

ICR TREATMENT STUDY ANALYSIS

Base Analysis and Data Review Comments

Treatment Study ID 1018
Study Protocol GAC bench-scale treatment study
Plant ICR Number 680
PWS Name Appomattox River Water Authority
City, State, Zip Petersburg, VA 23803

Major comments:

1. HAA breakthrough patterns during Quarter 3 indicate possible presence of formed DCAA in GAC influent. THM levels reached high levels relative to influent concentrations, especially during Quarters 2 and 3.

Response:

- I(A) Yes, there was DCAA present in the GAC influent SDSHAA sample. The reason why is unknown.*
- I(B) Quarter 2 10-min GAC effluent THM samples 10 and 11 were reported by the lab to be less than the average influent SDSTHM concentration. These data were confirmed.*
- I(C) The Quarter 3 10-min GAC effluent sample 12 and 20-min GAC effluent sample 11 both had SDSTHM concentrations that reached ~100 percent breakthrough and exceeded the average influent SDSTHM concentration.*

General Comments:

1. The treatment study influent sample was taken after filtration. Filtration media included a 24-in. GAC cap.

Response: Yes, the full-scale plant filter media included GAC.

2. GAC influent pH values reported in Table 8 of report do not match those reported in *Data Collection Spreadsheets*. Largest discrepancy is Quarter 3 (Report: 7.08; DCS: 6.27).

Response: The pH data in Table 8 was incorrect and was revised.

3. Table 9: Quarter 3, 20 minute run was terminated after 368 days, not 284 days as stated.

Response: The scaled operation time in Table 9 was incorrect and was revised to read 368 days.

4. Appendix Tables A.1 - A.4: These tables contain RSSCT design parameters. First two lines indicate values for "Diameter (large column)" and "Diameter (small column)". Note that the values given refer to particle diameter, not column diameter.

Response: EE&T understands that this value is the particle diameter, although it was unclear in the report.

5. GAC influent TSUVA values were low, ranging from 1.3 to 1.6 during all quarters.

Response: Data was confirmed to be correct.

6. Report indicates that a 5- μm in-line filter was used during RSSCT testing (page 7), while Problems Encountered section indicates the use of 1, 5, and 10 μm pore size filters (page 21). The *Data Collection Spreadsheets* indicate that a 1 μm pore size filter was used.

Response: We actually used 1 to 2 μm , 5 to 6 μm , and 20 to 30 μm Teflon filters during the study. Different sizes were used as needed to prevent rapid headloss buildup. Page 21 will be revised to indicate this.

7. Quarter 2: influent TOC concentration dropped from 3.9 to 2.0 over the course of the run (UV₂₅₄ increased slightly).

Response: Influent TOC for Quarter 2, sample B-1 10 was reported incorrectly. Should be 3.2 mg/L.

8. Measured dry bed density was reported as 0.50 g/cm³ for all quarters. Experimental results of dry bed density measurement were probably not reported.

Response: Dry bed density experimental results were not reported.

Outlier Data:

Seven outliers removed.

Cell: A1

Comment: 1018-SAS.xls 2/8/00 22:00

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

Cell: C3

Comment: 1018-10-01 - Run 1 (BDCM) 2/8/00 18:53
Original value (CoefA0) = 0 New value = 1.434
Fewer than 6 points above MRL. Step function applied.

Cell: D3

Comment: 1018-10-01 - Run 1 (BDCM) 2/8/00 18:53
Original value (CoefAf) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: E3

Comment: 1018-10-01 - Run 1 (BDCM) 2/8/00 18:53
Original value (CoefB) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: F3

Comment: 1018-10-01 - Run 1 (BDCM) 2/8/00 18:53
Original value (CoefD) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: J3

Comment: 1018-10-01 - Run 1 (BDCM) 2/8/00 18:53
Original value (S) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: K3

Comment: 1018-10-01 - Run 1 (BDCM) 2/8/00 18:53
Original value (t0) = 0 New value = 85.1016
Fewer than 6 points above MRL. Step function applied.

Cell: C22

Comment: 1018-10-01 - Run 1 (TSUVA) 2/8/00 20:20
Original value (CoefA0) = -0.0306 New value = 2
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D22

Comment: 1018-10-01 - Run 1 (TSUVA) 2/8/00 20:20
Original value (CoefAf) = 2.5424 New value = 0
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E22

Comment: 1018-10-01 - Run 1 (TSUVA) 2/8/00 20:20
Original value (CoefB) = 10 New value = 0
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F22

Comment: 1018-10-01 - Run 1 (TSUVA) 2/8/00 20:20
Original value (CoefD) = 0.1395 New value = 0
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J22

Comment: 1018-10-01 - Run 1 (TSUVA) 2/8/00 20:20
Original value (S) = -0.0073 New value = -0.0098
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C30

Comment: 1018-10-02 - Run 3 (DBAA) 2/8/00 20:38
Original value (CoefA0) = 0 New value = 1.18
Fewer than 6 points above MRL. Peak curve/step function combination applied.

Cell: D30

Comment: 1018-10-02 - Run 3 (DBAA) 2/8/00 20:38
Original value (CoefAf) = 0 New value = 0
Fewer than 6 points above MRL. Peak curve/step function combination applied.

Cell: E30

Comment: 1018-10-02 - Run 3 (DBAA) 2/8/00 20:38
Original value (CoefB) = 0 New value = 0
Fewer than 6 points above MRL. Peak curve/step function combination applied.

Cell: F30

Comment: 1018-10-02 - Run 3 (DBAA) 2/8/00 20:38
Original value (CoefD) = 0 New value = 0
Fewer than 6 points above MRL. Peak curve/step function combination applied.

Cell: J30

Comment: 1018-10-02 - Run 3 (DBAA) 2/8/00 20:38
Original value (S) = 0 New value = -0.0152
Fewer than 6 points above MRL. Peak curve/step function combination applied.

Cell: C31

Comment: 1018-10-02 - Run 3 (DBCM) 2/8/00 20:33
Original value (CoefA0) = 0 New value = 1.8
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D31

Comment: 1018-10-02 - Run 3 (DBCM) 2/8/00 20:33
Original value (CoefAf) = 2.12 New value = 0
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E31

Comment: 1018-10-02 - Run 3 (DBCM) 2/8/00 20:33
Original value (CoefB) = 10 New value = 0
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F31

Comment: 1018-10-02 - Run 3 (DBCM) 2/8/00 20:33
Original value (CoefD) = 0.15 New value = 0
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J31

Comment: 1018-10-02 - Run 3 (DBCM) 2/8/00 20:33
Original value (S) = 0 New value = -0.0041
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C33

Comment: 1018-10-02 - Run 3 (DCBAA) 2/8/00 20:36
Original value (CoefA0) = 0 New value = -0.2679
Fewer than 6 points above MRL. Data was fit to peak curve by iterative curve fit procedure.

Cell: D33

Comment: 1018-10-02 - Run 3 (DCBAA) 2/8/00 20:36
Original value (CoefAf) = 0 New value = 2.7178
Fewer than 6 points above MRL. Data was fit to peak curve by iterative curve fit procedure.

Cell: E33

Comment: 1018-10-02 - Run 3 (DCBAA) 2/8/00 20:36
Original value (CoefB) = 0 New value = 20.4698
Fewer than 6 points above MRL. Data was fit to peak curve by iterative curve fit procedure.

Cell: F33

Comment: 1018-10-02 - Run 3 (DCBAA) 2/8/00 20:36
Original value (CoefD) = 0 New value = 0.0169
Fewer than 6 points above MRL. Data was fit to peak curve by iterative curve fit procedure.

Cell: J33

Comment: 1018-10-02 - Run 3 (DCBAA) 2/8/00 20:36
Original value (S) = 0 New value = -0.0053
Fewer than 6 points above MRL. Data was fit to peak curve by iterative curve fit procedure.

Cell: C37

Comment: 1018-10-02 - Run 3 (MBAA) 2/8/00 20:34
Original value (CoefA0) = 0.0192 New value = -0.4814
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D37

Comment: 1018-10-02 - Run 3 (MBAA) 2/8/00 20:34
Original value (CoefAf) = 6.2019 New value = 6.3825
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E37

Comment: 1018-10-02 - Run 3 (MBAA) 2/8/00 20:34
Original value (CoefB) = 79.2283 New value = 20.5308
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F37

Comment: 1018-10-02 - Run 3 (MBAA) 2/8/00 20:34

Original value (CoefD) = 0.1501 New value = 0.1414
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J37

Comment: 1018-10-02 - Run 3 (MBAA) 2/8/00 20:34
Original value (S) = 0 New value = -0.0059
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C46

Comment: 1018-10-03 - Run 5 (BCAA) 2/8/00 21:12
Original value (CoefA0) = 0 New value = -0.23
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D46

Comment: 1018-10-03 - Run 5 (BCAA) 2/8/00 21:12
Original value (CoefAf) = 3.81 New value = 4.2493
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E46

Comment: 1018-10-03 - Run 5 (BCAA) 2/8/00 21:12
Original value (CoefB) = 10 New value = 10.4231
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F46

Comment: 1018-10-03 - Run 5 (BCAA) 2/8/00 21:12
Original value (CoefD) = 0.07 New value = 0.0829
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J46

Comment: 1018-10-03 - Run 5 (BCAA) 2/8/00 21:12
Original value (S) = 0 New value = -0.0052
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C49

Comment: 1018-10-03 - Run 5 (CHBr3) 2/8/00 19:12
Original value (CoefA0) = 0 New value = 1.38
Fewer than 6 points above MRL. Step function applied.

Cell: D49

Comment: 1018-10-03 - Run 5 (CHBr3) 2/8/00 19:12
Original value (CoefAf) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: E49

Comment: 1018-10-03 - Run 5 (CHBr3) 2/8/00 19:12
Original value (CoefB) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: F49

Comment: 1018-10-03 - Run 5 (CHBr3) 2/8/00 19:12
Original value (CoefD) = 0 New value = 0

Fewer than 6 points above MRL. Step function applied.

Cell: J49

Comment: 1018-10-03 - Run 5 (CHBr3) 2/8/00 19:12
Original value (S) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: K49

Comment: 1018-10-03 - Run 5 (CHBr3) 2/8/00 19:12
Original value (t0) = 0 New value = 257.2982
Fewer than 6 points above MRL. Step function applied.

Cell: C53

Comment: 1018-10-03 - Run 5 (DBCM) 2/8/00 21:08
Original value (CoefA0) = 1.8589 New value = 1.1895
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D53

Comment: 1018-10-03 - Run 5 (DBCM) 2/8/00 21:08
Original value (CoefAf) = 5.76 New value = 1.4582
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E53

Comment: 1018-10-03 - Run 5 (DBCM) 2/8/00 21:08
Original value (CoefB) = 53.0179 New value = 19.9808
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F53

Comment: 1018-10-03 - Run 5 (DBCM) 2/8/00 21:08
Original value (CoefD) = 0.0374 New value = 0.1694
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J53

Comment: 1018-10-03 - Run 5 (DBCM) 2/8/00 21:08
Original value (S) = 0 New value = -0.002
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C55

Comment: 1018-10-03 - Run 5 (DCBAA) 2/8/00 19:11
Original value (CoefA0) = 0 New value = 1.28
Fewer than 6 points above MRL. Step function applied.

