APPENDIX J

CAP DESIGN BENCH SCALE STUDY SUMMARY REPORT

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To: Caryn Kiehl-Simpson
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From: Danny Reible, PhD PE BCEE NAE

Re: Final Report -- Cap Design Bench Scale Experiments - Biological Degradation, Gas Generation and Gas Induced Contaminant Mobilization Studies, October 2008

This report presents the final results on the biological degradation, gas generation and gas induced contaminant mobilization evaluations conducted as part of the Onondaga Lake Pre-design Investigation. This work has been conducted in accordance with Addendum 6 of the Phase II Pre-Design Investigation Work Plan (Parsons, 2006), with exceptions noted in Appendix A. Results from the NAPL consolidation study, also completed as part of Addendum 6 are summarized under separate cover.

Evaluations were conducted on samples from 12 locations. These locations are depicted in Figure 1. Table 1 provides an overview of the samples collected and illustrates the testing conducted at each sample location.

1.0 Biological Decay Studies:

1.1 Experimental Methods

Slurries of 200 mL were created in 250-mL amber glass vials capped with "mininert" valves. The solids content (m/v) was 1% for aerobic samples and 5% for anaerobic samples. Porewater was extracted from the samples by centrifugation and analyzed by Severn Trent Laboratories Austin, TX. Artificial porewater was then created for the slurry experiments based on concentrations of nutrients, ionic species, and pH measured in the porewater extracted from the centrifuged cores. Sediment that had been centrifuged for porewater extraction was added to bottles either untreated ("biotic") or autoclaved for one hour at a temperature of 130°C and 15 psi for each of three consecutive days ("abiotic"). Bottles and artificial pore water were autoclaved (separately) for both biotic and abiotic samples (controls); additionally, sediment was autoclaved for abiotic samples. Neither slurries nor sediment used in biotic samples were autoclaved. These controls would indicate degradation associated with either abiotic processes or contamination of slurries by biological activity introduced with the water or sample handling. Despite the autoclaving on three consecutive days, it is possible that some biological activity remained. As will be noted later, SMU 1 samples generally showed little or no degradation over time and thus they served as an excellent control for non-degradative losses, such as volatile losses of contaminants or sorption onto the slurry vessel that might lead to overestimation of transformation rates.

		Gas Generation at 7C, 12C, 22C	Gas Induced Contaminant Mobilization	Biodecay Slurries (Aerobic and Anaerobic)			
		Anaerobic	Uncapped	12C	22C	w/ Phenol	Neutral pH
						22C	22C
ILWD Area A							
	OL-STA-10114	Complete	NR	NR	Complete	Complete	NR
	OL-STA-10115	Complete	NR	NR	Complete	NR	NR
	OL-STA-10116	Complete	Complete	Complete	NR	NR	NR
ILWD Area B							
	OL-STA-10117	Complete	NR	NR	Complete	NR	NR
	OL-STA-10118	Complete	Complete	Complete	NR	NR	Complete
	OL-STA-10119	Complete	NR	Complete	NR	NR	NR
SMU 6							
	OL-STA-60098	Complete	NR	Complete	NR	NR	NR
	OL-STA-60099	Complete	NR	Complete	NR	Complete	NR
	OL-STA-60100	Complete	NR	Complete	Complete	NR	NR
SMU 7							
	OL-STA-70048	Complete	Complete	Complete	Complete	NR	NR
	OL-STA-70049	Complete	Complete	Complete	Complete	Complete	NR
	OL-STA-70050	Complete	NR	Complete	NR	NR	NR

NR – not required per work plan or subsequent cap technical work group discussion.

Aerobic samples were produced by saturating the artificial porewater with oxygen while anaerobic samples were prepared with oxygen free water within a nitrogen glove box. Sufficient oxygen was present in the aerobic samples to maintain a non-zero oxygen concentration even if essentially complete degradation of compounds of interest (COIs) to carbon dioxide and water were to occur.

Aerobic samples were designed to simulate conditions in the upper portions of a cap (typically the biologically active zone), and anaerobic samples were designed to simulate conditions in the underlying sediment and within the chemical isolation layer of a cap. Due to the low solids content, however, the slurry experiments do not replicate organism density or other conditions in a cap precisely but instead are preliminary indications of degradation potential. Triplicate biotic and abiotic samples under both aerobic and anaerobic conditions were created (i.e. 3 aerobic biotic, 3 aerobic abiotic, 3 anaerobic biotic, 3 anaerobic abiotic). A mixture of COIs was added to each bottle, giving a final target concentration of 1 mg/L for each contaminant. Due to variability in transferring a small volume (approximately 1 uL) of organics to water, actual starting concentrations were typically lower than 1 mg/L. This was accounted for by sampling the slurry headspace 24 hours after spiking and using the result as the initial concentration. Bottles were then incubated on a tumbler at either 22°C (10114, 10115, 10117, 60100, 70048, and 70049) or 12°C (10116, 10118, 10119, 60098, 60099, 60100, 70048, 70049, and 70050). Two mL of liquid were removed from each bottle periodically and transferred to a 9-mL vial for analysis of COIs by headspace gas chromatography at the University of Texas. A set of samples collected in September 2008 was analyzed by DHL Laboratories in Austin, Texas as described in Appendix B.

1.2 Analytical Methods

Liquid-phase concentrations from slurry samples were measured by a Tekmar 7000 automated headspace sampler connected to an HP 5890 gas chromatograph with flame-ionization detector. A Restek RTX-624 column (30 m in length, 0.53 mm ID, 3 µm film thickness) was employed. The GC temperature program was a modified adaptation from EPA Method 8260B (40°C for 3 minutes, 8°C per minute to 170°C, 22°C per minute to 260°C, 260°C for 3 minutes) with a carrier gas (He) flow rate of 43 – 45 mL/min. During the April and September, 2008 measurements, the flow rate was reduced to 10 mL/min without loss of chromatogram quality. Analysis of bioslurry samples occurred in three different phases: frequent sampling from March to November, 2007, then single sampling of all slurries in April 2008 and again in September, 2008.

For the March to November, 2007, sampling, an 8-point calibration was performed for each compound in the range of 10 – 1500 ug/L with the exception of naphthalene, for which a 5-point calibration was performed in the range of 125 – 1500 ug/L. Note that the lower calibration range in the interim report was 40 ug/L, but this limit proved inconsistent in continuing calibrations. Calibration curves were performed with all analytes simultaneously to account for interactions that may have affected detection.

Calibration results on which all analytical results are based are shown in Tables 1.1.1 and 1.1.2. Table 1.1.1 shows the peak areas for each standard COI concentration, the slope of a linear, zero-intercept calibration curve and the square of the regression coefficient. r^2 exceeded 0.995 for all compounds. Table 1.1.2 shows the ratio of peak area to concentration, the mean values and the relative standard deviation from the mean. The relative standard deviation was less than 0.25 for all compounds except the dichlorobenzenes which exhibited a relative standard deviation from the mean of 0.297-0.334.

Table 1.1.1: Calibration (Peak Area)

ug/L	10.4	20.8	41.7	125	250	500	1000	1500	Slope	R^2
Bz	6318	12153	28360	88195	188838	427917	911020	1469586	**946.6**	**0.997**
Tol	6268	12139	31897	96808	207908	472115	999121	1616515	**1040.6**	**0.997**
ClBz	4119	8945	23208	71655	150222	335084	701871	1116074	**723.7**	**0.998**
EtBz	5822	11613	30146	92883	197840	452018	965022	1597608	**1019.5**	**0.996**
m-Xyl	6602	11822	29754	90543	191722	434765	925781	1526935	**976.0**	**0.996**
1,3-DCB	3015	7320	20845	69422	148378	332989	711272	1147490	**739.0**	**0.997**
1,4-DCB	1831	4534	13717	46189	101127	228539	485458	779094	**502.8**	**0.997**
1,2-DCB	2239	5863	16991	57501	118817	262927	552998	869145	**565.8**	**0.998**
Naph				36665	89835	199377	421850	623190	**414.6**	**0.999**

Table 1.1.2: Calibration (Area/Concentration)

ug/L	10.4	20.8	41.7	125	250	500	1000	1500	Mean	RSD
Bz	606.5	583.3	680.6	705.5	755.3	855.8	911.0	979.7	**759.7**	**0.189**
Tol	601.7	582.6	765.5	774.4	831.6	944.2	999.1	1077.6	**822.1**	**0.217**
ClBz	395.4	429.3	556.9	573.2	600.8	670.1	701.8	744.05	**584.0**	**0.212**
EtBz	558.9	557.4	723.5	743.0	791.3	904.0	965.0	1065.0	**788.5**	**0.232**
m-Xyl	633.7	567.4	714.1	724.3	766.8	869.5	925.7	1017.9	**777.4**	**0.194**
1,3-DCB	289.4	351.3	500.2	555.3	593.5	665.9	711.2	764.9	**554.0**	**0.303**
1,4-DCB	175.7	217.6	329.2	369.5	404.5	457.0	485.4	519.4	**369.8**	**0.334**
1,2-DCB	214.9	281.4	407.7	460.0	475.2	525.8	553.0	579.4	**437.2**	**0.297**
Naph				293.3	359.3	398.7	421.8	415.4	**377.7**	**0.141**

A laboratory control standard (LCS) was prepared by adding the mixture of COIs to a sample bottle containing 200 mL of deionized water. Each time a batch of samples was analyzed by GC-FID, at least one LCS sample and one sample blank consisting of deionized water was included. Certain compounds in the LCSs were subject to loss mechanisms that reduced their utility as an instrument response indicator. Certain compounds, specifically chlorobenzene exhibited only small losses, however, and so this compound was used to evaluate instrument response. When LCS concentrations of this compound were no longer stable, new LCSs were prepared.

In order to minimize variability observed in early samples, trifluorotoluene (TFT) was included as a surrogate compound in collected aqueous samples prior to analysis beginning on April 18th. TFT is a compound that elutes between COIs and is not present in the site samples. It was hoped that this compound could be used to correct analyte response and thus reduce any analytical variability. Evaluation of TFT results showed that sample-to-sample variation, due largely to inconsistency in volume transfers, limited its usefulness as a correction for individual samples. The mean TFT response measured on a given sampling day, however, was an excellent indicator of detector response, equivalent to a LCS. Substantial degradation of detector performance was noted during the period of April to September due to normal use of the chromatograph and normalization to mean TFT response allowed correction for this degradation in performance. Figure 1.1.1 shows the daily median TFT concentration and illustrates the degradation of detector performance until the instrument was shut down and maintenance conducted between 9/24 and 10/22.

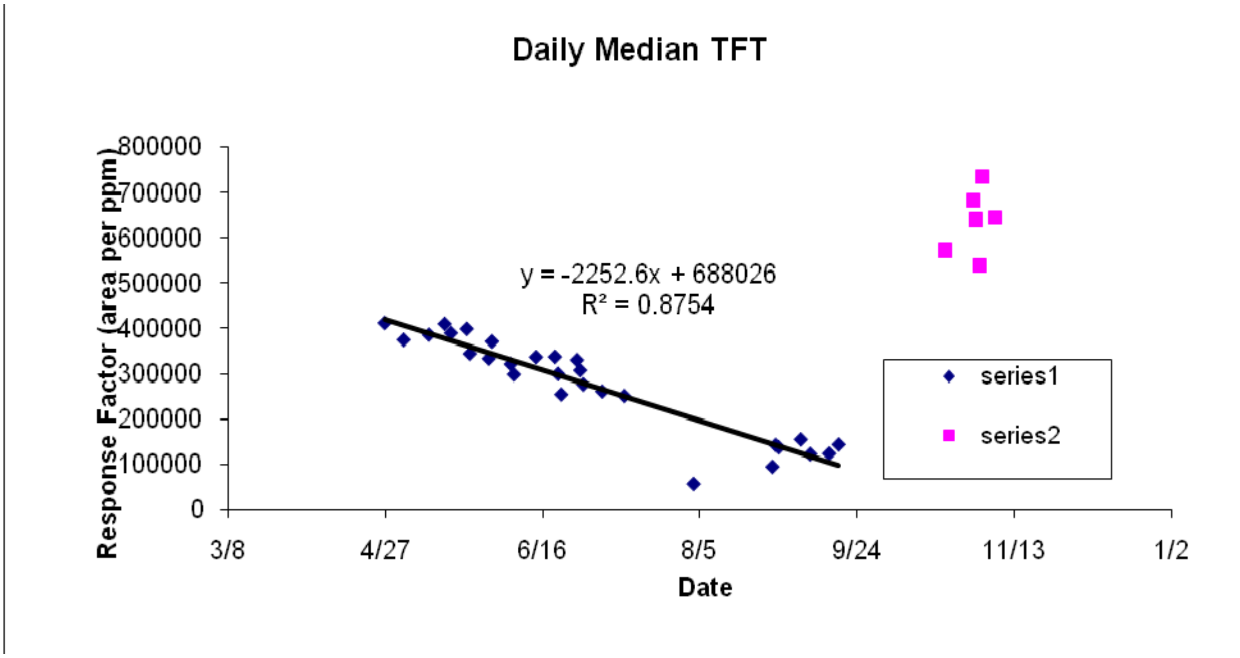


Figure 1.1.1 Median TFT Response with Time

The median TFT response was used to correct instrument response for the experimental period, using the linear degradation in performance with time up until instrument maintenance in October. The corrected TFT response is shown in Figure 1.1.2, indicating that using the TFT corrections in this manner effectively corrected for changes in detector performance over time. For purposes of normalizing detector response, the linear trend shown between mid-April and late September in detector response was projected backwards to the initial samples in mid-March. As will be seen, concentrations in some samples in August are apparently underestimated by as much as a factor of two by this correction but no other deviations were noted. All samples that were apparently underestimated by the August sampling were also sampled in November so that any trends suggested by the August sample could be confirmed or rejected.

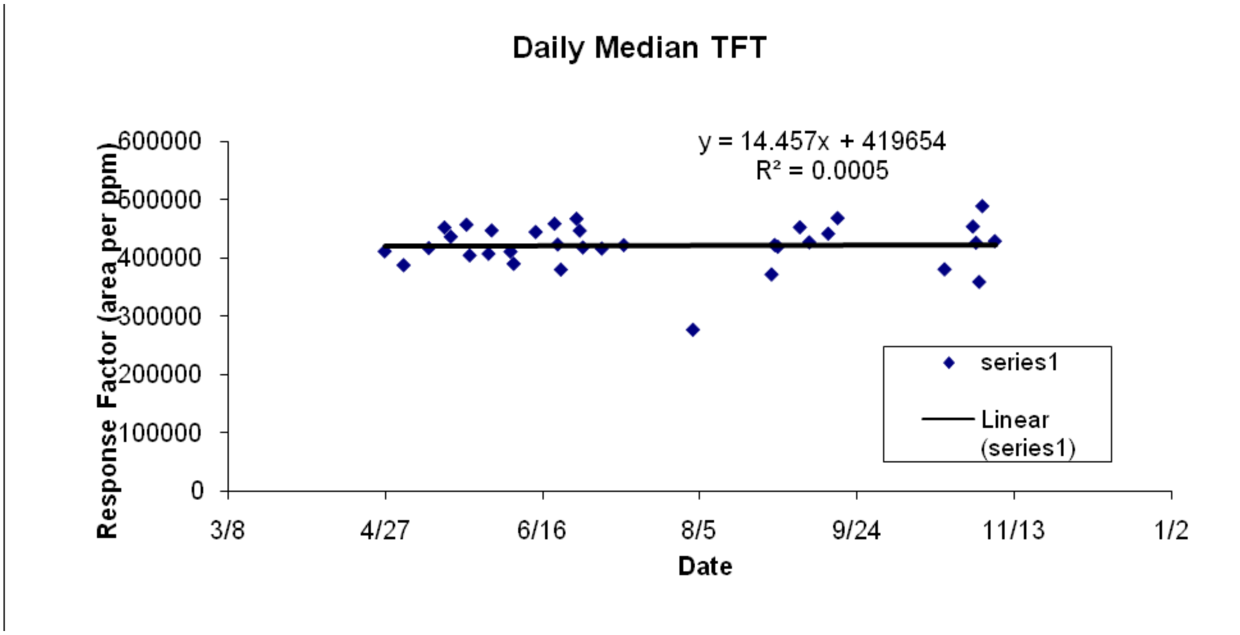


Figure 1.1.2 Corrected TFT Response with Time

New calibrations were made for the April/May 2008 and September/October 2008 sampling events. Both satisfied the quality control criteria of r^2>0.995 and relative standard deviation of less than 0.25.

Although the procedures described above generally led to clear trends of contaminant levels over time (i.e. indicating either evidence of degradation or persistence), occasional sampling events were found to deviate from these trends. In order to minimize the influence of sampling on experimental conditions, deviations or sampling problems were not corrected by resampling but instead subsequent sampling was used to confirm or reject the trends observed. That is, no single dataset was used to indicate contaminant behavior. All trends were confirmed by two or more datasets. Data collected on 5/3/07 and 6/7/07 was flagged because of an error in instrument performance, and data collected April-May of 2008 showed erroneously low concentrations because headspace sample storage times prior to analysis were longer than desired due to instrument maintenance and use for other sampling programs. A subsequent round of slurry sampling in September 2008, however, showed that trends noted prior to April-May 2008 were still observed.

1.3 Results

Concentrations of COIs for each slurry sample are included in Appendix B. All measurements are reported, although as indicated above, data integrity on 5/3/07, 6/7/07 and April-May 2008 are suspect. Analysis of the absolute response measurements over time shows that starting concentrations of contaminants in each slurry vessel were approximately consistent with the desired starting concentration. Some variation was expected and observed due to losses of the volatile COIs during slurry preparation. Initial sampling efforts (e.g. in March) were also subject to greater variability during method development and standardization. In some samples, concentrations were observed to increase over time initially (for 2 weeks to a month) and then decrease or stay constant subsequently. This was likely due to slow release of contaminants already present in the solids fraction of the slurries. This phenomena was repeated in replicates of like treatments. This behavior was primarily observed in SMU 1samples.

Due to the slow initial increase in concentration in some samples as well as the variability in slurry sample concentration in replicates, the data of Appendix B was plotted in terms of concentration (C) normalized by maximum concentration measured in that slurry vessel (C_{max}). This is essentially equivalent to plotting concentration versus initial concentration but recognizes that some of the SMU 1 samples, in particular, increased initially with time as contaminants desorbed in the solid phase. C/C_{max} for all slurry vessels are shown in Appendix B. Normalization by C_{max} generally led to plots with very little scatter between replicates and made it easy to see degradation or transformation trends in the collected concentration data. Vessels demonstrating no concentration change over time (i.e. 10119) suggest that volatile losses were minimal over several sampling events. Loss of contaminant was attributed to biodegradation if rates of change of concentration in biotic vessels were greater than those observed in abiotic vessels. Losses observed similarly in both biotic and abiotic vessels from SMU 1 are likely due to abiotic mechanisms, while those observed in the more biologically active SMUs 6 and 7 may reflect the difficulty in sterilizing a sediment sample by autoclaving. Most importantly, however, the stability of the concentrations over time in the SMU 1 samples shows that volatization losses and sorption losses are generally negligible and any consistent loss over time is reflective of either abiotic or biotic losses that would be expected to occur in the sediment cap. A summary of the qualitative results for each slurry sample follows. Table 1.1.3 summarizes all SMU 1 slurries, Table 1.1.4, all SMU 6 slurries, and Table 1.1.5, all SMU 7 slurries.

Table 1.1.3 – Summary of SMU 1 Slurry Experments

#	Temp. °C	Aerobic/ Anaerobic	Description (trends or no trends in concentration)[1]
10114	22	Aerobic	Concentration increases in slurry for 2-4 weeks after initiation Little or no decrease in concentration in controls or biotic slurries
10114	22	Anaerobic	Concentration increases in slurry for 2-4 weeks after initiation Little or no decrease in concentration in controls or biotic slurries
10115	22	Aerobic	Decrease in concentration in all compounds by 18 months
10115	22	Anaerobic	Little or no decrease in concentration in controls or biotic slurries
10116	12	Aerobic	Little or no decrease in concentration in controls or biotic slurries
10116	12	Anaerobic	Little or no decrease in concentration in controls or biotic slurries
10117	22	Aerobic	Decrease in concentration of all compounds by 18 months
10117	22	Anaerobic	Decrease in concentration of all compounds by 18 months
10118	12	Aerobic	Little or no decrease in concentration in controls or biotic slurries
10118	12	Anaerobic	Little or no decrease in concentration in controls or biotic slurries
10119	12	Aerobic	Little or no decrease in concentration in controls or biotic slurries
10119	12	Anaerobic	Little or no decrease in concentration in controls or biotic slurries

1. Note that lack of a measurable decrease in concentration suggests a half-life for degradation of at least a year.

Table 1.1.4 – Summary of SMU 6 Slurry Experiments

#	Temp. ºC	Aerobic/ Anaerobic	Description[1]
60098	12	Aerobic	Total loss of BTEX compounds in <3 months Little or no decrease in concentration of chlorinated benzenes Naphthalene loss rapid except ~ 3-4 months in one biotic slurry
60098	12	Anaerobic	Loss of TEX and naphthalene, not chlorinated compounds
60099	12	Aerobic	Total loss of BTEX compounds in <3 months Total loss of Monochlorobenzene and naphthalene in < 3 months Little or no decrease in concentration of multiply chlorinated benzenes
60099	12	Anaerobic	Loss of Benzene, Toluene and m-Xylene, little change in others
60100	12	Aerobic	Total loss of BTEX, Monochlorobenzene and naphthalene in < 3 months Uncertain behavior of dichlorobenzenes
60100	12	Anaerobic	Decrease in BTEX and naphthalene in at least 2 of 3 biotic slurries Evidence of Loss of chlorbenzene but not dichlorobenzenes
60100	22	Aerobic	Rapid decrease of Toluene, m-Xylene, and naphthalene, others stable Stopped because of losses observed in control vessels
60100	22	Anaerobic	Decrease in Toluene, Xylene and 1,2-DCB Little or no decrease in others

1. Note that loss of some compounds from abiotic controls is likely an indication of difficulty in ensuring killed controls even with triple autoclaving. Stability of volatile compounds in SMU 1 and other samples shows that loss is not due to sampling or other experimental artifact

Table 1.1.5 – Summary of SMU 7 Slurry Experiments

#	Temp. ºC	Aerobic/ Anaerobic	Description[1]
70048	12	Aerobic	Rapid degradation of BTEX and naphthalene, slower loss of Monochlorobenzene and 1,4-dichlorobenzene, others stable
70048	12	Anaerobic	Rapid decrease (< 3 months) in naphthalene and monochlorobenzene and in BTEX in 2 out of 3 biotic slurries Little or no loss of dichlorobenzenes
70048	22	Aerobic	Rapid loss of BTEX and naphthalene, little or no loss of chlorobenzenes
70048	22	Anaerobic	Rapid decrease (< 3 months) in naphthalene, monochlorobenzene and BTEX Gradual decrease loss of dichlorobenzenes in biotic and abiotic vessels
70049	12	Aerobic	Rapid decrease in all compounds except for 1,3 DCB
70049	12	Anaerobic	Slow degradation of all compounds
70049	22	Aerobic	Rapid degradation of all
70049	22	Anaerobic	Decrease in BTEX. Loss of all DCBs coupled with increase in Monochlorobenzene (degradation product of DCBs) and eventual loss of MCB
70050	12	Aerobic	Rapid degradation of naphthalene (< 3 months), m-xylene (<3 months) Slower decrease in other BTEX compounds (3-6 months) Loss of Monochlorobenzene and 1,4-DCB No decrease in concentration of 1,2- and 1,3-DCB
70050	12	Aanerobic	Little or no decrease in concentration in controls or biotic slurries

1. Note that loss of some compounds from abiotic controls is likely an indication of difficulty in ensuring killed controls even with triple autoclaving. Stability of volatile compounds in SMU 1 and other samples shows that loss is not due to sampling or other experimental artifact

In addition to these slurries, several supplemental slurry experiments were started in September 2007 to conduct a preliminary evaluation of how to initiate biodegradation in SMU 1 samples. The C/C_{max} data for these slurries are also included in Appendix B. These are summarized in Table 1.1.6.

Table 1.1.6 – Summary of Supplemental SMU 1 Slurry Experiments

#	Temp. °C	Aerobic/ Anaerobic	Description
Supp1	22	Aerobic	10118 sediment in 10118 pore water adjusted to pH 7 Little or no degradation in 1 year
Supp1	22	Anaerobic	10118 sediment in 10118 pore water adjusted to pH 7 Likely loss of all compounds observed in both biotic and abiotic vessels
Supp2	22	Aerobic	10118 sediment in artificial porewater of sample 70049 (pH 8.3) Likely loss of all compounds observed in both biotic and abiotic vessels
Supp2	22	Anaerobic	10118 sediment in artificial porewater of sample 70049 (pH 8.3) Likely loss of all compounds observed in both biotic and abiotic vessels
Supp3	22	Aerobic	10118 sediment and artificial porewater adjusted to pH 7 with 0.5 g of 70049 sediment Rapid degradation of all compounds except naphthalene and 13 DCB. Some evidence of degradation of 13 DCB
Supp3	22	Anaerobic	10118 sediment and artificial porewater adjusted to pH 7 with 0.5 g of 70049 sediment Likely degradation of all, benzene and naphthalene uncertain
60100	22	Aerobic	Degradation of Phenol. Rapid degradation of all compounds with addition of phenol (1 replicate)
70049	22	Aerobic	Degradation of Phenol. Rapid degradation of all compounds with addition of phenol (1 replicate)
10114	22	Aerobic	Gradual degradation of all compounds with addition of phenol (1 replicate)
60100	22	Anaerobic	Degradation of Phenol. Loss of all compounds with addition of phenol (1 replicate)
70049	22	Anaerobic	Degradation of Phenol. Loss of all compounds with addition of phenol (1 replicate)
10114	22	Anaerobic	Loss of all compounds with addition of phenol (1 replicate)

The supplemental slurry experiments suggest that rapid degradation of most compounds can occur in a cap over SMU 1 sediments if pH is controlled and if degradation is seeded by deposition of sediment from elsewhere in the lake.

Phenol has been shown in the literature to readily degrade with relatively short half lives (Howard, 1991). To confirm phenol degradation under site specific conditions three slurries anaerobic and aerobic were run on one sample from each SMU. Table 1.1.7 presents the results of the phenol slurries. Biological activity is confirmed by degradation of phenol by both aerobic and anaerobic slurries of sediment from SMU 6 and 7. The presence of phenol also apparently leads to degradation of essentially all compounds in SMU 6 and 7.

Table 1.1.7: Phenol Concentration in Supplemental Slurry Vessels
Spiked on 7/11/07 (target concentration 1.0 mg/L)
Measured by DHL-Austin on 9/25/08

Sample	Phenol (mg/L)
10114 Aerobic Biotic	0.392
10114 Aerobic Control	0.339
10114 Anaerobic Biotic	0.398
10114 Anaerobic Control	0.491
60100 Aerobic Biotic	<0.001
60100 Aerobic Control	<0.001
60100 Anaerobic Biotic	<0.001
60100 Anaerobic Control	0.357
70049 Aerobic Biotic	<0.001
70049 Aerobic Control	<0.001
70049 Anaerobic Biotic	<0.001
70049 Anaerobic Control	0.446

Evidence of biological degradation of COIs is characterized as substantial (S), moderate (M), or no observed degradation (within the time frame indicated) (n) as summarized in Table 1.1.8. Substantial implies essentially complete loss within 6-12 months in at least two of the three slurry replicates. Moderate implies a loss of the order of 50% within 12-18 months and "n" implies no observed degradation. "n" is sometimes associated with widely scattered data that may be the result of heterogeneity in the dilute slurries. This variability is likely the result of sample heterogeneity which is likely exaggerated by the small sample size and dilute slurries employed in these experiments. It is believed that if one or two of the slurry replicates for a particular treatment exhibit substantial degradation, then substantial degradation should be expected under field conditions where sediment density is higher and organism density is unlikely to be as variable as in the dilute slurry experiments. Phase III and IV PDI column experiments are underway to examine field degradation potential under cap conditions (Parsons, 2007 and Parsons, 2008).

COIs showing moderate or substantial degradation would be expected to degrade within the residence time within a cap while the samples with no observed degradation may or may not exhibit significant degradation. Note that reaction half-lives of a year or more were assumed for many of the more refractory compounds in the capping modeling efforts to date and reactivity on this time scale would not have been observable in the slurry experiments. Application of these results in future modeling efforts will be presented in subsequent design submittals.

Table 1.1.8: Summary of biodecay results. Evidence of biodecay is classified as substantial (S), moderate (M), or none (n).

Core	T (°C)	Aero/ Anaero	Bz	Tol	CB	EtBz	m-Xyl	1,3 DCB	1,4 DCB	1,2 DCB	Naph
10114	22	Aero	n	n	n	n	n	n	n	n	n
		Anaero	n	n	n	n	n	n	n	n	n
10115	22	Aero	M	M	M	M	M	M	M	M	M
		Anaero	n	n	n	n	n	n	n	n	n
10116	12	Aero	n	n	n	n	n	n	n	n	n
		Anaero	n	n	n	n	n	n	n	n	n
10117	22	Aero	M	M	M	M	M	M	M	M	M
		Anaero	M	M	M	M	M	M	M	M	n
10118	12	Aero	n	n	n	n	n	n	n	n	n
		Anaero	n	n	n	n	n	n	n	n	n
10119	12	Aero	n	n	n	n	n	n	n	n	n
		Anaero	n	n	n	n	n	n	n	n	n
60098	12	Aero	S	S	n	S	S	n	n	n	S
		Anaero	n	M	n	M	M	n	n	n	S
60099	12	Aero	S	S	S	S	S	n	n	n	S
		Anaero	M	M	n	n	n	n	n	n	M
60100	12	Aero	S	S	S	S	S	n	n	n	S
		Anaero	M	S	M	M	M	n	M	M	n
	22	Aero	n	S	n	n	S	n	n	n	S
		Anaero	n	S	n	n	S	n	n	M	n
70048	12	Aero	S	S	M	S	S	n	M	n	S
		Anaero	S	S	S	S	S	n	n	n	M
	22	Aero	S	S	n	S	S	n	n	n	S
		Anaero	S	S	S	S	S	M	M	M	S
70049	12	Aero	S	S	S	S	S	n	S	S	S
		Anaero	M	M	M	S	S	M	M	M	M
	22	Aero	S	S	S	S	S	S	S	S	S
		Anaero	M	S	n	S	S	S	S	S	n
70050	12	Aero	M	M	M	S	S	n	M	n	S
		Anaero	n	n	n	n	n	n	n	n	n

2.0 Gas Generation and Contaminant Transport:

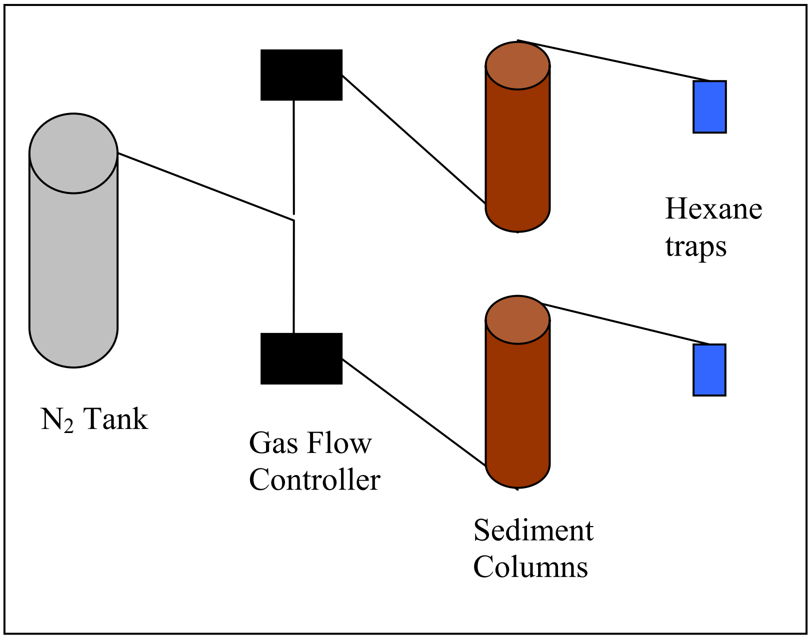
Two sets of experiments were conducted. Gas generation experiments were designed to measure the gas generation potential of the sediments and involved measuring gas ebullition in closed tubes filled with wet sediment. The resulting contaminant transport was assessed through column experiments in which gas was introduced to a sediment layer at a rate in the upper range of gas ebullition rates (i.e. at 1 $L/m^2/day$). The effluent gas stream was bubbled through a solvent trap filled with hexane and the hexane was periodically sampled to monitor the mass of contaminants transported by the gas.

2.1 Experimental Methods

Gas Generation: Tests for gas generation were conducted by adding wet sediment to a 30-mL glass tube and filling the tube 2/3 – 3/4 full with de-aerated artificial porewater in an anaerobic glove box. The tube was sealed with a butyl rubber septum and aluminum crimp cap. Tubes were incubated in duplicate at 7°C, 12°C, and 22°C. Gas production in the sediment was measured periodically by shaking the tubes to tease entrapped gas from the sediment into the headspace and puncturing the septum with a needle attached to a U-tube manometer to measure the headspace pressure. Gas generation measurements were made at intervals likely to produce measurable quantities of gas. On the basis of some preliminary measurements, a weekly sampling schedule was selected. Samples 10114, 10117, 60100, 70048, and 70049 were initiated with 20 grams of wet sediment, however this proved difficult to mix thoroughly, so the sediment mass was reduced to 10 grams for the remaining samples. Additional porewater was added to produce the desired volume of headspace in an effort to maintain consistency in sensitivity to pressure changes between samples.

Contaminant Transport: Sediment was extruded from cores into Kontes chromatography columns (4.8 cm diameter, 15 cm height). Flow from a nitrogen tank was split into two lines, each with a gas flow controller (Alicat Scientific, Tucson, AZ) connected to the bottom of a column. Teflon tubing directed gas flow from the top of the column into an amber vial containing 10-mL of hexane (Figure 2.1.1). The hexane trap was sampled periodically to monitor concentrations of COIs, and hexane was added after sampling to maintain a trap volume of 10-mL. Nitrogen flow was metered at 1.2 uL/min beginning on November 7, 2007. This flow corresponds to approximately 1 $L/m^2/day$.

Figure 2.1.1: Diagram of gas-induced transport apparatus. Two columns were operated simultaneously. Flow from a nitrogen tank was split and conveyed to gas flow controllers which metered gas flow to the two columns.



2.2 Analytical Methods

Gas Generation: A U-tube manometer was constructed by connecting two inverted 25-mL serological pipettes together with plastic tubing. The manometer was filled with displacement liquid ("reagent d: acidic salt solution", Standard Methods for Examination of Water and Wastewater, Method 2720B). One pipette tip was connected by plastic tubing to a 19G needle which was inserted through the butyl rubber stoppers into the headspace of the anaerobic tubes.

Gas-Induced Transport: A 1 uL sample was removed from the hexane trap and injected manually into the injection port of an HP 5890 with flame-ionization detector from November 7, 2007 through January 23, 2008. Samples were collected every two weeks and analyzed on an Agilent 6890 with FID and a Gerstel automated sampler thereafter. Both instruments used Restek RTX-624 columns (30 m in length, 0.53 mm ID, 3 µm film thickness), and temperature programs were adapted from EPA Method 8260B (40°C for 3 minutes, 8°C per minute to 170°C, 22°C per minute to 260°C, 260°C for 3 minutes). Helium served as the carrier gas at flow rates of 40-45 mL/min on the 5890 and at 8-10 mL/min on the 6890. Laboratory control standards (LCS) of 1 and 2 ppm COI in hexane were employed as external standards, and an injection of the solvent used to refill the traps (i.e. hexane with 5 ppm TFT) was used as an analytical blank. The use of pure hexane as a solvent interfered with the measurement of benzene and so fluxes of benzene were not estimated.

2.3 Results

Gas Generation: Changes in headspace pressures observed by manometry were converted to volumetric rates of gas generation and normalized by sediment mass. Gas generation results are summarized in Table 2.3.1. Appendix C describes the mass balance and volumetric rate conversion used to calculate the results in Table 2.3.1. The area normalized gas generation rate was estimated by assuming that all gas was being generated in a 10 cm layer of sediment with bulk (dry) density of 1/cm^3. Note that only SMU 7 exhibited gas generation rates approaching or exceeding 1 L/m^2-day which is typical of relatively "gassy" sediment. For example, rates of 1 L/m^2-day have been observed in the Anacostia River, an urban river with substantial sewage and combined sewer overflow source contributions. Seepages meters installed in Onondaga Lake over the course of the PDI provide an additional point of comparison. The most reliable data for this comparison was collected in 2007, average gas generation rates measured in 2007 from Onondaga Lake seepage meters measured 0.14 L/m2/day in SMU 4 and 0.25 L/m2/day in SMU 7.

Table 2.3.1: Summary of gas generation results

Core (T at max gas generation rate)	Lag time (d)	Max gas generation (uL/g-day)	Max gas generation (L/m^2-day)[1]	Duration of generation (d)
60098 (12 C)	12	0.7	0.07	7
60099	no generation after 15 days[2]			
60100 (22 C)	18	2.7	0.27	7
70048 (22 C)	26	6.9	0.69	7
70049 (22 C)	7	17.1	1.71	19
70050 (22 C)	0.05 µg/L-day after 15 days			
10114	no generation for 34 days (tests stopped)[2]			
10115	no generation after 21 days[2]			
10116	no generation after 15 days[2]			
10117	no generation for 34 days (tests stopped)[2]			
10118	no generation after 29 days[2]			
10119	no generation after 29 days[2]			

[1] gas generation rates of 1 L/m^2-day are typical for "gassy" sediment and have been observed in the Anacostia River
[2] no generation implies < 0.01 µL/g-day

Gas-Induced Transport: Mass of COIs in the hexane traps was determined as the product of the concentration observed in the trap and the hexane volume in the trap. The mass was divided by the cross-sectional area of the column to give mass per area. Changes in mass per area with time give mass flux. Concentration data and flux calculations are included in Appendix D.

An estimate of the maximum contaminant flux from the columns can be made by assuming that the mobile gas phase is in equilibrium with the porewater. Porewater concentrations in replicate samples were analyzed by STL/Test America at the outset of the experimentation. The theoretical maximum flux assuming that the primary mechanism of gas induced transport is due to contaminant partitioning into the vapor phase, is given by

$$Flux_{theoretical} = \left(1 \frac{L}{m^2 \cdot day}\right) HC_{pw}$$

Yuan et al. (2007)[a] observed experimentally that the gas induced flux from a contaminated sediment was indeed bounded by this estimate. Table 2.3.2 summarizes the measured porewater concentrations, Henry's Law constants, theoretical fluxes and observed fluxes for column 10018.

Table 2.3.2 – Observed and Theoretical Gas-Induced Contaminant Fluxes, Column 10018

	H (Cg/Cpw)	Cpw by STL (ug/L)	Flux Theoret (mg/m^2 day)	Flux Observed (mg/m^2 day)	R^2	Obs/Theory
Bz	0.15	1100	0.165	NA		NA
Tol	0.16	660	0.106	0.068	0.85	0.64
ClBz	0.183	18000	3.294	0.547	0.84	0.17
EtBz	0.169	ND	NA	0.0083	0.74	NA
Xyl	0.089	2900	0.258	0.12	0.9	0.46
13DCB	0.040	ND	NA	NA	NA	NA
14DCB	0.067	3300	0.221	0.034	0.92	0.15
12DCB	0.053	4100	0.217	0.010	0.84	0.05
Naph	0.0197	2900	0.057	0.0045	-1.48	0.08

Also included in Table 2.3.2 are r^2 values which indicate whether a linear trend in mass versus time was observed. If gas transport did not lead to a linear trend, it is likely that the fluxes measured are inaccurate. The low gas flow rates may lead to inadequate purging of the head space above the solvent leading to the potential for contamination of the solvent from other sources over the long period of exposure in the experiments. Strong linear trends, however, are strong indications that contaminant transport from the columns was the cause of the observed increase in concentration in the solvent and the reported flux. The final column in Table 2.3.2 indicates the ratio of the observed flux to the theoretical maximum. For more volatile species, this ratio is generally high (e.g. 0.64 for toluene) which is consistent with the expectation that these compounds would exhibit little or no air-side mass transfer resistances. For less volatile compounds such as the dichlorobenzenes, both air and water side mass transfer resistances may be important leading to less complete mass transfer into the mobile gas phase (that is, greater disequilibrium).

The relative significance of contamination of the solvent over time would be expected to be a more serious issue when the porewater concentrations are lower. This was demonstrated in column 70049 as shown in Table 2.3.3.

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[a] Yuan, Q., KT Valsaraj, DD. Reible and CS Willson, "A laboratory study of sediment and contaminant release during gas ebullition," Journal of the Air and Waste Management Association, 59, 9 (2007)

Table 2.3.3- Observed and Theoretical Gas-Induced Contaminant Fluxes, Column 70049

	H (Cg/Cpw)	Cpw by STL (ug/L)	Flux Theoret (mg/m^2 day)	Flux Observed (mg/m^2 day)	R^2	Obs/Theory
Bz	0.15	9.2	1.38E-03	NA		NA
Tol	0.16	1.7	2.72E-04	NA		NA
ClBz	0.183	78	0.0143	0.009	-0.48	0.63
EtBz	0.169	ND	NA	0.0063	0.54	NA
Xyl	0.089	5.8	5.16E-04	0.0087	0.94	16.85
13DCB	0.040	2.3	9.20E-05	0.0085	0.93	92.39
14DCB	0.067	21	1.41E-03	0.013	-1.56	9.23
12DCB	0.053	ND	NA	0.014	0.49	NA
Naph	0.0197	NA	NA	0.021	0.37	NA

For column 70049, the observed fluxes are often greater than predicted by the theoretical maximum. Since this is not supported by an appropriate mechanism and is contrary to past experience, it is believed that these artificially high gas-induced contaminant fluxes are an experimental error, likely associated with the need for long sample collection times and dependence upon near detection limit samples. Both factors would exaggerate the affect of background contamination leading to overestimates of contaminant fluxes. This is also reflected in the fact that the r^2 values suggest that most of the observed data do not fit the expected linear trend. In many cases, the highest concentration in the solvent collection phase were highest is the earliest times, magnifying the overestimate of flux. The apparent linear trends shown for xylene (r^2=0.94) and 13 DCB (r^2=0.93) are based upon only 2 and 3 non-zero data points, respectively, and represent concentrations that are near method detection limits. Based upon this rationale, the actual fluxes from core 70049 were judged to low to reliably estimate and that the estimated flux is unreliable.

The procedure was replicated with cores 10116 and 70048 with similar results. Observed fluxes for core 10116 were approximately one order of magnitude smaller than theoretical fluxes based on measured pore water concentrations, while those observed in 70048 were poorly correlated with predicted fluxes (Table 2.3.4).

As a result of the inability to reliably detect gas induced transport in the relatively lightly contaminated samples, plans to measure such transport in SMU 6 columns were abandoned.

In addition, the ongoing column experiments are evaluating the ability of a cap to attenuate contaminants in water flowing at 0.2 cm/day or 2 L/m^2/day. Since Henry's Law constant are less than unity for all compounds (0.02-0.18), this means that the water-induced contaminant fluxes into the caps in the columns are much larger than the gas-induced contaminant fluxes. Thus demonstration of effective attenuation of the water driven flux will demonstrate affective attenuation to the average gas-induced flux.

Table 2.3.4: Observed and Theoretical Gas-Induced Contaminant Fluxes, Columns 10116 and 70048

	H (Laq/Lg)	Core 70048 Porewater Conc by STL (ug/L)	Theoretical Flux (mg/m^2 day)	Observed Flux (mg/m^2 day)	Core 10116 Porewater Conc by STL (ug/L)	Theoretical Flux (mg/m^2 day)	Observed Flux (mg/m^2 day)
Bz	0.15	15	0.002	NA	730	0.110	NA
Tol	0.16	2.8	0.000	NA	1200	0.192	NA
ClBz	0.183	51	0.009	0.088	870	0.159	0.010
EtBz	0.169	2.9	0.000	0.005	130	0.022	0.001
Xyl	0.089	17	0.002	0.046	3400	0.303	0.015
13DCB	0.040	1.9	0.000	0.000	ND	NA	0.013
14DCB	0.067	9.8	0.001	0.098	210	0.014	0.014
12DCB	0.053	1	0.000	0.048	490	0.026	0.006
Naph	0.0197	NA	NA	NA	1900	0.037	NA

3.0 Conclusions and Recommendations

3.1 Biological Decay Slurry Experiments

Results to date have shown that microbial activity is highest in SMU 7. In SMU 7, COIs degrade over days to months timeframes under aerobic conditions. Compound disappearance slows considerably at 12 C but evidence of degradation is still noted. Reactivity under anaerobic conditions is much more uneven and many compounds appear refractory.

Since half-lives of a year or more were used in the FS cap design, these results suggest that the protectiveness of a cap in SMU 7 would generally equal or exceed FS expectations. Gas generation, while significant (of the order of as much as 1 L/m^2·day), does not appear to be sufficient to significantly compromise a sediment cap based on the investigators experience at other sites. Gas migration has generally not proven to be of concern except at sites where gas passes through a pool of mobile NAPL.

Degradation reactions are slower in SMU 6 although some degradation is noted under both anaerobic and aerobic conditions. Gas generation is significantly lower in SMU 6 compared to SMU 7, this is likely associated with the reduced presence of labile organic matter reducing microbial activity rather than being contaminant related. Labile organic matter is typically present in concentrations of grams of organic matter per kg of solids, whereas contaminants are typically present at mg per kg solid concentrations.

In SMU 1, no evidence of significant biological degradation has been observed although some samples (10115 and 10117) have shown partial contaminant loss over the 18 months. This may simply reflect degradation over time frames that exceed the current experimental times or it may be due to a lack of microbial activity in the remaining samples. Slurries in which pH was controlled and seeded with a small amount of SMU 7 sediments led to contaminant degradation indicating that such measures would enhance biological degradation in SMU 1 sediments.

Column experiments are currently being conducted that employ sediments at near *in situ* density (rather than dilute aqueous slurries). A more realistic simulation of cap conditions is achieved with column experiments. These experiments better reproduce redox conditions and sediment, nutrient and microbial population density within the cap. Column experiments also reproduce the potential buffering of SMU 1 porewater pH that a cap might afford. Finally column experiments are evaluating the potential for enhancements, including an active cap material, on Onondaga sediments.

3.2 Gas Generation and Transport Experiments

Gas generation, while significant in some area (of the order of as much as 1 $L/m^2 \cdot day$), does not appear to be sufficient to significantly compromise a sediment cap based on the investigators experience at other sites. Gas migration has generally not proven to be of concern except at sites where gas passes through a pool of mobile NAPL. The best estimate of the contaminant release associated with gas generation is the gas generation rate times the gas phase concentration that would be in equilibrium with the porewater. Due to mass transfer limitations, the actual gas phase concentration is likely to be a fraction of the equilibrium concentration based upon the data from SMU 1 cores which were judged to provide reliable data as a result of their internal consistency as well as their consistency with theory and previous evaluations at other sites. The low concentration cores from SMU 7 and 6 were not judged to provide accurate results due to nonlinearity of the solvent absorbed concentration and the fact that observed fluxes were sometimes estimated to be well above theoretical maximums.

Note that the gas generation rate employed, 1 $L/m^2 \cdot day$, is well above that expected over most of the site and that post-capping, this gas generation rate would be expected to decline over a period of month to years as a result of the depletion of labile organic matter.

4.0 References

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FIGURES

Capping Bench Test Sample

NOTES

1. Bathymetry contours are in 4 foot intervals.
2. Water depth based on average lake elevation of 362.82 feet.

0 95 190 380 570 760 950
Feet

FIGURE 1

Honeywell

Onondaga Lake
Syracuse, New York

SMUs 1-6-7
Phase II PDI Capping
Bench Test Sample Locations

PARSONS

290 ELWOOD DAVIS RD, SUITE 312, LIVERPOOL, NY 13088 Phone:(315)451-9560

APPENDICES

Appendix A - Deviations from Work Plan

The following sections describe deviations from Addendum 6 to the Phase II Onondaga Lake Pre Design Investigation Work Plan (Parsons, 2006). The deviations discussed in the following section were employed to enhance the outcome of the experimental results while staying true to the stated objectives of the Work Plan. The majority of deviations were changes made based on the results of initial tests and are not anticipated to impact the usability of the study results.

Biological Decay Studies:

Deviations from the work plan included decreasing sediment-water ratios to allow maintenance of oxygen concentrations in the oxygen saturated slurry. Under aerobic conditions, 1% w/v sediment slurries were employed. Under anaerobic conditions, 5% w/v slurries were employed to increase initial biomass and expedite rates of contaminant transformation.

Initial Porewater and sediment samples were transmitted to Severn Trent Laboratories, Austin, TX (now TestAmerica), rather than analyzed at the University of Texas, to expedite the tests. Other samples during the slurry testing were analyzed at the University of Texas and by DHL laboratories in Austin, TX as described in Appendix B.

Contaminant concentrations were reduced from 10 mg/L to 1 mg/L so that oxygen would be available in excess in aerobic vessels in the event of complete contaminant oxidation to carbon dioxide and water.

Biodecay studies were originally planned to be performed at 22°C (room temperature). After an initial review of the progress to date (during a March 2007 meeting at the University of Texas) it was decided by the project team in consultation with NYSDEC that tests should take place at 12°C (near the annual median temperature for the lake). Half of the tests would continued to be run at 22°C to observe early signs of biological activity as it was assumed that the tests run at the higher temperature would begin to decay sooner. For the tests that had been initiated at 22°C in SMU 1 (10114, 10115, 10117) where no biological decay was observed it was decided that tests for those samples would not be run at 12°C unless decay was observed at 22°C.

Photographs were taken in the field of each core prior to shipment. The work plan stated that additional photographs would be collected of each core upon receipt at the laboratory prior to initiation of the tests. Limited photographs were taken in the laboratory since all cores arrived in good condition; however, the characteristics of the core were documented as they were opened.

The work plan noted that slurry experiments would be run using sand to assess the influence of cap material on degradation rates. In lieu of the column experiments currently underway, these tests are not deemed to be necessary.

Phenol was analyzed as an additional COI in a separate batch of slurry experiments. These slurries were analyzed by DHL Laboratories in Austin. It is unlikely given the concentrations observed in lake sediments that phenol will drive the cap model; however, the most conservative literature biological decay rate is fairly rapid and it would be useful to understand any potential variation using site specific results.

The use of a range of controlled redox conditions were considered for the slurry experiments. Initial testing, however, indicated that conducting experiments in this manner required open microcosms and would likely lead to significant volatile losses. Mass balance calculations indicated that experiments could be conducted in sealed microcosms under fully aerobic conditions (simulating the near surface sediment environment) and fully anaerobic conditions (simulating the deep sediment or cap layers). These extremes are the most relevant to predicting the fate of contaminants within the cap and were chosen for the slurry experiments.

Gas Generation:

Thirty-mL tubes were employed rather than serum bottles. The reduction of volume facilitated temperature-controlled storage. The change also necessitated a reduction in sediment volume over initial plans.

Artificial porewater was employed in the gas generation experiments rather than the lake water specified in the work plan. Lake water would not adequately represent porewater conditions nor would its properties be expected to be stable during storage.

Gas generation rates were measured on a weekly basis. This was based on preliminary measurements and the likelihood of a time interval over which gas would be produced in measurable quantities.

For gas-induced transport, a 15-cm column was filled with sediment, and water and hexane were not added to the column. To increase sensitivity to contaminant concentration, the volume of hexane used to trap VOCs was reduced ten-fold, from 100-mL in the column to 10-mL in an external vial. Samples were analyzed according to EPA method 8015 (VOC detection by FID) instead of 8260 (GC-MS).

The work plan indicated that the hexane trap would be in the sediment column in direct contact with the overlying water, however, the hexane trap was maintained in a separate vessel to ensure sample integrity. Additionally,, the experiments of Yuan et al.. (2007) illustrated that the product of the equilibrium gas phase concentration and gas ebullitions rate bounded the ebullition induced contaminant flux. This is particularly true under capped conditions in that essentially any cap layer effectively eliminates any sediment resuspension or excess water flux due to physical disturbance of the sediment.

The work plan indicated that gas would be injected over a range of gas generation rates, however experiments were conducted using a single rate. The single rate experiments indicated that contaminant flux could likely be predicted from the gas phase concentration as determined by Henry's Law and the gas flow rate through the column.

The work plan indicated that an experiment using a thin sand cap would be used to evaluate the effectiveness of such a cap. Contaminant flux due to gas ebullition was determined to be much smaller than the expected flux due to pore water advection, as discussed in the final paragraph of page 17. Therefore evaluation of a thin-layer cap to minimize gas-induced contaminant flux was not pursued. The work of Yuan et al. (2007) also illustrates the effectiveness of a cap layer at reducing gas induced contaminant flux.

Appendix B: Bioslurry Results

Concentrations reported in units of mg/L

All measurements made by the University of Texas except for the following, which were submitted to DHL Analytical in Austin for external validation:

SampleDate	Sample
9/17/2008	10114 Anaerobic Abiotic 2
9/17/2008	10115 Anaerobic Biotic 2
9/17/2008	10117 Aerobic Abiotic 3
9/17/2008	60100 Anaerobic Biotic 1
9/17/2008	70048 Aerobic Abiotic 2
9/17/2008	70049 Anaerobic Biotic 3
9/17/2008	70049 Anaerobic Abiotic 2
9/17/2008	Supplemental 1 Aerobic Abiotic 2
10/8/2008	10116 Aerobic Biotic 1
10/8/2008	10118 Anaerobic Abiotic 3
10/8/2008	10119 Anaerobic Abiotic 3
10/8/2008	60098 Aerobic Abiotic 3
10/8/2008	60098 Anaerobic Abiotic 2
10/8/2008	60098 Anaerobic Abiotic 3
10/8/2008	60099 Aerobic Biotic 2
10/8/2008	60100 Anaerobic Abiotic 1
10/8/2008	70050 Aerobic Abiotic 1
10/8/2008	Supplemental 2 Anaerobic Biotic 1
10/8/2008	Supplemental 3 Aerobic Biotic 3

Data collected on 5/3/07 and 6/7/07 is of questionable quality because of instrument malfunction. Data collected April-May 2008 is biased low because of undesirably long holding times prior to analysis. For completeness, all data were presented. The summary of degradation provided in section 1.3 neglects these unrepresentative data.

Naphthalene was not reported in the 9/08-10/08 round of sampling because of interference with the naphthalene peak on chromatograms.

Increased variability in some samples collected in September 2008 may suggest a slow loss of sample integrity over time.

Plots of concentration are normalized by the maximum observed concentration for that sample (C/Cmax). In some samples, mostly SMU1, contaminant appears to have desorbed from the sediment over time, resulting in an increase in concentration.

