 (TSUVA) 2/19/00 13:46
Original value (CoefAf) = 0 New value = 1.6528
Fewer than 6 points. Logistic function (type 1) applied.

Cell: E110

Comment: 1083-20-01 - Run 2 (TSUVA) 2/19/00 13:46
Original value (CoefB) = 0 New value = 617.6156
Fewer than 6 points. Logistic function (type 1) applied.

Cell: F110

Comment: 1083-20-01 - Run 2 (TSUVA) 2/19/00 13:46
Original value (CoefD) = 0 New value = 0.0991
Fewer than 6 points. Logistic function (type 1) applied.

Cell: J110

Comment: 1083-20-01 - Run 2 (TSUVA) 2/19/00 13:46
Original value (S) = 0 New value = 0
Fewer than 6 points. Logistic function (type 1) applied.

Cell: C115

Comment: 1083-20-02 - Run 4 (CHBr3) 2/19/00 13:53
Original value (CoefA0) = -0.0709 New value = 1.4567
Poor peak curve fit. Data was refit by iterative curve fit procedure.

1083-20-02 - Run 4 (CHBr3) 2/19/00 13:57
Original value (CoefA0) = 1.4567 New value = 1.4567
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D115

Comment: 1083-20-02 - Run 4 (CHBr3) 2/19/00 13:53
Original value (CoefAf) = 6.3127 New value = 13.0982
Poor peak curve fit. Data was refit by iterative curve fit procedure.

1083-20-02 - Run 4 (CHBr3) 2/19/00 13:57
Original value (CoefAf) = 13.0982 New value = 13.0982
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E115

Comment: 1083-20-02 - Run 4 (CHBr3) 2/19/00 13:53
Original value (CoefB) = 3.8139 New value = 20.4519
Poor peak curve fit. Data was refit by iterative curve fit procedure.

1083-20-02 - Run 4 (CHBr3) 2/19/00 13:57

Original value (CoefB) = 20.4519 New value = 20.4519
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F115

Comment: 1083-20-02 - Run 4 (CHBr3) 2/19/00 13:53
Original value (CoefD) = 0.141 New value = 0.1615
Poor peak curve fit. Data was refit by iterative curve fit procedure.

1083-20-02 - Run 4 (CHBr3) 2/19/00 13:57
Original value (CoefD) = 0.1615 New value = 0.1615
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J115

Comment: 1083-20-02 - Run 4 (CHBr3) 2/19/00 13:53
Original value (S) = 0 New value = -0.1528
Poor peak curve fit. Data was refit by iterative curve fit procedure.

1083-20-02 - Run 4 (CHBr3) 2/19/00 13:57
Original value (S) = -0.1528 New value = -0.1528
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C118

Comment: 1083-20-02 - Run 4 (DBAA) 2/19/00 13:58
Original value (CoefA0) = -4.295 New value = -6.8709
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D118

Comment: 1083-20-02 - Run 4 (DBAA) 2/19/00 13:58
Original value (CoefAf) = 12.885 New value = 15.0048
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E118

Comment: 1083-20-02 - Run 4 (DBAA) 2/19/00 13:58
Original value (CoefB) = 1.2004 New value = 1.2212
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F118

Comment: 1083-20-02 - Run 4 (DBAA) 2/19/00 13:58
Original value (CoefD) = 0.0524 New value = 0.0972
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J118

Comment: 1083-20-02 - Run 4 (DBAA) 2/19/00 13:58
Original value (S) = 0 New value = -0.0363
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C137

Comment: 1083-20-03 - Run 6 (CHBr3) 2/19/00 14:09
Original value (CoefA0) = 0.7478 New value = 1.4553
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D137

Comment: 1083-20-03 - Run 6 (CHBr3) 2/19/00 14:09
Original value (CoefAf) = 16.17 New value = 21.1408
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E137

Comment: 1083-20-03 - Run 6 (CHBr3) 2/19/00 14:09
Original value (CoefB) = 16.3202 New value = 24.4389
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F137

Comment: 1083-20-03 - Run 6 (CHBr3) 2/19/00 14:09
Original value (CoefD) = 0.0975 New value = 0.1197
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J137

Comment: 1083-20-03 - Run 6 (CHBr3) 2/19/00 14:09
Original value (S) = 0 New value = -0.0869
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C147

Comment: 1083-20-03 - Run 6 (MBAA) 2/19/00 14:08
Original value (CoefA0) = 0 New value = -0.0435
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: D147

Comment: 1083-20-03 - Run 6 (MBAA) 2/19/00 14:08
Original value (CoefAf) = 0 New value = 1.4233
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: E147

Comment: 1083-20-03 - Run 6 (MBAA) 2/19/00 14:08
Original value (CoefB) = 0 New value = 944.5067
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: F147

Comment: 1083-20-03 - Run 6 (MBAA) 2/19/00 14:08
Original value (CoefD) = 0 New value = 0.1272
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: J147

Comment: 1083-20-03 - Run 6 (MBAA) 2/19/00 14:08
Original value (S) = 0 New value = 0
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: C159

Comment: 1083-20-04 - Run 8 (CHBr3) 2/19/00 14:18
Original value (CoefA0) = -0.0734 New value = -0.7233
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D159

Comment: 1083-20-04 - Run 8 (CHBr3) 2/19/00 14:18
Original value (CoefAf) = 7.0391 New value = 19.6339
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E159

Comment: 1083-20-04 - Run 8 (CHBr3) 2/19/00 14:18
Original value (CoefB) = 9.9938 New value = 22.1286
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F159

Comment: 1083-20-04 - Run 8 (CHBr3) 2/19/00 14:18
Original value (CoefD) = 0.0883 New value = 0.0911
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J159

Comment: 1083-20-04 - Run 8 (CHBr3) 2/19/00 14:18
Original value (S) = 0 New value = -0.0605
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C170

Comment: 1083-20-04 - Run 8 (MCAA) 2/19/00 13:42
Original value (CoefA0) = 0 New value = 2.7226
Fewer than 6 points above MRL. Step function applied.

