

August 8, 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 July. If you have any questions concerning this information, please give me a call.

Sincerely,

*Kari Ann Gillian*  
for  
Richard Johnson

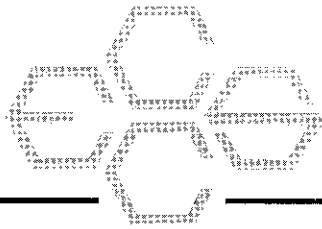
Enclosure

**Technical Memorandum**

**Borg Warner / Kuhlman Electric**

**Crystal Springs, Mississippi**





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## TECHNICAL MEMORANDUM

August 8, 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 soil and water samples collected from JMP Property area during July 2005 during an accelerated site investigation episode around the former Borg Warner and current Kuhlman Electric facility in Crystal Springs, Mississippi. Soil and 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 for soils and Table 2 for waters. A summary of method blanks, laboratory control samples and matrix spike/matrix spike duplicate data is provided in Table 3 for the soils and Table 4 for the waters.

In addition copies of the chain of custody sheets and shipping sheets can be found in appendix A through C.

- A) Chain of custody sheets for mobile lab PCB analysis for Excavation 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.

**Environmental Chemistry Consulting Services, Inc.**

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 3 and 4.
3. All MS/MSD recoveries were within acceptable ranges. Percent repeatability was also within acceptable ranges. See Table 3 and 4.
4. Since electron capture of detectors tend to have a very narrow linear range, many sample extracts required dilution. Dilutions were accurately done.

### **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. Sample Preparation - SOILS: Each sample or quality control sample is prepared in identical fashion. Approximately four grams of silica sand (blanks and control spikes) or sample is transferred into a clean scintillation vial. Ten grams of anhydrous sodium sulfate are added to the vial and mixed well. Extra sodium sulfate is added when necessary to assure the sample is dried. A surrogate, spike compound mix (if necessary) and eight mLs of 80/20 iso-octane/acetone are added to the vial. The vial is shaken for 30 seconds, allowed to settle for 2 minutes, shaken again for 30 seconds, and allowed to settle for 10 minutes. An aliquot of the extract is transferred to an autosampler vial for injection into the GC-ECD.
3. 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.
4. 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.
5. 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 July run sheets.
6. 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**

**Soil Sample Results – July**

**Table 1**  
**Kuhlman Electric**  
**Crystal Springs, Mississippi**  
**PCB Concentrations as Aroclor 1260 Detected**

Field Laboratory									
Field Lab Sample ID	Sample ID	Sample Depth	Date Collected	Time Collected	Date Analyzed	Concentration (mg/kg)	Surrogate TCMX(%)	Surrogate DCBP(%)	Response
HH001	JMP-DP-001-001	0-1'	14-Jul-05	12:35	14-Jul-05	< 0.10	96.3	96.2	
HH002	JMP-DP-001-002	1-2'	14-Jul-05	12:38	14-Jul-05	< 0.10	92.6	83.9	
HH003	JMP-DP-002-001	0-1'	14-Jul-05	12:50	14-Jul-05	< 0.10	92.4	90.5	
HH004	JMP-DP-002-002	1-2'	14-Jul-05	12:54	14-Jul-05	< 0.10	92.4	84.2	
HH005	JMP-DP-003-001	0-1'	14-Jul-05	13:02	14-Jul-05	< 0.10	95.5	87.8	
HH006	JMP-DP-003-002	1-2'	14-Jul-05	13:06	14-Jul-05	< 0.10	94.9	86.6	
HH007	JMP-DP-004-001	0-1'	14-Jul-05	13:10	14-Jul-05	< 0.10	97.6	89.4	
HH008	JMP-DP-004-002	1-2'	14-Jul-05	13:13	14-Jul-05	< 0.10	93.4	96.5	
HH009	JMP-DP-005-001	0-1'	14-Jul-05	13:20	14-Jul-05	< 0.10	92.8	85.3	
HH010	JMP-DP-005-002	1-2'	14-Jul-05	13:24	14-Jul-05	< 0.10	100	105	
HH011	JMP-Duplicate	-	14-Jul-05	-	14-Jul-05	< 0.10	92.3	88.4	
HH012	JMP-DP-006-001	0-1'	14-Jul-05	14:50	14-Jul-05	<b>0.10</b>	91.7	90.9	
HH013	JMP-DP-006-002	1-2'	14-Jul-05	14:54	14-Jul-05	< 0.10	94.9	90.6	
HH014	JMP-DP-007-001	0-1'	14-Jul-05	15:09	14-Jul-05	<b>0.14</b>	94.4	89.8	
HH015	JMP-DP-007-002	1-2'	14-Jul-05	15:12	14-Jul-05	< 0.10	99.7	90.4	
HH016	JMP-DP-008-001	0-1'	14-Jul-05	15:18	14-Jul-05	< 0.10	90.6	85.4	
HH017	JMP-DP-008-002	1-2'	14-Jul-05	15:23	14-Jul-05	< 0.10	91.6	96.4	
HH018	JMP-DP-009-001	0-1'	14-Jul-05	15:30	14-Jul-05	< 0.10	92.4	85.2	
HH019	JMP-DP-009-002	1-2'	14-Jul-05	15:34	14-Jul-05	< 0.10	92.1	92.3	
HH020	JMP-DP-010-001	0-1'	14-Jul-05	15:46	14-Jul-05	< 0.10	88.0	90.7	
HH021	JMP-DP-010-002	1-2'	14-Jul-05	15:49	14-Jul-05	< 0.10	92.7	93.2	

NOTES:

A = Acid Treated.

Surrogate recovery criteria 60-140% unless sample is acid treated.

Surrogate recovery criteria 75-175% if sample is acid treated.

**Table 2**

**Water Sample Results – July**

**Table 2**  
**Kuhlman Electric**  
**Crystal Springs, Mississippi**  
**PCB Concentrations as Aroclor 1260 Detected**

					Field Laboratory			
Field Lab Sample ID	Sample ID	Sample Depth	Date Collected	Time Collected	Date Analyzed	Concentration (ug/L)	Surrogate TCMX(%)	Surrogate DCBP(%)
W1304	JMP-FB-001	-	14-Jul-05	12:24	15-Jul-05	< 0.25	110	96.6

**Table 3**

**Soil QC Samples - July**



Table 3  
QC Results

Lab # associated with qc samples: HH001 through HH020

Matrix	Matrix		
Spike	Spike		
HH009	Duplicate	Blank	LCS
	HH009	834	834

Date Analyzed:	7/14/05	7/14/05	7/14/05	7/14/05
----------------	---------	---------	---------	---------

Compound	% Rec		% Rec		% RPD	mg/kg	% Rec
PCB as 1260	93.1		93.1		0%	< 0.10	86.4

Table 3  
QC Results

Lab # associated with qc samples: HH021

	Matrix	Matrix		
	Spike	Spike	Blank	LCS
	HH020	Duplicate		
		HH020		

Date Analyzed: 7/14/05 7/14/05

Compound	% Rec		% Rec		% RPD	mg/kg	% Rec
PCB as 1260	91.2		92.0		-1%		

**Table 4**

**Water QC Samples - July**

Table 4  
QC Results

Lab # associated with qc samples: W1304

Matrix Spike	Matrix Spike Duplicate	Blank	LCS
W1305	W1305		

Date Analyzed:	7/15/05	7/15/05	7/15/05	7/15/05
----------------	---------	---------	---------	---------

Compound	% Rec		% Rec		% RPD	ug/L	% Rec
PCB as 1260	98.6		101		-2%	< 0.25	98.7

## **Appendix A**

### **Chain of Custody Sheets for mobile lab PCB analysis Samples**



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

**CHAIN OF CUSTODY**

No. **013209** \*

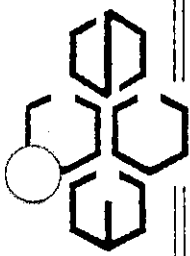
Page 1 of 2

Turn Around (circle one) Normal Rush  
 Report Due:

Project Number: \_\_\_\_\_  
 Project Name: KUUKMAN ELECTRL  
 Project Location: CRYSTAL SPRINGS  
 Sampled By (Print): CHARLIE PEELE  
 Mail Report To: \_\_\_\_\_  
 Company: MARTIN B DLABOS  
 Address: \_\_\_\_\_

Sample Description	Collection		Matrix	Total Bottles	Preserv*	Analysis Requested	Depth Comments	Laboratory Number
	Date	Time						
JMP-DP-001-001	7/14/05	1235	S	1	N/A	PCB's	0-1'	HH001
-001-002		1234					1-2'	HH002
-002-001		1230					0-1'	HH003
-002-002		1234					1-2'	HH004
-003-001		1302					0-1'	HH005
-003-002		1306					1-2'	HH006
-004-001		1310					0-1'	HH007
-004-002		1313					1-2'	HH008
-005-001		1320					0-1'	HA009
V.005-002		1324					1-2'	HA010
JMP DUP								HA011

