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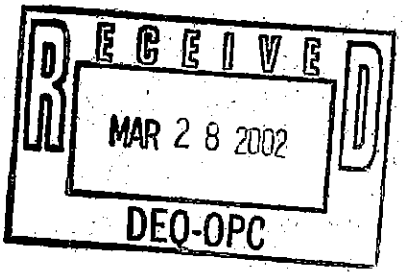

SITE REMEDIATION REPORT

Garment Shop Property
414 Lee Avenue
Crystal Springs, Mississippi

Prepared for

BorgWarner Inc.

February 2002

GeoEnvironmental Associates, LLC | MARTIN&SLAGLE

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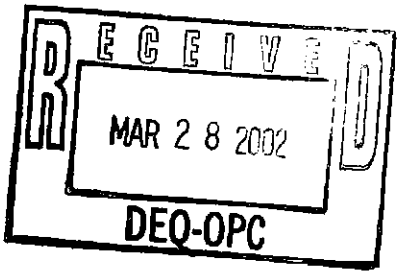

Prepared for

BorgWarner Inc.

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Prepared by

MARTIN&SLAGLE GeoEnvironmental Associates, LLC
PO Box 1023
Black Mountain, North Carolina

February 2002

Robert L. Martin, P.G.
Project Manager

Christine E. Slagle
Senior Scientist

TABLE OF CONTENTS

SITE REMEDIATION REPORT

Garment Shop Property
414 Lee Avenue
Crystal Springs, Mississippi

SECTION 1.0 EXECUTIVE SUMMARY

The soil on the Garment Shop property, located at 414 Lee Avenue, Crystal Springs, Mississippi, and consisting of approximately 0.11 acres, was found to contain concentrations of polychlorinated biphenyls (PCBs) during sampling events conducted in August and September 2000. The concentrations, in one area of the property, exceeded the standard of 1.0 mg/kg established by Mississippi Department of Environmental Quality (MDEQ) for PCBs in soils on residential properties.

The soil containing concentrations of PCBs in excess of 1.0 mg/kg was located around the roots of a tree located on the west property line immediately south of Lee Avenue. Seven samples were collected in the vicinity of the tree. Two samples that were collected from the site had concentrations of 2.7 and 1.9 mg/kg of PCBs.

The roots were decontaminated using an "Air-Shovel™" pressure washer/vacuum system. Contaminated soil removed by the pressure washer was vacuumed into a tank, properly disposed of, and replaced with clean backfill. Contaminated soil was disposed of in the BFI "Little Dixie" Subtitle D landfill in accordance with all applicable state and federal regulations.

Confirmatory soil samples were collected following excavation to confirm that impacted soil had been removed. A total of three floor samples and seven sidewall samples were collected following removal of impacted soil. All soil samples were collected and managed in accordance with USEPA Region IV Environmental Investigation Standard Operating Procedure and Quality Assurance Manual (EISOPQAM) protocols.

An area approximately 20 feet by 18 feet was excavated to an average depth of 1.5 feet below ground surface (bgs). Excavation continued until on-site laboratory analytical results confirmed that all soil containing concentrations of PCBs exceeding the residential cleanup thresholds was removed. The analytical results indicate that all soil

containing PCB concentrations of 1.0 mg/kg or greater was removed from the Garment Shop property. After confirmation results indicated that the remediation objective had been met, the excavation was backfilled with analytically confirmed clean soil. The surface of the remediation area was covered with fresh sod.

On May 18, 2001 the Garment Shop property was effectively remediated by removal of soil containing PCB concentrations in excess of 1.0 mg/kg in accordance with requirements established by the MDEQ. Based on the MDEQ criteria, no further action is warranted at the Garment Shop property.

2.0 INTRODUCTION

The soil on the Garment Shop property was found to contain concentrations of polychlorinated biphenyls (PCBs) during sampling events conducted in August 2000. The concentrations, in some areas of the property, exceeded the standard of 1 mg/kg established by MDEQ for PCBs in soils on residential properties. The soil containing concentrations of PCBs in excess of 1 mg/kg was remediated by removal and replacement with clean soil. This report describes the remediation process and results of soil analytical results. The report also includes maps showing sample locations and the areas of remediation.