Cell: D170

Comment: 1083-20-04 - Run 8 (MCAA) 2/19/00 13:42
Original value (CoefAf) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: E170

Comment: 1083-20-04 - Run 8 (MCAA) 2/19/00 13:42
Original value (CoefB) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: F170

Comment: 1083-20-04 - Run 8 (MCAA) 2/19/00 13:42
Original value (CoefD) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: J170

Comment: 1083-20-04 - Run 8 (MCAA) 2/19/00 13:42
Original value (S) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: K170

Comment: 1083-20-04 - Run 8 (MCAA) 2/19/00 13:42
Original value (t0) = 0 New value = 103.0792
Fewer than 6 points above MRL. Step function applied.

Cell: C176

Comment: 1083-20-04 - Run 8 (TSUVA) 2/19/00 14:16

Original value (CoefA0) = -0.6933 New value = 0.9608
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: D176

Comment: 1083-20-04 - Run 8 (TSUVA) 2/19/00 14:16
Original value (CoefAf) = 1.8768 New value = 0.634
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: E176

Comment: 1083-20-04 - Run 8 (TSUVA) 2/19/00 14:16
Original value (CoefB) = 2.0505 New value = 19.9365
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: F176

Comment: 1083-20-04 - Run 8 (TSUVA) 2/19/00 14:16
Original value (CoefD) = 0.1145 New value = 0.0301
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: J176

Comment: 1083-20-04 - Run 8 (TSUVA) 2/19/00 14:16
Original value (S) = 0 New value = 0
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

ICR Information

ID / ICR#: TX2200199 / 650
 ICR Contact: Mr. Bill Smith
 Phone No.: (817) 493-5100
 Period: 4/17/98 - 4/27/98 (10 B-S days)

Design Information

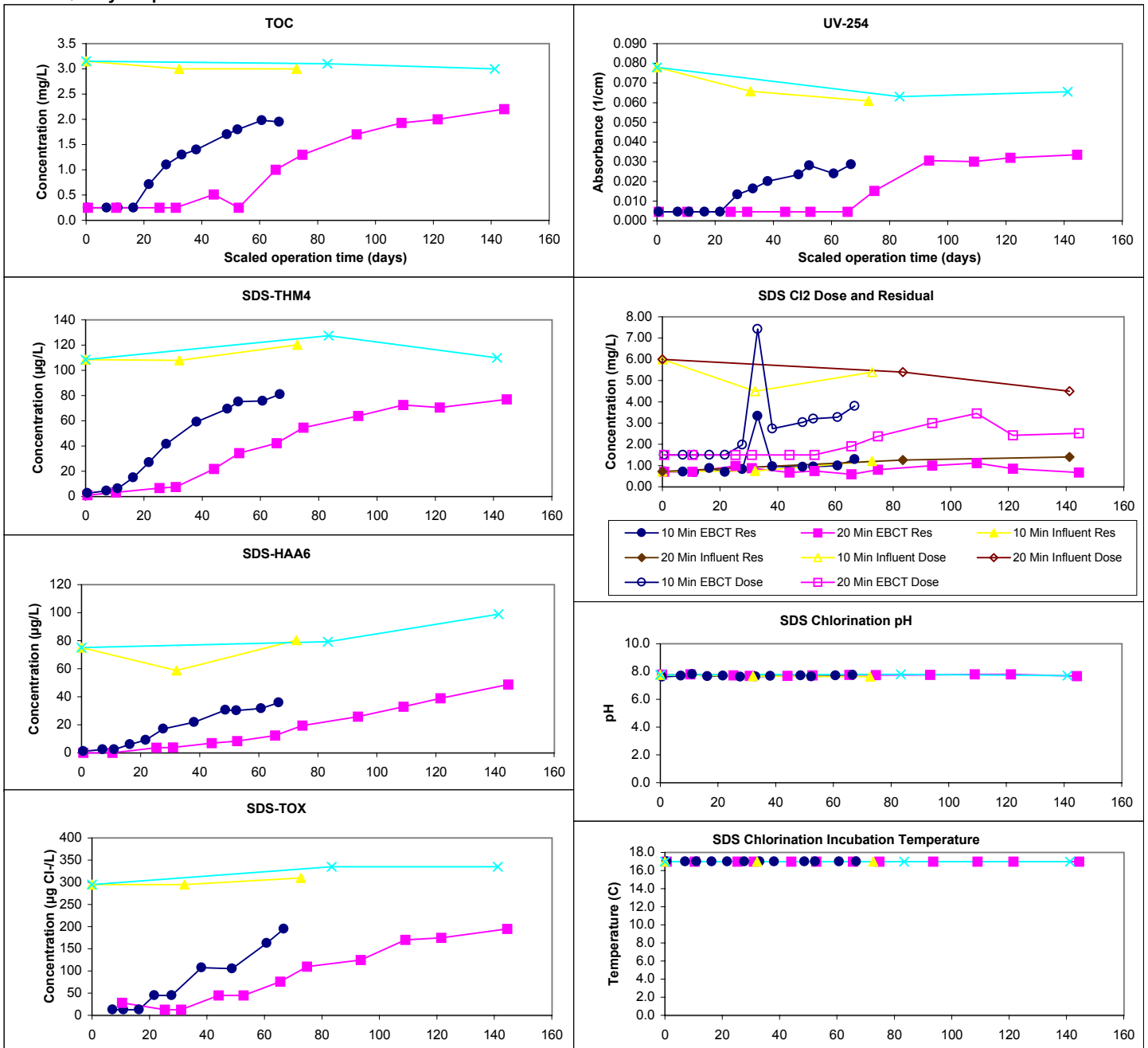
Design TOC: 3.0 mg/L
 Col Diameter: 8.0 mm
 Min Reynolds#: 0.50
 Full-Scale Temp: 20.6 C

