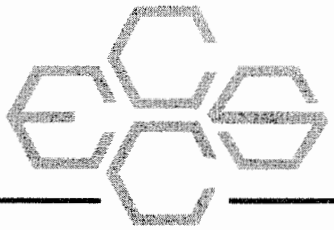

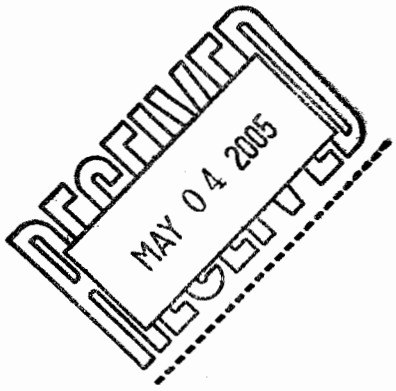

January 18, 2005

Robert Martin
Martin and Slagle

Dear Mr. Martin,

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

Sincerely,

Kari-Ann Killian

for Joseph Kubale

Enclosure

Environmental Chemistry Consulting Services, Inc.

2525 Advance Road • Madison, WI 53718 • Phone (608) 221-8700 • FAX (608) 221-4889

Technical Memorandum

Borg Warner / Kuhlman Electric

Crystal Springs, Mississippi

TECHNICAL MEMORANDUM

January 18, 2005

To: Robert Martin
Martin and Slagle

From: Joseph Kubale
ECCS

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

Introduction

This Technical Memorandum provides documentation of the field analytical test methods used to analyze water samples collected on September 7, 2004 during the investigation at the Kuhlman Electric 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

Purge and Trap GC/MSD

1,1-Dichloroethene	1.0
Methylene chloride	1.0
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-Dibromomethane	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

	Purge and Trap GC/MSD
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

The test results for water samples analyzed by purge and trap GC/MSD are provided in Table 1.

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, pp 119-120.

Table 1

Sample Results – September

Summary of Test Results

Project Name:	Kuhlman Electric	Date Analyzed:	09/10/04
Project Location:	Crystal Spings, Ms.	Concentration:	ug/L
Sample ID:	CSW-WA1-001	Dilution Factor:	1
Date Collected:	09/07/04	Lab Sample Number:	W1021
Sample Type:	Water		

Compound	Reporting Limit		Sample Result	
Dichlorodifluoromethane	1.0	<	1.0	
Chloromethane	1.0	<	1.0	
Vinyl Chloride	1.0	<	1.0	
Bromomethane	1.0	<	1.0	
Chloroethane	1.0	<	1.0	
Trichlorofluoromethane	NA		NA	
1,1-Dichloroethene	1.0	<	1.0	
Methylene chloride	1.0		0.35	J
trans-1,2-Dichloroethene	1.0	<	1.0	
1,1-Dichloroethane	1.0	<	1.0	
cis-1,2-Dichloroethene	1.0	<	1.0	
2,2-Dichloropropane	1.0	<	1.0	
Bromochloromethane	1.0	<	1.0	
Chloroform	1.0	<	1.0	
1,1,1-Trichloroethane	1.0	<	1.0	
1,1-Dichloropropene	1.0	<	1.0	
Carbon tetrachloride	1.0	<	1.0	
Benzene	1.0	<	1.0	
1,2-Dichloroethane	1.0	<	1.0	
Trichloroethene	1.0	<	1.0	
1,2-Dichloropropane	1.0	<	1.0	
Dibromomethane	1.0	<	1.0	
Bromodichloromethane	1.0	<	1.0	
cis-1,3-Dichloropropene	1.0	<	1.0	
Toluene	1.0	<	1.0	
trans-1,3-Dichloropropene	1.0	<	1.0	
1,1,2-Trichloroethane	1.0	<	1.0	
Tetrachloroethene	1.0	<	1.0	
1,3-Dichloropropane	2.0	<	2.0	
Dibromochloromethane	1.0	<	1.0	
1,2-Dibromoethane	1.0	<	1.0	

ECCS SOP: Volatile Organic Compounds by Purge and Trap-GC/MS

ND = Not Available

J = Estimated Concentration

Summary of Test Results

Project Name:	Kuhlman Electric	Date Analyzed:	09/10/04
Project Location:	Crystal Spings, Ms.	Concentration:	ug/L
Sample ID:	CSW-WA1-001	Dilution Factor:	1
Date Collected:	09/07/04	Lab Sample Number:	W1021
Sample Type:	Water		

Compound	Reporting Limit		Sample Result
Chlorobenzene	1.0	<	1.0
1,1,1,2-Tetrachloroethane	1.0	<	1.0
Ethyl benzene	1.0	<	1.0
m+p-Xylene	1.0	<	1.0
o-Xylene	1.0	<	1.0
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 :		
Dibromofluoromethane	96.4	%
Toluene-D8	99.0	%
4-Bromofluorobenzene	96.0	%

ECCS SOP: Volatile Organic Compounds by Purge and Trap-GC/MS

ND = Not Available

J = Estimated Concentration

Summary of Test Results

Project Name:	Kuhlman Electric	Date Analyzed:	09/10/04
Project Location:	Crystal Spings, Ms.	Concentration:	ug/L
Sample ID:	CSW-FB-001	Dilution Factor:	1
Date Collected:	09/07/04	Lab Sample Number:	W1022
Sample Type:	Water		

Compound	Reporting Limit		Sample Result
Dichlorodifluoromethane	1.0	<	1.0
Chloromethane	1.0	<	1.0
Vinyl Chloride	1.0	<	1.0
Bromomethane	1.0	<	1.0
Chloroethane	1.0	<	1.0
Trichlorofluoromethane	NA		NA
1,1-Dichloroethene	1.0	<	1.0
Methylene chloride	1.0	<	1.0
trans-1,2-Dichloroethene	1.0	<	1.0
1,1-Dichloroethane	1.0	<	1.0
cis-1,2-Dichloroethene	1.0	<	1.0
2,2-Dichloropropane	1.0	<	1.0
Bromochloromethane	1.0	<	1.0
Chloroform	1.0	<	1.0
1,1,1-Trichloroethane	1.0	<	1.0
1,1-Dichloropropene	1.0	<	1.0
Carbon tetrachloride	1.0	<	1.0
Benzene	1.0	<	1.0
1,2-Dichloroethane	1.0	<	1.0
Trichloroethene	1.0	<	1.0
1,2-Dichloropropane	1.0	<	1.0
Dibromomethane	1.0	<	1.0
Bromodichloromethane	1.0	<	1.0
cis-1,3-Dichloropropene	1.0	<	1.0
Toluene	1.0	<	1.0
trans-1,3-Dichloropropene	1.0	<	1.0
1,1,2-Trichloroethane	1.0	<	1.0
Tetrachloroethene	1.0	<	1.0
1,3-Dichloropropane	2.0	<	2.0
Dibromochloromethane	1.0	<	1.0
1,2-Dibromoethane	1.0	<	1.0

ECCS SOP: Volatile Organic Compounds by Purge and Trap-GC/MS

ND = Not Available

J = Estimated Concentration

Summary of Test Results

Project Name:	Kuhlman Electric	Date Analyzed:	09/10/04
Project Location:	Crystal Spings, Ms.	Concentration:	ug/L
Sample ID:	CSW-FB-001	Dilution Factor:	1
Date Collected:	09/07/04	Lab Sample Number:	W1022
Sample Type:	Water		

Compound	Reporting Limit		Sample Result
Chlorobenzene	1.0	<	1.0
1,1,1,2-Tetrachloroethane	1.0	<	1.0
Ethyl benzene	1.0	<	1.0
m+p-Xylene	1.0	<	1.0
o-Xylene	1.0	<	1.0
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 :		
Dibromofluoromethane	97.1	%
Toluene-D8	99.0	%
4-Bromofluorobenzene	97.0	%

ECCS SOP: Volatile Organic Compounds by Purge and Trap-GC/MS

ND = Not Available

J = Estimated Concentration

Summary of Test Results

Project Name:	Kuhlman Electric	Date Analyzed:	09/10/04
Project Location:	Crystal Spings, Ms.	Concentration:	ug/L
Sample ID:	CSW-WA2-001	Dilution Factor:	1
Date Collected:	09/07/04	Lab Sample Number:	W1023
Sample Type:	Water		

Compound	Reporting Limit		Sample Result
Dichlorodifluoromethane	1.0	<	1.0
Chloromethane	1.0	<	1.0
Vinyl Chloride	1.0	<	1.0
Bromomethane	1.0	<	1.0
Chloroethane	1.0	<	1.0
Trichlorofluoromethane	NA		NA
1,1-Dichloroethene	1.0	<	1.0
Methylene chloride	1.0	<	1.0
trans-1,2-Dichloroethene	1.0	<	1.0
1,1-Dichloroethane	1.0	<	1.0
cis-1,2-Dichloroethene	1.0	<	1.0
2,2-Dichloropropane	1.0	<	1.0
Bromochloromethane	1.0	<	1.0
Chloroform	1.0	<	1.0
1,1,1-Trichloroethane	1.0	<	1.0
1,1-Dichloropropene	1.0	<	1.0
Carbon tetrachloride	1.0	<	1.0
Benzene	1.0	<	1.0
1,2-Dichloroethane	1.0	<	1.0
Trichloroethene	1.0	<	1.0
1,2-Dichloropropane	1.0	<	1.0
Dibromomethane	1.0	<	1.0
Bromodichloromethane	1.0	<	1.0
cis-1,3-Dichloropropene	1.0	<	1.0
Toluene	1.0	<	1.0
trans-1,3-Dichloropropene	1.0	<	1.0
1,1,2-Trichloroethane	1.0	<	1.0
Tetrachloroethene	1.0	<	1.0
1,3-Dichloropropane	2.0	<	2.0
Dibromochloromethane	1.0	<	1.0
1,2-Dibromoethane	1.0	<	1.0