Cell: D55

Comment: 1018-10-03 - Run 5 (DCBAA) 2/8/00 19:11
Original value (CoefAf) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: E55

Comment: 1018-10-03 - Run 5 (DCBAA) 2/8/00 19:11
Original value (CoefB) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: F55

Comment: 1018-10-03 - Run 5 (DCBAA) 2/8/00 19:11
Original value (CoefD) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: J55

Comment: 1018-10-03 - Run 5 (DCBAA) 2/8/00 19:11
Original value (S) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: K55

Comment: 1018-10-03 - Run 5 (DCBAA) 2/8/00 19:11
Original value (t0) = 0 New value = 249.9381
Fewer than 6 points above MRL. Step function applied.

Cell: C56

Comment: 1018-10-03 - Run 5 (HAA5) 2/8/00 21:15
Original value (CoefA0) = 0.6143 New value = -9.6002
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D56

Comment: 1018-10-03 - Run 5 (HAA5) 2/8/00 21:15
Original value (CoefAf) = 52.8845 New value = 68.9916
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E56

Comment: 1018-10-03 - Run 5 (HAA5) 2/8/00 21:15
Original value (CoefB) = 11.2661 New value = 5.826
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F56

Comment: 1018-10-03 - Run 5 (HAA5) 2/8/00 21:15
Original value (CoefD) = 0.0561 New value = 0.058
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J56

Comment: 1018-10-03 - Run 5 (HAA5) 2/8/00 21:15
Original value (S) = -0.0661 New value = -0.1043
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C57

Comment: 1018-10-03 - Run 5 (HAA6) 2/8/00 21:19
Original value (CoefA0) = 0.617 New value = -10.543
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D57

Comment: 1018-10-03 - Run 5 (HAA6) 2/8/00 21:19
Original value (CoefAf) = 56.3597 New value = 73.6345
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E57

Comment: 1018-10-03 - Run 5 (HAA6) 2/8/00 21:19
Original value (CoefB) = 11.1899 New value = 5.6562
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F57

Comment: 1018-10-03 - Run 5 (HAA6) 2/8/00 21:19
Original value (CoefD) = 0.056 New value = 0.0584
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J57

Comment: 1018-10-03 - Run 5 (HAA6) 2/8/00 21:19
Original value (S) = -0.0696 New value = -0.1096
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C58

Comment: 1018-10-03 - Run 5 (HAA9) 2/8/00 21:17
Original value (CoefA0) = 0.6442 New value = -10.543
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D58

Comment: 1018-10-03 - Run 5 (HAA9) 2/8/00 21:17
Original value (CoefAf) = 56.2135 New value = 73.6345
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E58

Comment: 1018-10-03 - Run 5 (HAA9) 2/8/00 21:17
Original value (CoefB) = 11.2148 New value = 5.6562
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F58

Comment: 1018-10-03 - Run 5 (HAA9) 2/8/00 21:17
Original value (CoefD) = 0.0562 New value = 0.0584
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J58

Comment: 1018-10-03 - Run 5 (HAA9) 2/8/00 21:17
Original value (S) = -0.07 New value = -0.1034
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C59

Comment: 1018-10-03 - Run 5 (MBAA) 2/8/00 21:10
Original value (CoefA0) = 0.6888 New value = 1.2438
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D59

Comment: 1018-10-03 - Run 5 (MBAA) 2/8/00 21:10
Original value (CoefAf) = 7.575 New value = 3.6277
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E59

Comment: 1018-10-03 - Run 5 (MBAA) 2/8/00 21:10

Original value (CoefB) = 76.7046 New value = 19.6988
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F59

Comment: 1018-10-03 - Run 5 (MBAA) 2/8/00 21:10
Original value (CoefD) = 0.0462 New value = 0.041
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J59

Comment: 1018-10-03 - Run 5 (MBAA) 2/8/00 21:10
Original value (S) = 0 New value = -0.0076
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C62

Comment: 1018-10-03 - Run 5 (TCAA) 2/8/00 21:18
Original value (CoefA0) = 0.2111 New value = -6.2521
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D62

Comment: 1018-10-03 - Run 5 (TCAA) 2/8/00 21:18
Original value (CoefAf) = 22.3557 New value = 47.9618
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E62

Comment: 1018-10-03 - Run 5 (TCAA) 2/8/00 21:18
Original value (CoefB) = 11.9905 New value = 6.4679
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F62

Comment: 1018-10-03 - Run 5 (TCAA) 2/8/00 21:18
Original value (CoefD) = 0.0579 New value = 0.0316
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J62

Comment: 1018-10-03 - Run 5 (TCAA) 2/8/00 21:18
Original value (S) = -0.0371 New value = -0.0427
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C66

Comment: 1018-10-03 - Run 5 (TSUVA) 2/8/00 21:49
Original value (CoefA0) = 0 New value = 1.1738
Fewer than 6 points above MRL. Step function applied.

1018-10-03 - Run 5 (TSUVA) 2/8/00 21:50
Original value (CoefA0) = 1.1738 New value = 1.1738
Fewer than 6 points above MRL. Step function applied.

Cell: D66

Comment: 1018-10-03 - Run 5 (TSUVA) 2/8/00 21:49
Original value (CoefAf) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

1018-10-03 - Run 5 (TSUVA) 2/8/00 21:50
Original value (CoefAf) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: E66

Comment: 1018-10-03 - Run 5 (TSUVA) 2/8/00 21:49
Original value (CoefB) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

1018-10-03 - Run 5 (TSUVA) 2/8/00 21:50
Original value (CoefB) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: F66

Comment: 1018-10-03 - Run 5 (TSUVA) 2/8/00 21:49
Original value (CoefD) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

1018-10-03 - Run 5 (TSUVA) 2/8/00 21:50
Original value (CoefD) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: J66

Comment: 1018-10-03 - Run 5 (TSUVA) 2/8/00 21:49
Original value (S) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

1018-10-03 - Run 5 (TSUVA) 2/8/00 21:50
Original value (S) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: K66

Comment: 1018-10-03 - Run 5 (TSUVA) 2/8/00 21:49
Original value (t0) = 0 New value = 96.2041
Fewer than 6 points above MRL. Step function applied.

1018-10-03 - Run 5 (TSUVA) 2/8/00 21:50
Original value (t0) = 96.2041 New value = 21.7737
Fewer than 6 points above MRL. Step function applied.

Cell: C72

Comment: 1018-10-04 - Run 7 (CHCl3) 2/8/00 21:35
Original value (CoefA0) = 6.1998 New value = 1.3412
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: D72

Comment: 1018-10-04 - Run 7 (CHCl3) 2/8/00 21:35
Original value (CoefAf) = 87.705 New value = 57.3805
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: E72

Comment: 1018-10-04 - Run 7 (CHCl3) 2/8/00 21:35
Original value (CoefB) = 148.8581 New value = 18.9677
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: F72

Comment: 1018-10-04 - Run 7 (CHCl3) 2/8/00 21:35
Original value (CoefD) = 0.0148 New value = 0.0112
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: J72

Comment: 1018-10-04 - Run 7 (CHCl3) 2/8/00 21:35
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: C77

Comment: 1018-10-04 - Run 7 (DCBAA) 2/8/00 21:42
Original value (CoefA0) = 0.0117 New value = 0.2891
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: D77

Comment: 1018-10-04 - Run 7 (DCBAA) 2/8/00 21:42
Original value (CoefAf) = 0.5733 New value = 0.7641
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: E77

Comment: 1018-10-04 - Run 7 (DCBAA) 2/8/00 21:42
Original value (CoefB) = 8842.7743 New value = 20.0269
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: F77

Comment: 1018-10-04 - Run 7 (DCBAA) 2/8/00 21:42
Original value (CoefD) = 0.1807 New value = 0.01
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: J77

Comment: 1018-10-04 - Run 7 (DCBAA) 2/8/00 21:42
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: C82

Comment: 1018-10-04 - Run 7 (MCAA) 2/8/00 21:38
Original value (CoefA0) = -3.615 New value = -1.8713
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: D82

Comment: 1018-10-04 - Run 7 (MCAA) 2/8/00 21:38
Original value (CoefAf) = 8.3912 New value = 6.5697
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: E82

Comment: 1018-10-04 - Run 7 (MCAA) 2/8/00 21:38
Original value (CoefB) = 10.4557 New value = 4.3442
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: F82

Comment: 1018-10-04 - Run 7 (MCAA) 2/8/00 21:38
Original value (CoefD) = 0.0389 New value = 0.0237
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: J82

Comment: 1018-10-04 - Run 7 (MCAA) 2/8/00 21:38
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: C84

Comment: 1018-10-04 - Run 7 (TCAA) 2/8/00 21:41
Original value (CoefA0) = -7.71 New value = 0.6815
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: D84

Comment: 1018-10-04 - Run 7 (TCAA) 2/8/00 21:41
Original value (CoefAf) = 21.2025 New value = 12.0633
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: E84

Comment: 1018-10-04 - Run 7 (TCAA) 2/8/00 21:41
Original value (CoefB) = 1.1684 New value = 4.3669
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: F84

Comment: 1018-10-04 - Run 7 (TCAA) 2/8/00 21:41
Original value (CoefD) = 0.0104 New value = 0.0164
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: J84

Comment: 1018-10-04 - Run 7 (TCAA) 2/8/00 21:41
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: C85

Comment: 1018-10-04 - Run 7 (THM4) 2/8/00 21:36
Original value (CoefA0) = 6.9703 New value = 0.3985
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: D85

Comment: 1018-10-04 - Run 7 (THM4) 2/8/00 21:36
Original value (CoefAf) = 104.235 New value = 68.0706
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: E85

Comment: 1018-10-04 - Run 7 (THM4) 2/8/00 21:36

Original value (CoefB) = 64.9609 New value = 12.5134
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: F85

Comment: 1018-10-04 - Run 7 (THM4) 2/8/00 21:36
Original value (CoefD) = 0.0124 New value = 0.0105
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: J85

Comment: 1018-10-04 - Run 7 (THM4) 2/8/00 21:36
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: C94

Comment: 1018-20-01 - Run 2 (CHCl3) 2/8/00 20:23
Original value (CoefA0) = 5.5732 New value = 2.1647
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: D94

Comment: 1018-20-01 - Run 2 (CHCl3) 2/8/00 20:23
Original value (CoefAf) = 10.5547 New value = 15.8184
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: E94

Comment: 1018-20-01 - Run 2 (CHCl3) 2/8/00 20:23
Original value (CoefB) = 3.868 New value = 241.4683
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: F94

Comment: 1018-20-01 - Run 2 (CHCl3) 2/8/00 20:23
Original value (CoefD) = 0.0101 New value = 0.03
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: J94

Comment: 1018-20-01 - Run 2 (CHCl3) 2/8/00 20:23
Original value (S) = 0 New value = 0
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: C103

Comment: 1018-20-01 - Run 2 (MBAA) 2/8/00 18:56
Original value (CoefA0) = 0 New value = 1.254
Fewer than 6 points above MRL. Step function applied.