Relinquished By: Charlie Peele Date/Time: 7/14/05 130  
 Received By: [Signature] Date/Time: 7/15/05 7:10  
 Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Receipt Temp: \_\_\_\_\_  
 Temp Blank Y N



**Environmental Chemistry  
Consulting Services, Inc.**

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

**CHAIN OF CUSTODY**  
*JMP*

No. **013210** \*  
Page 2 of 2

Turn Around (circle one) Normal Rush  
Report Due:

Project Number:		Mail Report To:							
Project Name: <b>KULMAN ELECTRIC</b>		Company: <b>MARTIN &amp; STABLES</b>							
Project Location: <b>CRYSTAL SPRINGS</b>		Address:							
Sampled By (Print): <b>CHUCK POOL</b>		P.O. No.:							
Quote No.:		Laboratory Number							
Sample Description	Collection		Matrix	Total Bottles	Preserv*	Analysis Requested	Comments	Laboratory Number	
	Date	Time							
JMP-DP-006-001	7/14/00	1450	S	1	N/A	PER'S	0-1'	HH012	
↓ -002		1454					1-2'	HH013	
007-001		1505					0-1'	HH014	
↓ -002		1512					1-2'	HH015	
008-001		1515					0-1'	HH016	
↓ -002		1523					1-2'	HH017	
009-001		1530					0-1'	HH018	
↓ -002		1534					1-2'	HH019	
010-001		1546					0-1'	HH020	
↓ -002		1549					1-2'	HH021	
*Preservation Code		Relinquished By:		Date/Time:		Received By:		Date/Time:	
A=None B=HCL C=H2SO4		<i>Chuck Pool</i>		7/14/00 1600		<i>[Signature]</i>		7/14/00	
D=HNO3 E=EnCore F=Methanol		Relinquished By:		Date/Time:		Received By:		Date/Time:	
G=NaOH O=Other(Indicate)						<i>[Signature]</i>			
Custody Seal: Present/Absent		Intact/Not Intact		Seal #s		Receipt Temp:		Temp Blank Y N	
Shipped Via:		<i>[Signature]</i>				WHITE - REPORT COPY		YELLOW - LABORATORY COPY	
						PINK - SAMPLER/SUBMITTER			





**Appendix B**

**FEDEX shipping label for Paradigm Labs**

**From** Please print and press hard.  
**Date** 7/20/05 **Sender's FedEx Account Number**  
**Send/Name** Chuck Peel **Phone** (601) 998-2792  
**Company** PEEL CONSULTING  
**Address** 140 CHAPEL LANE  
**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 CUSTOMER **Phone** ( )

**Company** PARADIGM ANALYTICAL LABS

**Recipient's Address** 5500 BUSINESS DR  
 We cannot deliver to P.O. boxes or P.O. ZIP codes.

**Address**  
 To request a package be held at a specific FedEx location, print FedEx address here.  
**City** WILMINGTON **State** NC **ZIP** 28405-8446

**4a Express Package Service**  
 **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**  
 **FedEx 1Day Freight\*** Next business day\*\*  
 **FedEx 2Day Freight** Second business day\*\*  
 **FedEx 3Day Freight** Third business day\*\*  
 \* Call for Confirmation.

**5 Packaging**  
 **FedEx Envelope\***  **FedEx Pak\*** Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak  **FedEx Box**  **FedEx Tube**  **Other**  
 \* Declared value limit \$500

**6 Special Handling**  
 **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?  
 **No**  **Yes** As per attached Shipper's Declaration  **Yes** Shipper's Declaration not required  
 **Dry Ice** Dry Ice, 9, UN 1845 x \_\_\_\_\_ kg  
 **Cargo Aircraft Only**  
 Dangerous goods (including Dry Ice) cannot be shipped in FedEx packaging.

**7 Payment Bill to:** Enter FedEx Acct. No. or Credit Card No. below.  
 **Sender** Acct. No. in Section 1 will be billed.  **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 Sign to Authorize Delivery Without a 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. **466**  
 SRF • Rev. Date 11/03 • Part #158275 • ©1994-2003 FedEx • PRINTED IN U.S.A.

**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.GoFedEx 1.800.463.3339.

0295350499

## **Appendix C**

### **Chain of Custody Sheets for samples sent to 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

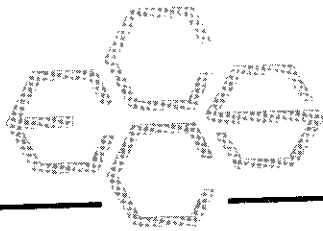
COC# 46363

Page 1 of 1

Client: MARTIN B SLABLO Project ID: KUHMAN ELECTRIC Date: 7/21/05 Report To: SAM B  
 Address: BLACK MOUNTAIN AL Contact: ROBERT MARTIN Turnaround: LOCAL  
 Address: BLACK MOUNTAIN AL Job Number: \_\_\_\_\_  
 Quote #: \_\_\_\_\_ P.O. Number: \_\_\_\_\_ Invoice To: SAM B

Sample ID	Date	Time	Matrix	Preservatives		Received By		Date	Time	Temperature	Comments:
				1	2	1	2				
JMP-DP-001-001	7/11/05	1235	S	X							MOBIL CAS # Depth
JMP-DUP				X							HH001 0-1'
JMP-DP-002-001		1450		X							HH011 -
JMP-DP-010-002		1549		X							HH012 0-1'
											HH021 1-2'

Relinquished By: Charles O. M. Fee Date: 7/20/05 Time: 1400  
 Received By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 State Certification Requested: NC \_\_\_\_\_ SC \_\_\_\_\_ Other \_\_\_\_\_  
 SEE REVERSE FOR TERMS AND CONDITIONS



August 8, 2005

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

Dear Mr. Martin,

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Sincerely,

A handwritten signature in cursive script that reads "Kari Ann Gillbar".

*for* Richard Johnson

Enclosure

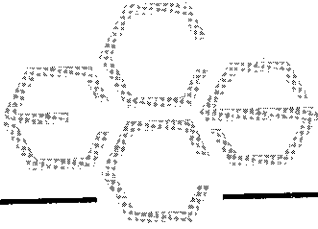
Environmental Chemistry Consulting Services, Inc.

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

**Technical Memorandum**

**Borg Warner / Kuhlman Electric**

**Crystal Springs, Mississippi**



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## TECHNICAL MEMORANDUM

August 8, 2005

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  - 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 July run sheets.
6. 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**

**Soil Sample Results – July**

**Table 1**  
**Kuhlman Electric**  
**Crystal Springs, Mississippi**  
**PCB Concentrations as Aroclor 1260 Detected**

Field Laboratory									
Field Lab Sample ID	Sample ID	Sample Depth	Date Collected	Time Collected	Date Analyzed	Concentration (mg/kg)	Surrogate TCMX(%)	Surrogate DCBP(%)	Response
GG047	GTP-DP-023-001	0-1'	14-Jul-05	10:38	14-Jul-05	1.0	90.1	96.1	
GG048	GTP-DP-023-002	1-2'	14-Jul-05	10:41	14-Jul-05	< 0.10	93.1	89.8	
GG049	GTP-DP-024-001	0-1'	14-Jul-05	10:35	14-Jul-05	8.0	89.8	89.9	
GG050	GTP-DP-024-002	1-2'	14-Jul-05	10:38	14-Jul-05	0.33	99.9	90.2	
GG051	GTP-DP-025-001	0-1'	14-Jul-05	10:43	14-Jul-05	0.51	84.1	75.3	
GG052	GTP-DP-025-002	1-2'	14-Jul-05	10:46	14-Jul-05	0.13	93.6	85.5	
GG053	GTP-DP-026-001	0-1'	14-Jul-05	10:51	14-Jul-05	9.9	94.4	95.7	
GG054	GTP-DP-026-002	1-2'	14-Jul-05	10:53	14-Jul-05	0.23	92.2	89.6	
GG055	GTP-Duplicate	-	14-Jul-05	-	14-Jul-05	0.91	90.8	90.9	
GG056	GTP-DP-027-001	0-1'	22-Jul-05	11:14	22-Jul-05	0.43	99.6	83.9	
GG057	GTP-DP-027-002	1-2'	22-Jul-05	11:16	22-Jul-05	< 0.10	99.6	96.6	
GG058	GTP-DP-028-001	0-1'	22-Jul-05	11:19	22-Jul-05	< 0.10	102	94.7	
GG059	GTP-DP-028-002	1-2'	22-Jul-05	11:21	22-Jul-05	< 0.10	102	97.4	
GG060	GTP-Duplicate	-	22-Jul-05	-	22-Jul-05	0.39	103	87.3	
GG061	GTP-DP-029-001	0-1'	22-Jul-05	11:23	22-Jul-05	0.25	102	95.0	
GG062	GTP-DP-029-002	1-2'	22-Jul-05	11:26	22-Jul-05	< 0.10	101	97.8	
GG063	GTP-DP-030-001	0-1'	22-Jul-05	11:30	22-Jul-05	0.26	99.7	90.4	
GG064	GTP-DP-030-002	1-2'	22-Jul-05	11:32	22-Jul-05	< 0.10	104	109	
GG065	GTP-DP-031-001	0-1'	22-Jul-05	11:36	22-Jul-05	0.22	100	85.0	
GG066	GTP-DP-031-002	1-2'	22-Jul-05	11:39	22-Jul-05	< 0.10	101	96.3	

NOTES:

A = Acid Treated.