Full-Scale GAC Size: 8x30 Bituminous Coa
 Bench-Scale GAC Size: 100x200
 Scaling Factor: 14.30
 Meas Dry Bed Density: 0.50 g/cm3

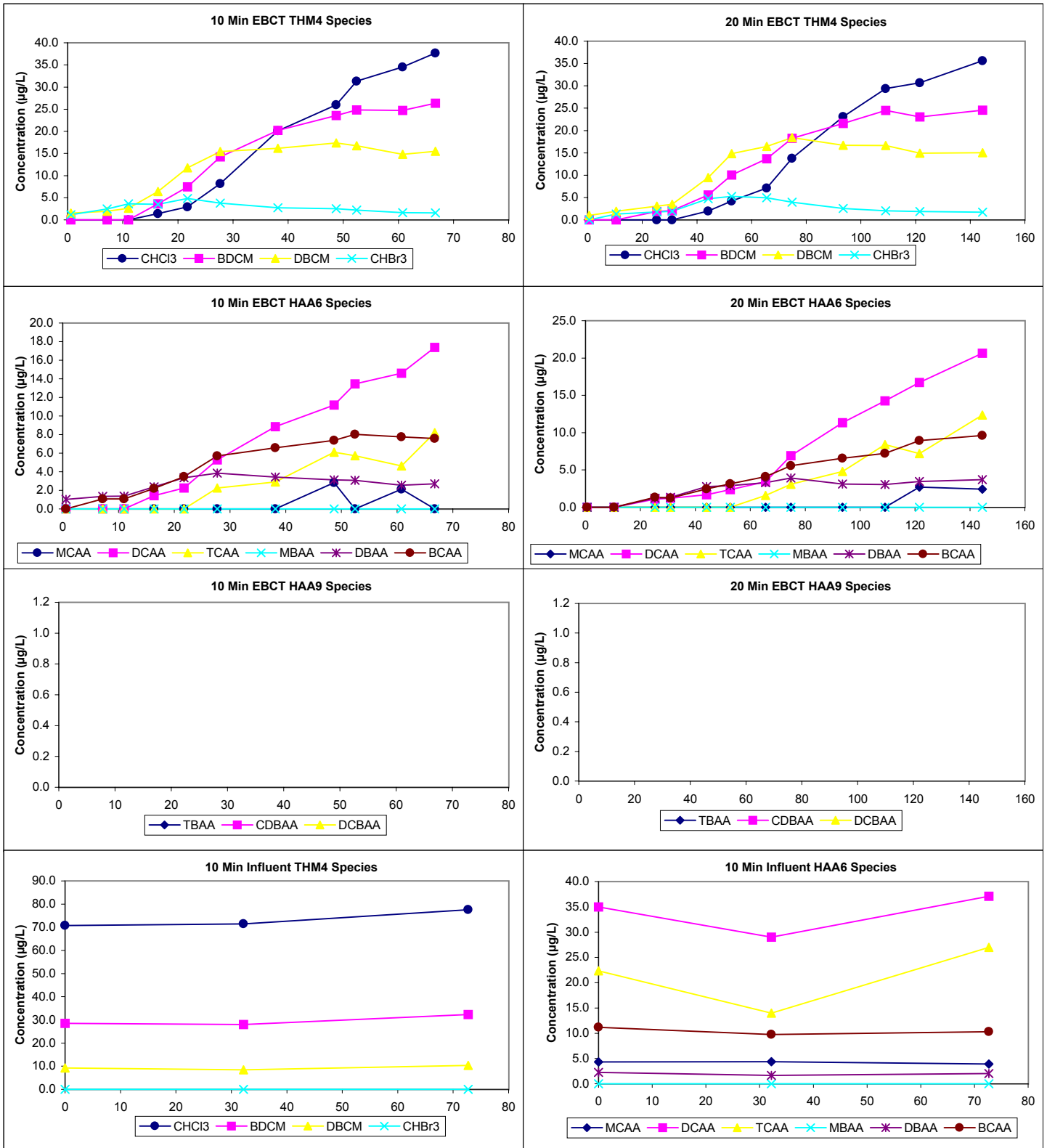
Water Quality Summary

Influent	10 Min Influent				20 Min Influent								
	Mean	SD/RD	Count	Min/Max	Mean	SD/RD	Count	Min/Max		Mean	SD	Count	Min/Max
TOC	3.1	0.1	3	3.0 - 3.2	3.1	0.1	3	3.0 - 3.2	Res (0)	0.96	0.50	30	0.59 - 3.34
pH	7.6	0.4	3	7.4 - 8.0	7.8	0.3	3	7.5 - 8.0	Temp	17.0	0.0	30	17.0 - 17.0
UV254	0.068	0.009	3	0.061 - 0.078	0.069	0.008	3	0.063 - 0.078	pH	7.7	0.1	30	7.6 - 7.8
SUVA	2.23	0.23	3	2.03 - 2.48	2.23	0.22	3	2.04 - 2.48	Time	119.3	0.3	30	119.0 - 120.0
Bromide	72	2	2	71 - 73	75	7	2	71 - 78	Comments:				
SDS-TOX	300	9	3	295 - 310	322	23	3	295 - 335					