Cell: D103

Comment: 1018-20-01 - Run 2 (MBAA) 2/8/00 18:56
Original value (CoefAf) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: E103

Comment: 1018-20-01 - Run 2 (MBAA) 2/8/00 18:56
Original value (CoefB) = 0 New value = 0

Fewer than 6 points above MRL. Step function applied.

Cell: F103

Comment: 1018-20-01 - Run 2 (MBAA) 2/8/00 18:56
Original value (CoefD) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: J103

Comment: 1018-20-01 - Run 2 (MBAA) 2/8/00 18:56
Original value (S) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: K103

Comment: 1018-20-01 - Run 2 (MBAA) 2/8/00 18:56
Original value (t0) = 0 New value = 178.3301
Fewer than 6 points above MRL. Step function applied.

Cell: C107

Comment: 1018-20-01 - Run 2 (THM4) 2/8/00 20:24
Original value (CoefA0) = 6.6238 New value = 2.7837
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: D107

Comment: 1018-20-01 - Run 2 (THM4) 2/8/00 20:24
Original value (CoefAf) = 9.9637 New value = 16.7386
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: E107

Comment: 1018-20-01 - Run 2 (THM4) 2/8/00 20:24
Original value (CoefB) = 713.1943 New value = 419.9929
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: F107

Comment: 1018-20-01 - Run 2 (THM4) 2/8/00 20:24
Original value (CoefD) = 0.0422 New value = 0.0321
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: J107

Comment: 1018-20-01 - Run 2 (THM4) 2/8/00 20:24
Original value (S) = 0 New value = 0
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: C109

Comment: 1018-20-01 - Run 2 (TOX) 2/8/00 20:30
Original value (CoefA0) = -38.75 New value = 17.8859
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: D109

Comment: 1018-20-01 - Run 2 (TOX) 2/8/00 20:30
Original value (CoefAf) = 116.25 New value = 2094.6088
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: E109

Comment: 1018-20-01 - Run 2 (TOX) 2/8/00 20:30
Original value (CoefB) = 1.1105 New value = 1714.6195
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: F109

Comment: 1018-20-01 - Run 2 (TOX) 2/8/00 20:30
Original value (CoefD) = 0.0045 New value = 0.0135
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: J109

Comment: 1018-20-01 - Run 2 (TOX) 2/8/00 20:30
Original value (S) = 0 New value = 0
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: C110

Comment: 1018-20-01 - Run 2 (TSUVA) 2/8/00 18:54
Original value (CoefA0) = 0 New value = 1.0631
Fewer than 6 points above MRL. Step function applied.

Cell: D110

Comment: 1018-20-01 - Run 2 (TSUVA) 2/8/00 18:54
Original value (CoefAf) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: E110

Comment: 1018-20-01 - Run 2 (TSUVA) 2/8/00 18:54
Original value (CoefB) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: F110

Comment: 1018-20-01 - Run 2 (TSUVA) 2/8/00 18:54
Original value (CoefD) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: J110

Comment: 1018-20-01 - Run 2 (TSUVA) 2/8/00 18:54
Original value (S) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: K110

Comment: 1018-20-01 - Run 2 (TSUVA) 2/8/00 18:54
Original value (t0) = 0 New value = 96.2041
Fewer than 6 points above MRL. Step function applied.

Cell: C111

Comment: 1018-20-01 - Run 2 (UV254) 2/8/00 20:25
Original value (CoefA0) = -0.012 New value = -0.0009
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: D111

Comment: 1018-20-01 - Run 2 (UV254) 2/8/00 20:25
Original value (CoefAf) = 0.036 New value = 0.0474
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: E111

Comment: 1018-20-01 - Run 2 (UV254) 2/8/00 20:25
Original value (CoefB) = 1.8054 New value = 20.0002
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: F111

Comment: 1018-20-01 - Run 2 (UV254) 2/8/00 20:25
Original value (CoefD) = 0.0068 New value = 0.0102
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: J111

Comment: 1018-20-01 - Run 2 (UV254) 2/8/00 20:25
Original value (S) = 0 New value = 0
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: C112

Comment: 1018-20-02 - Run 4 (BCAA) 2/8/00 20:50
Original value (CoefA0) = 1.7167 New value = 0.5
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: D112

Comment: 1018-20-02 - Run 4 (BCAA) 2/8/00 20:50
Original value (CoefAf) = 0.9156 New value = 2.52
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: E112

Comment: 1018-20-02 - Run 4 (BCAA) 2/8/00 20:50
Original value (CoefB) = 789.5082 New value = 43
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: F112

Comment: 1018-20-02 - Run 4 (BCAA) 2/8/00 20:50
Original value (CoefD) = 0.5957 New value = 0.02
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: J112

Comment: 1018-20-02 - Run 4 (BCAA) 2/8/00 20:50
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: C113

Comment: 1018-20-02 - Run 4 (BDCM) 2/8/00 20:54
Original value (CoefA0) = -0.0423 New value = 2.3
Poor peak curve fit. Data was refit by iterative curve fit procedure.

1018-20-02 - Run 4 (BDCM) 2/8/00 20:54

Original value (CoefA0) = 2.3 New value = 2.3

Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: D113

Comment: 1018-20-02 - Run 4 (BDCM) 2/8/00 20:54

Original value (CoefAf) = 5.9456 New value = 12

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

1018-20-02 - Run 4 (BDCM) 2/8/00 20:54

Original value (CoefAf) = 12 New value = 12

Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: E113

Comment: 1018-20-02 - Run 4 (BDCM) 2/8/00 20:54

Original value (CoefB) = 139.6392 New value = 43

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

1018-20-02 - Run 4 (BDCM) 2/8/00 20:54

Original value (CoefB) = 43 New value = 43

Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: F113

Comment: 1018-20-02 - Run 4 (BDCM) 2/8/00 20:54

Original value (CoefD) = 0.1626 New value = 0.0096

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

1018-20-02 - Run 4 (BDCM) 2/8/00 20:54

Original value (CoefD) = 0.0096 New value = 0.0096

Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: J113

Comment: 1018-20-02 - Run 4 (BDCM) 2/8/00 20:54

Original value (S) = 0 New value = 0

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

1018-20-02 - Run 4 (BDCM) 2/8/00 20:54

Original value (S) = 0 New value = 0

Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: C116

Comment: 1018-20-02 - Run 4 (CHCl3) 2/8/00 20:43

Original value (CoefA0) = -0.0144 New value = 3

Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

1018-20-02 - Run 4 (CHCl3) 2/8/00 20:45

Original value (CoefA0) = 3 New value = 11

Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: D116

Comment: 1018-20-02 - Run 4 (CHCl3) 2/8/00 20:43

Original value (CoefAf) = 34.4133 New value = 100

Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

1018-20-02 - Run 4 (CHCl3) 2/8/00 20:45
Original value (CoefAf) = 100 New value = 100
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: E116

Comment: 1018-20-02 - Run 4 (CHCl3) 2/8/00 20:43
Original value (CoefB) = 2381.8592 New value = 55
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

1018-20-02 - Run 4 (CHCl3) 2/8/00 20:45
Original value (CoefB) = 55 New value = 54
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: F116

Comment: 1018-20-02 - Run 4 (CHCl3) 2/8/00 20:43
Original value (CoefD) = 0.2468 New value = 0.0112
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

1018-20-02 - Run 4 (CHCl3) 2/8/00 20:45
Original value (CoefD) = 0.0112 New value = 0.0094
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: J116

Comment: 1018-20-02 - Run 4 (CHCl3) 2/8/00 20:43
Original value (S) = 0 New value = 0
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

1018-20-02 - Run 4 (CHCl3) 2/8/00 20:45
Original value (S) = 0 New value = 0
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: C120

Comment: 1018-20-02 - Run 4 (DCAA) 2/8/00 20:46
Original value (CoefA0) = -0.0025 New value = 7
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: D120

Comment: 1018-20-02 - Run 4 (DCAA) 2/8/00 20:46
Original value (CoefAf) = 33.9925 New value = 100
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: E120

Comment: 1018-20-02 - Run 4 (DCAA) 2/8/00 20:46
Original value (CoefB) = 13416.583 New value = 54
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: F120

Comment: 1018-20-02 - Run 4 (DCAA) 2/8/00 20:46
Original value (CoefD) = 0.271 New value = 0.0099
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: J120

Comment: 1018-20-02 - Run 4 (DCAA) 2/8/00 20:46
Original value (S) = 0 New value = 0
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: C121

Comment: 1018-20-02 - Run 4 (DCBAA) 2/8/00 19:05
Original value (CoefA0) = 0 New value = 1.7525
Fewer than 6 points above MRL. Step function applied.

Cell: D121

Comment: 1018-20-02 - Run 4 (DCBAA) 2/8/00 19:05
Original value (CoefAf) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: E121

Comment: 1018-20-02 - Run 4 (DCBAA) 2/8/00 19:05
Original value (CoefB) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: F121

Comment: 1018-20-02 - Run 4 (DCBAA) 2/8/00 19:05
Original value (CoefD) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: J121

Comment: 1018-20-02 - Run 4 (DCBAA) 2/8/00 19:05
Original value (S) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: K121

Comment: 1018-20-02 - Run 4 (DCBAA) 2/8/00 19:05
Original value (t0) = 0 New value = 219.8842
Fewer than 6 points above MRL. Step function applied.

