

ICR TREATMENT STUDY ANALYSIS

Base Analysis and Data Review Comments

Treatment Study ID	1015
Study Protocol	GAC RSSCT treatment study
Plant ICR Number	641
PWS Name	Corpus Christi
City, State, Zip	Corpus Christi, TX 78469-9277

These are general comments that do not need to be responded to by the utility.

Major comments:

None

General Comments:

1. In-line filtration using a 0.2 μm pore size filter was performed; the *Treatment Studies Manual* recommended the use of a 1.0 μm pore size filter.
2. Although not all contactors exceeded 70% TOC breakthrough, SDS-DBPs exceeded Stage 1 MCLs.

Outlier Data:

Q3 One outlier data point removed.

Cell: A1

Comment: 1015-SAS.xls 2/10/00 20:18

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

Cell: C4

Comment: 1015-10-01 - Run 1 (CDBAA) 2/10/00 19:16
Original value (CoefA0) = 99999 New value = -2.0905
Fewer than 6 points. Logistic function (type 1) applied.

Cell: D4

Comment: 1015-10-01 - Run 1 (CDBAA) 2/10/00 19:16
Original value (CoefAf) = 99999 New value = 14.0339
Fewer than 6 points. Logistic function (type 1) applied.

Cell: E4

Comment: 1015-10-01 - Run 1 (CDBAA) 2/10/00 19:16
Original value (CoefB) = 99999 New value = 5.5457
Fewer than 6 points. Logistic function (type 1) applied.

Cell: F4

Comment: 1015-10-01 - Run 1 (CDBAA) 2/10/00 19:16
Original value (CoefD) = 99999 New value = 0.11
Fewer than 6 points. Logistic function (type 1) applied.

Cell: J4

Comment: 1015-10-01 - Run 1 (CDBAA) 2/10/00 19:16
Original value (S) = 0 New value = 0
Fewer than 6 points. Logistic function (type 1) applied.

Cell: C18

Comment: 1015-10-01 - Run 1 (TCAA) 2/10/00 19:15
Original value (CoefA0) = 0 New value = -1.0149
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: D18

Comment: 1015-10-01 - Run 1 (TCAA) 2/10/00 19:15
Original value (CoefAf) = 0 New value = 65.5007
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: E18

Comment: 1015-10-01 - Run 1 (TCAA) 2/10/00 19:15
Original value (CoefB) = 0 New value = 132.2832
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: F18

Comment: 1015-10-01 - Run 1 (TCAA) 2/10/00 19:15
Original value (CoefD) = 0 New value = 0.0545
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: J18

Comment: 1015-10-01 - Run 1 (TCAA) 2/10/00 19:15
Original value (S) = 0 New value = 0
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: C36

Comment: 1015-10-02 - Run 3 (HAA9) 2/10/00 18:53
Original value (CoefA0) = 99999 New value = 60.34
Fewer than 6 points. Step function applied.

Cell: D36

Comment: 1015-10-02 - Run 3 (HAA9) 2/10/00 18:53
 Original value (CoefAf) = 99999 New value = 0
 Fewer than 6 points. Step function applied.

Cell: E36

Comment: 1015-10-02 - Run 3 (HAA9) 2/10/00 18:53
 Original value (CoefB) = 99999 New value = 0
 Fewer than 6 points. Step function applied.

Cell: F36

Comment: 1015-10-02 - Run 3 (HAA9) 2/10/00 18:53
 Original value (CoefD) = 99999 New value = 0
 Fewer than 6 points. Step function applied.

Cell: J36

Comment: 1015-10-02 - Run 3 (HAA9) 2/10/00 18:53
 Original value (S) = 0 New value = 0
 Fewer than 6 points. Step function applied.

Cell: K36

Comment: 1015-10-02 - Run 3 (HAA9) 2/10/00 18:53
 Original value (t0) = 0 New value = 62.24
 Fewer than 6 points. Step function applied.

Cell: C39

Comment: 1015-10-02 - Run 3 (TBAA) 2/10/00 18:56
 Original value (CoefA0) = 99999 New value = 17.8
 Fewer than 6 points. Step function applied.

Cell: D39

Comment: 1015-10-02 - Run 3 (TBAA) 2/10/00 18:56
 Original value (CoefAf) = 99999 New value = 0
 Fewer than 6 points. Step function applied.

Cell: E39

Comment: 1015-10-02 - Run 3 (TBAA) 2/10/00 18:56
 Original value (CoefB) = 99999 New value = 0
 Fewer than 6 points. Step function applied.

Cell: F39

Comment: 1015-10-02 - Run 3 (TBAA) 2/10/00 18:56
 Original value (CoefD) = 99999 New value = 0
 Fewer than 6 points. Step function applied.

Cell: J39

Comment: 1015-10-02 - Run 3 (TBAA) 2/10/00 18:56
 Original value (S) = 0 New value = 0
 Fewer than 6 points. Step function applied.

Cell: K39

Comment: 1015-10-02 - Run 3 (TBAA) 2/10/00 18:56
 Original value (t0) = 0 New value = 62.24
 Fewer than 6 points. Step function applied.

Cell: C43

Comment: 1015-10-02 - Run 3 (TOX) 2/10/00 19:19
 Original value (CoefA0) = 15.523 New value = -8.3777
 Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: D43

Comment: 1015-10-02 - Run 3 (TOX) 2/10/00 19:19

Original value (CoefAf) = 420 New value = 289.6109
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: E43

Comment: 1015-10-02 - Run 3 (TOX) 2/10/00 19:19
Original value (CoefB) = 32.4071 New value = 9.3351
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: F43

Comment: 1015-10-02 - Run 3 (TOX) 2/10/00 19:19
Original value (CoefD) = 0.0517 New value = 0.0459
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: J43

Comment: 1015-10-02 - Run 3 (TOX) 2/10/00 19:19
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: C45

Comment: 1015-10-02 - Run 3 (UV254) 2/10/00 19:18
Original value (CoefA0) = 0 New value = 0.0012
Poor peak curve fit. Data was refit to type 1 curve fit by iterative curve fit procedure.

Cell: D45

Comment: 1015-10-02 - Run 3 (UV254) 2/10/00 19:18
Original value (CoefAf) = 0.034 New value = 0.0329
Poor peak curve fit. Data was refit to type 1 curve fit by iterative curve fit procedure.

Cell: E45

Comment: 1015-10-02 - Run 3 (UV254) 2/10/00 19:18
Original value (CoefB) = 21.5673 New value = 20
Poor peak curve fit. Data was refit to type 1 curve fit by iterative curve fit procedure.

Cell: F45

Comment: 1015-10-02 - Run 3 (UV254) 2/10/00 19:18
Original value (CoefD) = 0.1011 New value = 0.1049
Poor peak curve fit. Data was refit to type 1 curve fit by iterative curve fit procedure.

