

July 25, 2007

Robert Martin
Martin and Slagle
P.O. Box 1023
Black Mountain, NC 28711

Dear Mr. Martin,

Enclosed is the Technical Memorandum for VOC work recently performed at the Kuhlman Electric Corporation (KEC) facility in Crystal Springs, MS. If you have any questions concerning this information, give me a call.

Sincerely,

jk Joseph Kubale

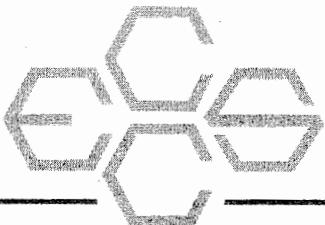
Enclosure



Technical Memorandum

Kuhlman Electric Corporation (KEC)

Crystal Springs, Mississippi



TECHNICAL MEMORANDUM

July 25, 2007

To: Robert Martin
Martin and Slagle

From: Joseph Kubale *Kubale*
ECCS

Re: Field Analytical Methods
Volatile Organic Compounds (VOC)
Kuhlman Electric Corporation (KEC)
Crystal Springs, MS

Introduction

This Technical Memorandum provides documentation of the field analytical test methods used to analyze water samples from KEP-GW collected in September 2005 during the investigation at the Kuhlman Electric Corporation (KEC) facility in Crystal Springs, MS. The samples were analyzed by purge and trap GC/MSD for the VOCs listed below.

Narrative

Waters

Water samples were analyzed for VOCs directly by purge and trap GC/MSD.

The following report limits were used for water samples. The reporting limit units are in ug/L.

Purge and Trap GC/MSD	
Dichlorodifluoromethane	1.0
Chloromethane	1.0
Vinyl chloride	1.0
Bromomethane	1.0
Chloroethane	1.0
Trichlorofluoromethane	1.0
1,1-Dichloroethene	1.0
Methylene chloride	1.0

Purge and Trap GC/MSD

trans-1,2-Dichloroethene	1.0
1,1-Dichloroethane	1.0
cis-1,2-Dichloroethene	1.0
2,2-Dichloropropane	1.0
Bromochloromethane	1.0
Chloroform	1.0
1,1,1-Trichloroethane	1.0
1,1-Dichloropropene	1.0
Carbon tetrachloride	1.0
Benzene	1.0
1,2-Dichloroethane	1.0
Trichloroethene	1.0
1,2-Dichloropropane	1.0
Dibromomethane	1.0
Bromodichloromethane	1.0
cis-1,3-Dichloropropene	1.0
Toluene	1.0
trans-1,3-Dichloropropene	1.0
1,1,2-Trichloroethane	1.0
Tetrachloroethene	1.0
1,3-Dichloropropane	2.0
Dibromochloromethane	1.0
1,2-Dibromoethane	1.0
Chlorobenzene	1.0
1,1,1,2-Tetrachloroethane	1.0
Ethyl benzene	1.0
Xylenes, total	2.0
Styrene	1.0
Bromoform	2.0
Isopropylbenzene	1.0
1,1,2,2-Tetrachloroethane	2.0
Bromobenzene	1.0
1,2,3-Trichloropropane	2.0
n-Propylbenzene	1.0
2-Chlorotoluene	1.0
1,3,5-Trimethylbenzene	1.0
4-Chlorotoluene	1.0
tert-Butylbenzene	1.0
1,2,4-Trimethylbenzene	1.0
sec-Butylbenzene	1.0
1,3-Dichlorobenzene	1.0
p-Isopropyltoluene	1.0
1,4-Dichlorobenzene	1.0
n-Butylbenzene	1.0
1,2-Dichlorobenzene	1.0
1,2-Dibromo-3-chloropropane	2.0
1,3,5-Trichlorobenzene	1.0
1,2,4-Trichlorobenzene	1.0
Hexachlorobutadiene	1.0
Naphthalene	3.0
1,2,3-Trichlorobenzene	1.0

A summary of test results is provided in Table 1. A summary of method blanks and matrix spike/matrix spike duplicate data is provided in Table 2.

In addition copies of the chain of custody sheets can be found in appendix A.