Cell: C122

Comment: 1018-20-02 - Run 4 (HAA5) 2/8/00 20:52
Original value (CoefA0) = -0.0005 New value = 15
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: D122

Comment: 1018-20-02 - Run 4 (HAA5) 2/8/00 20:52
Original value (CoefAf) = 61.773 New value = 120
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: E122

Comment: 1018-20-02 - Run 4 (HAA5) 2/8/00 20:52
Original value (CoefB) = 125067.415836512 New value = 43
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: F122

Comment: 1018-20-02 - Run 4 (HAA5) 2/8/00 20:52
Original value (CoefD) = 0.3513 New value = 0.011
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: J122

Comment: 1018-20-02 - Run 4 (HAA5) 2/8/00 20:52
Original value (S) = 0 New value = 0
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: C123

Comment: 1018-20-02 - Run 4 (HAA6) 2/8/00 21:02
Original value (CoefA0) = -0.0004 New value = 8
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: D123

Comment: 1018-20-02 - Run 4 (HAA6) 2/8/00 21:02
Original value (CoefAf) = 64.4441 New value = 100
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: E123

Comment: 1018-20-02 - Run 4 (HAA6) 2/8/00 21:02
Original value (CoefB) = 167944.514475139 New value = 30
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: F123

Comment: 1018-20-02 - Run 4 (HAA6) 2/8/00 21:02
Original value (CoefD) = 0.3598 New value = 0.012
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: J123

Comment: 1018-20-02 - Run 4 (HAA6) 2/8/00 21:02
Original value (S) = 0 New value = 0
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: C124

Comment: 1018-20-02 - Run 4 (HAA9) 2/8/00 20:52
Original value (CoefA0) = -0.0004 New value = 16
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: D124

Comment: 1018-20-02 - Run 4 (HAA9) 2/8/00 20:52
Original value (CoefAf) = 65.1754 New value = 122
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: E124

Comment: 1018-20-02 - Run 4 (HAA9) 2/8/00 20:52
Original value (CoefB) = 160581.154620467 New value = 43
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: F124

Comment: 1018-20-02 - Run 4 (HAA9) 2/8/00 20:52

Original value (CoefD) = 0.3578 New value = 0.0112
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: J124

Comment: 1018-20-02 - Run 4 (HAA9) 2/8/00 20:52
Original value (S) = 0 New value = 0
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: C128

Comment: 1018-20-02 - Run 4 (TCAA) 2/8/00 21:00
Original value (CoefA0) = -0.0017 New value = -0.5
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: D128

Comment: 1018-20-02 - Run 4 (TCAA) 2/8/00 21:00
Original value (CoefAf) = 19.2692 New value = 45
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: E128

Comment: 1018-20-02 - Run 4 (TCAA) 2/8/00 21:00
Original value (CoefB) = 11625.9272 New value = 30
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: F128

Comment: 1018-20-02 - Run 4 (TCAA) 2/8/00 21:00
Original value (CoefD) = 0.2775 New value = 0.0104
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: J128

Comment: 1018-20-02 - Run 4 (TCAA) 2/8/00 21:00
Original value (S) = -0.0034 New value = 0
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: C129

Comment: 1018-20-02 - Run 4 (THM4) 2/8/00 20:44
Original value (CoefA0) = -0.031 New value = 14
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: D129

Comment: 1018-20-02 - Run 4 (THM4) 2/8/00 20:44
Original value (CoefAf) = 41.5421 New value = 100
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: E129

Comment: 1018-20-02 - Run 4 (THM4) 2/8/00 20:44
Original value (CoefB) = 1338.4579 New value = 54
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: F129

Comment: 1018-20-02 - Run 4 (THM4) 2/8/00 20:44
Original value (CoefD) = 0.2273 New value = 0.01

Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: J129

Comment: 1018-20-02 - Run 4 (THM4) 2/8/00 20:44

Original value (S) = 0 New value = 0

Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: C130

Comment: 1018-20-02 - Run 4 (TOC) 2/8/00 20:41

Original value (CoefA0) = 0 New value = 0.1991

Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: D130

Comment: 1018-20-02 - Run 4 (TOC) 2/8/00 20:41

Original value (CoefAf) = 1.1507 New value = 3.5

Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: E130

Comment: 1018-20-02 - Run 4 (TOC) 2/8/00 20:41

Original value (CoefB) = 20.6423 New value = 55

Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: F130

Comment: 1018-20-02 - Run 4 (TOC) 2/8/00 20:41

Original value (CoefD) = 0.0924 New value = 0.01

Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: J130

Comment: 1018-20-02 - Run 4 (TOC) 2/8/00 20:41

Original value (S) = 0 New value = 0

Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: C131

Comment: 1018-20-02 - Run 4 (TOX) 2/8/00 21:05

Original value (CoefA0) = -39.75 New value = 20

Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: D131

Comment: 1018-20-02 - Run 4 (TOX) 2/8/00 21:05

Original value (CoefAf) = 92.9304 New value = 82

Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: E131

Comment: 1018-20-02 - Run 4 (TOX) 2/8/00 21:05

Original value (CoefB) = 1.285 New value = 54

Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: F131

Comment: 1018-20-02 - Run 4 (TOX) 2/8/00 21:05

Original value (CoefD) = 0.0338 New value = 0.014

Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: J131

Comment: 1018-20-02 - Run 4 (TOX) 2/8/00 21:05
Original value (S) = 0 New value = 0
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: C132

Comment: 1018-20-02 - Run 4 (TSUVA) 2/8/00 19:03
Original value (CoefA0) = 0 New value = 1.0863
Fewer than 6 points above MRL. Step function applied.

Cell: D132

Comment: 1018-20-02 - Run 4 (TSUVA) 2/8/00 19:03
Original value (CoefAf) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: E132

Comment: 1018-20-02 - Run 4 (TSUVA) 2/8/00 19:03
Original value (CoefB) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: F132

Comment: 1018-20-02 - Run 4 (TSUVA) 2/8/00 19:03
Original value (CoefD) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: J132

Comment: 1018-20-02 - Run 4 (TSUVA) 2/8/00 19:03
Original value (S) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: K132

Comment: 1018-20-02 - Run 4 (TSUVA) 2/8/00 19:03
Original value (t0) = 0 New value = 96.2041
Fewer than 6 points above MRL. Step function applied.

Cell: C142

Comment: 1018-20-03 - Run 6 (DCAA) 2/8/00 21:28
Original value (CoefA0) = -9.04 New value = 8.03
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: D142

Comment: 1018-20-03 - Run 6 (DCAA) 2/8/00 21:28
Original value (CoefAf) = 21.2922 New value = 19
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: E142

Comment: 1018-20-03 - Run 6 (DCAA) 2/8/00 21:28
Original value (CoefB) = 0.6243 New value = 43.3
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: F142

Comment: 1018-20-03 - Run 6 (DCAA) 2/8/00 21:28
Original value (CoefD) = 0.7068 New value = 0.009
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: J142

Comment: 1018-20-03 - Run 6 (DCAA) 2/8/00 21:28
Original value (S) = 0 New value = 0
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: C148

Comment: 1018-20-03 - Run 6 (MCAA) 2/8/00 21:32
Original value (CoefA0) = 0.0061 New value = -1.9068
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: D148

Comment: 1018-20-03 - Run 6 (MCAA) 2/8/00 21:32
Original value (CoefAf) = 6.7551 New value = 20.3947
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: E148

Comment: 1018-20-03 - Run 6 (MCAA) 2/8/00 21:32
Original value (CoefB) = 49.7508 New value = 25.1475
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: F148

Comment: 1018-20-03 - Run 6 (MCAA) 2/8/00 21:32
Original value (CoefD) = 0.0919 New value = 0.0749
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: J148

Comment: 1018-20-03 - Run 6 (MCAA) 2/8/00 21:32
Original value (S) = -0.0032 New value = -0.0155
Poor peak curve fit. Data was refit by iterative curve fit procedure.

Cell: C150

Comment: 1018-20-03 - Run 6 (TCAA) 2/8/00 21:33
Original value (CoefA0) = 0 New value = 3.89
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: D150

Comment: 1018-20-03 - Run 6 (TCAA) 2/8/00 21:33
Original value (CoefAf) = 0 New value = 7.6495
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: E150

Comment: 1018-20-03 - Run 6 (TCAA) 2/8/00 21:33
Original value (CoefB) = 0 New value = 22.6429
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: F150

Comment: 1018-20-03 - Run 6 (TCAA) 2/8/00 21:33

Original value (CoefD) = 0 New value = 0.1607
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: J150

Comment: 1018-20-03 - Run 6 (TCAA) 2/8/00 21:33
Original value (S) = 0 New value = 0
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: C152

Comment: 1018-20-03 - Run 6 (TOC) 2/8/00 21:56
Original value (CoefA0) = 0.5466 New value = 0.5
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: D152

Comment: 1018-20-03 - Run 6 (TOC) 2/8/00 21:56
Original value (CoefAf) = 0.6172 New value = 1.67
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: E152

Comment: 1018-20-03 - Run 6 (TOC) 2/8/00 21:56
Original value (CoefB) = 2337004.62838377 New value = 34
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: F152

Comment: 1018-20-03 - Run 6 (TOC) 2/8/00 21:56
Original value (CoefD) = 0.2886 New value = 0.01
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: J152

Comment: 1018-20-03 - Run 6 (TOC) 2/8/00 21:56
Original value (S) = 0 New value = 0
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: C154

Comment: 1018-20-03 - Run 6 (TSUVA) 2/8/00 21:58
Original value (CoefA0) = 0 New value = -2
Fewer than 6 points. Logistic function (type 1) applied.

Cell: D154

Comment: 1018-20-03 - Run 6 (TSUVA) 2/8/00 21:58
Original value (CoefAf) = 0 New value = 4.1
Fewer than 6 points. Logistic function (type 1) applied.

Cell: E154

Comment: 1018-20-03 - Run 6 (TSUVA) 2/8/00 21:58
Original value (CoefB) = 0 New value = 33
Fewer than 6 points. Logistic function (type 1) applied.

Cell: F154

Comment: 1018-20-03 - Run 6 (TSUVA) 2/8/00 21:58
Original value (CoefD) = 0 New value = 0.015

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

Cell: J154

Comment: 1018-20-03 - Run 6 (TSUVA) 2/8/00 21:58

Original value (S) = 0 New value = 0

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

Cell: C163

Comment: 1018-20-04 - Run 8 (DBCM) 2/8/00 21:46

Original value (CoefA0) = 1.0877 New value = 0.672

Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: D163

Comment: 1018-20-04 - Run 8 (DBCM) 2/8/00 21:46

Original value (CoefAf) = 0.8718 New value = 1.472

Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: E163

Comment: 1018-20-04 - Run 8 (DBCM) 2/8/00 21:46

Original value (CoefB) = 58892349695.9489 New value = 20.6174

Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: F163

Comment: 1018-20-04 - Run 8 (DBCM) 2/8/00 21:46

Original value (CoefD) = 0.1477 New value = 0.0143

Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: J163

Comment: 1018-20-04 - Run 8 (DBCM) 2/8/00 21:46

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: C169

Comment: 1018-20-04 - Run 8 (MBAA) 2/8/00 21:55

Original value (CoefA0) = -1 New value = 0.2

Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: D169

Comment: 1018-20-04 - Run 8 (MBAA) 2/8/00 21:55

Original value (CoefAf) = 1.77 New value = 2

Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: E169

Comment: 1018-20-04 - Run 8 (MBAA) 2/8/00 21:55

Original value (CoefB) = 14.5564 New value = 34

Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: F169

Comment: 1018-20-04 - Run 8 (MBAA) 2/8/00 21:55

Original value (CoefD) = 1482.5694 New value = 0.01

Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: J169

Comment: 1018-20-04 - Run 8 (MBAA) 2/8/00 21:55

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: C170

Comment: 1018-20-04 - Run 8 (MCAA) 2/8/00 21:48

Original value (CoefA0) = -2.665 New value = 1.0505

Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: D170

Comment: 1018-20-04 - Run 8 (MCAA) 2/8/00 21:48

Original value (CoefAf) = 5.2814 New value = 2.4261

Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: E170

Comment: 1018-20-04 - Run 8 (MCAA) 2/8/00 21:48

Original value (CoefB) = 1.077 New value = 6722.2136

Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: F170

Comment: 1018-20-04 - Run 8 (MCAA) 2/8/00 21:48

Original value (CoefD) = 0.3018 New value = 0.0356

Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: J170

Comment: 1018-20-04 - Run 8 (MCAA) 2/8/00 21:48

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: C176

Comment: 1018-20-04 - Run 8 (TSUVA) 2/8/00 19:20

Original value (CoefA0) = 0 New value = 1.5319

Fewer than 6 points above MRL. Step function applied.