Cell: J45

Comment: 1015-10-02 - Run 3 (UV254) 2/10/00 19:18
Original value (S) = -0.0001 New value = 0
Poor peak curve fit. Data was refit to type 1 curve fit by iterative curve fit procedure.

Cell: C46

Comment: 1015-10-03 - Run 5 (BCAA) 2/10/00 19:25
Original value (CoefA0) = 0 New value = -0.7508
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: D46

Comment: 1015-10-03 - Run 5 (BCAA) 2/10/00 19:25
Original value (CoefAf) = 0 New value = 111.0594
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: E46

Comment: 1015-10-03 - Run 5 (BCAA) 2/10/00 19:25
Original value (CoefB) = 0 New value = 423.2499
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: F46

Comment: 1015-10-03 - Run 5 (BCAA) 2/10/00 19:25
Original value (CoefD) = 0 New value = 0.0292
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: J46

Comment: 1015-10-03 - Run 5 (BCAA) 2/10/00 19:25
Original value (S) = 0 New value = 0
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: C48

Comment: 1015-10-03 - Run 5 (CDBAA) 2/10/00 19:05
Original value (CoefA0) = 99999 New value = 12.5
Fewer than 6 points. Step function applied.

Cell: D48

Comment: 1015-10-03 - Run 5 (CDBAA) 2/10/00 19:05
Original value (CoefAf) = 99999 New value = 0
Fewer than 6 points. Step function applied.

Cell: E48

Comment: 1015-10-03 - Run 5 (CDBAA) 2/10/00 19:05
Original value (CoefB) = 99999 New value = 0
Fewer than 6 points. Step function applied.

Cell: F48

Comment: 1015-10-03 - Run 5 (CDBAA) 2/10/00 19:05
Original value (CoefD) = 99999 New value = 0
Fewer than 6 points. Step function applied.

Cell: J48

Comment: 1015-10-03 - Run 5 (CDBAA) 2/10/00 19:05
Original value (S) = 0 New value = 0
Fewer than 6 points. Step function applied.

Cell: K48

Comment: 1015-10-03 - Run 5 (CDBAA) 2/10/00 19:05
Original value (t0) = 0 New value = 124.68
Fewer than 6 points. Step function applied.

Cell: C54

Comment: 1015-10-03 - Run 5 (DCAA) 2/10/00 19:23
Original value (CoefA0) = 0 New value = -0.5263
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: D54

Comment: 1015-10-03 - Run 5 (DCAA) 2/10/00 19:23
Original value (CoefAf) = 0 New value = 8.0638
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: E54

Comment: 1015-10-03 - Run 5 (DCAA) 2/10/00 19:23
Original value (CoefB) = 0 New value = 28.6312
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: F54

Comment: 1015-10-03 - Run 5 (DCAA) 2/10/00 19:23
Original value (CoefD) = 0 New value = 0.0223
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: J54

Comment: 1015-10-03 - Run 5 (DCAA) 2/10/00 19:23
Original value (S) = 0 New value = 0
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: C55

Comment: 1015-10-03 - Run 5 (DCBAA) 2/10/00 19:04

Original value (CoefA0) = 99999 New value = 5.7
Fewer than 6 points. Step function applied.

Cell: D55

Comment: 1015-10-03 - Run 5 (DCBAA) 2/10/00 19:04
Original value (CoefAf) = 99999 New value = 0
Fewer than 6 points. Step function applied.

Cell: E55

Comment: 1015-10-03 - Run 5 (DCBAA) 2/10/00 19:04
Original value (CoefB) = 99999 New value = 0
Fewer than 6 points. Step function applied.

Cell: F55

Comment: 1015-10-03 - Run 5 (DCBAA) 2/10/00 19:04
Original value (CoefD) = 99999 New value = 0
Fewer than 6 points. Step function applied.

Cell: J55

Comment: 1015-10-03 - Run 5 (DCBAA) 2/10/00 19:04
Original value (S) = 0 New value = 0
Fewer than 6 points. Step function applied.

Cell: K55

Comment: 1015-10-03 - Run 5 (DCBAA) 2/10/00 19:04
Original value (t0) = 0 New value = 124.68
Fewer than 6 points. Step function applied.

Cell: C59

Comment: 1015-10-03 - Run 5 (MBAA) 2/10/00 19:24
Original value (CoefA0) = 0 New value = -0.6767
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: D59

Comment: 1015-10-03 - Run 5 (MBAA) 2/10/00 19:24
Original value (CoefAf) = 0 New value = 13.482
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: E59

Comment: 1015-10-03 - Run 5 (MBAA) 2/10/00 19:24
Original value (CoefB) = 0 New value = 39.6052
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: F59

Comment: 1015-10-03 - Run 5 (MBAA) 2/10/00 19:24
Original value (CoefD) = 0 New value = 0.0216
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: J59

Comment: 1015-10-03 - Run 5 (MBAA) 2/10/00 19:24
Original value (S) = 0 New value = 0
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: C61

Comment: 1015-10-03 - Run 5 (TBAA) 2/10/00 19:06
Original value (CoefA0) = 99999 New value = 17.5
Fewer than 6 points. Step function applied.

Cell: D61

Comment: 1015-10-03 - Run 5 (TBAA) 2/10/00 19:06
Original value (CoefAf) = 99999 New value = 0
Fewer than 6 points. Step function applied.

Cell: E61

Comment: 1015-10-03 - Run 5 (TBAA) 2/10/00 19:06
Original value (CoefB) = 99999 New value = 0
Fewer than 6 points. Step function applied.

Cell: F61

Comment: 1015-10-03 - Run 5 (TBAA) 2/10/00 19:06
Original value (CoefD) = 99999 New value = 0
Fewer than 6 points. Step function applied.

Cell: J61

Comment: 1015-10-03 - Run 5 (TBAA) 2/10/00 19:06
Original value (S) = 0 New value = 0
Fewer than 6 points. Step function applied.

Cell: K61

Comment: 1015-10-03 - Run 5 (TBAA) 2/10/00 19:06
Original value (t0) = 0 New value = 124.68
Fewer than 6 points. Step function applied.

Cell: C70

Comment: 1015-10-04 - Run 7 (CDBAA) 2/10/00 19:28
Original value (CoefA0) = -4.1 New value = -0.948
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: D70

Comment: 1015-10-04 - Run 7 (CDBAA) 2/10/00 19:28
Original value (CoefAf) = 11.5915 New value = 7.76
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: E70

Comment: 1015-10-04 - Run 7 (CDBAA) 2/10/00 19:28
Original value (CoefB) = 4.899 New value = 20.0407
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: F70

Comment: 1015-10-04 - Run 7 (CDBAA) 2/10/00 19:28
Original value (CoefD) = 0.0859 New value = 0.1268
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: J70

Comment: 1015-10-04 - Run 7 (CDBAA) 2/10/00 19:28
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: C71

Comment: 1015-10-04 - Run 7 (CHBr3) 2/10/00 19:28
Original value (CoefA0) = 4.1677 New value = 4.0311
Poor peak curve fit. Data was refit to type 1 curve fit by iterative curve fit procedure.