- A) Chain of custody sheets for samples
- B) FEDEX shipping label for Paradigm Labs
- C) Chain of custody sheets for samples sent to Paradigm Labs

VOC Method Summary

Water Samples

Water samples were provided by the client to the field lab in 40ml VOC vials. A 10ml aliquot of the sample was withdrawn from the vial with a 10ml gas-tight syringe. 10 ul of a 25ug/mL surrogate and internal standard solution was added to the sample in the 10 mL syringe. The resulting concentration of the surrogate and internal standard was 25ug/L. The internal standards for the MSD were pentafluorobenzene, 1,4-Difluorobenzene, chlorobenzene-D5 and 1,4-Dichlorobenzene-D4. The surrogate standards were dibromofluoromethane, toluene-D8 and bromofluorobenzene. The sample was then immediately loaded onto a Tekmar ALS 2016 autosampler with a Tekmar LSC 2000 purge and trap concentrator for GC\MSD analysis.

GC/MSD Procedure:

Identification of target compounds was done by matching retention times and mass spectra of peaks found in samples to those found in a VOC calibration standard using the internal standards as time reference peaks. Quantitation was performed by the internal standard technique using a seven point standard curve generated from 5, 10, 20, 50, 100, 250, and 500 ng standards. These levels equate to 0.5, 1.0, 2.0, 5.0, 10, 25 and 50 ug/L for water samples.

A Hewlett-Packard 5890 gas chromatograph with a 30m x 0.32mm RTX-624 micro-capillary column interfaced to a Hewlett-Packard 5972 MSD was used. The data system included a Hewlett-Packard Enviroquant chromatography workstation for data handling.

Quality control consisted of the following items:

- Initial calibration with % relative standard deviation less than 15% of individual response factors obtained from analysis of calibration standards
- Continuing Calibration Verification standards analyzed at a frequency of every ten samples
- Surrogate standard additions to samples and standards
- Blank samples analyzed at a minimum of one per day
- Matrix spike and Matrix Spike Duplicate samples analyzed for every twenty samples
- Information documented in Field Logbook 85.

Table 1

Sample Results – September

TABLE 1 Kuhlman Electric - Crystal Springs, MS - Volatiles Detected in Water										
		W1369	W1370	W1371	KEP-GW	KEP-GW	KEP-GW	KEP-GW	KEP-GW	W1376
Depth	-	006	007	005	FB	002	004	004	009	KEP-GW
Date Collected	18-Sep-05	-	-	-	010	004	-	-	Duplicate	008
Time Collected	15:09	18-Sep-05	18-Sep-05	18-Sep-05	-	-	-	-	-	004
Date Analyzed	19-Sep-05	19-Sep-05	19-Sep-05	19-Sep-05	15:46	16:08	18-Sep-05	18-Sep-05	18-Sep-05	22-Sep-05
Reporting Limit	ug/L						16:45	17:03	-	17:25
VOLATILES										
Dichlorodifluoromethane	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
Chloromethane	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
Vinyl Chloride	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
Bromomethane	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
Chloroethane	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
Trichlorofluoromethane	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
1,1-Dichloroethene	1.0	<	12	<	1.0	<	1.0	<	1.0	< 1.0
Methylene Chloride	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
trans-1,2-Dichloroethene	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
1,1-Dichloroethane	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
cis-1,2-Dichloroethene	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
2,2-Dichloropropane	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
Bromochloromethane	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
Chloroform	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
1,1,1-Trichloroethane	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
1,1-Dichloropropene	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
Carbon Tetrachloride	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
Benzene	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
1,2-Dichloroethane	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
Trichloroethene	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
1,2-Dichloropropane	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
Dibromomethane	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
Bromodichloromethane	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
cis-1,3-Dichloropropene	2.0	<	2.0	<	2.0	<	2.0	<	2.0	< 2.0
Toluene	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
trans-1,3-Dichloropropene	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
1,1,2-Trichloroethane	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
Tetrachloroethene	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
1,3-Dichloropropane	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
Dibromochloromethane	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
1,2-Dibromoethane	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
Chlorobenzene	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
1,1,1,2-Tetrachloroethane	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0
Ethyl Benzene	1.0	<	1.0	<	1.0	<	1.0	<	1.0	< 1.0