SDS-THM4	112	7	3	108 - 120	115	11	3	108 - 127					
SDS-HAA6	71	11	3	59 - 80	84	13	3	75 - 99					
Effluent	10 Min EBCT (5 B-S days)				20 Min EBCT (10 B-S days)				Chart Legend: <div><div>●</div> 10 Min EBCT <div>■</div> 20 Min EBCT <div>▲</div> 10 Min Influent <div>✕</div> 20 Min Influent</div>				
Effluent pH	7.7	0.2	12	7.4 - 7.9	7.7	0.2	12	7.5 - 8.0					
Effluent Temp	22.4	1.2	12	21.0 - 24.0	22.4	0.8	12	21.0 - 23.0					

Water Quality Graphs



Water Quality Graphs (Continued)



ICR Information

ID / ICR#: TX2200199 / 650
 ICR Contact: Mr. Bill Smith
 Phone No.: (817) 493-5100
 Period: 8/11/98 - 8/27/98 (16 B-S days)

Design Information

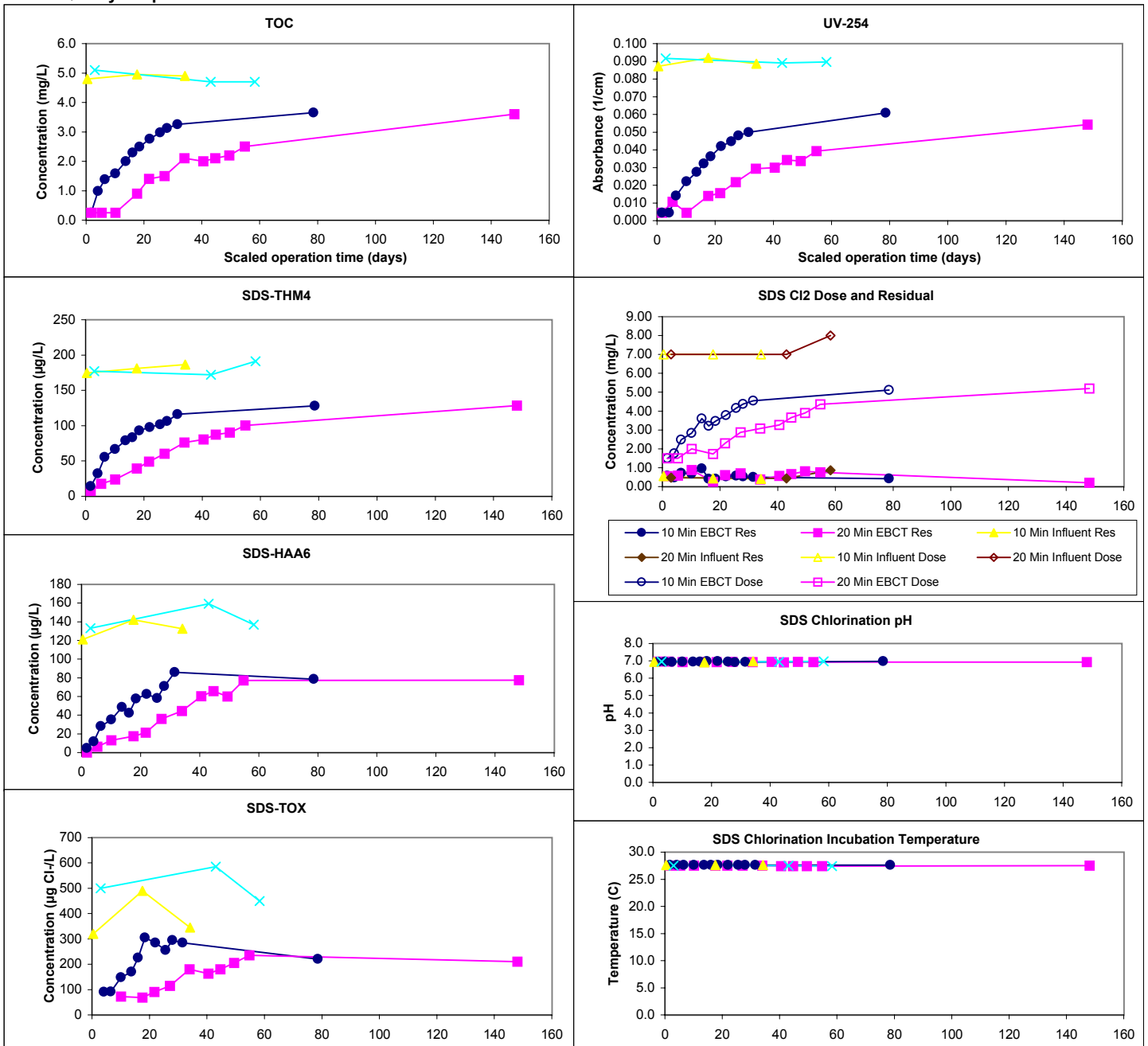
Design TOC: 5.0 mg/L
 Col Diameter: 11.0 mm
 Min Reynolds#: 0.63
 Full-Scale Temp: 29.8 C