Cell: D71

Comment: 1015-10-04 - Run 7 (CHBr3) 2/10/00 19:28
Original value (CoefAf) = 53.4585 New value = 53.1445
Poor peak curve fit. Data was refit to type 1 curve fit by iterative curve fit procedure.

Cell: E71

Comment: 1015-10-04 - Run 7 (CHBr3) 2/10/00 19:28
Original value (CoefB) = 2355.4404 New value = 1371.629
Poor peak curve fit. Data was refit to type 1 curve fit by iterative curve fit procedure.

Cell: F71

Comment: 1015-10-04 - Run 7 (CHBr3) 2/10/00 19:28

Original value (CoefD) = 0.3417 New value = 0.3197
Poor peak curve fit. Data was refit to type 1 curve fit by iterative curve fit procedure.

Cell: J71

Comment: 1015-10-04 - Run 7 (CHBr3) 2/10/00 19:28
Original value (S) = -0.4228 New value = 0
Poor peak curve fit. Data was refit to type 1 curve fit by iterative curve fit procedure.

Cell: C83

Comment: 1015-10-04 - Run 7 (TBAA) 2/10/00 19:11
Original value (CoefA0) = 0 New value = 4.55
Fewer than 6 points above MRL. Step function applied.

Cell: D83

Comment: 1015-10-04 - Run 7 (TBAA) 2/10/00 19:11
Original value (CoefAf) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: E83

Comment: 1015-10-04 - Run 7 (TBAA) 2/10/00 19:11
Original value (CoefB) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: F83

Comment: 1015-10-04 - Run 7 (TBAA) 2/10/00 19:11
Original value (CoefD) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: J83

Comment: 1015-10-04 - Run 7 (TBAA) 2/10/00 19:11
Original value (S) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: K83

Comment: 1015-10-04 - Run 7 (TBAA) 2/10/00 19:11
Original value (t0) = 0 New value = 76.5986
Fewer than 6 points above MRL. Step function applied.

Cell: C88

Comment: 1015-10-04 - Run 7 (TSUVA) 2/10/00 19:26
Original value (CoefA0) = -0.0638 New value = 1.143
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: D88

Comment: 1015-10-04 - Run 7 (TSUVA) 2/10/00 19:26
Original value (CoefAf) = 1.1883 New value = 0.5918
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: E88

Comment: 1015-10-04 - Run 7 (TSUVA) 2/10/00 19:26
Original value (CoefB) = 2.4761 New value = 19.9762
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: F88

Comment: 1015-10-04 - Run 7 (TSUVA) 2/10/00 19:26
Original value (CoefD) = 0.15 New value = 0.0439
Peak curve fit with S = 0. Refit to type 1 curve fit by iterative curve fit procedure.

Cell: J88

Comment: 1015-10-04 - Run 7 (TSUVA) 2/10/00 19:26
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: C106

Comment: 1015-20-01 - Run 2 (TCAA) 2/10/00 19:18
Original value (CoefA0) = 0 New value = -0.4232
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: D106

Comment: 1015-20-01 - Run 2 (TCAA) 2/10/00 19:18
Original value (CoefAf) = 0 New value = 3.4825
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: E106

Comment: 1015-20-01 - Run 2 (TCAA) 2/10/00 19:18
Original value (CoefB) = 0 New value = 20.6938
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: F106

Comment: 1015-20-01 - Run 2 (TCAA) 2/10/00 19:18
Original value (CoefD) = 0 New value = 0.0501
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: J106

Comment: 1015-20-01 - Run 2 (TCAA) 2/10/00 19:18
Original value (S) = 0 New value = 0
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: C116

Comment: 1015-20-02 - Run 4 (CHCl3) 2/10/00 19:20
Original value (CoefA0) = 0 New value = -0.1622
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: D116

Comment: 1015-20-02 - Run 4 (CHCl3) 2/10/00 19:20
Original value (CoefAf) = 0 New value = 50.5575
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: E116

Comment: 1015-20-02 - Run 4 (CHCl3) 2/10/00 19:20
Original value (CoefB) = 0 New value = 1587.8478
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: F116

Comment: 1015-20-02 - Run 4 (CHCl3) 2/10/00 19:20
Original value (CoefD) = 0 New value = 0.033
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: J116

Comment: 1015-20-02 - Run 4 (CHCl3) 2/10/00 19:20
Original value (S) = 0 New value = 0
Fewer than 6 points above MRL. Logistic function (type 1) applied.

Cell: C124

Comment: 1015-20-02 - Run 4 (HAA9) 2/10/00 19:21
Original value (CoefA0) = 99999 New value = -3.4939
Fewer than 6 points. Logistic function (type 1) applied.

Cell: D124

Comment: 1015-20-02 - Run 4 (HAA9) 2/10/00 19:21
Original value (CoefAf) = 99999 New value = 65.1062
Fewer than 6 points. Logistic function (type 1) applied.

Cell: E124

Comment: 1015-20-02 - Run 4 (HAA9) 2/10/00 19:21

Original value (CoefB) = 99999 New value = 19.8839
Fewer than 6 points. Logistic function (type 1) applied.

Cell: F124

Comment: 1015-20-02 - Run 4 (HAA9) 2/10/00 19:21
Original value (CoefD) = 99999 New value = 0.0466
Fewer than 6 points. Logistic function (type 1) applied.

Cell: J124

Comment: 1015-20-02 - Run 4 (HAA9) 2/10/00 19:21
Original value (S) = 0 New value = 0
Fewer than 6 points. Logistic function (type 1) applied.

Cell: C131

Comment: 1015-20-02 - Run 4 (TOX) 2/10/00 19:22
Original value (CoefA0) = -1.075 New value = 8.4088
Poor peak curve fit. Data was refit to type 1 curve fit by iterative curve fit procedure.

Cell: D131

Comment: 1015-20-02 - Run 4 (TOX) 2/10/00 19:22
Original value (CoefAf) = 211.2209 New value = 154.5075
Poor peak curve fit. Data was refit to type 1 curve fit by iterative curve fit procedure.

Cell: E131

Comment: 1015-20-02 - Run 4 (TOX) 2/10/00 19:22
Original value (CoefB) = 15.5006 New value = 30.5609
Poor peak curve fit. Data was refit to type 1 curve fit by iterative curve fit procedure.

Cell: F131

Comment: 1015-20-02 - Run 4 (TOX) 2/10/00 19:22
Original value (CoefD) = 0.0476 New value = 0.0717
Poor peak curve fit. Data was refit to type 1 curve fit by iterative curve fit procedure.

Cell: J131

Comment: 1015-20-02 - Run 4 (TOX) 2/10/00 19:22
Original value (S) = -1.2099 New value = 0
Poor peak curve fit. Data was refit to type 1 curve fit by iterative curve fit procedure.