TABLE 1

		Kuhlman Electric - Crystal Springs, Mi Ippi - Volatiles Detected in Water												
		W1369	W1370	W1371	KEP-GW	KEP-GW	KEP-GW	W1372	W1373	KEP-GW	KEP-GW	KEP-GW	W1375	W1376
Depth	-	006	007	005	FB	002	004	010	004	004	009	002	KEP	KEP-GW
Date Collected	18-Sep-05	-	-	-	-	-	-	-	-	-	-	-	Duplicate	004
Time Collected	15:09	18-Sep-05	15:45	18-Sep-05	15:46	18-Sep-05	16:08	16:45	18-Sep-05	17:03	-	-	-	008
Date Analyzed	19-Sep-05	19-Sep-05	19-Sep-05	19-Sep-05	19-Sep-05	18-Sep-05	19-Sep-05	19-Sep-05	18-Sep-05	19-Sep-05	18-Sep-05	19-Sep-05	-	004
Reporting Limit ug/L	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
VOLATILES														
Xylenes, Total	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Styrene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Isopropylbenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Bromobenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichloropropane	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
n-Propylbenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
tert-Butylbenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
n-Butylbenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-Chloropropane	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
1,3,5-Trichlorobenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Surrogates:														
Dibromofluorobenzene	%	95.1	101	99.2	92.8	104	102	95.2	99.4	107				
Toluene-D8	%	96.5	94.6	95.1	94.5	95.8	97.3	94.0	94.2	105				
4-Bromofluorobenzene	%	95.6	96.9	99.2	95.5	98.2	102	98.1	97.0	100				

(1) = Also analyzed from unpreserved vial.

TABLE F
Kuhlman Electric - Crystal Springs, MS
Volatiles Detected in Water

		W1411	KEP-GW	W1412
		003	004	KEP Duplicate
Depth	-	-	-	-
Date Collected	23-Sep-05	23-Sep-05	23-Sep-05	-
Time Collected	10:25	-	-	-
Date Analyzed	23-Sep-05	23-Sep-05	23-Sep-05	-
Reporting Limit	ug/L			
VOLATILES				
Dichlorodifluoromethane	1.0	<	1.0	< 1.0
Chloromethane	1.0	<	1.0	< 1.0
Vinyl Chloride	1.0	<	1.0	< 1.0
Bromomethane	1.0	<	1.0	< 1.0
Chloroethane	1.0	<	1.0	< 1.0
Trichlorofluoromethane	1.0	<	1.0	< 1.0
1,1-Dichloroethene	1.0	28	33	
Methylene Chloride	1.0	<	1.0	< 1.0
trans-1,2-Dichloroethene	1.0	<	1.0	< 1.0
1,1-Dichloroethane	1.0	<	1.0	< 1.0
cis-1,2-Dichloroethene	1.0	<	1.0	< 1.0
2,2-Dichloropropane	1.0	<	1.0	< 1.0
Bromoform	1.0	<	1.0	< 1.0
1,1,1-Trichloroethane	1.0	<	1.0	< 1.0
1,1-Dichloropropene	1.0	<	1.0	< 1.0
Carbon Tetrachloride	1.0	<	1.0	< 1.0
Benzene	1.0	<	1.0	< 1.0
1,2-Dichloroethane	1.0	<	1.0	< 1.0
Trichloroethene	1.0	<	1.0	< 1.0
1,2-Dichloropropane	1.0	<	1.0	< 1.0
Dibromomethane	1.0	<	1.0	< 1.0
Bromodichloromethane	1.0	<	1.0	< 1.0
cis-1,3-Dichloropropene	2.0	<	2.0	< 2.0
Toluene	1.0	<	1.0	< 1.0
trans-1,3-Dichloropropene	1.0	<	1.0	< 1.0
1,1,2-Trichloroethane	1.0	<	1.0	< 1.0
Tetrachloroethene	1.0	<	1.0	< 1.0
1,3-Dichloropropane	1.0	<	1.0	< 1.0
Dibromoform	1.0	<	1.0	< 1.0
1,2-Dibromoethane	1.0	<	1.0	< 1.0
Chlorobenzene	1.0	<	1.0	< 1.0
1,1,1,2-Tetrachloroethane	1.0	<	1.0	< 1.0
Ethyl Benzene	1.0	<	1.0	< 1.0