10114 Aerobic

	Biotic 1									Biotic 2									Biotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
3/21/07	0.53	0.56	0.42	0.38	0.43	0.16	0.29	0.22	0.71	0.49	0.58	0.43	0.39	0.46	0.15	0.28	0.23	0.85	0.73	0.60	0.47	0.41	0.49	0.21	0.39	0.30	1.08
3/23/07	0.07	0.57	0.43	0.40	0.47	0.19	0.35	0.27	0.82	0.01	0.58	0.44	0.43	0.51	0.16	0.28	0.22	0.66	0.71	0.60	0.45	0.41	0.48	0.15	0.27	0.22	0.88
3/28/07	0.68	0.77	0.69	0.81	1.01	0.51	0.84	0.56	1.09	0.71	0.84	0.77	0.88	1.13	0.54	0.92	0.65	1.38	0.12	0.86	0.79	0.89	1.15	0.55	0.93	0.64	1.44
4/3/07	0.38	0.67	0.65	0.70	0.87	0.46	0.77	0.56	1.25	0.40	0.70	0.65	0.72	0.93	0.45	0.77	0.55	1.24	0.43	0.77	0.71	0.79	1.02	0.48	0.83	0.59	1.32
4/10/07	0.38	0.69	0.66	0.74	0.90	0.47	0.79	0.56	1.18	0.36	0.72	0.68	0.75	0.97	0.48	0.82	0.58	1.34	0.39	0.69	0.67	0.72	0.93	0.46	0.80	0.57	1.38
4/14/07	0.40	0.81	0.75	0.84	1.04	0.53	0.90	0.63	1.32	0.81	0.82	0.76	0.85	1.10	0.54	0.93	0.65	1.42	0.37	0.74	0.72	0.77	1.00	0.51	0.88	0.62	1.46
4/17/07	0.58	0.81	0.79	0.84	1.05	0.58	0.98	0.70	1.50	0.59	0.83	0.79	0.86	1.12	0.57	0.97	0.68	1.54	0.62	0.88	0.84	0.90	1.16	0.59	1.02	0.73	1.64
4/20/07	0.79	0.88	0.83	0.92	1.14	0.60	1.01	0.71	1.50	0.77	0.88	0.82	0.91	1.18	0.59	1.02	0.70	1.53	0.83	0.92	0.86	0.96	1.24	0.61	1.05	0.73	1.63
4/27/07	0.75	0.81	0.77	0.84	1.05	0.56	0.94	0.67	1.42	0.85	0.91	0.83	0.94	1.21	0.59	1.01	0.70	1.51	0.95	1.01	0.92	1.05	1.35	0.65	1.10	0.77	1.62
5/3/07	0.12	0.04	0.04	0.02	0.02	0.01	0.02	0.02	0.16	0.14	0.05	0.04	0.02	0.03	0.01	0.02	0.02	0.13	0.14	0.05	0.04	0.02	0.03	0.01	0.02	0.02	0.13
5/11/07	0.83	0.85	0.80	0.89	1.11	0.56	0.95	0.68	1.40	0.77	0.80	0.74	0.83	1.07	0.52	0.89	0.63	1.39	0.85	0.88	0.80	0.91	1.18	0.56	0.96	0.67	1.48
6/6/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.81	0.75	0.84	1.10	0.52	0.89	0.64	1.42
7/5/07	0.79	0.80	0.75	0.83	1.04	0.53	0.91	0.65	1.37	0.73	0.76	0.71	0.79	1.03	0.50	0.87	0.62	1.37	0.83	0.84	0.78	0.88	1.14	0.54	0.93	0.66	1.47
9/6/07	0.61	0.68	0.63	0.70	0.86	0.45	0.74	0.52	1.07	0.51	0.64	0.59	0.67	0.86	0.42	0.70	0.48	1.05	0.62	0.68	0.63	0.71	0.91	0.44	0.74	0.51	1.14
11/2/07	0.56	0.54	0.58	0.53	0.67	0.41	0.72	0.55	1.42	0.88	0.88	0.83	0.89	1.15	0.57	1.01	0.72	1.67	0.99	0.97	0.91	0.98	1.26	0.62	1.09	0.78	1.82
4/23/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.42	0.43	0.52	0.38	0.51	0.51	0.59	0.61	1.91
9/18/08	0.35	0.38	0.53	0.36	0.45	0.60	0.65	0.81		0.42	0.23	0.18	0.09	0.11	0.08	0.08	0.15		0.91	0.91	0.87	0.85	1.04	0.88	0.89	1.00	

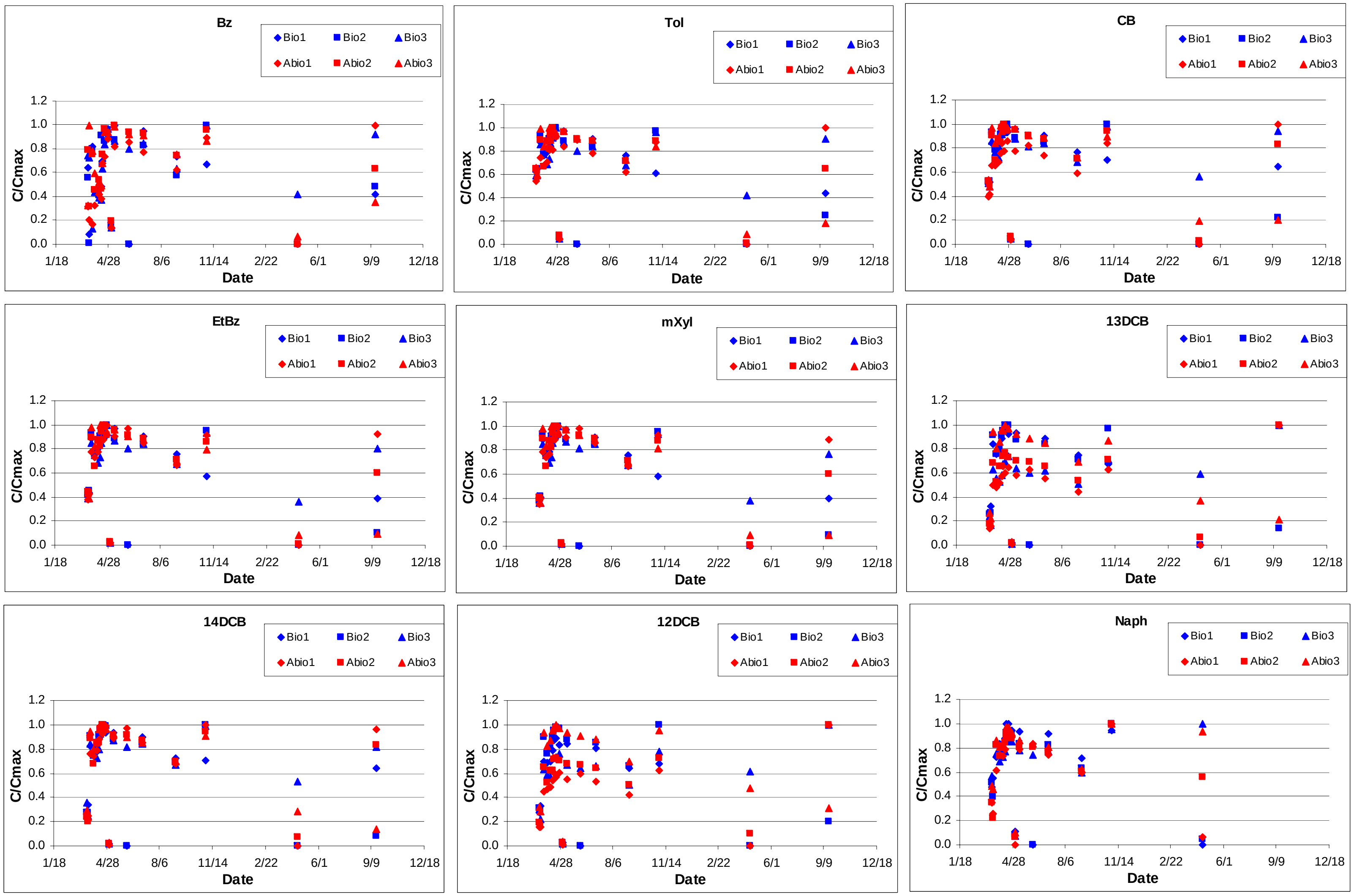
	Abiotic 1									Abiotic 2									Abiotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
3/21/07	0.23	0.38	0.28	0.26	0.25	0.09	0.15	0.12	0.28	0.61	0.51	0.39	0.37	0.35	0.12	0.19	0.16	0.33	0.38	0.78	0.60	0.54	0.51	0.21	0.36	0.29	0.71
3/23/07	0.15	0.40	0.30	0.29	0.28	0.10	0.16	0.13	0.21	0.24	0.50	0.37	0.36	0.34	0.11	0.17	0.13	0.21	1.17	0.71	0.53	0.49	0.46	0.17	0.30	0.26	0.66
3/28/07	0.12	0.53	0.47	0.54	0.55	0.32	0.50	0.35	0.49	0.58	0.71	0.66	0.74	0.76	0.46	0.72	0.53	0.79	0.91	1.16	1.08	1.23	1.25	0.75	1.17	0.85	1.26
4/3/07	0.23	0.48	0.46	0.50	0.52	0.31	0.49	0.37	0.60	0.35	0.52	0.52	0.54	0.56	0.35	0.55	0.43	0.71	0.70	0.99	0.93	1.03	1.05	0.64	0.99	0.75	1.18
4/10/07	0.30	0.50	0.48	0.54	0.54	0.33	0.52	0.39	0.59	0.42	0.70	0.64	0.73	0.74	0.44	0.69	0.51	0.78	0.61	1.05	0.99	1.10	1.12	0.68	1.06	0.79	1.22
4/14/07	0.28	0.58	0.54	0.61	0.62	0.37	0.58	0.43	0.63	0.36	0.65	0.62	0.68	0.70	0.44	0.69	0.51	0.81	0.58	1.18	1.10	1.25	1.27	0.76	1.19	0.87	1.30
4/17/07	0.49	0.63	0.60	0.67	0.68	0.42	0.66	0.48	0.72	0.58	0.75	0.71	0.78	0.80	0.50	0.78	0.58	0.87	0.79	1.06	1.05	1.11	1.14	0.76	1.19	0.90	1.43
4/20/07	0.53	0.58	0.55	0.61	0.62	0.39	0.61	0.45	0.72	0.75	0.79	0.74	0.83	0.85	0.52	0.81	0.59	0.89	1.10	1.17	1.11	1.24	1.26	0.80	1.24	0.91	1.42
4/27/07	0.64	0.66	0.61	0.69	0.71	0.42	0.65	0.48	0.71	0.71	0.73	0.70	0.76	0.78	0.49	0.77	0.57	0.85	1.10	1.13	1.08	1.18	1.21	0.77	1.20	0.89	1.35
5/3/07	0.10	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.00	0.15	0.06	0.05	0.02	0.02	0.01	0.02	0.02	0.06	0.19	0.08	0.07	0.03	0.04	0.02	0.03	0.03	0.14
5/11/07	0.59	0.59	0.55	0.63	0.64	0.38	0.58	0.43	0.63	0.77	0.76	0.70	0.80	0.81	0.48	0.74	0.55	0.77	1.15	1.15	1.07	1.21	1.23	0.74	1.15	0.86	1.26
6/6/07	0.62	0.63	0.59	0.67	0.69	0.41	0.64	0.47	0.67	0.73	0.72	0.67	0.76	0.79	0.47	0.74	0.54	0.78	1.08	1.07	1.01	1.13	1.17	0.71	1.11	0.83	1.22
7/5/07	0.56	0.56	0.52	0.59	0.61	0.36	0.56	0.43	0.60	0.72	0.70	0.65	0.74	0.76	0.44	0.70	0.53	0.74	1.06	1.05	0.98	1.09	1.12	0.67	1.06	0.80	1.18
9/6/07	0.45	0.44	0.42	0.46	0.47	0.29	0.45	0.33	0.48	0.57	0.56	0.52	0.59	0.60	0.36	0.56	0.41	0.58	0.87	0.85	0.80	0.88	0.89	0.55	0.86	0.63	0.92
11/2/07	0.64	0.62	0.60	0.63	0.65	0.41	0.66	0.49	0.80	0.74	0.70	0.69	0.72	0.74	0.48	0.76	0.59	0.96	1.01	0.98	1.00	0.99	1.03	0.69	1.13	0.87	1.46
4/23/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.02	0.01	0.01	0.04	0.06	0.08	0.54	0.08	0.10	0.22	0.10	0.12	0.29	0.35	0.44	1.37
9/18/08	0.72	0.71	0.71	0.64	0.63	0.65	0.64	0.79		0.49	0.52	0.61	0.50	0.51	0.67	0.67	0.81		0.41	0.21	0.22	0.12	0.12	0.17	0.17	0.29	

10114 Anaerobic

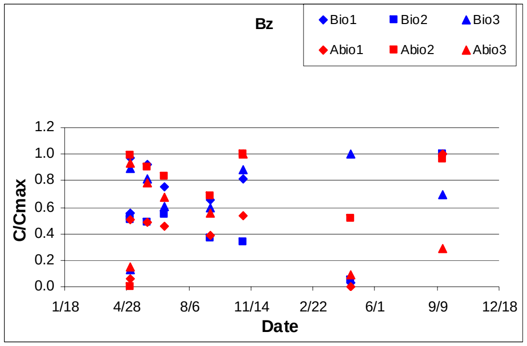
	Biotic 1									Biotic 2									Biotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/3/07	0.60	0.58	0.50	0.52	0.48	0.19	0.39	0.23	0.19	0.52	0.49	0.43	0.43	0.40	0.16	0.32	0.20	0.18	0.60	0.58	0.49	0.52	0.48	0.19	0.38	0.22	0.19
5/3/07	0.34	0.35	0.36	0.33	0.31	0.15	0.31	0.19	0.17	0.53	0.50	0.44	0.45	0.42	0.16	0.34	0.20	0.18	0.08	0.03	0.03	0.01	0.01	0.00	0.01	0.01	0.03
5/31/07	0.57	0.56	0.48	0.51	0.47	0.19	0.39	0.24	0.18	0.50	0.49	0.42	0.44	0.41	0.17	0.34	0.20	0.16	0.55	0.54	0.46	0.48	0.45	0.18	0.37	0.22	0.19
6/28/07	0.47	0.46	0.42	0.44	0.42	0.18	0.36	0.22	0.16	0.56	0.53	0.45	0.49	0.45	0.18	0.37	0.21	0.16	0.41	0.40	0.36	0.37	0.35	0.15	0.30	0.18	0.16
9/9/07	0.41	0.41	0.35	0.37	0.35	0.15	0.31	0.18	0.14	0.37	0.35	0.31	0.33	0.29	0.12	0.27	0.15	0.13	0.40	0.39	0.34	0.35	0.32	0.13	0.28	0.16	0.13
11/1/07	0.50	0.47	0.44	0.43	0.41	0.18	0.38	0.23	0.03	0.35	0.31	0.32	0.29	0.26	0.13	0.28	0.17	0.17	0.60	0.54	0.48	0.48	0.44	0.19	0.40	0.24	0.22
4/23/08	0.02	0.03	0.11	0.04	0.06	0.20	0.26	0.32	1.75	0.05	0.07	0.17	0.08	0.12	0.26	0.33	0.38	1.75	0.68	0.67	0.71	0.59	0.79	0.65	0.76	0.73	2.08
9/18/08	0.62	0.72	0.88	0.70	0.93	0.97	1.02	1.17		1.02	1.05	0.99	0.98	1.21	1.01	1.02	1.14		0.47	0.48	0.50	0.44	0.56	0.53	0.58	0.64	

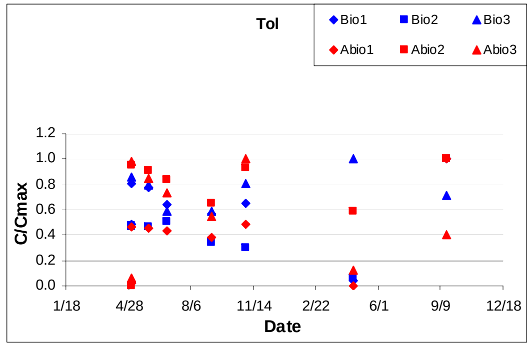
	Abiotic 1									Abiotic 2									Abiotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/3/07	0.59	0.53	0.42	0.42	0.38	0.13	0.26	0.15	0.11	0.61	0.55	0.43	0.44	0.40	0.13	0.26	0.16	0.11	0.64	0.58	0.46	0.47	0.43	0.14	0.28	0.17	0.11
5/3/07	0.07	0.03	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.03	0.02	0.01	0.01	0.00	0.00	0.00	0.00
5/31/07	0.56	0.52	0.40	0.42	0.39	0.13	0.26	0.16	0.11	0.56	0.52	0.40	0.43	0.39	0.13	0.27	0.16	0.09	0.54	0.51	0.40	0.42	0.39	0.13	0.26	0.16	0.09
6/28/07	0.53	0.49	0.39	0.41	0.38	0.14	0.28	0.17	0.13	0.51	0.48	0.39	0.41	0.38	0.14	0.28	0.17	0.10	0.46	0.43	0.36	0.30	0.35	0.12	0.25	0.15	0.09
9/9/07	0.45	0.43	0.34	0.37	0.34	0.12	0.26	0.15	0.13	0.42	0.37	0.28	0.07	0.33	0.12	0.25	0.15	0.13	0.38	0.33	0.24	0.03	0.31	0.11	0.22	0.14	0.11
11/1/07	0.62	0.55	0.44	0.46	0.43	0.16	0.33	0.20	0.20	0.61	0.53	0.42	0.18	0.44	0.17	0.34	0.21	0.21	0.69	0.59	0.46	0.13	0.49	0.19	0.37	0.23	0.22
4/23/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.32	0.34	0.45	0.29	0.31	0.35	0.39	0.44	0.88	0.06	0.07	0.15	0.07	0.08	0.15	0.18	0.23	0.70
9/18/08	1.16	1.13	1.02	0.98	0.94	0.81	0.81	0.92		0.59	0.57	0.62	0.47	0.49	0.43	0.48	0.50	0.66	0.20	0.24	0.38	0.22	0.24	0.38	0.41	0.54	

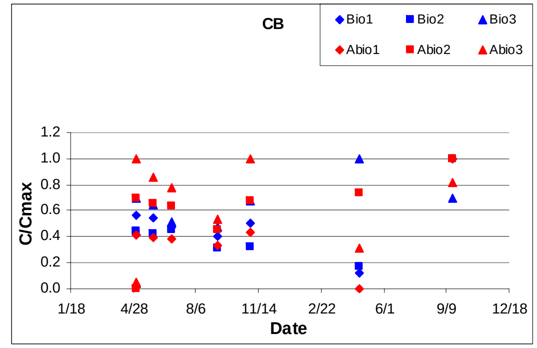
Sample: 10114 Temp: 22C Aerobic

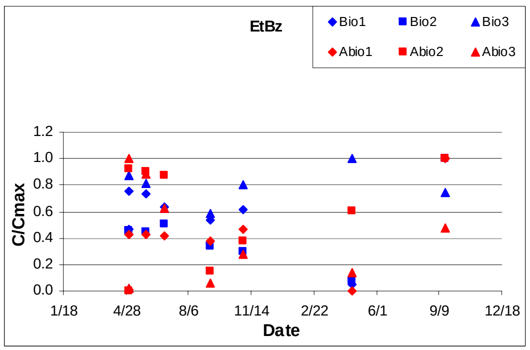


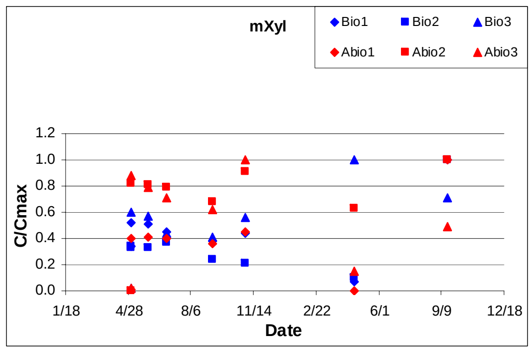
Sample: 10114 Temp: 22C Anaerobic

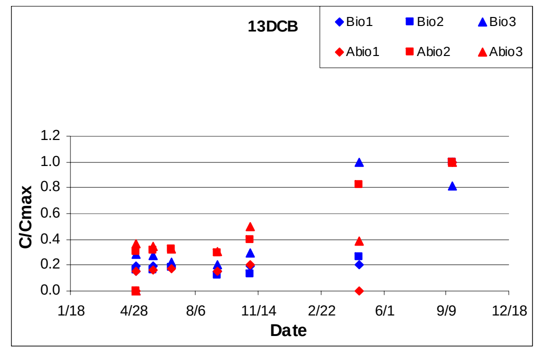


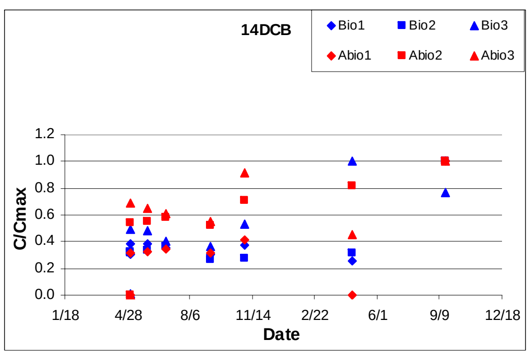


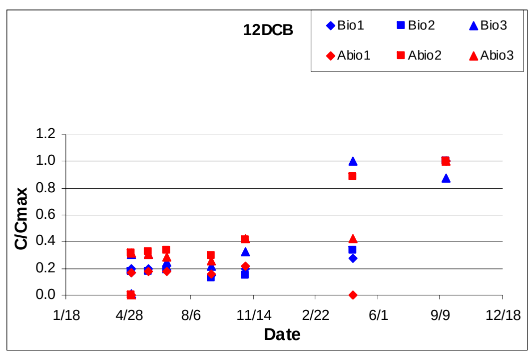


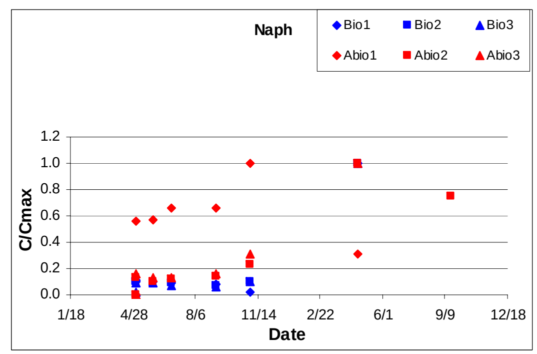












10115 Aerobic

					Biotic 1									Biotic 2									Biotic 3				
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/24/07	0.64	0.69	0.59	0.65	0.81	0.35	0.64	0.51	1.13	0.66	0.61	0.53	0.53	0.69	0.30	0.53	0.41	1.06	0.57	0.62	0.56	0.58	0.74	0.33	0.61	0.51	1.18
5/24/07	0.63	0.67	0.58	0.64	0.79	0.35	0.63	0.51	1.12	0.72	0.67	0.57	0.59	0.75	0.33	0.58	0.45	1.10	0.67	0.72	0.61	0.67	0.84	0.37	0.68	0.55	1.20
6/6/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.68	0.65	0.55	0.57	0.75	0.33	0.59	0.44	1.06	0.70	0.76	0.65	0.72	0.91	0.40	0.72	0.57	1.31
7/5/07	0.58	0.63	0.55	0.60	0.76	0.34	0.62	0.50	1.20	0.68	0.64	0.54	0.57	0.74	0.32	0.57	0.43	1.02	0.66	0.71	0.62	0.67	0.85	0.37	0.68	0.55	1.27
9/6/07	0.48	0.51	0.44	0.48	0.60	0.28	0.48	0.39	0.93	0.57	0.52	0.44	0.46	0.59	0.26	0.46	0.34	0.83	0.58	0.60	0.51	0.57	0.72	0.31	0.55	0.44	1.00
11/3/07	0.79	0.83	0.72	0.78	0.98	0.45	0.85	0.69	1.61	0.81	0.73	0.64	0.64	0.85	0.39	0.72	0.56	1.43	0.90	0.95	0.81	0.88	1.12	0.51	0.95	0.74	1.78
4/29/08	0.01	0.02	0.05	0.02	0.03	0.08	0.12	0.18	1.25	1.05	0.94	0.79	0.71	0.91	0.55	0.62	0.63	1.68	0.28	0.32	0.38	0.26	0.35	0.33	0.41	0.50	1.71
9/6/08	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.03		0.24	0.09	0.07	0.03	0.03	0.02	0.03	0.04	0.01	0.18	0.07	0.06	0.02	0.03	0.02	0.03	0.05	

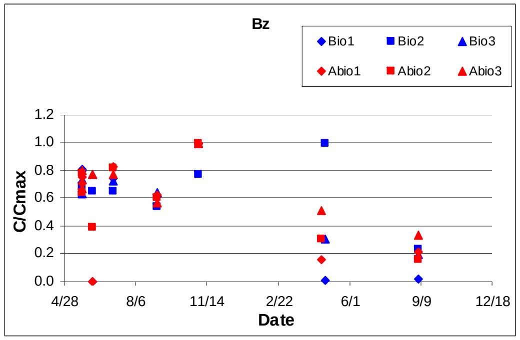
					Abiotic 1									Abiotic 2									Abiotic 3				
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/24/07	0.66	0.67	0.60	0.67	0.65	0.34	0.52	0.46	0.49	0.49	0.51	0.49	0.52	0.51	0.30	0.45	0.40	0.48	0.59	0.60	0.55	0.60	0.59	0.33	0.49	0.44	0.49
5/24/07	0.62	0.63	0.58	0.63	0.62	0.34	0.50	0.44	0.50	0.60	0.62	0.55	0.62	0.60	0.33	0.49	0.43	0.51	0.69	0.70	0.62	0.70	0.69	0.36	0.54	0.47	0.52
6/6/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.31	0.28	0.32	0.31	0.17	0.25	0.21	0.23	0.67	0.69	0.61	0.70	0.69	0.38	0.56	0.48	0.52
7/5/07	0.73	0.74	0.66	0.75	0.73	0.39	0.59	0.51	0.59	0.64	0.66	0.58	0.66	0.65	0.35	0.52	0.46	0.51	0.67	0.68	0.60	0.68	0.66	0.36	0.54	0.47	0.53
9/6/07	0.55	0.55	0.49	0.55	0.53	0.29	0.43	0.37	0.42	0.46	0.49	0.44	0.50	0.49	0.27	0.40	0.34	0.38	0.49	0.51	0.46	0.51	0.50	0.28	0.41	0.35	0.41
11/3/07	0.88	0.87	0.78	0.86	0.84	0.47	0.72	0.62	0.76	0.77	0.78	0.70	0.77	0.76	0.43	0.65	0.56	0.70	0.87	0.87	0.77	0.85	0.84	0.47	0.73	0.61	0.75
4/23/08	0.14	0.17	0.28	0.16	0.17	0.29	0.31	0.41	0.79	0.24	0.27	0.35	0.25	0.26	0.32	0.33	0.43	0.76	0.44	0.46	0.51	0.40	0.40	0.41	0.42	0.54	0.84
9/6/08	0.19	0.22	0.32	0.21	0.22	0.35	0.35	0.54		0.13	0.16	0.25	0.16	0.17	0.30	0.30	0.47		0.29	0.16	0.13	0.07	0.06	0.06	0.05	0.12	

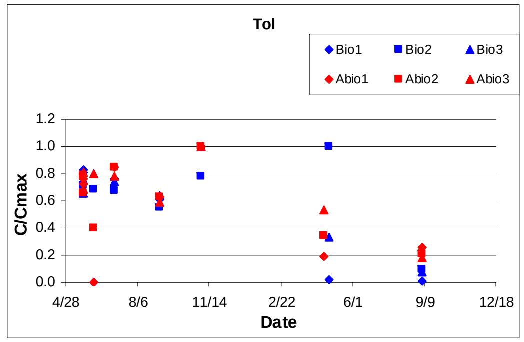
10115 Anaerobic

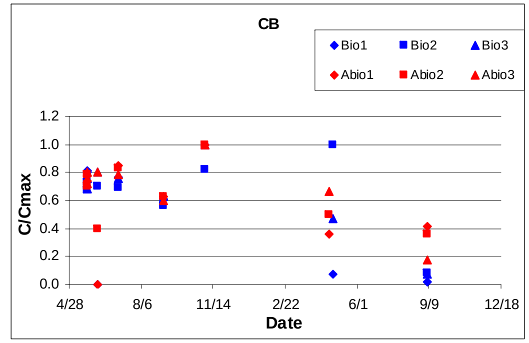
					Biotic 1									Biotic 2									Biotic 3				
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/24/07	0.79	0.82	0.59	0.51	1.00	0.21	0.43	0.41	1.56	0.89	0.91	0.63	0.55	1.11	0.22	0.45	0.43	1.73	0.83	0.86	0.60	0.53	1.06	0.22	0.44	0.42	1.65
5/24/07	0.70	0.73	0.54	0.46	0.90	0.20	0.40	0.39	1.55	0.86	0.89	0.63	0.54	1.10	0.22	0.46	0.44	1.78	0.81	0.83	0.59	0.52	1.03	0.21	0.44	0.42	1.68
6/7/07	0.78	0.81	0.57	0.50	1.01	0.21	0.43	0.41	1.61	0.83	0.87	0.60	0.52	1.08	0.21	0.44	0.42	1.76	0.81	0.83	0.58	0.51	1.03	0.21	0.44	0.42	1.71
6/29/07	0.78	0.84	0.58	0.52	1.05	0.21	0.53	0.41	1.60	0.76	0.81	0.57	0.48	1.01	0.20	0.43	0.40	1.74	0.75	0.79	0.56	0.48	0.99	0.20	0.52	0.40	1.66
9/15/07	0.68	0.69	0.49	0.42	0.90	0.18	0.56	0.33	1.33	0.64	0.70	0.49	0.41	0.90	0.18	0.56	0.34	1.46	0.72	0.73	0.52	0.45	0.95	0.19	0.58	0.35	1.45
11/3/07	0.50	0.51	0.40	0.30	0.63	0.15	0.40	0.32	1.61	1.10	1.11	0.76	0.64	1.38	0.27	0.73	0.53	2.31	1.04	1.05	0.74	0.62	1.31	0.27	0.73	0.53	2.26
4/29/08	0.46	0.49	0.43	0.26	0.56	0.23	0.38	0.41	2.22	0.58	0.62	0.50	0.31	0.68	0.26	0.41	0.44	2.43	0.46	0.49	0.43	0.27	0.57	0.25	0.40	0.43	2.49
9/6/08	0.12	0.05	0.04	0.01	0.02	0.01	0.01	0.03		0.89	0.92	0.73	0.47	1.28	0.31	0.43	0.58	2.14	0.16	0.07	0.05	0.02	0.03	0.01	0.02	0.03	

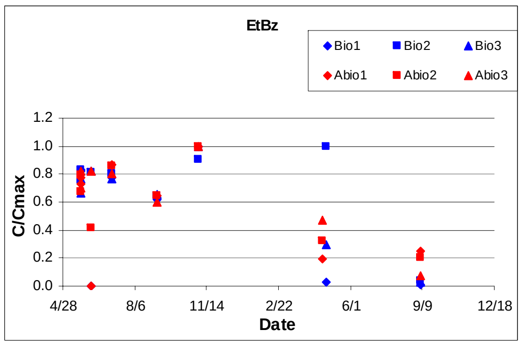
					Abiotic 1									Abiotic 2									Abiotic 3				
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/24/07	0.76	0.65	0.53	0.49	0.46	0.18	0.27	0.25	0.24	0.79	0.70	0.57	0.53	0.51	0.20	0.30	0.28	0.27	1.57	1.33	1.06	0.99	0.94	0.35	0.54	0.50	0.49
5/24/07	0.78	0.67	0.54	0.50	0.48	0.18	0.28	0.25	0.26	0.61	0.56	0.49	0.43	0.42	0.17	0.27	0.25	0.26	1.59	1.37	1.09	1.01	0.96	0.36	0.55	0.51	0.53
6/7/07	0.76	0.66	0.52	0.50	0.48	0.18	0.27	0.25	0.26	0.79	0.70	0.56	0.53	0.52	0.20	0.29	0.28	0.29	1.53	1.34	1.06	1.00	0.96	0.37	0.56	0.52	0.53
6/29/07	0.74	0.67	0.53	0.50	0.48	0.18	0.27	0.25	0.27	0.71	0.64	0.51	0.48	0.48	0.18	0.26	0.26	0.27	1.17	1.06	0.89	0.79	0.77	0.31	0.49	0.45	0.49
9/15/07	0.65	0.57	0.45	0.43	0.44	0.17	0.35	0.23	0.27	0.44	0.45	0.37	0.34	0.37	0.15	0.32	0.20	0.26	1.17	1.08	0.88	0.82	0.81	0.33	0.60	0.44	0.50
11/3/07	0.99	0.84	0.66	0.63	0.61	0.24	0.37	0.34	0.40	0.91	0.78	0.61	0.58	0.59	0.22	0.34	0.33	0.41	1.83	1.54	1.24	1.14	1.11	0.46	0.71	0.64	0.75
4/29/08	0.60	0.51	0.39	0.34	0.33	0.18	0.18	0.22	0.26	0.51	0.44	0.34	0.29	0.29	0.15	0.15	0.20	0.26	1.04	0.88	0.70	0.57	0.54	0.33	0.33	0.40	0.50
9/6/08	0.13	0.05	0.04	0.01	0.01	0.01	0.01	0.02		0.89	0.79	0.62	0.53	0.52	0.33	0.31	0.48		0.41	0.14	0.10	0.04	0.03	0.02	0.02	0.04	

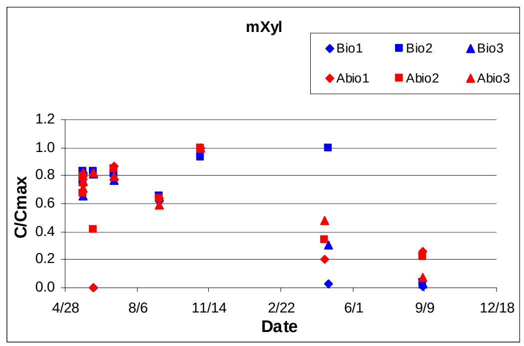
Sample: 10115 Temp: 22C Aerobic

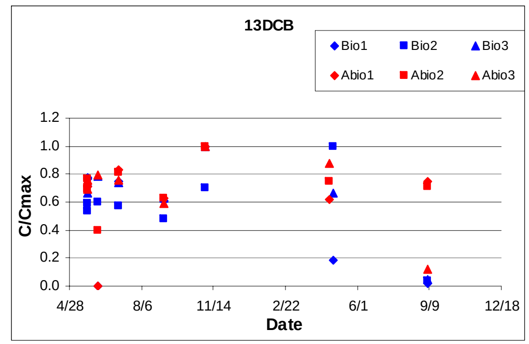


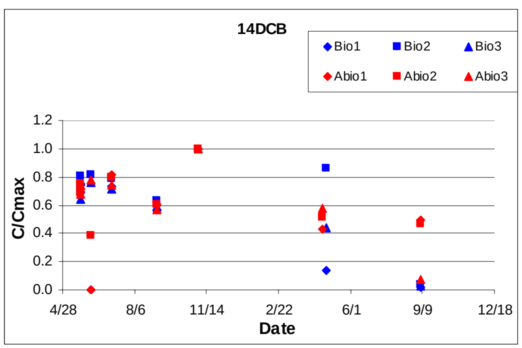


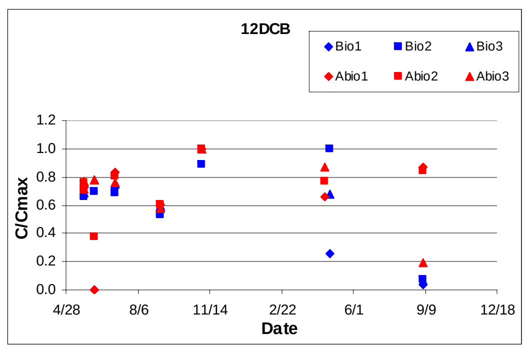


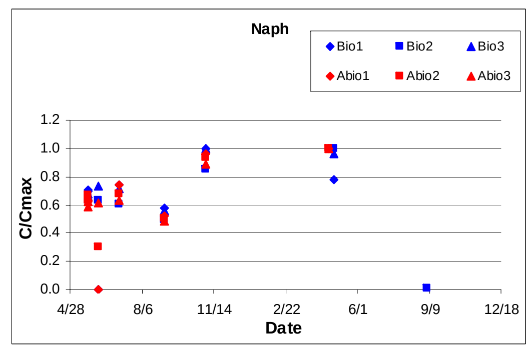




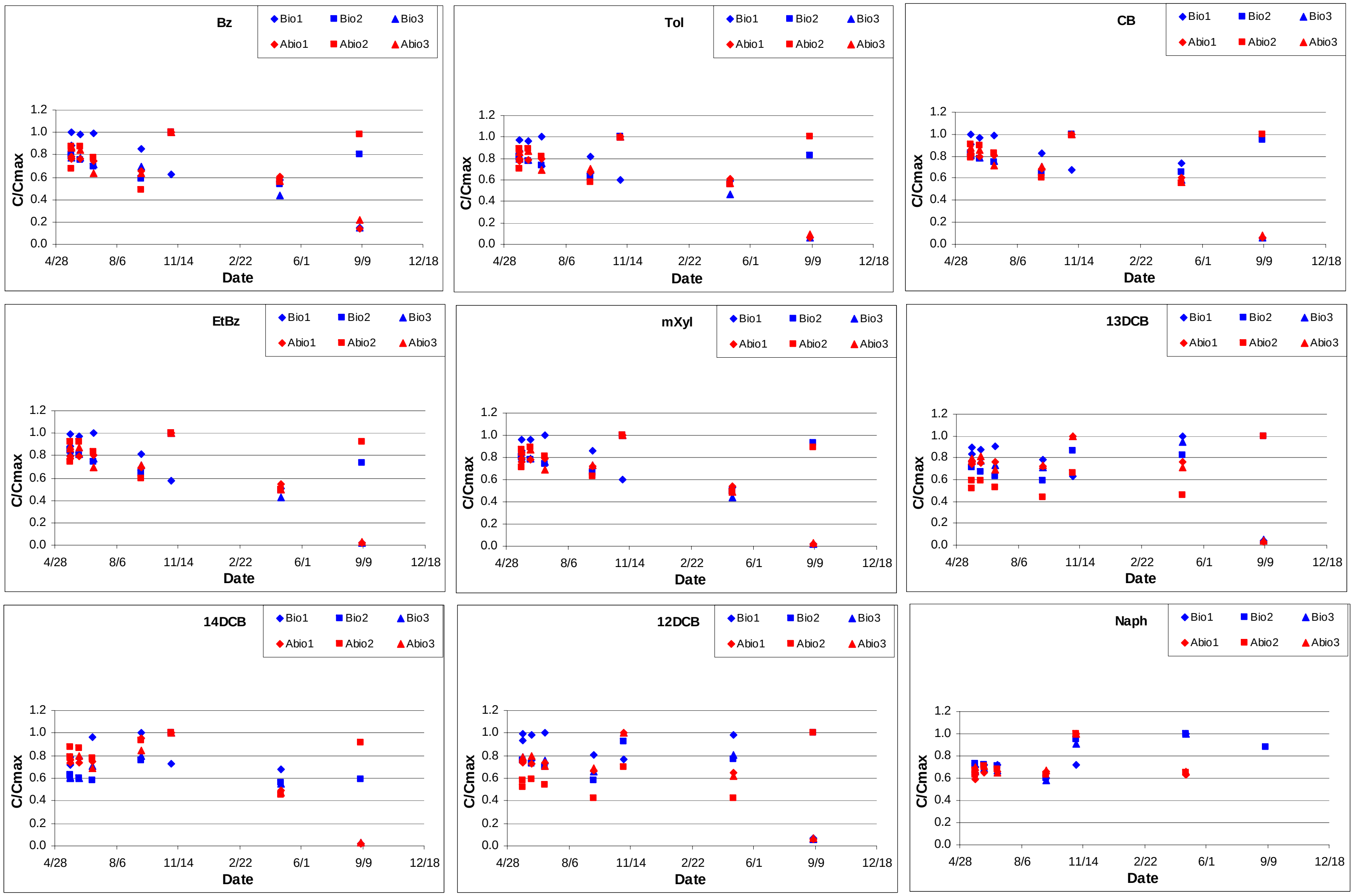








Sample: 10115   Temp: 22C   Anaerobic



10116 Aerobic

Biotic 1

DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/24/07	0.68	0.65	0.64	0.63	0.76	0.42	0.67	0.53	0.74
5/24/07	0.91	0.84	0.75	0.82	0.96	0.47	0.73	0.58	0.76
6/6/07	0.79	0.75	0.72	0.73	0.87	0.46	0.72	0.58	0.78
6/21/07	0.82	0.78	0.72	0.75	0.89	0.46	0.73	0.57	0.77
7/5/07	0.87	0.82	0.75	0.79	0.94	0.48	0.75	0.59	0.78
8/28/07	0.58	0.59	0.51	0.55	0.63	0.28	0.40	0.35	0.45
10/31/07	1.05	0.96	0.88	0.91	1.08	0.58	0.93	0.72	1.02
4/29/08	0.06	0.07	0.13	0.07	0.09	0.16	0.17	0.21	0.52
9/30/08	1.21	1.16	1.01	0.83	1.05	0.72	0.76	0.83	1.02

Biotic 2

DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/24/07	0.02	0.03	0.03	0.02	0.16	0.01	0.04	0.06	0.21
5/24/07	0.02	0.03	0.03	0.02	0.17	0.02	0.04	0.06	0.22
6/6/07	0.02	0.03	0.03	0.02	0.15	0.01	0.04	0.06	0.25
6/21/07	0.02	0.04	0.04	0.03	0.20	0.02	0.06	0.07	0.27
7/5/07	0.02	0.04	0.03	0.03	0.20	0.02	0.05	0.07	0.25
8/28/07	0.01	0.02	0.02	0.02	0.12	0.01	0.03	0.04	0.16
10/31/07	0.03	0.04	0.04	0.03	0.23	0.02	0.09	0.10	0.40
4/29/08	0.00	0.00	0.01	0.00	0.02	0.00	0.02	0.03	0.19
9/30/08	0.01	0.03	0.03	0.02	0.13	0.03	0.07	0.10	

Biotic 3

DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/24/07	0.80	0.75	0.68	0.72	0.89	0.42	0.67	0.53	0.73
5/24/07	0.85	0.79	0.70	0.75	0.93	0.43	0.69	0.54	0.73
6/6/07	0.86	0.81	0.72	0.77	0.96	0.44	0.71	0.56	0.71
6/21/07	0.80	0.76	0.69	0.73	0.91	0.43	0.68	0.54	0.72
7/5/07	0.86	0.81	0.72	0.77	0.96	0.44	0.70	0.56	0.76
8/28/07	0.50	0.50	0.44	0.46	0.56	0.24	0.37	0.31	0.46
10/31/07	1.09	1.00	0.90	0.94	1.17	0.57	0.93	0.71	1.03
4/29/08	0.45	0.41	0.41	0.34	0.42	0.31	0.33	0.36	0.60
9/30/08	1.28	1.19	1.11	1.02	1.21	1.00	0.97	1.13	

Abiotic 1

DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/24/07	0.75	0.79	0.70	0.83	0.82	0.47	0.69	0.59	0.66
5/24/07	0.72	0.75	0.68	0.79	0.77	0.46	0.68	0.58	0.70
6/6/07	0.72	0.76	0.70	0.81	0.80	0.48	0.71	0.61	0.70
6/21/07	0.68	0.71	0.65	0.75	0.73	0.44	0.65	0.57	0.64
7/5/07	0.73	0.77	0.70	0.81	0.80	0.47	0.70	0.60	0.70
8/28/07	0.26	0.33	0.34	0.35	0.35	0.22	0.32	0.31	0.41
10/31/07	0.96	0.99	0.89	1.03	1.01	0.61	0.93	0.77	0.93
4/29/08	0.25	0.28	0.31	0.26	0.26	0.28	0.29	0.35	0.54
9/30/08	1.09	1.12	1.01	1.06	0.98	0.96	0.90	1.14	

Abiotic 2

DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/24/07	0.72	0.75	0.68	0.79	0.78	0.45	0.69	0.58	0.69
5/24/07	0.74	0.77	0.69	0.82	0.80	0.46	0.68	0.58	0.67
6/6/07	0.45	0.49	0.51	0.52	0.53	0.38	0.57	0.51	0.66
6/21/07	0.71	0.75	0.69	0.79	0.78	0.48	0.71	0.61	0.72
7/5/07	0.69	0.72	0.66	0.76	0.75	0.45	0.67	0.58	0.69
8/28/07	0.30	0.37	0.37	0.39	0.39	0.23	0.34	0.32	0.42
10/31/07	0.92	0.95	0.86	0.98	0.96	0.60	0.91	0.75	0.95
4/29/08	0.29	0.31	0.34	0.29	0.29	0.30	0.30	0.37	0.56
9/30/08	0.56	0.62	0.66	0.59	0.57	0.70	0.67	0.90	

Abiotic 3

DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/24/07	0.74	0.77	0.69	0.81	0.80	0.46	0.68	0.58	0.63
5/24/07	0.70	0.74	0.68	0.78	0.77	0.45	0.67	0.58	0.69
6/6/07	0.60	0.64	0.62	0.68	0.67	0.43	0.64	0.56	0.67
6/21/07	0.73	0.78	0.70	0.82	0.80	0.47	0.71	0.60	0.73
7/5/07	0.76	0.79	0.71	0.83	0.81	0.47	0.69	0.60	0.68
8/28/07	0.33	0.41	0.39	0.43	0.41	0.23	0.34	0.32	0.43
10/31/07	0.90	0.92	0.84	0.96	0.94	0.58	0.89	0.74	0.93
4/29/08	0.04	0.06	0.11	0.06	0.07	0.15	0.16	0.22	0.48
9/30/08	0.49	0.55	0.62	0.52	0.50	0.67	0.64	0.88	

10116 Anaerobic

Biotic 1

DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/24/07	0.86	0.88	0.74	0.71	1.26	0.31	0.61	0.54	1.09
5/24/07	0.82	0.84	0.73	0.69	1.23	0.30	0.60	0.55	1.12
6/22/07	0.90	0.93	0.79	0.76	1.37	0.34	0.66	0.58	1.16
8/29/07	0.59	0.62	0.52	0.50	0.91	0.22	0.42	0.36	0.74
10/31/07	1.02	1.05	0.91	0.84	1.53	0.39	0.80	0.70	1.50
4/29/08	0.17	0.21	0.26	0.16	0.30	0.18	0.24	0.30	0.90
9/30/08	1.46	1.53	1.29	1.12	1.96	0.81	0.94	1.25	

Biotic 2

DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/24/07	0.84	0.86	0.73	0.67	1.26	0.28	0.58	0.52	1.07
5/24/07	0.82	0.83	0.71	0.65	1.23	0.28	0.57	0.51	1.11
6/22/07	0.89	0.92	0.77	0.72	1.38	0.31	0.63	0.56	1.16
8/29/07	0.62	0.64	0.54	0.51	0.97	0.21	0.41	0.37	0.70
10/31/07	0.80	0.80	0.73	0.62	1.20	0.30	0.63	0.57	1.41
4/29/08	0.32	0.33	0.34	0.23	0.45	0.20	0.26	0.33	0.94
9/30/08	1.13	1.19	1.08	0.84	1.58	0.66	0.79	1.08	

Biotic 3

DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/24/07	0.84	0.86	0.72	0.68	1.28	0.29	0.59	0.52	1.12
5/24/07	0.74	0.77	0.67	0.60	1.15	0.27	0.55	0.50	1.10
6/22/07	0.76	0.81	0.70	0.64	1.23	0.29	0.60	0.53	1.16
8/29/07	0.59	0.62	0.52	0.49	0.94	0.21	0.41	0.35	0.74
10/31/07	1.05	1.08	0.92	0.84	1.63	0.38	0.80	0.70	1.57
4/29/08	0.04	0.06	0.11	0.05	0.11	0.10	0.14	0.21	0.86
9/30/08	0.98	1.05	0.96	0.74	1.37	0.60	0.74	0.99	

Abiotic 1

DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/24/07	0.89	0.83	0.70	0.74	0.71	0.32	0.48	0.43	0.46
5/24/07	0.85	0.80	0.68	0.71	0.68	0.31	0.47	0.42	0.48
6/22/07	0.89	0.85	0.72	0.77	0.74	0.34	0.52	0.45	0.45
8/29/07	0.60	0.57	0.47	0.52	0.50	0.21	0.32	0.28	0.30
10/31/07	0.96	0.88	0.76	0.78	0.76	0.37	0.58	0.52	0.65
4/29/08	0.04	0.05	0.09	0.05	0.05	0.09	0.09	0.14	0.33
9/30/08	0.46	0.48	0.53	0.40	0.39	0.44	0.43	0.63	

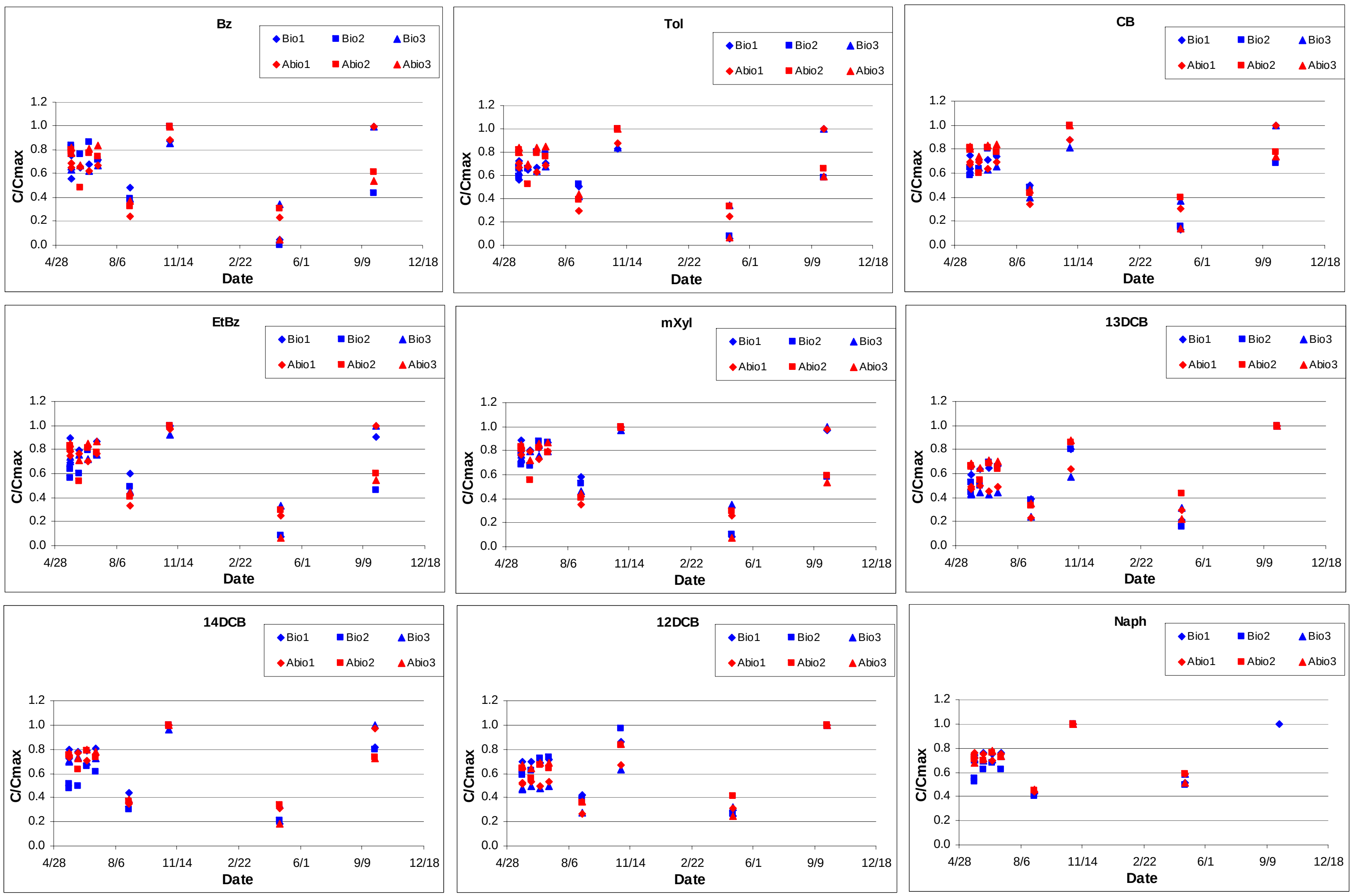
Abiotic 2

DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/24/07	0.82	0.77	0.65	0.68	0.65	0.30	0.44	0.40	0.46
5/24/07	0.57	0.55	0.50	0.48	0.47	0.23	0.35	0.32	0.34
6/22/07	0.77	0.73	0.61	0.66	0.63	0.28	0.42	0.38	0.39
8/29/07	0.57	0.54	0.44	0.49	0.47	0.20	0.29	0.26	0.27
10/31/07	0.83	0.77	0.66	0.68	0.66	0.32	0.50	0.44	0.55
4/29/08	0.06	0.08	0.12	0.07	0.08	0.11	0.12	0.17	0.32
9/30/08	0.57	0.56	0.56	0.46	0.44	0.43	0.42	0.59	

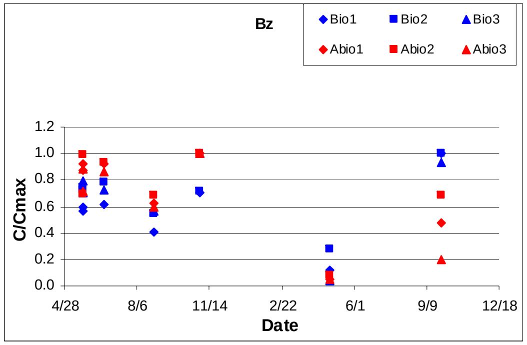
Abiotic 3

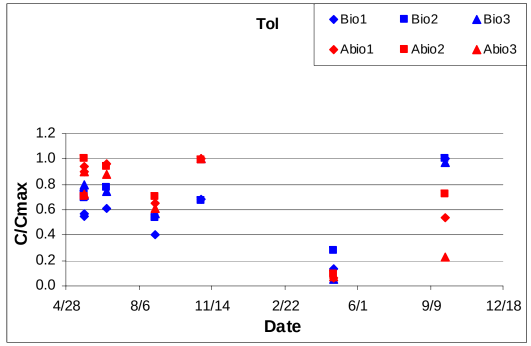
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/24/07	0.61	0.59	0.52	0.53	0.51	0.25	0.37	0.34	0.37
5/24/07	0.76	0.72	0.61	0.66	0.63	0.28	0.42	0.38	0.38
6/22/07	0.74	0.71	0.60	0.65	0.63	0.29	0.43	0.38	0.38
8/29/07	0.51	0.49	0.41	0.46	0.44	0.19	0.28	0.25	0.26
10/31/07	0.86	0.81	0.68	0.73	0.71	0.35	0.53	0.46	0.55
4/29/08	0.05	0.06	0.10	0.05	0.05	0.09	0.10	0.14	0.30
9/30/08	0.17	0.18	0.22	0.16	0.16	0.20	0.20	0.30	