Cell: C138

Comment: 1015-20-03 - Run 6 (CHCl3) 2/10/00 19:08
Original value (CoefA0) = 0 New value = 1.3
Fewer than 6 points above MRL. Step function applied.

Cell: D138

Comment: 1015-20-03 - Run 6 (CHCl3) 2/10/00 19:08
Original value (CoefAf) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: E138

Comment: 1015-20-03 - Run 6 (CHCl3) 2/10/00 19:08
Original value (CoefB) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: F138

Comment: 1015-20-03 - Run 6 (CHCl3) 2/10/00 19:08
Original value (CoefD) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: J138

Comment: 1015-20-03 - Run 6 (CHCl3) 2/10/00 19:08
Original value (S) = 0 New value = 0
Fewer than 6 points above MRL. Step function applied.

Cell: K138

Comment: 1015-20-03 - Run 6 (CHCl3) 2/10/00 19:08

Original value (t0) = 0 New value = 107.4979

Fewer than 6 points above MRL. Step function applied.

ICR Information





ID / ICR#: TX1780003 / 641
 ICR Contact: Mr Hubert Hall
 Phone No.: 512 857-1871
 Period: 11/3/97 - 11/10/97 (7 B-S days)

Design Information

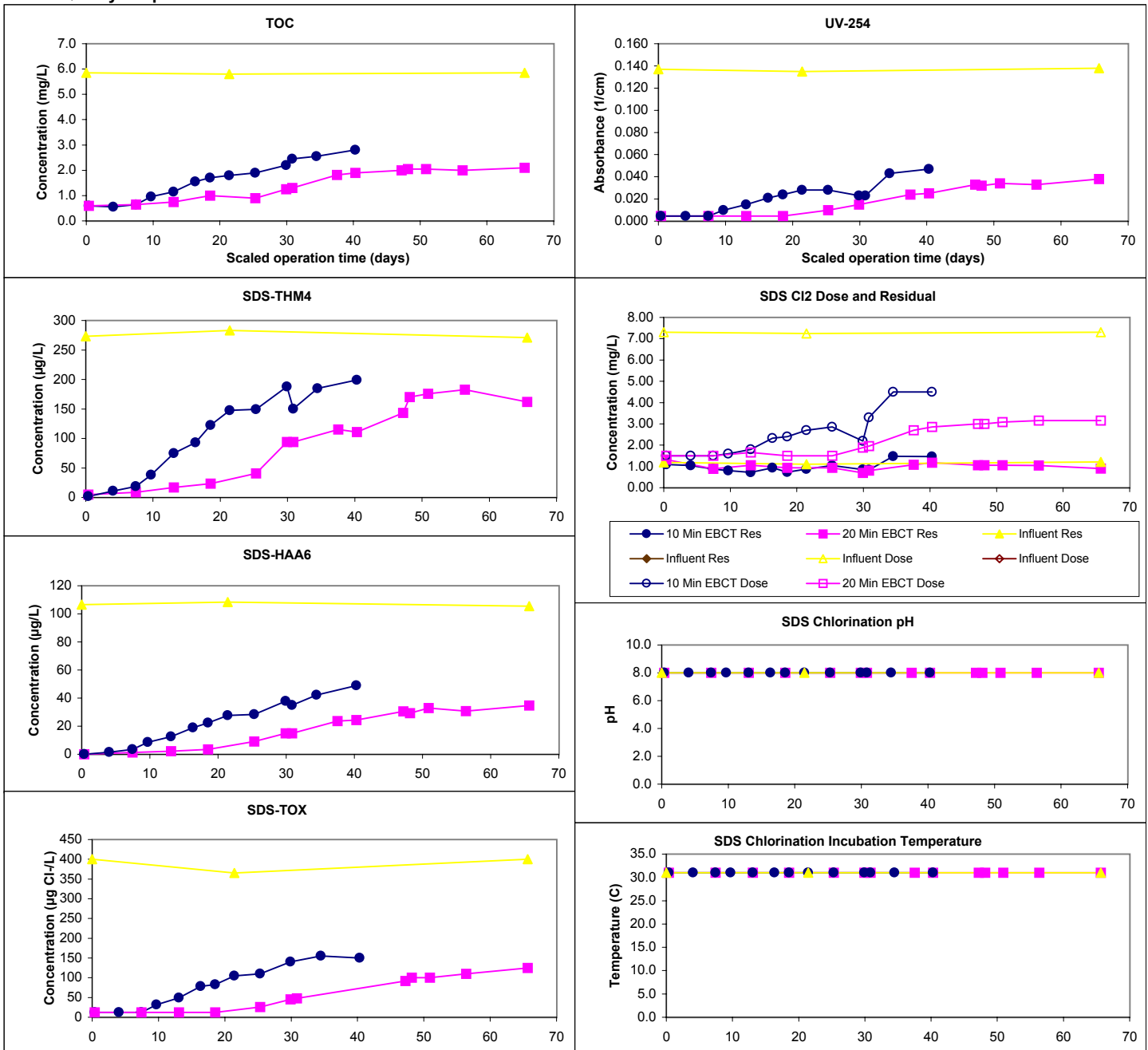
Design TOC: 5.6 mg/L
 Col Diameter: 11.0 mm
 Min Reynolds#: 0.55
 Full-Scale Temp: 24.3 C

Full-Scale GAC Size: 12x40 Bituminous coal
 Bench-Scale GAC Size: 100x200
 Scaling Factor: 9.36
 Meas Dry Bed Density: 0.41 g/cm3