TABLE 1
Kuhlman Electric - Crystal Springs, Mississippi - Volatiles Detected in Water

	W1411 KEP-GW	W1412 KEP
	003 Depth	004 Date Collected
	- 23-Sep-05	- 23-Sep-05
	10:25 Time Collected	- 23-Sep-05
	Date Analyzed	23-Sep-05
	Reporting Limit ug/L	
VOLATILES		
Xylenes, Total	< 2.0	< 2.0
Styrene	< 1.0	< 1.0
Bromoform	< 2.0	< 2.0
Isopropylbenzene	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	< 2.0	< 2.0
Bromobenzene	< 1.0	< 1.0
1,2,3-Trichloropropane	< 2.0	< 2.0
n-Propylbenzene	< 1.0	< 1.0
2-Chlorotoluene	< 1.0	< 1.0
1,3,5-Trimethylbenzene	< 1.0	< 1.0
4-Chlorotoluene	< 1.0	< 1.0
tert-Butylbenzene	< 1.0	< 1.0
1,2,4-Trimethylbenzene	< 1.0	< 1.0
sec-Butylbenzene	< 1.0	< 1.0
1,3-Dichlorobenzene	< 1.0	< 1.0
p-Isopropyltoluene	< 1.0	< 1.0
1,4-Dichlorobenzene	< 1.0	< 1.0
n-Butylbenzene	< 1.0	< 1.0
1,2-Dichlorobenzene	< 1.0	< 1.0
1,2-Dibromo-3-Chloropropane	< 2.0	< 2.0
1,3,5-Trichlorobenzene	< 1.0	< 1.0
1,2,4-Trichlorobenzene	< 1.0	< 1.0
Hexachlorobutadiene	< 1.0	< 1.0
Naphthalene	< 3.0	< 3.0
1,2,3-Trichlorobenzene	< 1.0	< 1.0
Surrogates:		
Dibromofluorobenzene	%	93.3
Toluene-D8	%	104
4-Bromofluorobenzene	%	94.6
		107
		99.8

(1) = Also analyzed from unpreserved vial.

Table 2

QC Results – September

TABLE 2
QC Report

Lab # associated with qc samples: W1369 through W1376

	Matrix
Matrix	Spike
Spike	Duplicate
W1369	W1369

Date Analyzed: 9/19/05 9/19/05 9/19/05

Compound	% Rec	% Rec	% RPD	ug/L
Dichlorodifluoromethane	99.4%	107%	-7%	< 1.0
Chloromethane	101%	108%	-7%	< 1.0
Vinyl Chloride	103%	110%	-6%	< 1.0
Bromomethane	100%	110%	-9%	< 1.0
Chloroethane	98.0%	110%	-11%	< 1.0
Trichlorofluoromethane	103%	108%	-5%	< 1.0
1,1-Dichloroethene	87.9%	89.6%	-2%	< 1.0
Methylene Chloride	101%	104%	-3%	< 1.0
trans-1,2-Dichloroethene	98.6%	109%	-10%	< 1.0
1,1-Dichloroethane	110%	118%	-7%	< 1.0
cis-1,2-Dichloroethene	105%	112%	-6%	< 1.0
2,2-Dichloropropane	103%	105%	-2%	< 1.0
Bromochloromethane	108%	116%	-7%	< 1.0
Chloroform	104%	111%	-7%	< 1.0
1,1,1-Trichloroethane	110%	112%	-2%	< 1.0
1,1-Dichloropropene	105%	108%	-3%	< 1.0
Carbon Tetrachloride	104%	108%	-3%	< 1.0
Benzene	107%	110%	-2%	< 1.0
1,2-Dichloroethane	106%	111%	-5%	< 1.0
Trichloroethene	107%	110%	-3%	< 1.0
1,2-Dichloropropane	107%	114%	-6%	< 1.0
Dibromomethane	106%	112%	-6%	< 1.0
Bromodichloromethane	106%	113%	-6%	< 1.0
cis-1,3-Dichloropropene	106%	114%	-8%	< 2.0
Toluene	108%	117%	-8%	< 1.0
trans-1,3-Dichloropropene	107%	119%	-11%	< 1.0
1,1,2-Trichloroethane	108%	119%	-10%	< 1.0
Tetrachloroethene	110%	123%	-12%	< 1.0
1,3-Dichloropropane	112%	120%	-7%	< 1.0
Dibromochloromethane	107%	120%	-12%	< 1.0
1,2-Dibromoethane	105%	121%	-15%	< 1.0
Chlorobenzene	112%	114%	-2%	< 1.0