Full-Scale GAC Size: 8x30 Bituminous Coa
 Bench-Scale GAC Size: 100x200
 Scaling Factor: 14.30
 Meas Dry Bed Density: 0.50 g/cm3

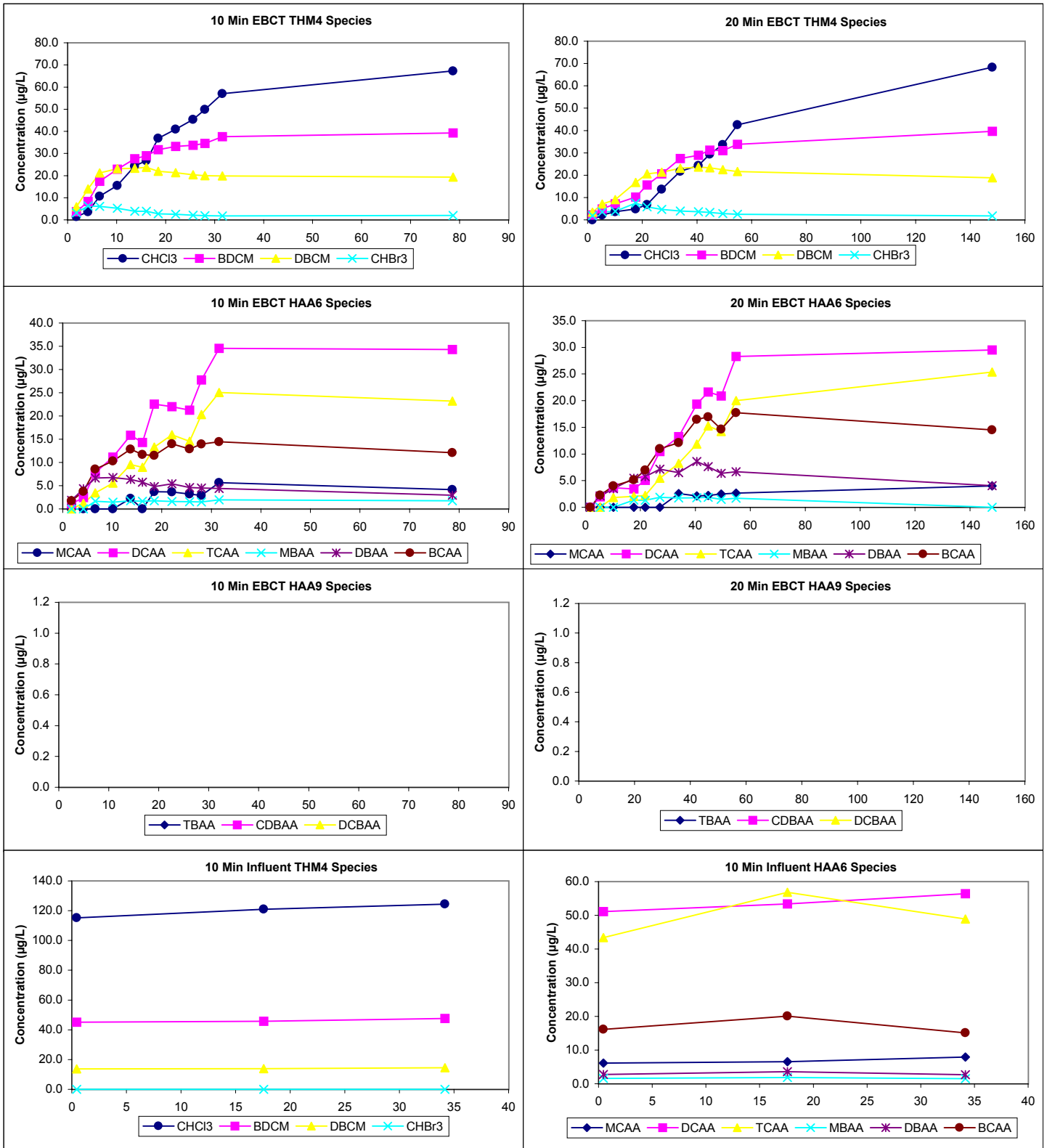
Water Quality Summary

Influent	10 Min Influent				20 Min Influent				Cumulative SDS Conditions			
	Mean	SD/RD	Count	Min/Max	Mean	SD/RD	Count	Min/Max	Res (0)	Mean	SD	Count
TOC	4.9	0.1	3	4.8 - 5.0	4.8	0.2	3	4.7 - 5.1	0.56	0.18		30
pH	8.2	0.1	3	8.1 - 8.3	8.1	0.1	3	8.1 - 8.2	27.5	0.1		30
UV254	0.089	0.002	3	0.087 - 0.092	0.090	0.001	3	0.089 - 0.092	6.9	0.0		30
SUVA	1.83	0.03	3	1.81 - 1.86	1.87	0.06	3	1.80 - 1.91	120.0	0.0		30
Bromide	125	50	2	100 - 150	85	7	2	81 - 88				
SDS-TOX	385	92	3	320 - 490	512	68	3	450 - 585				
SDS-THM4	181	6	3	175 - 187	180	10	3	172 - 191				
SDS-HAA6	132	11	3	121 - 142	143	14	3	133 - 159				
Effluent	10 Min EBCT				20 Min EBCT				Chart Legend:			
	Mean	SD/RD	Count	Min/Max	Mean	SD/RD	Count	Min/Max	10 Min EBCT	20 Min EBCT	10 Min Influent	20 Min Influent
Effluent pH	8.2	0.1	12	8.1 - 8.2	8.2	0.0	12	8.1 - 8.2				
Effluent Temp	22.5	0.8	12	21.0 - 23.0	22.8	1.1	12	21.0 - 24.0				