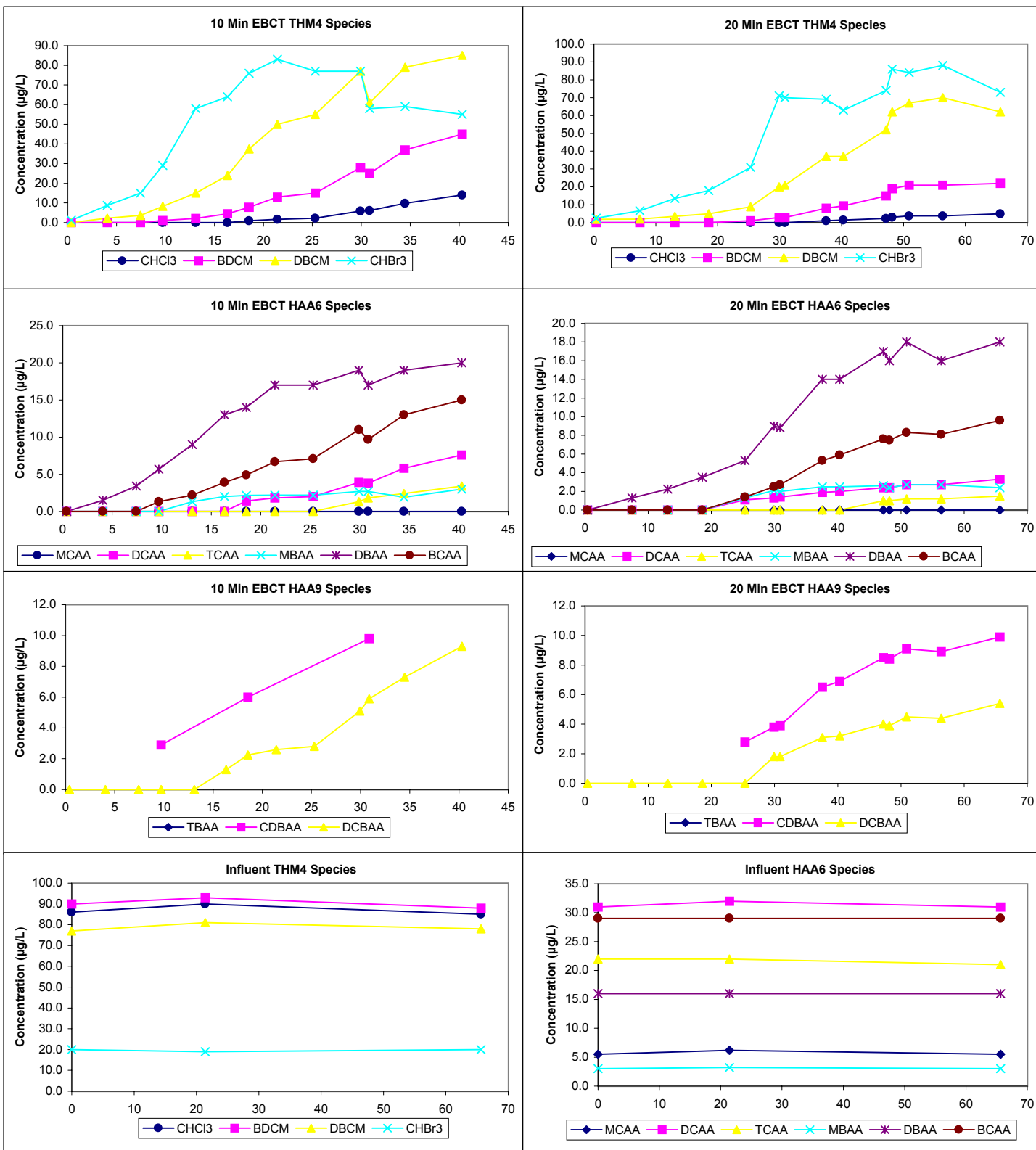
Water Quality Summary

Influent	Influent				Influent				Res (0)	Mean	SD	Count	Min/Max
	Mean	SD/RD	Count	Min/Max	Mean	SD/RD	Count	Min/Max					
TOC	5.8	0.0	3	5.8 - 5.9									
pH	8.2	0.0	3	8.2 - 8.2									
UV254	0.137	0.002	3	0.135 - 0.138									
SUVA	2.34	0.02	3	2.33 - 2.36									
Bromide	305	10	2	300 - 310									
SDS-TOX	388	20	3	365 - 400									
SDS-THM4	276	6	3	271 - 283									
SDS-HAA6	107	1	3	106 - 108									
Effluent	10 Min EBCT (4 B-S days)				20 Min EBCT (7 B-S days)				Chart Legend:	 10 Min EBCT  20 Min EBCT  Influent  Influent			
Effluent pH	8.3	0.1	13	8.2 - 8.3	8.3	0.0	14	8.3 - 8.3					
Effluent Temp	23.1	0.3	13	23.0 - 24.0	23.0	0.0	14	23.0 - 23.0					

Water Quality Graphs



Water Quality Graphs (Continued)



ICR Information

ID / ICR#: TX1780003 / 641
 ICR Contact: Mr Hubert Hall
 Phone No.: 512 857-1871
 Period: 1/22/98 - 2/5/98 (14 B-S days)

Design Information

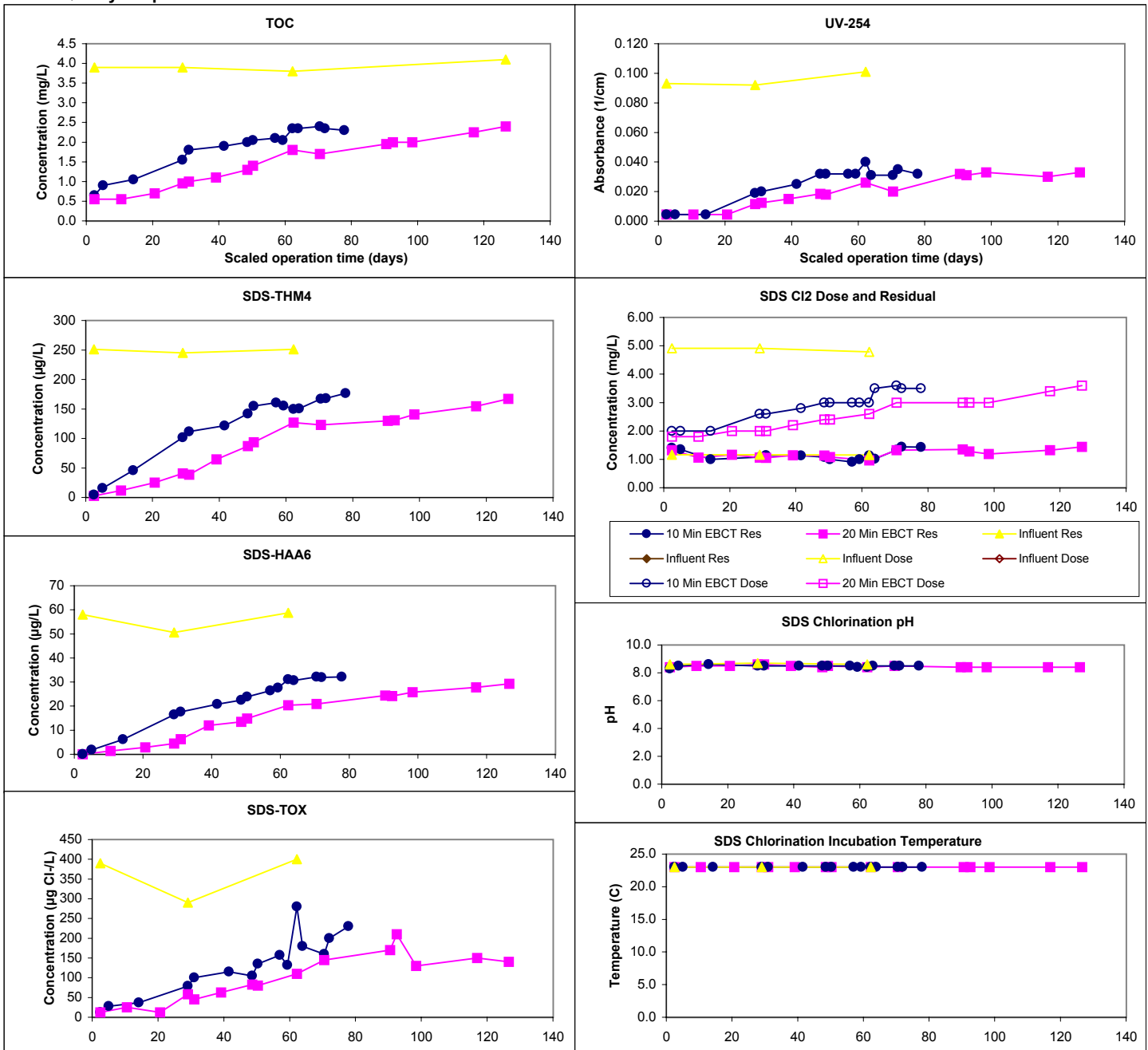
Design TOC: 4.0 mg/L
 Col Diameter: 11.0 mm
 Min Reynolds#: 0.48
 Full-Scale Temp: 18.3 C