ECCS SOP: Volatile Organic Compounds by Purge and Trap-GC/MS

ND = Not Available

J = Estimated Concentration

Summary of Test Results

Project Name:	Kuhlman Electric	Date Analyzed:	09/10/04
Project Location:	Crystal Spings, Ms.	Concentration:	ug/L
Sample ID:	CSW-WA2-001	Dilution Factor:	1
Date Collected:	09/07/04	Lab Sample Number:	W1023
Sample Type:	Water		

Compound	Reporting Limit		Sample Result
Chlorobenzene	1.0	<	1.0
1,1,1,2-Tetrachloroethane	1.0	<	1.0
Ethyl benzene	1.0	<	1.0
m+p-Xylene	1.0	<	1.0
o-Xylene	1.0	<	1.0
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 :		
Dibromofluoromethane	101	%
Toluene-D8	99.9	%
4-Bromofluorobenzene	98.0	%

ECCS SOP: Volatile Organic Compounds by Purge and Trap-GC/MS

ND = Not Available

J = Estimated Concentration

Summary of Test Results

Project Name:	Kuhlman Electric	Date Analyzed:	09/11/04
Project Location:	Crystal Spings, Ms.	Concentration:	ug/L
Sample ID:	CSW-WA3-001	Dilution Factor:	1
Date Collected:	09/07/04	Lab Sample Number:	W1024
Sample Type:	Water		

Compound	Reporting Limit	Sample Result		
Dichlorodifluoromethane	1.0	<	1.0	
Chloromethane	1.0	<	1.0	
Vinyl Chloride	1.0	<	1.0	
Bromomethane	1.0	<	1.0	
Chloroethane	1.0	<	1.0	
Trichlorofluoromethane	NA		NA	
1,1-Dichloroethene	1.0	<	1.0	
Methylene chloride	1.0	<	1.0	
trans-1,2-Dichloroethene	1.0	<	1.0	
1,1-Dichloroethane	1.0	<	1.0	
cis-1,2-Dichloroethene	1.0	<	1.0	
2,2-Dichloropropane	1.0	<	1.0	
Bromochloromethane	1.0	<	1.0	
Chloroform	1.0		0.22	J
1,1,1-Trichloroethane	1.0	<	1.0	
1,1-Dichloropropene	1.0	<	1.0	
Carbon tetrachloride	1.0	<	1.0	
Benzene	1.0	<	1.0	
1,2-Dichloroethane	1.0	<	1.0	
Trichloroethene	1.0	<	1.0	
1,2-Dichloropropane	1.0	<	1.0	
Dibromomethane	1.0	<	1.0	
Bromodichloromethane	1.0	<	1.0	
cis-1,3-Dichloropropene	1.0	<	1.0	
Toluene	1.0	<	1.0	
trans-1,3-Dichloropropene	1.0	<	1.0	
1,1,2-Trichloroethane	1.0	<	1.0	
Tetrachloroethene	1.0	<	1.0	
1,3-Dichloropropane	2.0	<	2.0	
Dibromochloromethane	1.0	<	1.0	
1,2-Dibromoethane	1.0	<	1.0	

ECCS SOP: Volatile Organic Compounds by Purge and Trap-GC/MS

ND = Not Available

J = Estimated Concentration

Summary of Test Results

Project Name:	Kuhlman Electric	Date Analyzed:	09/11/04
Project Location:	Crystal Spings, Ms.	Concentration:	ug/L
Sample ID:	CSW-WA3-001	Dilution Factor:	1
Date Collected:	09/07/04	Lab Sample Number:	W1024
Sample Type:	Water		

Compound	Reporting Limit		Sample Result
Chlorobenzene	1.0	<	1.0
1,1,1,2-Tetrachloroethane	1.0	<	1.0
Ethyl benzene	1.0	<	1.0
m+p-Xylene	1.0	<	1.0
o-Xylene	1.0	<	1.0
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 :		
Dibromofluoromethane	101	%
Toluene-D8	99.4	%
4-Bromofluorobenzene	96.0	%

ECCS SOP: Volatile Organic Compounds by Purge and Trap-GC/MS

ND = Not Available

J = Estimated Concentration

Summary of Test Results

Project Name:	Kuhlman Electric	Date Analyzed:	09/11/04
Project Location:	Crystal Spings, Ms.	Concentration:	ug/L
Sample ID:	CSW-WA4-001	Dilution Factor:	1
Date Collected:	09/07/04	Lab Sample Number:	W1025
Sample Type:	Water		

Compound	Reporting Limit		Sample Result
Dichlorodifluoromethane	1.0	<	1.0
Chloromethane	1.0	<	1.0
Vinyl Chloride	1.0	<	1.0
Bromomethane	1.0	<	1.0
Chloroethane	1.0	<	1.0
Trichlorofluoromethane	NA		NA
1,1-Dichloroethene	1.0		**3.2**
Methylene chloride	1.0	<	1.0
trans-1,2-Dichloroethene	1.0	<	1.0
1,1-Dichloroethane	1.0	<	1.0
cis-1,2-Dichloroethene	1.0	<	1.0
2,2-Dichloropropane	1.0	<	1.0
Bromochloromethane	1.0	<	1.0
Chloroform	1.0	<	1.0
1,1,1-Trichloroethane	1.0	<	1.0
1,1-Dichloropropene	1.0	<	1.0
Carbon tetrachloride	1.0	<	1.0
Benzene	1.0	<	1.0
1,2-Dichloroethane	1.0	<	1.0
Trichloroethene	1.0	<	1.0
1,2-Dichloropropane	1.0	<	1.0
Dibromomethane	1.0	<	1.0
Bromodichloromethane	1.0	<	1.0
cis-1,3-Dichloropropene	1.0	<	1.0
Toluene	1.0	<	1.0
trans-1,3-Dichloropropene	1.0	<	1.0
1,1,2-Trichloroethane	1.0	<	1.0
Tetrachloroethene	1.0	<	1.0
1,3-Dichloropropane	2.0	<	2.0
Dibromochloromethane	1.0	<	1.0
1,2-Dibromoethane	1.0	<	1.0

ECCS SOP: Volatile Organic Compounds by Purge and Trap-GC/MS

ND = Not Available

J = Estimated Concentration

Summary of Test Results

Project Name:	Kuhlman Electric	Date Analyzed:	09/11/04
Project Location:	Crystal Spings, Ms.	Concentration:	ug/L
Sample ID:	CSW-WA4-001	Dilution Factor:	1
Date Collected:	09/07/04	Lab Sample Number:	W1025
Sample Type:	Water		

Compound	Reporting Limit	Sample Result
Chlorobenzene	1.0	< 1.0
1,1,1,2-Tetrachloroethane	1.0	< 1.0
Ethyl benzene	1.0	< 1.0
m+p-Xylene	1.0	< 1.0
o-Xylene	1.0	< 1.0
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 :		
Dibromofluoromethane	103	%
Toluene-D8	98.3	%
4-Bromofluorobenzene	93.8	%

ECCS SOP: Volatile Organic Compounds by Purge and Trap-GC/MS

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Summary of Test Results

Project Name:	Kuhlman Electric	Date Analyzed:	09/10/04
Project Location:	Crystal Spings, Ms.	Concentration:	ug/L
Sample ID:	CSW-FB-002	Dilution Factor:	1
Date Collected:	09/07/04	Lab Sample Number:	W1026
Sample Type:	Water		

Compound	Reporting Limit		Sample Result
Dichlorodifluoromethane	1.0	<	1.0
Chloromethane	1.0	<	1.0
Vinyl Chloride	1.0	<	1.0
Bromomethane	1.0	<	1.0
Chloroethane	1.0	<	1.0
Trichlorofluoromethane	NA		NA
1,1-Dichloroethene	1.0	<	1.0
Methylene chloride	1.0	<	1.0
trans-1,2-Dichloroethene	1.0	<	1.0
1,1-Dichloroethane	1.0	<	1.0
cis-1,2-Dichloroethene	1.0	<	1.0
2,2-Dichloropropane	1.0	<	1.0
Bromochloromethane	1.0	<	1.0
Chloroform	1.0	<	1.0
1,1,1-Trichloroethane	1.0	<	1.0
1,1-Dichloropropene	1.0	<	1.0
Carbon tetrachloride	1.0	<	1.0
Benzene	1.0	<	1.0
1,2-Dichloroethane	1.0	<	1.0
Trichloroethene	1.0	<	1.0
1,2-Dichloropropane	1.0	<	1.0
Dibromomethane	1.0	<	1.0
Bromodichloromethane	1.0	<	1.0
cis-1,3-Dichloropropene	1.0	<	1.0
Toluene	1.0	<	1.0
trans-1,3-Dichloropropene	1.0	<	1.0
1,1,2-Trichloroethane	1.0	<	1.0
Tetrachloroethene	1.0	<	1.0
1,3-Dichloropropane	2.0	<	2.0
Dibromochloromethane	1.0	<	1.0
1,2-Dibromoethane	1.0	<	1.0