Water Quality Graphs



Water Quality Graphs (Continued)



ICR Information

ID / ICR#: TX2200199 / 650
 ICR Contact: Mr. Bill Smith
 Phone No.: (817) 493-5100
 Period: 10/19/98 - 10/23/98 (4 B-S days)

Design Information

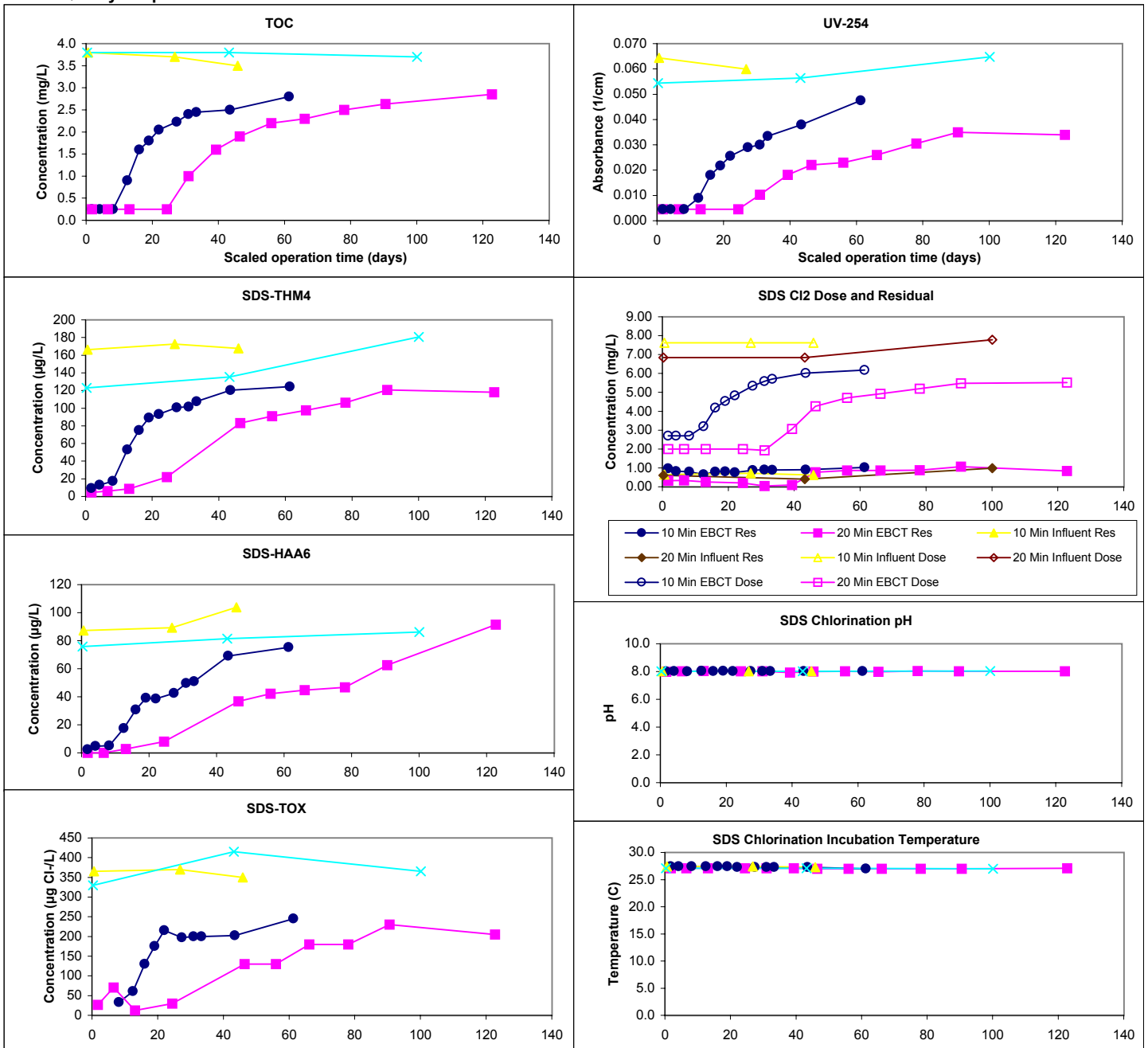
Design TOC: 3.7 mg/L
 Col Diameter: 11.0 mm
 Min Reynolds#: 0.56
 Full-Scale Temp: 24.8 C

Full-Scale GAC Size: 8x30 Bituminous
 Bench-Scale GAC Size: 100x200
 Scaling Factor: 14.30
 Meas Dry Bed Density: 0.50 g/cm3