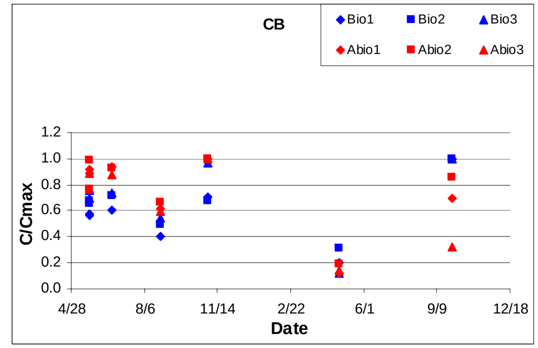
Sample: 10116 Temp: 12C Aerobic

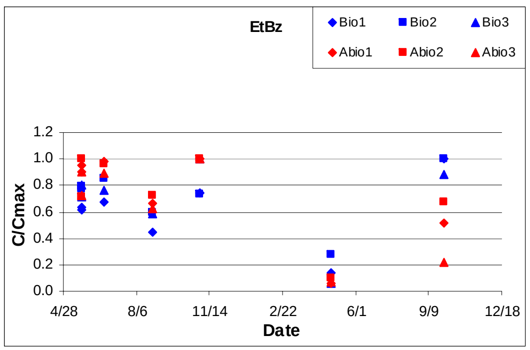


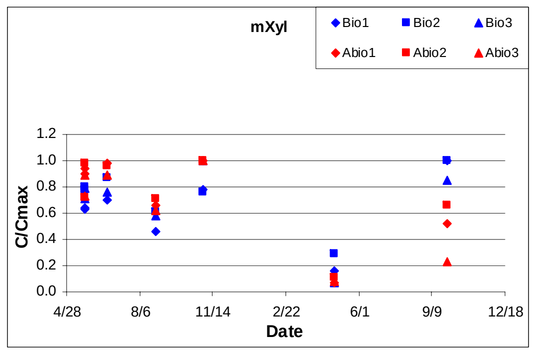
Sample: 10116 Temp: 12C Anaerobic

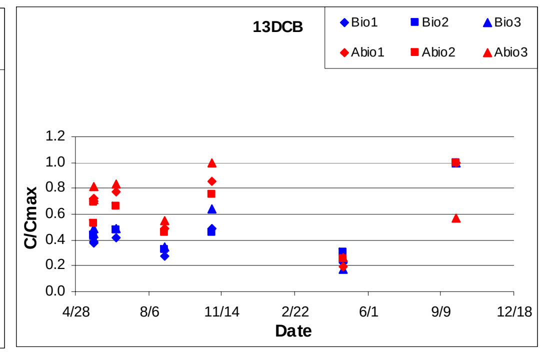


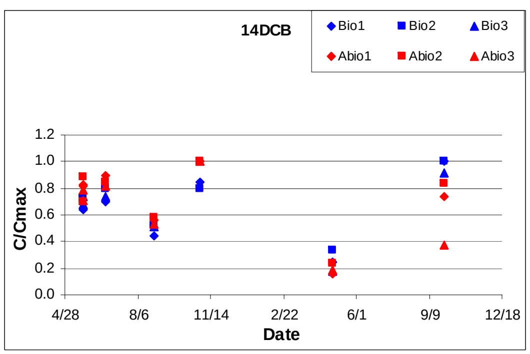


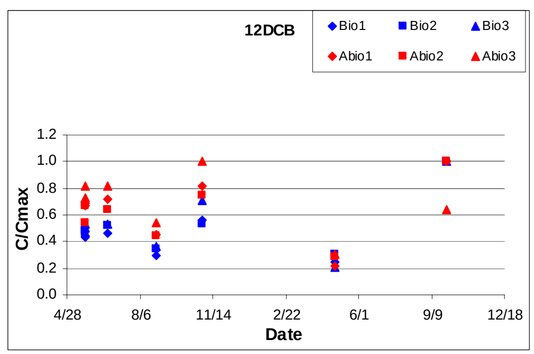


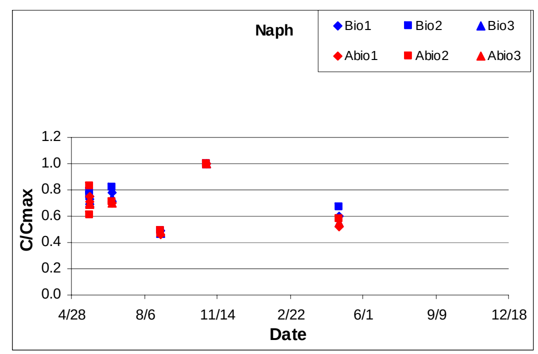












10117 Aerobic

	Biotic 1									Biotic 2									Biotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
4/12/07	0.74	0.90	1.05	1.00	1.18	0.56	1.43	0.82	1.24	0.83	0.89	1.14	0.99	1.21	0.56	1.51	0.86	1.34	0.45	0.91	1.08	1.01	1.20	0.58	1.47	0.85	1.33
4/17/07	0.62	0.85	1.03	0.94	1.12	0.55	1.41	0.83	1.34	0.68	0.93	1.22	1.02	1.25	0.60	1.61	0.96	1.49	0.67	0.91	1.11	1.00	1.19	0.58	1.49	0.90	1.42
4/20/07	0.79	0.86	1.03	0.96	1.13	0.55	1.41	0.82	1.32	0.86	0.93	1.21	1.04	1.26	0.58	1.56	0.91	1.46	0.78	0.84	1.04	0.93	1.11	0.54	1.40	0.85	1.40
4/27/07	0.77	0.80	0.97	0.89	1.05	0.51	1.31	0.79	1.22	0.91	0.93	1.20	1.03	1.26	0.57	1.53	0.89	1.41	0.92	0.94	1.12	1.04	1.23	0.57	1.47	0.88	1.38
5/3/07	0.13	0.04	0.04	0.02	0.02	0.01	0.02	0.02	0.08	0.18	0.07	0.08	0.03	0.04	0.01	0.04	0.03	0.15	0.15	0.05	0.05	0.02	0.03	0.01	0.03	0.03	0.14
5/11/07	0.83	0.84	1.00	0.93	1.10	0.51	1.31	0.80	1.25	0.91	0.91	1.18	1.02	1.24	0.56	1.50	0.88	1.30	0.87	0.87	1.04	0.97	1.14	0.52	1.33	0.82	1.27
6/6/07	0.79	0.81	0.96	0.90	1.08	0.50	1.29	0.78	1.20	0.83	0.84	1.09	0.93	1.14	0.50	1.37	0.83	1.29	0.70	0.70	0.82	0.77	0.91	0.38	0.96	0.63	1.01
7/5/07	0.78	0.78	0.94	0.87	1.04	0.47	1.22	0.76	1.15	0.75	0.75	1.01	0.84	1.03	0.46	1.28	0.77	1.21	0.81	0.81	0.98	0.90	1.07	0.49	1.28	0.79	1.27
9/6/07	0.61	0.61	0.74	0.67	0.79	0.37	0.96	0.57	0.90	0.67	0.66	0.87	0.73	0.89	0.40	1.07	0.62	0.98	0.65	0.66	0.79	0.72	0.85	0.40	1.01	0.60	0.95
11/2/07	0.84	0.83	1.04	0.89	1.06	0.52	1.37	0.86	1.50	0.75	0.73	1.04	0.78	0.97	0.48	1.34	0.84	1.54	0.93	0.91	1.13	0.97	1.15	0.56	1.46	0.92	1.57
4/29/08	0.47	0.50	0.78	0.48	0.58	0.53	0.94	0.83	1.67	0.36	0.38	0.71	0.37	0.47	0.48	0.89	0.79	1.81	0.22	0.25	0.52	0.26	0.33	0.40	0.72	0.67	1.66
10/1/08	0.06	0.03	0.04	0.02	0.02	0.01	0.02	0.03		0.19	0.10	0.15	0.05	0.06	0.05	0.09	0.14		0.52	0.35	0.43	0.22	0.25	0.20	0.31	0.40	

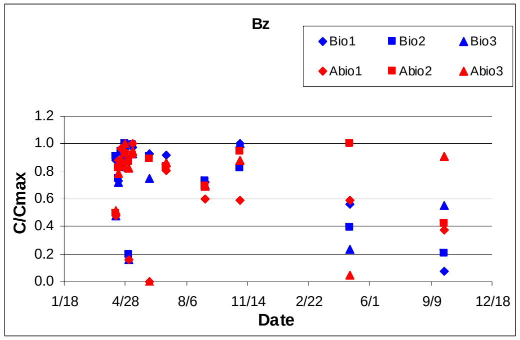
	Abiotic 1									Abiotic 2									Abiotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
4/12/07	0.26	0.50	0.49	0.54	0.55	0.31	0.49	0.39	0.45	0.39	0.75	0.69	0.83	0.84	0.45	0.70	0.55	0.57	0.48	0.88	0.81	0.95	0.96	0.53	0.82	0.65	0.69
4/17/07	0.49	0.56	0.55	0.60	0.61	0.35	0.55	0.45	0.52	0.66	0.76	0.72	0.82	0.83	0.46	0.71	0.58	0.64	0.73	0.84	0.80	0.91	0.92	0.52	0.81	0.66	0.73
4/20/07	0.54	0.57	0.54	0.62	0.62	0.35	0.54	0.44	0.52	0.68	0.73	0.69	0.80	0.81	0.45	0.70	0.56	0.64	0.83	0.88	0.81	0.97	0.98	0.53	0.81	0.66	0.72
4/27/07	0.46	0.46	0.45	0.48	0.49	0.28	0.45	0.38	0.46	0.75	0.76	0.70	0.83	0.83	0.45	0.69	0.56	0.63	0.93	0.95	0.87	1.04	1.04	0.55	0.85	0.69	0.75
5/3/07	0.09	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.70	0.70	0.65	0.75	0.75	0.40	0.62	0.52	0.57	0.77	0.77	0.72	0.83	0.84	0.45	0.69	0.58	0.65
5/11/07	0.56	0.55	0.52	0.59	0.59	0.32	0.50	0.41	0.44	0.73	0.74	0.68	0.81	0.82	0.43	0.66	0.54	0.58	0.88	0.89	0.81	0.97	0.98	0.51	0.79	0.65	0.66
6/6/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.71	0.63	0.76	0.77	0.37	0.56	0.49	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7/5/07	0.45	0.44	0.44	0.46	0.47	0.27	0.43	0.37	0.39	0.67	0.67	0.62	0.72	0.74	0.39	0.60	0.51	0.54	0.80	0.80	0.74	0.88	0.90	0.47	0.72	0.61	0.65
9/6/07	0.33	0.32	0.34	0.32	0.32	0.21	0.33	0.29	0.33	0.55	0.55	0.50	0.59	0.59	0.31	0.48	0.40	0.41	0.65	0.65	0.60	0.71	0.72	0.38	0.57	0.47	0.49
11/2/07	0.33	0.30	0.38	0.29	0.31	0.25	0.41	0.38	0.55	0.76	0.73	0.70	0.77	0.78	0.43	0.68	0.59	0.71	0.82	0.80	0.78	0.84	0.86	0.49	0.78	0.67	0.85
4/29/08	0.33	0.28	0.38	0.23	0.23	0.29	0.32	0.41	0.59	0.80	0.77	0.74	0.70	0.69	0.55	0.57	0.66	0.86	0.04	0.05	0.10	0.06	0.06	0.12	0.14	0.19	0.45
10/1/08	0.21	0.18	0.28	0.14	0.14	0.27	0.28	0.43		0.34	0.13	0.10	0.05	0.05	0.05	0.04	0.10		0.85	0.84	0.89	0.81	0.81	0.68	0.73	0.84	0.86

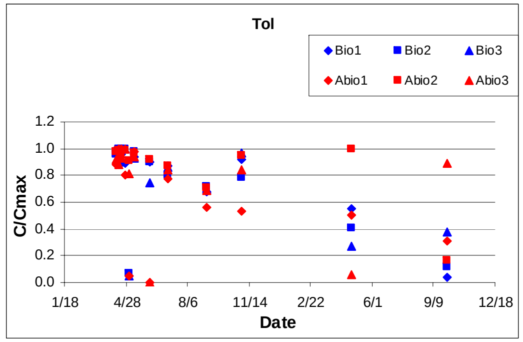
10117 Anaerobic

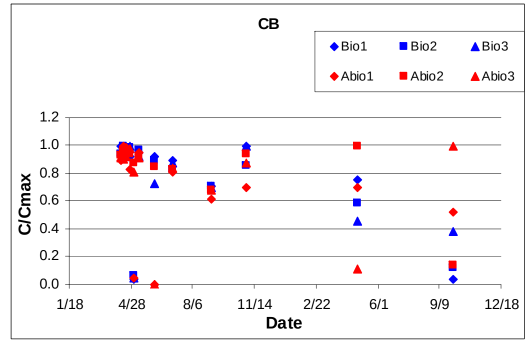
	Biotic 1									Biotic 2									Biotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
4/12/07	0.41	0.83	2.16	0.78	1.54	0.34	2.47	1.02	2.20	0.38	0.64	1.96	0.61	1.35	0.26	2.30	0.91	2.13	0.44	0.73	2.10	0.69	1.48	0.29	2.42	0.97	2.18
5/3/07	0.73	0.67	0.60	0.59	0.59	0.25	0.39	0.34	0.37	0.69	0.63	1.98	0.59	1.31	0.25	2.24	0.92	2.18	0.69	0.62	1.93	0.59	1.27	0.25	2.18	0.92	2.21
5/18/07	0.75	0.70	1.86	0.64	1.27	0.28	2.11	0.89	2.03	0.65	0.60	1.92	0.57	1.28	0.25	2.24	0.91	2.17	0.63	0.58	1.82	0.55	1.20	0.25	2.12	0.87	2.13
6/7/07	0.83	0.75	1.99	0.71	1.40	0.29	2.15	0.93	2.11	0.64	0.57	1.79	0.56	1.23	0.22	2.02	0.83	1.98	0.60	0.54	1.69	0.52	1.12	0.23	1.93	0.81	1.97
6/29/07	0.80	0.73	1.97	0.69	1.36	0.29	2.16	0.93	2.10	0.64	0.57	1.81	0.55	1.22	0.22	2.04	0.84	2.03	0.67	0.59	1.86	0.58	1.25	0.25	2.12	0.88	2.10
9/15/07	0.62	0.56	1.60	0.54	1.09	0.26	1.92	0.75	1.79	0.56	0.50	1.61	0.48	1.10	0.21	1.91	0.72	1.75	0.50	0.44	1.46	0.43	0.96	0.21	1.83	0.70	1.72
11/2/07	0.75	0.68	2.05	0.63	1.27	0.32	2.41	1.06	2.69	0.88	0.78	2.49	0.74	1.65	0.10	2.87	1.15	2.75	0.60	0.53	1.87	0.50	1.10	0.26	2.29	0.98	2.62
4/29/08	0.09	0.10	0.64	0.10	0.23	0.20	1.03	0.69	2.78	0.25	0.23	1.08	0.19	0.44	0.20	1.17	0.74	2.68	0.21	0.20	1.05	0.18	0.41	0.22	1.28	0.80	2.75
10/1/08	0.13	0.04	0.12	0.01	0.02	0.02	0.07	0.08		0.17	0.10	0.38	0.05	0.11	0.05	0.27	0.24		0.30	0.13	0.40	0.05	0.10	0.04	0.21	0.21	

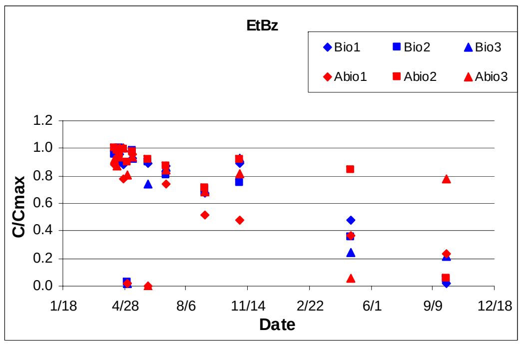
	Abiotic 1									Abiotic 2									Abiotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
4/12/07	0.51	0.76	0.67	0.67	0.67	0.28	0.46	0.37	0.40	0.47	0.70	0.62	0.63	0.62	0.26	0.42	0.35	0.34	0.55	0.79	0.70	0.71	0.70	0.29	0.47	0.39	0.38
5/3/07	0.69	0.63	0.57	0.57	0.57	0.25	0.39	0.35	0.33	0.73	0.67	0.60	0.59	0.59	0.25	0.39	0.34	0.37	0.75	0.69	0.62	0.61	0.61	0.26	0.41	0.36	0.37
5/18/07	0.72	0.67	0.60	0.61	0.61	0.26	0.41	0.36	0.39	0.76	0.71	0.62	0.64	0.63	0.26	0.42	0.36	0.37	0.74	0.69	0.60	0.62	0.61	0.25	0.40	0.35	0.32
6/7/07	0.70	0.65	0.57	0.58	0.58	0.24	0.38	0.34	0.36	0.75	0.70	0.59	0.63	0.63	0.24	0.38	0.34	0.33	0.73	0.67	0.58	0.60	0.60	0.24	0.38	0.34	0.31
6/29/07	0.71	0.65	0.58	0.58	0.58	0.24	0.39	0.35	0.37	0.69	0.63	0.55	0.57	0.57	0.22	0.36	0.33	0.30	0.78	0.71	0.61	0.64	0.64	0.25	0.39	0.35	0.34
9/15/07	0.44	0.44	0.43	0.40	0.44	0.21	0.44	0.29	0.35	0.50	0.53	0.47	0.49	0.52	0.22	0.44	0.28	0.32	0.43	0.48	0.45	0.44	0.47	0.21	0.43	0.28	0.32
11/2/07	0.42	0.39	0.44	0.35	0.36	0.21	0.36	0.34	0.51	0.75	0.68	0.62	0.60	0.61	0.27	0.44	0.40	0.47	0.44	0.41	0.44	0.37	0.38	0.20	0.34	0.33	0.45
4/29/08	0.10	0.11	0.22	0.10	0.11	0.17	0.20	0.27	0.54	0.90	0.79	0.73	0.60	0.60	0.37	0.39	0.48	0.60	0.25	0.25	0.35	0.21	0.23	0.24	0.26	0.36	0.57
10/1/08	0.52	0.47	0.56	0.41	0.40	0.40	0.40	0.57		0.30	0.18	0.17	0.09	0.09	0.07	0.07	0.14		0.20	0.08	0.06	0.02	0.02	0.02	0.02	0.06	

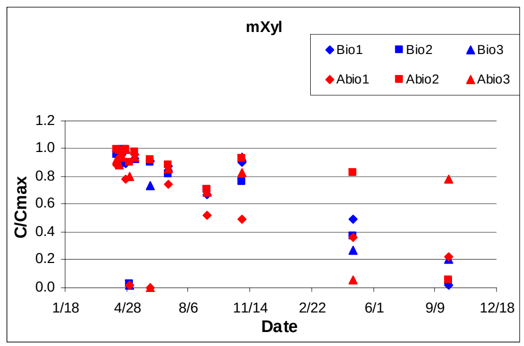
Sample: 10117 Temp: 22C Aerobic

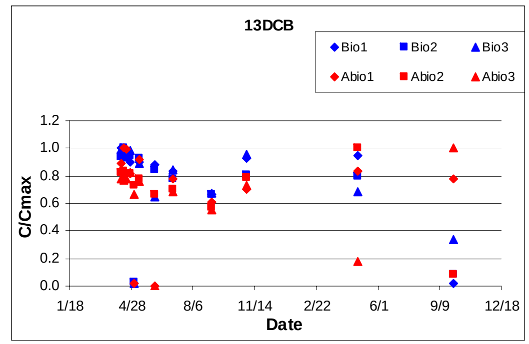


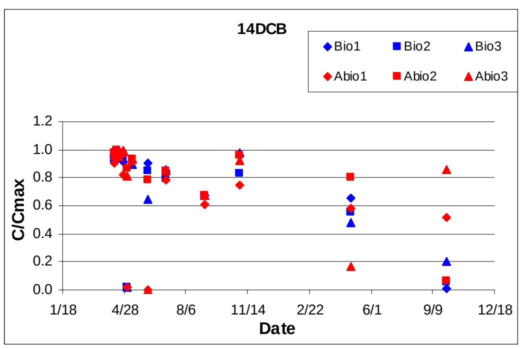


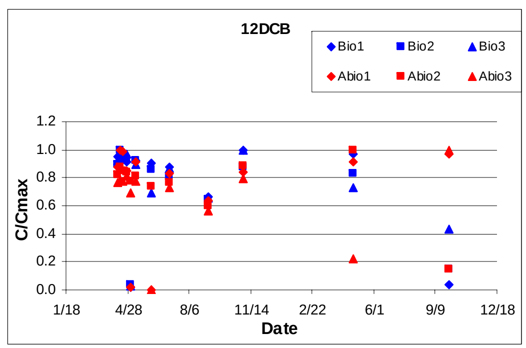


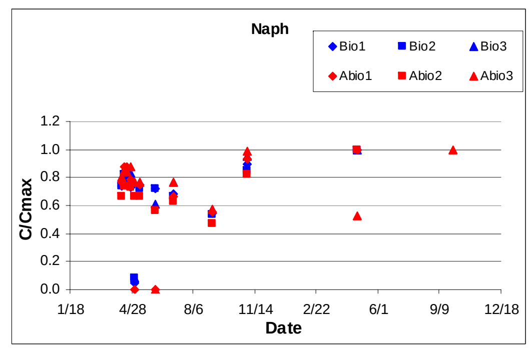




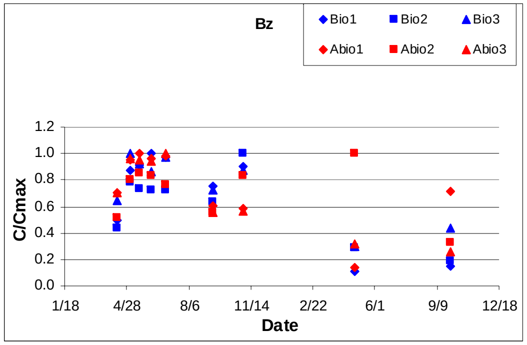


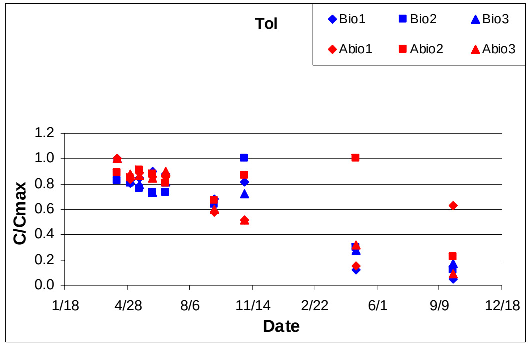


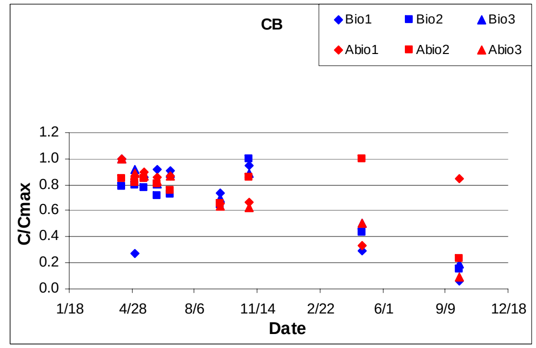


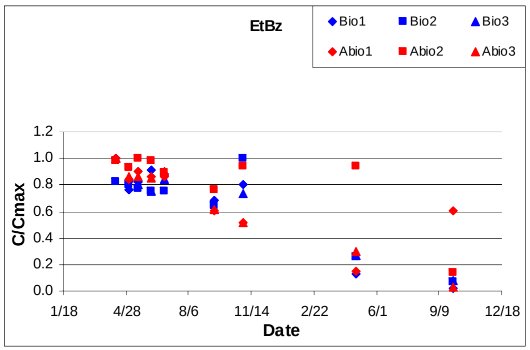


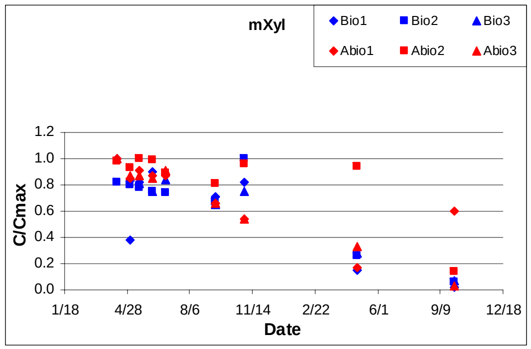
Sample: 10117 Temp: 22C Anaerobic

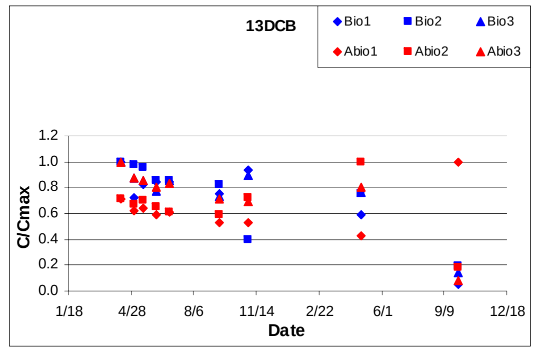


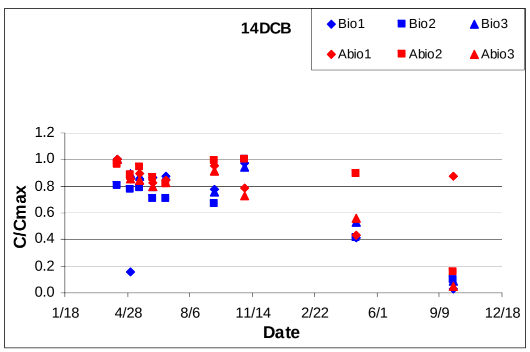


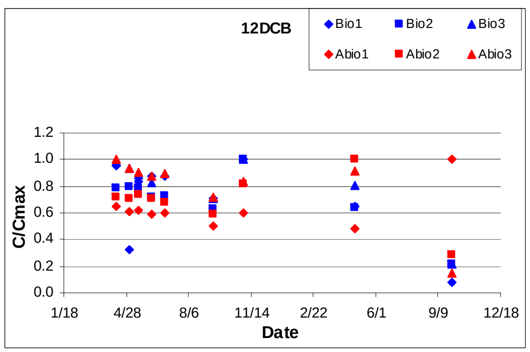


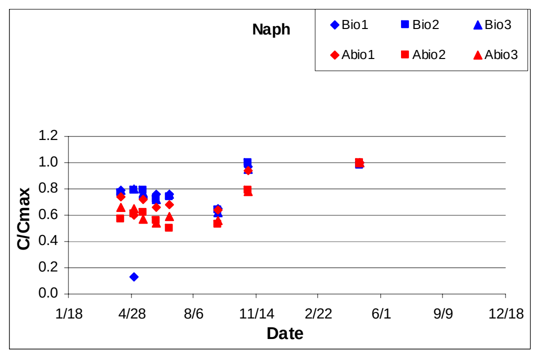












10118 Aerobic

	Biotic 1									Biotic 2									Biotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/23/07	0.83	0.85	0.85	0.90	0.93	0.55	1.06	0.81	1.05	0.81	0.83	0.78	0.87	0.88	0.52	0.92	0.74	0.95	0.82	0.83	0.80	0.87	0.90	0.52	0.98	0.76	0.99
5/23/07	0.80	0.81	0.81	0.85	0.89	0.51	0.99	0.79	1.02	0.83	0.84	0.79	0.89	0.90	0.54	0.94	0.75	0.96	0.79	0.81	0.79	0.85	0.87	0.51	0.96	0.76	1.00
6/6/07	0.60	0.61	0.66	0.65	0.69	0.42	0.83	0.67	0.92	0.74	0.76	0.73	0.80	0.82	0.48	0.86	0.70	0.92	0.57	0.59	0.63	0.62	0.65	0.41	0.80	0.65	0.95
6/21/07	0.68	0.70	0.72	0.74	0.77	0.46	0.90	0.72	0.97	0.69	0.70	0.69	0.75	0.76	0.45	0.82	0.67	0.91	0.76	0.78	0.76	0.82	0.85	0.49	0.94	0.76	1.00
7/5/07	0.74	0.75	0.76	0.79	0.83	0.48	0.95	0.76	1.00	0.75	0.76	0.73	0.80	0.82	0.48	0.87	0.71	0.95	0.72	0.73	0.73	0.77	0.80	0.46	0.89	0.73	0.98
8/28/07	0.34	0.41	0.43	0.43	0.44	0.24	0.47	0.41	0.59	0.35	0.43	0.42	0.44	0.45	0.25	0.44	0.39	0.55	0.39	0.47	0.46	0.48	0.49	0.26	0.48	0.42	0.58
10/31/07	0.93	0.92	0.95	0.96	1.01	0.61	1.23	0.95	1.29	0.90	0.89	0.88	0.93	0.95	0.60	1.12	0.88	1.24	0.89	0.89	0.91	0.93	0.96	0.59	1.16	0.90	1.27
4/29/08	0.01	0.02	0.06	0.02	0.03	0.09	0.14	0.19	0.59	0.50	0.48	0.48	0.43	0.43	0.37	0.45	0.49	0.74	0.33	0.33	0.39	0.32	0.33	0.33	0.43	0.47	0.78
10/1/08	0.43	0.48	0.69	0.47	0.50	0.74	0.96	1.17		1.09	1.07	1.07	1.00	0.97	0.99	1.11	1.34		0.77	0.81	0.95	0.79	0.79	0.92	1.12	1.34	

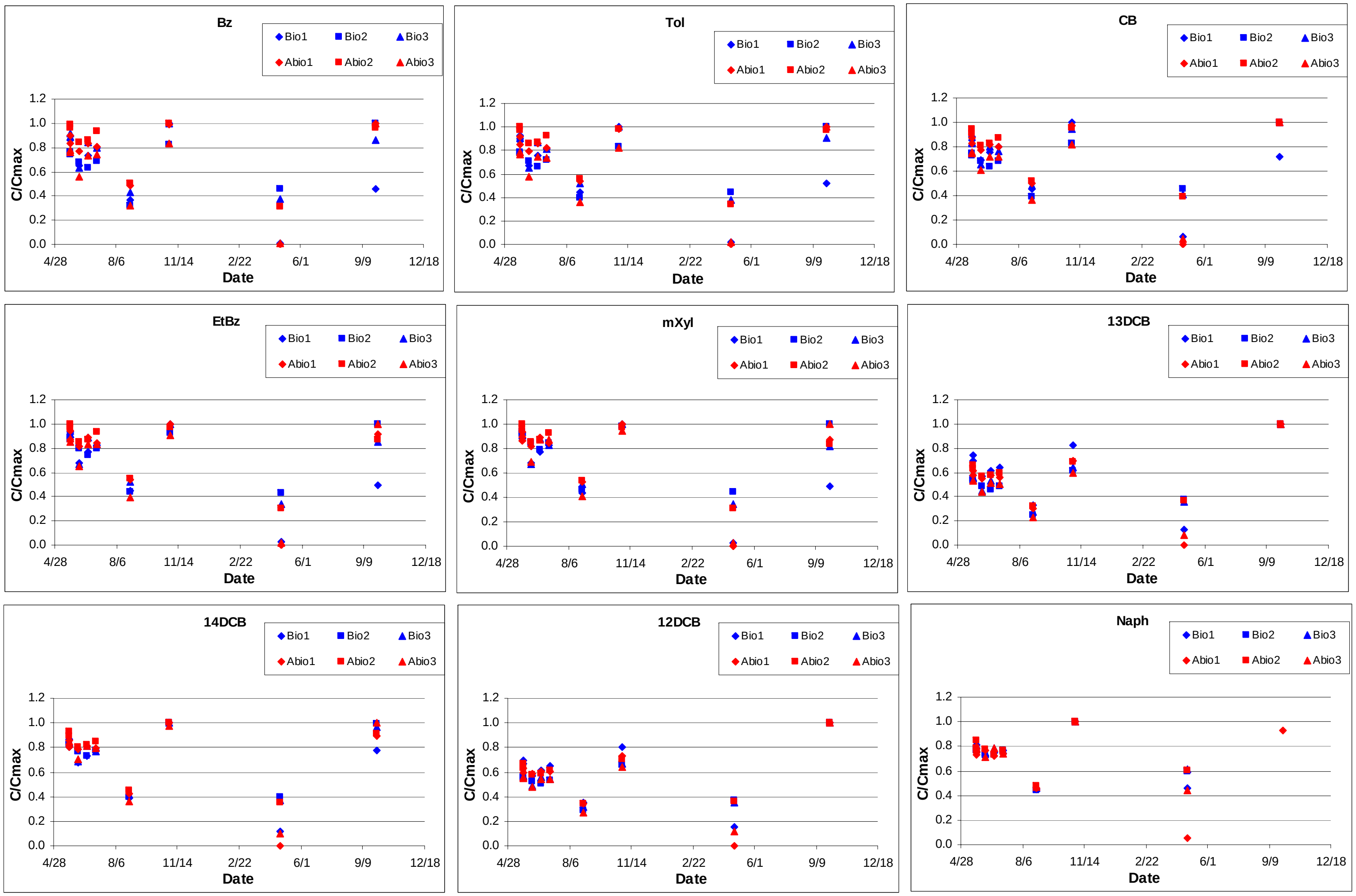
	Abiotic 1									Abiotic 2									Abiotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/23/07	0.83	0.83	0.72	0.87	0.84	0.49	0.73	0.61	0.68	0.85	0.87	0.78	0.92	0.90	0.54	0.80	0.68	0.79	0.81	0.82	0.73	0.86	0.84	0.51	0.75	0.62	0.72
5/23/07	0.77	0.77	0.68	0.80	0.77	0.47	0.69	0.57	0.66	0.83	0.85	0.75	0.89	0.87	0.52	0.77	0.64	0.74	0.83	0.84	0.74	0.89	0.87	0.52	0.77	0.64	0.74
6/6/07	0.71	0.72	0.64	0.75	0.73	0.45	0.67	0.56	0.70	0.73	0.74	0.67	0.78	0.77	0.46	0.70	0.59	0.72	0.59	0.62	0.59	0.66	0.65	0.42	0.64	0.55	0.66
6/21/07	0.77	0.77	0.67	0.81	0.79	0.47	0.70	0.58	0.66	0.74	0.76	0.68	0.80	0.79	0.48	0.71	0.60	0.68	0.78	0.80	0.70	0.84	0.83	0.49	0.74	0.62	0.72
7/5/07	0.74	0.74	0.66	0.77	0.76	0.45	0.68	0.58	0.67	0.81	0.80	0.72	0.85	0.84	0.49	0.74	0.63	0.71	0.79	0.79	0.70	0.84	0.82	0.48	0.72	0.61	0.69
8/28/07	0.45	0.49	0.41	0.49	0.47	0.25	0.36	0.33	0.42	0.43	0.48	0.43	0.50	0.48	0.26	0.39	0.35	0.45	0.34	0.39	0.36	0.40	0.38	0.22	0.33	0.31	0.43
10/31/07	0.92	0.89	0.80	0.92	0.90	0.56	0.85	0.71	0.90	0.86	0.86	0.78	0.89	0.87	0.56	0.87	0.72	0.94	0.89	0.88	0.80	0.91	0.90	0.57	0.88	0.73	0.92
4/29/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.27	0.29	0.32	0.27	0.27	0.30	0.31	0.37	0.56	0.01	0.02	0.05	0.02	0.02	0.08	0.09	0.13	0.41
10/1/08	0.92	0.90	0.82	0.84	0.78	0.81	0.76	0.96	0.84	0.83	0.85	0.82	0.79	0.75	0.82	0.79	1.02		1.06	1.07	0.98	1.01	0.94	0.96	0.91	1.14	

10118 Anaerobic

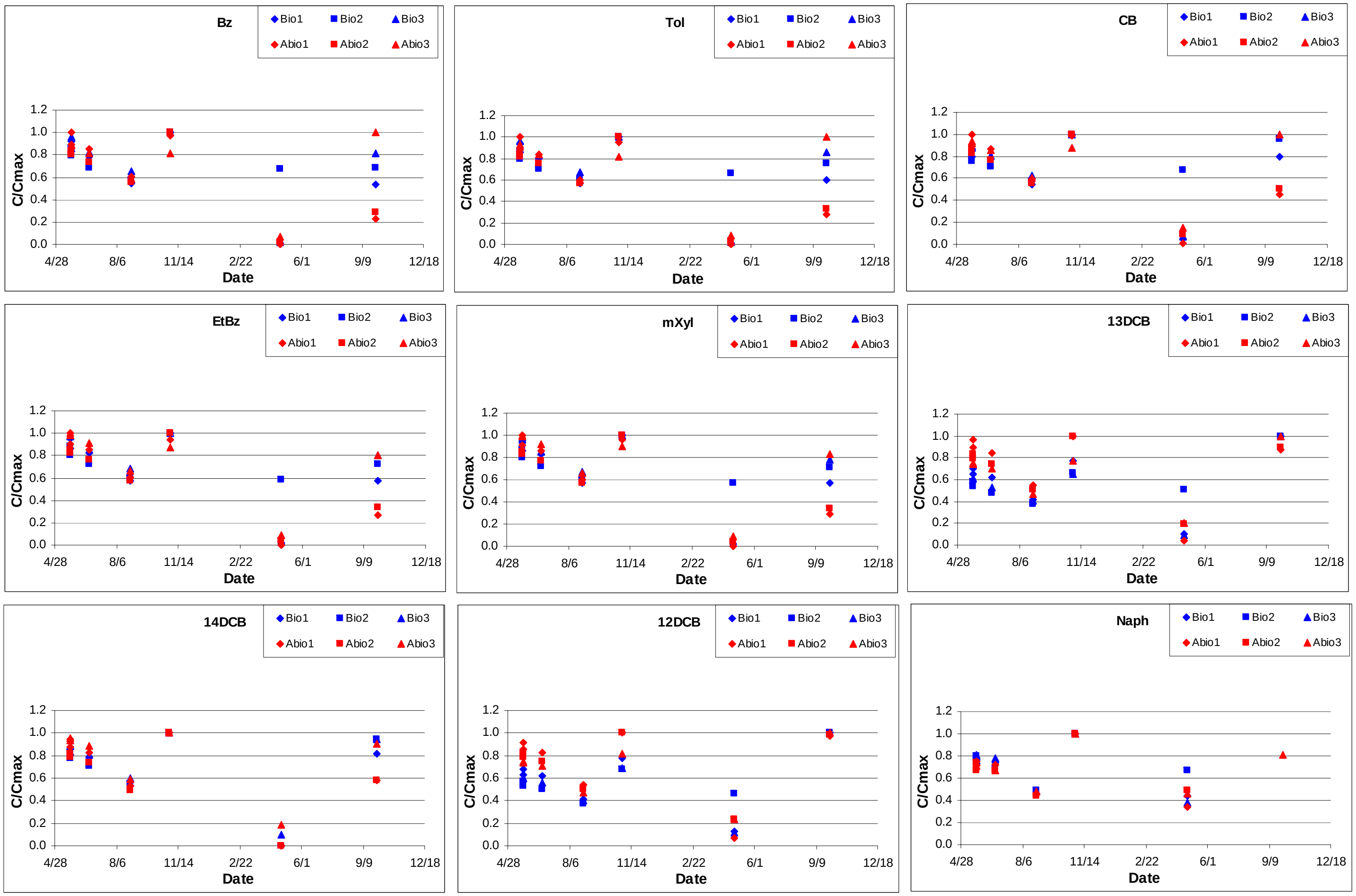
	Biotic 1									Biotic 2									Biotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/23/07	0.85	0.80	1.18	0.73	0.94	0.34	1.43	1.04	1.22	0.77	0.73	1.08	0.67	0.86	0.32	1.33	0.97	1.23	0.78	0.75	1.09	0.68	0.87	0.33	1.34	0.98	1.25
5/23/07	0.76	0.73	1.08	0.66	0.85	0.31	1.32	0.96	1.20	0.70	0.67	1.00	0.61	0.79	0.30	1.26	0.91	1.18	0.79	0.74	1.08	0.68	0.87	0.33	1.34	0.98	1.17
6/22/07	0.72	0.68	1.06	0.63	0.82	0.30	1.29	0.95	1.17	0.61	0.59	0.93	0.55	0.71	0.26	1.14	0.85	1.06	0.67	0.64	0.99	0.59	0.77	0.29	1.23	0.91	1.19
8/29/07	0.50	0.48	0.75	0.44	0.56	0.20	0.87	0.63	0.72	0.52	0.50	0.76	0.46	0.59	0.21	0.89	0.63	0.76	0.54	0.52	0.77	0.48	0.61	0.22	0.91	0.65	0.74
10/31/07	0.91	0.85	1.36	0.76	0.99	0.37	1.64	1.19	1.58	0.89	0.84	1.33	0.76	0.99	0.37	1.61	1.16	1.53	0.82	0.77	1.22	0.70	0.90	0.35	1.52	1.11	1.53
4/29/08	0.01	0.01	0.07	0.01	0.02	0.05	0.00	0.20	0.70	0.60	0.56	0.90	0.45	0.56	0.28	0.00	0.78	1.03	0.01	0.02	0.08	0.02	0.03	0.05	0.16	0.20	0.59
10/1/08	0.48	0.50	1.08	0.43	0.57	0.48	1.34	1.53		0.61	0.63	1.27	0.55	0.70	0.56	1.51	1.70		0.67	0.66	1.23	0.56	0.70	0.54	1.43	1.62	

	Abiotic 1									Abiotic 2									Abiotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/23/07	0.75	0.73	0.62	0.67	0.65	0.31	0.48	0.41	0.43	0.77	0.74	0.65	0.69	0.66	0.32	0.49	0.42	0.45	0.76	0.71	0.60	0.64	0.62	0.29	0.44	0.38	0.39
5/23/07	0.84	0.81	0.68	0.74	0.71	0.34	0.52	0.44	0.45	0.75	0.72	0.62	0.67	0.65	0.31	0.47	0.40	0.41	0.76	0.72	0.61	0.65	0.62	0.29	0.44	0.38	0.38
6/22/07	0.71	0.68	0.59	0.63	0.62	0.30	0.45	0.40	0.43	0.69	0.66	0.57	0.62	0.60	0.29	0.44	0.38	0.40	0.69	0.65	0.56	0.59	0.57	0.27	0.41	0.36	0.36
8/29/07	0.51	0.49	0.41	0.45	0.43	0.19	0.29	0.26	0.27	0.52	0.50	0.41	0.47	0.44	0.20	0.29	0.26	0.26	0.50	0.47	0.39	0.43	0.41	0.18	0.28	0.24	0.25
10/31/07	0.82	0.77	0.67	0.70	0.68	0.35	0.55	0.48	0.60	0.94	0.88	0.74	0.81	0.78	0.39	0.60	0.51	0.60	0.69	0.64	0.57	0.57	0.56	0.30	0.47	0.42	0.53
4/29/08	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.03	0.20	0.02	0.03	0.07	0.03	0.03	0.07	0.00	0.12	0.30	0.06	0.07	0.10	0.05	0.06	0.08	0.09	0.12	0.24
10/1/08	0.19	0.22	0.31	0.20	0.21	0.31	0.32	0.47		0.27	0.30	0.38	0.27	0.27	0.35	0.35	0.51		0.85	0.78	0.65	0.52	0.52	0.39	0.42	0.51	0.43

Sample: 10118 Temp: 12C Aerobic



Sample: 10118 Temp: 12C Anaerobic



10119 Aerobic

DATE	Biotic 1									Biotic 2									Biotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/23/07	0.84	0.85	0.78	0.88	0.91	0.53	0.88	0.75	1.06	0.76	0.77	0.73	0.81	0.85	0.50	0.84	0.72	1.04	0.84	0.84	0.76	0.89	0.89	0.54	0.85	0.73	0.99
5/23/07	0.78	0.79	0.73	0.83	0.86	0.51	0.83	0.71	1.01	0.87	0.87	0.81	0.91	0.95	0.54	0.90	0.78	1.12	0.80	0.81	0.73	0.85	0.86	0.52	0.83	0.70	0.98
6/6/07	0.48	0.49	0.51	0.51	0.54	0.36	0.60	0.56	0.92	0.56	0.58	0.60	0.61	0.65	0.41	0.68	0.62	0.99	0.70	0.72	0.66	0.75	0.77	0.46	0.74	0.65	0.95
6/21/07	0.70	0.71	0.67	0.75	0.78	0.45	0.75	0.66	0.99	0.76	0.76	0.73	0.80	0.84	0.48	0.80	0.71	1.06	0.79	0.81	0.73	0.85	0.86	0.51	0.81	0.69	0.97
7/5/07	0.56	0.58	0.57	0.60	0.63	0.40	0.66	0.60	0.96	0.74	0.75	0.71	0.78	0.83	0.46	0.76	0.69	1.03	0.78	0.79	0.71	0.83	0.83	0.48	0.75	0.67	0.96
8/28/07	0.44	0.49	0.44	0.50	0.50	0.25	0.41	0.39	0.59	0.46	0.50	0.46	0.51	0.52	0.26	0.42	0.41	0.61	0.56	0.56	0.51	0.61	0.61	0.36	0.56	0.48	0.64
10/31/07	0.91	0.90	0.86	0.93	0.96	0.58	0.98	0.84	1.30	0.86	0.87	0.84	0.89	0.94	0.57	0.97	0.84	1.32	0.33	0.34	0.38	0.35	0.36	0.29	0.49	0.45	0.89
4/29/08	0.05	0.06	0.10	0.06	0.06	0.11	0.13	0.17	0.44	0.74	0.73	0.74	0.65	0.68	0.61	0.67	0.82	1.40	0.04	0.05	0.12	0.06	0.07	0.16	0.19	0.28	0.85
10/1/08	0.67	0.72	0.80	0.69	0.69	0.83	0.87	1.16		0.76	0.79	0.87	0.75	0.77	0.88	0.91	1.22		0.68	0.74	0.82	0.71	0.70	0.88	0.90	1.19	

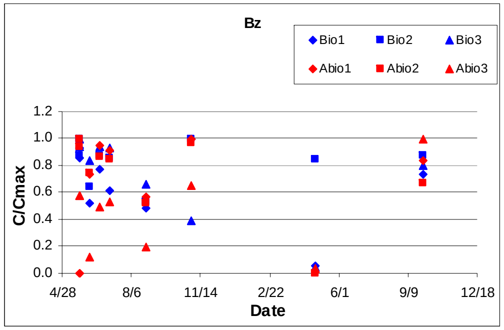
DATE	Abiotic 1									Abiotic 2									Abiotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/23/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.82	0.73	0.87	0.85	0.52	0.77	0.64	0.72	0.76	0.75	0.67	0.79	0.77	0.48	0.71	0.59	0.68
5/23/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86	0.88	0.77	0.93	0.91	0.55	0.83	0.67	0.80	0.76	0.74	0.65	0.78	0.76	0.46	0.68	0.57	0.63
6/6/07	0.59	0.62	0.60	0.66	0.66	0.44	0.66	0.57	0.73	0.64	0.66	0.63	0.71	0.71	0.46	0.69	0.59	0.74	0.16	0.18	0.25	0.20	0.22	0.22	0.35	0.34	0.56
6/21/07	0.77	0.79	0.70	0.83	0.81	0.49	0.74	0.62	0.74	0.74	0.76	0.68	0.80	0.79	0.48	0.71	0.61	0.73	0.65	0.66	0.59	0.69	0.68	0.41	0.62	0.53	0.62
7/5/07	0.74	0.74	0.66	0.78	0.76	0.46	0.68	0.59	0.71	0.73	0.73	0.66	0.78	0.76	0.46	0.68	0.59	0.71	0.71	0.69	0.62	0.73	0.71	0.43	0.65	0.55	0.64
8/28/07	0.46	0.51	0.44	0.53	0.50	0.26	0.39	0.35	0.45	0.45	0.51	0.44	0.52	0.50	0.26	0.38	0.36	0.46	0.26	0.32	0.32	0.34	0.34	0.21	0.31	0.29	0.39
10/31/07	0.81	0.80	0.75	0.83	0.81	0.54	0.82	0.70	0.95	0.83	0.83	0.76	0.86	0.84	0.56	0.86	0.72	0.97	0.86	0.83	0.75	0.86	0.84	0.53	0.80	0.67	0.87
4/29/08	0.01	0.01	0.05	0.02	0.02	0.11	0.14	0.20	0.75	0.00	0.01	0.03	0.01	0.01	0.07	0.09	0.15	0.67	0.05	0.07	0.14	0.07	0.08	0.20	0.23	0.31	0.79
10/1/08	0.68	0.70	0.68	0.67	0.63	0.71	0.67	0.89		0.58	0.61	0.66	0.58	0.55	0.71	0.68	0.91		1.32	1.31	1.10	1.25	1.14	1.06	0.97	1.19	

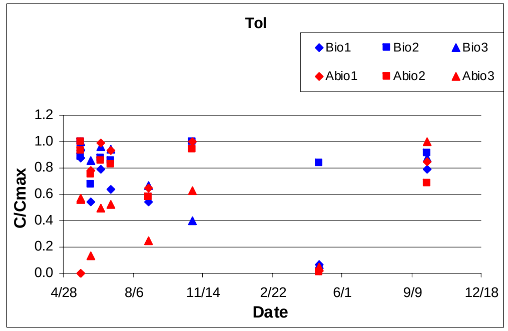
10119 Anaerobic

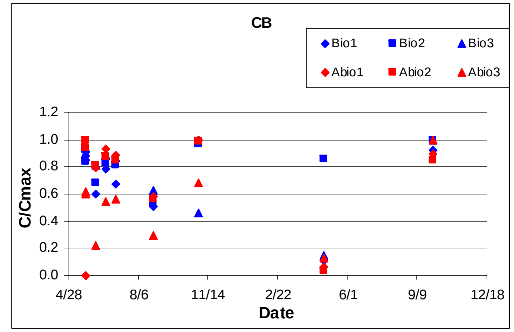
DATE	Biotic 1									Biotic 2									Biotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/23/07	0.80	0.77	0.82	0.70	0.88	0.34	0.75	0.74	1.19	0.71	0.68	0.73	0.62	0.77	0.32	0.68	0.69	1.16	0.77	0.74	0.78	0.68	0.83	0.35	0.74	0.72	1.19
5/23/07	0.69	0.67	0.73	0.60	0.76	0.31	0.68	0.68	1.13	0.80	0.76	0.79	0.70	0.86	0.35	0.75	0.73	1.18	0.81	0.78	0.80	0.72	0.87	0.35	0.75	0.73	1.16
6/22/07	0.68	0.66	0.74	0.61	0.77	0.30	0.68	0.68	1.14	0.66	0.64	0.70	0.59	0.74	0.30	0.65	0.66	1.12	0.56	0.55	0.62	0.51	0.63	0.27	0.58	0.60	1.05
8/29/07	0.53	0.51	0.56	0.47	0.59	0.22	0.47	0.48	0.75	0.50	0.49	0.52	0.45	0.56	0.21	0.45	0.45	0.73	0.53	0.52	0.55	0.48	0.58	0.23	0.48	0.47	0.75
10/31/07	0.73	0.70	0.83	0.63	0.80	0.35	0.79	0.80	1.44	0.77	0.74	0.83	0.67	0.84	0.35	0.79	0.80	1.43	0.67	0.65	0.76	0.59	0.74	0.34	0.76	0.76	1.43
4/29/08	0.01	0.01	0.05	0.01	0.02	0.06	0.00	0.21	1.06	0.00	0.00	0.03	0.01	0.01	0.04	0.00	0.14	1.00	0.98	0.92	1.01	0.74	0.89	0.55	0.73	1.01	1.74
10/1/08	0.62	0.65	0.91	0.56	0.70	0.60	0.81	1.27		0.42	0.44	0.61	0.38	0.46	0.40	0.55	0.88		0.41	0.44	0.63	0.38	0.46	0.47	0.62	1.00	

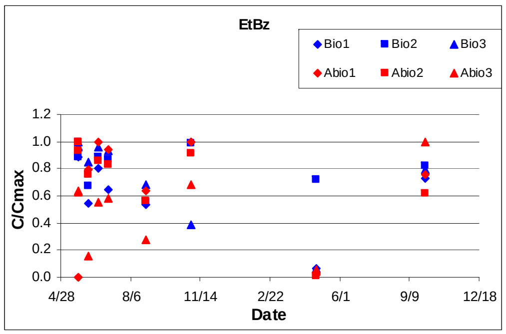
DATE	Abiotic 1									Abiotic 2									Abiotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/23/07	0.75	0.73	0.63	0.68	0.66	0.33	0.50	0.43	0.49	0.78	0.75	0.65	0.70	0.68	0.34	0.51	0.44	0.46	0.67	0.63	0.53	0.58	0.56	0.28	0.42	0.36	0.36
5/23/07	0.83	0.81	0.69	0.76	0.73	0.36	0.55	0.48	0.49	0.71	0.69	0.61	0.65	0.62	0.32	0.49	0.42	0.46	0.70	0.65	0.56	0.60	0.58	0.29	0.44	0.38	0.43
6/22/07	0.70	0.68	0.59	0.64	0.62	0.31	0.48	0.42	0.45	0.71	0.68	0.58	0.64	0.61	0.30	0.46	0.40	0.41	0.69	0.64	0.54	0.59	0.57	0.28	0.42	0.37	0.37
8/29/07	0.53	0.51	0.43	0.49	0.46	0.22	0.33	0.28	0.32	0.53	0.51	0.43	0.48	0.46	0.21	0.33	0.28	0.32	0.49	0.46	0.38	0.42	0.40	0.19	0.29	0.24	0.27
10/31/07	0.68	0.64	0.60	0.60	0.58	0.33	0.53	0.47	0.65	0.83	0.77	0.68	0.71	0.68	0.36	0.56	0.49	0.62	0.78	0.71	0.62	0.65	0.63	0.33	0.52	0.45	0.56
4/29/08	0.79	0.73	0.66	0.58	0.56	0.43	0.00	0.54	0.75	0.14	0.15	0.22	0.12	0.13	0.19	0.00	0.28	0.57	0.79	0.70	0.61	0.56	0.53	0.40	0.41	0.49	0.63
10/1/08	1.12	1.05	0.89	0.88	0.81	0.68	0.64	0.84		0.95	0.94	0.78	0.65	0.63	0.47	0.52	0.59	0.60	1.05	0.96	0.82	0.80	0.73	0.60	0.57	0.75	