2.1 Background

The KEC facility was constructed and has been operated as a transformer manufacturing plant since the 1950s by KEC or its predecessor, a corporate entity also named KEC. KEC continued to own and operate the plant in March 1999 when BorgWarner Inc. purchased Kuhlman Corporation, the parent of KEC, and thereafter as well. Neither BorgWarner nor Kuhlman Corporation has ever owned or operated the plant. Seven months after the purchase on October 1, 1999, BorgWarner and Kuhlman Corporation sold KEC's stock to KEC Acquisition Corporation. BorgWarner and Kuhlman Corporation agreed to indemnify KEC, KEC Acquisition Corporation and their affiliates for historic contamination at the site and may, under the purchase agreement, control any remediation of such contamination. None of BorgWarner, Kuhlman Corporation or KEC Acquisition Corporation has ever owned or operated the plant.

During routine construction activities at KEC's plant in Crystal Springs, Mississippi, construction personnel encountered soil that had been impacted by unknown chemicals. KEC reported that construction activities were immediately halted, and two soil samples were collected by representatives of KEC and sent to an independent laboratory for analysis. KEC reported the detection of PCB in the stained soils, along with various chlorinated benzenes.

On April 19, 2000, BorgWarner received notification from KEC in accordance with the purchase agreement that areas of contaminated soil had been found in Crystal Springs, Mississippi. BorgWarner responded by sending a representative to meet with KEC plant representatives and a representative from Mississippi Department of Environmental Quality (MDEQ), Eric Dear, on April 25, 2000. During this meeting all parties were briefed on the existing situation at the plant and MDEQ's expectations regarding assessment of the site.

In May 2000, a preliminary assessment of the KEC property was conducted. The goal of this preliminary assessment was to:

- Determine the character and concentration of the contaminants in various environmental media on-site,
- Determine if contaminants might have migrated from the site, and,
- Identify and conduct any immediate response actions necessary to alleviate public exposure to the contaminants.

The results of the preliminary assessment indicated a likelihood that PCBs had migrated off site and on to adjacent residential properties. An assessment of the adjacent properties was initiated and remedial activities were completed on seven properties, including the Garment Shop with confirmed concentrations of PCBs exceeding the residential cleanup thresholds.

2.2 Site Description

The Garment Shop property is located at 414 Lee Avenue, Crystal Springs, Mississippi and consists of approximately 0.11 acres. The site includes a single story concrete block manufacturing building that covers about 50% of the property (Figure 2). The property is located across Lee Avenue and approximately 100 feet southeast from the main employee parking lot entrance of the KEC facility. The property is generally flat, sloping gently to

the east. PCB concentrations exceeding the residential cleanup thresholds were found only in the grassy area adjacent to Lee Avenue at the property line common with the Kellum property located immediately west of the subject site.

2.3 Previous Investigative Activities

The initial investigation of the Garment Shop occurred on August 26, 2000. Seventeen soil samples were collected in seven locations from depths of 0.5 feet and 4 feet below ground surface (bgs) at each location. Samples were collected using a direct-push soil sampler. A detailed description of sampling techniques used during the assessment is included in the *Preliminary Site Characterization Report* (Ogden 2000).

Samples were analyzed by the on site laboratory for PCBs using a modified EPA Method 8080. Ten percent of the samples were split for confirmation analysis by the fixed-base laboratory, Paradigm Analytical Labs (Paradigm) located in Wilmington, North Carolina. All sampling as performed in accordance with EPA Region IV Environmental Investigation Standard Operating Procedures and Quality Assurance Manual (EISQAM).

The results of laboratory analysis of the soil samples confirmed the presence of PCBs in two shallow soil samples (DP-537 and DP-561) above the residential cleanup threshold. The soil was located around roots from a tree located on the Kellum Property.

Remedial activities were conducted between May 15 and May 18, 2001. Impacted soil was removed from around tree roots using an "Air-Shovel™" pressure washer/vacuum system. Contaminated soil removed by the pressure washer was vacuumed into a tank and transferred to a roll-off box located on the KEC property. Soil removal continued until on site laboratory analytical results confirmed that all soil containing concentrations of PCBs exceeding the residential cleanup thresholds was removed.