Surrogate recovery criteria 60-140% unless sample is acid treated.

Surrogate recovery criteria 75-175% if sample is acid treated.

**Table 2**

**Water Sample Results – July**

**Table 2**  
**Kuhlman Electric**  
**Crystal Springs, Mississippi**  
**PCB Concentrations as Aroclor 1260 Detected**

					Field Laboratory			
Field Lab Sample ID	Sample ID	Sample Depth	Date Collected	Time Collected	Date Analyzed	Concentration (ug/L)	Surrogate TCMX(%)	Surrogate DCBP(%)
W1303	GTP-FB-002	-	14-Jul-05	10:23	15-Jul-05	< 0.25	106	93.2
W1312	GTP-FB-003	-	22-Jul-05	11:13	26-Jul-05	< 0.25	113	108

**Table 3**

**Soil QC Samples - July**

Table 3  
QC Results

Lab # associated with qc samples: GG047 through GG055

	Matrix	Matrix		
	Spike	Spike	Blank	LCS
	HH009	Duplicate	833	833
		HH009		

Date Analyzed:                      7/14/05                      7/14/05                      7/14/05                      7/14/05

Compound	% Rec		% Rec		% RPD	mg/kg	% Rec
PCB as 1260	93.1		93.1		0%	< 0.10	90.3

Table 3  
QC Results

Lab # associated with qc samples: GG056 through GG066

	Matrix	Matrix		
	Spike	Duplicate	Blank	LCS
	GG059	GG059	841	841

Date Analyzed:	7/22/05	7/22/05	7/22/05	7/22/05
----------------	---------	---------	---------	---------

Compound	% Rec		% Rec		% RPD	mg/kg	% Rec
PCB as 1260	98.6		98.1		1%	< 0.10	97.6



**Table 4**

**Water QC Samples - July**

Table 4  
QC Results

Lab # associated with qc samples: W1303

Matrix	Matrix		
Spike	Spike	Blank	LCS
W1305	Duplicate		
	W1305		

Date Analyzed:	7/15/05	7/15/05	7/15/05	7/15/05
----------------	---------	---------	---------	---------

Compound	% Rec		% Rec		% RPD	ug/L	% Rec
PCB as 1260	98.6		101		-2%	< 0.25	98.7

Table 4  
QC Results

Lab # associated with qc samples: W1312

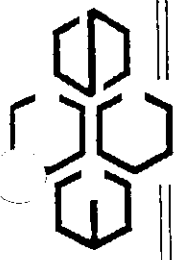
Matrix Spike	Matrix Spike Duplicate	Blank	LCS
W1312	W1312		

Date Analyzed:	7/27/05	7/27/05	7/26/05	7/26/05
----------------	---------	---------	---------	---------

Compound	% Rec		% Rec		% RPD	ug/L	% Rec
PCB as 1260	92.7		90.9		2%	< 0.25	104

## **Appendix A**

### **Chain of Custody Sheets for mobile lab PCB analysis Samples**



**Environmental Chemistry  
Consulting Services, Inc.**

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

**CHAIN OF CUSTODY**

No. **013206** \*

Page 1 of 1

Turn Around (circle one) Normal Rush  
Report Due:

Project Number: \_\_\_\_\_  
 Project Name: KUKHAN ELECTROL  
 Project Location: CRYSTAL SPRINGS  
 Sampled By (Print): CAROL PEGG  
 Mail Report To: \_\_\_\_\_  
 Company: MARTIN BRADLO  
 Address: \_\_\_\_\_

Sample Description	Collection		Matrix	Total Bottles	Preserv*	Analysis Requested	Comments	Laboratory Number
	Date	Time						
GTP-DP-023-001	7/14/05	1034	S	1	NA	PCB's	0-1'	GG-047
-023-002		1041	S				1-2'	GG-048
-024-001		1035					0-1'	GG-049
-024-002		1034					1-2'	GG-050
-025-001		1043					0-1'	GG-051
-025-002		1046					1-2'	GG-052
-026-001		1051					0-1'	GG-053
-026-002		1053					1-2'	GG-054
GTP-DVP								GG-055

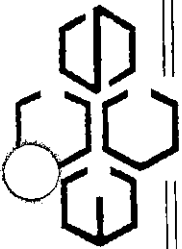
\* Preservation Code  
 A=None B=HCL C=H2SO4  
 D=HNO3 E=EnCore F=Methanol  
 G=NaOH O=Other(Indicate)

Relinquished By: [Signature] Date/Time: 7/14/05 1106  
 Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Received By: [Signature] Date/Time: 7/14/05  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Receipt Temp: \_\_\_\_\_  
 Temp Blank Y N

Shipped Via: \_\_\_\_\_



**Environmental Chemistry  
Consulting Services, Inc.**

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

**CHAIN OF CUSTODY**

No. **013231** \*

Page 1 of 1

Turn Around (circle one) Normal Rush  
Report Due:

Project Number:		Mail Report To:		Company: <b>MARTINO SLAGLE</b>		Quote No.:	
Project Name: <b>KUTHEMAN ELECTRIC</b>		Company Address:		Address:		Laboratory Number	
Project Location: <b>CRYSTAL SPRINGS</b>		Address:		Address:		Depth-Comments	
Sampled By (Print): <b>Chuck Paul</b>		Matrix		Total Bottles		Preserv*	
Sample Description		Collection Date		Time		Analysis Requested	
GTP-DP-027-001	7/22/05	1114	S	1	NA	PCBC	GC056
GTP-DP-027-002		1116					GC057
GTP-DP-028-001		1119					GC058
GTP-DP-028-002		1121					GC059
GTP-Duplicate							GC060
GTP-DP-029-001		1123					GC061
GTP-DP-029-002		1126					GC062
GTP-DP-030-001		1130					GC063
GTP-DP-030-002		1132					GC064
GTP-DP-031-001		1136					GC065
GTP-DP-031-002		1139					GC066
*Preservation Code		Relinquished By:		Date/Time:		Received By:	
A=None B=HCL C=H2SO4		<b>Chas. O. A. Paul</b>		7/26/05 1200		<b>Gregory Muntel</b>	
D=HNO3 E=EnCore F=Methanol		Relinquished By:		Date/Time:		Received By:	
G=NaOH O=Other(Indicate)							
Custody Seal: Present/Absent		Intact/Not Intact		Seal #'s		Date/Time:	
Shipped Via:						7/22/05 1210	







**Appendix B**

**FEDEX shipping label for Paradigm Labs**

From *Please print and press hard.*  
 Date 7/20/05 Sender's FedEx Account Number  
 Sender's Name Chuck Peel Phone (601) 898-2792  
 Company PEEL CONSULTING  
 Address 140 CHAPEL LANE Dept./Floor/Suite/Room  
 City MADISON State MS ZIP 39110  
 Your Internal Billing Reference MARTIN + SLACK OPTIONAL  
 Recipient's Name SAMPLE CUSTODIAN Phone ( )  
 Company PARADIGM ANALYTICAL LABS  
 Recipient's Address 5500 BUSINESS DR Dept./Floor/Suite/Room  
 Address WILMINGTON State NC ZIP 28405-8446

**4a Express Package Service** *Packages up to 150 lbs.*  
 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** *\*Declared value limit \$500*  
 FedEx Envelope\*  FedEx Pak\*  FedEx Box  FedEx Tube  Other  
**6 Special Handling** *Include FedEx address in Section 3.*  
 SATURDAY Delivery  HOLD Weekday  HOLD Saturday  
 No  Yes  Yes  Dry Ice  Cargo Aircraft Only  
**7 Payment Bill to:** *Enter FedEx Acct. No. or Credit Card No. below.*  
 Sender  Recipient  Third Party  Credit Card  Cash/Check  
 FedEx Acct. No. 1811-4189-1 Exp. Date  
 Total Packages Total Weight Total Declared Value\*  
 \$ .00  
 FedEx Use Only

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.GoFedEx 1.800.463.3339.

0295350499

**8 Sign to Authorize Delivery Without a 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.  
 466  
 SRF + Rev. Date 11/03 + Part #158279 + ©1994-2003 FedEx + PRINTED IN U.S.A.