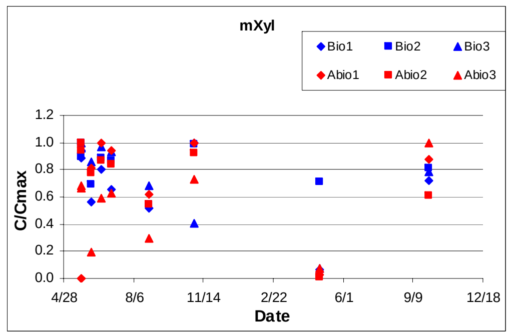
Sample: 10119 Temp: 12C Aerobic

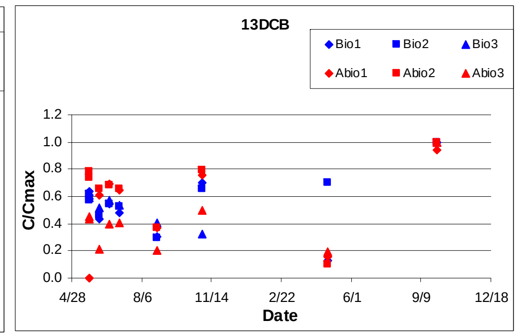


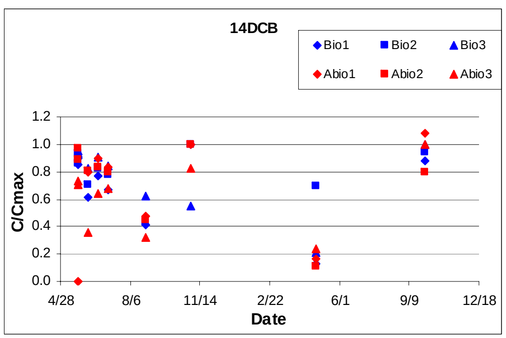


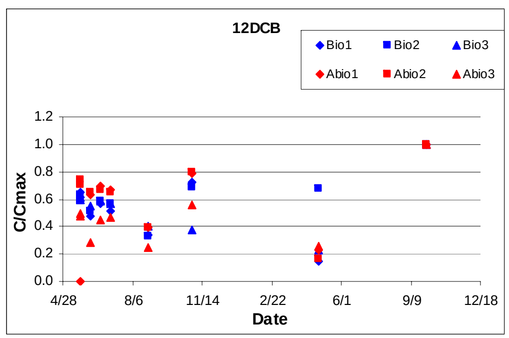


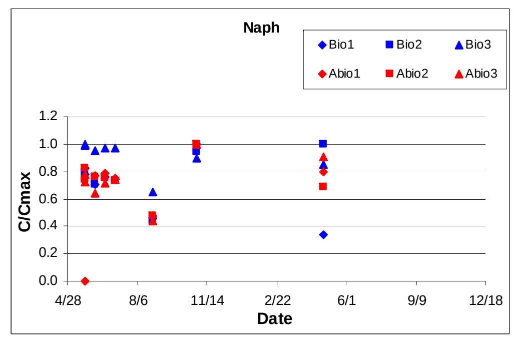




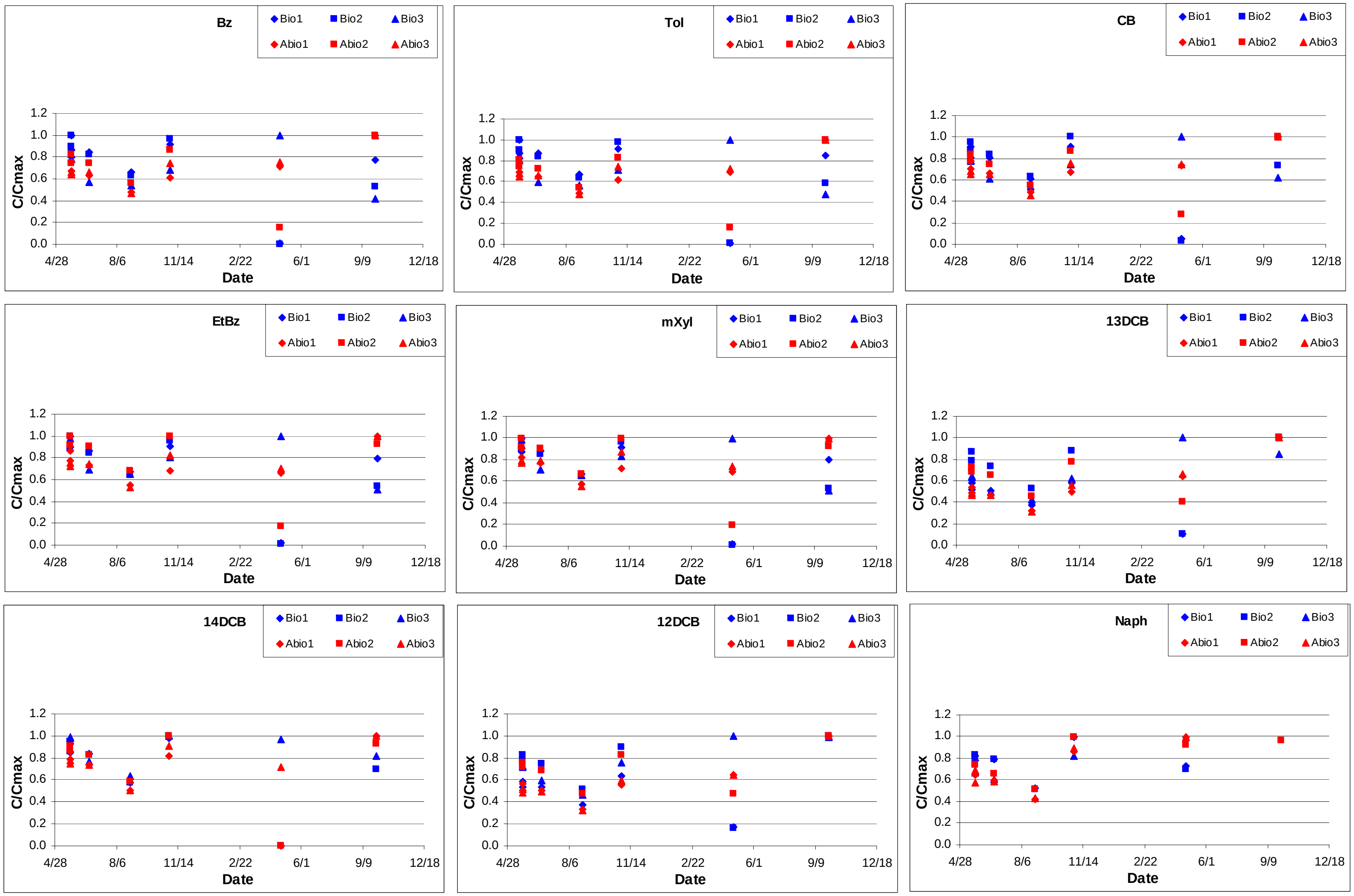








Sample: 10119 Temp: 12C Anaerobic



60098 Aerobic

DATE	Biotic 1									Biotic 2									Biotic 3								
	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/23/07	0.90	0.92	0.85	1.00	0.98	0.69	1.02	0.83	1.08	0.87	0.90	0.82	0.97	0.96	0.64	0.96	0.79	1.01	0.82	0.83	0.77	0.91	0.89	0.62	0.93	0.76	1.03
5/23/07	0.86	0.87	0.81	0.95	0.94	0.63	0.94	0.79	0.99	0.90	0.92	0.84	1.00	0.98	0.67	1.00	0.82	1.00	0.89	0.92	0.84	1.00	0.99	0.66	0.98	0.81	1.03
5/30/07	0.87	0.89	0.81	0.94	0.94	0.64	0.96	0.78	1.02	0.81	0.83	0.77	0.90	0.89	0.61	0.91	0.76	0.99	0.70	0.72	0.69	0.78	0.77	0.55	0.82	0.69	0.94
6/6/07	0.13	0.14	0.14	0.15	0.16	0.12	0.18	0.16	0.25	0.80	0.82	0.75	0.87	0.87	0.60	0.90	0.74	0.99	0.76	0.78	0.73	0.83	0.83	0.58	0.86	0.73	0.97
6/14/07	0.81	0.83	0.76	0.86	0.84	0.61	0.92	0.75	0.98	0.78	0.80	0.74	0.85	0.85	0.59	0.87	0.73	0.96	0.75	0.76	0.72	0.82	0.82	0.57	0.85	0.72	0.95
6/20/07	0.85	0.26	0.80	0.38	0.01	0.63	0.94	0.78	1.00	0.84	0.24	0.80	0.58	0.00	0.63	0.95	0.79	1.05	0.80	0.44	0.76	0.56	0.00	0.60	0.90	0.74	0.97
6/27/07	0.89	0.01	0.84	0.11	0.00	0.67	0.99	0.82	1.06	0.79	0.00	0.76	0.27	0.00	0.61	0.91	0.76	1.00	0.81	0.01	0.76	0.15	0.00	0.60	0.90	0.75	0.99
7/5/07	0.85	0.01	0.79	0.05	0.00	0.63	0.94	0.78	1.00	0.82	0.00	0.77	0.19	0.00	0.61	0.93	0.76	0.99	0.80	0.00	0.75	0.06	0.00	0.59	0.88	0.75	0.99
7/12/07	0.83	0.00	0.78	0.03	0.00	0.62	0.93	0.77	1.07	0.82	0.00	0.77	0.14	0.00	0.60	0.92	0.76	1.03	0.77	0.00	0.72	0.03	0.00	0.57	0.87	0.72	0.96
8/30/07	0.00	0.00	0.31	0.00	0.00	0.39	0.58	0.46	0.00	0.00	0.00	0.29	0.01	0.00	0.38	0.57	0.48	0.63	0.00	0.00	0.29	0.00	0.00	0.39	0.58	0.49	0.66
10/31/07	0.01	0.00	0.54	0.00	0.00	0.72	1.11	0.87	0.02	0.00	0.00	0.52	0.01	0.00	0.71	1.08	0.80	0.07	0.00	0.00	0.48	0.00	0.00	0.67	1.03	0.78	0.13
4/8/08	0.01	0.00	0.65	0.00	0.00	0.95	0.94	1.05	0.02	0.00	0.00	0.57	0.00	0.00	0.89	0.88	0.93	0.08	0.00	0.00	0.30	0.00	0.00	0.56	0.58	0.64	0.10
9/22/08	0.00	0.00	0.33	0.00	0.00	0.66	0.67	0.87		0.00	0.00	0.29	0.00	0.00	0.62	0.62	0.78		0.00	0.00	0.71	0.00	0.00	1.25	1.18	1.34	

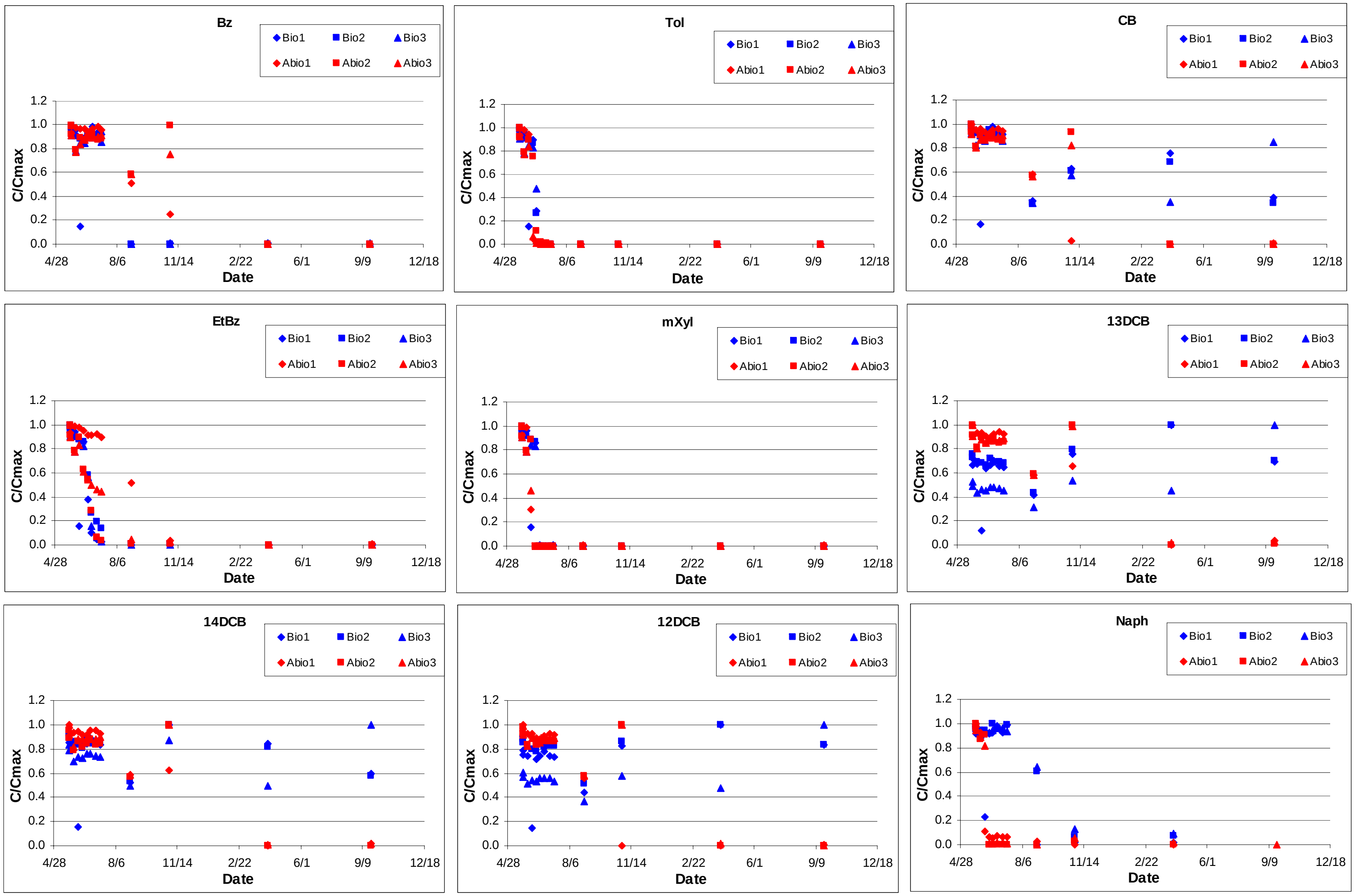
DATE	Abiotic 1									Abiotic 2									Abiotic 3								
	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/23/07	0.83	0.85	0.80	0.91	0.89	0.62	0.93	0.77	1.01	0.91	0.94	0.86	1.02	1.00	0.67	0.99	0.81	1.06	0.89	0.90	0.83	0.98	0.96	0.64	0.95	0.78	0.98
5/23/07	0.78	0.80	0.75	0.85	0.83	0.56	0.84	0.71	0.95	0.84	0.86	0.80	0.93	0.91	0.61	0.92	0.77	1.02	0.81	0.84	0.75	0.88	0.87	0.58	0.87	0.72	0.92
5/30/07	0.82	0.83	0.76	0.90	0.88	0.58	0.86	0.72	0.94	0.72	0.74	0.70	0.80	0.79	0.54	0.82	0.69	0.92	0.69	0.70	0.66	0.76	0.75	0.51	0.77	0.65	0.87
6/6/07	0.81	0.80	0.76	0.89	0.27	0.58	0.87	0.71	0.11	0.82	0.84	0.78	0.91	0.88	0.60	0.90	0.75	0.96	0.74	0.76	0.72	0.82	0.44	0.56	0.83	0.70	0.79
6/14/07	0.80	0.04	0.74	0.86	0.00	0.56	0.85	0.68	0.06	0.80	0.71	0.75	0.64	0.00	0.56	0.85	0.69	0.00	0.78	0.06	0.72	0.59	0.00	0.54	0.84	0.66	0.01
6/20/07	0.79	0.01	0.73	0.83	0.00	0.56	0.84	0.68	0.06	0.82	0.11	0.76	0.55	0.00	0.58	0.87	0.71	0.00	0.80	0.01	0.73	0.54	0.00	0.55	0.84	0.67	0.01
6/27/07	0.80	0.00	0.75	0.83	0.00	0.57	0.88	0.70	0.07	0.84	0.02	0.79	0.29	0.00	0.60	0.92	0.74	0.00	0.79	0.00	0.74	0.49	0.00	0.56	0.83	0.68	0.01
7/5/07	0.82	0.00	0.76	0.84	0.00	0.58	0.88	0.71	0.07	0.80	0.00	0.75	0.07	0.00	0.57	0.87	0.72	0.00	0.80	0.00	0.74	0.45	0.00	0.56	0.84	0.68	0.02
7/12/07	0.80	0.00	0.75	0.81	0.00	0.57	0.86	0.71	0.07	0.81	0.00	0.74	0.04	0.00	0.58	0.87	0.71	0.00	0.81	0.00	0.75	0.44	0.00	0.57	0.85	0.70	0.01
8/30/07	0.43	0.00	0.46	0.47	0.00	0.36	0.54	0.43	0.03	0.53	0.00	0.49	0.01	0.00	0.40	0.59	0.48	0.00	0.52	0.00	0.47	0.04	0.00	0.37	0.55	0.46	0.00
10/31/07	0.21	0.00	0.02	0.03	0.00	0.41	0.57	0.00	0.00	0.91	0.00	0.80	0.01	0.00	0.67	1.04	0.83	0.03	0.67	0.00	0.68	0.02	0.00	0.63	0.95	0.79	0.05
4/8/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.02
9/22/08	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.01		0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.00

60098 Anaerobic

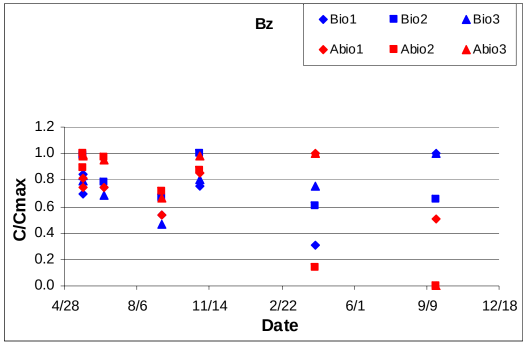
DATE	Biotic 1									Biotic 2									Biotic 3								
	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/23/07	0.73	0.74	0.68	0.78	0.77	0.50	0.76	0.64	0.83	0.87	0.88	0.79	0.94	0.92	0.57	0.85	0.71	0.86	0.82	0.82	0.74	0.87	0.86	0.54	0.81	0.68	0.86
5/23/07	0.88	0.89	0.80	0.95	0.93	0.59	0.88	0.72	0.93	0.86	0.88	0.79	0.93	0.91	0.57	0.86	0.70	0.91	0.86	0.87	0.78	0.92	0.90	0.57	0.85	0.70	0.90
6/21/07	0.78	0.78	0.71	0.84	0.83	0.52	0.79	0.65	0.78	0.69	0.70	0.66	0.74	0.74	0.47	0.71	0.60	0.76	0.70	0.71	0.65	0.74	0.74	0.46	0.70	0.59	0.74
9/9/07	0.56	0.62	0.57	0.65	0.64	0.41	0.63	0.50	0.62	0.59	0.63	0.58	0.66	0.65	0.41	0.62	0.50	0.62	0.48	0.42	0.35	0.00	0.55	0.36	0.51	0.45	0.56
10/31/07	0.79	0.76	0.73	0.58	0.76	0.52	0.81	0.67	0.15	0.88	0.83	0.75	0.15	0.86	0.56	0.86	0.71	0.94	0.82	0.64	0.55	0.01	0.83	0.55	0.79	0.71	0.94
4/8/08	0.32	0.20	0.51	0.08	0.00	0.57	0.60	0.70	0.04	0.54	0.28	0.60	0.01	0.00	0.60	0.62	0.73	0.03	0.77	0.00	0.57	0.00	0.00	0.67	0.64	0.74	0.00
9/22/08	1.05	0.38	1.06	0.06	0.01	1.19	1.15	1.37		0.58	0.15	0.62	0.00	0.00	0.67	0.68	0.87		1.03	0.00	0.71	0.00	0.00	0.92	0.84	1.05	

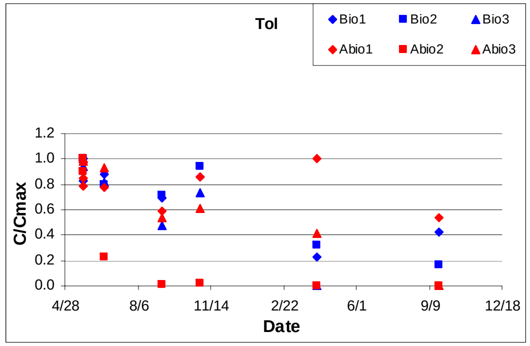
DATE	Abiotic 1									Abiotic 2									Abiotic 3								
	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/23/07	0.82	0.81	0.73	0.84	0.81	0.47	0.70	0.58	0.59	0.80	0.80	0.71	0.79	0.77	0.46	0.69	0.58	0.70	0.48	0.46	0.40	0.46	0.45	0.25	0.37	0.31	0.35
5/23/07	0.75	0.75	0.67	0.76	0.74	0.43	0.65	0.54	0.57	0.72	0.72	0.66	0.71	0.70	0.41	0.62	0.54	0.67	0.48	0.47	0.41	0.47	0.46	0.25	0.38	0.32	0.34
6/21/07	0.75	0.74	0.66	0.76	0.74	0.41	0.63	0.52	0.61	0.77	0.18	0.67	0.76	0.00	0.43	0.65	0.53	0.00	0.46	0.43	0.39	0.45	0.43	0.24	0.36	0.30	0.30
9/9/07	0.54	0.56	0.50	0.55	0.55	0.32	0.50	0.40	0.48	0.57	0.01	0.53	0.49	0.00	0.34	0.52	0.41	0.04	0.32	0.25	0.29	0.33	0.17	0.19	0.29	0.23	0.20
10/31/07	0.85	0.82	0.75	0.75	0.80	0.48	0.75	0.62	0.81	0.69	0.01	0.65	0.47	0.01	0.42	0.67	0.55	0.07	0.48	0.29	0.41	0.44	0.11	0.27	0.42	0.34	0.25
4/8/08	1.00	0.95	0.90	0.59	0.80	0.72	0.73	0.80	0.15	0.11	0.00	0.38	0.25	0.01	0.59	0.63	0.67	0.06	0.49	0.19	0.44	0.37	0.00	0.34	0.35	0.40	0.06
9/22/08	0.51	0.52	0.58	0.20	0.42	0.61	0.60	0.76		0.00	0.00	0.00	0.14	0.00	0.61	0.73	0.55	0.03	0.00	0.00	0.00	0.13	0.00	0.28	0.32	0.22	0.13

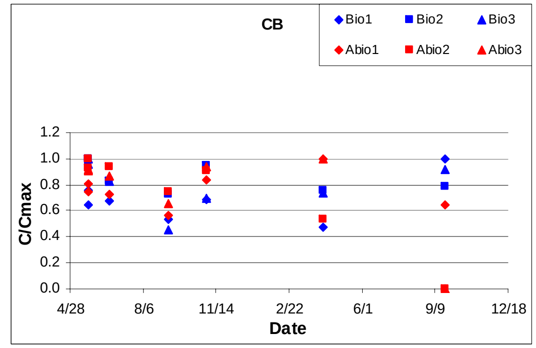
Sample: 60098 Temp: 12C Aerobic

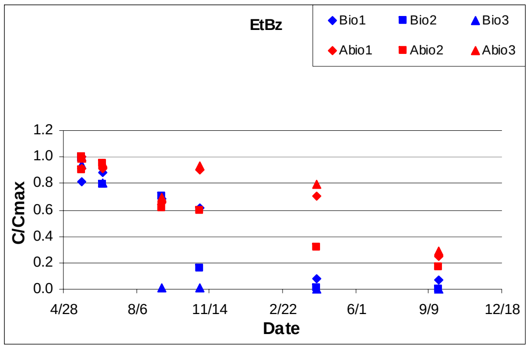


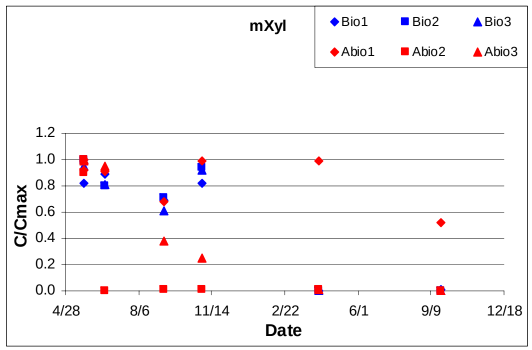
Sample: 60098 Temp: 12C Anaerobic

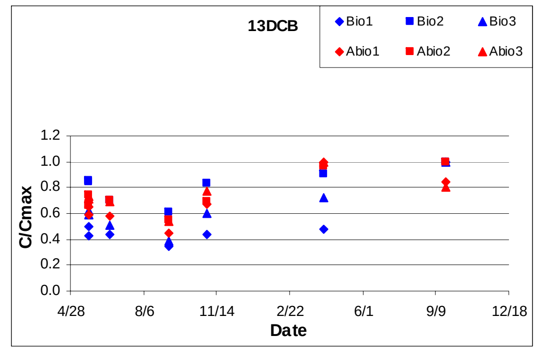


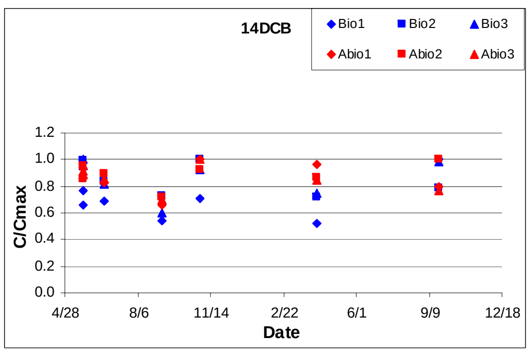


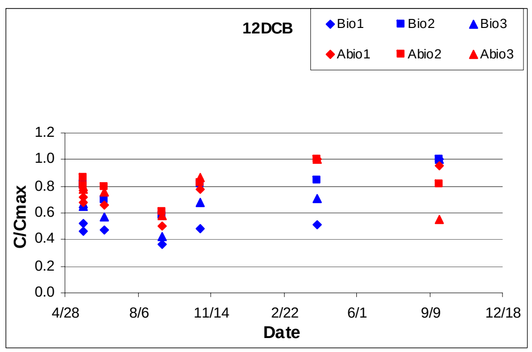


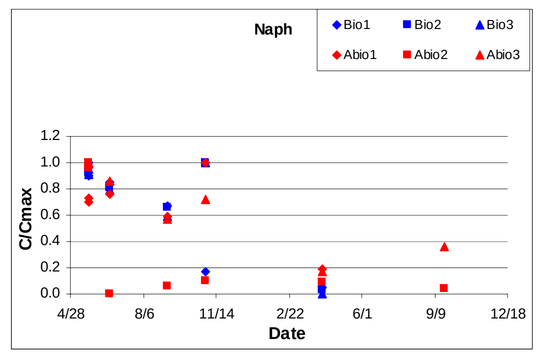












60099 Aerobic

DATE	BZ	TOL	CB	EtBz	mXyl (Biotic 1)	13DCB	14DCB	12DCB	Naph
5/3/07	0.58	0.57	0.50	0.52	0.48	0.20	0.40	0.25	0.23
5/3/07	0.62	0.62	0.55	0.57	0.53	0.22	0.45	0.27	0.26
5/11/07	0.55	0.54	0.50	0.48	0.45	0.21	0.42	0.25	0.00
5/18/07	0.55	0.35	0.48	0.49	0.00	0.20	0.41	0.25	0.00
5/24/07	0.01	0.00	0.00	0.00	0.00	0.17	0.17	0.20	0.00
5/31/07	0.01	0.01	0.01	0.01	0.01	0.21	0.17	0.23	0.01
6/6/07	0.01	0.01	0.01	0.01	0.01	0.19	0.16	0.22	0.01
6/14/07	0.00	0.01	0.01	0.01	0.01	0.20	0.17	0.22	0.01
6/20/07	0.01	0.00	0.01	0.01	0.00	0.20	0.17	0.23	0.01
6/27/07	0.01	0.00	0.01	0.00	0.00	0.23	0.20	0.26	0.01
8/30/07	0.00	0.00	0.01	0.00	0.00	0.16	0.14	0.18	0.00
11/1/07	0.00	0.00	0.01	0.01	0.01	0.35	0.30	0.37	0.02
4/8/08	0.00	0.00	0.01	0.01	0.01	0.39	0.20	0.37	0.01
9/22/08	0.00	0.00	0.01	0.00	0.00	0.32	0.17	0.34	

DATE	BZ	TOL	CB	EtBz	mXyl (Biotic 2)	13DCB	14DCB	12DCB	Naph
5/3/07	0.44	0.45	0.44	0.42	0.40	0.19	0.39	0.25	0.26
5/3/07	0.64	0.65	0.58	0.62	0.57	0.25	0.50	0.30	0.29
5/11/07	0.58	0.59	0.53	0.56	0.53	0.23	0.46	0.28	0.22
5/18/07	0.56	0.55	0.50	0.51	0.47	0.21	0.43	0.25	0.00
5/24/07	0.55	0.52	0.47	0.47	0.41	0.20	0.40	0.25	0.00
5/31/07	0.54	0.34	0.47	0.45	0.01	0.22	0.45	0.27	0.00
6/6/07	0.02	0.01	0.00	0.00	0.00	0.21	0.26	0.25	0.00
6/14/07	0.01	0.00	0.00	0.00	0.00	0.22	0.28	0.26	0.00
6/20/07	0.02	0.00	0.00	0.00	0.00	0.22	0.27	0.25	0.00
6/27/07	0.02	0.00	0.00	0.00	0.00	0.24	0.29	0.27	0.00
8/30/07	0.02	0.00	0.00	0.00	0.00	0.17	0.20	0.19	0.00
11/1/07	0.01	0.00	0.01	0.00	0.00	0.26	0.34	0.31	0.01
4/8/08	0.01	0.00	0.02	0.00	0.01	0.45	0.35	0.47	0.01
9/22/08	0.01	0.00	0.02	0.00	0.01	0.30	0.25	0.35	0.01

DATE	BZ	TOL	CB	EtBz	mXyl (Biotic 3)	13DCB	14DCB	12DCB	Naph
5/3/07	0.62	0.61	0.54	0.56	0.52	0.22	0.44	0.27	0.26
5/3/07	0.38	0.38	0.39	0.35	0.33	0.16	0.33	0.21	0.23
5/11/07	0.59	0.58	0.53	0.53	0.49	0.22	0.45	0.27	0.00
5/18/07	0.57	0.56	0.50	0.51	0.48	0.20	0.41	0.24	0.00
5/24/07	0.53	0.48	0.46	0.45	0.10	0.18	0.37	0.23	0.00
5/31/07	0.54	0.36	0.45	0.45	0.01	0.21	0.42	0.25	0.00
6/6/07	0.25	0.05	0.01	0.00	0.00	0.20	0.36	0.24	0.00
6/14/07	0.27	0.05	0.01	0.00	0.00	0.22	0.40	0.26	0.00
6/20/07	0.27	0.05	0.01	0.00	0.00	0.22	0.40	0.26	0.00
6/27/07	0.26	0.05	0.01	0.00	0.00	0.23	0.41	0.27	0.00
8/30/07	0.17	0.03	0.01	0.00	0.00	0.18	0.30	0.20	0.00
11/1/07	0.10	0.02	0.01	0.00	0.00	0.20	0.35	0.24	0.01
4/8/08	0.00	0.01	0.01	0.01	0.01	0.46	0.49	0.47	0.01
9/22/08	0.00	0.00	0.01	0.00	0.00	0.52	0.52	0.55	

DATE	BZ	TOL	CB	EtBz	mXyl (Abiotic 1)	13DCB	14DCB	12DCB	Naph
5/3/07	0.50	0.50	0.46	0.46	0.44	0.20	0.40	0.25	0.23
5/3/07	0.58	0.56	0.49	0.51	0.48	0.21	0.42	0.26	0.24
5/11/07	0.55	0.54	0.46	0.49	0.45	0.18	0.36	0.23	0.20
5/18/07	0.57	0.56	0.47	0.51	0.47	0.19	0.38	0.23	0.20
5/24/07	0.56	0.53	0.44	0.47	0.43	0.17	0.33	0.21	0.18
5/31/07	0.57	0.56	0.48	0.52	0.48	0.20	0.40	0.25	0.21
6/6/07	0.60	0.44	0.49	0.53	0.00	0.20	0.40	0.25	0.02
6/14/07	0.51	0.32	0.42	0.44	0.00	0.17	0.34	0.21	0.02
6/20/07	0.57	0.35	0.47	0.49	0.00	0.19	0.38	0.24	0.02
6/27/07	0.37	0.11	0.04	0.01	0.00	0.19	0.36	0.24	0.00
8/30/07	0.19	0.06	0.03	0.01	0.00	0.17	0.30	0.20	0.00
11/1/07	0.25	0.09	0.04	0.02	0.00	0.37	0.68	0.42	0.04
4/8/08	0.00	0.01	0.01	0.01	0.00	0.46	0.51	0.43	0.02
9/22/08	0.01	0.01	0.01	0.01	0.01	0.39	0.38	0.42	

DATE	BZ	TOL	CB	EtBz	mXyl (Abiotic 2)	13DCB	14DCB	12DCB	Naph
5/3/07	0.59	0.57	0.48	0.51	0.47	0.19	0.37	0.23	0.19
5/3/07	0.49	0.47	0.41	0.41	0.38	0.16	0.32	0.20	0.18
5/11/07	0.53	0.51	0.43	0.46	0.42	0.17	0.34	0.21	0.17
5/18/07	0.52	0.50	0.42	0.44	0.41	0.16	0.31	0.19	0.16
5/24/07	0.43	0.41	0.36	0.36	0.33	0.13	0.26	0.17	0.14
5/31/07	0.53	0.51	0.43	0.47	0.44	0.19	0.37	0.22	0.04
6/6/07	0.52	0.51	0.45	0.49	0.34	0.21	0.41	0.25	0.03
6/14/07	0.51	0.36	0.41	0.44	0.00	0.17	0.33	0.20	0.00
6/20/07	0.52	0.37	0.43	0.45	0.00	0.18	0.35	0.21	0.00
6/27/07	0.46	0.26	0.25	0.01	0.00	0.17	0.32	0.20	0.00
8/30/07	0.30	0.17	0.16	0.01	0.00	0.15	0.27	0.17	0.00
11/1/07	0.43	0.23	0.21	0.01	0.00	0.20	0.37	0.25	0.02
4/8/08	0.02	0.01	0.00	0.00	0.00	0.28	0.13	0.31	0.09
9/22/08	0.09	0.04	0.04	0.01	0.01	0.24	0.17	0.30	

DATE	BZ	TOL	CB	EtBz	mXyl (Abiotic 3)	13DCB	14DCB	12DCB	Naph
5/3/07	0.47	0.46	0.43	0.41	0.39	0.17	0.34	0.22	0.19
5/3/07	0.57	0.55	0.48	0.49	0.46	0.19	0.39	0.24	0.22
5/11/07	0.55	0.53	0.45	0.47	0.43	0.18	0.35	0.22	0.19
5/18/07	0.58	0.56	0.47	0.50	0.46	0.18	0.36	0.22	0.18
5/24/07	0.48	0.45	0.40	0.40	0.37	0.15	0.29	0.19	0.08
5/31/07	0.56	0.54	0.46	0.49	0.45	0.19	0.38	0.23	0.02
6/6/07	0.53	0.51	0.45	0.46	0.30	0.19	0.38	0.23	0.02
6/14/07	0.54	0.35	0.43	0.44	0.00	0.18	0.34	0.21	0.00
6/20/07	0.57	0.35	0.44	0.40	0.00	0.18	0.35	0.22	0.01
6/27/07	0.40	0.12	0.04	0.01	0.00	0.18	0.32	0.23	0.00
8/30/07	0.24	0.08	0.03	0.01	0.00	0.17	0.27	0.20	0.00
11/1/07	0.40	0.13	0.05	0.02	0.00	0.37	0.58	0.41	0.04
4/8/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27
9/22/08	0.01	0.01	0.01	0.01	0.01	0.26	0.22	0.30	

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DATE	BZ	TOL	CB	EtBz	mXyl (Biotic 1)	13DCB	14DCB	12DCB	Naph
5/3/07	0.53	0.38	0.33	0.24	0.22	0.07	0.15	0.09	0.07
5/3/07	0.27	0.21	0.22	0.14	0.13	0.05	0.11	0.07	0.05
5/31/07	0.46	0.35	0.29	0.23	0.21	0.07	0.16	0.09	0.07
6/28/07	0.46	0.35	0.30	0.24	0.22	0.08	0.17	0.10	0.09
9/9/07	0.32	0.25	0.22	0.17	0.16	0.06	0.14	0.08	0.07
11/1/07	0.51	0.37	0.32	0.25	0.24	0.09	0.19	0.12	0.10
4/8/08	0.37	0.01	0.31	0.13	0.21	0.13	0.17	0.13	0.03
9/22/08	0.19	0.01	0.21	0.14	0.10	0.08	0.11	0.11	

DATE	BZ	TOL	CB	EtBz	mXyl (Biotic 2)	13DCB	14DCB	12DCB	Naph
5/3/07	0.46	0.34	0.29	0.22	0.20	0.07	0.14	0.09	0.07
5/3/07	0.45	0.32	0.28	0.21	0.19	0.06	0.13	0.08	0.06
5/31/07	0.40	0.30	0.26	0.20	0.19	0.06	0.14	0.09	0.07
6/28/07	0.39	0.29	0.25	0.20	0.18	0.06	0.14	0.08	0.07
9/9/07	0.28	0.21	0.19	0.15	0.14	0.05	0.12	0.06	0.06
11/1/07	0.45	0.33	0.29	0.23	0.22	0.08	0.19	0.11	0.10
4/8/08	0.00	0.00	0.01	0.19	0.06	0.15	0.20	0.09	0.03
9/22/08	0.27	0.00	0.23	0.16	0.07	0.09	0.12	0.11	

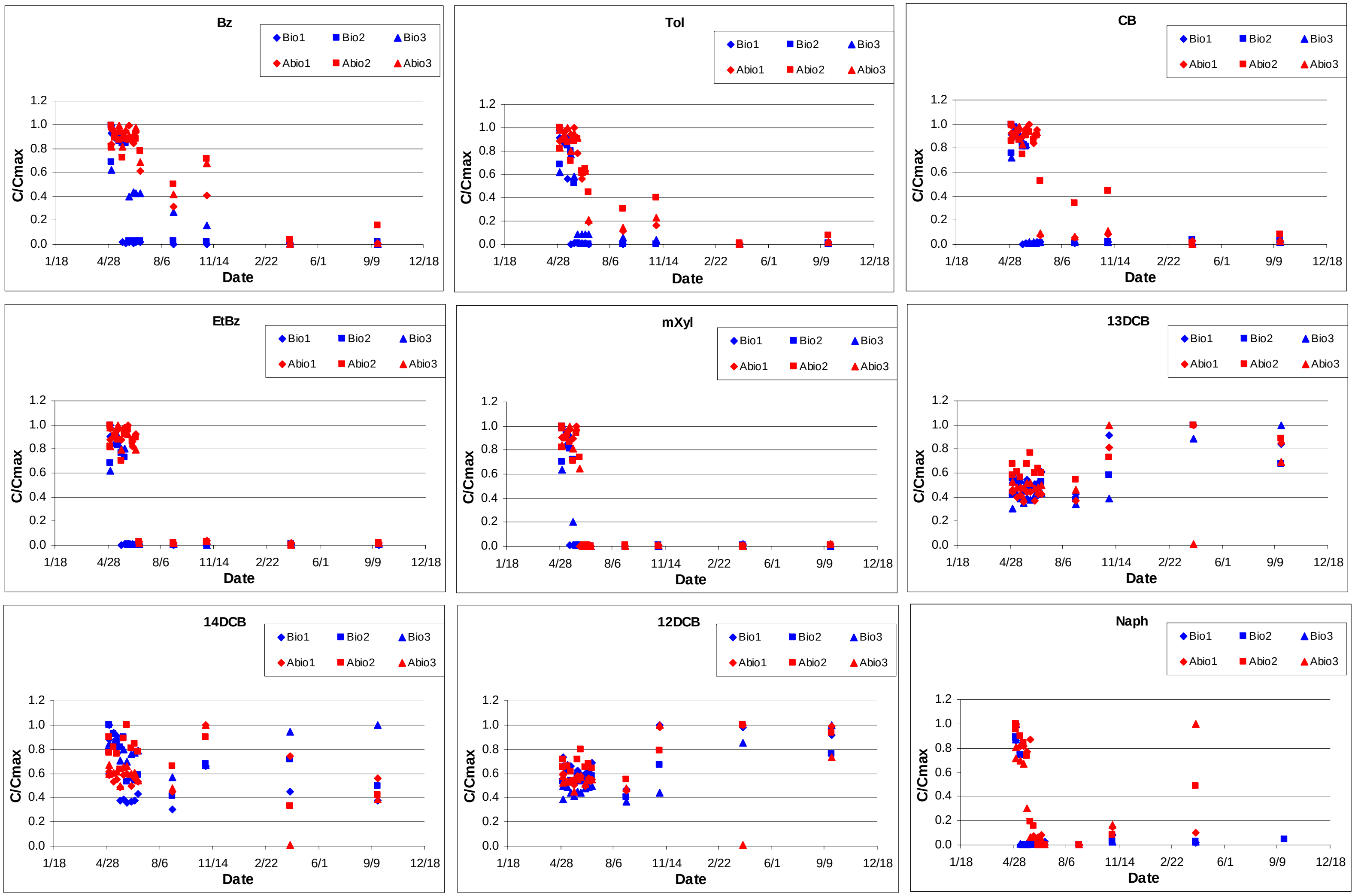
DATE	BZ	TOL	CB	EtBz	mXyl (Biotic 3)	13DCB	14DCB	12DCB	Naph
5/3/07	0.54	0.40	0.34	0.26	0.24	0.08	0.17	0.10	0.08
5/3/07	0.50	0.37	0.31	0.23	0.21	0.07	0.15	0.09	0.07
5/31/07	0.48	0.37	0.30	0.24	0.22	0.08	0.17	0.10	0.09
6/28/07	0.47	0.35	0.30	0.24	0.23	0.08	0.17	0.10	0.08
9/9/07	0.30	0.24	0.21	0.16	0.15	0.06	0.14	0.07	0.06
11/1/07	0.57	0.42	0.36	0.30	0.28	0.11	0.24	0.14	0.12
4/8/08	0.20	0.08	0.29	0.25	0.04	0.15	0.20	0.16	0.02
9/22/08	0.25	0.00	0.23	0.15	0.11	0.10	0.13	0.12	

DATE	BZ	TOL	CB	EtBz	mXyl (Abiotic 1)	13DCB	14DCB	12DCB	Naph
5/3/07	0.51	0.34	0.24	0.20	0.18	0.05	0.11	0.07	0.04
5/3/07	0.46	0.31	0.22	0.18	0.16	0.05	0.09	0.06	0.04
5/31/07	0.45	0.34	0.23	0.21	0.19	0.06	0.13	0.08	0.06
6/28/07	0.42	0.30	0.22	0.21	0.20	0.07	0.13	0.08	0.06
9/9/07	0.33	0.26	0.18	0.18	0.16	0.06	0.13	0.07	0.06
11/1/07	0.48	0.34	0.24	0.22	0.21	0.08	0.16	0.10	0.09
4/8/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/22/08	0.27	0.23	0.19	0.18	0.16	0.12	0.15	0.15	

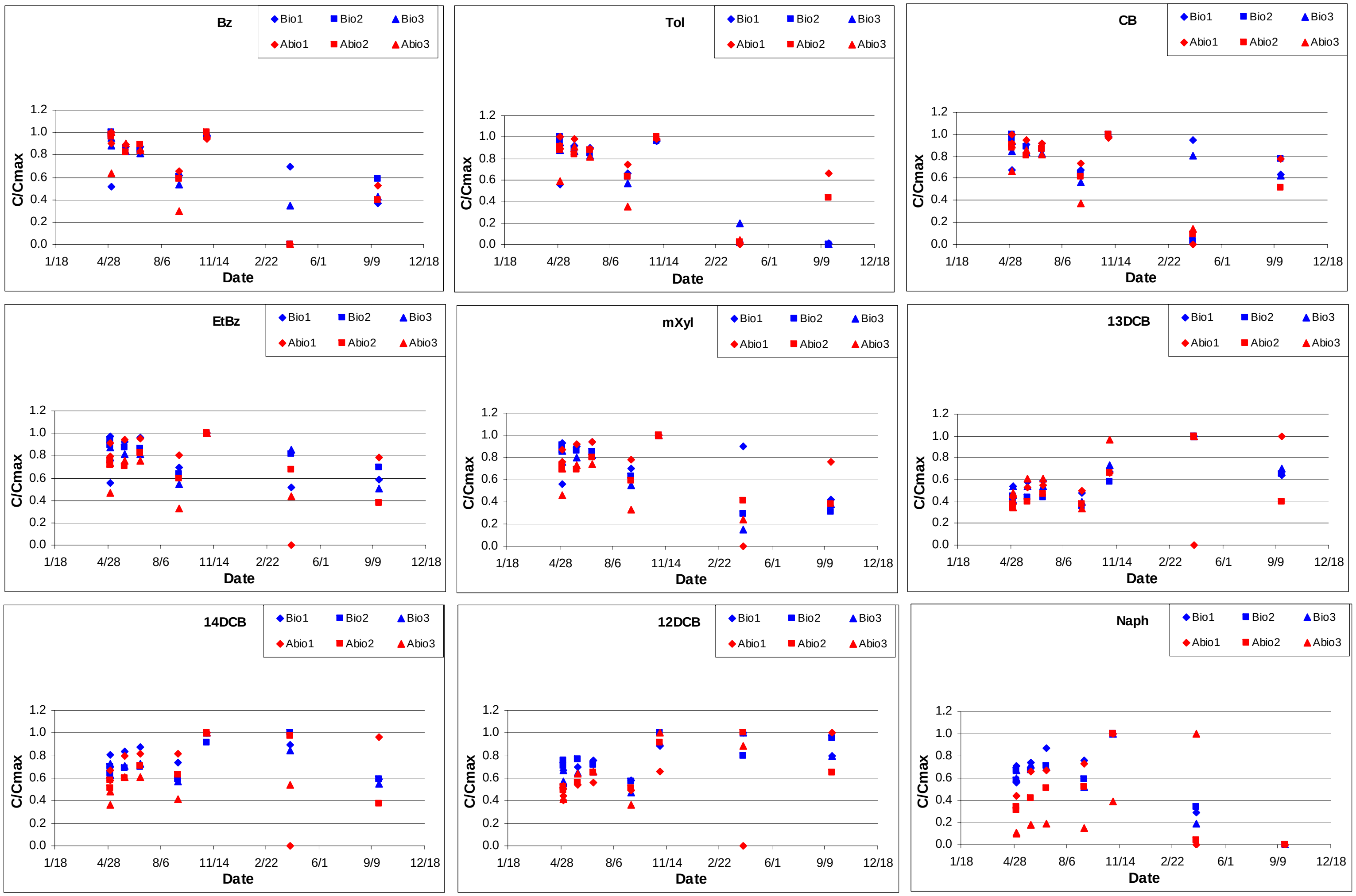
DATE	BZ	TOL	CB	EtBz	mXyl (Abiotic 2)	13DCB	14DCB	12DCB	Naph
5/3/07	0.46	0.31	0.22	0.19	0.17	0.05	0.10	0.06	0.04
5/3/07	0.45	0.30	0.22	0.18	0.16	0.05	0.09	0.06	0.03
5/31/07	0.39	0.29	0.20	0.18	0.16	0.05	0.10	0.07	0.04
6/28/07	0.42	0.30	0.22	0.21	0.19	0.06	0.12	0.08	0.05
9/9/07	0.28	0.22	0.15	0.15	0.14	0.05	0.11	0.06	0.05
11/1/07	0.47	0.34	0.25	0.25	0.23	0.09	0.17	0.11	0.10
4/8/08	0.00	0.01	0.02	0.17	0.10	0.13	0.17	0.12	0.00
9/22/08	0.19	0.15	0.13	0.10	0.09	0.05	0.07	0.08	

DATE	BZ	TOL	CB	EtBz	mXyl (Abiotic 3)	13DCB	14DCB	12DCB	Naph
5/3/07	0.44	0.30	0.21	0.18	0.16	0.04	0.08	0.06	0.03
5/3/07	0.28	0.19	0.16	0.11	0.10	0.03	0.06	0.04	0.03
5/31/07	0.40	0.30	0.20	0.18	0.17	0.05	0.11	0.07	0.05
6/28/07	0.38	0.27	0.19	0.18	0.17	0.05	0.11	0.07	0.05
9/9/07	0.13	0.11	0.09	0.08	0.08	0.03	0.07	0.04	0.04
11/1/07	0.44	0.33	0.24	0.24	0.23	0.09	0.17	0.10	0.10
4/8/08	0.00	0.01	0.03	0.11	0.05	0.09	0.09	0.09	0.25
9/22/08									

Sample: 60099 Temp: 12C Aerobic



Sample: 60099 Temp: 12C Anaerobic



60100 12C Aerobic

Biotic 1

DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/16/07	0.86	0.81	0.70	0.82	0.80	0.49	0.72	0.59	0.58
5/16/07	0.93	0.88	0.76	0.88	0.87	0.53	0.79	0.63	0.62
5/23/07	0.70	0.00	0.58	0.39	0.00	0.40	0.59	0.37	0.00
5/31/07	0.40	0.00	0.47	0.02	0.00	0.42	0.63	0.37	0.00
6/6/07	0.02	0.00	0.15	0.00	0.00	0.39	0.55	0.34	0.00
6/14/07	0.00	0.00	0.00	0.00	0.00	0.37	0.43	0.32	0.00
6/20/07	0.02	0.00	0.01	0.00	0.00	0.39	0.44	0.33	0.00
6/27/07	0.02	0.00	0.01	0.00	0.00	0.40	0.44	0.33	0.00
7/5/07	0.01	0.00	0.01	0.00	0.00	0.41	0.45	0.31	0.00
7/12/07	0.00	0.00	0.01	0.00	0.00	0.39	0.43	0.29	0.00
8/30/07	0.00	0.00	0.00	0.00	0.00	0.26	0.28	0.18	0.00
10/31/07	0.00	0.00	0.01	0.00	0.00	0.39	0.43	0.28	0.01
4/8/08	0.00	0.00	0.01	0.00	0.00	0.57	0.41	0.35	0.29
9/22/08	0.00	0.00	0.01	0.00	0.00	0.62	0.43	0.40	

Biotic 2

DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/16/07	0.91	0.84	0.71	0.82	0.81	0.48	0.72	0.57	0.56
5/16/07	0.90	0.83	0.71	0.82	0.81	0.48	0.72	0.58	0.54
5/23/07	0.77	0.00	0.60	0.46	0.00	0.40	0.59	0.31	0.00
5/31/07	0.37	0.00	0.26	0.00	0.00	0.35	0.50	0.27	0.00
6/6/07	0.00	0.00	0.00	0.00	0.00	0.23	0.28	0.18	0.00
6/14/07	0.00	0.00	0.00	0.00	0.00	0.37	0.42	0.25	0.00
6/20/07	0.00	0.00	0.00	0.00	0.00	0.36	0.39	0.24	0.00
6/27/07	0.01	0.00	0.00	0.00	0.00	0.36	0.33	0.23	0.00
7/5/07	0.00	0.00	0.00	0.00	0.00	0.29	0.02	0.17	0.00
7/12/07	0.00	0.00	0.00	0.00	0.00	0.29	0.02	0.16	0.00
8/30/07	0.00	0.00	0.00	0.00	0.00	0.19	0.02	0.08	0.00
10/31/07	0.00	0.00	0.00	0.00	0.00	0.34	0.03	0.14	0.00
4/8/08	0.00	0.00	0.00	0.00	0.00	0.14	0.01	0.00	0.03
9/22/08	0.00	0.00	0.00	0.00	0.00	0.37	0.04	0.04	

Biotic 3

DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/16/07	0.89	0.84	0.73	0.85	0.83	0.51	0.75	0.61	0.55
5/16/07	0.89	0.85	0.73	0.86	0.85	0.51	0.76	0.61	0.57
5/23/07	0.77	0.00	0.61	0.43	0.00	0.41	0.61	0.41	0.00
5/31/07	0.34	0.00	0.43	0.01	0.00	0.39	0.57	0.38	0.00
6/6/07	0.00	0.00	0.08	0.00	0.00	0.39	0.53	0.36	0.00
6/14/07	0.00	0.00	0.00	0.00	0.00	0.40	0.47	0.36	0.00
6/20/07	0.00	0.00	0.00	0.01	0.00	0.42	0.48	0.37	0.00
6/27/07	0.00	0.00	0.01	0.00	0.00	0.41	0.45	0.35	0.00
7/5/07	0.00	0.00	0.01	0.00	0.00	0.41	0.44	0.34	0.00
7/12/07	0.00	0.00	0.00	0.00	0.00	0.41	0.44	0.33	0.00
8/30/07	0.00	0.00	0.00	0.00	0.00	0.27	0.28	0.20	0.00
10/31/07	0.00	0.00	0.00	0.00	0.00	0.45	0.13	0.33	0.00
4/8/08	0.00	0.00	0.00	0.00	0.00	0.14	0.03	0.12	0.00
9/22/08	0.00	0.00	0.00	0.00	0.00	0.40	0.05	0.02	

Abiotic 1

DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/16/07	0.78	0.74	0.64	0.76	0.74	0.44	0.65	0.53	0.60
5/16/07	0.80	0.75	0.64	0.77	0.75	0.44	0.65	0.53	0.59
5/23/07	0.74	0.69	0.59	0.69	0.68	0.38	0.56	0.47	0.51
5/31/07	0.71	0.66	0.57	0.67	0.66	0.38	0.56	0.47	0.51
6/6/07	0.72	0.67	0.58	0.66	0.63	0.38	0.56	0.45	0.00
6/14/07	0.74	0.03	0.47	0.03	0.00	0.38	0.53	0.45	0.00
6/20/07	0.00	0.00	0.00	0.00	0.00	0.22	0.01	0.00	0.00
6/27/07	0.00	0.00	0.00	0.00	0.00	0.19	0.01	0.00	0.00
7/5/07	0.00	0.00	0.00	0.00	0.00	0.21	0.02	0.00	0.00
7/12/07	0.00	0.00	0.00	0.00	0.00	0.20	0.01	0.00	0.00
8/30/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/31/07	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
4/8/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/22/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

Abiotic 2

DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/16/07	0.88	0.80	0.69	0.80	0.78	0.46	0.69	0.56	0.60
5/16/07	0.89	0.83	0.71	0.84	0.82	0.48	0.71	0.58	0.65
5/23/07	0.81	0.13	0.64	0.57	0.00	0.39	0.58	0.47	0.00
5/31/07	0.79	0.00	0.63	0.38	0.00	0.42	0.62	0.48	0.00
6/6/07	0.60	0.01	0.49	0.04	0.00	0.34	0.51	0.39	0.00
6/14/07	0.79	0.00	0.59	0.03	0.00	0.40	0.60	0.44	0.00
6/20/07	0.00	0.00	0.00	0.02	0.00	0.36	0.54	0.31	0.00
6/27/07	0.00	0.00	0.00	0.01	0.00	0.34	0.42	0.06	0.00
7/5/07	0.00	0.00	0.00	0.00	0.00	0.26	0.18	0.00	0.00
7/12/07	0.00	0.00	0.00	0.00	0.00	0.21	0.02	0.00	0.00
8/30/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/31/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/8/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/22/08	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	