SECTION 3.0 SAMPLING PROGRAM – LOCATION AND RATIONALE

Remediation of the Garment shop, on Lee Avenue, began on May 15, 2001. Remediation of this property involved removal and disposal of all soil containing 1.0 mg/kg or greater of PCBs in accordance with MDEQ's established clean-up criteria for residential properties. All soils containing greater than 1 mg/kg of PCBs were profiled and disposed of at the BFI's "Little Dixie", Subtitle "D" Landfill in Madison County, Mississippi after MDEQ and US EPA approvals were obtained.

Following excavation, all excavated areas were sampled to confirm that impacted soil had been removed. In correspondence regarding disposal requirements, Craig Brown, of US EPA Region IV, stated that the excavated soils did not meet the definition of "PCB remediation waste." Under this definition, the remediation activities fell under the management criteria and guidelines set by MDEQ. Remediation was based on criteria established in the *State of Michigan Department of Environmental Quality, Waste Management Division, Guidance Document, Verification of Soil Remediation, April 1994, Revision 1*, as adopted by Mississippi DEQ for use on remediation projects of this nature.

The guidance document provides a procedure for establishing a soil-sampling grid for confirmation that cleanup goals have been met or exceeded. The procedure applies to sites with a surface area less than 10,890 square feet. The procedure involves a biased approach to sampling, i.e. collecting samples from the point of a known release, such as a tank leak or surface spill. The remediation area of the excavation floor is approximately 295 ft^2. The area of the sidewall surrounding excavation is 120 ft^2. The guidance defined the minimum number of floor samples for this size of site to be two and the minimum number of sidewall samples to be four.

A total of three floor samples and seven sidewall samples were collected following removal of soil to a depth of approximately 1.5 feet. All samples were collected in accordance with EPA Region IV EISOPQAM. Sample locations are shown in Figure 2.

One duplicate sample was collected for laboratory quality assurance. The analytical results indicate that all soil containing 1.0 mg/kg or greater were removed from the Garment shop property. Table 1 contains analytical results that confirm remediation, and Appendix 1 contains data sheets of all samples collected during the remediation process.

SECTION 4.0 ANALYTICAL PROGRAM

All soil samples were collected and managed in accordance with USEPA Region IV EISOPQAM protocols. Samples were collected using clean sampling equipment. Equipment rinseate samples were collected and analyzed to confirm the effectiveness of the decontamination procedures.

Each sample was assigned a unique sample identification designation in accordance with the labeling requirements under section 3.2.1 of the EISOPQAM. Field records were kept in accordance with procedures specified in section 3.5 of EISOPQAM. The sample identification designation, date, and time of collection was recorded in the field book and on the chain of custody for cross-referencing.

Upon collection, samples were placed in 4 oz amber glass jars, and the jars were transferred to a small sample cooler. Field personnel delivered samples to the on-site lab several times each day. Upon arrival at the on-site lab, the samples were transferred to the Environmental Chemistry Consulting Services, Inc. (ECCS) sample custodian who logged each sample on ECCS chains of custody. Each sample was assigned a unique ECCS internal ID for tracking purposes. After analysis, the samples were transferred to either a sample refrigerator in the on-site lab or stored in coolers until they were either sent to Paradigm for confirmation analysis or disposed of. Chain of custody forms were completed for all samples packaged and shipped to Paradigm for confirmation analysis. Chain of Custody forms are included in Appendix 2.

Analytical Methods

For analysis of samples in the on-site lab, ECCS used EPA 8082m, modified for the mini-extraction. Paradigm Analytical also used EPA 8082 for quantitation of PCBs.