TABLE 2
QC Report

Lab # associated with qc samples: W1369 through W1376

Matrix	Matrix	Matrix	Blank
Matrix	Spike	Duplicate	
Spike			
W1369		W1369	

Date Analyzed: 9/19/05 9/19/05 9/19/05

Compound	% Rec	% Rec	% RPD	ug/L
1,1,1,2-Tetrachloroethane	103%	107%	-4%	< 1.0
Ethyl Benzene	107%	109%	-2%	< 1.0
Xylenes, Total	106%	109%	-3%	< 2.0
Styrene	103%	108%	-5%	< 1.0
Bromoform	105%	109%	-4%	< 2.0
Isopropylbenzene	104%	109%	-5%	< 1.0
1,1,2,2-Tetrachloroethane	104%	115%	-10%	< 2.0
Bromobenzene	108%	109%	-1%	< 1.0
1,2,3-Trichloropropane	107%	111%	-4%	< 2.0
n-Propylbenzene	103%	108%	-5%	< 1.0
2-Chlorotoluene	104%	109%	-5%	< 1.0
1,3,5-Trimethylbenzene	103%	109%	-6%	< 1.0
4-Chlorotoluene	104%	107%	-3%	< 1.0
tert-Butylbenzene	109%	111%	-2%	< 1.0
1,2,4-Trimethylbenzene	105%	109%	-4%	< 1.0
sec-Butylbenzene	104%	110%	-5%	< 1.0
1,3-Dichlorobenzene	106%	112%	-6%	< 1.0
p-Isopropyltoluene	107%	113%	-6%	< 1.0
1,4-Dichlorobenzene	108%	111%	-3%	< 1.0
n-Butylbenzene	104%	111%	-7%	< 1.0
1,2-Dichlorobenzene	110%	114%	-4%	< 1.0
1,2-Dibromo-3-Chloropropane	102%	132%	-26%	< 2.0
1,3,5-Trichlorobenzene	106%	114%	-7%	< 1.0
1,2,4-Trichlorobenzene	104%	118%	-12%	< 1.0
Hexachlorobutadiene	105%	111%	-5%	< 1.0
Naphthalene	66.0%	115%	-54%	< 3.0
1,2,3-Trichlorobenzene	98.0%	113%	-14%	< 1.0