Abiotic 3

DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/16/07	0.83	0.75	0.63	0.73	0.71	0.41	0.61	0.50	0.58
5/16/07	0.82	0.73	0.62	0.72	0.70	0.41	0.60	0.49	0.54
5/23/07	0.73	0.48	0.56	0.50	0.02	0.35	0.52	0.42	0.00
5/31/07	0.67	0.00	0.53	0.40	0.00	0.35	0.52	0.39	0.00
6/6/07	0.76	0.00	0.57	0.37	0.00	0.36	0.54	0.40	0.00
6/14/07	0.69	0.00	0.47	0.03	0.00	0.34	0.49	0.38	0.00
6/20/07	0.00	0.00	0.00	0.02	0.00	0.31	0.47	0.27	0.00
6/27/07	0.00	0.00	0.00	0.00	0.00	0.30	0.45	0.02	0.00
7/5/07	0.00	0.00	0.00	0.00	0.00	0.26	0.40	0.00	0.00
7/12/07	0.00	0.00	0.00	0.00	0.00	0.26	0.19	0.00	0.00
8/30/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/31/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/8/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/22/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

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Biotic 1

DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/16/07	0.78	0.69	0.57	0.64	0.61	0.29	0.44	0.37	0.32
5/16/07	0.77	0.69	0.57	0.63	0.61	0.29	0.44	0.37	0.31
5/31/07	0.76	0.60	0.54	0.59	0.43	0.28	0.42	0.34	0.28
6/28/07	0.69	0.35	0.42	0.35	0.13	0.25	0.36	0.26	0.15
9/9/07	0.41	0.15	0.22	0.12	0.03	0.18	0.25	0.16	0.03
10/31/07	0.53	0.17	0.27	0.13	0.04	0.23	0.31	0.21	0.03
4/8/08	0.01	0.00	0.05	0.02	0.00	0.24	0.21	0.16	0.00
9/22/08	0.00	0.00	0.01	0.01	0.00	0.24	0.20	0.19	

Biotic 2

DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/16/07	0.71	0.65	0.55	0.59	0.59	0.28	0.43	0.35	0.11
5/16/07	0.75	0.68	0.57	0.63	0.61	0.29	0.44	0.36	0.25
5/31/07	0.76	0.66	0.54	0.61	0.56	0.27	0.41	0.34	0.33
6/28/07	0.70	0.58	0.48	0.54	0.49	0.25	0.37	0.30	0.29
9/9/07	0.50	0.40	0.33	0.36	0.33	0.19	0.28	0.23	0.21
10/31/07	0.67	0.45	0.40	0.40	0.36	0.25	0.35	0.31	0.29
4/8/08	0.00	0.00	0.02	0.01	0.00	0.06	0.06	0.02	0.00
9/22/08	0.28	0.00	0.19	0.12	0.05	0.23	0.19	0.29	

Biotic 3

DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/16/07	0.72	0.67	0.59	0.59	0.53	0.30	0.46	0.35	0.00
5/16/07	0.61	0.58	0.53	0.53	0.48	0.28	0.43	0.33	0.00
5/31/07	0.01	0.01	0.08	0.01	0.00	0.22	0.34	0.09	0.00
6/28/07	0.01	0.00	0.01	0.00	0.00	0.22	0.29	0.07	0.00
9/9/07	0.00	0.00	0.00	0.00	0.00	0.15	0.21	0.02	0.00
10/31/07	0.01	0.01	0.01	0.00	0.00	0.21	0.28	0.02	0.00
4/8/08	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.00	0.00
9/22/08	0.00	0.00	0.00	0.00	0.00	0.08	0.03	0.00	

Abiotic 1

DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/16/07	0.84	0.72	0.56	0.60	0.57	0.24	0.36	0.30	0.31
5/16/07	0.83	0.70	0.54	0.59	0.56	0.23	0.34	0.28	0.26
5/31/07	0.75	0.64	0.48	0.52	0.49	0.19	0.29	0.25	0.23
6/28/07	0.75	0.55	0.48	0.47	0.41	0.19	0.29	0.25	0.21
9/9/07	0.46	0.26	0.32	0.26	0.19	0.14	0.23	0.18	0.14
10/31/07	0.65	0.30	0.43	0.31	0.16	0.20	0.31	0.25	0.17
4/8/08	0.00	0.00	0.02	0.00	0.00	0.05	0.06	0.04	0.00
9/22/08	0.19	0.10	0.20	0.15	0.07	0.21	0.24	0.22	0.14

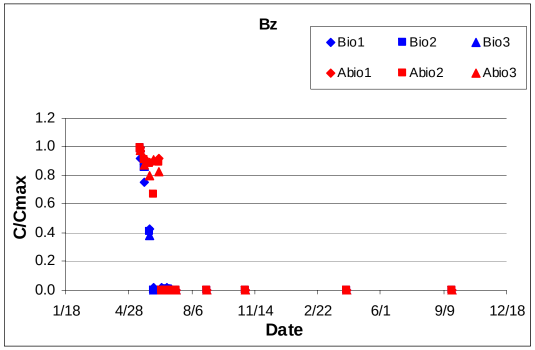
Abiotic 2

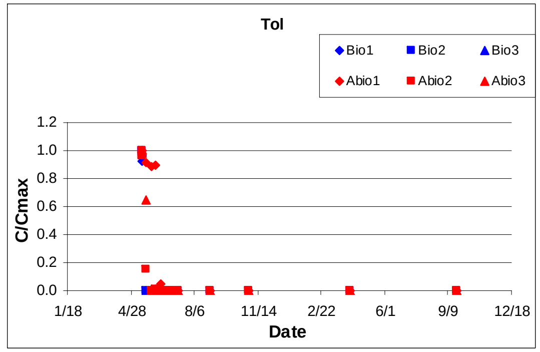
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/16/07	0.79	0.67	0.53	0.57	0.54	0.23	0.34	0.29	0.27
5/16/07	0.82	0.69	0.55	0.58	0.56	0.23	0.36	0.30	0.30
5/31/07	0.81	0.70	0.52	0.57	0.54	0.21	0.32	0.27	0.25
6/28/07	0.78	0.65	0.49	0.54	0.52	0.19	0.30	0.25	0.22
9/9/07	0.53	0.46	0.34	0.38	0.36	0.14	0.22	0.18	0.18
10/31/07	0.55	0.45	0.37	0.36	0.31	0.16	0.25	0.23	0.17
4/8/08	0.06	0.02	0.09	0.01	0.01	0.14	0.14	0.07	0.00
9/22/08	1.10	0.76	0.58	0.58	0.50	0.38	0.35	0.46	

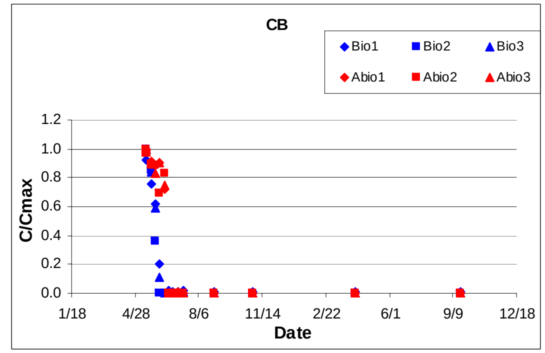
Abiotic 3

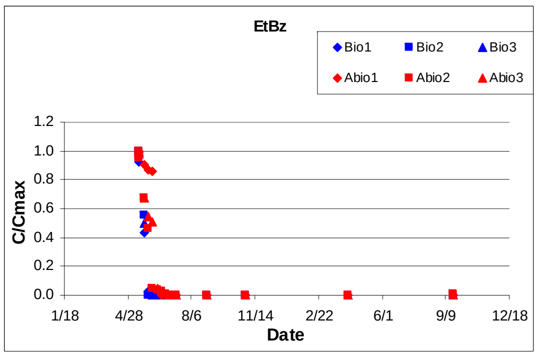
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/16/07	0.73	0.61	0.49	0.52	0.49	0.21	0.32	0.27	0.25
5/16/07	0.78	0.67	0.52	0.56	0.53	0.22	0.34	0.29	0.27
5/31/07	0.70	0.61	0.47	0.51	0.49	0.19	0.30	0.25	0.20
6/28/07	0.75	0.61	0.48	0.53	0.48	0.20	0.29	0.25	0.21
9/9/07	0.51	0.41	0.34	0.37	0.33	0.15	0.23	0.19	0.16
10/31/07	0.67	0.48	0.43	0.43	0.22	0.19	0.29	0.26	0.23
4/8/08	0.01	0.01	0.02	0.01	0.00	0.06	0.05	0.08	0.00
9/22/08	0.58	0.40	0.35	0.28	0.12	0.39	0.30	0.46	

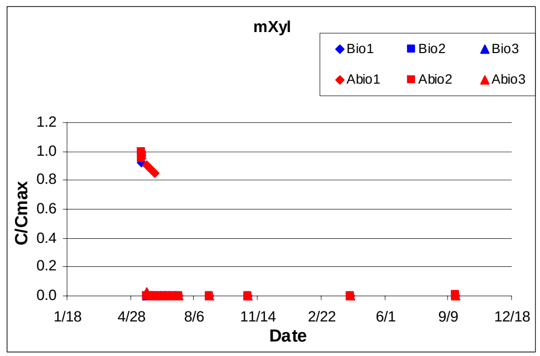
Sample: 60100 Temp: 12C Aerobic

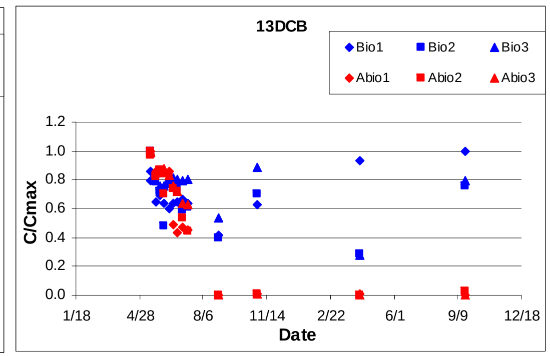


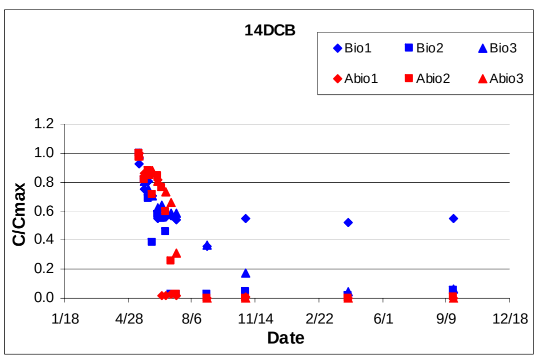


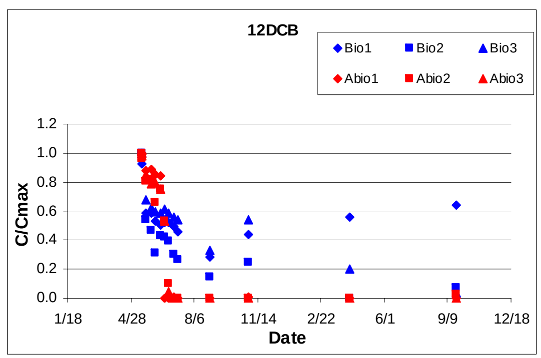


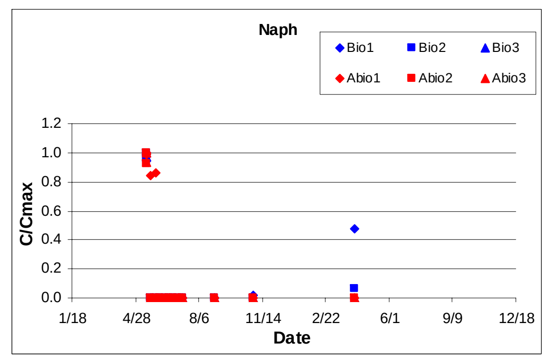




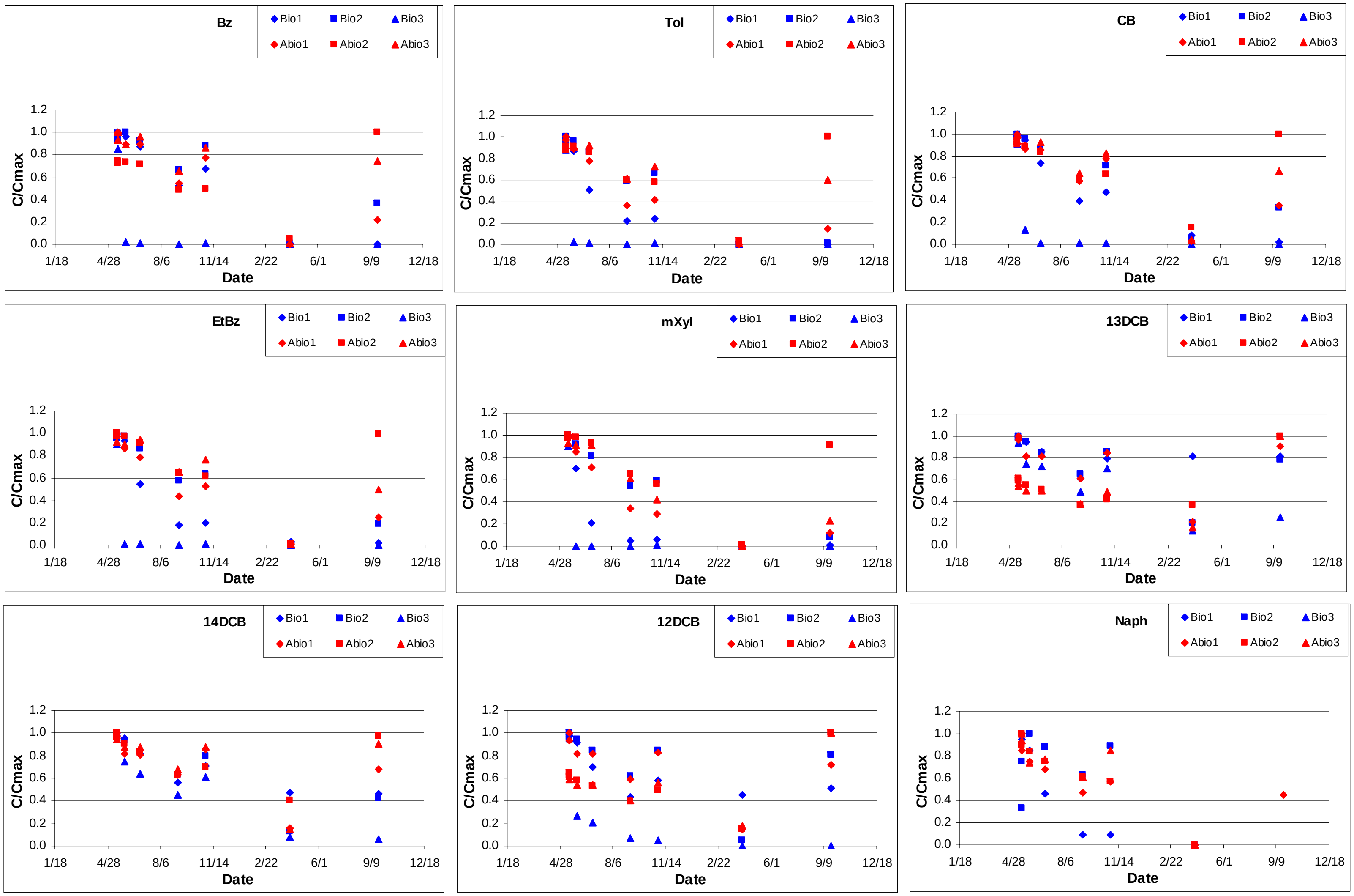








Sample: 60100 Temp: 12C Anaerobic



60100 22C Aerobic

	Biotic 1									Biotic 2									Biotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
4/3/07	0.61	0.53	0.50	0.52	0.40	0.32	0.49	0.38	0.10	0.29	0.48	0.44	0.48	0.48	0.27	0.42	0.34	0.39	0.34	0.55	0.49	0.57	0.56	0.30	0.47	0.38	0.43
4/10/07	0.30	0.08	0.47	0.40	0.00	0.32	0.48	0.23	0.00	0.29	0.18	0.37	0.42	0.00	0.25	0.38	0.31	0.38	0.35	0.21	0.43	0.48	0.00	0.29	0.45	0.37	0.42
4/14/07	0.52	0.06	0.47	0.37	0.00	0.32	0.48	0.21	0.00	0.19	0.17	0.36	0.41	0.00	0.28	0.44	0.35	0.38	0.28	0.25	0.50	0.58	0.00	0.34	0.53	0.42	0.44
4/17/07	0.41	0.06	0.52	0.41	0.00	0.35	0.53	0.24	0.00	0.30	0.16	0.34	0.32	0.00	0.29	0.44	0.37	0.41	0.45	0.24	0.49	0.50	0.00	0.35	0.54	0.43	0.47
4/20/07	0.43	0.06	0.50	0.40	0.00	0.34	0.52	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.01	0.00	0.20	0.00	0.00	0.00	0.00	0.23	0.00	0.10	0.00

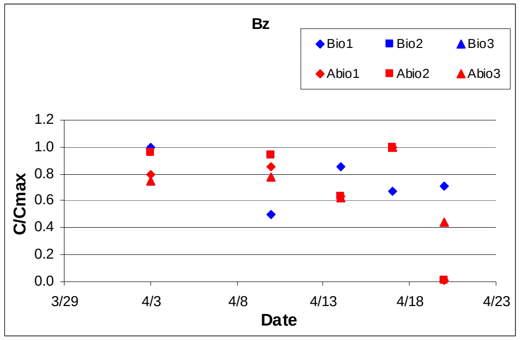
	Abiotic 1									Abiotic 2									Abiotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
4/3/07	0.31	0.53	0.48	0.56	0.53	0.30	0.47	0.37	0.40	0.29	0.48	0.44	0.48	0.48	0.27	0.42	0.34	0.39	0.34	0.55	0.49	0.57	0.56	0.30	0.47	0.38	0.43
4/10/07	0.33	0.22	0.46	0.53	0.00	0.30	0.47	0.38	0.40	0.29	0.18	0.37	0.42	0.00	0.25	0.38	0.31	0.38	0.35	0.21	0.43	0.48	0.00	0.29	0.45	0.37	0.42
4/14/07	0.25	0.21	0.43	0.56	0.00	0.34	0.52	0.41	0.41	0.19	0.17	0.36	0.41	0.00	0.28	0.44	0.35	0.38	0.28	0.25	0.50	0.58	0.00	0.34	0.53	0.42	0.44
4/17/07	0.39	0.19	0.40	0.47	0.00	0.35	0.54	0.43	0.45	0.30	0.16	0.34	0.32	0.00	0.29	0.44	0.37	0.41	0.45	0.24	0.49	0.50	0.00	0.35	0.54	0.43	0.47
4/20/07	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.01	0.00	0.20	0.00	0.00	0.00	0.00	0.23	0.00	0.10	0.00

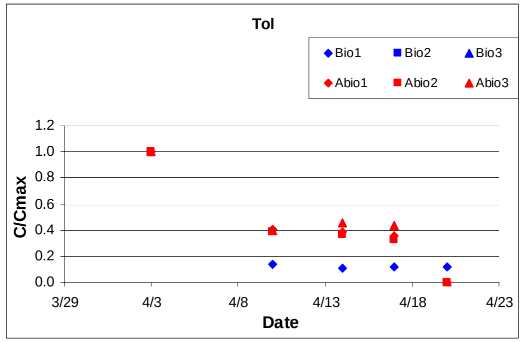
60100 22C Anaerobic

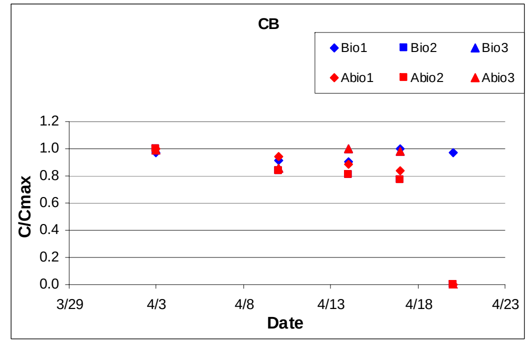
	Biotic 1									Biotic 2									Biotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
4/3/07	0.56	0.47	0.39	0.44	0.41	0.17	0.26	0.21	0.14	0.50	0.53	0.45	0.50	0.49	0.19	0.30	0.25	0.16	0.40	0.34	0.41	0.38	0.01	0.19	0.29	0.20	0.00
4/3/07	0.35	0.35	0.39	0.41	0.01	0.17	0.27	0.21	0.00	0.54	0.41	0.37	0.40	0.29	0.17	0.25	0.19	0.14	0.55	0.42	0.38	0.41	0.31	0.18	0.27	0.20	0.13
5/18/07	0.57	0.00	0.38	0.44	0.43	0.18	0.26	0.22	0.17	0.52	0.00	0.34	0.39	0.28	0.16	0.23	0.18	0.12	0.55	0.00	0.36	0.41	0.31	0.17	0.25	0.19	0.13
6/7/07	0.53	0.00	0.34	0.41	0.39	0.15	0.22	0.19	0.15	0.50	0.00	0.30	0.35	0.25	0.14	0.20	0.16	0.12	0.52	0.00	0.33	0.38	0.29	0.15	0.21	0.17	0.11
6/29/07	0.57	0.01	0.36	0.44	0.43	0.16	0.23	0.20	0.14	0.48	0.00	0.30	0.36	0.13	0.14	0.19	0.17	0.11	0.50	0.00	0.32	0.37	0.29	0.15	0.21	0.18	0.12
9/15/07	0.48	0.01	0.28	0.35	0.01	0.12	0.24	0.17	0.14	0.42	0.01	0.23	0.28	0.00	0.11	0.20	0.14	0.11	0.33	0.01	0.20	0.23	0.02	0.10	0.20	0.12	0.12
11/2/07	0.48	0.01	0.31	0.30	0.01	0.17	0.16	0.22	0.24	0.70	0.01	0.39	0.42	0.00	0.23	0.20	0.26	0.22	0.80	0.01	0.45	0.48	0.01	0.26	0.24	0.29	0.25
9/18/08	0.37	0.00	0.26	0.28	ND	0.15	0.14	0.23	ND	0.46	0.00	0.41	0.29	0.00	0.14	0.12	0.00		0.07	0.00	0.13	0.06	0.00	0.06	0.05	0.05	

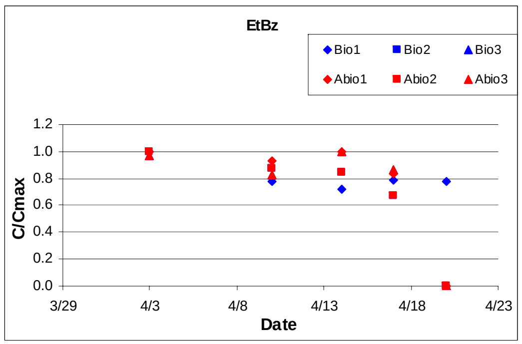
	Abiotic 1									Abiotic 2									Abiotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
4/3/07	0.67	0.38	0.53	0.56	0.01	0.18	0.29	0.24	0.25	0.48	0.29	0.28	0.33	0.16	0.10	0.16	0.14	0.10	0.56	0.32	0.37	0.39	0.00	0.12	0.19	0.16	0.14
4/3/07	0.86	0.43	0.52	0.57	0.12	0.19	0.29	0.25	0.21	0.38	0.15	0.27	0.27	0.00	0.09	0.15	0.13	0.12	0.59	0.44	0.35	0.39	0.33	0.12	0.19	0.16	0.14
5/18/07	0.83	0.36	0.48	0.54	0.20	0.17	0.27	0.23	0.18	0.44	0.26	0.25	0.31	0.19	0.09	0.15	0.13	0.09	0.62	0.44	0.35	0.40	0.33	0.12	0.18	0.16	0.10
6/7/07	0.77	0.32	0.43	0.50	0.18	0.15	0.23	0.21	0.15	0.39	0.23	0.22	0.27	0.17	0.08	0.12	0.12	0.06	0.62	0.44	0.34	0.40	0.33	0.11	0.17	0.15	0.10
6/29/07	0.79	0.34	0.44	0.52	0.19	0.16	0.24	0.22	0.17	0.37	0.22	0.21	0.27	0.16	0.08	0.12	0.11	0.08	0.54	0.39	0.30	0.36	0.30	0.10	0.15	0.14	0.10
9/15/07	0.58	0.01	0.31	0.36	0.14	0.12	0.24	0.17	0.18	0.35	0.19	0.17	0.23	0.15	0.07	0.17	0.10	0.11	0.49	0.31	0.23	0.28	0.25	0.09	0.19	0.12	0.12
11/2/07	0.67	0.01	0.38	0.36	0.13	0.19	0.19	0.26	0.30	0.64	0.00	0.32	0.37	0.22	0.17	0.16	0.21	0.20	0.84	0.56	0.42	0.45	0.38	0.19	0.19	0.25	0.25
9/18/08	0.93	0.01	0.42	0.53	0.19	0.25	0.21	0.36		0.07	0.00	0.08	0.07	0.04	0.08	0.06	0.14		0.20	0.00	0.05	0.03	0.03	0.02	0.02	0.05	

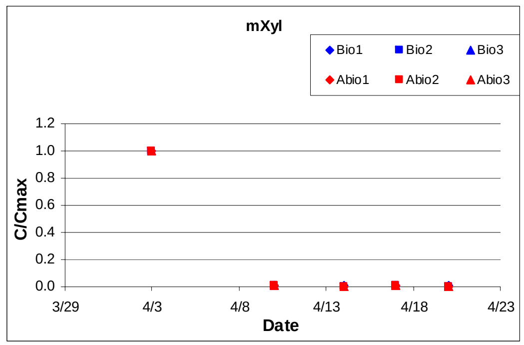
Sample: 60100 Temp: 22C Aerobic

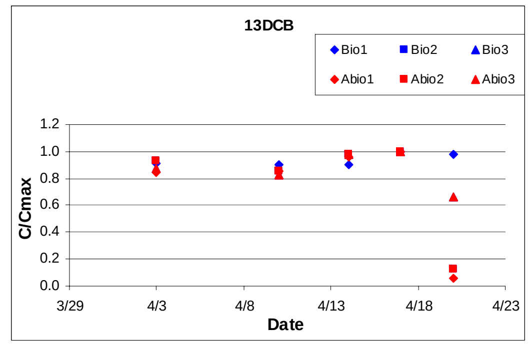


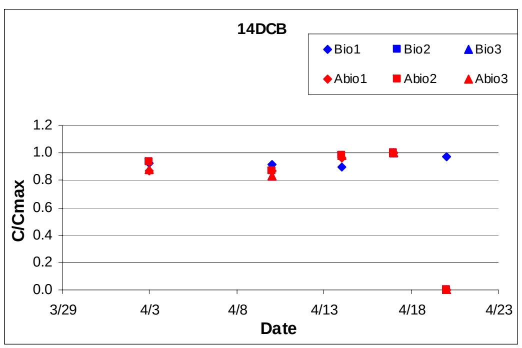


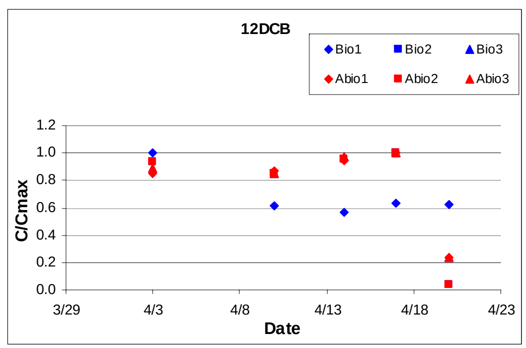


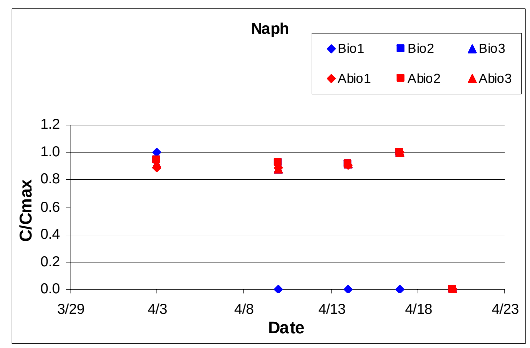




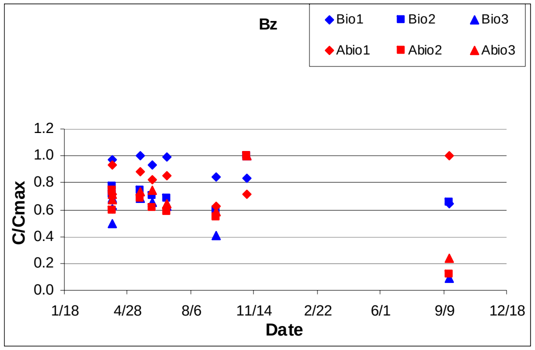


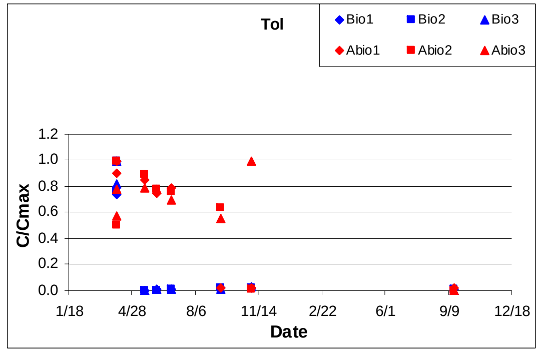


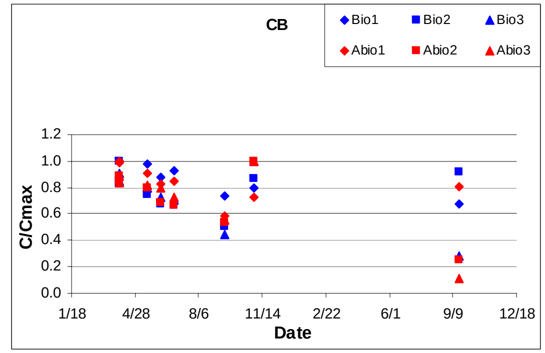


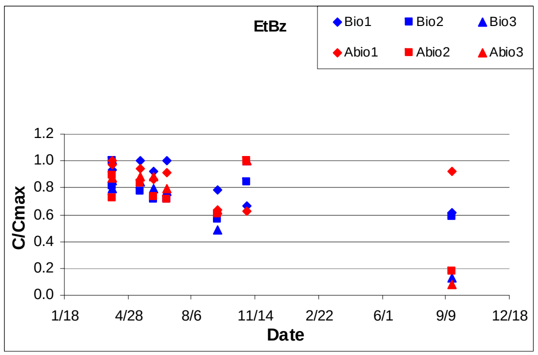


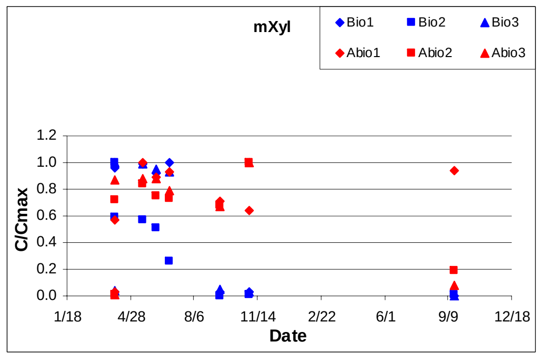
Sample: 60100 Temp: 22C Anaerobic

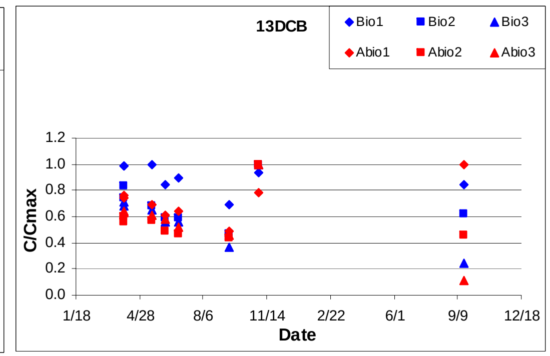


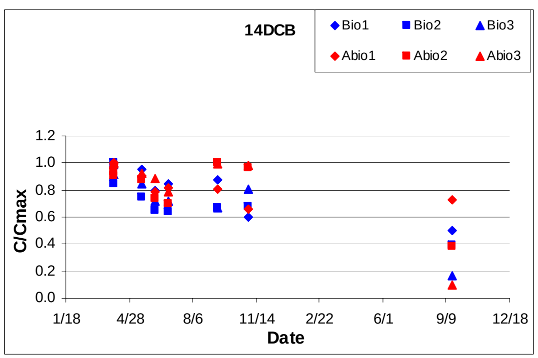


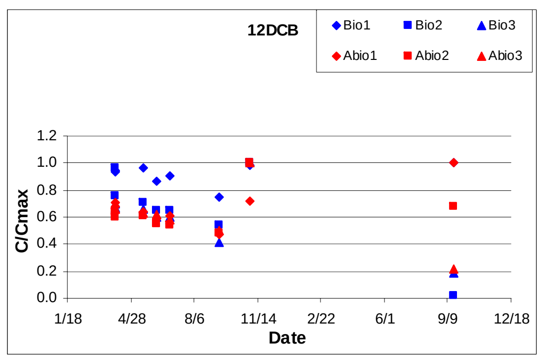


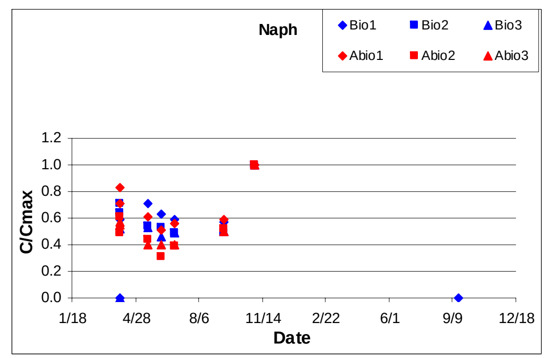












70048 12C Aerobic

	Biotic 1									Biotic 2									Biotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/16/07	0.81	0.76	0.68	0.79	0.77	0.50	0.75	0.62	0.79	0.87	0.82	0.72	0.85	0.83	0.54	0.80	0.66	0.83	0.79	0.74	0.67	0.77	0.75	0.50	0.75	0.63	0.82
5/16/07	0.86	0.80	0.72	0.83	0.81	0.53	0.79	0.66	0.80	0.79	0.75	0.68	0.77	0.76	0.51	0.76	0.63	0.80	0.53	0.51	0.46	0.53	0.52	0.35	0.52	0.44	0.62
5/23/07	0.74	0.67	0.62	0.63	0.27	0.44	0.66	0.56	0.18	0.82	0.75	0.66	0.71	0.50	0.47	0.70	0.59	0.35	0.80	0.74	0.66	0.72	0.62	0.47	0.70	0.60	0.30
5/31/07	0.76	0.31	0.65	0.15	0.00	0.47	0.70	0.56	0.00	0.79	0.37	0.67	0.18	0.00	0.48	0.72	0.58	0.00	0.70	0.37	0.61	0.24	0.00	0.44	0.66	0.54	0.00
6/6/07	0.70	0.16	0.65	0.06	0.00	0.48	0.73	0.58	0.00	0.68	0.20	0.63	0.06	0.00	0.46	0.70	0.56	0.00	0.65	0.20	0.62	0.09	0.00	0.46	0.69	0.56	0.00
6/14/07	0.63	0.07	0.60	0.02	0.00	0.45	0.68	0.54	0.00	0.71	0.12	0.65	0.02	0.00	0.47	0.71	0.57	0.00	0.64	0.08	0.61	0.04	0.00	0.45	0.69	0.55	0.00
6/20/07	0.56	0.04	0.55	0.01	0.00	0.41	0.62	0.51	0.00	0.72	0.09	0.67	0.01	0.00	0.49	0.75	0.59	0.00	0.60	0.05	0.59	0.02	0.00	0.44	0.66	0.53	0.00
6/27/07	0.64	0.03	0.63	0.01	0.00	0.47	0.71	0.56	0.00	0.69	0.07	0.66	0.01	0.00	0.48	0.73	0.57	0.00	0.71	0.04	0.68	0.02	0.00	0.50	0.75	0.60	0.00
7/5/07	0.61	0.02	0.60	0.01	0.00	0.44	0.68	0.54	0.00	0.66	0.05	0.63	0.01	0.00	0.47	0.72	0.57	0.00	0.68	0.03	0.65	0.01	0.00	0.49	0.73	0.59	0.00
7/12/07	0.58	0.02	0.58	0.01	0.00	0.44	0.66	0.53	0.00	0.68	0.05	0.66	0.01	0.00	0.49	0.75	0.59	0.00	0.66	0.02	0.64	0.01	0.00	0.48	0.72	0.58	0.00
8/30/07	0.00	0.01	0.30	0.00	0.00	0.29	0.44	0.35	0.00	0.23	0.02	0.39	0.00	0.00	0.31	0.48	0.38	0.00	0.04	0.00	0.32	0.00	0.00	0.32	0.50	0.38	0.00
10/31/07	0.00	0.00	0.00	0.00	0.00	0.40	0.10	0.51	0.01	0.13	0.01	0.52	0.01	0.00	0.53	0.82	0.65	0.01	0.01	0.01	0.47	0.01	0.00	0.50	0.79	0.63	0.01
4/23/08	0.00	0.00	0.01	0.00	0.00	0.41	0.08	0.52	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.05	0.37	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.01	0.18	0.00
9/18/08	0.00	0.00	0.02	0.01	0.01	0.70	0.16	0.87		0.00	0.00	0.01	0.01	0.01	0.88	0.18	1.03		0.00	0.00	0.01	0.00	0.00	0.60	0.06	0.75	

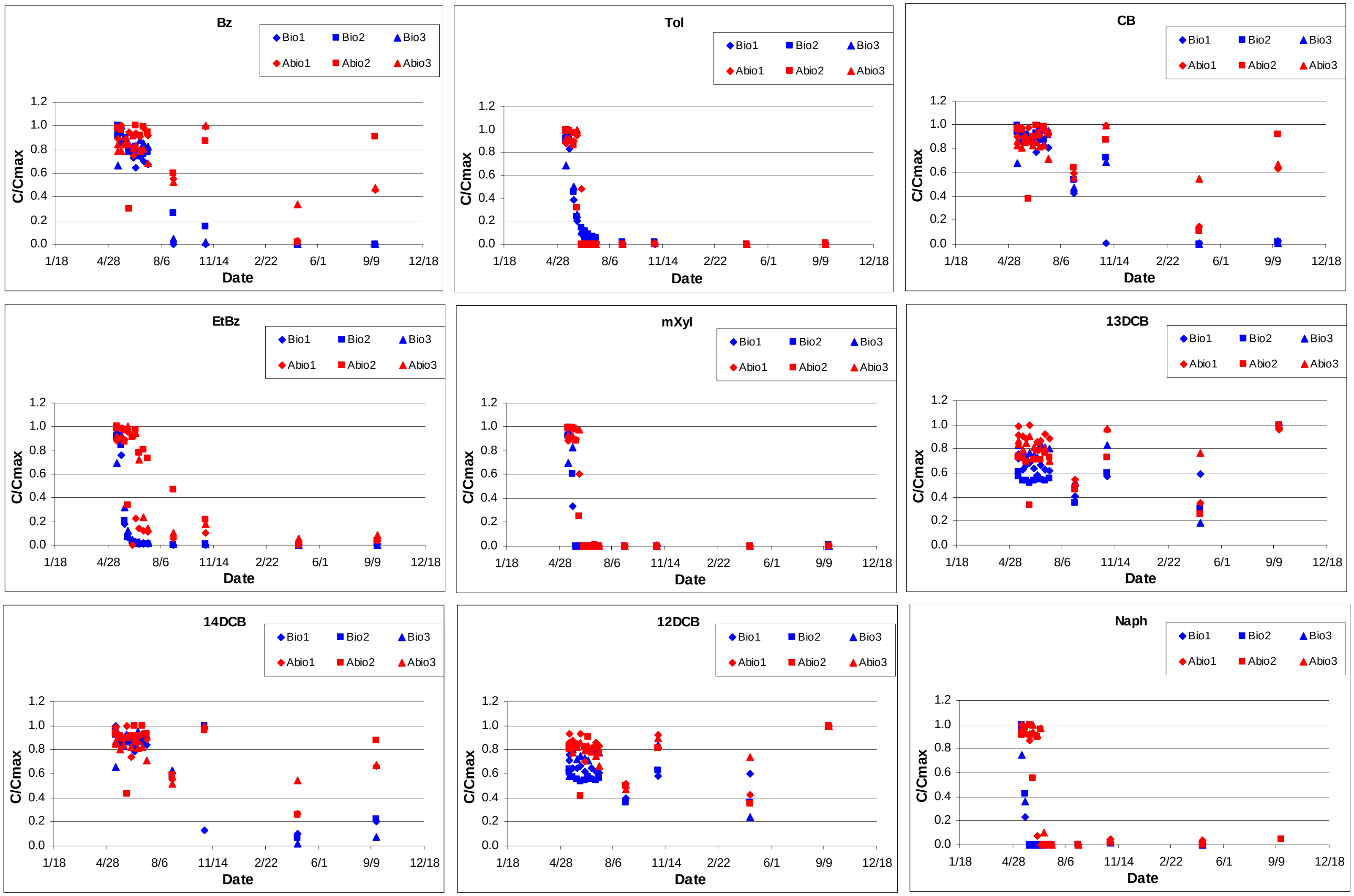
	Abiotic 1									Abiotic 2									Abiotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/16/07	0.82	0.77	0.69	0.79	0.77	0.50	0.75	0.63	0.79	0.80	0.74	0.65	0.74	0.72	0.44	0.66	0.55	0.65	0.79	0.75	0.68	0.76	0.74	0.48	0.73	0.61	0.77
5/16/07	0.74	0.68	0.63	0.70	0.68	0.46	0.70	0.58	0.75	0.80	0.74	0.65	0.74	0.72	0.44	0.65	0.54	0.65	0.85	0.80	0.70	0.82	0.80	0.50	0.74	0.62	0.76
5/23/07	0.83	0.77	0.68	0.78	0.76	0.46	0.68	0.59	0.74	0.79	0.73	0.64	0.73	0.71	0.43	0.64	0.55	0.70	0.80	0.75	0.66	0.76	0.74	0.45	0.68	0.59	0.74
5/31/07	0.74	0.69	0.63	0.71	0.69	0.45	0.67	0.57	0.69	0.68	0.63	0.59	0.65	0.64	0.41	0.63	0.54	0.71	0.85	0.79	0.69	0.81	0.79	0.48	0.72	0.62	0.73
6/6/07	0.79	0.74	0.68	0.76	0.47	0.50	0.76	0.63	0.74	0.24	0.24	0.26	0.25	0.18	0.20	0.30	0.28	0.39	0.86	0.81	0.71	0.83	0.78	0.52	0.78	0.64	0.79
6/14/07	0.62	0.37	0.59	0.00	0.00	0.36	0.56	0.48	0.06	0.74	0.00	0.61	0.67	0.00	0.42	0.64	0.54	0.64	0.83	0.00	0.67	0.77	0.00	0.47	0.70	0.59	0.72
6/20/07	0.78	0.00	0.64	0.18	0.00	0.43	0.66	0.55	0.00	0.81	0.00	0.67	0.73	0.00	0.47	0.70	0.60	0.69	0.84	0.00	0.70	0.79	0.00	0.49	0.74	0.62	0.77
6/27/07	0.76	0.00	0.64	0.11	0.00	0.44	0.65	0.55	0.00	0.75	0.00	0.62	0.58	0.00	0.43	0.64	0.51	0.00	0.80	0.00	0.66	0.60	0.00	0.46	0.70	0.59	0.08
7/5/07	0.82	0.00	0.68	0.10	0.00	0.46	0.71	0.58	0.00	0.81	0.00	0.66	0.60	0.01	0.46	0.70	0.54	0.00	0.82	0.00	0.67	0.19	0.00	0.46	0.70	0.56	0.00
7/12/07	0.77	0.00	0.64	0.09	0.00	0.45	0.67	0.56	0.00	0.77	0.00	0.63	0.54	0.00	0.43	0.65	0.51	0.00	0.69	0.00	0.58	0.12	0.00	0.40	0.61	0.50	0.00
8/30/07	0.46	0.00	0.42	0.05	0.00	0.27	0.42	0.35	0.00	0.49	0.00	0.43	0.35	0.00	0.28	0.41	0.33	0.00	0.53	0.00	0.46	0.09	0.00	0.29	0.45	0.36	0.00
10/31/07	0.83	0.01	0.70	0.08	0.01	0.48	0.75	0.62	0.03	0.71	0.00	0.59	0.16	0.00	0.44	0.67	0.54	0.01	1.01	0.00	0.81	0.15	0.00	0.55	0.86	0.67	0.02
4/23/08	0.02	0.00	0.10	0.00	0.00	0.18	0.21	0.28	0.03	0.02	0.00	0.07	0.00	0.00	0.15	0.18	0.23	0.00	0.34	0.00	0.45	0.05	0.00	0.44	0.46	0.55	0.03
9/18/08	0.39	0.00	0.44	0.03	0.01	0.48	0.51	0.68		0.74	0.00	0.62	0.03	ND	0.60	0.61	0.66	0.03	0.48	0.00	0.54	0.07	0.01	0.57	0.58	0.75	

70048 12C Anaerobic

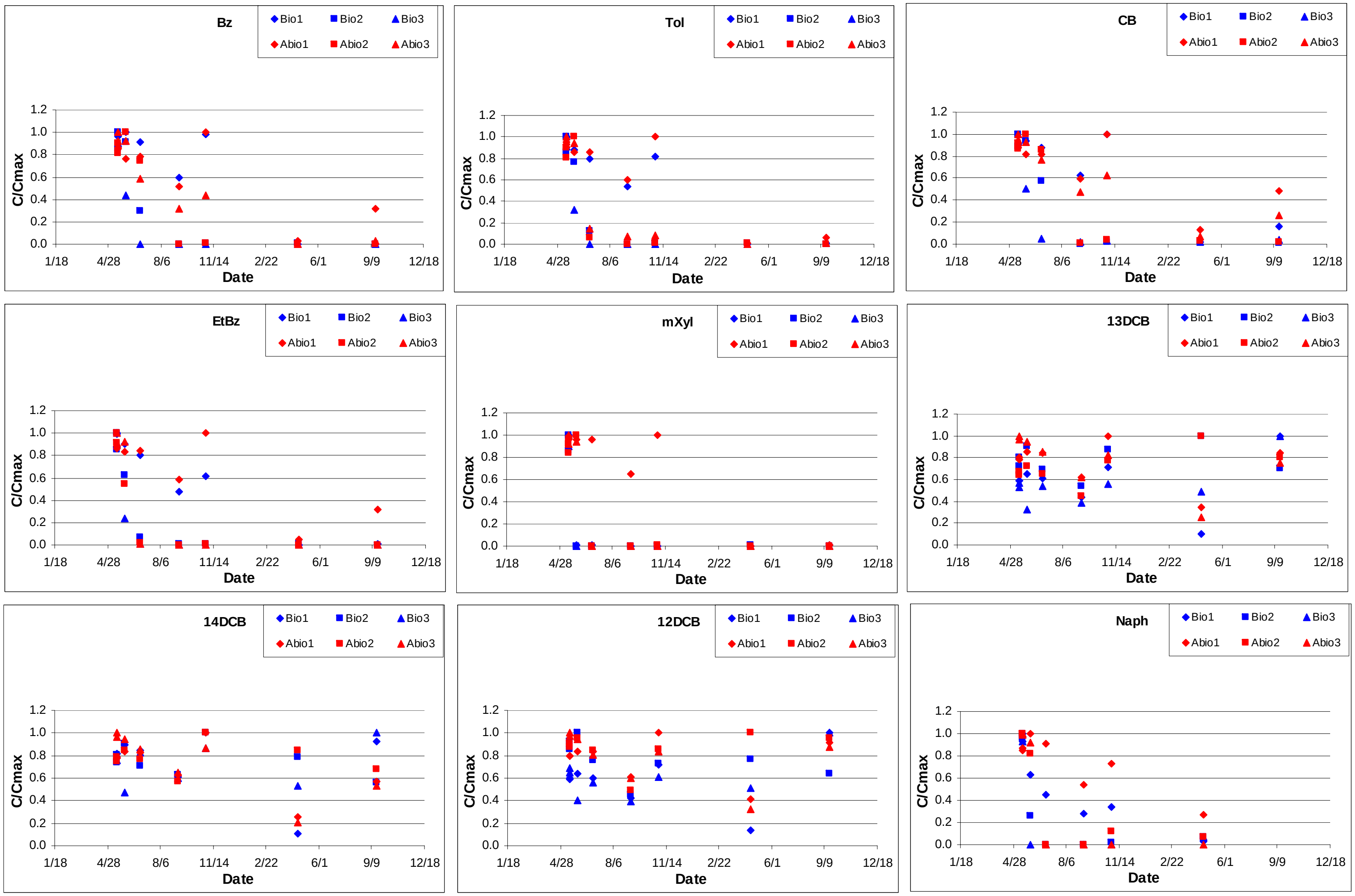
	Biotic 1									Biotic 2									Biotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/16/07	0.82	0.75	0.65	0.72	0.61	0.39	0.60	0.50	0.53	0.80	0.74	0.64	0.67	0.62	0.34	0.52	0.44	0.45	0.80	0.73	0.62	0.68	0.62	0.35	0.54	0.45	0.48
5/16/07	0.83	0.75	0.65	0.72	0.62	0.39	0.60	0.50	0.50	0.68	0.63	0.57	0.57	0.53	0.31	0.48	0.41	0.43	0.73	0.66	0.58	0.61	0.56	0.33	0.50	0.43	0.44
5/31/07	0.86	0.66	0.68	0.65	0.01	0.43	0.66	0.54	0.33	0.73	0.56	0.60	0.42	0.00	0.39	0.59	0.48	0.11	0.35	0.23	0.31	0.16	0.00	0.20	0.31	0.27	0.00
6/28/07	0.78	0.59	0.63	0.58	0.00	0.41	0.62	0.51	0.24	0.24	0.09	0.37	0.05	0.00	0.30	0.46	0.36	0.00	0.00	0.00	0.03	0.01	0.00	0.33	0.54	0.37	0.00
9/9/07	0.51	0.40	0.45	0.35	0.00	0.29	0.45	0.35	0.15	0.00	0.00	0.00	0.00	0.00	0.23	0.41	0.22	0.00	0.00	0.00	0.01	0.00	0.00	0.24	0.40	0.26	0.00
10/31/07	0.84	0.61	0.72	0.45	0.00	0.47	0.73	0.60	0.18	0.01	0.01	0.01	0.01	0.00	0.37	0.65	0.35	0.01	0.00	0.00	0.02	0.00	0.00	0.34	0.57	0.40	0.00
4/23/08	0.00	0.00	0.01	0.00	0.00	0.07	0.08	0.12	0.02	0.01	0.01	0.01	0.01	0.00	0.43	0.51	0.37	0.03	0.00	0.00	0.01	0.00	0.00	0.30	0.35	0.34	0.03
9/18/08	0.00	0.01	0.11	0.01	0.01	0.67	0.68	0.84		0.00	0.00	0.01	0.00	0.00	0.30	0.37	0.31		0.00	0.00	0.02	0.00	0.00	0.62	0.66	0.66	

	Abiotic 1									Abiotic 2									Abiotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/16/07	0.86	0.77	0.65	0.69	0.65	0.31	0.48	0.41	0.43	0.75	0.67	0.57	0.61	0.59	0.31	0.48	0.40	0.47	0.86	0.77	0.65	0.72	0.69	0.35	0.54	0.46	0.52
5/16/07	0.87	0.79	0.66	0.71	0.67	0.32	0.48	0.41	0.44	0.67	0.60	0.54	0.56	0.54	0.29	0.45	0.39	0.47	0.79	0.71	0.62	0.66	0.63	0.34	0.52	0.44	0.51
5/31/07	0.78	0.71	0.60	0.66	0.65	0.34	0.52	0.43	0.51	0.83	0.75	0.62	0.34	0.64	0.33	0.51	0.43	0.38	0.79	0.72	0.61	0.66	0.65	0.33	0.51	0.43	0.47
6/28/07	0.79	0.71	0.60	0.67	0.65	0.33	0.51	0.43	0.46	0.62	0.05	0.54	0.01	0.00	0.30	0.46	0.38	0.00	0.50	0.11	0.50	0.01	0.00	0.30	0.46	0.37	0.00
9/9/07	0.52	0.49	0.44	0.47	0.44	0.24	0.39	0.31	0.27	0.00	0.00	0.01	0.00	0.00	0.20	0.35	0.22	0.00	0.28	0.05	0.31	0.00	0.00	0.22	0.35	0.27	0.00
10/31/07	1.01	0.83	0.74	0.80	0.68	0.40	0.62	0.52	0.37	0.01	0.01	0.03	0.00	0.01	0.36	0.61	0.38	0.06	0.37	0.06	0.41	0.00	0.00	0.29	0.47	0.38	0.00
4/23/08	0.03	0.01	0.10	0.04	0.00	0.14	0.16	0.21	0.14	0.00	0.00	0.02	0.00	0.00	0.46	0.51	0.45	0.03	0.00	0.00	0.04	0.00	0.00	0.09	0.11	0.15	0.00
9/18/08	0.32	0.05	0.36	0.25	0.01	0.33	0.35	0.47		0.00	0.00	0.01	0.00	0.00	0.37	0.41	0.43		0.02	0.01	0.17	0.00	0.00	0.27	0.29	0.40	

Sample: 70048 Temp: 12C Aerobic



Sample: 70048 Temp: 12C Anaerobic



70048 22C Aerobic

DATE	Biotic 1									Biotic 2									Biotic 3								
	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
3/14/07	0.43	0.39	0.37	0.35	0.35	0.27	0.43	0.37	0.51	0.34	0.29	0.21	0.17	0.16	0.07	0.12	0.10	0.31	0.35	0.28	0.22	0.17	0.16	0.11	0.19	0.16	0.38
3/18/07	0.16	0.04	0.23	0.01	0.00	0.11	0.18	0.14	0.00	0.08	0.03	0.22	0.01	0.00	0.18	0.00	0.22	0.00	0.04	0.02	0.18	0.00	0.00	0.09	0.16	0.12	0.00
3/23/07	0.01	0.03	0.25	0.00	0.00	0.12	0.21	0.16	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.02	0.20	0.00	0.00	0.10	0.17	0.13	0.00
3/28/07	0.03	0.02	0.35	0.00	0.01	0.38	0.59	0.40	0.00	0.01	0.01	0.22	0.00	0.00	0.32	0.51	0.35	0.00	0.02	0.01	0.29	0.00	0.01	0.33	0.53	0.36	0.00
4/3/07	0.01	0.01	0.27	0.00	0.01	0.32	0.49	0.36	0.00	0.00	0.00	0.17	0.00	0.01	0.27	0.41	0.30	0.00	0.02	0.01	0.26	0.00	0.01	0.27	0.42	0.31	0.00
4/10/07	0.02	0.01	0.28	0.02	0.00	0.34	0.54	0.38	0.00	0.00	0.00	0.17	0.00	0.00	0.26	0.41	0.30	0.00	0.02	0.01	0.26	0.00	0.00	0.29	0.45	0.32	0.00
4/14/07	0.01	0.00	0.31	0.00	0.00	0.39	0.61	0.42	0.00	0.00	0.00	0.22	0.00	0.00	0.32	0.50	0.35	0.00	0.01	0.01	0.30	0.00	0.00	0.33	0.52	0.36	0.00
4/17/07	0.02	0.01	0.32	0.00	0.00	0.41	0.64	0.45	0.00	0.00	0.00	0.21	0.00	0.00	0.32	0.51	0.36	0.00	0.02	0.01	0.31	0.00	0.00	0.34	0.54	0.38	0.00
4/27/07	0.03	0.01	0.31	0.00	0.00	0.39	0.59	0.44	0.00	0.01	0.00	0.22	0.00	0.00	0.32	0.50	0.36	0.00	0.03	0.01	0.31	0.00	0.00	0.34	0.53	0.38	0.00