SECTION 5.0 REMEDIATION AND DISPOSAL

Remediation of the Garment Shop, on Lee Avenue, began on May 15, 2001. Remediation of this property involved removal to the property line common with the Paul Kellum property, to the south side of Lee Street, and to the north side of the existing building structure. Disposal of all soil containing 1.0 milligram per kilogram (mg/kg) or greater of PCBs was conducted in accordance with MDEQ's established clean-up criteria for residential properties. All soils containing greater than 1 mg/kg of PCBs were profiled and disposed of at the BFI's "Little Dixie" Subtitle D Landfill in Madison County, Mississippi after MDEQ and US EPA approvals were obtained.

The soil containing concentrations of PCBs in excess of 1.0 mg/kg was located around the roots of a tree located on the west property line immediately south of Lee Avenue. An area approximately 20 feet by 18 feet was excavated to an average depth of 1.5 feet bgs. Impacted soil was removed from around tree roots using an "Air-Shovel™" pressure washer/vacuum system. Contaminated soil removed by the pressure washer was vacuumed into a tank and transferred to a roll-off box located on the KEC property. Soil removal continued until on site laboratory analytical results confirmed that all soil containing concentrations of PCBs exceeding the residential cleanup thresholds was removed.

The slurry of water and soil created during contamination removal was solidified by mixing the slurry with "ASTROGEL", a sorbent material consisting of polyacrylamide and sodium polyacrylate copolymer produced by Astro American Chemical Co, Inc., and properly disposed. The solidified soil/water slurry was disposed of in the BFI "Little Dixie" Subtitle D landfill located in Ridgeland, Mississippi in accordance with all applicable state and federal regulations. A total of 22 tons of waste was disposed at the landfill. Waste from this property was disposed with waste removed from the Kellum property located immediately west of this site. Therefore waste disposal manifests are not included in this report. All waste disposal manifests for soil removed from around the hackberry tree located in the Kellum property are included in the Kellum property

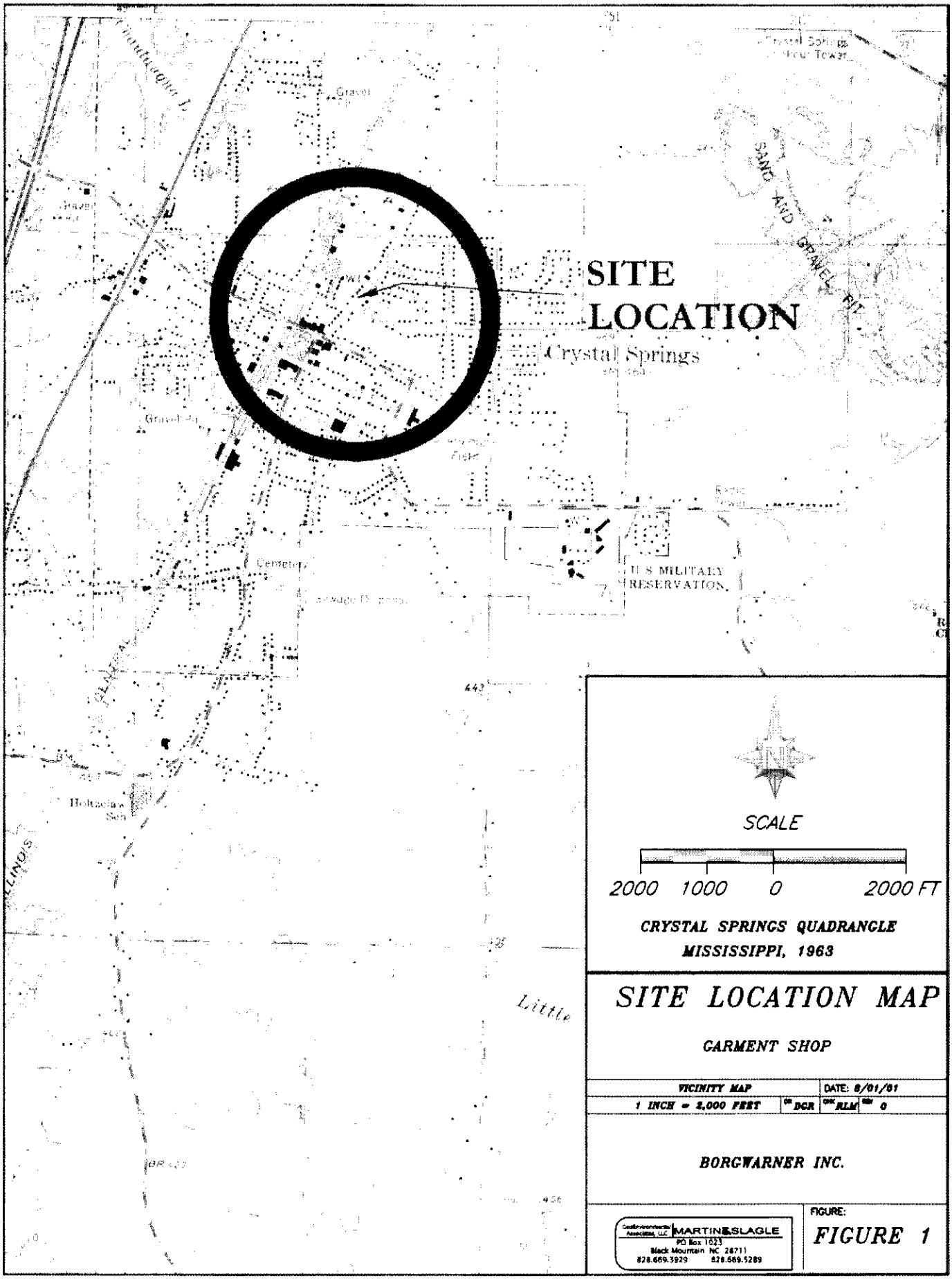
report. Confirmatory soil samples were collected following excavation to confirm that impacted soil had been removed.