ECCS SOP: Volatile Organic Compounds by Purge and Trap-GC/MS

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J = Estimated Concentration

Summary of Test Results

Project Name:	Kuhlman Electric	Date Analyzed:	09/10/04
Project Location:	Crystal Spings, Ms.	Concentration:	ug/L
Sample ID:	CSW-FB-002	Dilution Factor:	1
Date Collected:	09/07/04	Lab Sample Number:	W1026
Sample Type:	Water		

Compound	Reporting Limit		Sample Result
Chlorobenzene	1.0	<	1.0
1,1,1,2-Tetrachloroethane	1.0	<	1.0
Ethyl benzene	1.0	<	1.0
m+p-Xylene	1.0	<	1.0
o-Xylene	1.0	<	1.0
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 :		
Dibromofluoromethane	100	%
Toluene-D8	98.5	%
4-Bromofluorobenzene	95.8	%

ECCS SOP: Volatile Organic Compounds by Purge and Trap-GC/MS

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Summary of Test Results

Project Name:	Kuhlman Electric	Date Analyzed:	09/10/04
Project Location:	Crystal Spings, Ms.	Concentration:	ug/L
Sample ID:	CSW-BD-001	Dilution Factor:	1
Date Collected:	09/07/04	Lab Sample Number:	W1027
Sample Type:	Water		

Compound	Reporting Limit		Sample Result	
Dichlorodifluoromethane	1.0	<	1.0	
Chloromethane	1.0	<	1.0	
Vinyl Chloride	1.0	<	1.0	
Bromomethane	1.0	<	1.0	
Chloroethane	1.0	<	1.0	
Trichlorofluoromethane	NA		NA	
1,1-Dichloroethene	1.0	<	1.0	
Methylene chloride	1.0		0.42	J
trans-1,2-Dichloroethene	1.0	<	1.0	
1,1-Dichloroethane	1.0	<	1.0	
cis-1,2-Dichloroethene	1.0	<	1.0	
2,2-Dichloropropane	1.0	<	1.0	
Bromochloromethane	1.0	<	1.0	
Chloroform	1.0	<	1.0	
1,1,1-Trichloroethane	1.0	<	1.0	
1,1-Dichloropropene	1.0	<	1.0	
Carbon tetrachloride	1.0	<	1.0	
Benzene	1.0	<	1.0	
1,2-Dichloroethane	1.0	<	1.0	
Trichloroethene	1.0	<	1.0	
1,2-Dichloropropane	1.0	<	1.0	
Dibromomethane	1.0	<	1.0	
Bromodichloromethane	1.0	<	1.0	
cis-1,3-Dichloropropene	1.0	<	1.0	
Toluene	1.0	<	1.0	
trans-1,3-Dichloropropene	1.0	<	1.0	
1,1,2-Trichloroethane	1.0	<	1.0	
Tetrachloroethene	1.0	<	1.0	
1,3-Dichloropropane	2.0	<	2.0	
Dibromochloromethane	1.0	<	1.0	
1,2-Dibromoethane	1.0	<	1.0	

ECCS SOP: Volatile Organic Compounds by Purge and Trap-GC/MS

ND = Not Available

J = Estimated Concentration

Summary of Test Results

Project Name:	Kuhlman Electric	Date Analyzed:	09/10/04
Project Location:	Crystal Spings, Ms.	Concentration:	ug/L
Sample ID:	CSW-BD-001	Dilution Factor:	1
Date Collected:	09/07/04	Lab Sample Number:	W1027
Sample Type:	Water		

Compound	Reporting Limit		Sample Result
Chlorobenzene	1.0	<	1.0
1,1,1,2-Tetrachloroethane	1.0	<	1.0
Ethyl benzene	1.0	<	1.0
m+p-Xylene	1.0	<	1.0
o-Xylene	1.0	<	1.0
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 :		
Dibromofluoromethane	106	%
Toluene-D8	99.0	%
4-Bromofluorobenzene	96.8	%

ECCS SOP: Volatile Organic Compounds by Purge and Trap-GC/MS

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Summary of Test Results

Project Name:	Kuhlman Electric	Date Analyzed:	09/11/04
Project Location:	Crystal Spings, Ms.	Concentration:	ug/L
Sample ID:	CSW-WA5-001	Dilution Factor:	1
Date Collected:	09/07/04	Lab Sample Number:	W1028
Sample Type:	Water		

Compound	Reporting Limit		Sample Result	
Dichlorodifluoromethane	1.0	<	1.0	
Chloromethane	1.0	<	1.0	
Vinyl Chloride	1.0	<	1.0	
Bromomethane	1.0	<	1.0	
Chloroethane	1.0	<	1.0	
Trichlorofluoromethane	NA		NA	
1,1-Dichloroethene	1.0		0.41	J
Methylene chloride	1.0	<	1.0	
trans-1,2-Dichloroethene	1.0		0.30	J
1,1-Dichloroethane	1.0	<	1.0	
cis-1,2-Dichloroethene	1.0	<	1.0	
2,2-Dichloropropane	1.0	<	1.0	
Bromochloromethane	1.0	<	1.0	
Chloroform	1.0		0.12	J
1,1,1-Trichloroethane	1.0	<	1.0	
1,1-Dichloropropene	1.0	<	1.0	
Carbon tetrachloride	1.0	<	1.0	
Benzene	1.0	<	1.0	
1,2-Dichloroethane	1.0	<	1.0	
Trichloroethene	1.0	<	1.0	
1,2-Dichloropropane	1.0	<	1.0	
Dibromomethane	1.0	<	1.0	
Bromodichloromethane	1.0	<	1.0	
cis-1,3-Dichloropropene	1.0	<	1.0	
Toluene	1.0	<	1.0	
trans-1,3-Dichloropropene	1.0	<	1.0	
1,1,2-Trichloroethane	1.0	<	1.0	
Tetrachloroethene	1.0	<	1.0	
1,3-Dichloropropane	2.0	<	2.0	
Dibromochloromethane	1.0	<	1.0	
1,2-Dibromoethane	1.0	<	1.0	

ECCS SOP: Volatile Organic Compounds by Purge and Trap-GC/MS

ND = Not Available

J = Estimated Concentration

Summary of Test Results

Project Name:	Kuhlman Electric	Date Analyzed:	09/11/04
Project Location:	Crystal Spings, Ms.	Concentration:	ug/L
Sample ID:	CSW-WA5-001	Dilution Factor:	1
Date Collected:	09/07/04	Lab Sample Number:	W1028
Sample Type:	Water		

Compound	Reporting Limit	Sample Result
Chlorobenzene	1.0	< 1.0
1,1,1,2-Tetrachloroethane	1.0	< 1.0
Ethyl benzene	1.0	< 1.0
m+p-Xylene	1.0	< 1.0
o-Xylene	1.0	< 1.0
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 :		
Dibromofluoromethane	105	%
Toluene-D8	98.8	%
4-Bromofluorobenzene	92.6	%

ECCS SOP: Volatile Organic Compounds by Purge and Trap-GC/MS

ND = Not Available

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Summary of Test Results

Project Name:	Kuhlman Electric	Date Analyzed:	09/11/04
Project Location:	Crystal Spings, Ms.	Concentration:	ug/L
Sample ID:	CSW-WA6-001	Dilution Factor:	1
Date Collected:	09/07/04	Lab Sample Number:	W1029
Sample Type:	Water		

Compound	Reporting Limit		Sample Result	
Dichlorodifluoromethane	1.0		0.66	J
Chloromethane	1.0		0.78	J
Vinyl Chloride	1.0		0.44	J
Bromomethane	1.0	<	1.0	
Chloroethane	1.0	<	1.0	
Trichlorofluoromethane	NA		NA	
1,1-Dichloroethene	1.0		0.61	J
Methylene chloride	1.0	<	1.0	
trans-1,2-Dichloroethene	1.0		0.39	J
1,1-Dichloroethane	1.0	<	1.0	
cis-1,2-Dichloroethene	1.0	<	1.0	
2,2-Dichloropropane	1.0	<	1.0	
Bromochloromethane	1.0	<	1.0	
Chloroform	1.0	<	1.0	
1,1,1-Trichloroethane	1.0	<	1.0	
1,1-Dichloropropene	1.0	<	1.0	
Carbon tetrachloride	1.0	<	1.0	
Benzene	1.0	<	1.0	
1,2-Dichloroethane	1.0	<	1.0	
Trichloroethene	1.0		0.30	J
1,2-Dichloropropane	1.0	<	1.0	
Dibromomethane	1.0	<	1.0	
Bromodichloromethane	1.0	<	1.0	
cis-1,3-Dichloropropene	1.0	<	1.0	
Toluene	1.0		0.25	J
trans-1,3-Dichloropropene	1.0	<	1.0	
1,1,2-Trichloroethane	1.0	<	1.0	
Tetrachloroethene	1.0		0.44	J
1,3-Dichloropropane	2.0	<	2.0	
Dibromochloromethane	1.0	<	1.0	
1,2-Dibromoethane	1.0	<	1.0	

ECCS SOP: Volatile Organic Compounds by Purge and Trap-GC/MS

ND = Not Available

J = Estimated Concentration

Summary of Test Results

Project Name:	Kuhlman Electric	Date Analyzed:	09/11/04
Project Location:	Crystal Spings, Ms.	Concentration:	ug/L
Sample ID:	CSW-WA6-001	Dilution Factor:	1
Date Collected:	09/07/04	Lab Sample Number:	W1029
Sample Type:	Water		