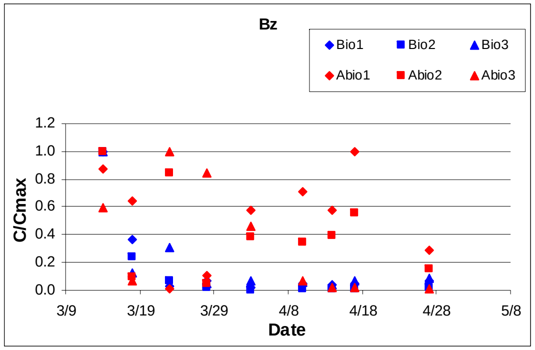
DATE	Abiotic 1									Abiotic 2									Abiotic 3								
	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
3/14/07	0.36	0.27	0.19	0.15	0.14	0.06	0.11	0.10	0.26	0.37	0.49	0.44	0.49	0.49	0.29	0.45	0.34	0.53	0.48	0.42	0.34	0.26	0.25	0.19	0.32	0.27	0.70
3/18/07	0.26	0.32	0.26	0.24	0.23	0.15	0.25	0.20	0.36	0.04	0.27	0.21	0.17	0.16	0.07	0.11	0.10	0.27	0.06	0.48	0.35	0.32	0.30	0.13	0.22	0.18	0.48
3/23/07	0.00	0.33	0.25	0.23	0.22	0.11	0.18	0.14	0.30	0.31	0.27	0.24	0.18	0.17	0.10	0.17	0.15	0.35	0.81	0.57	0.42	0.38	0.35	0.13	0.22	0.18	0.47
3/28/07	0.04	0.48	0.44	0.48	0.49	0.31	0.48	0.34	0.47	0.02	0.32	0.35	0.30	0.30	0.25	0.40	0.31	0.55	0.68	0.76	0.72	0.78	0.80	0.52	0.81	0.60	0.93
4/3/07	0.24	0.41	0.39	0.41	0.42	0.27	0.41	0.32	0.52	0.14	0.02	0.25	0.17	0.00	0.18	0.30	0.25	0.49	0.37	0.09	0.64	0.60	0.00	0.48	0.74	0.55	0.83
4/10/07	0.29	0.38	0.38	0.39	0.39	0.27	0.42	0.32	0.50	0.13	0.01	0.25	0.15	0.00	0.18	0.30	0.25	0.49	0.05	0.00	0.34	0.15	0.00	0.43	0.68	0.52	0.66
4/14/07	0.24	0.47	0.45	0.46	0.48	0.31	0.49	0.37	0.57	0.14	0.01	0.31	0.20	0.00	0.22	0.36	0.29	0.52	0.02	0.00	0.31	0.11	0.00	0.51	0.79	0.59	0.62
4/17/07	0.41	0.50	0.49	0.49	0.47	0.34	0.53	0.40	0.54	0.21	0.02	0.31	0.19	0.01	0.22	0.38	0.31	0.59	0.02	0.00	0.27	0.07	0.00	0.53	0.83	0.63	0.66
4/27/07	0.12	0.01	0.40	0.00	0.00	0.32	0.50	0.36	0.00	0.06	0.00	0.24	0.09	0.00	0.19	0.32	0.25	0.00	0.00	0.00	0.11	0.01	0.00	0.53	0.82	0.60	0.00

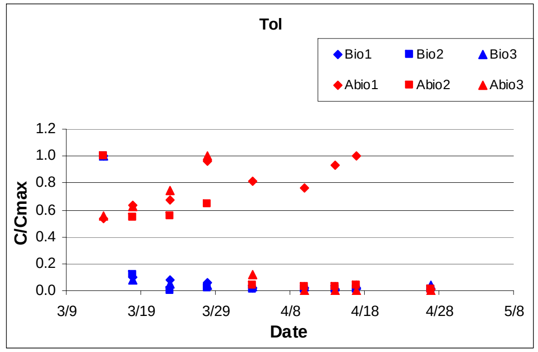
70048 22C Anaerobic

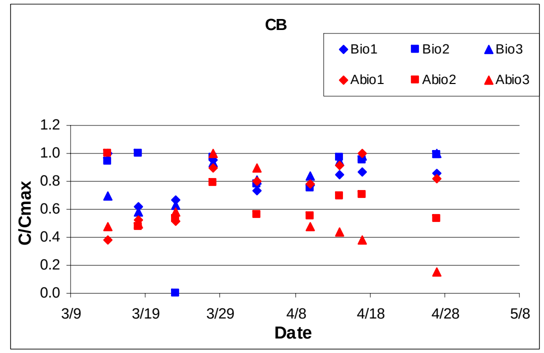
DATE	Biotic 1									Biotic 2									Biotic 3								
	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
3/14/07	0.25	0.33	0.29	0.31	0.31	0.18	0.28	0.22	0.29	0.30	0.29	0.26	0.23	0.23	0.17	0.27	0.21	0.27	0.36	0.33	0.29	0.28	0.28	0.18	0.29	0.26	0.31
4/3/07	0.18	0.18	0.25	0.16	0.01	0.18	0.29	0.21	0.01	0.19	0.19	0.30	0.34	0.00	0.20	0.32	0.24	0.03	0.00	0.00	0.00	0.00	0.00	0.18	0.31	0.17	0.00
4/27/07	0.17	0.15	0.22	0.11	0.00	0.19	0.30	0.22	0.00	0.23	0.21	0.27	0.33	0.12	0.22	0.34	0.25	0.04	0.01	0.01	0.01	0.01	0.00	0.23	0.40	0.21	0.00
5/18/07	0.14	0.13	0.19	0.10	0.00	0.18	0.29	0.21	0.00	0.17	0.15	0.19	0.27	0.09	0.19	0.31	0.23	0.04	0.00	0.00	0.00	0.00	0.00	0.20	0.34	0.17	0.00
6/7/07	0.09	0.09	0.15	0.09	0.00	0.16	0.26	0.20	0.00	0.09	0.09	0.12	0.21	0.06	0.18	0.28	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.29	0.14	0.00
6/29/07	0.05	0.06	0.10	0.08	0.00	0.15	0.25	0.18	0.00	0.05	0.06	0.08	0.16	0.04	0.16	0.26	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.29	0.14	0.00
9/15/07	0.07	0.01	0.01	0.02	0.00	0.08	0.11	0.07	0.01	0.00	0.00	0.00	0.02	0.01	0.08	0.10	0.07	0.01	0.00	0.00	0.00	0.00	0.01	0.09	0.12	0.06	0.00
11/2/07	0.00	0.00	0.01	0.03	0.00	0.30	0.32	0.29	0.03	0.00	0.00	0.01	0.03	0.00	0.32	0.32	0.28	0.02	0.00	0.00	0.00	0.00	0.00	0.32	0.37	0.24	0.00
4/23/08	0.00	0.00	0.00	0.00	0.00	0.11	0.13	0.14	0.01	0.00	0.00	0.00	0.00	0.00	0.17	0.17	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.14	0.10	0.03
9/8/08	0.02	0.00	0.00	0.01	0.00	0.21	0.21	0.27		0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02		0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	

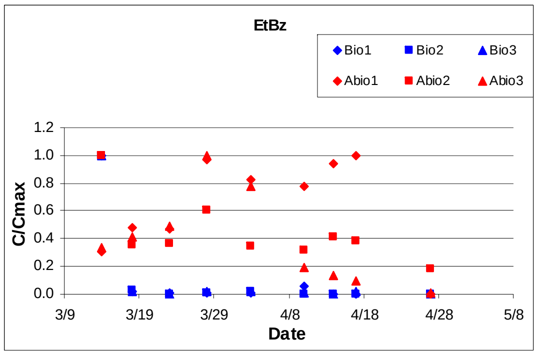
DATE	Abiotic 1									Abiotic 2									Abiotic 3								
	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
3/14/07	0.52	0.39	0.29	0.22	0.21	0.13	0.22	0.20	0.46	0.26	0.30	0.23	0.16	0.16	0.09	0.16	0.14	0.33	0.24	0.32	0.29	0.27	0.28	0.18	0.28	0.22	0.37
4/3/07	0.63	0.57	0.60	0.65	0.03	0.33	0.52	0.39	0.58	0.48	0.38	0.47	0.50	0.01	0.25	0.40	0.31	0.46	0.31	0.23	0.32	0.32	0.01	0.18	0.28	0.22	0.35
4/27/07	0.72	0.59	0.59	0.61	0.21	0.33	0.54	0.41	0.59	0.65	0.55	0.52	0.57	0.46	0.29	0.46	0.35	0.49	0.47	0.33	0.39	0.40	0.07	0.22	0.35	0.27	0.38
5/18/07	0.74	0.59	0.59	0.62	0.44	0.33	0.54	0.40	0.55	0.61	0.50	0.50	0.54	0.43	0.28	0.45	0.34	0.47	0.51	0.36	0.41	0.44	0.27	0.24	0.37	0.28	0.38
6/7/07	0.77	0.57	0.60	0.64	0.26	0.33	0.52	0.41	0.57	0.56	0.46	0.46	0.49	0.25	0.25	0.40	0.31	0.45	0.48	0.33	0.38	0.40	0.22	0.20	0.32	0.25	0.34
6/29/07	0.68	0.52	0.56	0.59	0.33	0.31	0.51	0.39	0.54	0.60	0.49	0.49	0.53	0.40	0.27	0.44	0.34	0.44	0.47	0.32	0.38	0.40	0.22	0.21	0.34	0.26	0.34
9/15/07	0.29	0.21	0.23	0.21	0.11	0.16	0.19	0.16	0.22	0.22	0.17	0.18	0.16	0.12	0.13	0.16	0.13	0.18	0.19	0.12	0.15	0.13	0.07	0.11	0.14	0.10	0.14
11/2/07	1.11	0.76	0.88	0.76	0.36	0.62	0.66	0.65	0.96	0.16	0.13	0.19	0.12	0.09	0.16	0.18	0.20	0.45	0.33	0.21	0.31	0.24	0.11	0.23	0.26	0.27	0.48
4/23/08	0.18	0.13	0.25	0.15	0.06	0.24	0.27	0.32	0.75	0.65	0.46	0.52	0.45	0.28	0.37	0.40	0.42	0.72	0.12	0.07	0.17	0.10	0.04	0.15	0.17	0.20	0.46
9/8/08	0.16	0.04	0.07	0.04	0.00	0.05	0.05	0.09		0.11	0.05	0.06	0.03	0.01	0.04	0.04	0.07		0.18	0.03	0.07	0.03	0.00	0.02	0.03	0.05	

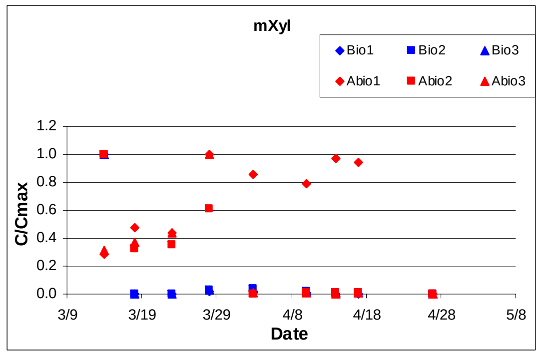
Sample: 70048   Temp: 22C   Aerobic

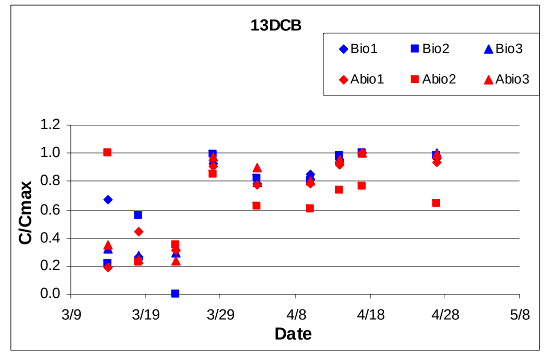


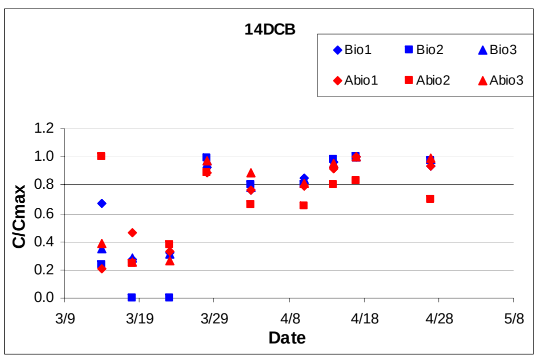


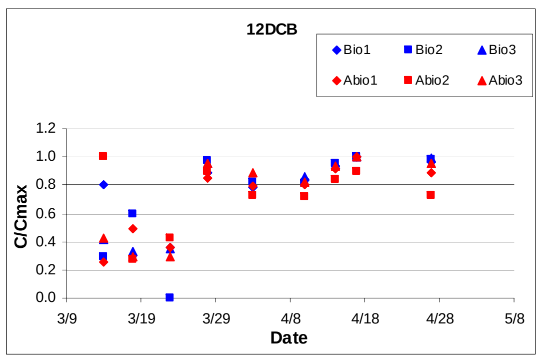


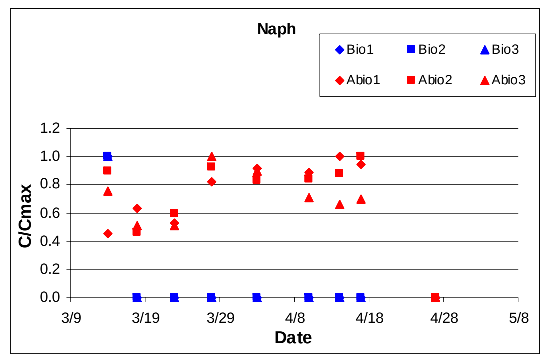




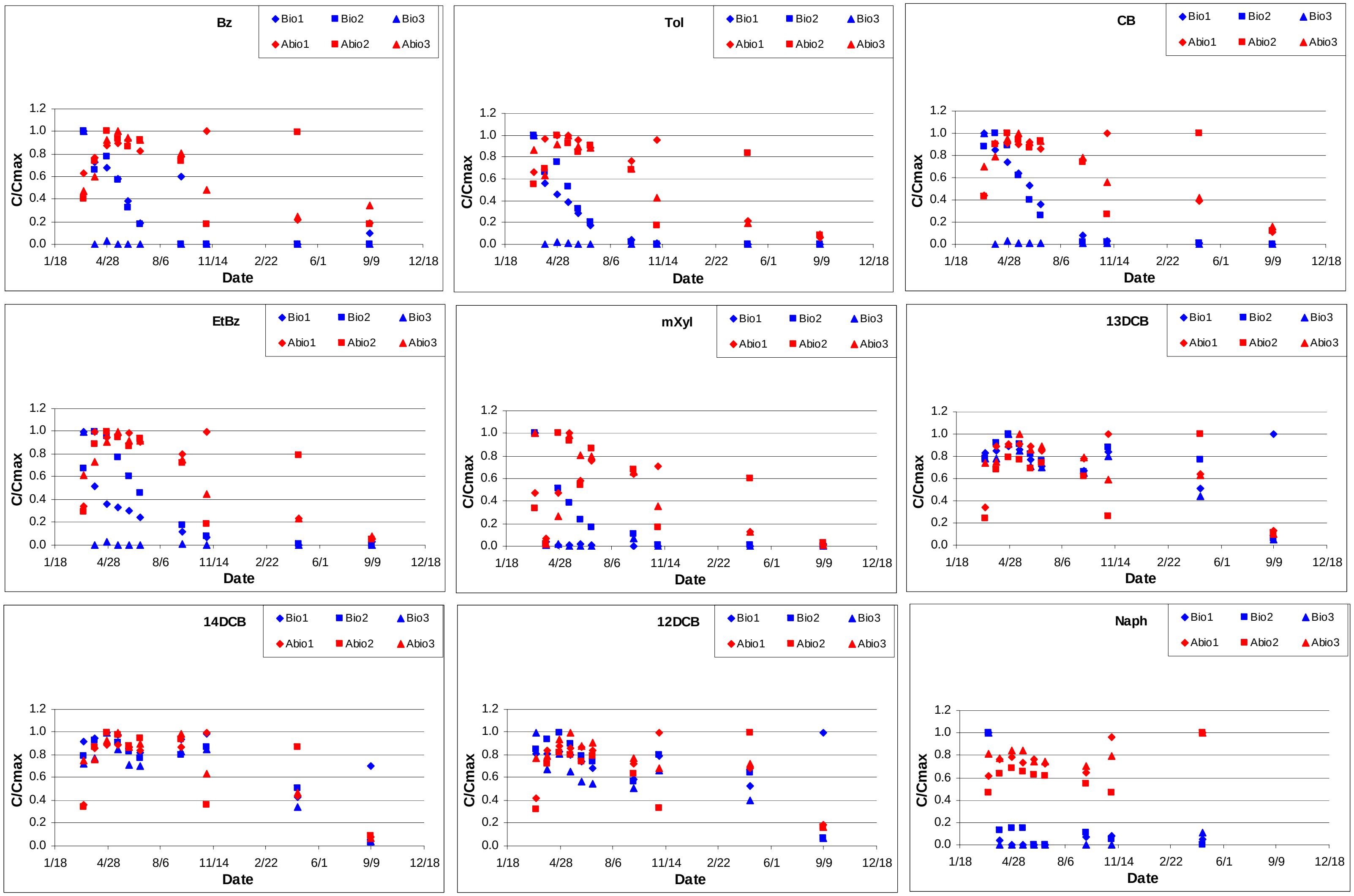








Sample: 70048 Temp: 22C Anaerobic



70049 12C Aerobic

	Biotic 1									Biotic 2									Biotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/3/07	0.27	0.31	0.37	0.36	0.36	0.25	0.51	0.32	0.40	0.62	0.66	0.60	0.74	0.69	0.36	0.70	0.42	0.41	0.39	0.43	0.45	0.48	0.46	0.28	0.56	0.35	0.40
5/3/07	0.67	0.72	0.65	0.80	0.76	0.39	0.76	0.45	0.44	0.35	0.39	0.43	0.44	0.43	0.27	0.54	0.34	0.39	0.63	0.67	0.61	0.75	0.71	0.37	0.72	0.43	0.43
5/11/07	0.18	0.00	0.00	0.00	0.00	0.35	0.36	0.36	0.00	0.44	0.02	0.13	0.01	0.00	0.32	0.50	0.34	0.00	0.08	0.02	0.20	0.09	0.00	0.35	0.60	0.38	0.00
5/18/07	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00
5/31/07	0.01	0.00	0.00	0.00	0.00	0.22	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.01	0.00	0.00
6/6/07	0.01	0.01	0.00	0.00	0.00	0.25	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.01	0.00	0.00
6/14/07	0.00	0.00	0.00	0.00	0.00	0.22	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.01	0.00	0.00
6/20/07	0.01	0.00	0.00	0.00	0.00	0.21	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.01	0.00	0.00
6/27/07	0.00	0.00	0.00	0.00	0.00	0.22	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00
7/5/07	0.00	0.00	0.00	0.00	0.00	0.20	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.01	0.00	0.00
7/12/07	0.00	0.00	0.00	0.00	0.00	0.20	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00
8/30/07	0.00	0.00	0.00	0.00	0.00	0.12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.00
11/1/07	0.00	0.00	0.00	0.00	0.00	0.22	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.01	0.00	0.00
4/29/08	0.00	0.00	0.00	0.00	0.00	0.31	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00	0.04
9/27/08	0.00	0.00	0.00	0.00	0.00	0.41	0.02	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	

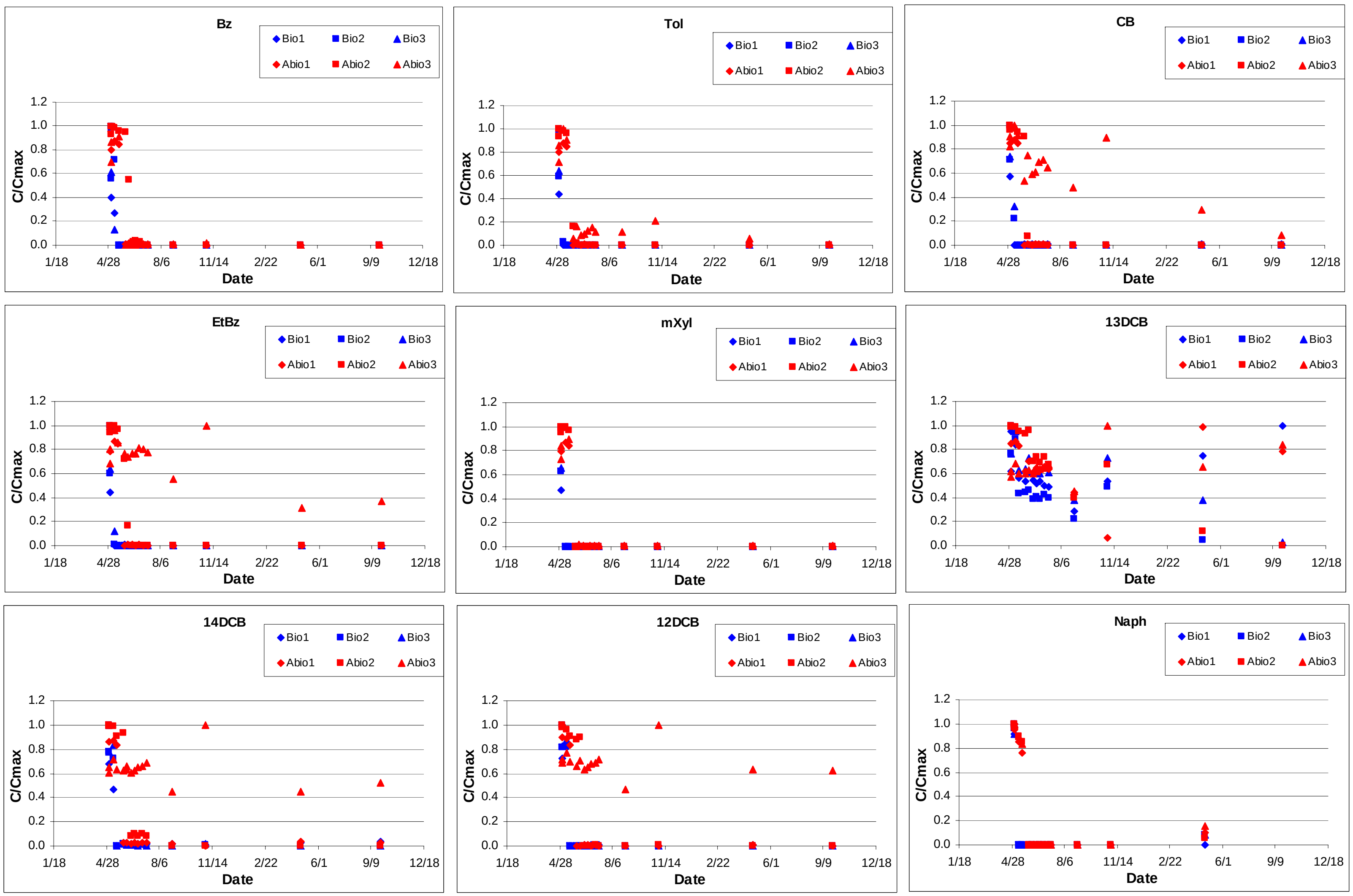
	Abiotic 1									Abiotic 2									Abiotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/3/07	0.63	0.66	0.59	0.71	0.67	0.32	0.63	0.37	0.35	0.64	0.71	0.67	0.84	0.80	0.50	0.94	0.57	0.66	0.41	0.42	0.41	0.41	0.39	0.19	0.37	0.23	0.23
5/3/07	0.50	0.53	0.51	0.56	0.53	0.28	0.54	0.34	0.34	0.60	0.66	0.64	0.80	0.76	0.49	0.93	0.56	0.65	0.50	0.51	0.45	0.49	0.46	0.20	0.40	0.24	0.23
5/11/07	0.56	0.58	0.52	0.62	0.58	0.28	0.54	0.33	0.30	0.63	0.70	0.65	0.84	0.80	0.49	0.93	0.55	0.59	0.58	0.59	0.50	0.58	0.54	0.22	0.44	0.26	0.21
5/18/07	0.54	0.56	0.50	0.60	0.56	0.27	0.52	0.31	0.27	0.61	0.68	0.63	0.82	0.78	0.47	0.86	0.52	0.56	0.53	0.53	0.46	0.52	0.48	0.20	0.39	0.24	0.20
5/31/07	0.01	0.00	0.00	0.00	0.00	0.20	0.01	0.00	0.00	0.61	0.11	0.60	0.61	0.00	0.46	0.88	0.50	0.00	0.00	0.03	0.27	0.47	0.00	0.20	0.38	0.22	0.00
6/6/07	0.01	0.01	0.00	0.01	0.00	0.22	0.02	0.00	0.00	0.35	0.01	0.05	0.14	0.00	0.48	0.59	0.51	0.00	0.01	0.10	0.37	0.45	0.01	0.21	0.40	0.24	0.00
6/14/07	0.00	0.00	0.00	0.00	0.00	0.20	0.01	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.35	0.08	0.00	0.00	0.00	0.05	0.30	0.46	0.00	0.20	0.37	0.22	0.00
6/20/07	0.00	0.00	0.01	0.00	0.00	0.21	0.02	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.37	0.09	0.00	0.00	0.00	0.05	0.30	0.47	0.00	0.20	0.38	0.22	0.00
6/27/07	0.00	0.00	0.00	0.00	0.00	0.20	0.01	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.34	0.08	0.00	0.00	0.00	0.07	0.35	0.49	0.01	0.21	0.40	0.23	0.00
7/5/07	0.00	0.00	0.00	0.00	0.00	0.21	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.37	0.09	0.00	0.00	0.01	0.09	0.36	0.49	0.01	0.21	0.40	0.23	0.00
7/12/07	0.00	0.00	0.00	0.00	0.00	0.21	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.08	0.00	0.00	0.00	0.07	0.33	0.47	0.01	0.22	0.42	0.24	0.00
8/30/07	0.00	0.00	0.00	0.00	0.00	0.14	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.01	0.07	0.24	0.33	0.01	0.15	0.27	0.16	0.00
11/1/07	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.00	0.00	0.01	0.12	0.45	0.61	0.01	0.32	0.61	0.34	0.00
4/29/08	0.00	0.00	0.00	0.00	0.00	0.32	0.02	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.04	0.00	0.03	0.15	0.19	0.00	0.21	0.27	0.22	0.04
9/27/08	0.00	0.00	0.00	0.00	0.00	0.25	0.02	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.04	0.22	0.00	0.27	0.32	0.21	

70049 12C Anaerobic

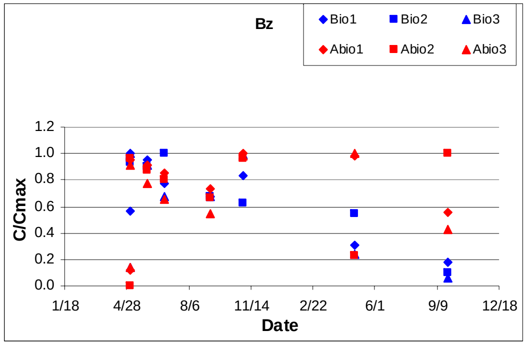
	Biotic 1									Biotic 2									Biotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/3/07	0.60	0.58	0.50	0.52	0.48	0.19	0.39	0.23	0.19	0.52	0.49	0.43	0.43	0.40	0.16	0.32	0.20	0.18	0.60	0.58	0.49	0.52	0.48	0.19	0.38	0.22	0.19
5/3/07	0.34	0.35	0.36	0.33	0.31	0.15	0.31	0.19	0.17	0.53	0.50	0.44	0.45	0.42	0.16	0.34	0.20	0.18	0.08	0.03	0.03	0.01	0.01	0.00	0.01	0.01	0.03
5/31/07	0.57	0.56	0.48	0.51	0.47	0.19	0.39	0.24	0.18	0.50	0.49	0.42	0.44	0.41	0.17	0.34	0.20	0.16	0.55	0.54	0.46	0.48	0.45	0.18	0.37	0.22	0.19
6/28/07	0.47	0.46	0.42	0.44	0.42	0.18	0.36	0.22	0.16	0.56	0.53	0.45	0.49	0.45	0.18	0.37	0.21	0.16	0.41	0.40	0.36	0.37	0.35	0.15	0.30	0.18	0.16
9/9/07	0.41	0.41	0.35	0.37	0.35	0.15	0.31	0.18	0.14	0.37	0.35	0.31	0.33	0.29	0.12	0.27	0.15	0.13	0.40	0.39	0.34	0.35	0.32	0.13	0.28	0.16	0.13
11/1/07	0.50	0.47	0.44	0.43	0.41	0.18	0.38	0.23	0.03	0.35	0.31	0.32	0.29	0.26	0.13	0.28	0.17	0.17	0.60	0.54	0.48	0.48	0.44	0.19	0.40	0.24	0.22
4/29/08	0.18	0.00	0.19	0.10	0.11	0.16	0.22	0.15	0.04	0.31	0.00	0.38	0.40	0.18	0.25	0.34	0.26	0.09	0.14	0.00	0.13	0.02	0.00	0.13	0.17	0.16	0.04
9/27/08	0.11	0.00	0.15	0.12	0.00	0.17	0.22	0.17		0.06	0.00	0.09	0.05	0.00	0.12	0.17	0.15		0.04	0.00	0.04	0.01	0.00	0.05	0.05	0.08	

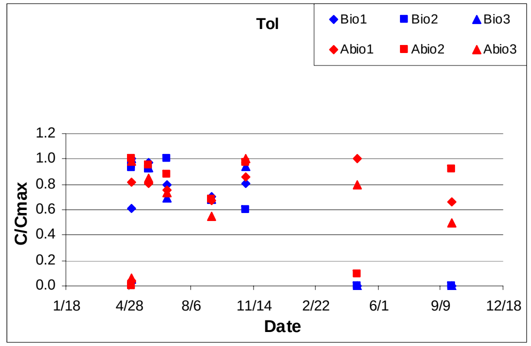
	Abiotic 1									Abiotic 2									Abiotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/3/07	0.59	0.53	0.42	0.42	0.38	0.13	0.26	0.15	0.11	0.61	0.55	0.43	0.44	0.40	0.13	0.26	0.16	0.11	0.64	0.58	0.46	0.47	0.43	0.14	0.28	0.17	0.11
5/3/07	0.07	0.03	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.03	0.02	0.01	0.01	0.00	0.00	0.00	0.00
5/31/07	0.56	0.52	0.40	0.42	0.39	0.13	0.26	0.16	0.11	0.56	0.52	0.40	0.43	0.39	0.13	0.27	0.16	0.09	0.54	0.51	0.40	0.42	0.39	0.13	0.26	0.16	0.09
6/28/07	0.53	0.49	0.39	0.41	0.38	0.14	0.28	0.17	0.13	0.51	0.48	0.39	0.41	0.38	0.14	0.28	0.17	0.10	0.46	0.43	0.36	0.30	0.35	0.12	0.25	0.15	0.09
9/9/07	0.45	0.43	0.34	0.37	0.34	0.12	0.26	0.15	0.13	0.42	0.37	0.28	0.07	0.33	0.12	0.25	0.15	0.13	0.38	0.33	0.24	0.03	0.31	0.11	0.22	0.14	0.11
11/1/07	0.62	0.55	0.44	0.46	0.43	0.16	0.33	0.20	0.20	0.61	0.53	0.42	0.18	0.44	0.17	0.34	0.21	0.21	0.69	0.59	0.46	0.13	0.49	0.19	0.37	0.23	0.22
4/29/08	0.60	0.64	0.56	0.57	0.52	0.30	0.39	0.31	0.06	0.14	0.05	0.01	0.01	0.22	0.19	0.08	0.20	0.03	0.70	0.47	0.34	0.01	0.45	0.25	0.28	0.27	0.21
9/27/08	0.35	0.42	0.43	0.44	0.39	0.24	0.32	0.26		0.64	0.50	0.37	0.22	0.46	0.25	0.30	0.29		0.30	0.29	0.29	0.14	0.27	0.23	0.29	0.28	

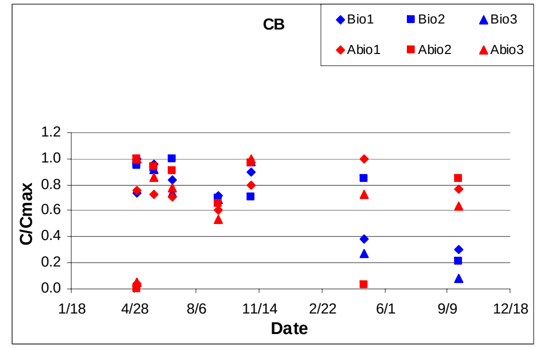
Sample: 70049 Temp: 12C Aerobic

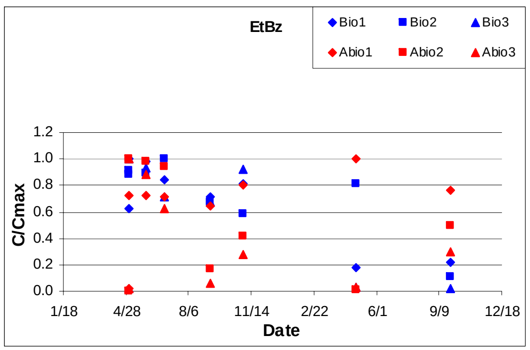


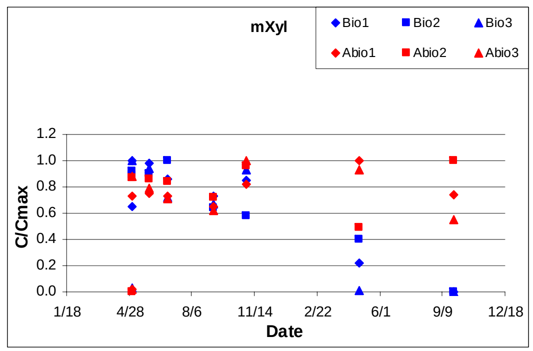
Sample: 70049 Temp: 12C Anaerobic

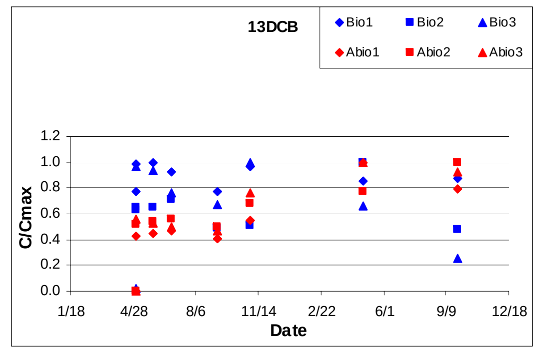


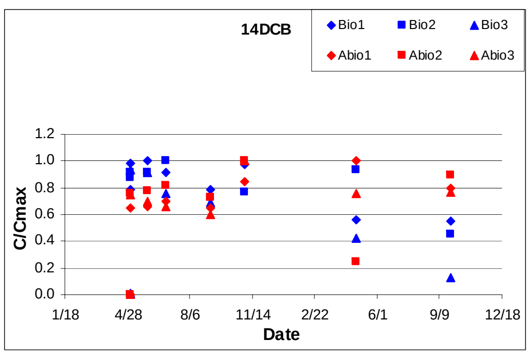


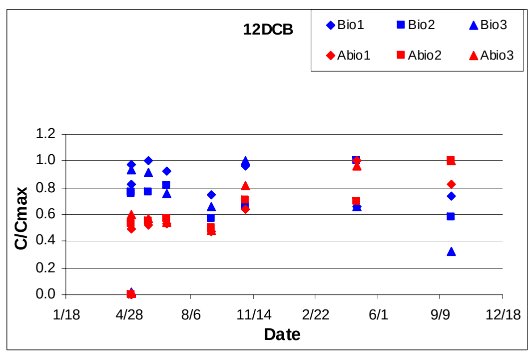


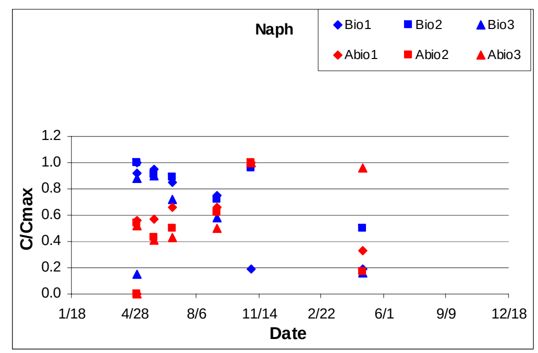












70049 22C Aerobic

					Biotic 1									Biotic 2									Biotic 3				
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
3/14/07	0.35	0.39	0.34	0.36	0.32	0.20	0.32	0.25	0.24	0.26	0.39	0.36	0.36	0.32	0.23	0.37	0.28	0.34	0.23	0.30	0.27	0.23	0.21	0.16	0.27	0.21	0.18
3/18/07	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3/23/07	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3/28/07	0.00	0.02	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.00	0.00	0.00	0.00
4/3/07	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/10/07	0.01	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4/27/07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

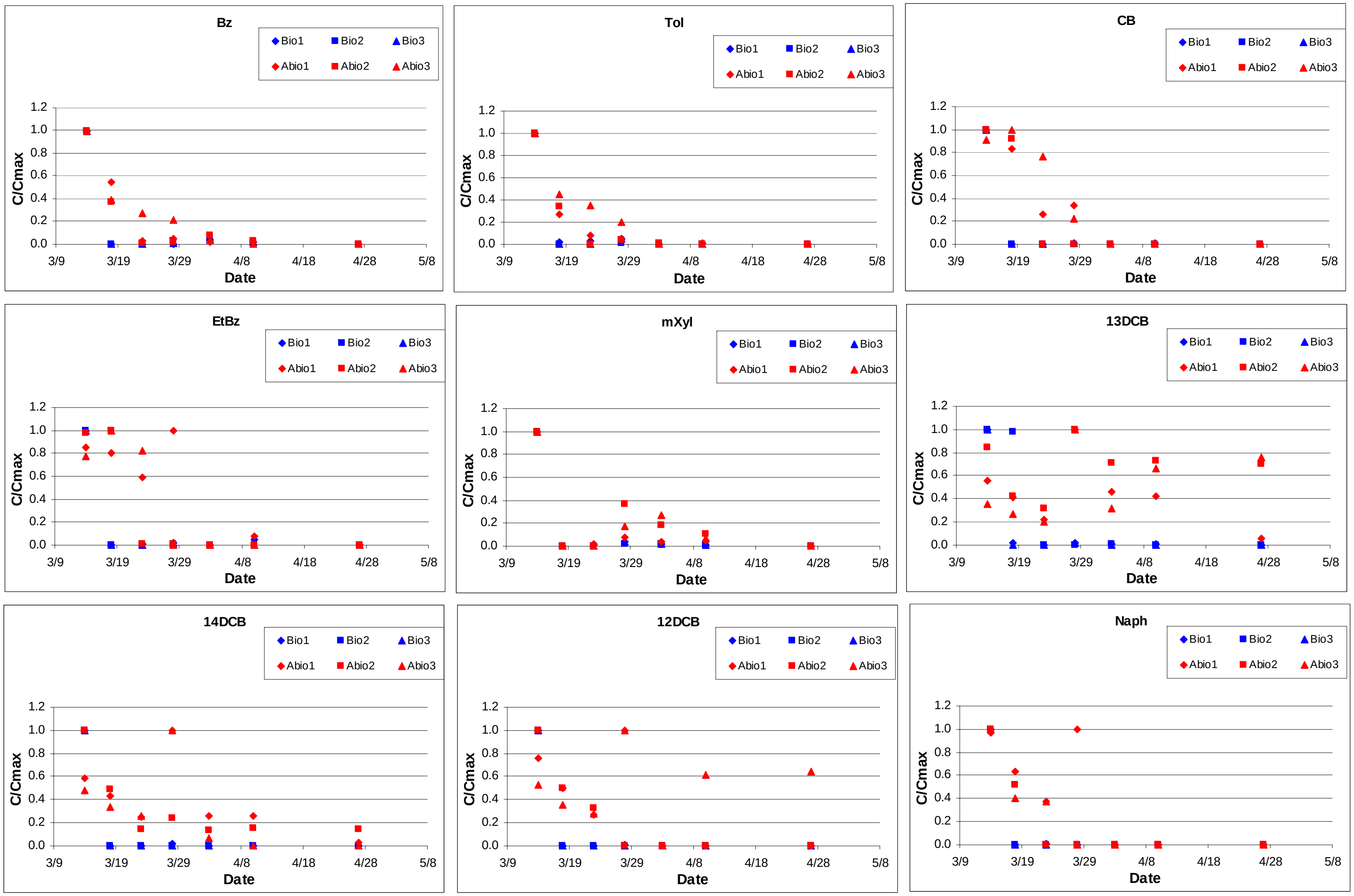
					Abiotic 1									Abiotic 2									Abiotic 3				
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
3/14/07	0.27	0.23	0.18	0.15	0.09	0.09	0.15	0.14	0.20	0.21	0.27	0.23	0.19	0.02	0.12	0.20	0.16	0.26	0.43	0.36	0.28	0.23	0.03	0.11	0.19	0.16	0.39
3/18/07	0.15	0.06	0.15	0.14	0.00	0.07	0.11	0.09	0.13	0.08	0.09	0.21	0.19	0.00	0.06	0.10	0.08	0.14	0.17	0.16	0.31	0.29	0.00	0.08	0.13	0.11	0.16
3/23/07	0.01	0.02	0.05	0.11	0.00	0.04	0.06	0.05	0.07	0.00	0.00	0.00	0.00	0.00	0.04	0.03	0.05	0.00	0.12	0.13	0.24	0.24	0.00	0.06	0.10	0.09	0.14
3/28/07	0.01	0.01	0.06	0.18	0.01	0.16	0.26	0.19	0.20	0.00	0.01	0.00	0.00	0.01	0.14	0.05	0.00	0.00	0.09	0.07	0.07	0.00	0.01	0.32	0.40	0.31	0.00
4/3/07	0.01	0.00	0.00	0.00	0.00	0.07	0.07	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.10	0.03	0.00	0.00	0.02	0.00	0.00	0.00	0.01	0.10	0.03	0.00	0.00
4/10/07	0.01	0.00	0.00	0.01	0.00	0.07	0.07	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.10	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.19	0.00
4/27/07	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.20	0.00

70049 22C Anaerobic

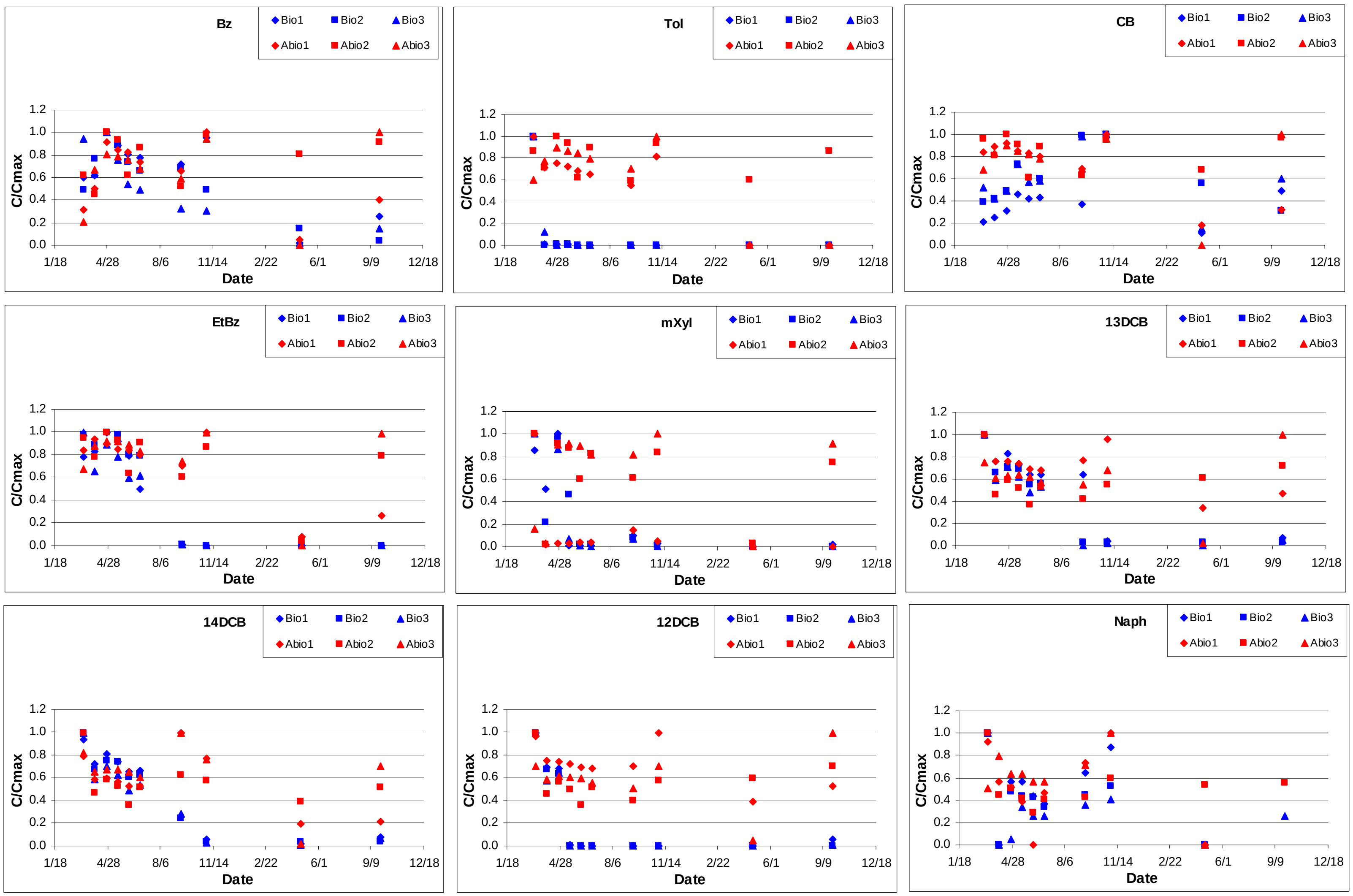
					Biotic 1									Biotic 2									Biotic 3				
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
3/14/07	0.22	0.23	0.19	0.19	0.19	0.11	0.19	0.15	0.15	0.22	0.34	0.29	0.32	0.32	0.18	0.29	0.20	0.27	0.32	0.37	0.31	0.34	0.34	0.19	0.32	0.23	0.27
4/3/07	0.23	0.00	0.22	0.21	0.12	0.08	0.15	0.10	0.00	0.35	0.00	0.32	0.29	0.07	0.12	0.20	0.13	0.00	0.21	0.04	0.25	0.22	0.01	0.11	0.19	0.13	0.00
4/27/07	0.37	0.00	0.28	0.25	0.23	0.09	0.16	0.10	0.08	0.45	0.00	0.37	0.33	0.31	0.13	0.22	0.13	0.13	0.34	0.00	0.30	0.30	0.29	0.14	0.22	0.15	0.01
5/18/07	0.33	0.00	0.41	0.23	0.00	0.08	0.15	0.00	0.09	0.40	0.00	0.55	0.32	0.15	0.12	0.22	0.00	0.12	0.25	0.00	0.44	0.27	0.02	0.12	0.20	0.00	0.09
6/7/07	0.30	0.00	0.37	0.20	0.00	0.07	0.13	0.00	0.07	0.33	0.00	0.46	0.26	0.01	0.10	0.18	0.00	0.12	0.18	0.00	0.35	0.20	0.00	0.09	0.16	0.00	0.07
6/29/07	0.29	0.00	0.38	0.12	0.00	0.07	0.13	0.00	0.06	0.30	0.00	0.45	0.26	0.01	0.10	0.18	0.00	0.09	0.17	0.00	0.35	0.21	0.00	0.10	0.17	0.00	0.07
9/15/07	0.27	0.00	0.33	0.00	0.02	0.07	0.20	0.00	0.10	0.30	0.00	0.75	0.00	0.03	0.00	0.07	0.00	0.12	0.11	0.00	0.59	0.00	0.02	0.00	0.09	0.00	0.10
11/2/07	0.36	0.00	0.88	0.00	0.01	0.00	0.01	0.00	0.13	0.22	0.00	0.75	0.00	0.00	0.00	0.01	0.00	0.14	0.10	0.00	0.60	0.00	0.00	0.00	0.01	0.00	0.11
4/29/08	0.01	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.42	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00
9/27/08	0.10	0.00	0.43	0.00	0.01	0.01	0.02	0.01		0.02	0.00	0.23	0.00	0.00	0.01	0.01	0.00		0.05	ND	0.37	ND	0.00	0.01	0.02	0.00	0.07

					Abiotic 1									Abiotic 2									Abiotic 3				
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
3/14/07	0.15	0.29	0.22	0.22	0.16	0.10	0.17	0.13	0.15	0.45	0.49	0.42	0.39	0.37	0.25	0.41	0.32	0.40	0.12	0.23	0.21	0.19	0.04	0.11	0.18	0.13	0.08
4/3/07	0.24	0.21	0.24	0.24	0.00	0.08	0.13	0.10	0.09	0.33	0.40	0.35	0.32	0.01	0.12	0.19	0.15	0.18	0.37	0.30	0.26	0.25	0.01	0.09	0.14	0.11	0.13
4/27/07	0.43	0.22	0.24	0.24	0.00	0.08	0.13	0.10	0.08	0.73	0.56	0.44	0.42	0.34	0.15	0.24	0.18	0.20	0.45	0.34	0.28	0.26	0.24	0.09	0.15	0.12	0.11
5/18/07	0.40	0.21	0.23	0.22	0.00	0.08	0.12	0.10	0.06	0.68	0.53	0.40	0.39	0.32	0.13	0.21	0.16	0.17	0.43	0.33	0.26	0.26	0.24	0.09	0.15	0.12	0.11
6/7/07	0.39	0.20	0.22	0.22	0.01	0.07	0.11	0.09	0.00	0.45	0.35	0.27	0.27	0.23	0.09	0.15	0.12	0.12	0.42	0.32	0.25	0.25	0.23	0.09	0.14	0.11	0.10
6/29/07	0.35	0.19	0.21	0.21	0.01	0.07	0.11	0.09	0.08	0.64	0.50	0.39	0.38	0.31	0.13	0.21	0.17	0.16	0.38	0.30	0.24	0.24	0.22	0.08	0.13	0.11	0.10
9/15/07	0.31	0.16	0.18	0.18	0.02	0.08	0.21	0.09	0.12	0.38	0.33	0.27	0.25	0.23	0.11	0.26	0.13	0.17	0.33	0.27	0.21	0.21	0.21	0.08	0.22	0.10	0.12
11/2/07	0.47	0.24	0.27	0.26	0.01	0.10	0.17	0.13	0.16	0.72	0.52	0.42	0.36	0.31	0.14	0.23	0.19	0.24	0.53	0.38	0.30	0.28	0.26	0.10	0.17	0.13	0.17
4/29/08	0.02	0.00	0.05	0.02	0.00	0.04	0.04	0.05	0.00	0.59	0.34	0.30	0.02	0.01	0.15	0.16	0.19	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
9/27/08	0.19	0.00	0.08	0.07	0.00	0.05	0.05	0.07		0.67	0.49	0.42	0.33	0.28	0.18	0.21	0.23	0.22	0.55	0.00	0.31	0.28	0.24	0.15	0.15	0.19	

Sample: 70049 Temp: 22C Aerobic



Sample: 70049 Temp: 22C Anaerobic



70050 12C Aerobic

DATE	Biotic 1									Biotic 2									Biotic 3								
	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/3/07	0.55	0.55	0.52	0.53	0.49	0.24	0.48	0.29	0.27	0.58	0.59	0.54	0.59	0.55	0.26	0.51	0.31	0.30									
5/3/07	0.60	0.61	0.56	0.59	0.54	0.25	0.50	0.31	0.27	0.51	0.52	0.49	0.52	0.48	0.23	0.47	0.29	0.29									
5/11/07	0.58	0.47	0.52	0.57	0.00	0.23	0.46	0.28	0.17	0.58	0.49	0.53	0.59	0.00	0.25	0.50	0.31	0.23									
5/18/07	0.55	0.44	0.49	0.52	0.00	0.21	0.42	0.25	0.00	0.52	0.43	0.48	0.52	0.00	0.22	0.44	0.26	0.00									
5/24/07	0.57	0.45	0.50	0.50	0.01	0.21	0.43	0.25	0.00	0.53	0.44	0.48	0.52	0.01	0.22	0.44	0.23	0.00									
5/31/07	0.54	0.39	0.44	0.03	0.01	0.21	0.42	0.25	0.00	0.54	0.45	0.48	0.52	0.01	0.22	0.44	0.19	0.00									
6/6/07	0.42	0.31	0.37	0.02	0.00	0.19	0.38	0.23	0.00	0.46	0.39	0.45	0.39	0.01	0.22	0.43	0.17	0.00									
6/14/07	0.54	0.38	0.42	0.03	0.00	0.21	0.40	0.24	0.00	0.43	0.35	0.39	0.35	0.01	0.18	0.36	0.14	0.00									
6/20/07	0.54	0.39	0.43	0.02	0.00	0.21	0.41	0.25	0.00	0.53	0.44	0.48	0.44	0.01	0.23	0.46	0.17	0.00									
6/27/07	0.39	0.29	0.33	0.02	0.00	0.17	0.34	0.21	0.00	0.45	0.38	0.42	0.36	0.01	0.20	0.39	0.16	0.00									
8/30/07	0.35	0.26	0.28	0.02	0.00	0.14	0.27	0.16	0.00	0.34	0.28	0.30	0.21	0.00	0.14	0.27	0.11	0.00									
11/1/07	0.56	0.39	0.45	0.03	0.01	0.26	0.51	0.31	0.02	0.21	0.16	0.22	0.11	0.00	0.15	0.31	0.13	0.00									
4/29/08	0.20	0.13	0.15	0.01	0.00	0.19	0.21	0.17	0.01	0.02	0.01	0.02	0.00	0.00	0.13	0.11	0.10	0.04									
9/30/08	0.15	0.10	0.12	0.01	0.00	0.40	0.34	0.37		0.00	0.00	0.00	0.00	0.00	0.15	0.04	0.11										