Cell: D176

Comment: 1018-20-04 - Run 8 (TSUVA) 2/8/00 19:20

Original value (CoefAf) = 0 New value = 0

Fewer than 6 points above MRL. Step function applied.

Cell: E176

Comment: 1018-20-04 - Run 8 (TSUVA) 2/8/00 19:20

Original value (CoefB) = 0 New value = 0

Fewer than 6 points above MRL. Step function applied.

Cell: F176

Comment: 1018-20-04 - Run 8 (TSUVA) 2/8/00 19:20

Original value (CoefD) = 0 New value = 0

Fewer than 6 points above MRL. Step function applied.

Cell: J176

Comment: 1018-20-04 - Run 8 (TSUVA) 2/8/00 19:20
Original value (S) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: K176

Comment: 1018-20-04 - Run 8 (TSUVA) 2/8/00 19:20
Original value (t0) = 0 New value = 96.2041
Fewer than 6 points above MRL. Step function applied.

Cell: C177

Comment: 1018-20-04 - Run 8 (UV254) 2/8/00 21:45
Original value (CoefA0) = -0.0006 New value = 0.0027
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: D177

Comment: 1018-20-04 - Run 8 (UV254) 2/8/00 21:45
Original value (CoefAf) = 0.0156 New value = 0.0122
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: E177

Comment: 1018-20-04 - Run 8 (UV254) 2/8/00 21:45
Original value (CoefB) = 0.9729 New value = 20.0001
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: F177

Comment: 1018-20-04 - Run 8 (UV254) 2/8/00 21:45
Original value (CoefD) = 0.0042 New value = 0.013
Poor type -1 or 1 curve fit. Data was refit by iterative curve fit procedure.

Cell: J177

Comment: 1018-20-04 - Run 8 (UV254) 2/8/00 21:45
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#: VA 4041035 / 680
 ICR Contact: Arnold Moody
 Phone No.: (804) 590-1145
 Period: 2/18/98 - 3/29/98 (39 B-S days)

Design Information

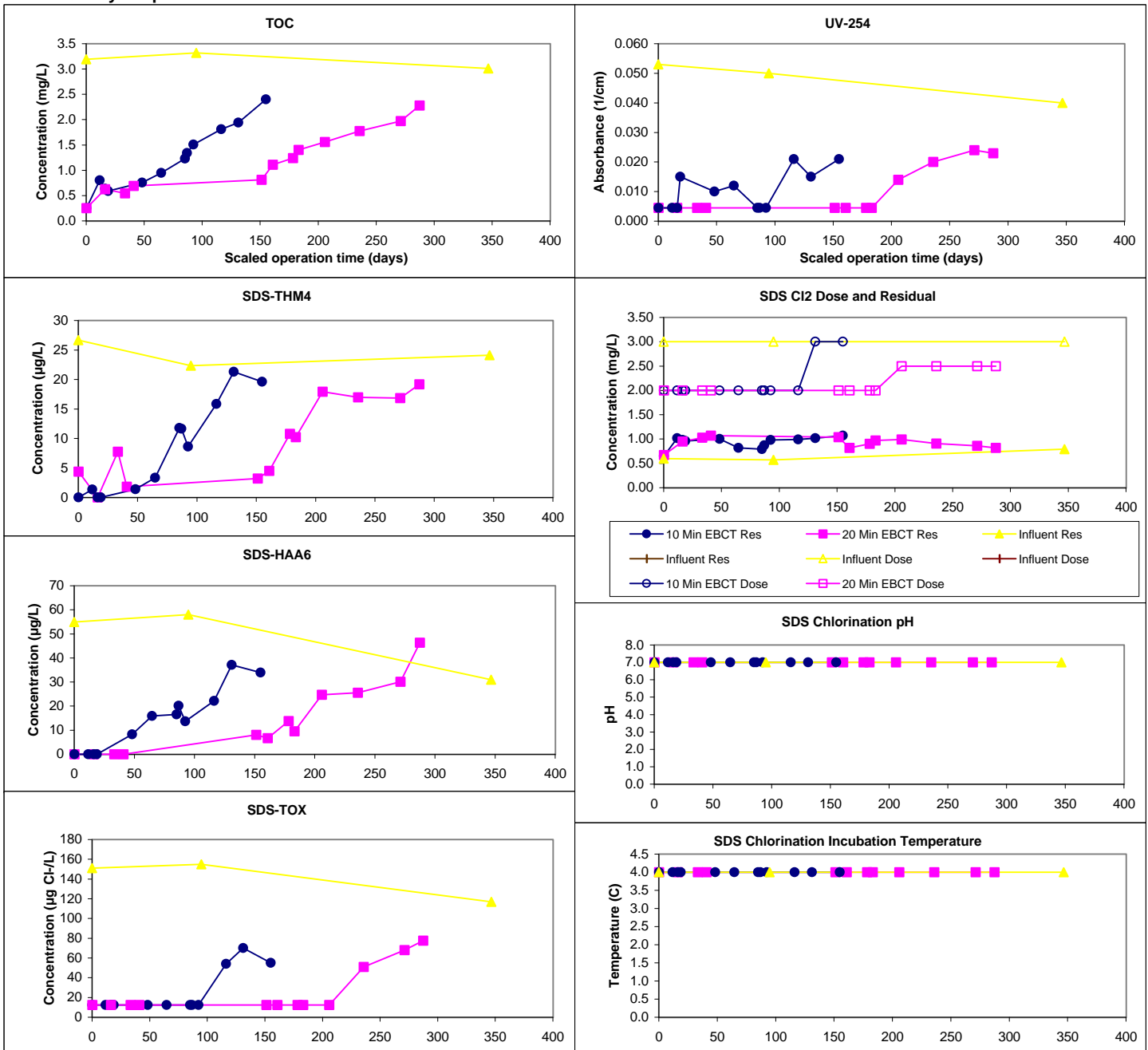
Design TOC: 3.2 mg/L
 Col Diameter: 8.0 mm
 Min Reynolds#: 0.50
 Full-Scale Temp: 21.0 C

Full-Scale GAC Size: 12x40 Bituminous coal
 Bench-Scale GAC Size: 80x140
 Scaling Factor: 7.36
 Meas Dry Bed Density: 0.50 g/cm3

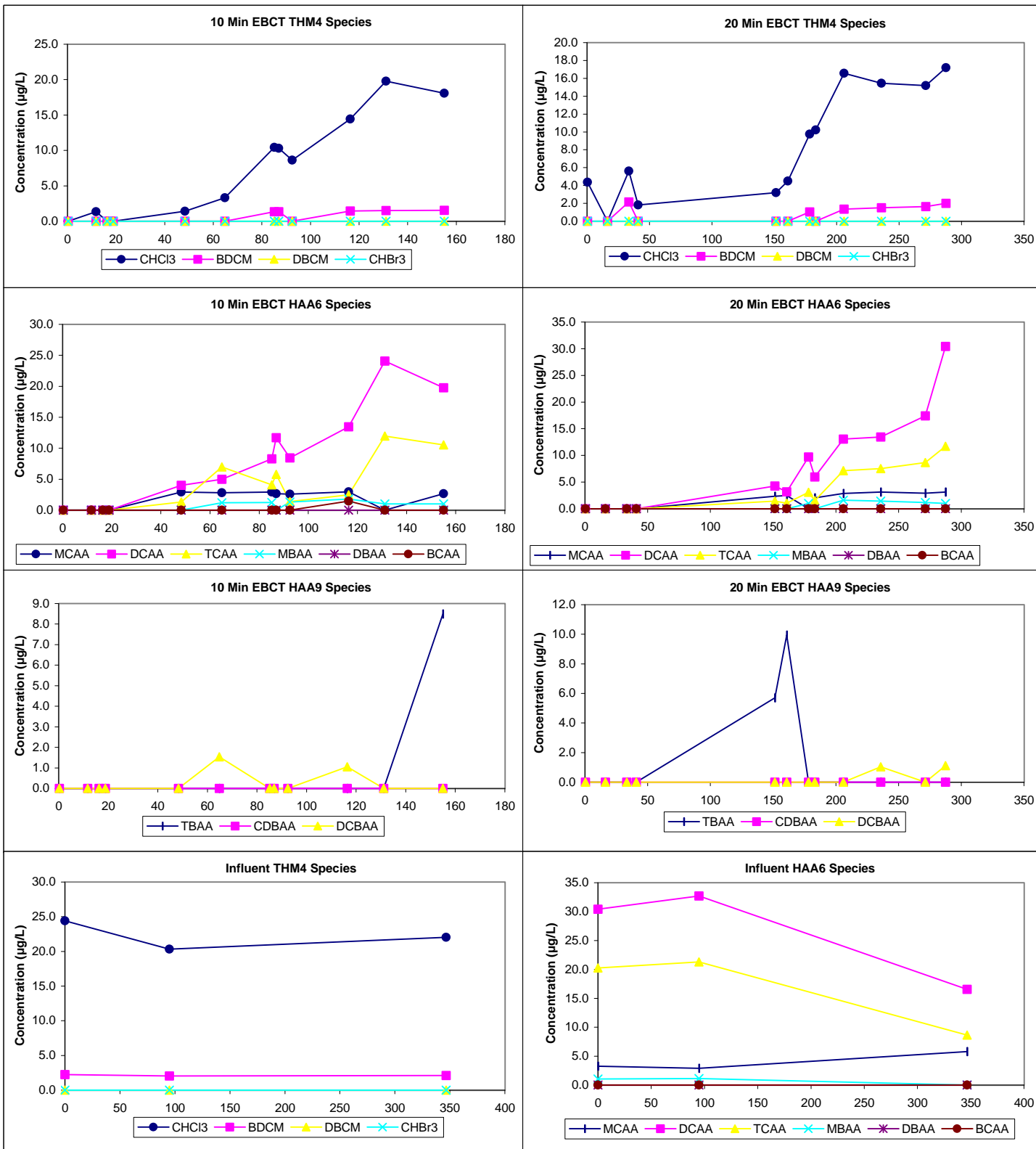
Water Quality Summary

Influent	Influent				Influent				Res (0)	Mean	SD	Count	Min/Max	
	Mean	SD/RD	Count	Min/Max	Mean	SD/RD	Count	Min/Max						
TOC	3.2	0.2	3	3.0 - 3.3						0.89	0.14	27	0.57 - 1.07	
pH	6.6	0.2	3	6.4 - 6.8						Temp	4.0	0.0	27	4.0 - 4.0
UV254	0.048	0.007	3	0.040 - 0.053						pH	7.0	0.0	27	7.0 - 7.0
SUVA	1.50	0.17	3	1.33 - 1.66						Time	72.0	0.0	27	72.0 - 72.0
Bromide	10	0	2	10 - 10						Comments:				
SDS-TOX	141	21	3	117 - 155										
SDS-THM4	24	2	3	22 - 27										
SDS-HAA6	48	15	3	31 - 58										
Effluent	10 Min EBCT (21 B-S days)				20 Min EBCT (39 B-S days)					Chart Legend:	<div><div><div></div><div>10 Min EBCT</div></div><div><div></div><div>20 Min EBCT</div></div><div><div></div><div>Influent</div></div><div><div></div><div>Influent</div></div></div>			
Effluent pH	6.5	0.3	12	6.1 - 7.0	6.5	0.3	12	5.9 - 6.9						
Effluent Temp	19.2	1.4	12	16.0 - 21.9	19.3	1.9	12	16.1 - 22.0						