From *Please print and press hard.*  
 Date 7/28/05 Sender's FedEx Account Number  
 Sender's Name CHUCK PEBL Phone (601) 898-2792  
 Company PEBL CONSULTING  
 Address 140 CHAPEL LANE Dept./Floor/Suite/Room  
 City MADISON State MS ZIP 39110  
 Your Internal Billing Reference MARTIN + SLACK OPTIONAL  
 Recipient's Name SAMPLE CUSTODIAN Phone ( )  
 Company PARADIGM ANALYTICAL LABS  
 Recipient's Address 5500 BUSINESS DR Dept./Floor/Suite/Room  
 Address WILMINGTON State NC ZIP 28405-8446

**4a Express Package Service** *Packages up to 150 lbs.*  
 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** *\*Declared value limit \$500*  
 FedEx Envelope\*  FedEx Pak\*  FedEx Box  FedEx Tube  Other  
**6 Special Handling** *Include FedEx address in Section 3.*  
 SATURDAY Delivery  HOLD Weekday  HOLD Saturday  
 No  Yes  Yes  Dry Ice  Cargo Aircraft Only  
**7 Payment Bill to:** *Enter FedEx Acct. No. or Credit Card No. below.*  
 Sender  Recipient  Third Party  Credit Card  Cash/Check  
 FedEx Acct. No. 1811-4189-1 Exp. Date  
 Total Packages Total Weight Total Declared Value\*  
 \$ .00  
 FedEx Use Only

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.GoFedEx 1.800.463.3339.

0295350499

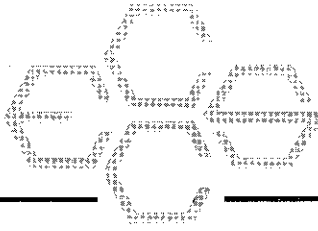
**8 Sign to Authorize Delivery Without a Signature**  
 By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.  
 466  
 SRF + Rev. Date 11/03 + Part #158279 + ©1994-2003 FedEx + PRINTED IN U.S.A.

**Appendix C**

**Chain of Custody Sheets for samples sent to Paradigm Labs**








August 8, 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 July. If you have any questions concerning this information, please give me a call.

Sincerely,

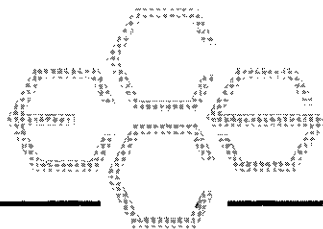
  
for Richard Johnson

Enclosure

**Technical Memorandum**

**Borg Warner / Kuhlman Electric**

**Crystal Springs, Mississippi**



---

## TECHNICAL MEMORANDUM

August 8, 2005

**To:** Robert Martin  
Martin Slagle Inc.

**From:** Richard Johnson *for*  
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 soil and water samples collected from CSP Property area during July 2005 during an accelerated site investigation episode around the former Borg Warner and current Kuhlman Electric facility in Crystal Springs, Mississippi. Soil and 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 for soils and Table 2 for waters. A summary of method blanks, laboratory control samples and matrix spike/matrix spike duplicate data is provided in Table 3 for the soils and Table 4 for the waters.

In addition copies of the chain of custody sheets and shipping sheets can be found in appendix A through C.

- A) Chain of custody sheets for mobile lab PCB analysis for Excavation 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.

**Environmental Chemistry Consulting Services, Inc.**



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 with the exception of one sample (C252). Method states that 1 of the 2 required surrogates must be within range.
2. All LCS recoveries were within acceptable ranges. See Table 3 and 4.
3. All MS/MSD recoveries were within acceptable ranges. Percent repeatability was also within acceptable ranges. See Table 3 and 4.
4. Since electron capture of detectors tend to have a very narrow linear range, many sample extracts required dilution. Dilutions were accurately done.

### **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. Sample Preparation - SOILS: Each sample or quality control sample is prepared in identical fashion. Approximately four grams of silica sand (blanks and control spikes) or sample is transferred into a clean scintillation vial. Ten grams of anhydrous sodium sulfate are added to the vial and mixed well. Extra sodium sulfate is added when necessary to assure the sample is dried. A surrogate, spike compound mix (if necessary) and eight mLs of 80/20 iso-octane/acetone are added to the vial. The vial is shaken for 30 seconds, allowed to settle for 2 minutes, shaken again for 30 seconds, and allowed to settle for 10 minutes. An aliquot of the extract is transferred to an autosampler vial for injection into the GC-ECD.

3. 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.

4. 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.

5. 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 July run sheets.

6. 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**

**Soil Sample Results – July**

**Table 1**  
**Kuhlman Electric**  
**Crystal Springs, Mississippi**  
**PCB Concentrations as Aroclor 1260 Detected**

Field Laboratory									
Field Lab Sample ID	Sample ID	Sample Depth	Date Collected	Time Collected	Date Analyzed	Concentration (mg/kg)	Surrogate TCMX(%)	Surrogate DCBP(%)	Rinse
C217	CSP-DP-171-001	0-1'	15-Jul-05	10:08	15-Jul-05	1.2	90.3	86.4	
C218	CSP-DP-171-002	1-2'	15-Jul-05	10:10	15-Jul-05	< 0.10	95.1	91.0	
C219	CSP- Duplicate	-	15-Jul-05	-	15-Jul-05	1.2	90.2	91.7	
C220	CSP-DP-172-001	0-1'	15-Jul-05	12:40	15-Jul-05	1.0	91.5	88.0	
C221	CSP-DP-172-002	1-2'	15-Jul-05	12:43	15-Jul-05	< 0.10	93.2	90.4	
C222	CSP-DP-173-001	0-1'	15-Jul-05	12:51	15-Jul-05	1.5	95.5	80.3	
C223	CSP-DP-173-002	1-2'	15-Jul-05	12:54	15-Jul-05	< 0.10	93.4	85.4	
C224	CSP-DP-174-001	0-1'	15-Jul-05	12:59	15-Jul-05	< 0.10	89.7	86.3	
C225	CSP-DP-174-002	1-2'	15-Jul-05	13:02	15-Jul-05	< 0.10	91.9	89.9	
C226	CSP-DP-175-001	0-1'	15-Jul-05	13:05	15-Jul-05	0.49	90.5	87.0	
C227	CSP-DP-175-002	1-2'	15-Jul-05	13:08	15-Jul-05	< 0.10	93.2	89.0	
C228	CSP-DP-176-001	0-1'	15-Jul-05	13:11	15-Jul-05	0.15	91.3	84.9	
C229	CSP-DP-176-002	1-2'	15-Jul-05	13:13	15-Jul-05	< 0.10	94.3	87.7	
C230	CSP-DP-177-001	0-1'	15-Jul-05	13:20	15-Jul-05	0.87	89.2	76.8	
C231	CSP-DP-177-002	1-2'	15-Jul-05	13:24	15-Jul-05	0.45	90.0	80.0	
C232	CSP-DP-178-001	0-1'	15-Jul-05	13:28	15-Jul-05	1.8	90.7	81.6	
C233	CSP-DP-178-002	1-2'	15-Jul-05	13:32	15-Jul-05	< 0.10	92.8	84.5	
C234	CSP-DP-179-001	0-1'	15-Jul-05	14:30	15-Jul-05	0.23	89.4	84.1	
C235	CSP-DP-179-002	1-2'	15-Jul-05	14:33	15-Jul-05	< 0.10	91.1	85.6	
C236	CSP-DP-180-001	0-1'	15-Jul-05	14:40	15-Jul-05	< 0.10	90.8	84.3	
C237	CSP-DP-180-002	1-2'	15-Jul-05	14:43	15-Jul-05	< 0.10	87.9	85.6	
C238	CSP-DP-181-001	0-1'	15-Jul-05	14:50	15-Jul-05	< 0.10	90.1	85.4	
C239	CSP-DP-181-002	1-2'	15-Jul-05	14:53	15-Jul-05	< 0.10	90.8	85.1	
C240	CSP-DP-182-001	0-1'	15-Jul-05	14:58	15-Jul-05	0.67	91.8	83.4	
C241	CSP-DP-182-002	1-2'	15-Jul-05	15:02	15-Jul-05	< 0.10	90.9	82.3	
C242	CSP-DP-183-001	0-1'	15-Jul-05	15:08	15-Jul-05	0.21	87.8	84.0	
C243	CSP-DP-183-002	1-2'	15-Jul-05	15:11	16-Jul-05	< 0.10	89.2	82.2	
C244	CSP-DP-184-001	0-1'	15-Jul-05	15:20	16-Jul-05	0.14	87.3	80.8	
C245	CSP-DP-184-002	1-2'	15-Jul-05	15:23	16-Jul-05	< 0.10	90.1	81.8	
C246	CSP-DP-185-001	0-1'	15-Jul-05	15:28	16-Jul-05	0.12	90.0	82.2	
C247	CSP-DP-185-002	1-2'	15-Jul-05	15:30	16-Jul-05	< 0.10	91.5	82.9	
C248	CSP-DP-186-001	0-1'	15-Jul-05	15:38	16-Jul-05	0.14	88.2	80.3	
C249	CSP-DP-186-002	1-2'	15-Jul-05	15:41	16-Jul-05	< 0.10	91.5	78.1	
C250	CSP-DP-187-001	0-1'	15-Jul-05	15:50	16-Jul-05	< 0.10	86.2	79.2	
C251	CSP-DP-187-002	1-2'	15-Jul-05	15:53	16-Jul-05	< 0.10	88.1	77.1	
C252	CSP-DP-188-001	0-1'	18-Jul-05	16:05	19-Jul-05	< 0.10	136	61.8	A
C253	CSP-DP-189-001	0-1'	18-Jul-05	16:15	19-Jul-05	< 0.10	138	103	A
C254	CSP-DP-190-001	0-1'	18-Jul-05	16:21	19-Jul-05	< 0.10	132	109	A
C255	CSP-DP-191-001	0-1'	18-Jul-05	16:28	19-Jul-05	0.38	136	102	A

NOTES:

: Acid Treated.