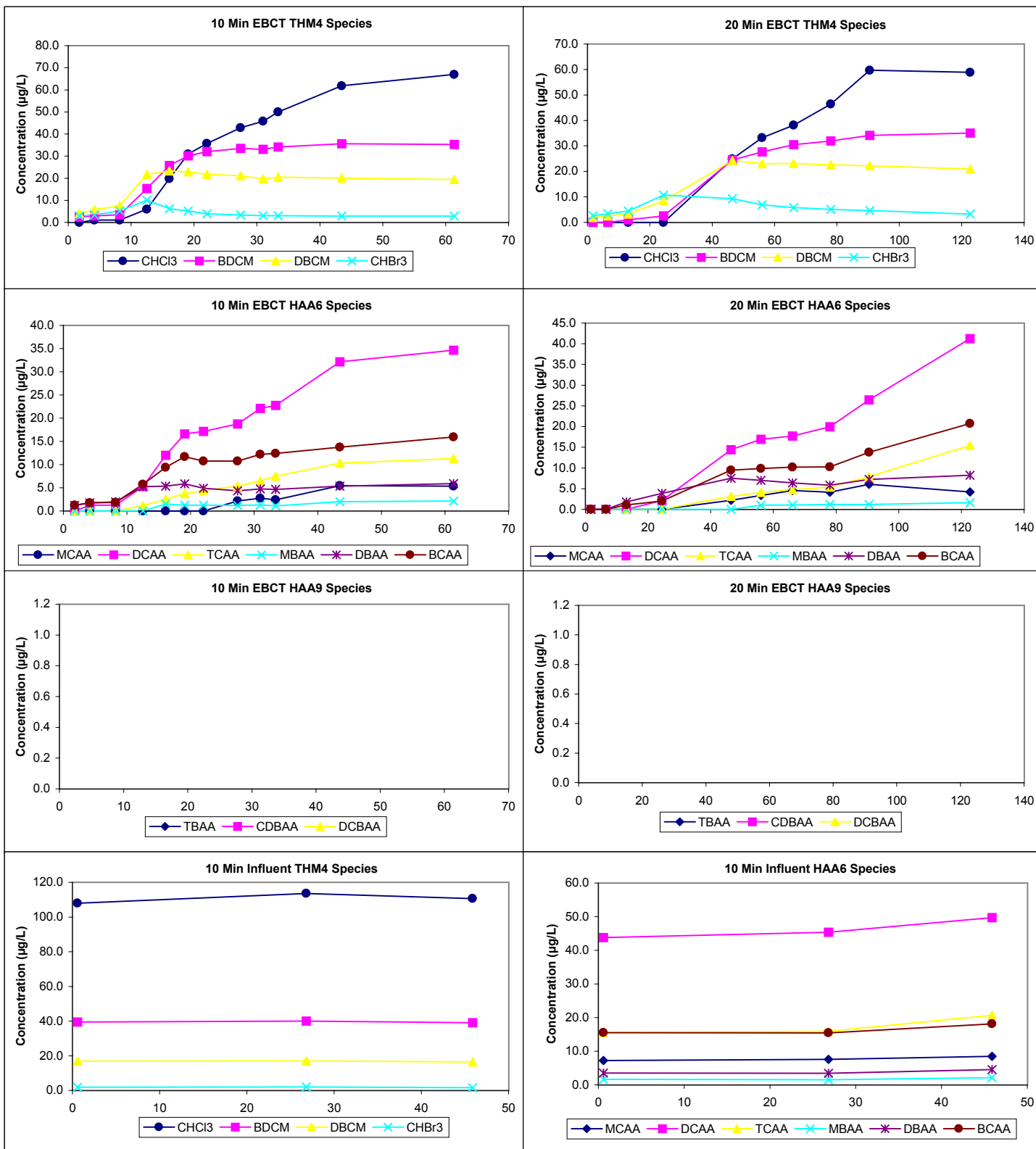
Water Quality Summary

Influent	10 Min Influent				20 Min Influent				Res (2)	Mean	SD	Count	Min/Max
	Mean	SD/RD	Count	Min/Max	Mean	SD/RD	Count	Min/Max		Mean	SD	Count	Min/Max
TOC	3.7	0.2	3	3.5 - 3.8	3.8	0.1	3	3.7 - 3.8		0.69	0.28	30	0.05 - 1.07
pH	8.1	0.0	3	8.0 - 8.1	8.2	0.0	3	8.1 - 8.2	Temp	27.2	0.2	30	27.0 - 27.4
UV254	0.062	0.005	2	0.060 - 0.064	0.059	0.006	3	0.054 - 0.065	pH	8.0	0.0	30	7.9 - 8.0
SUVA	1.66	0.08	2	1.62 - 1.69	1.56	0.17	3	1.43 - 1.75	Time	120.0	0.0	30	120.0 - 120.0
Bromide	100	1	2	100 - 100	102	0	2	102 - 102	Comments:				
SDS-TOX	362	10	3	350 - 370	370	43	3	330 - 415					
SDS-THM4	169	3	3	166 - 172	146	30	3	123 - 181					
SDS-HAA6	93	9	3	87 - 104	81	5	3	76 - 86					
Effluent	10 Min EBCT (4 B-S days)				20 Min EBCT (8 B-S days)				Chart Legend:	<div><div></div>10 Min EBCT</div> <div><div></div>20 Min EBCT</div> <div><div></div>10 Min Influent</div> <div><div></div>20 Min Influent</div>			
Effluent pH	8.1	0.1	12	8.0 - 8.2	8.1	0.2	12	7.8 - 8.5					
Effluent Temp	22.6	0.9	12	21.0 - 24.0	22.2	1.0	12	21.0 - 24.0					

Water Quality Graphs



Water Quality Graphs (Continued)



ICR Information

ID / ICR#: TX2200199 / 650
 ICR Contact: Mr. Bill Smith
 Phone No.: (817) 493-5100
 Period: 1/14/99 - 1/19/99 (5 B-S days)