Compound	Reporting Limit		Sample Result	
Chlorobenzene	1.0	<	1.0	
1,1,1,2-Tetrachloroethane	1.0	<	1.0	
Ethyl benzene	1.0		0.21	J
m+p-Xylene	1.0		0.15	J
o-Xylene	1.0		0.20	J
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		0.18	J
p-Isopropyltoluene	1.0		0.22	J
1,4-Dichlorobenzene	1.0		0.13	J
n-Butylbenzene	1.0	<	1.0	
1,2-Dichlorobenzene	1.0		0.24	J
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 :		
Dibromofluoromethane	103	%
Toluene-D8	101	%
4-Bromofluorobenzene	101	%

ECCS SOP: Volatile Organic Compounds by Purge and Trap-GC/MS

ND = Not Available

J = Estimated Concentration

Summary of Test Results

Project Name:	Kuhlman Electric	Date Analyzed:	09/10/04
Project Location:	Crystal Spings, Ms.	Concentration:	ug/L
Sample ID:	Trip Blank	Dilution Factor:	1
Date Collected:	-----	Lab Sample Number:	W1029A
Sample Type:	Water		

Compound	Reporting Limit		Sample Result
Dichlorodifluoromethane	1.0	<	1.0
Chloromethane	1.0	<	1.0
Vinyl Chloride	1.0	<	1.0
Bromomethane	1.0	<	1.0
Chloroethane	1.0	<	1.0
Trichlorofluoromethane	NA		NA
1,1-Dichloroethene	1.0	<	1.0
Methylene chloride	1.0	<	1.0
trans-1,2-Dichloroethene	1.0	<	1.0
1,1-Dichloroethane	1.0	<	1.0
cis-1,2-Dichloroethene	1.0	<	1.0
2,2-Dichloropropane	1.0	<	1.0
Bromochloromethane	1.0	<	1.0
Chloroform	1.0	<	1.0
1,1,1-Trichloroethane	1.0	<	1.0
1,1-Dichloropropene	1.0	<	1.0
Carbon tetrachloride	1.0	<	1.0
Benzene	1.0	<	1.0
1,2-Dichloroethane	1.0	<	1.0
Trichloroethene	1.0	<	1.0
1,2-Dichloropropane	1.0	<	1.0
Dibromomethane	1.0	<	1.0
Bromodichloromethane	1.0	<	1.0
cis-1,3-Dichloropropene	1.0	<	1.0
Toluene	1.0	<	1.0
trans-1,3-Dichloropropene	1.0	<	1.0
1,1,2-Trichloroethane	1.0	<	1.0
Tetrachloroethene	1.0	<	1.0
1,3-Dichloropropane	2.0	<	2.0
Dibromochloromethane	1.0	<	1.0
1,2-Dibromoethane	1.0	<	1.0

ECCS SOP: Volatile Organic Compounds by Purge and Trap-GC/MS

ND = Not Available

J = Estimated Concentration

Summary of Test Results

Project Name:	Kuhlman Electric	Date Analyzed:	09/10/04
Project Location:	Crystal Spings, Ms.	Concentration:	ug/L
Sample ID:	Trip Blank	Dilution Factor:	1
Date Collected:	-----	Lab Sample Number:	W1029A
Sample Type:	Water		

Compound	Reporting Limit		Sample Result
Chlorobenzene	1.0	<	1.0
1,1,1,2-Tetrachloroethane	1.0	<	1.0
Ethyl benzene	1.0	<	1.0
m+p-Xylene	1.0	<	1.0
o-Xylene	1.0	<	1.0
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 :		
Dibromofluoromethane	96.6	%
Toluene-D8	98.6	%
4-Bromofluorobenzene	91.6	%

ECCS SOP: Volatile Organic Compounds by Purge and Trap-GC/MS

ND = Not Available

J = Estimated Concentration

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

MISC
9/7/04

No. 008793

Page 1 of 1

Project Number:	Mail Report To:	Turn Around (circle one) Normal Rush
Project Name: KUHLMAN ELECTRIC	Company: MARTIN - SLAGLE	Report Due:
Project Location: CRYSTAL SPRINGS	Address:	Invoice To:
Sampled By (Print): Chuck Ruel		Company:
		Address:
		P.O. No.: Quote No.:

Sample Description	Collection Date	Collection Time	Matrix	Total Bottles	Preserv*	Analysis Requested	Comments	Laboratory Number
CSW-WA1-001	9/7/04	0922	W	2/1	B/A	P2CO PUP2+CSi		W1021
CSW-FB-001		0955		3/1	B/A			W1022
CSW-WA2-001		1045		3/2	B/A			W1023
CSW-WA3-001		1100		3/2	B/A			W1024
CSW-WA4-001		1115		3/2	B/A			W1025
CSW-FB-002		1125		3/2	B/A			W1026
CSW-BD-001		—		2/2	B/A			W1027
CSW-WA5-001		1205		3/2	B/A			W1028
CSW-WAC-001		1220		3/2	B/A			W1029
TRIP-BLANK	—	—	W	2	B			W1029A

*Preservation Code
A=None B=HCL C=H2SO4
D=HNO3 E=EnCore F=Methanol
G=NaOH O=Other(Indicate)

Relinquished By: Chuck Ruel	Date/Time: 9/7/04 1500	Received By:	Date/Time: 9/7/04 1500
Relinquished By:	Date/Time:	Received By:	Date/Time:

Custody Seal: Present/Absent Intact/Not Intact Seal #'s

Shipped Via:

Receipt Temp:
Temp Blank Y N

WHITE - REPORT COPY YELLOW - LABORATORY COPY PINK - SAMPLER/SUBMITTER

Appendix B

FEDEX shipping label for Paradigm Labs

FedEx Express **USA Airbill**

FedEx Tracking Number: 8452 9227 4218

0215 — Sender's Copy

From *Please print and press hard.*

Date: 9/7/04 — Sender's FedEx Account Number:

Sender's Name: Chuck Peel — Phone: (601) 856-2727

Company: Peel Consulting

Address: 140 Chapel Lane — Dept./Floor/Suite/Room:

City: Madison — State: MS — ZIP: 39110

Your Internal Billing Reference (First 24 characters will appear on invoice.): MARTIN & SLACK (OPTIONAL)

To

Recipient's Name: SAMPLE CUSTODIAN — Phone: (910) 350-1903

Company: PARADIGM ANALYTICAL LABS

Address: 5500 BUSINESS DR — To "HOLD" at FedEx location, print FedEx address. We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address: — Dept./Floor/Suite/Room:

City: WILMINGTON — State: NC — ZIP: 28405-8446

4a Express Package Service — Packages up to 150 lbs. Delivery commitment may be later in some areas.

- [X] FedEx Priority Overnight — Next business morning
- [ ] FedEx Standard Overnight — Next business afternoon
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations
- [ ] FedEx 2Day — Second business day
- [ ] FedEx Express Saver — Third business day

FedEx Envelope rate not available. Minimum charge: One-pound rate

4b Express Freight Service — Packages over 150 lbs. Delivery commitment may be later in some areas.

- [ ] FedEx 1Day Freight* — Next business day
- [ ] FedEx 2Day Freight — Second business day
- [ ] FedEx 3Day Freight — Third business day

* Call for Confirmation:

5 Packaging — * Declared value limit $500

- [ ] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak
- [X] Other

6 Special Handling — Include FedEx address in Section 3.

- [ ] SATURDAY Delivery — Available ONLY for FedEx Priority Overnight, FedEx 2Day, FedEx 1Day Freight, and FedEx 2Day Freight to select ZIP codes
- [ ] HOLD Weekday at FedEx Location — NOT Available for FedEx First Overnight
- [ ] HOLD Saturday at FedEx Location — Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations

Does this shipment contain dangerous goods? One box must be checked.

- [X] No
- [ ] Yes — As per attached Shipper's Declaration
- [ ] Yes — Shipper's Declaration not required
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous Goods (including Dry Ice) cannot be shipped in FedEx packaging. [ ] Cargo Aircraft Only

7 Payment *Bill to:* — Enter FedEx Acct. No. or Credit Card No. below.

- [ ] Sender — Acct. No. in Section 1 will be billed.
- [X] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

FedEx Acct. No. / Credit Card No.: 1811-4189-1 — Exp. Date:

Total Packages: — Total Weight: — Total Declared Value†: $ .00

†Our liability is limited to $100 unless you declare a higher value. See back for details. FedEx Use Only

8 Release Signature *Sign to authorize delivery without obtaining signature.*

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

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Try online shipping at fedex.com

By using this Airbill you agree to the service conditions on the back of this Airbill and in our current Service Guide, including terms that limit our liability.

Questions? Visit our Web site at fedex.com or call 1.800.Go.FedEx® 800.463.3339.