Water Quality Graphs



Water Quality Graphs (Continued)



ICR Information

ID / ICR#: VA 4041035 / 680
 ICR Contact: Arnold Moody
 Phone No.: (804) 590-1145
 Period: 6/12/98 - 7/29/98 (47 B-S days)

Design Information

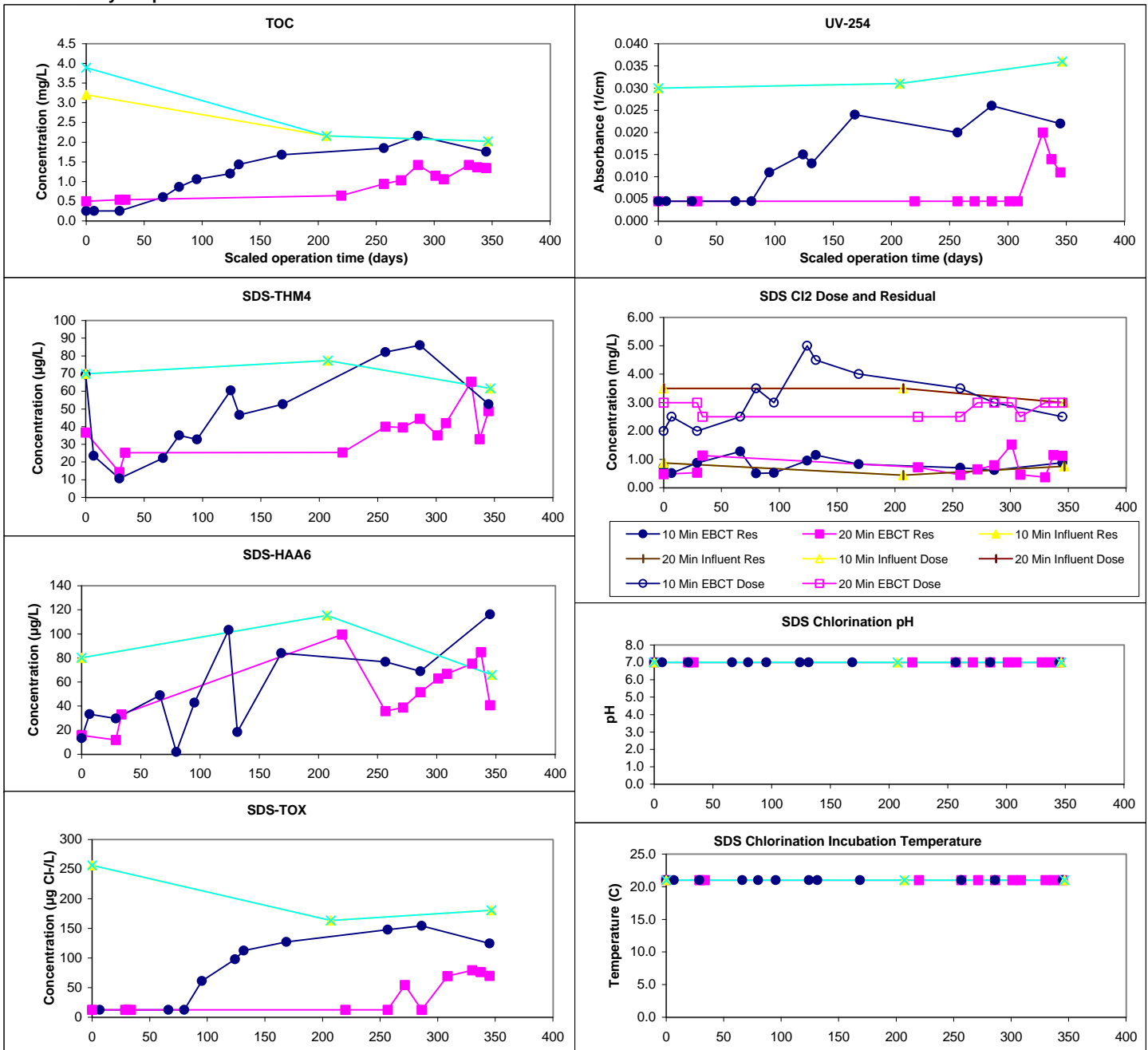
Design TOC: 3.9 mg/L
 Col Diameter: 8.0 mm
 Min Reynolds#: 0.50
 Full-Scale Temp: 21.0 C

Full-Scale GAC Size: 12x40 Bituminous coal
 Bench-Scale GAC Size: 80x140
 Scaling Factor: 7.36
 Meas Dry Bed Density: 0.50 g/cm³

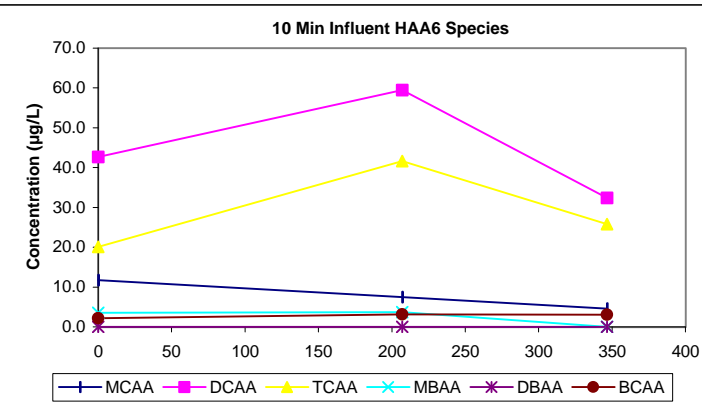
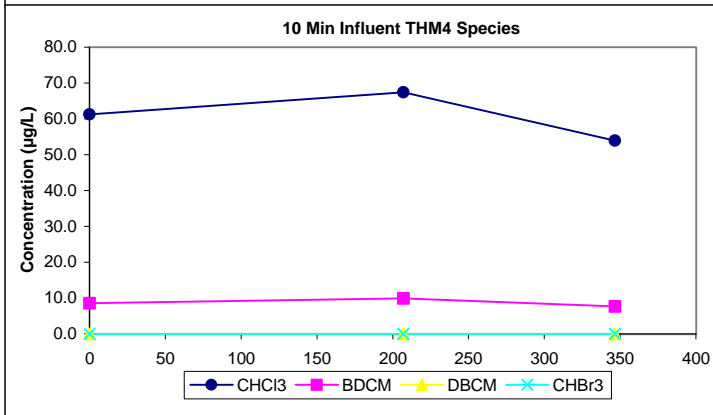
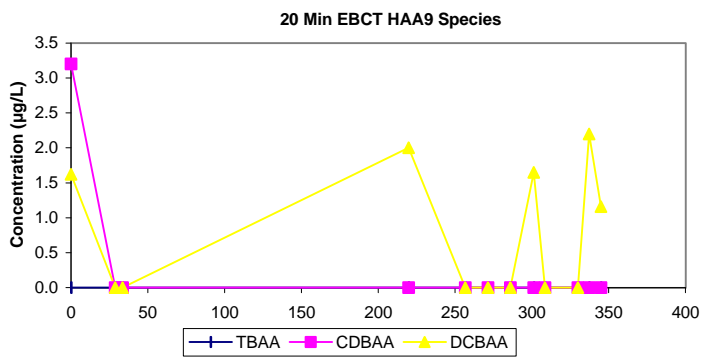
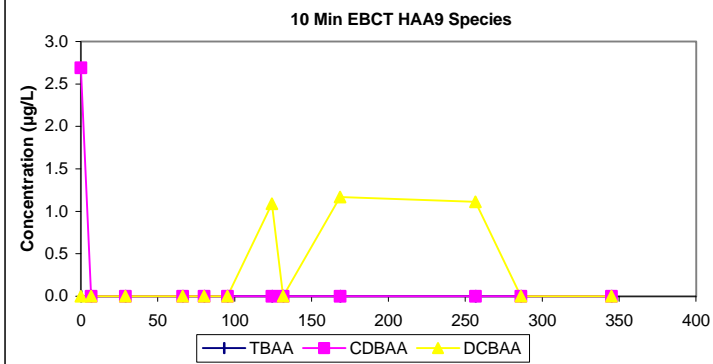
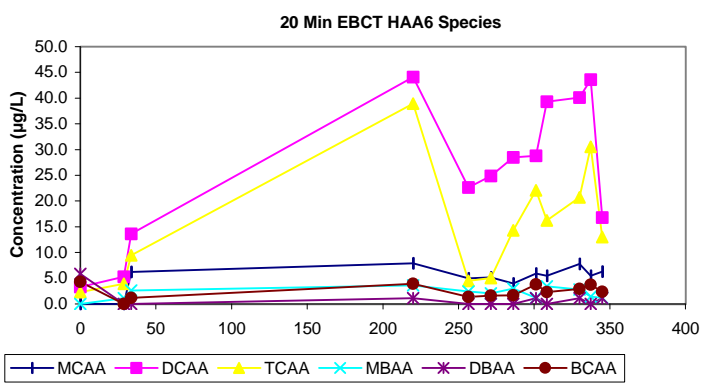
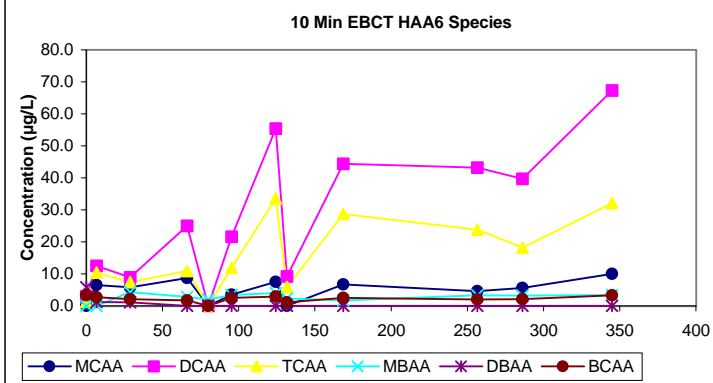
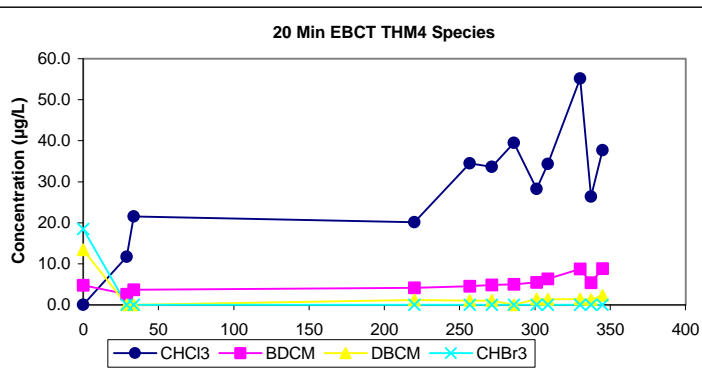
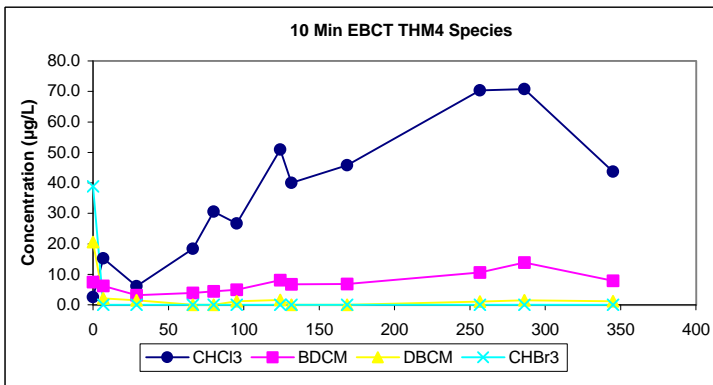
Water Quality Summary