Full-Scale GAC Size: 12x40 Bituminous coal
 Bench-Scale GAC Size: 100x200
 Scaling Factor: 9.36
 Meas Dry Bed Density: 0.43 g/cm3

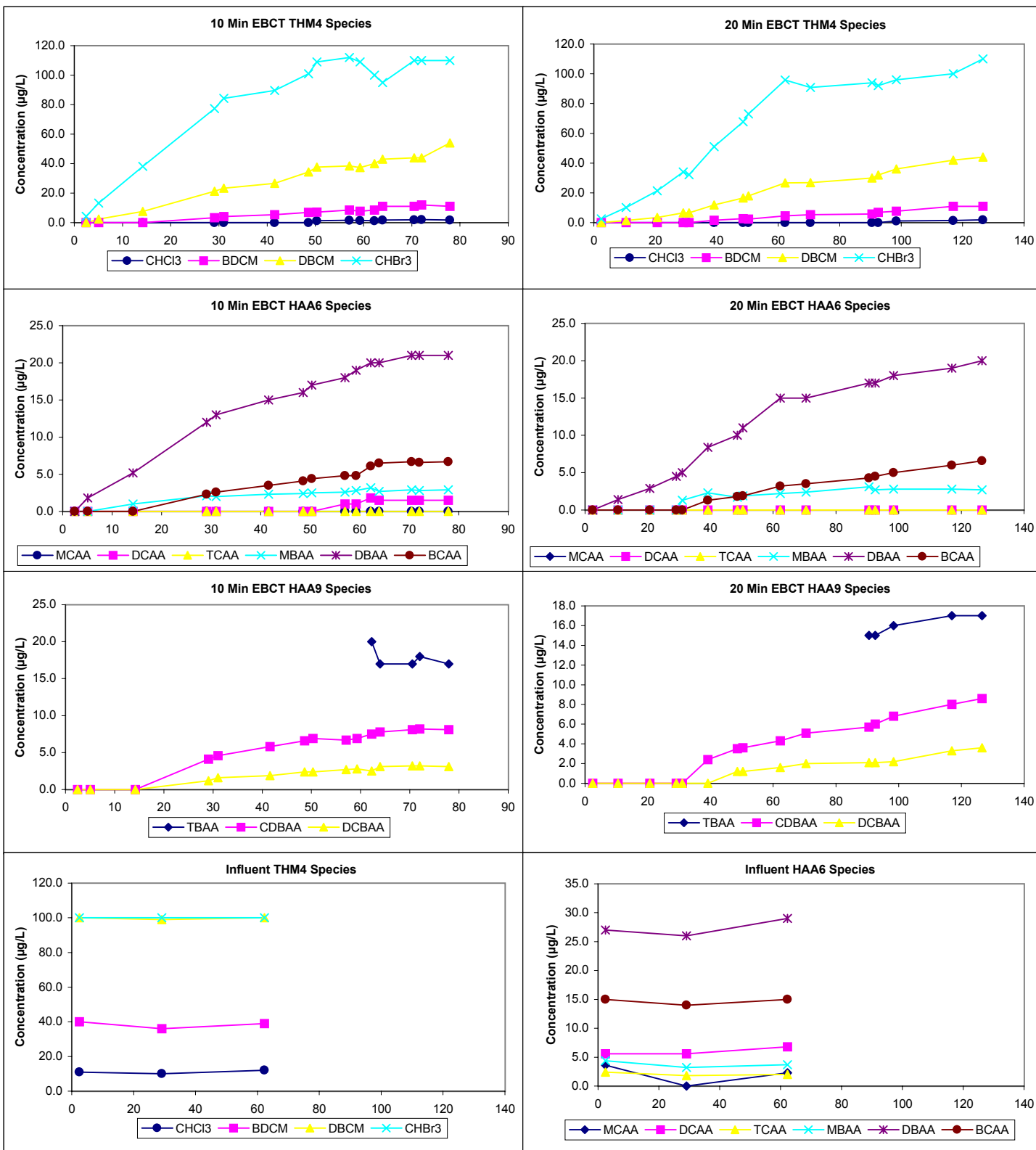
Water Quality Summary

Influent	Influent				Influent				<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><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Water Quality Graphs



Water Quality Graphs (Continued)



ICR Information





ID / ICR#: TX1780003 / 641
 ICR Contact: Mr Hubert Hall
 Phone No.: 512 857-1871
 Period: 4/7/98 - 4/21/98 (14 B-S days)