0271890775

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FedEx Express **USA Airbill**

FedEx Tracking Number: 8452 9227 4229

MUR43

0215 — Sender's Copy

From *Please print and press hard.*

Date: 9/7/04 — Sender's FedEx Account Number:

Sender's Name: Chuck Peel — Phone: (601) 856-2727

Company: Peel Consulting

Address: 140 Chapel Lane — Dept./Floor/Suite/Room:

City: Madison — State: MS — ZIP: 39110

Your Internal Billing Reference (First 24 characters will appear on invoice.): MARTIN & SLACK (OPTIONAL)

To

Recipient's Name: SAMPLE CUSTODIAN — Phone: (910) 350-1903

Company: PARADIGM ANALYTICAL LABS

Address: 5500 BUSINESS DR — To "HOLD" at FedEx location, print FedEx address. We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address: — Dept./Floor/Suite/Room:

City: WILMINGTON — State: NC — ZIP: 28405-8446

4a Express Package Service — Packages up to 150 lbs. Delivery commitment may be later in some areas.

- [X] FedEx Priority Overnight — Next business morning
- [ ] FedEx Standard Overnight — Next business afternoon
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations
- [ ] FedEx 2Day — Second business day
- [ ] FedEx Express Saver — Third business day

FedEx Envelope rate not available. Minimum charge: One-pound rate

4b Express Freight Service — Packages over 150 lbs. Delivery commitment may be later in some areas.

- [ ] FedEx 1Day Freight* — Next business day
- [ ] FedEx 2Day Freight — Second business day
- [ ] FedEx 3Day Freight — Third business day

* Call for Confirmation:

5 Packaging — * Declared value limit $500

- [ ] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak
- [X] Other

6 Special Handling — Include FedEx address in Section 3.

- [ ] SATURDAY Delivery — Available ONLY for FedEx Priority Overnight, FedEx 2Day, FedEx 1Day Freight, and FedEx 2Day Freight to select ZIP codes
- [ ] HOLD Weekday at FedEx Location — NOT Available for FedEx First Overnight
- [ ] HOLD Saturday at FedEx Location — Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations

Does this shipment contain dangerous goods? One box must be checked.

- [X] No
- [ ] Yes — As per attached Shipper's Declaration
- [ ] Yes — Shipper's Declaration not required
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous Goods (including Dry Ice) cannot be shipped in FedEx packaging. [ ] Cargo Aircraft Only

7 Payment *Bill to:* — Enter FedEx Acct. No. or Credit Card No. below.

- [ ] Sender — Acct. No. in Section 1 will be billed.
- [X] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

FedEx Acct. No. / Credit Card No.: 1811-4189-1 — Exp. Date:

Total Packages: — Total Weight: — Total Declared Value†: $ .00

†Our liability is limited to $100 unless you declare a higher value. See back for details. FedEx Use Only

8 Release Signature *Sign to authorize delivery without obtaining signature.*

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

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Try online shipping at fedex.com

By using this Airbill you agree to the service conditions on the back of this Airbill and in our current Service Guide, including terms that limit our liability.

Questions? Visit our Web site at fedex.com or call 1.800.Go.FedEx® 800.463.3339.

0271890775

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FedEx Express **USA Airbill** FedEx Tracking Number **840423369925**

7038271000/0024780644/4

Form ID No. **0200**

From *Please print and press hard.*

Date 9/7/04 Sender's FedEx Account Number

Sender's Name Chuck Peel Phone (601) 898-2927

Company Peel Consulting

Address 140 Chapel Lane

Dept/Floor/Suite/Room:

City Madison State MS ZIP 39110

Your Internal Billing Reference First 24 characters will appear on invoice. MARTIN-SLAGLE

To

Recipient's Name SAMPLE CUSTODIAN Phone (910 350-1903

Company PARADIGM ANALYTICAL LABS

Address

To "HOLD" at FedEx location, print FedEx address. We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address 5500 BUSINESS DR

Dept/Floor/Suite/Room

City WILMINGTON State NC ZIP 28405

By using this Airbill you agree to the service conditions on the back of this Airbill and in our current Service Guide, including terms that limit our liability.

Questions? Visit our Web site at fedex.com
or call 1.800.Go.FedEx® 800.463.3339.

4a Express Package Service — *Packages up to 150 lbs.* Delivery commitment may be later in some areas.

- [X] FedEx Priority Overnight — Next business morning
- [ ] FedEx Standard Overnight — Next business afternoon
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations
- [ ] FedEx 2Day — Second business day
- [ ] FedEx Express Saver — Third business day

FedEx Envelope rate not available. Minimum charge: One-pound rate

4b Express Freight Service — *Packages over 150 lbs.* Delivery commitment may be later in some areas.

- [ ] FedEx 1Day Freight* — Next business day
- [ ] FedEx 2Day Freight — Second business day
- [ ] FedEx 3Day Freight — Third business day

* Call for Confirmation:

5 Packaging * Declared value limit $500

- [ ] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak
- [X] Other

6 Special Handling Include FedEx address in Section 3 *

- [ ] **SATURDAY Delivery** — Available ONLY for FedEx Priority Overnight and FedEx 2Day to select ZIP codes
- [ ] **HOLD Weekday** at FedEx Location — NOT Available for FedEx First Overnight
- [ ] **HOLD Saturday** at FedEx Location — Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations

Does this shipment contain dangerous goods? One box must be checked.

- [X] No
- [ ] Yes — As per attached Shipper's Declaration
- [ ] Yes — Shipper's Declaration not required
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous Goods (including Dry Ice) cannot be shipped in FedEx packaging.

- [ ] Cargo Aircraft Only

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below.

- [ ] Sender — Acct. No. in Section 1 will be billed
- [X] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

FedEx Acct. No. / Credit Card No. 1411-4107-1 Exp. Date

Total Packages	Total Weight	Total Declared Value†	
		$ .00	FedEx Use Only

†Our liability is limited to $100 unless you declare a higher value. See back for details.

8 Release Signature *Sign to authorize delivery without obtaining signature.*

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

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PARADIGM ANALYTICAL LABORATORIES, INC.
5500 Business Drive, Wilmington, NC 28405
Phone: (910)-350-1903 FAX: (910)-350-1557

Chain-of Custody Record & Analytical Request

COC# 44029

Page 1 of 1

Client: MARTIN + SLAGLE **Project ID:** KUHLMAN ELECTRIC **Date:** 9/7/04 **Report To:** SAME

Address: _____ **Contact:** ROBERT MARTIN **Turnaround:** STD

Address: BLACK MOUNTAIN NC **Phone:** _____ **Job Number:** _____

Quote #: _____ **Fax:** _____ **P.O. Number:** _____ **Invoice To:** SAME

Sample ID	Date	Time	Matrix	Preservatives				Analyses									Comments: Please specify any special reporting requirements
				HCL				8260B	#Bottles								MOBIL LAB #
CSW-WA1-001	9/7/04	0922	W	X				X	3								W1021
CSW-FB-001	9/7/04	0955	W	X				X	3								W1022
CSW-WA2-001	9/7/04	1045	W	X				X	3								W1023
CSW-WA3-001	9/7/04	1100	W	X				X	3								W1024
CSW-WA4-001	9/7/04	1115	W	X				X	3								W1025
CSW-FB-002	9/7/04	1125	W	X				X	3								W1026
CSW-BD-001	9/7/04	—	W	X				X	2								W1027
CSW-WA5-001	9/7/04	1205	W	X				X	3								W102F
CSW-WA6-001	9/7/04	1320	W	X				X	3								W1029
TRIP BLANK	—		W	X				X	2								—

Relinquished By	Date	Time	Received By	Date	Time	Temperature	State Certification Requested
	9/7/04	1500					NC ____ SC ____ Other ____
							SEE REVERSE FOR TERMS AND CONDITIONS

CLIENT COPY

Appendix D

QC Data

Summary of Test Results

Project Name:	Kuhlman Electric	Date Analyzed:	09/10/04
Project Location:	Crystal Springs, MS	Concentration:	ug/L
Sample ID:	Blank Water	Dilution Factor:	1
Date Collected:	-		
Sample Type:	Water		

	Reporting Limit		Sample Result
Dichlorodifluoromethane	1.0	<	1.0
Chloromethane	1.0	<	1.0
Vinyl Chloride	1.0	<	1.0
Bromomethane	1.0	<	1.0
Chloroethane	1.0	<	1.0
1,1-Dichloroethene	1.0	<	1.0
Methylene Chloride	1.0	<	1.0
trans-1,2-Dichloroethene	1.0	<	1.0
1,1-Dichloroethane	1.0	<	1.0
cis-1,2-Dichloroethene	1.0	<	1.0
2,2-Dichloropropane	1.0	<	1.0
Bromochloromethane	1.0	<	1.0
Chloroform	1.0	<	1.0
1,1,1-Trichloroethane	1.0	<	1.0
1,1-Dichloropropene	1.0	<	1.0
Carbon Tetrachloride	1.0	<	1.0
Benzene	1.0	<	1.0
1,2-Dichloroethane	1.0	<	1.0
Trichloroethene	1.0	<	1.0
1,2-Dichloropropane	1.0	<	1.0
Dibromomethane	1.0	<	1.0
Bromodichloromethane	1.0	<	1.0
cis-1,2-Dichloropropene	1.0	<	1.0
Toluene	1.0	<	1.0
trans-1,2-Dichloropropene	1.0	<	1.0
1,1,2-Trichloroethane	1.0	<	1.0
Tetrachloroethene	1.0	<	1.0
1,3-Dichloropropane	2.0	<	2.0
Dibromochloromethane	1.0	<	1.0
1,2-Dibromomethane	1.0	<	1.0
Chlorobenzene	1.0	<	1.0