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	2.5	0.6	3	2.0 - 3.2	2.7	1.0	3	2.0 - 3.9	Res (0)	0.77	0.29	30	0.37 - 1.52
pH	7.2	0.2	3	7.1 - 7.4	7.2	0.2	3	7.1 - 7.4	Temp	21.0	0.0	30	21.0 - 21.0
UV254	0.032	0.003	3	0.030 - 0.036	0.032	0.003	3	0.030 - 0.036	pH	7.0	0.0	30	7.0 - 7.0
SUVA	1.38	0.42	3	0.94 - 1.78	1.33	0.51	3	0.77 - 1.78	Time	72.0	0.0	30	72.0 - 72.0
Bromide	10	0	2	10 - 10	10	0	2	10 - 10	Comments:				
SDS-TOX	200	50	3	164 - 257	200	50	3	164 - 257					
SDS-THM4	70	8	3	62 - 77	70	8	3	62 - 77					
SDS-HAA6	87	25	3	66 - 115	87	25	3	66 - 115	<div>Chart Legend:</div> <div><div><div></div><div>10 Min EBCT</div></div><div><div></div><div>20 Min EBCT</div></div><div><div></div><div>10 Min Influent</div></div><div><div></div><div>20 Min Influent</div></div></div>				
Effluent	10 Min EBCT (47 B-S days)				20 Min EBCT (47 B-S days)								
Effluent pH	7.1	0.6	12	6.4 - 8.2	6.9	0.6	12	6.4 - 8.5					
Effluent Temp	24.7	1.3	12	23.0 - 27.0	24.2	1.3	12	22.6 - 26.6					

Water Quality Graphs



Water Quality Graphs (Continued)



ICR Information

ID / ICR#: VA 4041035 / 680
 ICR Contact: Arnold Moody
 Phone No.: (804) 590-1145
 Period: 9/1/98 - 10/21/98 (50 B-S days)

Design Information

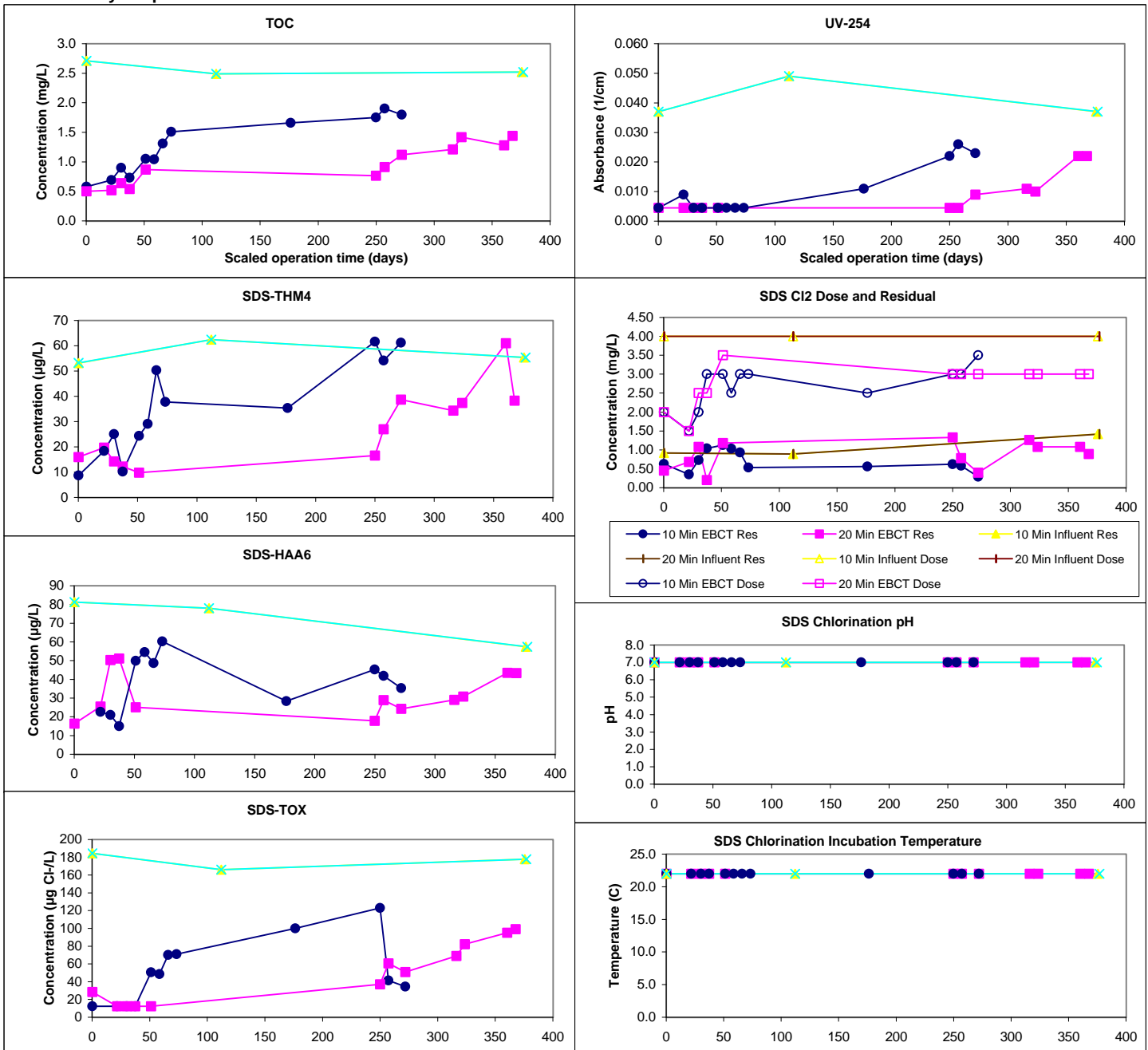
Design TOC: 2.6 mg/L
 Col Diameter: 8.0 mm
 Min Reynolds#: 0.50
 Full-Scale Temp: 21.0 C

Full-Scale GAC Size: 12x40 Bituminous coal
 Bench-Scale GAC Size: 80x140
 Scaling Factor: 7.36
 Meas Dry Bed Density: 0.50 g/cm³

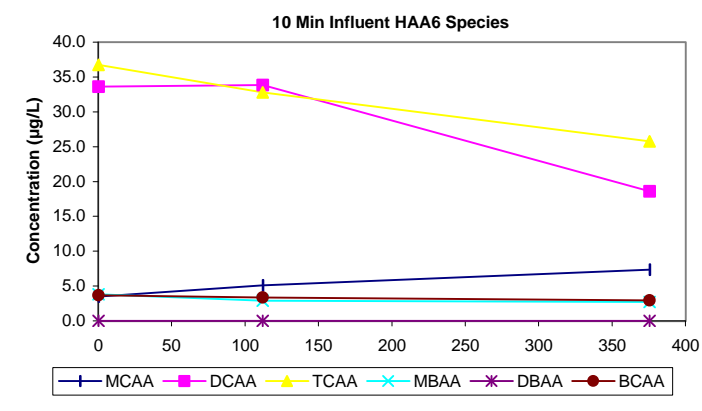
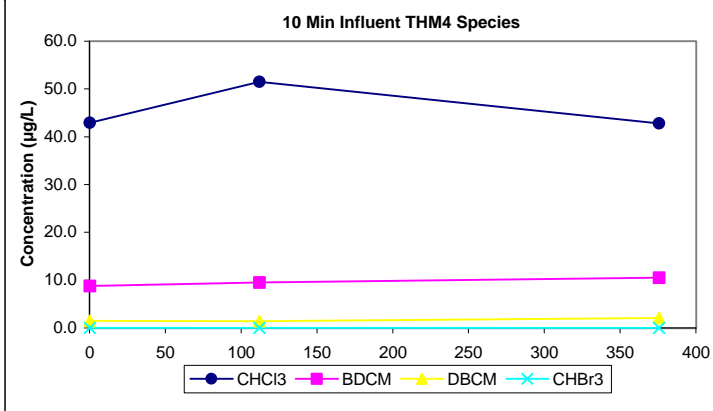
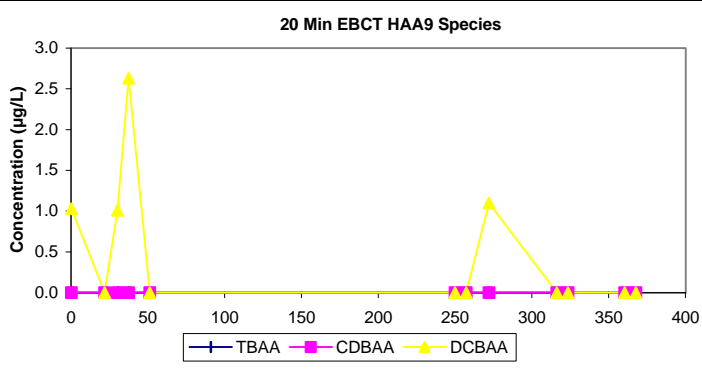
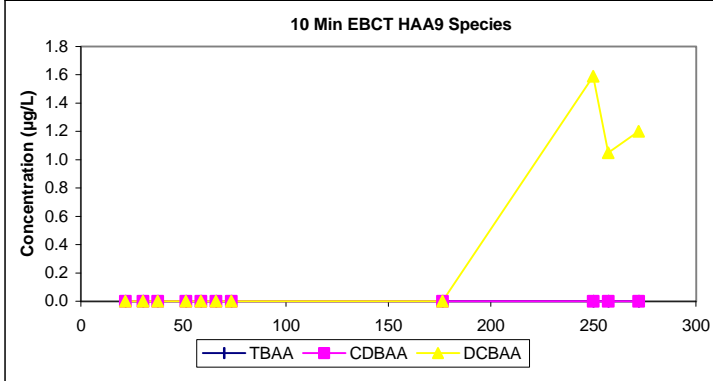
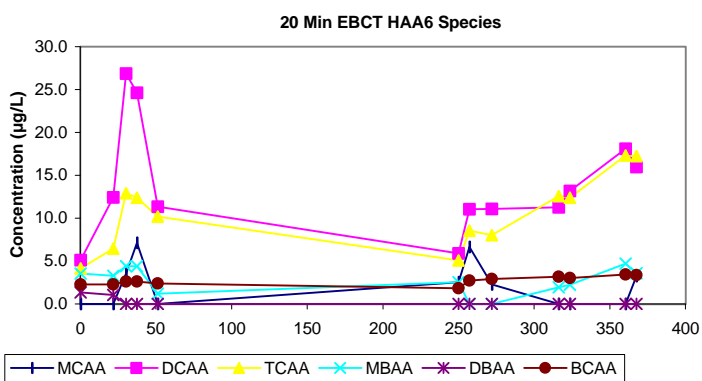
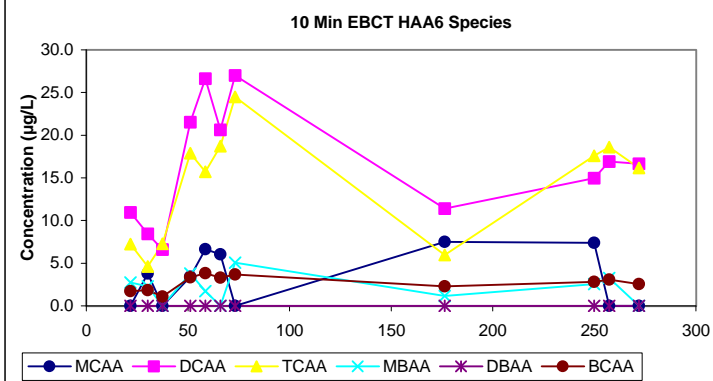
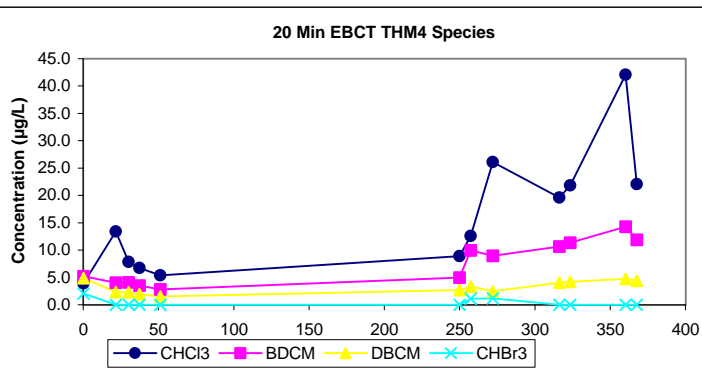
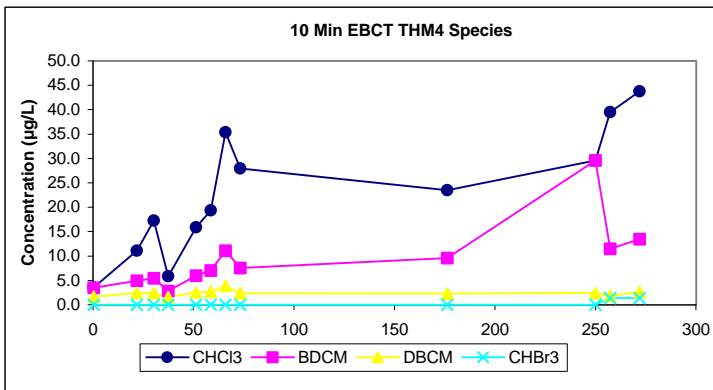
Water Quality Summary