TABLE 2
QC Report

Lab # associated with qc samples: W1409

Matrix	Matrix	Matrix	Blank
Spike	Duplicate		
W1405	W1405		

Date Analyzed: 9/22/05 9/22/05 9/22/05

Compound	% Rec	% Rec	% RPD	ug/L
Dichlorodifluoromethane	102%	101%	1%	< 1.0
Chloromethane	103%	106%	-3%	< 1.0
Vinyl Chloride	109%	92.2%	17%	< 1.0
Bromomethane	106%	103%	2%	< 1.0
Chloroethane	108%	107%	1%	< 1.0
Trichlorofluoromethane	106%	96.2%	10%	< 1.0
1,1-Dichloroethene	111%	98.0%	12%	< 1.0
Methylene Chloride	114%	113%	1%	< 1.0
trans-1,2-Dichloroethene	108%	93.6%	14%	< 1.0
1,1-Dichloroethane	108%	109%	-1%	< 1.0
cis-1,2-Dichloroethene	109%	92.0%	17%	< 1.0
2,2-Dichloropropane	110%	98.8%	11%	< 1.0
Bromochloromethane	107%	96.4%	11%	< 1.0
Chloroform	112%	105%	6%	< 1.0
1,1,1-Trichloroethane	115%	97.2%	17%	< 1.0
1,1-Dichloropropene	105%	95.6%	9%	< 1.0
Carbon Tetrachloride	100%	91.4%	9%	< 1.0
Benzene	111%	110%	1%	< 1.0
1,2-Dichloroethane	110%	111%	0%	< 1.0
Trichloroethene	106%	95.4%	10%	< 1.0
1,2-Dichloropropane	110%	108%	1%	< 1.0
Dibromomethane	108%	98.0%	10%	< 1.0
Bromodichloromethane	105%	91.2%	14%	< 1.0
cis-1,3-Dichloropropene	111%	90.8%	20%	< 2.0
Toluene	113%	112%	1%	< 1.0
trans-1,3-Dichloropropene	113%	95.2%	17%	< 1.0
1,1,2-Trichloroethane	119%	116%	3%	< 1.0
Tetrachloroethene	114%	106%	7%	< 1.0
1,3-Dichloropropane	113%	114%	-1%	< 1.0
Dibromochloromethane	107%	94.8%	12%	< 1.0
1,2-Dibromoethane	107%	94.6%	12%	< 1.0
Chlorobenzene	111%	109%	2%	< 1.0

TABLE 2
QC Report

Lab # associated with qc samples: W1409

Matrix	Matrix	Matrix	Blank
Spike	Duplicate		
W1405	W1405		

Date Analyzed: 9/22/05 9/22/05 9/22/05

Compound	% Rec	% Rec	% RPD	ug/L
1,1,1,2-Tetrachloroethane	105%	91.8%	14%	< 1.0
Ethyl Benzene	105%	117%	-10%	< 1.0
Xylenes, Total	104%	101%	3%	< 2.0
Styrene	102%	87.8%	15%	< 1.0
Bromoform	104%	89.8%	15%	< 2.0
Isopropylbenzene	102%	96.0%	6%	< 1.0
1,1,2,2-Tetrachloroethane	107%	99.4%	7%	< 2.0
Bromobenzene	106%	102%	4%	< 1.0
1,2,3-Trichloropropane	111%	105%	6%	< 2.0
n-Propylbenzene	104%	98.6%	6%	< 1.0
2-Chlorotoluene	106%	102%	4%	< 1.0
1,3,5-Trimethylbenzene	102%	95.8%	6%	< 1.0
4-Chlorotoluene	103%	97.6%	5%	< 1.0
tert-Butylbenzene	100%	90.4%	10%	< 1.0
1,2,4-Trimethylbenzene	103%	96.4%	7%	< 1.0
sec-Butylbenzene	102%	93.2%	9%	< 1.0
1,3-Dichlorobenzene	101%	101%	0%	< 1.0
p-Isopropyltoluene	97.4%	89.6%	8%	< 1.0
1,4-Dichlorobenzene	101%	99.4%	2%	< 1.0
n-Butylbenzene	101%	88.4%	13%	< 1.0
1,2-Dichlorobenzene	102%	99.0%	3%	< 1.0
1,2-Dibromo-3-Chloropropane	118%	95.8%	21%	< 2.0
1,3,5-Trichlorobenzene	103%	90.4%	13%	< 1.0
1,2,4-Trichlorobenzene	109%	85.2%	24%	< 1.0
Hexachlorobutadiene	93.8%	81.2%	14%	< 1.0
Naphthalene	95.4%	47.4%	67%	< 3.0
1,2,3-Trichlorobenzene	98.4%	77.8%	23%	< 1.0