Summary of Test Results

Project Name:	Kuhlman Electric	Date Analyzed:	09/10/04
Project Location:	Crystal Springs, MS	Concentration:	ug/L
Sample ID:	Blank Water	Dilution Factor:	1
Date Collected:	-		
Sample Type:	Water		

	Reporting Limit		Sample Result
1,1,1,2-Tetrachloroethane	1.0	<	1.0
Ethyl Benzene	1.0	<	1.0
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:	
Dibromofluoromethane	105%
Toluene-D8	98.9%
4-Bromofluorobenzene	98.2%

ECCS SOP: Volatile Organic Compounds by Purge and Trap- GC/MS

Summary of Test Results

Matrix Spike/Matrix Spike Duplicate Results Water

Sample Number: W1023
Date Analyzed: 09/11/04

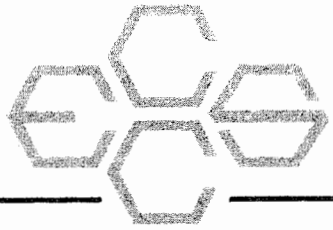
Compound	Matrix Spike Percent Recovery	Matrix Spike Dup Percent Recovery	% RPD (20% Limit)	QC Limits MS/MSD
Dichlorodifluoromethane	84.0	84.8	-0.95	60 - 120
Chloromethane	108	109	-0.92	60 - 120
Vinyl Chloride	99.0	101	-2.0	60 - 120
Bromomethane	120	118	1.7	60 - 120
Chloroethane	113	111	1.8	60 - 120
1,1-Dichloroethene	101	105	-3.9	60 - 120
Methylene Chloride	105	102	2.9	60 - 120
trans-1,2-Dichloroethene	104	106	-1.9	60 - 120
1,1-Dichloroethane	96.6	86.4	11.1	60 - 120
cis-1,2-Dichloroethene	91.4	92.8	-1.5	60 - 120
2,2-Dichloropropane	99.6	95.6	4.1	60 - 120
Bromochloromethane	82.0	80.6	1.7	60 - 120
Chloroform	99.0	96.6	2.5	60 - 120
1,1,1-Trichloroethane	102	95.0	7.1	60 - 120
1,1-Dichloropropene	92.4	96.4	-4.2	60 - 120
Carbon Tetrachloride	95.6	93.8	1.9	60 - 120
Benzene	90.8	92.4	-1.7	60 - 120
1,2-Dichloroethane	94.2	92.2	2.1	60 - 120
Trichloroethene	91.4	93.0	-1.7	60 - 120
1,2-Dichloropropane	91.0	91.0	0.0	60 - 120
Dibromomethane	76.4	74.6	2.4	60 - 120
Bromodichloromethane	60.8	67.8	-10.9	60 - 120
cis-1,2-Dichloropropene	85.6	87.8	-2.5	60 - 120
Toluene	90.4	94.0	-3.9	60 - 120
trans-1,2-Dichloropropene	78.8	82.8	-5.0	60 - 120
1,1,2-Trichloroethane	74.2	79.2	-6.5	60 - 120
Tetrachloroethene	86.4	91.8	-6.1	60 - 120
1,3-Dichloropropane	76.0	79.8	-4.9	60 - 120
Dibromochloromethane	71.2	75.6	-6.0	60 - 120
1,2-Dibromomethane	72.6	75.2	-3.5	60 - 120
Chlorobenzene	85.4	94.8	-10.4	60 - 120
1,1,1,2-Tetrachloroethane	86.0	90.6	-5.2	60 - 120
Ethyl Benzene	92.6	95.0	-2.6	60 - 120

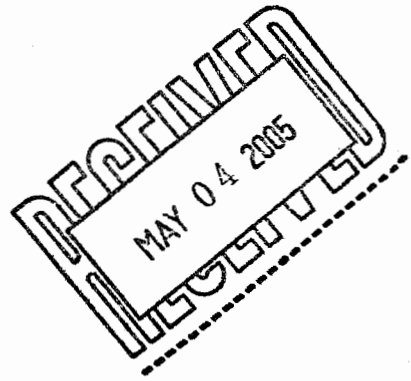
Summary of Test Results

Matrix Spike/Matrix Spike Duplicate Results Water

Sample Number: W1023
Date Analyzed: 09/11/04

Compound	Matrix Spike Percent Recovery	Matrix Spike Dup Percent Recovery	% RPD (20% Limit)	QC Limits MS/MSD
m+p Xylene	93.2	96.0	-3.0	60 - 120
o-Xylene	92.4	93.4	-1.1	60 - 120
Styrene	82.8	86.4	-4.3	60 - 120
Bromoform	63.4	67.0	-5.5	60 - 120
Isopropylbenzene	95.2	97.8	-2.7	60 - 120
1,1,2,2-Tetrachloroethane	68.2	71.4	-4.6	60 - 120
Bromobenzene	83.4	89.8	-7.4	60 - 120
1,2,3-Trichloropropane	70.8	73.2	-3.3	60 - 120
n-Propylbenzene	95.8	97.2	-1.5	60 - 120
2-Chlorotoluene	95.8	97.2	-1.5	60 - 120
1,3,5-Trimethylbenzene	98.0	95.2	2.9	60 - 120
4-Chlorotoluene	94.8	96.2	-1.5	60 - 120
tert-Butylbenzene	96.8	95.6	1.2	60 - 120
1,2,4-Trimethylbenzene	93.0	94.2	-1.3	60 - 120
sec-Butylbenzene	100	97.2	2.8	60 - 120
1,3-Dichlorobenzene	88.0	92.6	-5.1	60 - 120
p-Isopropyltoluene	100	100	0.0	60 - 120
1,4-Dichlorobenzene	87.8	92.2	-4.9	60 - 120
n-Butylbenzene	108	108	0.0	60 - 120
1,2-Dichlorobenzene	86.8	88.4	-1.8	60 - 120
1,2-Dibromo-3-Chloropropane	69.4	62.2	10.9	60 - 120
1,3,5-Trichlorobenzene	87.0	97.6	-11.5	60 - 120
1,2,4-Trichlorobenzene	89.0	90.8	-2.0	60 - 120
Hexachlorobutadiene	103	96.4	6.6	60 - 120
Naphthalene	63.6	72.6	-13.2	60 - 120
1,2,3-Trichlorobenzene	80.0	88.0	-9.5	60 - 120
Surrogates:				
Dibromofluoromethane	101	97.8	3.2	60 - 140
Toluene-D8	99.0	100	-1.0	60 - 140
4-Bromofluorobenzene	102	104	-1.9	60 - 140





April 18, 2005

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

Dear Mr. Martin,

Enclosed is the Technical Memorandum for work completed at the former Borg Warner and current Kuhlman Electric facility in Crystal Springs, Mississippi during the month of September. If you have any questions concerning this information, please give me a call.

Sincerely,

for Richard Johnson

Enclosure

Environmental Chemistry Consulting Services, Inc.
2525 Advance Road • Madison, WI 53718 • Phone (608) 221-8700 • FAX (608) 221-4889

Technical Memorandum

Borg Warner / Kuhlman Electric

Crystal Springs, Mississippi

TECHNICAL MEMORANDUM

April 18, 2005

To: Robert Martin
Martin Slagle Inc.

From: Richard Johnson
ECCS, Inc.

Re: Field Analytical Methods – QC Summary
Borg Warner – Kuhlman Electric Facility
Crystal Springs, Mississippi

INTRODUCTION

This Technical Memorandum provides documentation of the field analytical test methods used to analyze CSW samples collected during September 2004 at an accelerated site investigation episode around the former Borg Warner and current Kuhlman Electric facility in Crystal Springs, Mississippi. Water samples were analyzed for polychlorinated biphenyls (PCBs) and chlorinated benzenes by gas chromatography (GC) in accordance with ECCS's Polychlorinated Biphenyl (PCB) Mini Extraction Screening Procedure. A summary of test results is provided in Table 1. A summary of method blanks, laboratory control samples 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

The PCB mini-extraction procedure is based on the existing EPA SW846 methods 8082/8141. The procedure incorporates all the quality control rigors of the full 8082/8141 methods including quantification based on 6-point calibration with continuing calibration verification, surrogate method performance monitoring, method blanks, laboratory control samples (LCS), and matrix spike/matrix spike (MS/MSD) duplicate samples. As such, you should consider these test results as comparable to what you would get from a fixed-based laboratory using the more-widely accepted extraction procedure.

The primary project objective of the sampling and testing episode was to delineate the PCB contamination at and around the site using the accelerated site characterization approach. The mobile laboratory was required to provide data as quickly as possible to keep the accelerated site investigation process on track while trying to maintain a goal of level three data quality.

CASE NARRATIVE

During the episode, all samples collected were analyzed. To maintain rapid turnaround and to meet the project objective, three GCs were operated on a nearly continuous basis.

Quality control including proper calibration, continuing calibration verification, surrogates, method blanks, laboratory control samples and matrix spike/matrix spike duplicate samples was performed at the method-specified intervals. Overall quality of the data is very good. The following quality related issues should be noted:

1. All surrogate recoveries were within acceptable ranges.

2. All LCS recoveries were within acceptable ranges. See Table 2.

3. All MS/MSD recoveries were within acceptable ranges. Percent repeatability was also within acceptable ranges. See Table 2.