Design Information

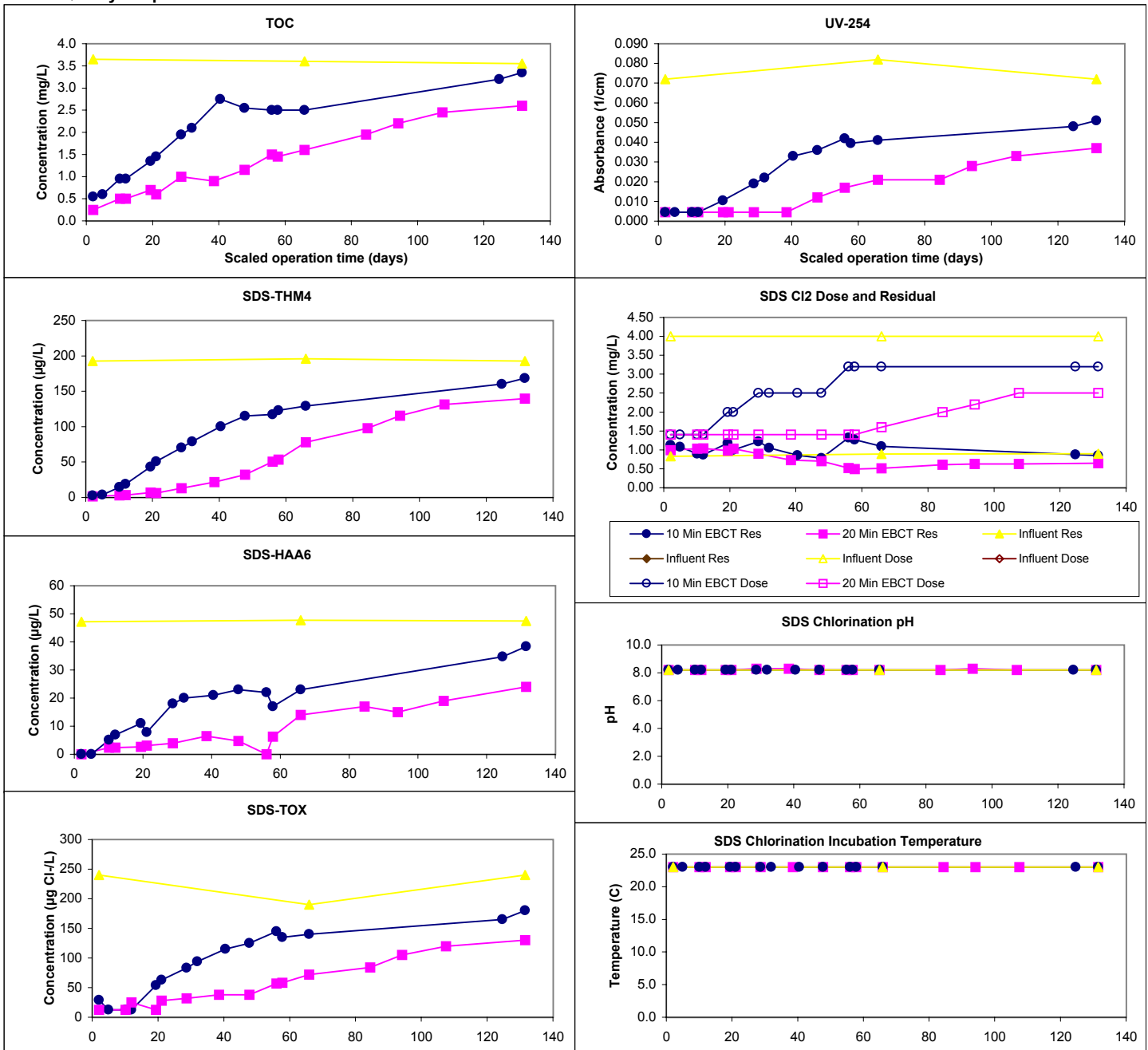
Design TOC: 3.6 mg/L
 Col Diameter: 11.0 mm
 Min Reynolds#: 0.54
 Full-Scale Temp: 23.3 C

Full-Scale GAC Size: 12x40 Bituminous coal
 Bench-Scale GAC Size: 100x200
 Scaling Factor: 9.36
 Meas Dry Bed Density: 0.41 g/cm3

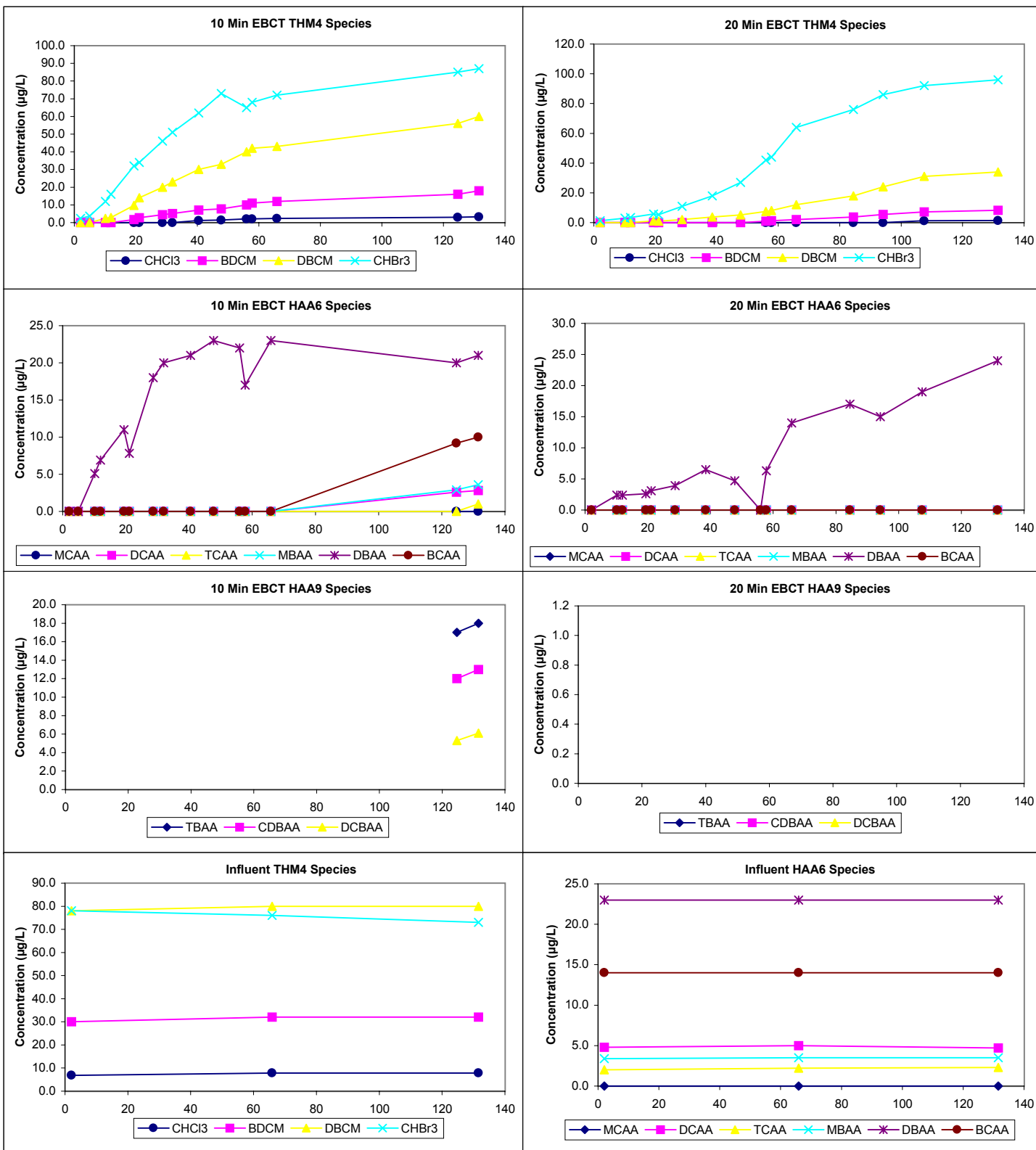
Water Quality Summary

Influent	Influent					Influent				Res (0)	Mean	SD	Count	Min/Max
	Mean	SD/RD	Count	Min/Max		Mean	SD/RD	Count	Min/Max					
TOC	3.6	0.0	3	3.6 - 3.7										
pH	8.0	0.1	3	7.9 - 8.0										
UV254	0.075	0.006	3	0.072 - 0.082										
SUVA	2.09	0.16	3	1.97 - 2.28										
Bromide	475	10	2	470 - 480										
SDS-TOX	223	29	3	190 - 240										
SDS-THM4	194	2	3	193 - 196										
SDS-HAA6	47	0	3	47 - 48										
Effluent	10 Min EBCT (14 B-S days)				20 Min EBCT (14 B-S days)				Chart Legend:					
Effluent pH	8.1	0.0	15	8.0 - 8.1	8.1	0.1	15	8.0 - 8.2		 10 Min EBCT				
Effluent Temp	23.0	0.0	15	23.0 - 23.0	23.0	0.0	15	23.0 - 23.0		 20 Min EBCT				
										 Influent				
										 Influent				