Design Information

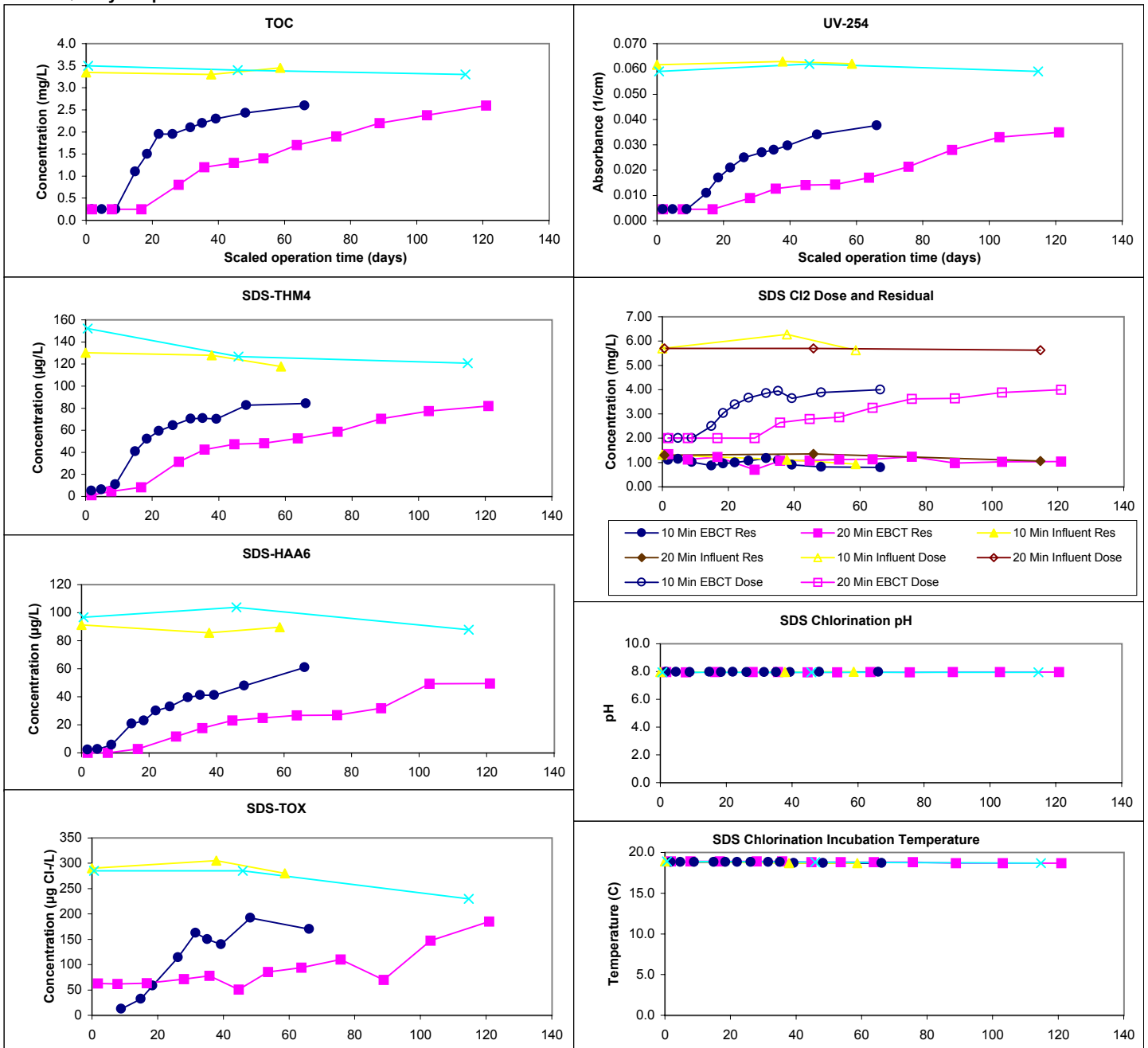
Design TOC: 3.3 mg/L
 Col Diameter: 11.0 mm
 Min Reynolds#: 0.43
 Full-Scale Temp: 14.2 C

Full-Scale GAC Size: 8x30 Bituminous
 Bench-Scale GAC Size: 100x200
 Scaling Factor: 14.30
 Meas Dry Bed Density: 0.50 g/cm3

Water Quality Summary

	10 Min Influent				20 Min Influent								
Influent	Mean	SD/RD	Count	Min/Max	Mean	SD/RD	Count	Min/Max		Mean	SD	Count	Min/Max
TOC	3.4	0.1	3	3.3 - 3.5	3.4	0.1	3	3.3 - 3.5	Res (0)	1.07	0.16	30	0.70 - 1.36
pH	8.3	0.0	3	8.2 - 8.3	8.3	0.0	3	8.2 - 8.3	Temp	18.8	0.1	30	18.7 - 18.9
UV254	0.062	0.001	3	0.062 - 0.063	0.060	0.002	3	0.059 - 0.062	pH	8.0	0.0	30	7.9 - 8.0
SUVA	1.85	0.06	3	1.80 - 1.91	1.76	0.07	3	1.69 - 1.82	Time	120.0	0.0	30	120.0 - 120.0
Bromide	75	4	2	73 - 77	65	15	2	57 - 72	Comments:				
SDS-TOX	292	13	3	280 - 305	267	32	3	230 - 285					
SDS-THM4	125	7	3	118 - 130	133	17	3	121 - 152					
SDS-HAA6	89	3	3	86 - 91	96	8	3	88 - 104					
Effluent	10 Min EBCT (4 B-S days)				20 Min EBCT (8 B-S days)				Chart Legend:				
Effluent pH	8.2	0.2	12	7.8 - 8.6	8.2	0.2	12	7.8 - 8.5					
Effluent Temp	23.8	1.7	12	21.0 - 26.0	23.3	1.4	12	21.0 - 25.0					

Water Quality Graphs



Water Quality Graphs (Continued)