METHOD SUMMARY

This method employs a mini-extraction procedure and gas chromatography analysis for the detection of PCBs and chlorinated benzenes. Reporting limits are provided in the results Tables. Four grams of sample are dried with anhydrous sodium sulfate and extracted with eight mLs of 80/20 iso-octane/acetone. The extract is then analyzed by Gas Chromatography-Electron Capture Detector (GC-ECD).

Procedure

1. Standards Preparation - Primary standards are prepared from a solution purchased from various vendors at Certified concentrations. Stock standards are prepared in suitable solvents and stored in a freezer when not in use. Secondary standards are prepared in 80/20 iso-octane/acetone and stored in a freezer when not in use. Standard curve mixes for this project was prepared at six concentrations: PCBs – 0.05, 0.10, 0.20, 0.50, 1.0 and 2.0 ug/m; chlorinated benzenes – 0.005, 0.01, 0.02, 0.05, 0.10 and 0.20 ug/ml.

2. WATER Samples: 200 grams of water was weighed into a clean jar containing 50 grams of sodium chloride. The samples were spiked with a surrogate in addition the LCS/MS/MSD were spiked with PCB's and chlorinated benzenes. Added 10 ml of isooctane to each and shake 3 times for 2 minutes each time. Samples were allowed to settle for approximately 5 minutes between each shake. Isooctane was decanted into a scintillation vial and then an aliquot was transferred to an autosampler vial. Then extracts were injected into a GC-ECD.

3. GC-ECD Analysis - A sample aliquot is injected into an HP5890 GC with an ECD equipped with an HP ChemStation for data processing. PCBs were identified by matching retention times of standards to the same retention time in the sample. Regression analysis was performed on each of the selected peak's height verses concentration of the standard using a LN/LN transformed linear regression. For PCBs nine peaks were selected for quantification. The ug/mL value for each peak was added together and divided by the number of peaks selected to obtain the total PCB ug/mL result. If interference occurred at any of the peaks, these peaks were not included in the total, and the divisor was reduced accordingly.

4. Quality Control - Quality control consisted of the following items:
   - Continuing calibration standards analyzed every ten samples or less and at the end of a run.
   - Blank and LCS samples analyzed every twenty sample or less with a minimum of one per day.
   - MS/MSD samples analyzed every twenty samples or less with a minimum of one per day.
   - Information is documented in logbook 45 and September run sheets.

5. Instrument Conditions - Two HP5890 gas chromatographs were equipped with RTX-35 capillary columns. Each system had a Leap Technologies A200S auto-sampler and an HP ChemStation for data handling.

Table 1

Sample Results – September

Ti

Kuhlman Electric

Crystal Springs, Mississippi

Chlorinated Benzenes and PCB Concentrations as Aroclor 1260 Detected in ug/L

						Field Laboratory									
Field Lab Sample ID	Sample ID	Sample Depth	Date Collected	Time Collected	Date Analyzed	1,3,5-Trichloro-benzene	1,2,4-Trichloro-benzene	1,2,3-Trichloro-benzene	1,2,3,5- & 1,2,4,5-Tetrachloro-benzene	1,2,3,4-Tetrachloro-benzene	Penta-chloro-benzene	Hexa-chloro-benzene	PCB as 1260	Surrogate TCMX(%)	Surrogate DCBP(%)
W1021	CSW-WA1-001	-	7-Sep-04	9:22	8-Sep-04	< 0.025	< 0.025	< 0.025	< 0.050	< 0.025	< 0.025	< 0.025	< 0.025	88.3	106
W1022	CSW-FB-001	-	7-Sep-04	9:55	8-Sep-04	< 0.025	< 0.025	< 0.025	< 0.050	< 0.025	< 0.025	< 0.025	< 0.025	89.1	118
W1023	CSW-WA2-001	-	7-Sep-04	10:45	8-Sep-04	< 0.025	< 0.025	< 0.025	< 0.050	< 0.025	< 0.025	< 0.025	< 0.025	87.5	104
W1024	CSW-WA3-001	-	7-Sep-04	11:00	8-Sep-04	< 0.025	< 0.025	< 0.025	< 0.050	< 0.025	< 0.025	< 0.025	< 0.025	84.0	106
W1025	CSW-WA4-001	-	7-Sep-04	11:15	8-Sep-04	< 0.025	< 0.025	< 0.025	< 0.050	< 0.025	< 0.025	< 0.025	< 0.025	98.7	114
W1026	CSW-FB-002	-	7-Sep-04	11:25	8-Sep-04	< 0.025	< 0.025	< 0.025	< 0.050	< 0.025	< 0.025	< 0.025	< 0.025	90.3	109
W1027	CSW-BD-001	-	7-Sep-04	-	8-Sep-04	< 0.025	< 0.025	< 0.025	< 0.050	< 0.025	< 0.025	< 0.025	< 0.025	96.8	119
W1028	CSW-WA5-001	-	7-Sep-04	12:05	8-Sep-04	< 0.025	< 0.025	< 0.025	< 0.050	< 0.025	< 0.025	< 0.025	< 0.025	105	119
W1029	CSW-WA6-001	-	7-Sep-04	13:20	8-Sep-04	< 0.025	< 0.025	< 0.025	< 0.050	< 0.025	< 0.025	< 0.025	< 0.025	102	114

Table 2

QC Samples - September

Table 2
QC Results

Lab # associated with qc samples: W1021 through W1029

	Matrix Spike W1025		Matrix Spike Duplicate W1025			Blank	LCS
Date Analyzed:	9/8/04		9/8/04			9/8/04	9/8/04
Compound	% Rec		% Rec		% RPD	ug/L	% Rec
1,3,5-Trichlorobenzene	96.1		95.0		1%	< 0.025	78.8
1,2,4-Trichlorobenzene	104		107		-3%	< 0.025	99.5
1,2,3-Trichlorobenzene	101		107		-6%	< 0.025	98.0
1,2,3,5- & 1,2,4,5-Tetrachlorobenzene	98.4		104		-6%	< 0.050	100
1,2,3,4-Tetrachlorobenzene	136		146		-7%	< 0.025	99.8
Pentachlorobenzene	103		109		-6%	< 0.025	102
Hexachlorobenzene	103		108		-5%	< 0.025	102
PCB as 1260	103		110		-7%	< 0.25	109

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

MISC 9/7/04

No. 008793 *

Page 1 of 1

Project Number:	Mail Report To:
Project Name: KUHLMAN ELECTRIC	Company: MARTIN - SLAGLE
Project Location: CRYSTAL SPRINGS	Address:
Sampled By (Print): Chuck Lind	

Turn Around (circle one) Normal Rush	
Report Due:	
Invoice To:	
Company:	
Address:	
P.O. No.: Quote No.:	

Sample Description	Collection Date	Collection Time	Matrix	Total Bottles	Preserv*	Analysis Requested	Comments	Laboratory Number
CSW-WA1-001	9/7/04	0922	W	2/1	B/A	8260 PUP2+CSi		W1021
CSW-FB-001		0955		3/1	B/A			W1022
CSW-WA2-001		1045		3/2	B/A			W1023
CSW-WA3-001		1100		3/2	B/A			W1024
CSW-WA4-001		1115		3/2	B/A			W1025
CSW-FB-002		1125		3/2	B/A			W1026
CSW-BD-001		—		2/2	B/A			W1027
CSW-WA5-001		1205		3/2	B/A			W1028
CSW-WA6-001		1220		3/2	B/A			W1029
TRIP-BLANK	—	—	W	2	B			W1029A

*Preservation Code

A=None B=HCL C=H2SO4

D=HNO3 E=EnCore F=Methanol

G=NaOH O=Other(Indicate)

Relinquished By: Chuck Lind	Date/Time: 9/7/04 1500	Received By:	Date/Time: 9/7/04 1500
Relinquished By:	Date/Time:	Received By:	Date/Time:

Custody Seal: Present/Absent Intact/Not Intact Seal #'s

Shipped Via:

Receipt Temp:

Temp Blank Y N

WHITE - REPORT COPY YELLOW - LABORATORY COPY PINK - SAMPLER COPY

Appendix B

FEDEX shipping label for Paradigm Labs

FedEx Express **USA Airbill**

FedEx Tracking Number: 8452 9227 4218

Sender's Copy

From Please print and press hard.

Date: 9/7/04 Sender's FedEx Account Number:

Sender's Name: Chuck Peel Phone: (601) 856-2927

Company: Peel Consulting

Address: 140 Chapel Lane Dept./Floor/Suite/Room:

City: Madison State: MS ZIP: 39110

Your Internal Billing Reference First 24 characters will appear on invoice. MARTIN & SLACK (OPTIONAL)

To

Recipient's Name: SAMPLE CUSTODIAN Phone: (910) 350-1903

Company: PARADIGM ANALYTICAL LABS

Address: 5500 BUSINESS DR

To "HOLD" at FedEx location, print FedEx address. We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address: Dept./Floor/Suite/Room:

City: WILMINGTON State: NC ZIP: 28405-8446

4a Express Package Service — Packages up to 150 lbs. Delivery commitment may be later in some areas.

- [X] FedEx Priority Overnight — Next business morning
- [ ] FedEx Standard Overnight — Next business afternoon
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations
- [ ] FedEx 2Day — Second business day
- [ ] FedEx Express Saver — Third business day

FedEx Envelope rate not available. Minimum charge: One-pound rate

4b Express Freight Service — Packages over 150 lbs. Delivery commitment may be later in some areas.