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	2.6	0.1	3	2.5 - 2.7	2.6	0.1	3	2.5 - 2.7	0.84	0.84	0.33	30
pH	6.3	0.1	3	6.2 - 6.3	6.3	0.1	3	6.2 - 6.3	Temp	22.0	0.0	30
UV254	0.041	0.007	3	0.037 - 0.049	0.041	0.007	3	0.037 - 0.049	pH	7.0	0.0	30
SUVA	1.60	0.32	3	1.37 - 1.97	1.60	0.32	3	1.37 - 1.97	Time	72.0	0.0	30
Bromide	10	0	2	10 - 10	10	0	2	10 - 10	Comments:			
SDS-TOX	176	9	3	166 - 185	176	9	3	166 - 185				
SDS-THM4	57	5	3	53 - 62	57	5	3	53 - 62	Chart Legend:			
SDS-HAA6	72	13	3	57 - 81	72	13	3	57 - 81				
Effluent	10 Min EBCT				20 Min EBCT							
	Mean	SD/RD	Count	Min/Max	Mean	SD/RD	Count	Min/Max				
Effluent pH	7.1	0.3	12	6.7 - 7.8	7.2	0.5	12	6.6 - 7.9				
Effluent Temp	24.0	1.0	12	22.9 - 26.5	23.6	1.2	12	22.4 - 26.9				

Water Quality Graphs



Water Quality Graphs (Continued)



ICR Information

ID / ICR#: VA 4041035 / 680
 ICR Contact: Arnold Moody
 Phone No.: (804) 590-1145
 Period: 1/3/99 - 3/4/99 (59 B-S days)

Design Information

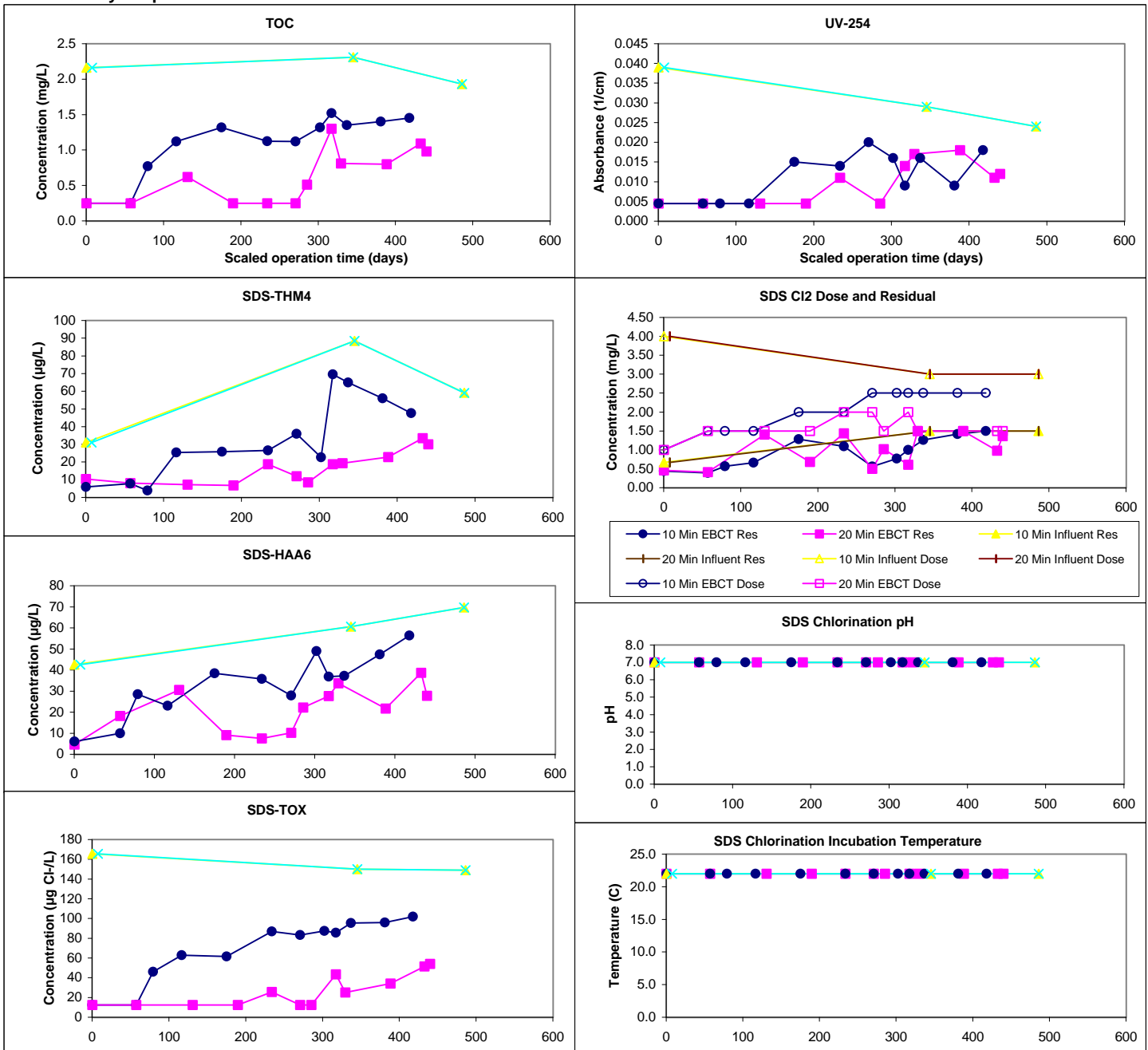
Design TOC: 2.2 mg/L
 Col Diameter: 8.0 mm
 Min Reynolds#: 0.50
 Full-Scale Temp: 21.0 C

Full-Scale GAC Size: 12x40 Bituminous coal
 Bench-Scale GAC Size: 80x140
 Scaling Factor: 7.36
 Meas Dry Bed Density: 0.50 g/cm3

Water Quality Summary

Influent	10 Min Influent				20 Min Influent				Res (0)	Mean	SD	Count	Min/Max
	Mean	SD/RD	Count	Min/Max	Mean	SD/RD	Count	Min/Max					
TOC	2.1	0.2	3	1.9 - 2.3	2.1	0.2	3	1.9 - 2.3	Temp	1.00	0.42	30	0.39 - 1.50
pH	7.4	0.0	3	7.4 - 7.4	7.4	0.0	3	7.4 - 7.4	pH	22.0	0.0	30	22.0 - 22.0
UV254	0.031	0.008	3	0.024 - 0.039	0.031	0.008	3	0.024 - 0.039	Time	7.0	0.0	30	7.0 - 7.0
SUVA	1.43	0.32	3	1.24 - 1.81	1.43	0.32	3	1.24 - 1.81		72.0	0.0	30	72.0 - 72.0
Bromide	10	0	2	10 - 10	10	0	2	10 - 10	Comments:				
SDS-TOX	155	9	3	149 - 166	155	9	3	149 - 166					
SDS-THM4	60	29	3	31 - 88	60	29	3	31 - 88	Chart Legend: <div><div><div></div><div>10 Min EBCT</div></div><div><div></div><div>20 Min EBCT</div></div><div><div></div><div>10 Min Influent</div></div><div><div></div><div>20 Min Influent</div></div></div>				
SDS-HAA6	58	14	3	43 - 70	58	14	3	43 - 70					
Effluent	10 Min EBCT (57 B-S days)				20 Min EBCT (60 B-S days)								
Effluent pH	7.5	0.3	11	7.0 - 7.9	7.7	0.2	11	7.3 - 7.9					
Effluent Temp	16.7	2.5	11	13.1 - 21.2	16.1	2.6	11	11.3 - 18.4					

Water Quality Graphs



Water Quality Graphs (Continued)