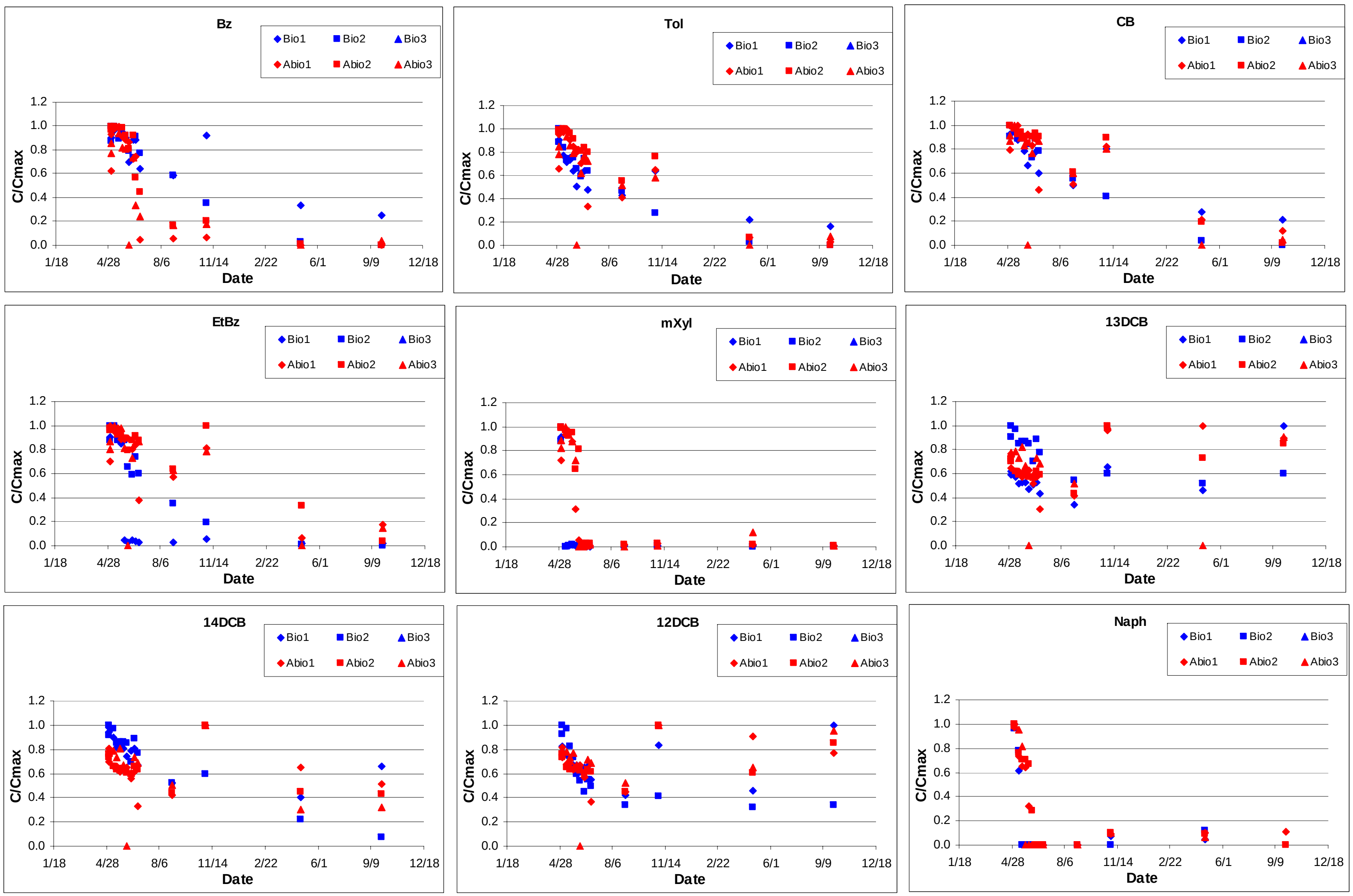
DATE	Abiotic 1									Abiotic 2									Abiotic 3								
	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/3/07	0.49	0.47	0.41	0.43	0.39	0.17	0.35	0.21	0.20	0.53	0.51	0.45	0.45	0.42	0.18	0.37	0.23	0.21	0.47	0.46	0.42	0.40	0.38	0.17	0.35	0.22	0.20
5/3/07	0.33	0.32	0.33	0.30	0.28	0.15	0.30	0.19	0.20	0.54	0.52	0.45	0.46	0.42	0.18	0.36	0.22	0.21	0.52	0.50	0.44	0.44	0.40	0.17	0.35	0.22	0.20
5/11/07	0.51	0.48	0.40	0.40	0.37	0.14	0.28	0.18	0.15	0.55	0.52	0.43	0.45	0.41	0.16	0.32	0.20	0.16	0.61	0.58	0.49	0.50	0.46	0.18	0.36	0.22	0.19
5/18/07	0.52	0.49	0.41	0.42	0.38	0.14	0.28	0.18	0.13	0.54	0.51	0.42	0.43	0.39	0.15	0.31	0.19	0.15	0.58	0.55	0.46	0.47	0.43	0.16	0.33	0.21	0.16
5/24/07	0.48	0.44	0.37	0.38	0.35	0.13	0.26	0.17	0.13	0.54	0.50	0.42	0.43	0.40	0.15	0.30	0.19	0.15	0.50	0.50	0.44	0.49	0.40	0.18	0.36	0.22	0.00
5/31/07	0.46	0.42	0.37	0.38	0.12	0.13	0.27	0.17	0.06	0.50	0.48	0.41	0.42	0.27	0.15	0.31	0.20	0.14	0.49	0.46	0.41	0.41	0.33	0.15	0.30	0.19	0.00
6/6/07	0.45	0.39	0.38	0.38	0.02	0.14	0.28	0.17	0.00	0.44	0.43	0.38	0.37	0.34	0.15	0.30	0.19	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6/14/07	0.38	0.35	0.34	0.34	0.00	0.12	0.24	0.15	0.00	0.50	0.43	0.40	0.41	0.01	0.14	0.29	0.18	0.00	0.45	0.36	0.37	0.37	0.00	0.13	0.27	0.17	0.00
6/20/07	0.39	0.37	0.36	0.36	0.01	0.13	0.26	0.16	0.00	0.31	0.44	0.42	0.43	0.01	0.16	0.32	0.19	0.00	0.21	0.45	0.44	0.46	0.00	0.16	0.33	0.20	0.00
6/27/07	0.02	0.16	0.19	0.16	0.00	0.07	0.14	0.10	0.00	0.24	0.42	0.41	0.41	0.01	0.15	0.31	0.19	0.00	0.15	0.42	0.42	0.43	0.01	0.15	0.31	0.19	0.00
8/30/07	0.03	0.20	0.21	0.24	0.01	0.09	0.18	0.12	0.00	0.09	0.29	0.27	0.30	0.01	0.11	0.21	0.14	0.00	0.10	0.30	0.29	0.31	0.00	0.12	0.23	0.15	0.00
11/1/07	0.04	0.32	0.34	0.34	0.01	0.22	0.43	0.26	0.02	0.11	0.40	0.40	0.47	0.01	0.26	0.49	0.30	0.02	0.11	0.34	0.39	0.39	0.01	0.22	0.45	0.28	0.02
4/29/08	0.00	0.03	0.09	0.03	0.01	0.23	0.28	0.24	0.02	0.00	0.03	0.09	0.16	0.01	0.19	0.22	0.18	0.02	0.00	0.00	0.00	0.00	0.06	0.00	0.14	0.18	0.01
9/30/08	0.00	0.01	0.05	0.07	0.00	0.20	0.22	0.20	0.02	0.00	0.00	0.01	0.02	0.00	0.22	0.21	0.26		0.02	0.04	0.02	0.07	0.00	0.20	0.14	0.27	

70050 12C Anaerobic

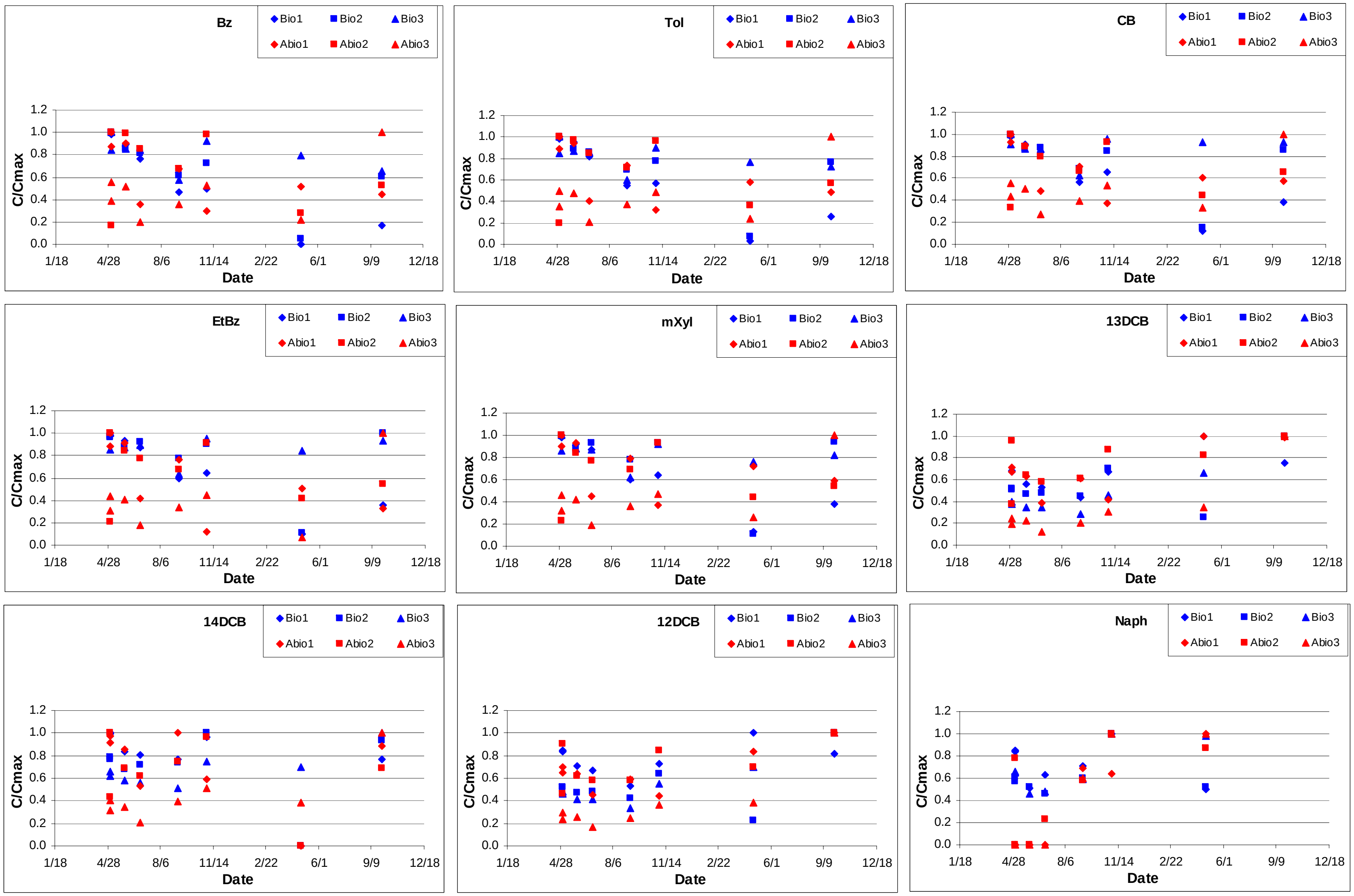
DATE	Biotic 1									Biotic 2									Biotic 3								
	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/3/07	0.49	0.35	0.30	0.22	0.20	0.07	0.15	0.09	0.06	0.50	0.37	0.31	0.23	0.20	0.06	0.14	0.09	0.06	0.59	0.46	0.38	0.31	0.28	0.09	0.19	0.12	0.09
5/3/07	0.48	0.34	0.29	0.22	0.20	0.07	0.14	0.09	0.06	0.49	0.37	0.31	0.23	0.21	0.06	0.15	0.09	0.07	0.50	0.39	0.35	0.26	0.24	0.08	0.18	0.12	0.09
5/31/07	0.44	0.33	0.27	0.21	0.18	0.06	0.12	0.08	0.04	0.42	0.33	0.27	0.21	0.18	0.06	0.12	0.08	0.06	0.51	0.40	0.33	0.27	0.24	0.08	0.17	0.11	0.06
6/28/07	0.38	0.28	0.25	0.19	0.17	0.05	0.12	0.07	0.05	0.40	0.32	0.27	0.22	0.19	0.06	0.13	0.09	0.05	0.50	0.40	0.33	0.27	0.24	0.08	0.16	0.11	0.06
9/9/07	0.23	0.19	0.17	0.13	0.12	0.04	0.11	0.06	0.05	0.30	0.26	0.22	0.18	0.16	0.06	0.14	0.08	0.07	0.34	0.28	0.24	0.19	0.17	0.06	0.15	0.09	0.08
11/1/07	0.24	0.20	0.19	0.14	0.13	0.07	0.14	0.08	0.08	0.36	0.29	0.27	0.21	0.19	0.09	0.18	0.11	0.11	0.55	0.42	0.37	0.29	0.26	0.10	0.22	0.14	0.13
4/29/08	0.00	0.01	0.04	0.02	0.03	0.10	0.00	0.11	0.04	0.02	0.03	0.05	0.03	0.02	0.03	0.00	0.04	0.06	0.47	0.36	0.36	0.26	0.21	0.15	0.20	0.18	0.13
9/30/08	0.08	0.09	0.12	0.08	0.08	0.07	0.11	0.09		0.30	0.28	0.27	0.23	0.19	0.12	0.17	0.18		0.39	0.34	0.36	0.29	0.23	0.22	0.29	0.25	

DATE	Abiotic 1									Abiotic 2									Abiotic 3								
	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
5/3/07	0.38	0.26	0.21	0.16	0.14	0.04	0.09	0.06	0.00	0.49	0.35	0.27	0.24	0.22	0.08	0.16	0.10	0.07	0.46	0.32	0.24	0.20	0.18	0.05	0.11	0.07	0.00
5/3/07	0.43	0.29	0.22	0.18	0.16	0.05	0.10	0.06	0.00	0.08	0.07	0.09	0.05	0.05	0.03	0.07	0.05	0.00	0.32	0.23	0.19	0.14	0.12	0.04	0.08	0.06	0.00
5/31/07	0.39	0.28	0.20	0.17	0.15	0.04	0.08	0.06	0.00	0.48	0.34	0.24	0.20	0.18	0.05	0.11	0.07	0.00	0.43	0.30	0.21	0.18	0.16	0.05	0.09	0.06	0.00
6/28/07	0.15	0.12	0.11	0.08	0.07	0.03	0.05	0.04	0.00	0.42	0.30	0.22	0.19	0.17	0.05	0.10	0.07	0.02	0.17	0.13	0.12	0.08	0.07	0.03	0.05	0.04	0.00
9/9/07	0.29	0.22	0.16	0.14	0.13	0.04	0.10	0.05	0.05	0.33	0.25	0.18	0.16	0.15	0.05	0.12	0.07	0.06	0.30	0.24	0.17	0.15	0.14	0.04	0.10	0.06	0.05
11/1/07	0.13	0.09	0.08	0.02	0.06	0.03	0.06	0.04	0.04	0.48	0.34	0.25	0.22	0.20	0.07	0.15	0.10	0.10	0.44	0.31	0.23	0.20	0.18	0.06	0.13	0.09	0.08
4/29/08	0.22	0.17	0.13	0.09	0.12	0.07	0.00	0.08	0.07	0.14	0.13	0.12	0.10	0.10	0.07	0.00	0.08	0.08	0.18	0.15	0.14	0.03	0.10	0.07	0.10	0.09	0.08
9/30/08	0.19	0.14	0.13	0.06	0.09	0.06	0.09	0.09		0.26	0.20	0.18	0.13	0.12	0.08	0.11	0.11		0.83	0.64	0.43	0.45	0.39	0.21	0.26	0.24	

Sample: 70050 Temp: 12C Aerobic



Sample: 70050 Temp: 12C Anaerobic



Supplemental Slurry 1 Aerobic: SMU1 sediment in SMU1 APW adjusted to pH 7

	Biotic 1									Biotic 2									Biotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
9/7/07	0.47	0.46	0.61	0.58	0.68	0.50	1.03	0.56	0.82	0.45	0.43	0.68	0.54	0.71	0.46	1.15	0.57	0.90	0.49	0.49	0.69	0.62	0.74	0.54	1.11	0.60	0.89
10/17/07	0.65	0.63	0.84	0.77	0.91	0.67	1.40	0.78	1.21	0.61	0.58	0.92	0.71	0.93	0.60	1.53	0.79	1.34	0.31	0.30	0.49	0.37	0.45	0.38	0.86	0.50	0.97
11/3/07	0.47	0.45	0.67	0.54	0.65	0.54	1.16	0.69	1.26	0.60	0.57	0.94	0.70	0.92	0.61	1.59	0.84	1.46	0.68	0.66	0.98	0.80	0.98	0.74	1.59	0.91	1.51
5/15/08	0.08	0.08	0.18	0.09	0.11	0.22	0.32	0.30	0.82	0.39	0.39	0.76	0.42	0.55	0.63	1.08	0.82	1.67	0.09	0.10	0.27	0.12	0.15	0.32	0.49	0.46	1.35
9/6/08	1.02	0.83	1.03	0.76	0.86	0.89	1.11	1.09		0.54	0.48	0.83	0.46	0.58	0.65	1.02	0.95		0.16	0.16	0.35	0.16	0.19	0.36	0.49	0.56	

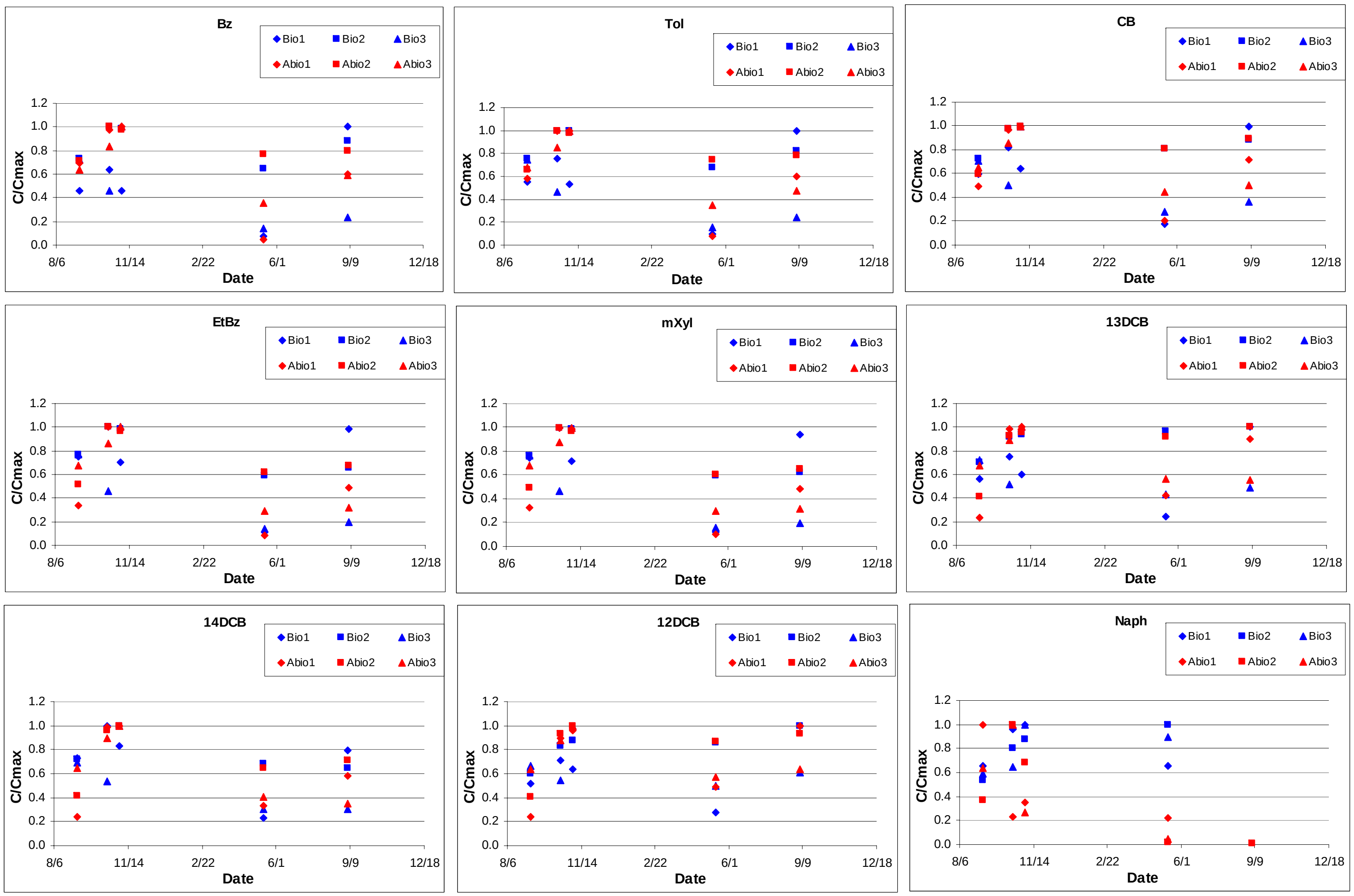
	Abiotic 1									Abiotic 2									Abiotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
9/7/07	0.42	0.33	0.30	0.24	0.22	0.14	0.18	0.14	0.12	0.95	0.82	0.79	0.79	0.77	0.60	0.73	0.54	0.48	0.49	0.49	0.49	0.60	0.59	0.53	0.63	0.46	0.44
10/17/07	0.60	0.57	0.59	0.70	0.68	0.61	0.76	0.52	0.03	1.33	1.25	1.31	1.53	1.54	1.36	1.69	1.24	1.29	0.64	0.62	0.65	0.76	0.77	0.69	0.87	0.63	0.70
11/3/07	0.61	0.57	0.61	0.68	0.67	0.62	0.77	0.56	0.04	1.30	1.22	1.33	1.49	1.50	1.39	1.75	1.33	0.88	0.77	0.73	0.76	0.89	0.88	0.78	0.97	0.72	0.19
5/15/08	0.03	0.04	0.12	0.06	0.07	0.26	0.26	0.28	0.03	1.03	0.93	1.08	0.95	0.93	1.34	1.14	1.15	0.02	0.28	0.26	0.34	0.26	0.26	0.44	0.39	0.41	0.04
9/6/08	0.37	0.34	0.43	0.34	0.33	0.56	0.45	0.58		1.06	0.98	1.19	1.03	1.00	1.46	1.24	1.24	0.02	0.45	0.34	0.38	0.29	0.28	0.43	0.34	0.46	

Supplemental Slurry 1 Anaerobic: SMU1 sediment in SMU1 APW adjusted to pH 7

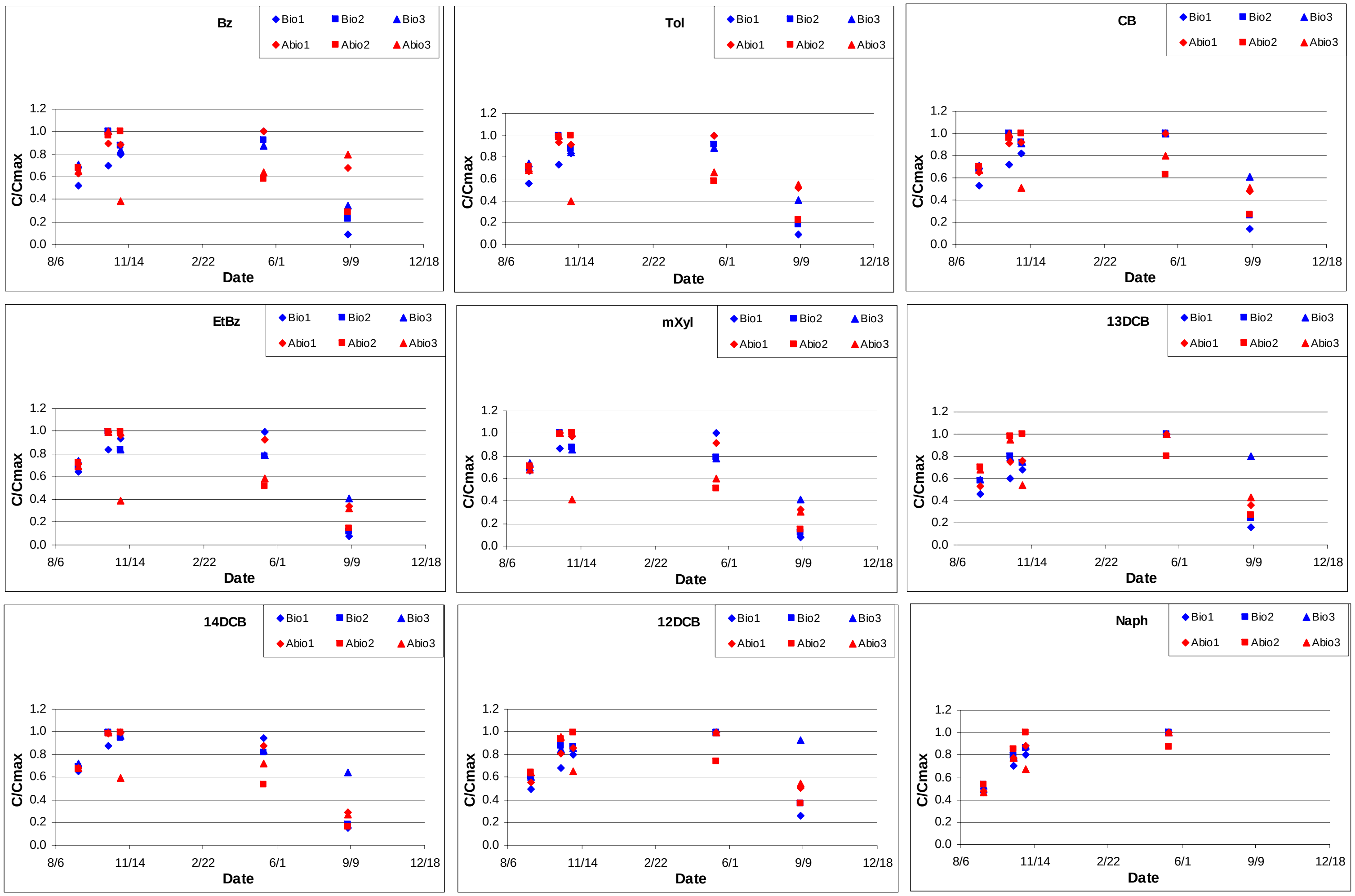
	Biotic 1									Biotic 2									Biotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
9/7/07	0.47	0.44	1.34	0.47	0.96	0.31	1.80	0.71	1.54	0.46	0.42	1.39	0.46	0.96	0.30	1.82	0.73	1.63	0.45	0.42	1.25	0.44	0.91	0.28	1.75	0.68	1.52
10/17/07	0.64	0.57	1.80	0.61	1.24	0.40	2.43	0.98	2.31	0.69	0.61	2.03	0.67	1.37	0.42	2.65	1.05	2.40	0.63	0.56	1.75	0.60	1.24	0.38	2.43	0.95	2.27
11/3/07	0.73	0.65	2.06	0.68	1.41	0.46	2.77	1.15	2.64	0.60	0.54	1.88	0.56	1.20	0.39	2.50	1.04	2.61	0.53	0.47	1.61	0.50	1.06	0.36	2.35	0.97	2.54
5/15/08	0.92	0.78	2.52	0.73	1.45	0.67	2.62	1.44	3.26	0.64	0.56	2.04	0.53	1.08	0.52	2.16	1.20	3.01	0.55	0.50	1.77	0.47	0.97	0.48	2.03	1.13	2.88
9/6/08	0.08	0.07	0.36	0.06	0.12	0.11	0.42	0.38		0.16	0.11	0.53	0.08	0.16	0.12	0.49	0.44		0.22	0.23	1.07	0.25	0.51	0.38	1.57	1.04	

	Abiotic 1									Abiotic 2									Abiotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
9/7/07	0.47	0.44	0.43	0.46	0.44	0.31	0.39	0.30	0.29	0.43	0.39	0.38	0.41	0.40	0.28	0.34	0.26	0.24	0.46	0.43	0.42	0.47	0.45	0.33	0.40	0.30	0.28
10/17/07	0.67	0.61	0.60	0.64	0.63	0.45	0.57	0.44	0.46	0.61	0.54	0.53	0.57	0.56	0.39	0.50	0.38	0.38	0.70	0.64	0.62	0.67	0.66	0.46	0.59	0.45	0.46
11/3/07	0.66	0.60	0.61	0.62	0.62	0.45	0.58	0.47	0.53	0.63	0.55	0.55	0.57	0.56	0.40	0.51	0.41	0.45	0.27	0.25	0.32	0.27	0.27	0.26	0.35	0.30	0.41
5/15/08	0.75	0.65	0.66	0.60	0.58	0.59	0.50	0.54	0.60	0.36	0.32	0.34	0.29	0.29	0.32	0.27	0.31	0.39	0.45	0.42	0.50	0.40	0.40	0.49	0.42	0.47	0.60
9/6/08	0.51	0.34	0.32	0.22	0.21	0.21	0.17	0.28		0.18	0.13	0.15	0.08	0.08	0.11	0.08	0.15		0.56	0.35	0.32	0.22	0.20	0.21	0.16	0.25	

Sample: Supplemental 1 (SMU1 in pH 7 water) Temp: 22C Aerobic



Sample: Supplemental 1 (SMU1 in pH 7 water)   Temp: 22C   Anaerobic



Supplemental Slurry 2 Aerobic: SMU1 sediment in SMU7 APW (pH 8)

					Biotic 1									Biotic 2									Biotic 3				
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
9/7/07	0.44	0.44	0.71	0.54	0.71	0.47	1.13	0.58	0.93	0.47	0.46	0.68	0.56	0.71	0.46	1.08	0.55	0.83	0.50	0.49	0.73	0.61	0.76	0.51	1.14	0.61	0.95
10/17/07	0.57	0.54	0.93	0.67	0.88	0.59	1.50	0.79	1.33	0.46	0.45	0.73	0.54	0.70	0.49	1.22	0.66	1.21	0.52	0.50	0.78	0.61	0.77	0.55	1.28	0.71	1.29
11/3/07	0.27	0.26	0.53	0.31	0.42	0.35	0.95	0.54	1.17	0.71	0.67	1.05	0.80	1.02	0.68	1.66	0.90	1.53	0.43	0.42	0.75	0.52	0.66	0.55	1.31	0.76	1.49
5/15/08	0.08	0.09	0.27	0.10	0.14	0.27	0.48	0.41	1.19	0.37	0.38	0.76	0.41	0.54	0.67	1.11	0.84	1.67	0.00	0.01	0.04	0.01	0.02	0.08	0.14	0.15	0.95
9/6/08	0.13	0.09	0.21	0.07	0.09	0.15	0.24	0.28		0.10	0.08	0.19	0.06	0.09	0.15	0.24	0.27		0.22	0.13	0.24	0.09	0.12	0.16	0.24	0.26	

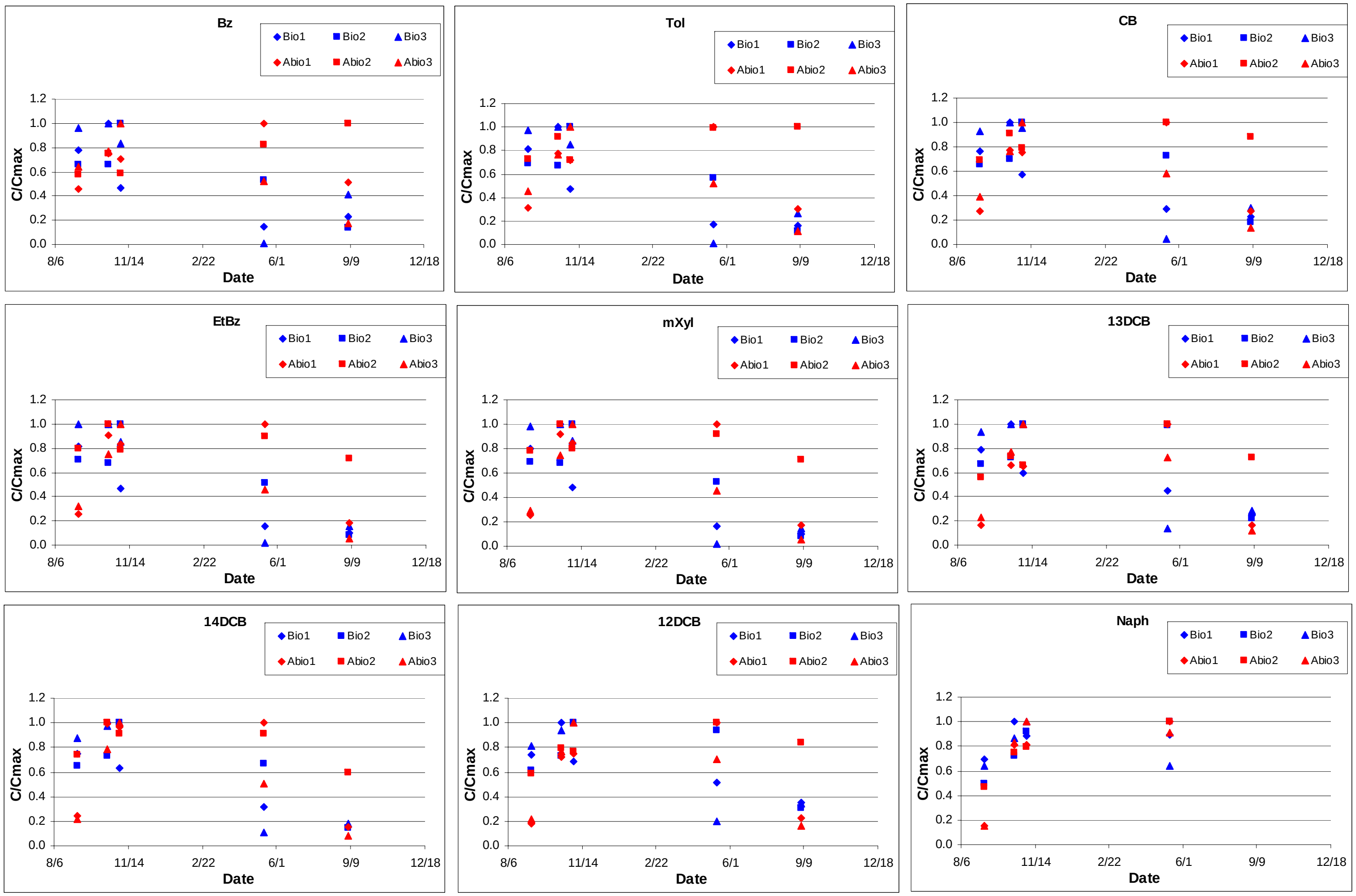
					Abiotic 1									Abiotic 2									Abiotic 3				
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
9/7/07	0.28	0.18	0.16	0.16	0.15	0.12	0.15	0.11	0.10	0.48	0.48	0.49	0.59	0.58	0.50	0.61	0.45	0.43	0.31	0.20	0.19	0.16	0.16	0.10	0.13	0.10	0.07
10/17/07	0.47	0.44	0.46	0.54	0.55	0.47	0.59	0.43	0.52	0.62	0.60	0.63	0.74	0.74	0.65	0.82	0.61	0.69	0.36	0.34	0.36	0.39	0.40	0.36	0.45	0.34	0.40
11/3/07	0.44	0.41	0.45	0.50	0.50	0.46	0.58	0.45	0.52	0.49	0.47	0.55	0.58	0.59	0.59	0.75	0.59	0.73	0.48	0.44	0.47	0.52	0.54	0.46	0.57	0.45	0.49
5/15/08	0.62	0.57	0.60	0.60	0.60	0.71	0.60	0.60	0.64	0.68	0.64	0.70	0.66	0.68	0.89	0.74	0.76	0.93	0.25	0.23	0.27	0.24	0.24	0.34	0.29	0.31	0.44
9/6/08	0.32	0.18	0.16	0.11	0.11	0.12	0.09	0.13		0.83	0.65	0.62	0.52	0.52	0.64	0.49	0.64		0.08	0.05	0.07	0.03	0.03	0.05	0.05	0.07	

Supplemental Slurry 2 Anaerobic: SMU1 sediment in SMU7 APW (pH 8)

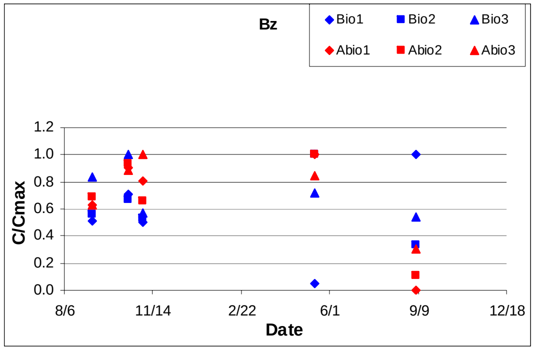
					Biotic 1									Biotic 2									Biotic 3				
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
9/7/07	0.40	0.38	1.30	0.40	0.87	0.26	1.68	0.66	1.49	0.41	0.39	1.43	0.41	0.95	0.26	1.82	0.70	1.57	0.42	0.39	1.43	0.41	0.92	0.27	1.75	0.70	1.57
10/17/07	0.56	0.50	1.78	0.53	1.15	0.34	2.25	0.90	2.15	0.50	0.44	1.74	0.48	1.11	0.30	2.24	0.89	2.17	0.51	0.46	1.76	0.49	1.10	0.34	2.24	0.90	2.23
11/3/07	0.40	0.36	1.49	0.39	0.87	0.30	2.05	0.88	2.42	0.39	0.35	1.52	0.37	0.88	0.27	2.03	0.85	2.37	0.29	0.27	1.27	0.29	0.67	0.26	1.82	0.79	2.41
5/15/08	0.04	0.05	0.43	0.06	0.14	0.18	0.87	0.56	2.52	0.74	0.65	2.60	0.62	1.40	0.53	2.52	1.36	3.16	0.37	0.36	1.66	0.35	0.77	0.43	1.88	1.06	2.98
9/6/08	0.79	0.71	2.45	0.57	1.54	0.47	2.35	1.23	2.36	0.25	0.14	0.14	0.07	0.07	0.08	0.06	0.11		0.28	0.15	0.15	0.08	0.07	0.08	0.06	0.10	

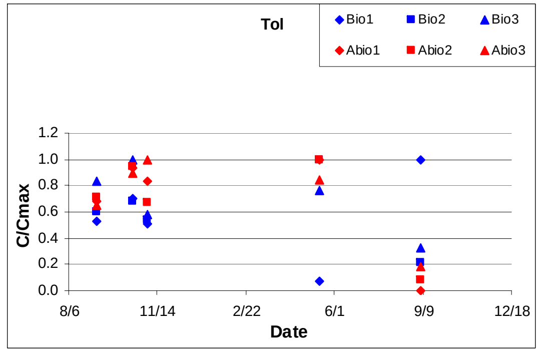
					Abiotic 1									Abiotic 2									Abiotic 3				
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
9/7/07	0.48	0.45	0.43	0.47	0.45	0.31	0.38	0.30	0.27	0.44	0.42	0.41	0.43	0.42	0.30	0.37	0.29	0.26	0.39	0.36	0.36	0.37	0.36	0.25	0.31	0.25	0.23
10/17/07	0.68	0.62	0.61	0.65	0.64	0.45	0.57	0.44	0.46	0.61	0.55	0.55	0.58	0.57	0.40	0.52	0.40	0.43	0.55	0.50	0.49	0.52	0.51	0.36	0.46	0.36	0.39
11/3/07	0.61	0.55	0.57	0.57	0.56	0.41	0.53	0.44	0.52	0.43	0.39	0.44	0.41	0.42	0.34	0.44	0.37	0.43	0.62	0.55	0.56	0.58	0.57	0.40	0.52	0.42	0.45
5/15/08	0.75	0.66	0.66	0.60	0.58	0.58	0.49	0.53	0.54	0.65	0.58	0.62	0.53	0.53	0.56	0.49	0.53	0.61	0.53	0.47	0.50	0.43	0.42	0.45	0.39	0.43	0.50
9/6/08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.07	0.05	0.26	0.03	0.06	0.04	0.20	0.18		0.19	0.10	0.40	0.05	0.10	0.06	0.22	0.21	

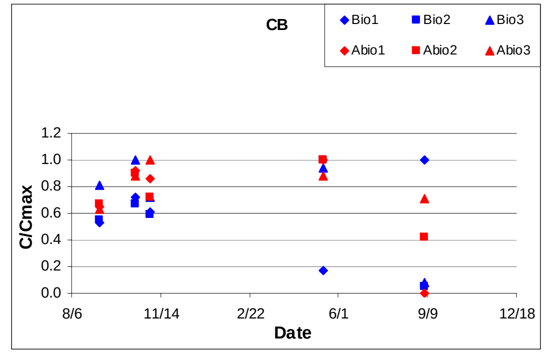
Sample: Supplemental 2 (SMU1 in SMU7 water)   Temp: 22C   Aerobic

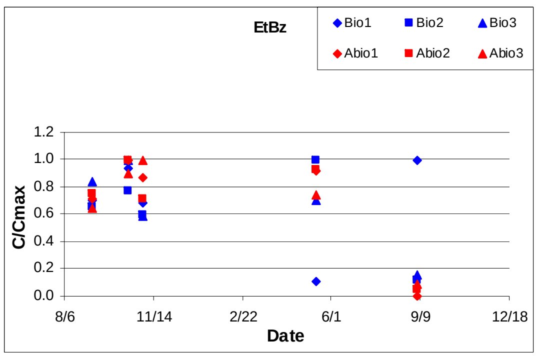


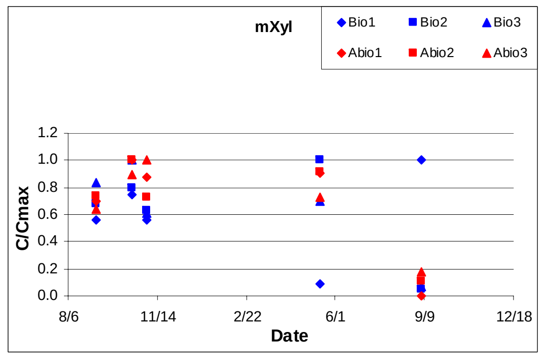
Sample: Supplemental 2 (SMU1 in SMU7 water) Temp: 22C Anaerobic

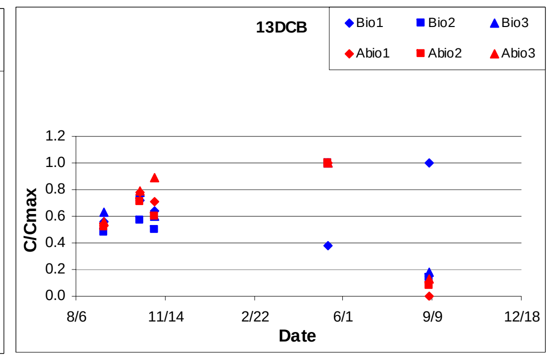


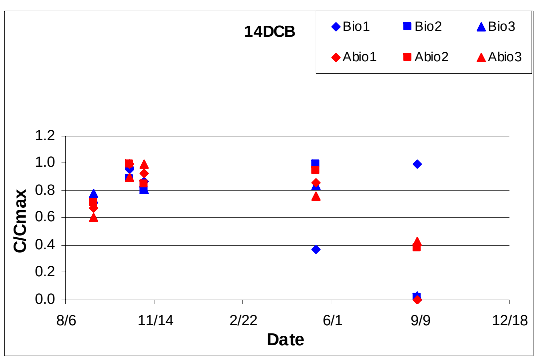


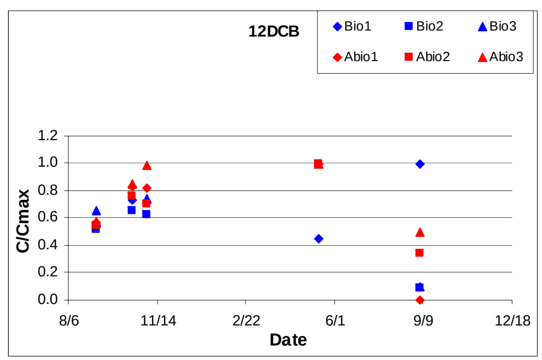


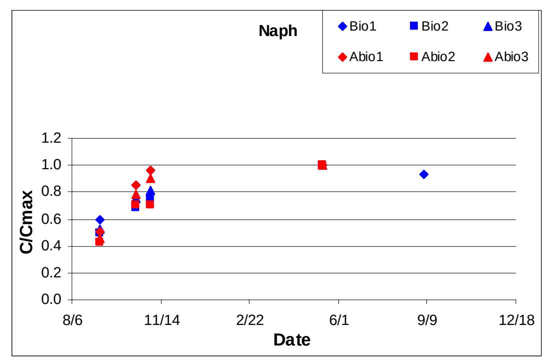












Supplemental Slurry 3 Aerobic: SMU1 sediment seeded with SMU7 sediment in SMU7 water (pH 8)

	Biotic 1									Biotic 2									Biotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
9/7/07	0.47	0.45	0.50	0.54	0.49	0.46	0.90	0.50	0.01	0.43	0.42	0.45	0.49	0.47	0.44	0.74	0.47	0.01	0.41	0.36	0.41	0.45	0.02	0.40	0.66	0.36	0.01
10/17/07	0.00	0.01	0.03	0.01	0.01	0.55	0.99	0.60	0.09	0.00	0.00	0.01	0.00	0.01	0.47	0.92	0.18	0.02	0.00	0.00	0.00	0.00	0.00	0.16	0.03	0.01	0.01
11/3/07	0.01	0.01	0.05	0.01	0.02	0.66	1.20	0.73	0.06	0.00	0.00	0.01	0.00	0.00	0.56	1.11	0.21	0.01	0.00	0.00	0.00	0.00	0.00	0.15	0.03	0.01	0.00
5/15/08	0.00	0.01	0.03	0.00	0.01	0.53	0.66	0.58	0.01	0.00	0.00	0.01	0.00	0.00	0.22	0.36	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.01	0.01	0.02
9/6/08	0.00	0.00	0.01	0.00	0.00	0.05	0.07	0.09		0.01	0.01	0.04	0.02	0.03	1.13	1.34	0.39		ND	ND	ND	ND	0.00	0.18	ND	0.00	ND

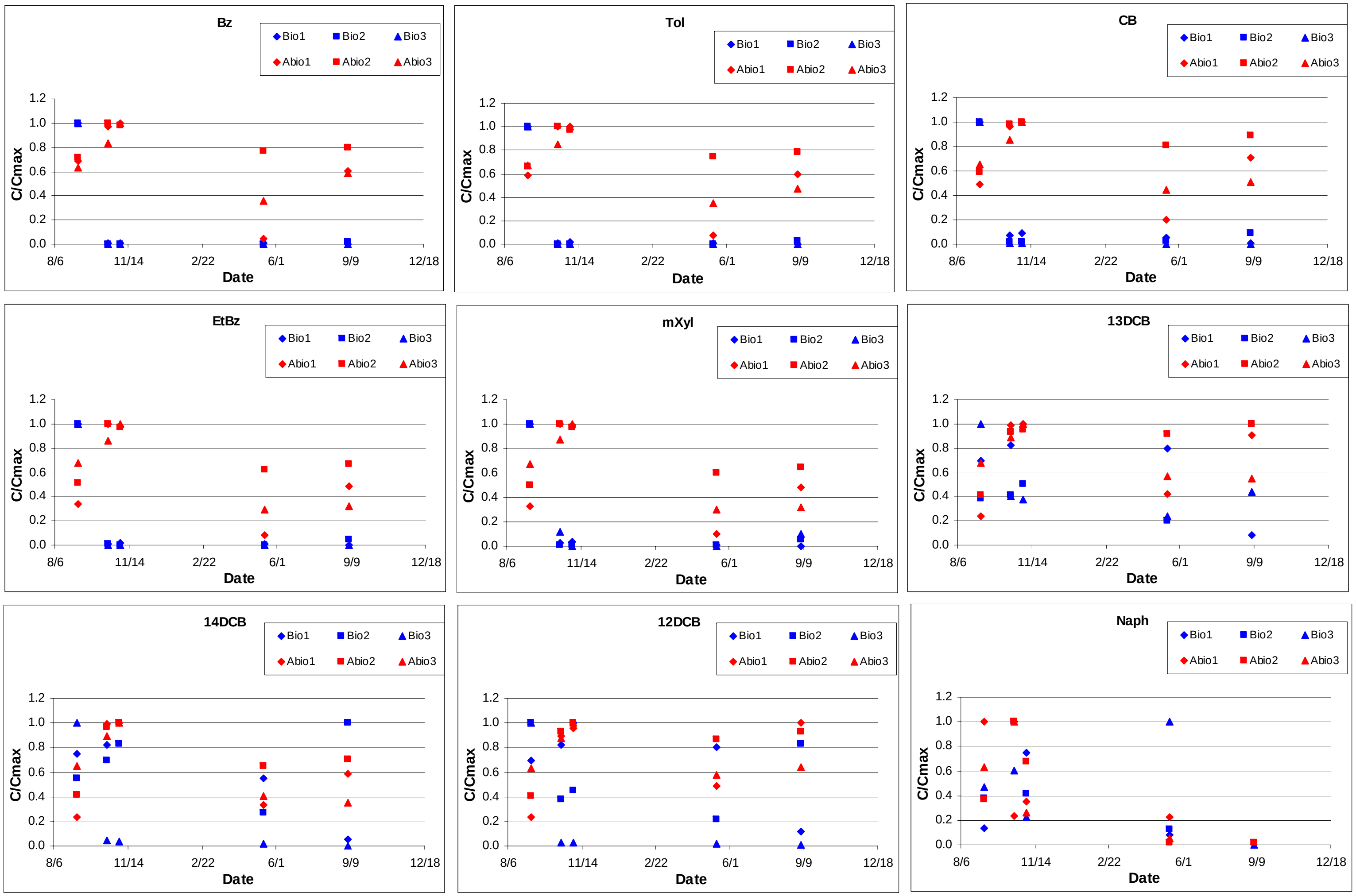
	Abiotic 1									Abiotic 2									Abiotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
9/7/07	0.42	0.33	0.30	0.24	0.22	0.14	0.18	0.14	0.12	0.95	0.82	0.79	0.79	0.77	0.60	0.73	0.54	0.48	0.49	0.49	0.49	0.60	0.59	0.53	0.63	0.46	0.44
10/17/07	0.60	0.57	0.59	0.70	0.68	0.61	0.76	0.52	0.03	1.33	1.25	1.31	1.53	1.54	1.36	1.69	1.24	1.29	0.64	0.62	0.65	0.76	0.77	0.69	0.87	0.63	0.70
11/3/07	0.61	0.57	0.61	0.68	0.67	0.62	0.77	0.56	0.04	1.30	1.22	1.33	1.49	1.50	1.39	1.75	1.33	0.88	0.77	0.73	0.76	0.89	0.88	0.78	0.97	0.72	0.19
5/15/08	0.03	0.04	0.12	0.06	0.07	0.26	0.26	0.28	0.03	1.03	0.93	1.08	0.95	0.93	1.34	1.14	1.15	0.02	0.28	0.26	0.34	0.26	0.26	0.44	0.39	0.41	0.04
9/6/08	0.37	0.34	0.43	0.34	0.33	0.56	0.45	0.58		1.06	0.98	1.19	1.03	1.00	1.46	1.24	1.24	0.02	0.45	0.34	0.38	0.29	0.28	0.43	0.34	0.46	

Supplemental Slurry 3 Anaerobic: SMU1 sediment seeded with SMU7 sediment in SMU7 water (pH 8)

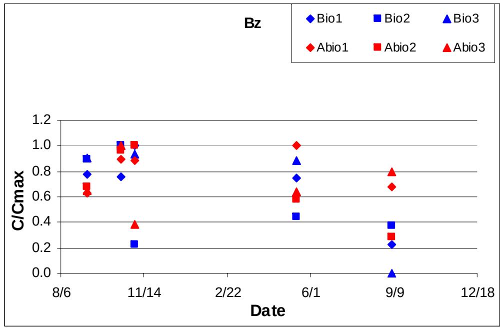
	Biotic 1									Biotic 2									Biotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
9/7/07	0.45	0.41	1.36	0.41	0.90	0.24	1.67	0.65	1.43	0.49	0.45	1.31	0.47	0.94	0.28	1.67	0.68	1.47	0.42	0.39	1.25	0.40	0.84	0.25	1.58	0.64	1.46
10/17/07	0.44	0.40	1.44	0.41	0.91	0.28	1.87	0.76	1.89	0.54	0.48	1.54	0.51	1.03	0.33	2.02	0.83	2.00	0.47	0.42	1.48	0.44	0.94	0.30	1.97	0.81	2.10
11/3/07	0.58	0.52	1.90	0.54	1.20	0.36	2.49	1.00	2.33	0.12	0.11	0.46	0.12	0.27	0.11	0.71	0.31	1.00	0.44	0.41	1.60	0.44	0.96	0.34	2.30	0.96	2.42
5/15/08	0.43	0.39	1.62	0.37	0.81	0.40	1.80	1.00	2.71	0.24	0.24	1.13	0.24	0.51	0.35	1.49	0.88	2.57	0.41	0.37	1.53	0.35	0.74	0.39	1.72	0.98	2.68
9/6/08	0.13	0.01	0.05	0.04	0.00	0.04	0.03	0.07		0.20	0.00	0.05	0.03	0.03	0.02	0.02	0.05		0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	

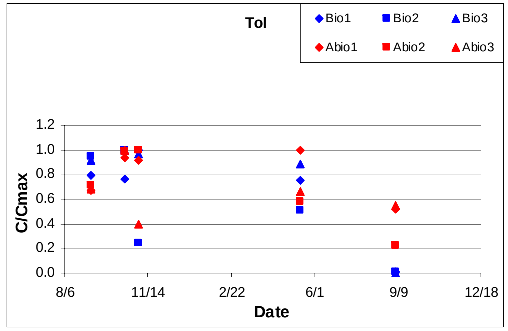
	Abiotic 1									Abiotic 2									Abiotic 3								
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
9/7/07	0.47	0.44	0.43	0.46	0.44	0.31	0.39	0.30	0.29	0.43	0.39	0.38	0.41	0.40	0.28	0.34	0.26	0.24	0.46	0.43	0.42	0.47	0.45	0.33	0.40	0.30	0.28
10/17/07	0.67	0.61	0.60	0.64	0.63	0.45	0.57	0.44	0.46	0.61	0.54	0.53	0.57	0.56	0.39	0.50	0.38	0.38	0.70	0.64	0.62	0.67	0.66	0.46	0.59	0.45	0.46
11/3/07	0.66	0.60	0.61	0.62	0.62	0.45	0.58	0.47	0.53	0.63	0.55	0.55	0.57	0.56	0.40	0.51	0.41	0.45	0.27	0.25	0.32	0.27	0.27	0.26	0.35	0.30	0.41
5/15/08	0.75	0.65	0.66	0.60	0.58	0.59	0.50	0.54	0.60	0.36	0.32	0.34	0.29	0.29	0.32	0.27	0.31	0.39	0.45	0.42	0.50	0.40	0.40	0.49	0.42	0.47	0.60
9/6/08	0.51	0.34	0.32	0.22	0.21	0.21	0.17	0.28		0.18	0.13	0.15	0.08	0.08	0.11	0.08	0.15		0.56	0.35	0.32	0.22	0.20	0.21	0.16	0.25	