After confirmation results indicated that the remediation objective had been met, the excavation was backfilled with analytically confirmed clean soil. The surface of the remediation area was covered with fresh sod. Photographs showing details of remediation are included in Appendix 3.

SECTION 6.0 SUMMARY AND CONCLUSIONS

On May 18, 2001 the Garment Shop property was effectively remediated by removal and proper disposal of soil containing PCB concentrations of 1 mg/kg or greater in accordance with the MDEQ established residential property cleanup criteria and supervision. Confirmation sampling in the impacted area was performed in accordance with applicable state requirements to demonstrate that the remediation goals were met.

Based on the MDEQ criteria no further action is warranted at the Garment Shop property



SITE LOCATION MAP

CARMENT SHOP

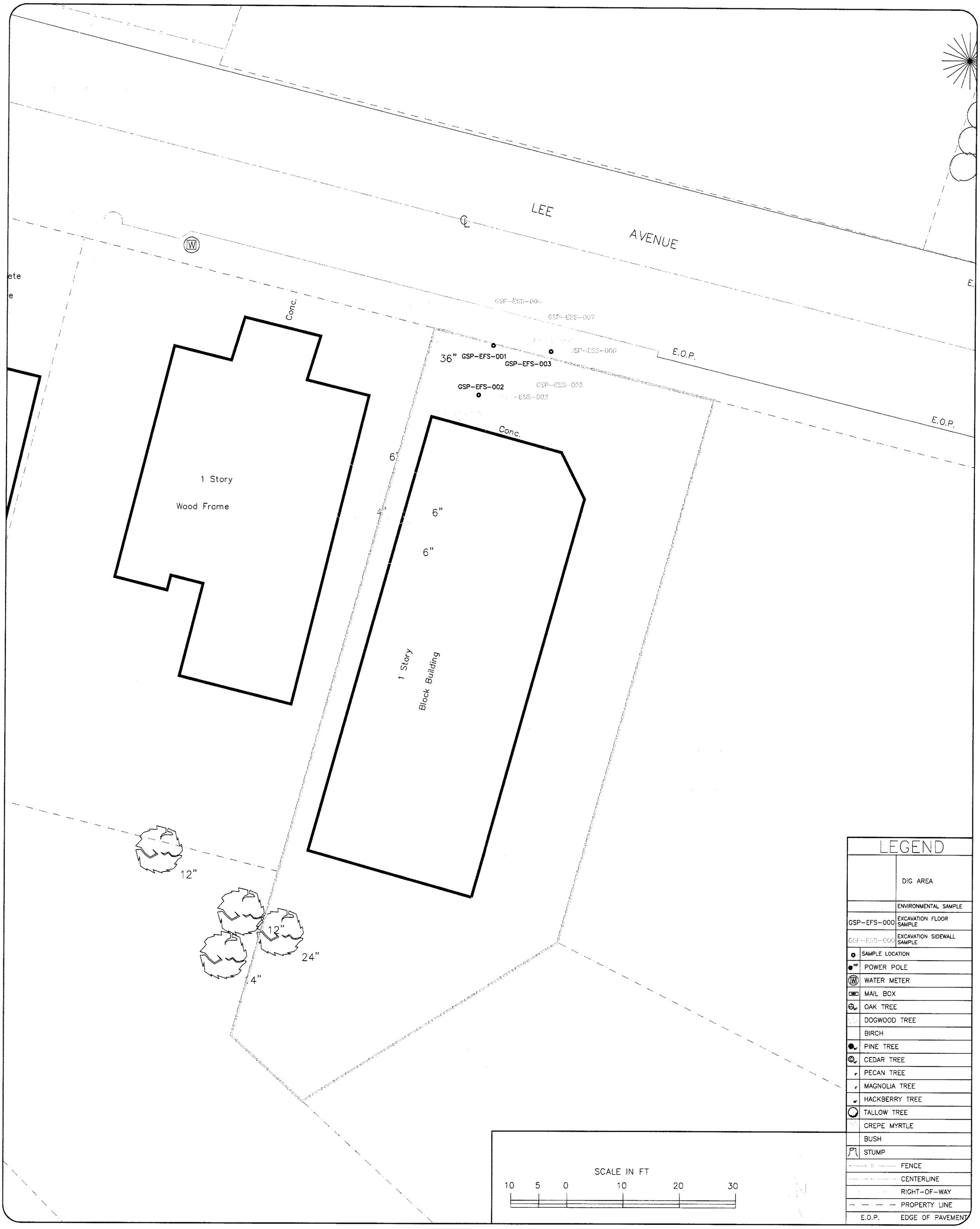
VICINITY MAP		DATE: 8/01/01
1 INCH = 2,000 FEET	DR DGR	CHK RLM REV 0

BORGWARNER INC.

MARTIN&SLAGLE
PO Box 1023
Black Mountain NC 28711
828.669.3929 828.669.5289