Surrogate recovery criteria 60-140% unless sample is acid treated.

Surrogate recovery criteria 75-175% if sample is acid treated.

**Table 1**  
**Kuhlman Electric**  
**Crystal Springs, Mississippi**  
**PCB Concentrations as Aroclor 1260 Detected**

Field Laboratory									
Field Lab Sample ID	Sample ID	Sample Depth	Date Collected	Time Collected	Date Analyzed	Concentration (mg/kg)	Surrogate TCMX(%)	Surrogate DCBP(%)	Response
C256	CSP-DP-192-001	0-1'	18-Jul-05	16:36	19-Jul-05	< 0.10	119	111	A
C257	CSP- Duplicate	-	18-Jul-05	-	19-Jul-05	< 0.10	122	112	A
C258	CSP-DP-193-001	0-1'	18-Jul-05	16:44	19-Jul-05	< 0.10	120	100	A
C259	CSP-DP-194-001	0-1'	18-Jul-05	16:50	19-Jul-05	< 0.10	120	107	A
C260	CSP-DP-195-001	0-1'	18-Jul-05	16:59	19-Jul-05	< 0.10	135	106	A
C261	CSP-DP-196-001	0-1'	19-Jul-05	10:10	20-Jul-05	< 0.10	112	106	A
C262	CSP-DP-197-001	0-1'	19-Jul-05	10:18	20-Jul-05	< 0.10	122	96.1	A
C263	CSP-DP-198-001	0-1'	19-Jul-05	10:22	20-Jul-05	< 0.10	109	93.1	A
C264	CSP-DP-199-001	0-1'	19-Jul-05	10:28	20-Jul-05	< 0.10	110	101	A
C265	CSP-DP-200-001	0-1'	19-Jul-05	10:34	20-Jul-05	< 0.10	135	110	A
C266	CSP-DP-201-001	0-1'	19-Jul-05	10:39	20-Jul-05	< 0.10	120	93.3	A
C267	CSP-DP-202-001	0-1'	19-Jul-05	10:44	20-Jul-05	< 0.10	117	96.7	A
C268	CSP-DP-203-001	0-1'	19-Jul-05	10:49	20-Jul-05	< 0.10	118	94.8	A
C269	CSP- Duplicate	-	19-Jul-05	-	20-Jul-05	< 0.10	106	100	A
C270	CSP-DP-204-001	0-1'	19-Jul-05	13:32	20-Jul-05	< 0.10	133	87.8	A
C271	CSP-DP-205-001	0-1'	19-Jul-05	13:42	20-Jul-05	< 0.10	126	92.7	A

NOTES:

A = Acid Treated.

Surrogate recovery criteria 60-140% unless sample is acid treated.

Surrogate recovery criteria 75-175% if sample is acid treated.

**Table 2**

**Water Sample Results – July**

**Table 2**  
**Kuhlman Electric**  
**Crystal Springs, Mississippi**  
**PCB Concentrations as Aroclor 1260 Detected**

					Field Laboratory			
Field Lab Sample ID	Sample ID	Sample Depth	Date Collected	Time Collected	Date Analyzed	Concentration (ug/L)	Surrogate TCMX(%)	Surrogate DCBP(%)
W1305	CSP-FB-008	-	15-Jul-05	10:05	15-Jul-05	< 0.25	109	97.4
W1310	CSP-FB-009	-	18-Jul-05	16:17	20-Jul-05	< 0.25	110	112

**Table 3**  
**Soil QC Samples - July**



Table 3  
QC Results

Lab # associated with qc samples: C217 through C236

Matrix	Matrix		
Spike	Spike	Blank	LCS
C218	Duplicate	835	835
	C218		

Date Analyzed: 7/15/05 7/15/05 7/15/05 7/15/05

Compound	% Rec		% Rec		% RPD	mg/kg	% Rec
PCB as 1260	92.9		91.5		2%	< 0.10	91.6

Table 3  
QC Results

Lab # associated with qc samples: C237 through C251

Matrix	Matrix		
Spike	Spike		
C251	Duplicate	Blank	LCS
	C251	836	836

Date Analyzed: 7/16/05 7/16/05 7/16/05 7/16/05

Compound	% Rec		% Rec		% RPD	mg/kg	% Rec
PCB as 1260	85.3		86.0		-1%	< 0.10	82.9

Table 3  
QC Results

Lab # associated with qc samples: C252 through C260

Matrix	Matrix		
Spike	Spike		
C259	Duplicate	Blank	LCS
	C259	837	837

Date Analyzed: 7/19/05 7/19/05 7/19/05 7/19/05

Compound	% Rec		% Rec		% RPD	mg/kg	% Rec
PCB as 1260	99.5		94.8		5%	< 0.10	106

Table 3  
QC Results

Lab # associated with qc samples: C261 through C271

Matrix	Matrix		
Spike	Spike		
C265	Duplicate	Blank	LCS
	C265	838	838

Date Analyzed: 7/20/05 7/20/05 7/19/05 7/20/05

Compound	% Rec		% Rec		% RPD	mg/kg	% Rec
PCB as 1260	112		107		5%	< 0.10	99.2

**Table 4**

**Water QC Samples - July**

Table 4  
QC Results

Lab # associated with qc samples: W1305

	Matrix	Matrix		
	Spike	Spike	Blank	LCS
	W1305	Duplicate		
		W1305		

Date Analyzed:	7/15/05	7/15/05	7/15/05	7/15/05
----------------	---------	---------	---------	---------

Compound	% Rec		% Rec		% RPD	ug/L	% Rec
PCB as 1260	98.6		101		-2%	< 0.25	98.7

Table 4  
QC Results

Lab # associated with qc samples: W1310

	Matrix	Matrix		
	Spike	Spike	Blank	LCS
	W1309	Duplicate		
		W1309		

Date Analyzed:                      7/20/05                      7/20/05                      7/20/05                      7/20/05

Compound	% Rec		% Rec		% RPD	ug/L	% Rec
PCB as 1260	116		111		4%	< 0.25	115

## **Appendix A**

### **Chain of Custody Sheets for mobile lab PCB analysis Samples**





**Environmental Chemistry Consulting Services, Inc.**  
 2825 Advance Road  
 Madison, WI 53718  
 Phone 608-221-8700 FAX 608-221-4889

**CHAIN OF CUSTODY**

**No. 013212 \***

*CSP* *Package # 55*

Page 1 of 3

Turn Around (circle one)  Normal  Rush  
 Report Due:

Project Number: 171-001  
 Project Name: KUHLMAN ELECTRIC  
 Project Location: CRYSTAL SPRING  
 Sampled By (Print): CHRIS POGEL

Mail Report To:  
 Company: MARTIN B SEAGLE  
 Address:

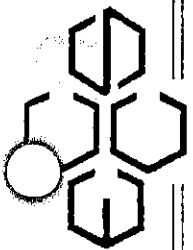
Sample Description	Collection		Matrix	Total Bottles	Preserv*	Analysis Requested	Comments	Laboratory Number
	Date	Time						
CSP-DP-171-001	7/8/05	1004	S	1	MA	PCBS	0-1'	C217
↓ ↓ 171-002		1010					1-2'	C218
CSP-DUP		-					-	C219
CSP-DP-172-001		1240					0-1'	C220
↓ ↓ 172-002		1243					1-2'	C221
↓ ↓ 173-001		1251					0-1'	C222
↓ ↓ 174-002		1254					1-2'	C223
↓ ↓ 174-001		1259					0-1'	C224
↓ ↓ 175-002		1302					1-2'	C225
↓ ↓ 175-001		1305					0-1'	C226
↓ ↓ 176-002		1308					1-2'	C227
↓ ↓ 176-001		1311					0-1'	C228

Received By: *[Signature]* Date/Time: 7/15/05 1345  
 Received By: *[Signature]* Date/Time: 7/15/05

Relinquished By: *[Signature]* Date/Time: 7/15/05 1345  
 Relinquished By: *[Signature]* Date/Time: 7/15/05

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

Custody Seal: Present/Absent  
 Shipped Via: Temp Blank Y N



**Environmental Chemicals Consulting Services, Inc.**

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

**CHAIN OF CUSTODY**

No. **013213** \*  
Page 2 of 3

Turn Around (circle one) Normal Rush  
Report Due:

Project Number: \_\_\_\_\_  
 Project Name: KUNLUN ELECTRIC  
 Project Location: CRYSTAL SPRINGS  
 Sampled By (Print): CHUCK POOL  
 Mail Report To: \_\_\_\_\_  
 Company: MARTIN B SCARF  
 Address: \_\_\_\_\_

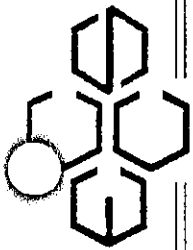
Sample Description	Collection		Matrix	Total Bottles	Preserv*	Analysis Requested	Comments	Laboratory Number
	Date	Time						
CSP-DP-176-002	7/18/05	1313	S	1	UA	PCB's	1-2'	C229
↓ - 001	↓	1320	↓	↓	↓	↓	1-2' 10	C230
↓ - 002	↓	1324	↓	↓	↓	↓	1-2'	C231
178-001	↓	1328	↓	↓	↓	↓	0-1'	C232
↓ - 002	↓	1332	↓	↓	↓	↓	1-2'	C233
179-001	↓	1430	↓	↓	↓	↓	0-1'	C234
↓ - 002	↓	1433	↓	↓	↓	↓	1-2'	C235
180-001	↓	1440	↓	↓	↓	↓	0-1'	C236
↓ - 002	↓	1443	↓	↓	↓	↓	1-2'	C237
181-001	↓	1450	↓	↓	↓	↓	0-1'	C238
↓ - 002	↓	1453	↓	↓	↓	↓	1-2'	C239
↓ - 002	↓	1457	↓	↓	↓	↓	0-1'	C240

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

Relinquished By: Chuck Pool Date/Time: 7/15/05 1530  
 Received By: [Signature] Date/Time: 7/15/05

Custody Seal: Present/Absent  
 Shipped Via: EMV 12000 B Pak

Receipt Temp: \_\_\_\_\_  
 Temp Blank Y N



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

**CHAIN OF CUSTODY**  
 CSP Buckett ST

No. 013214 \*  
 Page 3 of 3

Turn Around (circle one) Normal Rush  
 Report Due:

Project Number: \_\_\_\_\_  
 Project Name: KULMAN ELECTRIC  
 Project Location: CRYSTAL SPRING  
 Sampled By (Print): CHUCK POEL  
 Mail Report To: \_\_\_\_\_  
 Company: MARTIN & SEABO  
 Address: \_\_\_\_\_  
 P.O. No.: \_\_\_\_\_ Quote No.: \_\_\_\_\_

Sample Description	Collection		Matrix	Total Bottles	Preserv*	Analysis Requested	Comments	Laboratory Number
	Date	Time						
CSP-DP-182-002	7/15/05	1400	S	1	NA	PCB's	1-2'	C241
183-001	7/15/05	1408					0-1'	C242
184-002	7/15/05	1411					1-2'	C243
184-001	7/15/05	1520					0-1'	C244
185-002	7/15/05	1523					1-2'	C245
185-001	7/15/05	1528					0-1'	C246
186-002	7/15/05	1530					0-2'	C247
186-001	7/15/05	1538					0-1'	C248
187-002	7/15/05	1541					1-2'	C249
187-001	7/15/05	1550					0-1'	C250
188-002	7/15/05	1553					0-2'	C251

\*Preservation Code: A=None B=HCL C=H2SO4 D=HNO3 E=EnCore F=Methanol G=NaOH O=Other(Indicate)  
 Relinquished By: Charles A. Poel Date/Time: 7/15/05 1600  
 Received By: [Signature] Date/Time: 7/15/05  
 Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Receipt Temp: \_\_\_\_\_ Temp Blank Y N  
 Shipped Via: ENTY/CAW Seal #s: 278761



**Environmental Chemistry  
Consulting Services, Inc.**

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

**CHAIN OF CUSTODY**

No. 013217

Page 1 of 1

Turn Around (circle one) Normal Rush  
Report Due:

Project Number: \_\_\_\_\_  
 Project Name: **KATHMAN ELECTRIC**  
 Project Location: **CAPITAL SPRINGS**  
 Sampled By (Print): **Chuck Paul**

Mail Report To: \_\_\_\_\_  
 Company: **MARTIN + STAGLE**  
 Address: \_\_\_\_\_

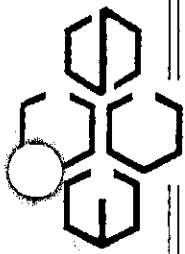
Sample Description	Collection		Matrix	Total Bottles	Preserv*	Analysis Requested	Depth	Comments	Laboratory Number
	Date	Time							
CSP-DP-188-001	7/18/05	1605	S	1	NA	PICs	0-1		C252
CSP-DP-189-001		1615					0-1		C253
CSP-DP-190-001		1621					0-1		C254
CSP-DP-191-001		1628					0-1		C255
CSP-DP-192-001		1636					0-1		C256
CSP-Duplicate									C257
CSP-DP-193-001		1644					0-1		C258
CSP-DP-194-001		1650					0-1		C259
CSP-DP-195-001		1659					0-1		C260

Relinquished By: **Chuck Paul** Date/Time: 7/18/05 1720  
 Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Received By: **Gregg Stuebel** Date/Time: 7/18/05 1720  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

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

Custody Seal: Present/Absent  
 Shipped Via: \_\_\_\_\_

Receipt Temp: \_\_\_\_\_  
 Temp Blank Y N



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

**CHAIN OF CUSTODY**  
 CSP

No. **013219** \*  
 Page **1** of **1**

Turn Around (circle one) Normal Rush  
 Report Due:

*Packet*

Project Number: \_\_\_\_\_  
 Project Name: **KUHLMAN ELECTRIC**  
 Project Location: **CAPYCAL SPRINGS**  
 Sampled By (Print): **Chuck Peel**

Mail Report To:  
 Company: **MARTIN & SWAGLE**  
 Address: \_\_\_\_\_

Invoice To:  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_

P.O. No.: \_\_\_\_\_ Quote No.: \_\_\_\_\_

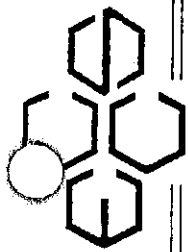
Sample Description	Collection		Matrix	Total Bottles	Preserv	Analysis Requested	Depth	Comments	Laboratory Number
	Date	Time							
CSP-DP-196-001	07/19/05	1010	S	1	NA	PKS	0-1'		C261
CSP-DP-197-001		1018					0-1'		C262
CSP-DP-198-001		1022					0-1'		C263
CSP-DP-199-001		1028					0-1'		C264
CSP-DP-200-001		1034					0-1'		C265
CSP-DP-201-001		1039					0-1'		C266
CSP-DP-202-001		1044					0-1'		C267
CSP-DP-203-001		1049					0-1'		C268
CSP-Duplicate									C269
CSP-DP-204-001		1332					0-1'		C270
CSP-DP-205-001		1342					0-1'		C271

Relinquished By: **Chuck Peel** Date/Time: **7/19/05 1700**  
 Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Received By: *[Signature]* Date/Time: **7/19/05 1700**  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

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 \_\_\_\_\_  
 Shipped Via: \_\_\_\_\_ Receipt Temp: \_\_\_\_\_  
 Temp Blank Y N





**Environmental Chemistry  
Consulting Services, Inc.**

2525 Advance Road  
Madison, WI 53718  
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**CHAIN OF CUSTODY**  
*MISC*

No. **013215** \*  
Page 1 of 1

Turn Around (circle one) Normal Rush

Report Due:

Project Number:		Mail Report To:		P.O. No.:		Quote No.:		Laboratory Number	
Project Name: <b>KUHLMAN ELECTRIC</b>		Company: <b>MARTIN &amp; SAGGE</b>		P.O. No.:		Quote No.:		Laboratory Number	
Project Location: <b>CAYITH SPRINGS</b>		Address:		P.O. No.:		Quote No.:		Laboratory Number	
Sampled By (Print): <b>Chuck Paul</b>		Address:		P.O. No.:		Quote No.:		Laboratory Number	
Sample Description	Collection		Matrix	Total Bottles	Preserv*	Analysis Requested	Comments	Laboratory Number	
	Date	Time							
<b>CSP-FB-009</b>	<b>7/18/05</b>	<b>1617</b>	<b>W</b>	<b>1</b>	<b>NA</b>	<b>PBS</b>		<b>W1310</b>	
*Preservation Code		Relinquished By:		Date/Time:		Received By:		Date/Time:	
A=None B=HCL C=H2SO4		<b>Chuck Paul</b>		<b>7/18/05 1700</b>		<b>Chuck Paul</b>		<b>7/18/05 1700</b>	
D=HNO3 E=EnCore F=Methanol		Relinquished By:		Date/Time:		Received By:		Date/Time:	
G=NaOH O=Other(Indicate)									
Custody Seal: Present/Absent		Intact/Not Intact		Seal #'s		Receipt Temp:		Temp Blank Y N	
Shipped Via:									

**Appendix B**

**FEDEX shipping label for Paradigm Labs**



**From** Please print and press hard.

Date 7/20/05 Sender's FedEx Account Number \_\_\_\_\_

Sender Name Chuck Peel Phone (601) 998-2792

Company PEEL CONSULTING

Address 140 CHAPEL LANE

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 CUSTOMER Phone ( )

Company PARADIGM ANALYTICAL LABS

Recipient's Address 5500 BUSINESS DR

Address WILMINGTON State NC ZIP 28405-8446

**4a Express Package Service** Packages up to 150 lbs. \* To most locations

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. \*\* To most locations

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  FedEx Box  FedEx Tube  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.