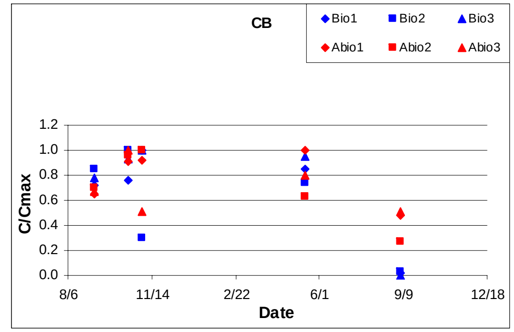
Sample: Supplemental 3 (SMU1 seeded with SMU7 in SMU7 water) Temp: 22C Aerobic

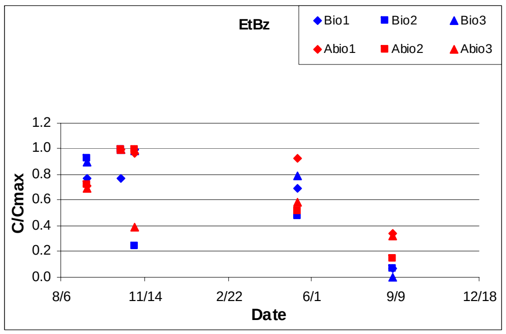


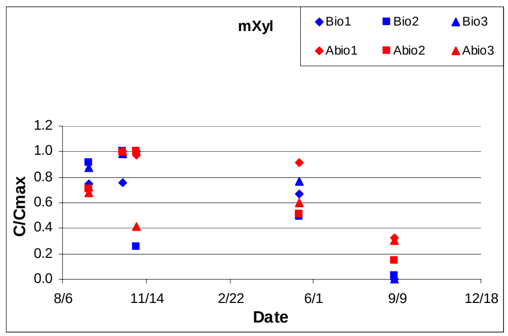
Sample: Supplemental 3 (SMU1 seeded with SMU7 in SMU7 water)   Temp: 22C   Anaerobic

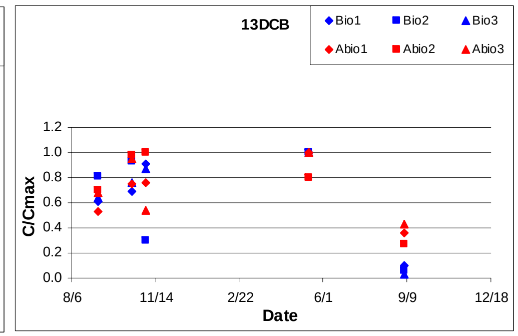


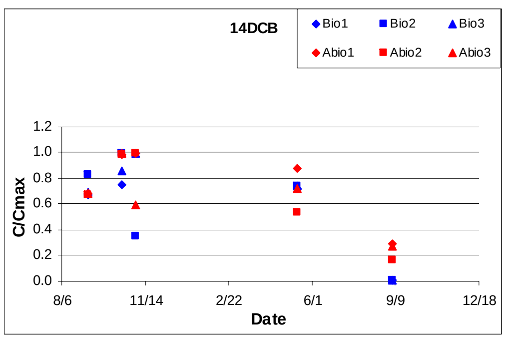


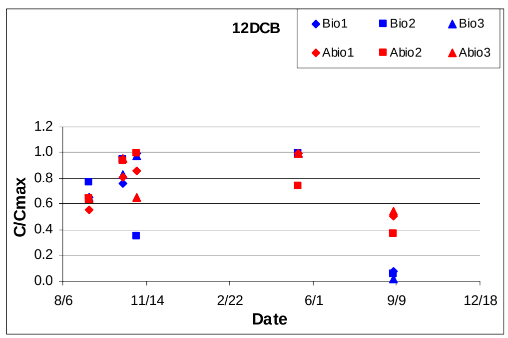


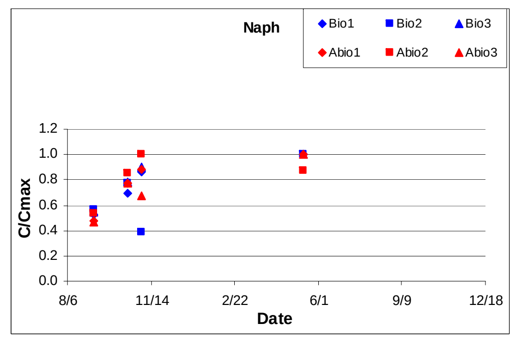












Supplemental Slurry Aerobic: Contaminants of Interest plus phenol

	60100 Biotic									70049 Biotic 2							
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB
7/12/07	0.47	0.51	0.53	0.60	0.54	0.41	0.60	0.45	0.15	0.69	0.66	0.60	0.66	0.66	0.38	0.55	0.42
8/3/07	0.02	0.00	0.00	0.00	0.01	0.18	0.03	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8/28/07	0.00	0.00	0.00	0.00	0.00	0.18	0.02	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10/17/07	0.00	0.00	0.00	0.01	0.00	0.30	0.05	0.14	0.05	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.00
11/3/07	0.00	0.00	0.00	0.00	0.01	0.22	0.03	0.12	0.05	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.00
5/14/08	0.00	0.00	0.01	0.00	0.00	0.42	0.06	0.19	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9/6/08	0.10	0.00	0.43	0.00	0.01	0.01	0.02	0.01		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

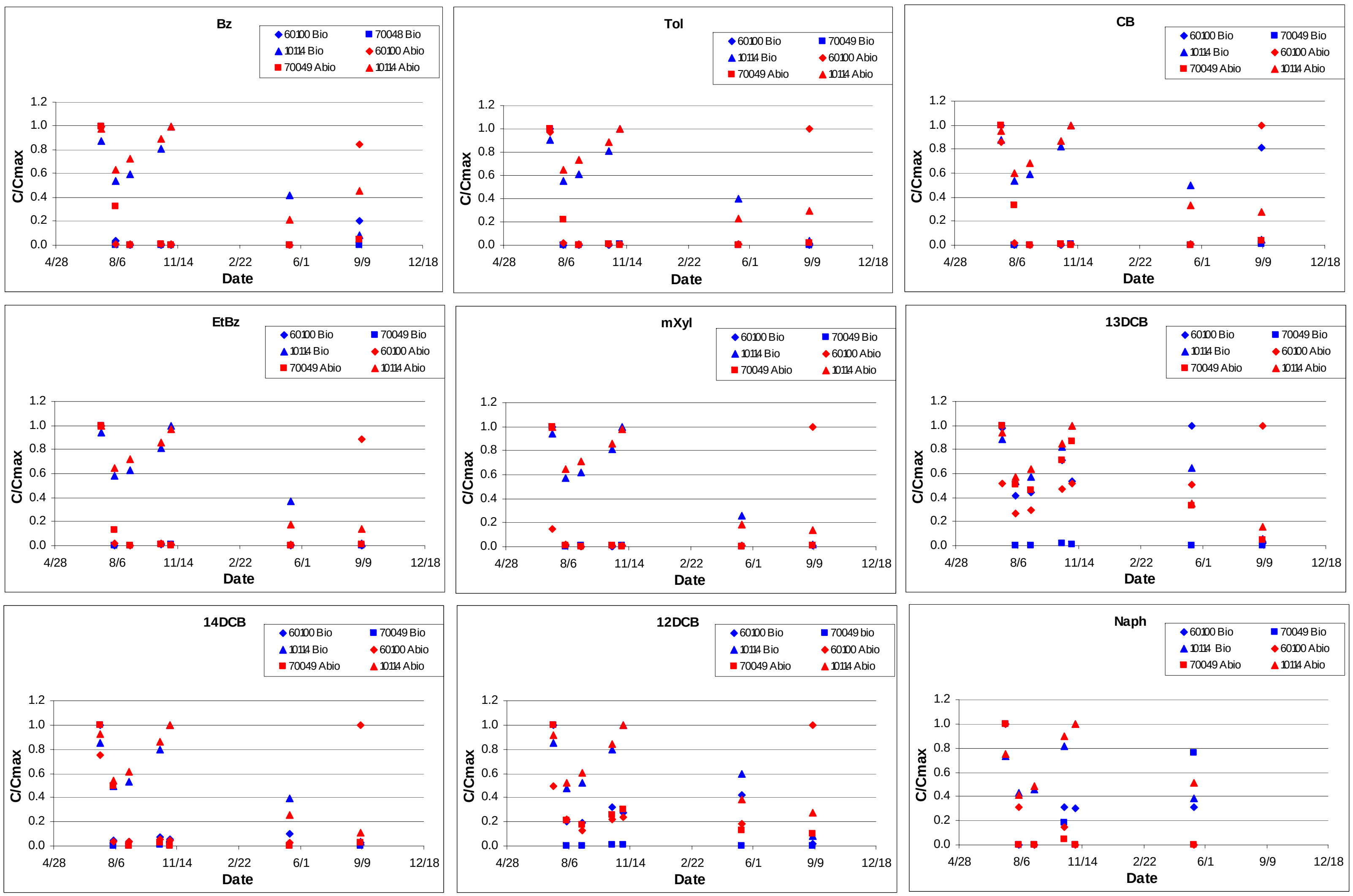
	60100 Abiotic									70049 Abiotic							
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB
7/12/07	0.57	0.50	0.53	0.57	0.07	0.35	0.51	0.40	0.36	0.65	0.61	0.55	0.59	0.52	0.32	0.47	0.36
8/3/07	0.00	0.01	0.01	0.01	0.01	0.18	0.02	0.18	0.11	0.21	0.13	0.18	0.07	0.00	0.16	0.23	0.08
8/28/07	0.00	0.00	0.00	0.00	0.00	0.20	0.02	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.06
10/17/07	0.01	0.01	0.01	0.01	0.01	0.31	0.04	0.18	0.05	0.00	0.01	0.01	0.01	0.00	0.23	0.01	0.09
11/3/07	0.01	0.01	0.01	0.01	0.01	0.35	0.03	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.11
5/14/08	0.00	0.00	0.00	0.00	0.00	0.34	0.02	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.05
9/6/08	0.49	0.52	0.61	0.50	0.51	0.67	0.67	0.81		0.03	0.01	0.02	0.00	0.00	0.01	0.01	0.04

Supplemental Slurry Anaerobic: Contaminants of Interest plus phenol

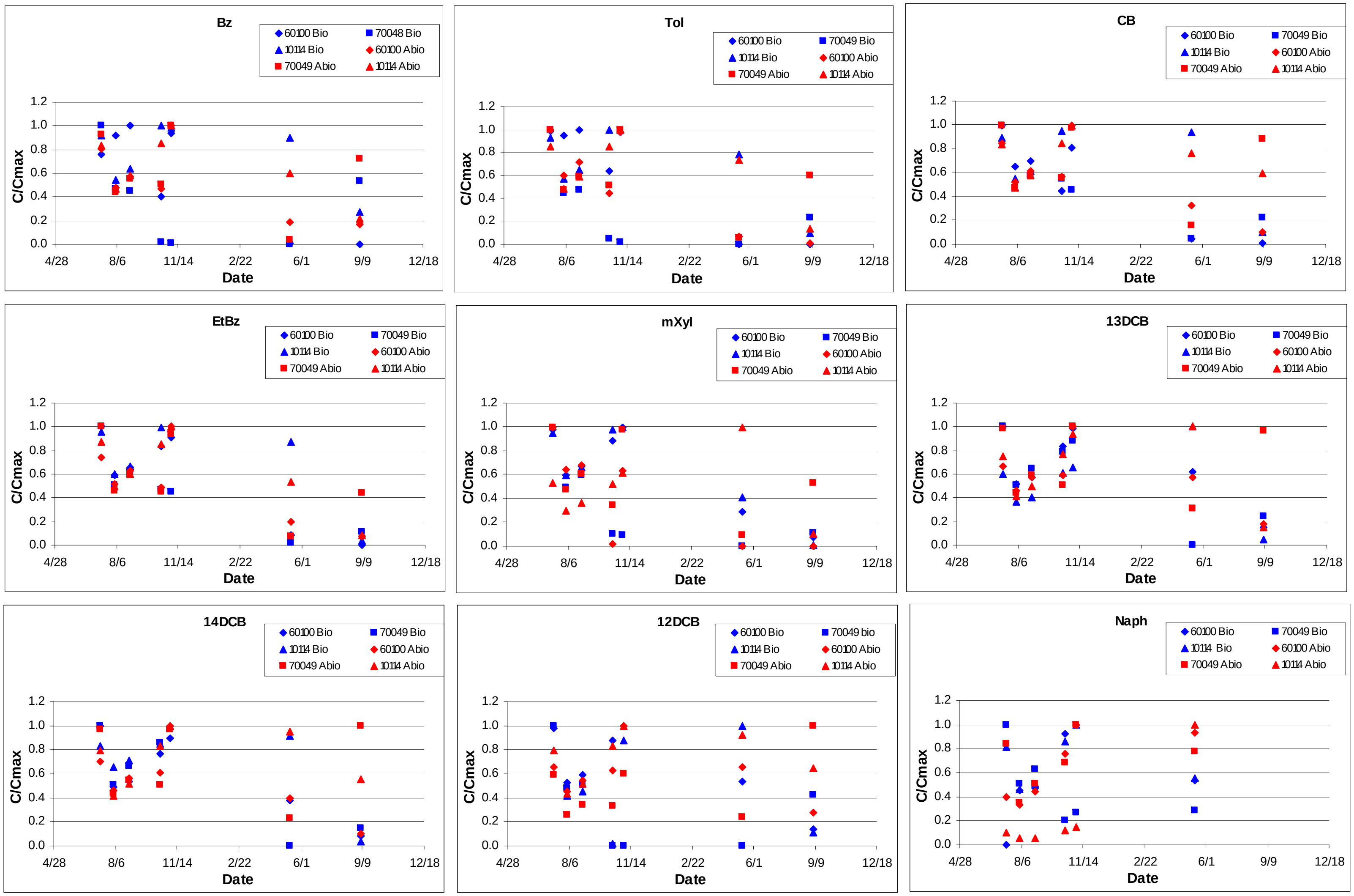
	60100 Biotic									70049 Biotic 2							
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB
7/12/07	0.28	0.35	0.44	0.54	0.51	0.29	0.44	0.32	0.00	0.63	0.55	0.47	0.45	0.44	0.19	0.29	0.23
8/3/07	0.34	0.34	0.28	0.32	0.31	0.15	0.21	0.17	0.15	0.29	0.24	0.22	0.23	0.22	0.10	0.15	0.11
8/28/07	0.37	0.35	0.30	0.36	0.35	0.17	0.23	0.20	0.15	0.28	0.26	0.27	0.28	0.26	0.12	0.19	0.12
10/17/07	0.15	0.22	0.19	0.45	0.46	0.25	0.34	0.29	0.30	0.01	0.03	0.26	0.21	0.05	0.15	0.25	0.00
11/3/07	0.34	0.34	0.35	0.49	0.52	0.29	0.39	0.33	0.33	0.01	0.01	0.22	0.21	0.04	0.17	0.28	0.00
5/14/08	0.00	0.00	0.02	0.04	0.15	0.18	0.16	0.18	0.18	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00
9/6/08	0.00	0.00	0.00	0.00	0.04	0.04	0.04	0.04		0.34	0.13	0.10	0.05	0.05	0.05	0.04	0.10

	60100 Abiotic									70049 Abiotic 2							
DATE	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph	BZ	TOL	CB	EtBz	mXyl	13DCB	14DCB	12DCB
7/12/07	0.60	0.50	0.41	0.39	0.37	0.14	0.21	0.17	0.10	0.66	0.59	0.49	0.50	0.47	0.20	0.30	0.24
8/3/07	0.35	0.30	0.25	0.27	0.24	0.10	0.14	0.12	0.09	0.31	0.28	0.23	0.23	0.22	0.09	0.13	0.10
8/28/07	0.43	0.36	0.29	0.33	0.25	0.12	0.17	0.15	0.11	0.40	0.34	0.28	0.29	0.28	0.12	0.17	0.13
10/17/07	0.35	0.22	0.27	0.25	0.01	0.13	0.18	0.17	0.19	0.37	0.30	0.27	0.23	0.16	0.10	0.16	0.13
11/3/07	0.74	0.49	0.48	0.52	0.23	0.21	0.30	0.27	0.26	0.71	0.59	0.47	0.47	0.46	0.20	0.30	0.24
5/14/08	0.14	0.04	0.16	0.10	0.00	0.12	0.12	0.17	0.24	0.03	0.03	0.08	0.04	0.04	0.06	0.07	0.09
9/6/08	0.13	0.01	0.05	0.04	0.00	0.04	0.03	0.07		0.52	0.35	0.43	0.22	0.25	0.20	0.31	0.40

Sample: 10114, 60100, 70049 + VOC + phenol Temp: 22C Aerobic



Sample: 10114, 60100, 70049 + VOC + phenol Temp: 22C Anaerobic



Appendix C: Gas Generation and Gas-Induced Contaminant Transport Data and Calculations

In the gas generation tests, the pressure of a closed system is measured to determine rates of gas generation. The "system" is comprised of the "tubing" (the plastic tubing from the needle to the fluid level in the manometer) and the "vial" (the headspace of the anaerobic tube). To determine the pressure contribution by the vial, each component of the system is considered individually. In terms of a mole balance,

$$n_{vial} + n_{tubing} = n_{system} \qquad \text{(Eq. 1)}$$

By the ideal gas law, each *n* in Eq. 1 can be substituted by *PV/RT*. The temperature of the system can be determined by mole-weighted averaging:

$$\frac{n_{vial}T_{vial} + n_{tubing}T_{tubing}}{n_{vial} + n_{tubing}} = T_{system} \qquad \text{(Eq. 2)}$$

Substitution of Eq. 1 (in terms of *P*, *V*, *R*, and *T*) into Eq. 2 and solution for P_{vial} gives

$$P_{vial} = \frac{P_{system}V_{system} - P_{tubing}V_{tubing}}{V_{vial}} \qquad \text{(Eq. 3)}$$

The system volume is taken to be the sum of the tubing and vial headspace volumes and one-half the observed manometer fluid displacement (*h)*, P_{tubing} is assumed to be atmospheric, and P_{system} is measured by manometry ($P_{system} = P_{atmospheric} + \rho gh$, where ρ is the density of the manometer fluid relative to the negligible air density). The observed vial pressure is attributable to new gas generation and residual pressure, since the vial pressure is not relieved between observations. Thus,

$$P_{gas} = P_{vial} - P_{residual} \qquad \text{(Eq. 4)}$$

where $P_{residual}$ is P_{vial} from the previous observation. The ideal gas law is employed again to determine the volume that would be occupied by the vial headspace were the pressure atmospheric:

$$V_{gas} = \frac{P_{vial}V_{vial}}{P_{atm}} \qquad \text{(Eq. 5)}$$

The volume of gas generated, computed by Eq. 5, is divided by the length of time between observations and the mass of sediment in the vial to yield a sediment mass normalized rate of gas generation. Often more useful in the environment is a gas generation rate normalized per unit area of sediment. To convert between sediment mass normalized and surface area normalized gas generation rates, let us assume that significant labile organic matter (which is the source of gas generation) only exists in the biologically active zone (of the order of 10 cm in depth) and that the sediment bulk density is of the order of 1 g/cm^3 (Hansbo, 1975, reports dry densities of silts/clays as 0.6 - 1.8 g/cm^3.). The sediment mass subject to gas generation is then 10 kg/m^2. Then

$$1 \frac{\mu L}{g \cdot day} = 0.1 \frac{L}{m^2 \cdot day}$$

Gas Generation Data

"h" is the height difference between the two manometer fluid levels, calculations as described above

Note that a rate of gas generation cannot be computed from the initial vial pressure observation. Placement of a seal on the vial during preparation slightly overpressures the vial and makes any initial measurement meaningless. In subsequent measurements, the correction for the residual pressure eliminates this source of error.

height of balch tube	14.5	cm	length of tubing	67	cm
vol of balch tube	29	mL	diameter of tubing	0.125	in
			volume of buret	16	mL
density of solution	1220	kg/m^3	total vol of "tubing"	21.30	mL
accel due to gravity	9.8	m/s^2			
atmospheric press	101325	N/m^2	on buret, delta volume approx delta h (ie delta 1 mL = delta 1 cm)		

DATE

				11-Apr		14-Apr					18-Apr		21-Apr		25-Apr	2-May		10-May		18-May	
sample	tube #	headspace vol (mL)	sed mass (g)	h	Psys (Pa)	h	Psys (Pa)	Pgas (Pa)	Vgas (uL)	uL/g-day	h	uL/g-day	h	uL/g-day	h	h	uL/g-day	h	uL/g-day	h	uL/g-day
60100	a(22C)	8	20	1.85	101546.2	0.3	101360.9	1810.7	2.5	0.042	0.25	0.026	0	0.000		4.45	2.500	0.55	0.048	0.0	0.000
	b(22C)														3.1	3.65	2.671	0.3	0.012	0.0	0.000
	c(12C)			1.9	101552.2	0.1	101337.0	450.0	0.2	0.003	0.4	0.069	0	0.000		0.1	0.003	0.3	0.019	0.0	0.000
	d(12C)														0.95	0	0.000	0.4	0.035	0.0	0.000
	e(7C)			1.3	101480.4	0.3	101360.9	1876.5	2.7	0.045	0.25	0.026	0	0.000		0.1	0.003	0.1	0.002	0.0	0.000
	f(7C)														2.1	0.2	0.007	0.3	0.019	0.0	0.000
70048	a(22C)	10	20	1.85	101546.2	0.2	101348.9	867.2	0.7	0.012	0.35	0.042	0	0.000		0	0.000	0.2	0.011	0.0	0.000
	b(22C)														2.35	0.2	0.004	5.65	6.902	0.4	0.025
	c(12C)			0.2	101348.9	0.25	101354.9	1336.6	1.7	0.029	0.75	0.192	-0.2	-0.023		0.1	0.002	0.2	0.011	0.0	0.000
	d(12C)														2	0.1	0.001	0.3	0.024	0.0	0.000
	e(7C)			1.25	101474.5	0.6	101396.7	3117.0	9.2	0.153	0.35	0.040	-0.2	-0.021		0.2	0.009	0.4	0.043	0.0	0.000
	f(7C)														2.3	0.1	0.001	0.4	0.043	0.0	0.000
70049	a(22C)	8	20	2.2	101588.0	0.2	101348.9	1091.4	0.9	0.015	1.75	1.224	6.4	17.121		2.5	0.797	0.7	0.092	0.1	0.002
	b(22C)														11.9	1.3	0.280	0.3	0.017	0.1	0.002
	c(12C)			1.75	101534.2	0.35	101366.8	2161.5	3.6	0.059	0.55	0.128	0	0.000		1.85	0.496	0.7	0.095	0.8	0.132
	d(12C)														2.8	1.35	0.397	4.7	3.749	0.8	0.109
	e(7C)			1.5	101504.3	0.3	101360.9	1852.6	2.6	0.044	0.45	0.086	-0.2	-0.026		0.6	0.057	1	0.205	1.7	0.569
	f(7C)														2.2	0.4	0.032	1.6	0.514	1.3	0.333
10114	a(22C)	4	20	2.1	101576.1	0.25	101354.9	3105.4	3.6	0.061	0.25	0.052	0	0.000		0	0.000	0.2	0.004	0	0.000
	b(22C)														2.25	0	0.000	0.2	0.004	0	0.000
	c(12C)			1.75	101534.2	0.4	101372.8	5162.0	9.9	0.164	0.35	0.101	-0.2	-0.050		0	0.000	0.2	0.004	0	0.000
	d(12C)														2	0	0.000	0.2	0.004	0	0.000
	e(7C)			1.6	101516.3	0.5	101384.8	6523.4	15.5	0.259	0.2	0.033	-0.2	-0.049		0	0.000	0.2	0.004	0	0.000
	f(7C)														2.2	0.1	0.003	0.2	0.004	0	0.000
10117	a(22C)	4	20	1.85	101546.2	0.15	101342.9	1792.4	1.2	0.020	0.25	0.053	0	0.000		0.1	0.000	0.2	0.004	0	0.000
	b(22C)														2.15	0.1	0.003	0.2	0.004	0	0.000
	c(12C)			1.75	101534.2	0.4	101372.8	5162.0	9.9	0.164	0.4	0.131	-0.2	-0.050		0	0.000	0.2	0.004	0	0.000
	d(12C)														2	0	0.000	0.2	0.004	0	0.000
	e(7C)			1.65	101522.3	0.5	101384.8	6517.4	15.5	0.259	0.25	0.051	-0.2	-0.049		0.2	0.000	0.2	0.004	0	0.000
	f(7C)														2.4	0.1	0.003	0.2	0.004	0	0.000

Gas Generation Data (continued)

				DATE								
				26-May	31-May		7-Jun		14-Jun		21-Jun	
sample	tube #	headspace vol (mL)	sed mass (g)	h	h	uL/g-day	h	uL/g-day	h	uL/g-day	h	uL/g-day
60098	a(22C)	12	10	2.3	0.5	0.092	0.1	0.003	0.1	0.003	-0.1	-0.004
	b(22C)				2.9		0.7	0.131	0.1	0.002	0	0.000
	c(12C)			2	0.5	0.095	0.5	0.080	1.45	0.673	-0.1	-0.007
	d(12C)				2.2		0.2	0.007	1.3	0.550	0.45	0.059
	e(7C)			1.9	0.3	0.030	0.2	0.013	0.1	0.003	-0.1	-0.004
	f(7C)				2.8		0.3	0.018	0.1	0.003	-0.1	-0.004
60099	a(22C)	2.5	10						1.8		0	0.000
	b(22C)								2.1		0	0.000
	c(12C)								1.2		0	0.000
	d(12C)								3		0	0.000
	e(7C)								1.4		0.05	0.003
	f(7C)								1.7		0	0.000
70050	a(22C)	1.7	10						0.95		0.15	0.048
	b(22C)								1		0.15	0.048
	c(12C)								0.8		-0.1	-0.026
	d(12C)								0.7		-0.1	-0.025
	e(7C)								0.7		0.15	0.048
	f(7C)								0.7		0.1	0.021
10115	a(22C)	7	10	2.2	0.5	0.170	0.1	0.005	0.1	0.006	-0.05	-0.002
	b(22C)				2.6		0.1	0.002	0.1	0.006	-0.05	-0.002
	c(12C)			2	0.4	0.108	0.2	0.021	0.1	0.005	0	0.000
	d(12C)				2.2		0.2	0.016	0.1	0.005	0	0.000
	e(7C)			1.9	0.3	0.058	0.2	0.022	0.1	0.005	0	0.000
	f(7C)				2.4		0.5	0.120	0.1	0.005	0.2	0.023
10116	a(22C)	2.3	10						1.85		0.1	0.000
	b(22C)								1.7		0.1	0.000
	c(12C)								2.25		0.05	0.000
	d(12C)								3.2		0.05	0.000
	e(7C)								0.95		0.15	0.015
	f(7C)								0.9		0.15	0.015
10118	a(22C)	11	10	2.1	0.3	0.032	0.1	0.003	0.1	0.004	-0.1	-0.004
	b(22C)				2.4		0.2	0.008	0.1	0.003	-0.05	-0.001
	c(12C)			2	0.1	0.001	0.2	0.015	0.1	0.003	0	0.000
	d(12C)				2.1		0.3	0.023	0.1	0.003	0	0.000
	e(7C)			2	2	1.835	0.2	0.009	0.1	0.003	-0.1	-0.004
	f(7C)				0.3		1	0.354	0.1	0.002	-0.1	-0.004
10119	a(22C)	10	10	2.2	0.4	0.070	0.1	0.003	0.1	0.004	-0.1	-0.004
	b(22C)				2.5		0.2	0.009	0.1	0.004	-0.1	-0.004
	c(12C)			2.2	0.4	0.070	0.2	0.015	0.1	0.004	0	0.000
	d(12C)				1.9		0.2	0.010	0.1	0.004	0	0.000
	e(7C)			1.9	0.6	0.174	0.2	0.014	0.1	0.004	-0.15	-0.010
	f(7C)				2.3		0.2	0.009	0.1	0.004	-0.15	-0.010

Instrument Calibration

Calibration for Samples Analyzed November 7, 2007 – January 23, 2008
The instrument used is an HP 5890 gas chromatograph with flame-ionization detector. A Restek RTX-624 column (30 m in length, 0.53 mm ID, 3 µm film thickness) was employed. The GC temperature program was a modified adaptation from EPA Method 8260B (40°C for 3 minutes, 8°C per minute to 170°C, 22°C per minute to 260°C, 260°C for 3 minutes) with a carrier gas (He) flow rate of 43 – 45 mL/min. Hexane was withdrawn from the trap and introduced to the column by manual direct injection (splitless).

Benzene was obscured by the solvent peak at concentrations below 2 mg/L and was excluded from analysis. A 6-point calibration curve was created for all compounds except toluene, the curve for which consisted of four points due to limited detection below 0.2 ppm. The concentrations over which the calibration is applicable is 0.2 – 5.5 mg/L.

Calibration for 0.2 ppm - 5.5 ppm				
	m	r^2	CF	CF_RSD
Tol	50969.96	0.998	65.1	0.234
CB	36222.43	0.997	48.2	0.226
EtBz	50989.57	0.996	68.2	0.234
mXyl	50577.41	0.995	72.8	0.276
13DCB	27857.33	0.988	46.2	0.350
14DCB	29412.26	0.986	53.3	0.407
12DCB	28135.79	0.980	56.3	0.452
Naph	49407.51	0.986	79.6	0.528

Values for the correlation coefficient (r^2) meet or exceed the laboratory quality control threshold of 0.995 for toluene, chlorobenzene, ethylbenzene, and m-xylene. Values of r^2 for dichlorobenzenes and naphthalene do not met laboratory quality control standards, but the linearity of detector response to concentration was deemed acceptable given r^2>0.98 for all compounds.

Calibration for Samples Analyzed After February 14, 2008
Samples were analyzed on an Agilent 6890 with a Gerstel Automated Sampler. The column and temperature program are as described above, but the carrier gas (He) flow rate was reduced to 10 mL/min. Benzene was not obscured by the solvent peak and was included in analysis. Due to differences in detector sensitivity, the minimum quantifiable limit is five times higher than previously.

Calibration for 1.0 ppm – 15.0 ppm

	m	r^2	CF	CF_RSD
Bz	0.0423	0.998	27.5	0.265
Tol	0.0451	1.000	23.5	0.126
CB	0.0636	1.000	16.0	0.080
EtBz	0.0458	1.000	22.3	0.080
mXyl	0.0457	1.000	22.9	0.117
13DCB	0.081	1.000	12.4	0.070
14DCB	0.0772	1.000	13.5	0.118
12DCB	0.0796	1.000	12.7	0.077
Naph	0.0447	0.994	24.3	0.205

Raw Data: Column 10118

COIs contained in the hexane trap were monitored over time.

					Cmpd Peak Area					
Date	**Day**	**Bz**	**Tol**	**CB**	**EtBz**	**mXyl**	**13DCB**	**14DCB**	**12DCB**	**Naph**
7-Nov	0									
8-Nov	1									11088
13-Nov	6					2378				
16-Nov	9			100325						
19-Nov	12			66008			2524			
14-Dec	37	208306	0	71860	0	0	0	5549	0	1565
22-Dec	45		21415	155817	2646	38605		5431		
2-Jan	56	489676	45623	325921	5475	84919		12696	2060	
9-Jan	63	349842	28579	268005	5154	71669		9327	3348	
23-Jan	77	610890	56264	469685	8913	133828		21030	6572	
14-Feb	99	148.88	42.99	219.22		72.28				
10-Mar	124	137.63	41.51	207.46		69.87				
26-Mar	140	193.50	59.67	322.74		106.96		15.96		
26-Mar	140	182.51	56.17	303.22		100.79		14.74		

Application of the appropriate calibration yields concentration in the trap.

						Concentration (ppm)				
Date	**Day**	**Bz**	**Tol**	**CB**	**EtBz**	**mXyl**	**13DCB**	**14DCB**	**12DCB**	**Naph**
7-Nov	0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Nov	1		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
13-Nov	6		0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00
16-Nov	9		0.00	2.77	0.00	0.00	0.00	0.00	0.00	0.00
19-Nov	12		0.00	1.82	0.00	0.00	0.09	0.00	0.00	0.00
14-Dec	37		0.00	1.98	0.00	0.00	0.00	0.19	0.00	0.03
22-Dec	45		0.42	4.30	0.05	0.76	0.00	0.18	0.00	0.00
2-Jan	56		0.90	9.00	0.11	1.68	0.00	0.43	0.07	0.00
9-Jan	63		0.56	7.40	0.10	1.42	0.00	0.32	0.12	0.00
23-Jan	77		1.10	12.97	0.17	2.65	0.00	0.72	0.23	0.00
14-Feb	99	6.30	1.94	13.94	0.00	3.30	0.00	0.00	0.00	0.00
10-Mar	124	5.82	1.87	13.19	0.00	3.19	0.00	0.00	0.00	0.00
26-Mar	140	8.19	2.69	20.53	0.00	4.89	0.00	1.23	0.00	0.00
26-Mar	140	7.72	2.53	19.29	0.00	4.61	0.00	1.14	0.00	0.00

Measurement of the trap volume allows determination of COI mass in the trap.

		VOL					Mass (ug/mL*mL = ug)				
Date	**Day**	**(mL)**	**Bz**	**Tol**	**CB**	**EtBz**	**mXyl**	**13DCB**	**14DCB**	**12DCB**	**Naph**
7-Nov	0	10		0	0	0	0	0	0	0	0
8-Nov	1	10		0	0	0	0	0	0	0	2.24
13-Nov	6	10		0.00	0.00	0.00	0.47	0.00	0.00	0.00	0.00
16-Nov	9	10		0.00	27.70	0.00	0.00	0.00	0.00	0.00	0.00
19-Nov	12	10		0.00	18.22	0.00	0.00	0.91	0.00	0.00	0.00
14-Dec	37	7.5		0.00	14.88	0.00	0.00	0.00	1.41	0.00	0.24
22-Dec	45	8.5		3.57	36.56	0.44	6.49	0.00	1.57	0.00	0.00
2-Jan	56	7.4		6.62	66.58	0.79	12.42	0.00	3.19	0.54	0.00
9-Jan	63	8.5		4.77	62.89	0.86	12.04	0.00	2.70	1.01	0.00
23-Jan	77	8		8.83	103.73	1.40	21.17	0.00	5.72	1.87	0.00
14-Feb	99	6.8	42.82	13.19	94.81	0.00	22.46	0.00	0.00	0.00	0.00
10-Mar	124	6.2	36.09	11.61	81.80	0.00	19.80	0.00	0.00	0.00	0.00
26-Mar	140	7.6	62.21	20.45	155.99	0	37.15	0	9.36	0	0
26-Mar	140	7.6	58.67	19.25	146.56	0	35.00	0	8.64	0	0

Normalization of mass by the column cross-sectional area yields mass/area.

						Mass per Area (mg / m^2)				
Date	**Day**	**Bz**	**Tol**	**CB**	**EtBz**	**mXyl**	**13DCB**	**14DCB**	**12DCB**	**Naph**
7-Nov	0		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Nov	1		0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.24
13-Nov	6		0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00
16-Nov	9		0.00	15.31	0.00	0.00	0.00	0.00	0.00	0.00
19-Nov	12		0.00	10.07	0.00	0.00	0.50	0.00	0.00	0.00
14-Dec	37		0.00	8.22	0.00	0.00	0.00	0.78	0.00	0.13
22-Dec	45		1.97	20.21	0.24	3.59	0.00	0.87	0.00	0.00
2-Jan	56		3.66	36.80	0.44	6.87	0.00	1.77	0.30	0.00
9-Jan	63		2.63	34.76	0.47	6.66	0.00	1.49	0.56	0.00
23-Jan	77		4.88	57.33	0.77	11.70	0.00	3.16	1.03	0.00
14-Feb	99	23.67	7.29	52.40	0.00	12.41	0.00	0.00	0.00	0.00
10-Mar	124	19.95	6.42	45.21	0.00	10.94	0.00	0.00	0.00	0.00
26-Mar	140	34.38	11.30	86.21	0.00	20.53	0.00	5.17	0.00	0.00
26-Mar	140	32.42	10.64	81.00	0.00	19.35	0.00	4.78	0.00	0.00

Raw Data: Column 70049

Date	Day	Tol	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
					Cmpd Peak Area				
7-Nov	0								
8-Nov	1								6267
13-Nov	6				3031				5317
16-Nov	9		14884						
19-Nov	12		68746						
14-Dec	37					3455			
22-Dec	45						6754		
2-Jan	56						16843		
9-Jan	63						10988	4552	
23-Jan	77		2845	2534			17707	7821	
14-Feb	99		12.96	26.27	32.60	16.29	23.05	32.90	28.33
10-Mar	124	18.58	18.97	43.22	48.89	27.84	30.01	46.39	51.04
26-Mar	140							16.69	69.82

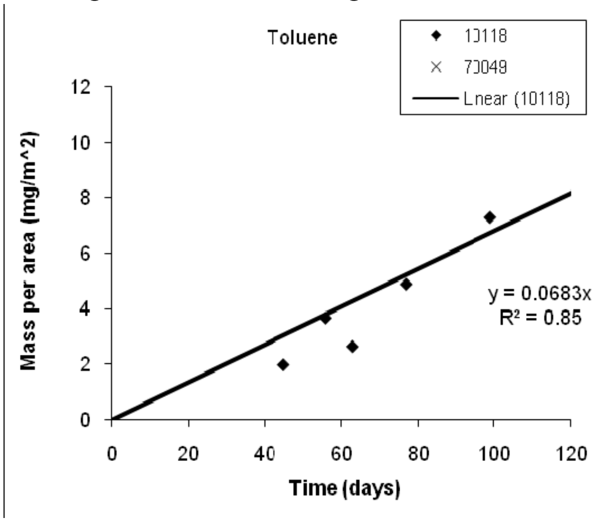
Date	Day	Tol	CB	EtBz	mXyl	13DCB	14DCB	12DCB	Naph
						Concentration (ppm)			
7-Nov	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Nov	1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13
13-Nov	6	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.11
16-Nov	9	0.00	0.41	0.00	0.00	0.00	0.00	0.00	0.00
19-Nov	12	0.00	1.90	0.00	0.00	0.00	0.00	0.00	0.00
14-Dec	37	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00
22-Dec	45	0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00
2-Jan	56	0.00	0.00	0.00	0.00	0.00	0.57	0.00	0.00
9-Jan	63	0.00	0.00	0.00	0.00	0.00	0.37	0.16	0.00
23-Jan	77	0.00	0.08	0.05	0.00	0.00	0.60	0.28	0.00
14-Feb	99	0.00	0.82	1.20	1.49	1.32	1.78	2.62	1.27
10-Mar	124	0.84	1.21	1.98	2.23	2.25	2.32	3.69	2.28
26-Mar	140	0.00	0.00	0.00	0.00	0.00	0.00	1.33	3.12

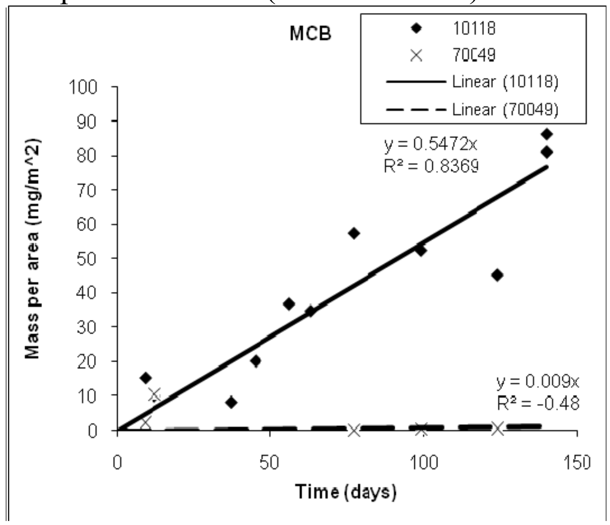
		VOL	Mass (ug/mL*mL = ug)							
Date	**Day**	(mL)	**Tol**	**CB**	**EtBz**	**mXyl**	**13DCB**	**14DCB**	**12DCB**	**Naph**
7-Nov	0	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8-Nov	1	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27
13-Nov	6	10	0.00	0.00	0.00	0.60	0.00	0.00	0.00	1.08
16-Nov	9	10	0.00	4.11	0.00	0.00	0.00	0.00	0.00	0.00
19-Nov	12	10	0.00	18.98	0.00	0.00	0.00	0.00	0.00	0.00
14-Dec	37	5.3	0.00	0.00	0.00	0.00	0.66	0.00	0.00	0.00
22-Dec	45	7	0.00	0.00	0.00	0.00	0.00	1.61	0.00	0.00
2-Jan	56	2.6	0.00	0.00	0.00	0.00	0.00	1.49	0.00	0.00
9-Jan	63	6.9	0.00	0.00	0.00	0.00	0.00	2.58	1.12	0.00
23-Jan	77	4.5	0.00	0.35	0.22	0.00	0.00	2.71	1.25	0.00
14-Feb	99	1.0	0.00	0.82	1.20	1.49	1.32	1.78	2.62	1.27
10-Mar	124	0.9	0.75	1.09	1.78	2.01	2.03	2.08	3.32	2.05
26-Mar	140	3.1	0.00	0.00	0.00	0.00	0.00	0.00	4.12	9.68

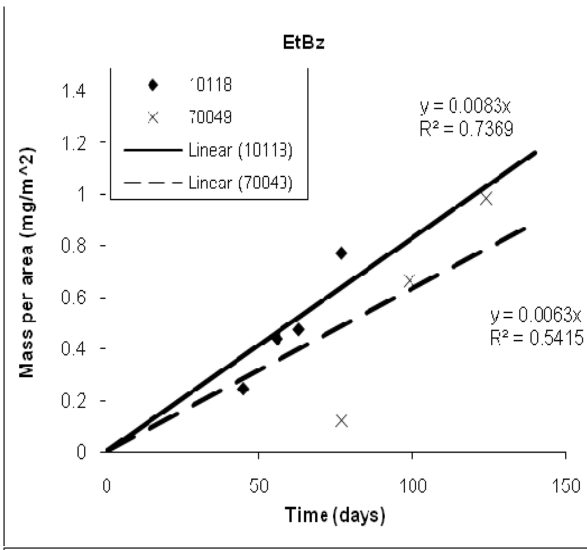
		Mass per Area (mg / m^2)							
Date	**Day**	**Tol**	**CB**	**EtBz**	**mXyl**	**13DCB**	**14DCB**	**12DCB**	**Naph**
7-Nov	0								
8-Nov	1								0.70
13-Nov	6								0.59
16-Nov	9		2.27						
19-Nov	12		10.49						
14-Dec	37					0.36			
22-Dec	45						0.89		
2-Jan	56						0.82		
9-Jan	63						1.42	0.62	
23-Jan	77		0.20	0.12			1.50	0.69	
14-Feb	99		0.46	0.67	0.82	0.73	0.98	1.45	0.70
10-Mar	124	0.42	0.60	0.98	1.11	1.12	1.15	1.84	1.13
26-Mar	140							2.28	5.35

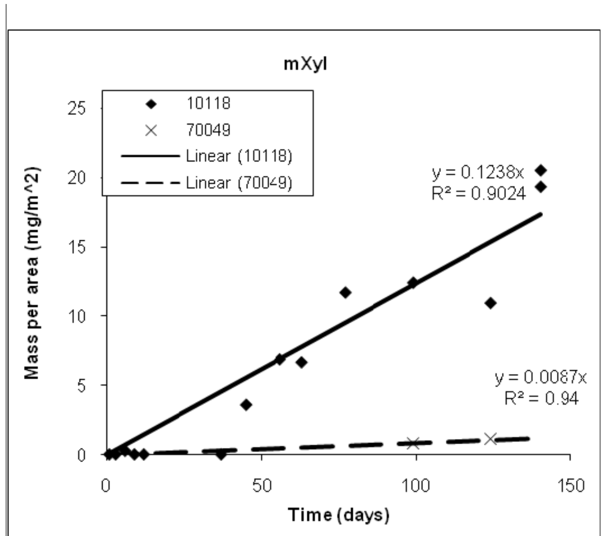
Note: Concentrations reported as “0.00” were less than minimum quantitation limits of 0.2 mg/L prior to January 23, 2008, and 1.0 mg/L thereafter.

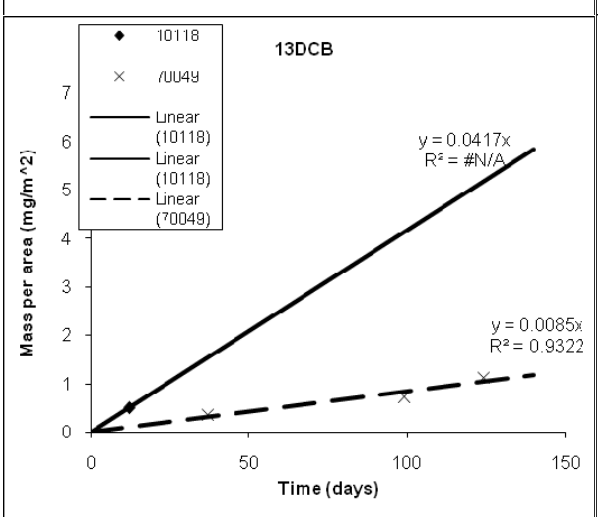
Plotting mass/area vs time generates a line with slope of mass flux (mass/area-time).

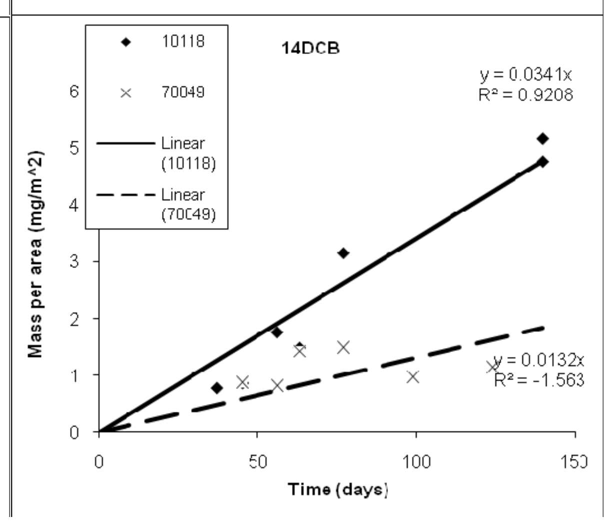


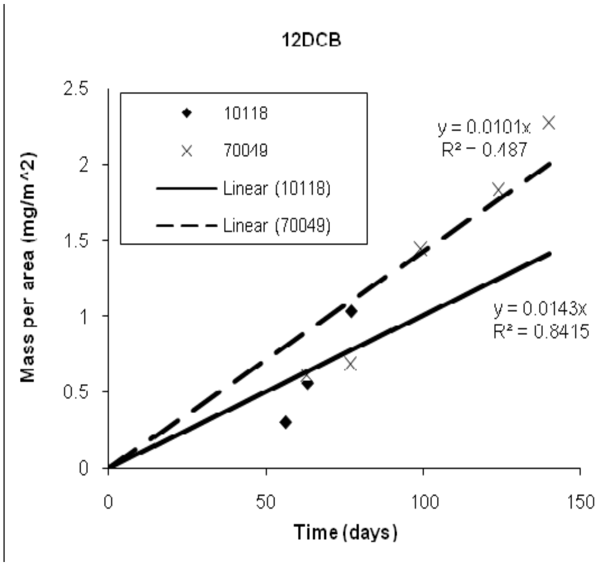


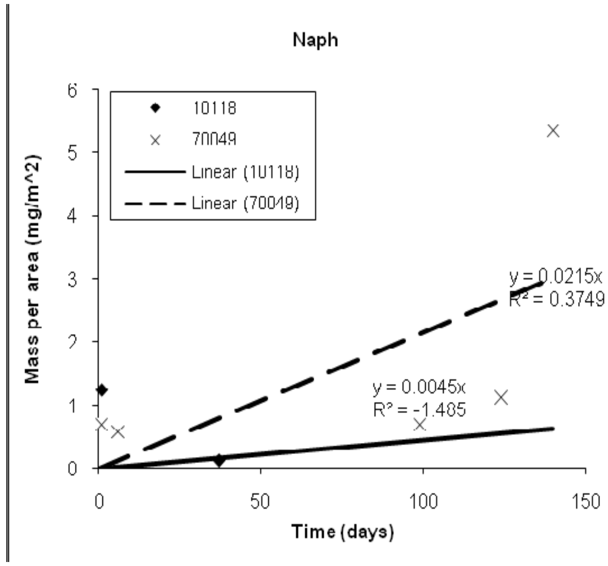









12DCB
10118
70049
Linear (10118)
Linear (70049)
y = 0.0101x
R² = 0.487
y = 0.0143x
R² = 0.8415
Mass per area (mg/m^2)
Time (days)
0
0.5
1
1.5
2
2.5
0
50
100
150


Naph
10118
70049
Linear (10118)
Linear (70049)
y = 0.0215x
R² = 0.3749
y = 0.0045x
R² = -1.485
Mass per area (mg/m^2)
Time (days)
0
1
2
3
4
5
6
0
50
100
150

Sediment from locations 10116 and 70048 were subject to gas flow and contaminant flux was measured. Two calibrations were required as the instrument configuration changed during the course of the experiment.

Agilent 6890 Calibration for direct injection of 1 uL of hexane from gas-induced transport column trap (8/29/08)

	Conc(ppm)									
	0.08	0.45	0.89	1.87	3.96	Slope	R^2	RF	RSD	Slope,RF Average
ClBz	4.945	28.407	59.819	106.912	247.535	61.761	0.999	62.316	0.058	62.039
EtBz	6.430	35.316	76.035	138.598	324.470	80.666	0.998	80.005	0.053	80.336
mpXyl	13.402	79.052	169.425	309.113	730.859	90.659	0.998	88.272	0.123	89.465
oXyl	7.781	42.298	90.919	167.244	395.412	98.057	0.998	96.302	0.060	97.179
Styrene	6.893	34.382	72.965	130.607	292.341	73.465	0.999	75.467	0.068	74.466
13DCB	5.239	23.536	49.136	88.305	206.065	51.318	0.998	51.661	0.064	51.489
14DCB	4.778	24.941	53.180	95.524	221.699	55.265	0.999	55.527	0.064	55.396
12DCB	4.464	22.925	48.335	86.987	204.992	50.937	0.998	50.853	0.064	50.895

Agilent 6890 Calibration for direct injection of 1 uL of hexane from gas-induced transport column trap (9/30/08)

	Std Concentration (ppm)						
	0.10	0.47	0.95	2.91	5.07	Slope	R^2
CB	5.13	14.74	21.53	58.89	93.71	17.73	0.998
EtBz	2.71	10.91	19.93	69.43	116.50	23.20	0.999
m,pXyl	5.78	23.46	42.96	148.53	248.02	24.69	0.999
oXyl	2.78	11.30	20.78	70.67	117.76	23.41	0.999
13DCB		7.77	13.18	43.28	71.69	14.09	0.999
14DCB		7.07	12.98	44.74	74.99	14.96	0.999
12DCB		6.76	12.33	42.24	70.80	14.10	0.999

Data for Column 10116

			Peak Area			
Date	CB	EtBz	mXyl	13DCB	14DCB	12DCB
29-Aug	7.91	ND	29.49	10.88	16.77	5.54
11-Sep	10.23	6.67	82.95	37.81	51.63	18.16
19-Sep	7.39	ND	12.08	6.17	7.05	2.54
30-Sep	11.71	ND	20.79	11.04	12.36	4.58
8-Oct	11.21	1.85	18.64	11.47	10.93	4.13

Date	Calibration Date	CB	EtBz	mXyl	13DCB	14DCB	12DCB
		Concentration in Trap (mg/L)					
29-Aug	08/29/08	0.128	ND	0.330	0.112	0.225	0.108
11-Sep	08/29/08	0.495	0.249	2.782	1.167	2.080	1.058
19-Sep	09/30/08	0.42	ND	0.49	0.44	0.47	0.18
30-Sep	09/30/08	0.66	ND	0.84	0.78	0.83	0.33
8-Oct	09/30/08	0.63	0.08	0.76	0.81	0.73	0.29

Date	Trap Volume (mL)	Mass in Trap (ug)					
		CB	EtBz	mpXyl	13DCB	14DCB	12DCB
29-Aug	1.0	0.13	-	0.33	0.11	0.23	0.11
11-Sep	0.6	0.30	0.15	1.67	0.70	1.25	0.63
19-Sep	3.3	1.37	-	1.61	1.45	1.55	0.60
30-Sep	2.4	1.58	-	2.02	1.88	1.98	0.78
8-Oct	2.6	1.64	0.21	1.96	2.12	1.90	0.76

Date	Mass per Area (mg/m^2)					
	CB	EtBz	mpXyl	13DCB	14DCB	12DCB
29-Aug	0.07	0.00	0.18	0.06	0.12	0.06
11-Sep	0.16	0.08	0.92	0.39	0.69	0.35
19-Sep	0.76	0.00	0.89	0.80	0.86	0.33
30-Sep	0.88	0.00	1.12	1.04	1.10	0.43
8-Oct	0.91	0.11	1.08	1.17	1.05	0.42

	CB	EtBz	mXyl	13DCB	14DCB	12DCB
Flux (mg/m^2 day)	0.0103	0.0007	0.0148	0.0128	0.0137	0.0056
R^2	0.87	0.47	0.96	0.91	0.95	0.95

Data for Column 70048

Date	Peak Area					
	CB	EtBz	mpXyl	13DCB	14DCB	12DCB
2-Sep	43.60061	ND	35.00203	ND	ND	ND
11-Sep	74.90572	5.253086	57.11388	ND	78.39438	34.53
19-Sep	62.77	4.572	48.244	ND	68.262	29.627
30-Sep	62.43	5.153	46.441	ND	66.2	28.947
8-Oct	62.12	5.88	45.78	ND	68.37	29.25

Date	Calibration Date	Concentration in Trap (mg/L)					
		CB	EtBz	mpXyl	13DCB	14DCB	12DCB
2-Sep	08/29/08	43.60061	ND	35.00203	ND	ND	ND
11-Sep	08/29/08	74.90572	5.253086	57.11388	ND	78.39438	34.53
19-Sep	09/30/08	62.77	4.572	48.244	ND	68.262	29.627
30-Sep	09/30/08	62.43	5.153	46.441	ND	66.2	28.947
8-Oct	09/30/08	62.12	5.88	45.78	ND	68.37	29.25

Date	Volume in Trap (mL)	Mass in Trap (ug)					
		CB	EtBz	mpXyl	13DCB	14DCB	12DCB
2-Sep	6.0	4.22		2.35			
11-Sep	8.2	29.70	1.61	15.70		25.90	16.50
19-Sep	9.0	31.86	1.77	17.59	0.00	41.07	18.91
30-Sep	9.0	31.69	2.00	16.93		39.83	18.48
8-Oct	9.0	31.53	2.28	16.69	0.00	41.14	18.67

Date	Mass per Area (mg/m^2) CB	EtBz	mpXyl	13DCB	14DCB	12DCB
2-Sep	2.33		1.30			
11-Sep	16.41	0.89	8.68		14.31	9.11
19-Sep	17.60	0.98	9.72		22.69	10.45
30-Sep	17.51	1.10	9.35		22.01	10.21
8-Oct	17.42	1.26	9.22		22.73	10.31

	CB	EtBz	mpXyl	13DCB	14DCB	12DCB
Flux (mg/m^2 day)	0.088	0.005	0.046		0.098	0.048
r^2	0.88	0.75	0.85		0.78	0.80