- [ ] FedEx 1Day Freight* — Next business day
- [ ] FedEx 2Day Freight — Second business day
- [ ] FedEx 3Day Freight — Third business day

* Call for Confirmation:

5 Packaging * Declared value limit $500

- [ ] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak
- [X] Other

6 Special Handling — Include FedEx address in Section 3.

- [ ] SATURDAY Delivery — Available ONLY for FedEx Priority Overnight, FedEx 2Day, FedEx 1Day Freight, and FedEx 2Day Freight to select ZIP codes
- [ ] HOLD Weekday at FedEx Location — NOT Available for FedEx First Overnight
- [ ] HOLD Saturday at FedEx Location — Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations

Does this shipment contain dangerous goods? One box must be checked.

- [X] No
- [ ] Yes — As per attached Shipper's Declaration
- [ ] Yes — Shipper's Declaration not required
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous Goods (including Dry Ice) cannot be shipped in FedEx packaging. [ ] Cargo Aircraft Only

7 Payment Bill to: Enter FedEx Acct. No. or Credit Card No. below.

- [ ] Sender — Acct. No. in Section 1 will be billed.
- [X] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

FedEx Acct. No. / Credit Card No.: 1811-4189-1 Exp. Date:

Total Packages | Total Weight | Total Declared Value† $ .00

†Our liability is limited to $100 unless you declare a higher value. See back for details. FedEx Use Only

8 Release Signature Sign to authorize delivery without obtaining signature.

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnity and hold us harmless from any resulting claims.

447

Try online shipping at fedex.com

By using this Airbill you agree to the service conditions on the back of this Airbill and in our current Service Guide, including terms that limit our liability.

Questions? Visit our Web site at fedex.com or call 1.800.Go.FedEx® 800.463.3339.

0271890775

FedEx Express **USA Airbill**

FedEx Tracking Number: 8452 9227 4229

Sender's Copy

From Please print and press hard.

Date: 9/7/04 Sender's FedEx Account Number:

Sender's Name: Chuck Peel Phone: (601) 856-2927

Company: Peel Consulting

Address: 140 Chapel Lane Dept./Floor/Suite/Room:

City: Madison State: MS ZIP: 39110

Your Internal Billing Reference First 24 characters will appear on invoice. MARTIN & SLACK (OPTIONAL)

To

Recipient's Name: SAMPLE CUSTODIAN Phone: (910) 350-1903

Company: PARADIGM ANALYTICAL LABS

Address: 5500 BUSINESS DR

To "HOLD" at FedEx location, print FedEx address. We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address: Dept./Floor/Suite/Room:

LMINGTON State: NC ZIP: 28405-8446

4a Express Package Service — Packages up to 150 lbs.

- [X] FedEx Priority Overnight
- [ ] FedEx Standard Overnight
- [ ] FedEx First Overnight
- [ ] FedEx 2Day
- [ ] FedEx Express Saver

4b Express Freight Service — Packages over 150 lbs.

- [ ] FedEx 1Day Freight*
- [ ] FedEx 2Day Freight
- [ ] FedEx 3Day Freight

5 Packaging

- [ ] FedEx Envelope*
- [ ] FedEx Pak*
- [X] Other

6 Special Handling

- [ ] SATURDAY Delivery
- [ ] HOLD Weekday at FedEx Location
- [ ] HOLD Saturday at FedEx Location

Does this shipment contain dangerous goods?

- [X] No
- [ ] Yes — As per attached Shipper's Declaration
- [ ] Yes — Shipper's Declaration not required
- [ ] Dry Ice

[ ] Cargo Aircraft Only

7 Payment Bill to:

- [ ] Sender
- [X] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

FedEx Acct. No. / Credit Card No.: 1811-4189-1

Total Packages | Total Weight | Total Declared Value† $ .00

8 Release Signature

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnity and hold us harmless from any resulting claims.

447

Try online shipping at fedex.com

By using this Airbill you agree to the service conditions on the back of this Airbill and in our current Service Guide, including terms that limit our liability.

Questions? Visit our Web site at fedex.com

0271890775

FedEx Express **USA Airbill** FedEx Tracking Number **840423369925**

/0382/1000/0024780644/4

Form ID No. 0200

From *Please print and press hard.*

Date 9/7/04 Sender's FedEx Account Number

Name Chuck Peel Phone (601) 856-2927

Company Peel Consulting

Address 140 Chapel Lane

Dept./Floor/Suite/Room

City Madison State MS ZIP 39110

Your Internal Billing Reference First 24 characters will appear on invoice. MARTIN - SLAGLE

To

Recipient's Name SAMPLE CUSTODIAN Phone (910 350-1903

Company PARADIGM ANALYTICAL LABS

Address

"HOLD" at FedEx location, print FedEx address. We cannot deliver to P.O. boxes or P.D. ZIP codes.

Address 5500 BUSINESS DR

Dept./Floor/Suite/Room

City WILMINGTON State NC ZIP 28405

By using this Airbill you agree to the service conditions on the back of this Airbill and in our current Service Guide, including terms that limit our liability.

Questions? Visit our Web site at fedex.com
or call 1.800.Go.FedEx® 800.463.3339.

4a Express Package Service *Packages up to 150 lbs.* Delivery commitment may be later in some areas.

- [X] FedEx Priority Overnight — Next business morning
- [ ] FedEx Standard Overnight — Next business afternoon
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations
- [ ] FedEx 2Day — Second business day
- [ ] FedEx Express Saver — Third business day

FedEx Envelope rate not available. Minimum charge: One-pound rate

4b Express Freight Service *Packages over 150 lbs.* Delivery commitment may be later in some areas.

- [ ] FedEx 1Day Freight* — Next business day
- [ ] FedEx 2Day Freight — Second business day
- [ ] FedEx 3Day Freight — Third business day

* Call for Confirmation:

5 Packaging * Declared value limit $500

- [ ] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak
- [X] Other

6 Special Handling Include FedEx address in Section 3.

- [ ] **SATURDAY Delivery** — Available ONLY for FedEx Priority Overnight and FedEx 2Day to select ZIP codes
- [ ] **HOLD Weekday** at FedEx Location — NOT Available for FedEx First Overnight
- [ ] **HOLD Saturday** at FedEx Location — Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations

Does this shipment contain dangerous goods? One box must be checked.

- [X] No
- [ ] Yes — As per attached Shipper's Declaration
- [ ] Yes — Shipper's Declaration not required
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous Goods (including Dry Ice) cannot be shipped in FedEx packaging.

- [ ] Cargo Aircraft Only

7 Payment *Bill to:* Enter FedEx Acct. No. or Credit Card No. below.

- [ ] Sender — Acct. No. in Section 1 will be billed.
- [X] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

FedEx Acct. No. / Credit Card No. 1811-4107-1 Exp. Date

Total Packages	Total Weight	Total Declared Value†	
		$ .00	FedEx Use Only

†Our liability is limited to $100 unless you declare a higher value. See back for details.

8 Release Signature *Sign to authorize delivery without obtaining signature.*

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

446

Rev. Date 10/01 • Part #157611 • ©1994–2001 FedEx • PRINTED IN U.S.A. WCSL 03

Appendix C

Chain of Custody Sheets for samples sent to Paradigm Labs

PARADIGM ALYTICAL LABORATORIES, INC.
5500 Business ve, Wilmington, NC 28405
Phone: (910)-350-1903 FAX: (910)-350-1557

Chain-of-Custody Record & Analytical Request

COC# 44 08

Page 1 of 1

Client: MARTIN & SLACK | Project ID: KUHLMAN ELECTRIC | Date: 9/7/04 | Report To: SAME
Address: | Contact: ROBERT MARTIN | Turnaround: |
Address: BLACK MOUNTAIN NC | Phone: | Job Number: |
Quote #: | Fax: | P.O. Number: | Invoice To: SAME

Sample ID	Date	Time	Matrix	Preservatives: None				Analyses: 8270C ①	40 ML VOAs								Comments: Please specify any special reporting requirements
																	MOBILE LAB #
CSW-WA1-001	9/7/04	0922	W	X				X	3			① See attached list and 8270					W1021
CSW-FB-001	9/7/04	0955	W	X				X	1								W1022
CSW-WA2-001	9/7/04	1045	W	X				X	2								W1023
CSW-WA3-001	9/7/04	1100	W	X				X	2								W1024
CSW-WA4-001	9/7/04	1115	W	X				X	2								W1025
CSW-FB-002	9/7/04	1125	W	X				X	2								W1026
CSW-BD-001	9/7/04	—	W	X				X	2								W1027
CSW-WA5-001	9/7/04	1205	W	X				X	2								W1028
CSW-WA6-001	9/7/04	1320	W	X				X	2								W1029

Relinquished By	Date	Time	Received By	Date	Time	Temperature	State Certification Requested
Chris O'Mara	9/7/04	1500					NC ____ SC ____ Other ____
							SEE REVERSE FOR TERMS AND CONDITIONS

CL COPY

Paradigm Analytical:

Chlorinated Benzenes

1,3,5-Trichlorobenzene
1,2,4-Trichlorobenzene
1,2,3-Trichlorobenzene
1,2,3,4-Tetrachlorobenzene
1,2,4,5-Tetrachlorobenzene
1,2,3,5-Tetrachlorobenzene
Pentachlorobenzene
Hexachlorobenzene