Water Quality Graphs



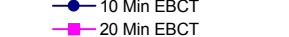
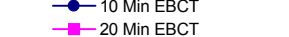
Water Quality Graphs (Continued)



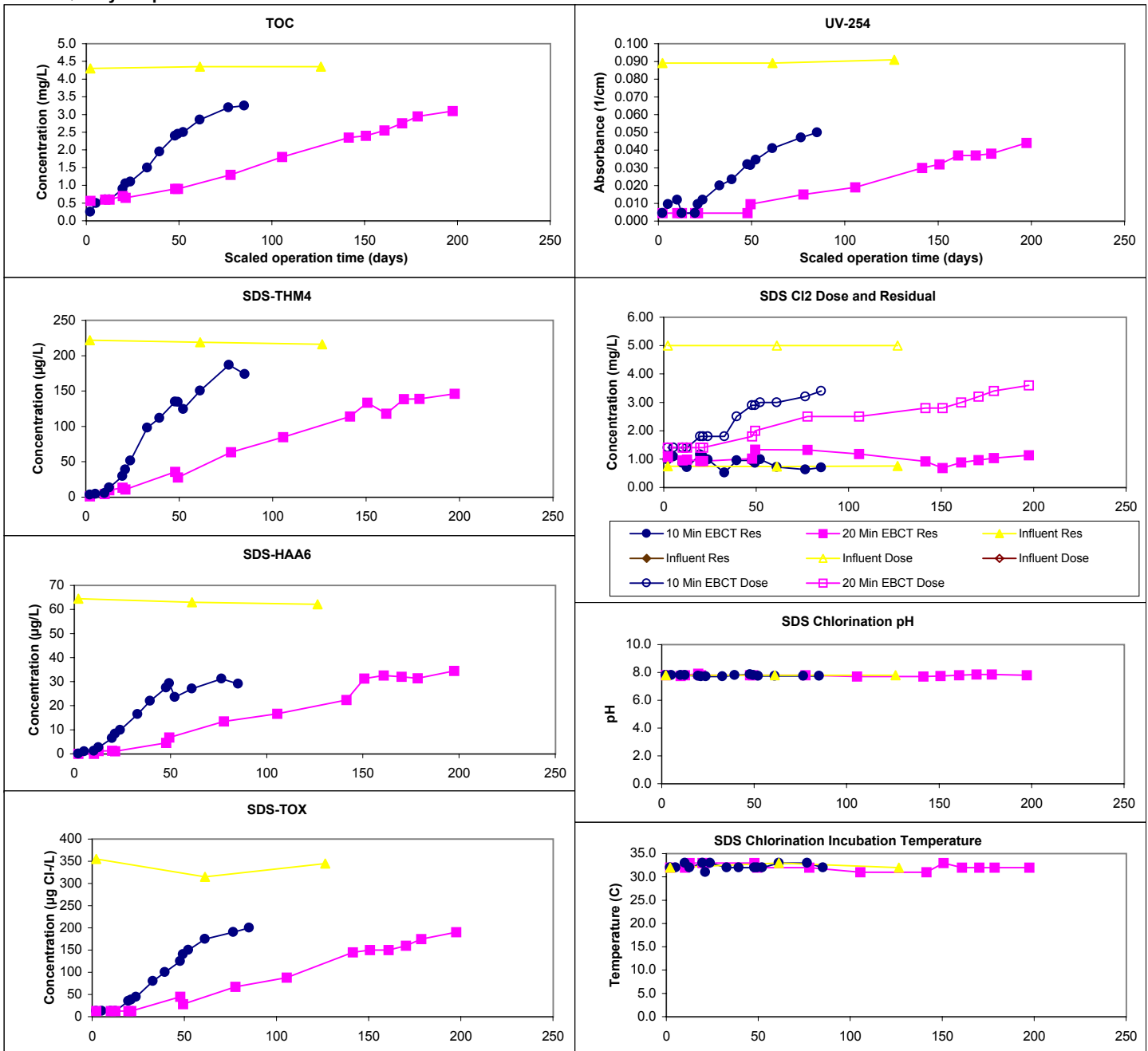
Design Information

ID / ICR#: TX1780003 / 641	Design TOC: 4.1 mg/L	Full-Scale GAC Size: 12x40 Bituminous coal
ICR Contact: Mr Hubert Hall	Col Diameter: 11.0 mm	Bench-Scale GAC Size: 100x200
Phone No.: 512 857-1871	Min Reynolds#: 0.66	Scaling Factor: 9.36
Period: 7/20/98 - 8/10/98 (21 B-S days)	Full-Scale Temp: 32.0 C	Meas Dry Bed Density: 0.50 g/cm3

Cumulative SDS Conditions

Influent	Influent				Influent				Res (0)	Mean	SD	Count	Min/Max
	Mean	SD/RD	Count	Min/Max	Mean	SD/RD	Count	Min/Max					
TOC	4.3	0.0	3	4.3 - 4.4									
pH	8.0	0.1	3	8.0 - 8.1					Temp	32.2	0.6	33	31.0 - 33.0
UV254	0.090	0.001	3	0.089 - 0.091					pH	7.8	0.0	33	7.7 - 7.9
SUVA	2.07	0.02	3	2.05 - 2.09					Time	23.7	0.2	33	23.4 - 24.1
Bromide	330	0	2	330 - 330					Comments: 				
SDS-TOX	338	21	3	315 - 355									
SDS-THM4	219	3	3	216 - 222									
SDS-HAA6	63	1	3	62 - 65									
Effluent	10 Min EBCT (9 B-S days)				20 Min EBCT (21 B-S days)				Chart Legend: 				
Effluent pH	8.1	0.1	15	8.0 - 8.3	8.1	0.1	15	8.0 - 8.4					
Effluent Temp	23.0	0.0	15	23.0 - 23.0	23.0	0.0	15	23.0 - 23.0					

Water Quality Graphs



Water Quality Graphs (Continued)