TABLE 2
QC Report

Lab # associated with qc samples: W1411 through W1412

Matrix	Matrix	Matrix	Blank
Spike	Duplicate		
W1414	W1414		

Date Analyzed: 9/23/05 9/23/05 9/23/05

Compound	% Rec	% Rec	% RPD	ug/L
Dichlorodifluoromethane	103%	105%	-2%	< 1.0
Chloromethane	110%	111%	-1%	< 1.0
Vinyl Chloride	110%	110%	0%	< 1.0
Bromomethane	115%	117%	-1%	< 1.0
Chloroethane	109%	115%	-5%	< 1.0
Trichlorofluoromethane	112%	111%	1%	< 1.0
1,1-Dichloroethene	114%	117%	-3%	< 1.0
Methylene Chloride	113%	117%	-4%	< 1.0
cis-1,2-Dichloroethene	115%	111%	3%	< 1.0
1,1-Dichloroethane	117%	116%	1%	< 1.0
cis-1,2-Dichloroethene	112%	112%	0%	< 1.0
2,2-Dichloropropane	118%	116%	2%	< 1.0
Bromochloromethane	105%	108%	-3%	< 1.0
Chloroform	117%	115%	2%	< 1.0
1,1,1-Trichloroethane	118%	116%	2%	< 1.0
1,1-Dichloropropene	105%	102%	2%	< 1.0
Carbon Tetrachloride	107%	108%	-1%	< 1.0
Benzene	117%	116%	1%	< 1.0
1,2-Dichloroethane	108%	108%	-1%	< 1.0
Trichloroethene	107%	108%	-1%	< 1.0
1,2-Dichloropropane	112%	110%	2%	< 1.0
Dibromomethane	106%	105%	1%	< 1.0
Bromodichloromethane	103%	99.8%	3%	< 1.0
cis-1,3-Dichloropropene	101%	102%	-1%	< 2.0
Toluene	119%	119%	0%	< 1.0
trans-1,3-Dichloropropene	107%	107%	0%	< 1.0
1,1,2-Trichloroethane	113%	112%	1%	< 1.0
Tetrachloroethene	116%	113%	3%	< 1.0
1,3-Dichloropropane	111%	110%	1%	< 1.0
Dibromochloromethane	107%	109%	-2%	< 1.0
1,2-Dibromoethane	107%	103%	4%	< 1.0
Chlorobenzene	113%	113%	0%	< 1.0

TABLE 2
QC Report

Lab # associated with qc samples: W1411 through W1412

Matrix	Matrix	Matrix	Blank
Spike	Duplicate		
W1414	W1414		

Date Analyzed: 9/23/05 9/23/05 9/23/05

Compound	% Rec	% Rec	% RPD	ug/L
1,1,1,2-Tetrachloroethane	107%	107%	0%	< 1.0
Ethyl Benzene	112%	110%	2%	< 1.0
Xylenes, Total	108%	107%	1%	< 2.0
Styrene	103%	102%	1%	< 1.0
Bromoform	100%	105%	-5%	< 2.0
Isopropylbenzene	101%	103%	-2%	< 1.0
1,1,2,2-Tetrachloroethane	105%	101%	4%	< 2.0
Bromobenzene	109%	108%	1%	< 1.0
1,2,3-Trichloropropane	106%	106%	-1%	< 2.0
n-Propylbenzene	104%	106%	-2%	< 1.0
2-Chlorotoluene	108%	110%	-2%	< 1.0
1,3,5-Trimethylbenzene	103%	103%	0%	< 1.0
4-Chlorotoluene	104%	102%	2%	< 1.0
tert-Butylbenzene	102%	100%	2%	< 1.0
1,2,4-Trimethylbenzene	104%	103%	0%	< 1.0
sec-Butylbenzene	105%	104%	1%	< 1.0
1,3-Dichlorobenzene	105%	109%	-3%	< 1.0
p-Isopropyltoluene	98.6%	100%	-2%	< 1.0
1,4-Dichlorobenzene	105%	106%	-1%	< 1.0
n-Butylbenzene	102%	102%	-1%	< 1.0
1,2-Dichlorobenzene	103%	103%	0%	< 1.0
1,2-Dibromo-3-Chloropropane	101%	97.2%	4%	< 2.0
1,3,5-Trichlorobenzene	99.4%	101%	-1%	< 1.0
1,2,4-Trichlorobenzene	93.4%	90.0%	4%	< 1.0
Hexachlorobutadiene	96.0%	102%	-6%	< 1.0
Naphthalene	77.8%	44.4%	55%	< 3.0
1,2,3-Trichlorobenzene	89.8%	87.2%	3%	< 1.0