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.  Recipient  Third Party  Credit Card  Cash/Check

FedEx Acct. 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 Sign to Authorize Delivery Without a 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.

SRF - Rev. Date 11/03 - Part # 15279 - ©1994-2003 FedEx - PRINTED IN U.S.A.

**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.GoFedEx 1.800.463.3339.

0295350499

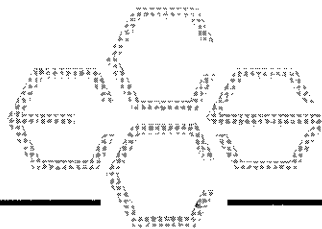
466

## **Appendix C**

### **Chain of Custody Sheets for samples sent to Paradigm Labs**







August 8, 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 July. If you have any questions concerning this information, please give me a call.

Sincerely,

*for* Richard Johnson

Enclosure

**Technical Memorandum**

**Borg Warner / Kuhlman Electric**

**Crystal Springs, Mississippi**

**Table 1**  
**Kuhlman Electric**  
**Crystal Springs, Mississippi**  
**PCB Concentrations as Aroclor 1260 Detected**

Field Laboratory									
Field Lab Sample ID	Sample ID	Sample Depth	Date Collected	Time Collected	Date Analyzed	Concentration (mg/kg)	Surrogate TCMX(%)	Surrogate DCBP(%)	Recovery
II001	ESP-DP-001-001	0-1'	20-Jul-05	12:32	20-Jul-05	<b>0.53</b>	99.2	97.7	
II002	ESP-DP-001-002	1-2'	20-Jul-05	12:37	20-Jul-05	< 0.10	103	110	
II003	ESP-DP-002-001	0-1'	20-Jul-05	12:45	20-Jul-05	<b>1.6</b>	101	102	
II004	ESP-DP-002-002	1-2'	20-Jul-05	12:47	20-Jul-05	< 0.10	104	114	
II005	ESP-DP-003-001	0-1'	20-Jul-05	12:50	20-Jul-05	<b>3.6</b>	102	101	
II006	ESP-DP-003-002	1-2'	20-Jul-05	12:52	20-Jul-05	<b>0.15</b>	103	112	
II007	ESP-DP-004-001	0-1'	20-Jul-05	13:00	20-Jul-05	<b>1.7</b>	101	107	
II008	ESP-DP-004-002	1-2'	20-Jul-05	13:03	20-Jul-05	<b>0.36</b>	101	110	
II009	ESP-Duplicate	-	20-Jul-05	-	20-Jul-05	<b>0.52</b>	100	106	
II010	ESP-DP-005-001	0-1'	20-Jul-05	13:10	20-Jul-05	<b>0.95</b>	100	105	
II011	ESP-DP-005-002	1-2'	20-Jul-05	13:13	20-Jul-05	< 0.10	99.7	109	
II012	ESP-DP-006-001	0-1'	20-Jul-05	13:19	20-Jul-05	<b>0.33</b>	101	111	
II013	ESP-DP-006-002	1-2'	20-Jul-05	13:22	20-Jul-05	<b>0.39</b>	103	113	
II014	ESP-DP-007-001	0-1'	20-Jul-05	13:29	20-Jul-05	<b>0.28</b>	102	112	
II015	ESP-DP-007-002	1-2'	20-Jul-05	13:31	20-Jul-05	< 0.10	100	109	
II016	ESP-DP-008-001	0-1'	20-Jul-05	15:00	20-Jul-05	< 0.10	104	117	
II017	ESP-DP-008-002	1-2'	20-Jul-05	15:03	20-Jul-05	< 0.10	101	108	
II018	ESP-DP-009-001	0-1'	20-Jul-05	15:10	20-Jul-05	< 0.10	100	102	
II019	ESP-DP-009-002	1-2'	20-Jul-05	15:14	20-Jul-05	< 0.10	98.8	107	
II020	ESP-DP-010-001	0-1'	21-Jul-05	15:00	21-Jul-05	< 0.10	98.5	93.9	
II021	ESP-DP-010-002	1-2'	21-Jul-05	15:03	21-Jul-05	< 0.10	99.2	98.7	
II022	ESP-DP-011-001	0-1'	21-Jul-05	15:09	21-Jul-05	< 0.10	98.2	104	
II023	ESP-DP-011-002	1-2'	21-Jul-05	15:13	21-Jul-05	< 0.10	98.9	96.3	
II024	ESP-Duplicate	-	21-Jul-05	-	21-Jul-05	< 0.10	100	95.4	
II025	ESP-DP-012-001	0-1'	21-Jul-05	15:18	21-Jul-05	< 0.10	98.1	92.7	
II026	ESP-DP-012-002	1-2'	21-Jul-05	15:20	21-Jul-05	< 0.10	96.1	96.3	
II027	ESP-DP-013-001	0-1'	21-Jul-05	15:25	21-Jul-05	<b>0.31</b>	99.2	94.1	
II028	ESP-DP-013-002	1-2'	21-Jul-05	15:28	21-Jul-05	< 0.10	96.5	97.8	
II029	ESP-DP-014-001	0-1'	21-Jul-05	15:34	21-Jul-05	<b>0.50</b>	98.1	93.6	
II030	ESP-DP-014-002	1-2'	21-Jul-05	15:37	21-Jul-05	< 0.10	97.8	97.4	
II031	ESP-DP-015-001	0-1'	21-Jul-05	15:40	21-Jul-05	<b>0.12</b>	100	97.1	
II032	ESP-DP-015-002	1-2'	21-Jul-05	15:43	21-Jul-05	< 0.10	99.2	99.2	

**NOTES:**

A = Acid Treated.

Surrogate recovery criteria 60-140% unless sample is acid treated.

Surrogate recovery criteria 75-175% if sample is acid treated.

**Table 2**

**Water Sample Results – July**



**Table 2**  
**Kuhlman Electric**  
**Crystal Springs, Mississippi**  
**PCB Concentrations as Aroclor 1260 Detected**

					Field Laboratory			
Field Lab Sample ID	Sample ID	Sample Depth	Date Collected	Time Collected	Date Analyzed	Concentration (ug/L)	Surrogate TCMX(%)	Surrogate DCBP(%)
W1311	ESP-FB-001	-	20-Jul-05	12:30	20-Jul-05	< 0.25	113	115

**Table 3**

**Soil QC Samples - July**

Table 3  
QC Results

Lab # associated with qc samples: II001 through II019

Matrix Spike	Matrix Spike Duplicate	Blank	LCS
D065	D065	839	839

Date Analyzed:	7/20/05	7/20/05	7/20/05	7/20/05
----------------	---------	---------	---------	---------

Compound	% Rec		% Rec		% RPD	mg/kg	% Rec
PCB as 1260	104		106		-2%	< 0.10	105

Table 3  
QC Results

Lab # associated with qc samples: II020 through II032

Matrix Spike	Matrix Spike Duplicate	Blank	LCS
II023	II023	840	840

Date Analyzed:	7/21/05	7/21/05	7/21/05	7/21/05
----------------	---------	---------	---------	---------

Compound	% Rec		% Rec		% RPD	mg/kg	% Rec
PCB as 1260	103		99.4		4%	< 0.10	98.8

**Table 4**

**Water QC Samples - July**

Table 4  
QC Results

Lab # associated with qc samples: W1311

	Matrix	Matrix		
	Spike	Spike	Blank	LCS
	W1309	Duplicate		
		W1309		

Date Analyzed:	7/20/05	7/20/05	7/20/05	7/20/05
----------------	---------	---------	---------	---------

Compound	% Rec		% Rec		% RPD	ug/L	% Rec
PCB as 1260	116		111		4%	< 0.25	115

**Appendix A**

**Chain of Custody Sheets for mobile lab PCB analysis Samples**



**Environmental Chemistry Consulting Services, Inc.**

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

**CHAIN OF CUSTODY**

No. **013225** \*  
Page **1** of **2**

Turn Around (circle one) Normal Rush  
Report Due:

Project Number: \_\_\_\_\_  
 Project Name: **KUTTMAN ELECTRIC**  
 Project Location: **CANYON SPRINGS**  
 Sampled By (Print): **Chuck Paul**

Mail Report To: \_\_\_\_\_  
 Company: **MARTIN & SLACIC**  
 Address: \_\_\_\_\_

P.O. No.: \_\_\_\_\_ Quote No.: \_\_\_\_\_

Sample Description	Collection		Matrix	Total Bottles	Preserv*	Analysis Requested	Depth	Comments	Laboratory Number
	Date	Time							
ESP-DP-001-001	7/20/05	1232	S	1	NA	PCBS	0-1'		II001
ESP-DP-001-002		1237					1-2'		II002
ESP-DP-002-001		1245					0-1'		II003
ESP-DP-002-002		1247					1-2'		II004
ESP-DP-003-001		1250					0-1'		II005
ESP-DP-003-002		1252					1-2'		II006
ESP-DP-004-001		1300					0-1'		II007
ESP-DP-004-002		1303					1-2'		II008
ESP-Duplicate									II009
ESP-DP-005-001		1310					0-1'		II010
ESP-DP-005-002		1313					1-2'		II011
ESP-DP-006-001		1319					0-1'		II012

Received By: *[Signature]* Date/Time: 7/20/05 1400  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

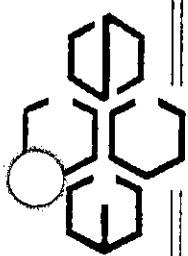
Relinquished By: *[Signature]* Date/Time: 7/20/05 1400  
 Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

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

Custody Seal: Present/Absent  
 Shipped Via: \_\_\_\_\_

Receipt Temp: \_\_\_\_\_  
 Temp Blank Y N





**Environmental Chemistry Consulting Services, Inc.**

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

**CHAIN OF CUSTODY**

No. **013226** \*  
Page **2** of **2**

Turn Around (circle one) Normal Rush  
Report Due:

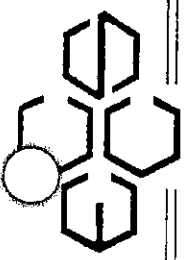
Project Number: \_\_\_\_\_  
 Project Name: **KUTLMAH ELECTRIC**  
 Project Location: **CRYSTAL SPRINGS**  
 Sampled By (Print): **Chuck Paul**

Mail Report To: \_\_\_\_\_  
 Company: **MARTIN + SACCO**  
 Address: \_\_\_\_\_  
 P.O. No.: \_\_\_\_\_  
 Quote No.: \_\_\_\_\_

Sample Description	Collection		Matrix	Total Bottles	Preserv*	Analysis Requested	Laboratory Number
	Date	Time					
ESP-DP-006-002	7/20/05	1322	S	1	NA	PCB	II 013
ESP-DP-007-001		1329					II 014
ESP-DP-007-002		1331					II 015
ESP-DP-008-001		1500					II 016
ESP-DP-008-002		1503					II 017
ESP-DP-009-001		1510					II 018
ESP-DP-009-002		1514					II 019

Received By: *[Signature]*  
 Date/Time: 7/20/05 1600  
 Received By: *[Signature]*  
 Date/Time: \_\_\_\_\_

Relinquished By: *Charles D. A. Paul*  
 Relinquished By: \_\_\_\_\_  
 Intact/Not Intact: \_\_\_\_\_ Seal #'s: \_\_\_\_\_  
 Custody Seal: Present/Absent  
 Shipped Via: \_\_\_\_\_



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

**CHAIN OF CUSTODY**  
*ESP*

No. **013228** \*  
 Page 1 of 2

Turn Around (circle one) Normal Rush  
 Report Due:

Project Number: \_\_\_\_\_  
 Project Name: KUTCHMAN ELECTRIC  
 Project Location: CAPITAL SPRINGS  
 Sampled By (Print): Chuck Reed

Mail Report To: \_\_\_\_\_  
 Company: MARTIN & SCALE  
 Address: \_\_\_\_\_

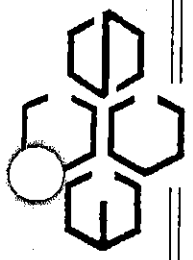
P.O. No.: \_\_\_\_\_ Quote No.: \_\_\_\_\_

Sample Description	Collection		Matrix	Total Bottles	Preserv*	Analysis Requested	Laboratory Number
	Date	Time					
ESP-DP-010-001	7/21/05	1500	S	1	NA	PCBS	II020
ESP-DP-010-002		1503					II021
ESP-DP-011-001		1509					II022
ESP-DP-011-002		1513					II023
ESP-Duplicate							II024
ESP-DP-012-001		1519					II025
ESP-DP-012-002		1520					II026
ESP-DP-013-001		1525					II027
ESP-DP-013-002		1528					II028
ESP-DP-014-001		1534					II029
ESP-DP-014-002		1537					II030
ESP-DP-015-001		1540					II031

Received By: [Signature] Date/Time: 7/21/05 1600  
 Received By: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Receipt Temp: \_\_\_\_\_ Temp Blank Y N

Relinquished By: [Signature] Date/Time: \_\_\_\_\_  
 Relinquished By: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Custody Seal: Present/Absent \_\_\_\_\_ Seal #'s \_\_\_\_\_  
 Shipped Via: \_\_\_\_\_



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

**CHAIN OF CUSTODY**  
 ESP Puckett St

No. 013229 \*  
 Page 2 of 2

Turn Around (circle one) Normal Rush  
 Report Due:

Project Number:		Mail Report To:							
Project Name: <b>KUHLMAN ELECTRIC</b>		Company: <b>MARTIN &amp; SAGLE</b>							
Project Location: <b>CRYSTAL SPRINGS</b>		Address:							
Sampled By (Print): <b>Chuck Paul</b>		P.O. No.:							
Quote No.:		Laboratory Number:							
Sample Description	Collection Date	Time	Matrix	Total Bottles	Preserv*	Analysis Requested	Comments	Laboratory Number	
ESP-DP-015-002	7/21/05	1543	S	1	NA	PCB	1-2'	II03Z	
*Preservation Code		Relinquished By:		Date/Time:		Received By:		Date/Time:	
A=None B=HCL C=H2SO4		<i>Charles O. M. ...</i>		7/21/05 1700		<i>Joseph ...</i>		7/21/05 1700	
D=HNO3 E=EnCore F=Methanol		Relinquished By:		Date/Time:		Received By:		Date/Time:	
G=NaOH O=Other(Indicate)									
Custody Seal: Present/Absent		Intact/Not Intact		Seal #s		Receipt Temp:		Temp Blank Y N	
Shipped Via:									



**Appendix B**

**FEDEX shipping label for Paradigm Labs**

**From** Please print and press hard.  
 Date **7/20/05** Sender's FedEx Account Number  
 Sender Name **Chuck Peel** Phone **(601) 898-2792**  
 Company **PEEL CONSULTING**  
 Address **140 CHAPEL LANE**  
 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 ( )  
 Company **PARADIGM ANALYTICAL LABS**  
 Recipient's Address **5500 BUSINESS DR**  
 We cannot deliver to P.O. boxes or P.O. ZIP codes.  
 Address  
 To request a package be held at a specific FedEx location, print FedEx address here.  
 City **WILMINGTON** State **NC** ZIP **28405-8446**

**4a Express Package Service** Packages up to 150 lbs. To most locations

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 Envelope rate not available. Minimum charge: One-pound rate  FedEx Express Saver Third business day\*

**4b Express Freight Service** Packages over 150 lbs. To most locations

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  FedEx Box  FedEx Tube  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.  
 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.  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 Sign to Authorize Delivery Without a 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.

SRF Rev. Date 11/03+Part #158273+©1994-2003 FedEx+PRINTED IN U.S.A.

**466**

**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.GoFedEx 1.800.463.3339.

**0295350499**

**From** Please print and press hard.  
 Date **7/28/05** Sender's FedEx Account Number  
 Sender's Name **CHUCK PEEL** Phone **(601) 898-2792**  
 Company **PEEL CONSULTING**  
 Address **140 CHAPEL LANE**  
 City **MADISON** State **MS** ZIP **39110**

**Your Internal Billing Reference** First 24 characters will appear on invoice. **MARTIN + SLACK**

**To**  
 Recipient's Name **SAMPLE CUSTODIAN** Phone ( )  
 Company **PARADIGM ANALYTICAL LABS**  
 Recipient's Address **5500 BUSINESS DR**  
 We cannot deliver to P.O. boxes or P.O. ZIP codes.  
 Address  
 To request a package be held at a specific FedEx location, print FedEx address here.  
 City **WILMINGTON** State **NC** ZIP **28405-8446**

**4a Express Package Service** Packages up to 150 lbs. To most locations

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 Envelope rate not available. Minimum charge: One-pound rate  FedEx Express Saver Third business day\*

**4b Express Freight Service** Packages over 150 lbs. To most locations

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  FedEx Box  FedEx Tube  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.  
 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.  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 Sign to Authorize Delivery Without a 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.

SRF Rev. Date 11/03+Part #158273+©1994-2003 FedEx+PRINTED IN U.S.A.

**466**

**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.GoFedEx 1.800.463.3339.

**0295350499**

## **Appendix C**

### **Chain of Custody Sheets for samples sent to Paradigm Labs**