Appendix A

Chain of Custody Sheets for Samples



**Environmental Chemistry
Consulting Services, Inc.**

2525 Advance Road

Madison, WI 53718

Phone 608-221-8700 FAX 608-221-4889

CHAIN OF CUSTODY

No. 013300

Page 1 of 1

Project Number:		Mail Report To:		Turn Around (circle one)		Normal	Rush			
Project Name: 1 Cultured Electronic	Company: MATERIA + SURFACES									
Project Location: Chippewa Falls	Address:									
Sampled By (Print): Robert Martin										
Sample Description		Collection Date	Time	Matrix	Total Bottles	Preserv*	Analysis Requested	P.O. No.:	Quote No.:	Laboratory Number
CSP-WP-030-004	9/22/05	11:18	W	4	A/B	8082CS1 / P260B	83.25			W1403
CSP-WP-030-005	9/22/05	12:52	W	4	A/B	8082CS1 / P260B	88.25			W1404
CSP-WP-030-006	9/22/05	14:46	W	4	A/B	8082CS1 / P260B	93.25			W1405
CSP-WP-030-007	9/22/05	15:35	W	4	A/B	8082CS1 / P260B	98.25			W1406
CSP-WP-030-008	9/22/05	16:32	W	4	A/B	8082CS1 / P260B	103.25			W1407
CSP-WP-030-009	9/22/05	17:23	W	4	A/B	8082CS1 / P260B	107.2			W1408
KEP-602-009-004	9/22/05	17:25	W	4	A/B	8082CS1 / P260B	—			W1409
<i>[Large handwritten signature]</i>										
Relinquished By: <i>Robert Martin</i>		Date/Time: 9/22/05 1809	Received By: <i>Jay Schubel</i>		Date/Time: 9/22/05 1809					
Relinquished By: <i>[Signature]</i>		Date/Time: 9/22/05 1809	Received By: <i>[Signature]</i>		Date/Time: 9/22/05 1809					
Custody Seal: Present/Absent Seal #'s Intact/Not Intact		Receipt Temp: Temp Blank Y N		Receipt Temp: Temp Blank Y N		Date/Time: 9/22/05 1809				
Shipped Via										

*Preservation Code

A=None B=HCL C=H₂SO₄

D=HNO₃ E=EnCore F=Methanol

G=NaOH O=Other(Indicate)

Custody Seal: Present/Absent

Seal #'s
Intact/Not Intact

Appendix B

FEDEX shipping label for Paradigm Labs

PARADIGM ANALYTICAL LABORATORIES, INC.

5500 Business Drive, Wilmington, NC 28405
Phone: (910)-350-1903 FAX: (910)-350-1557

Chain-of Custody Record & Analytical Request

COCR# 44672

Page 1 of 1

Client: M&T W & SATELLITEProject ID: Kinston ElectricReport To: Sgt. McCAddress: 10001 MartinContact: Robert MartinTurnaround: STDAddress: Black Mountain NC

Phone: _____

Job Number: _____

Quote #: _____

Fax: _____

P.O. Number: _____

Invoice To: Sgt. McCComments: Please specify any special reporting requirementsMobile Lab
See AttachedDepth: 1218Preservatives: NoneAnalyses: 3 VialsComments: W1373Depth: 2228Preservatives: NoneAnalyses: 2-1 VialsComments: W1373Depth: 80728Preservatives: NoneAnalyses: 3-VialComments: W1376Depth: 1218Preservatives: NoneAnalyses: 2-1 VialsComments: W1376Depth: 918/05Preservatives: WAnalyses: 3 VialsComments: W1373Depth: 918/05Preservatives: WAnalyses: 2-1 VialsComments: XDepth: 918/05Preservatives: WAnalyses: 3-VialComments: W1376Depth: 918/05Preservatives: WAnalyses: 2-1 VialsComments: W1376Depth: 918/05Preservatives: WAnalyses: 1 L SampleComments: XDepth: 918/05Preservatives: WAnalyses: 1-VialComments: XDepth: 918/05Preservatives: W