FIGURE:

FIGURE 1



GeoEnvironmental Associates, LLC | MARTIN&SLAGLE
PO Box 1023
Black Mountain NC 28711
828.669.3929 828.669.5289

PREPARED FOR:

BorgWarner Inc.

DRAWING NAME:

CRYSTAL SPRINGS\REPORTS\LEE AVE 02/02.dwg

SCALE 1"=10'
DR: DGR
CHK: SJG
REV: 0
DATE: 02/06/02

SITE REMEDIATION
Garment Shop Property
SAMPLE LOCATION MAP

2
FIGURE

TABLE 1
SUMMARY OF DATA SHOWING CONFIRMATION OF REMEDIATION
GARMENT PROPERTY

				Field Laboratory		Fixed Laboratory	
Field Lab Sample ID	Sample ID	Date Collected	Time Collected	Date Analyzed	Concentration (mg/kg)	Date Analyzed	Concentration (mg/kg)
2138	GSP-ESS-001	5/15/2001	1556	5/15/2001	0.13	6/4/2001	<0.230
2139	GSP-ESS-002	5/15/2001	1600	5/15/2001	0.27		
2140	GSP-ESS-003	5/15/2001	1603	5/15/2001	1.2	6/4/2001	0.280
2141	GSP-ESS-004	5/15/2001	1602	5/15/2001	0.51		
2142	GSP-EFS-001	5/15/2001	1534	5/15/2001	<0.10		
2143	GSP-EFS-002	5/15/2001	1536	5/15/2001	<0.10		
2203	GSP-ESS-005	5/18/2001	1350	5/18/2001	0.21		
2204	GSP-ESS-006	5/18/2001	1352	5/18/2001	0.35	6/4/2001	0.190
2205	GSP-EFS-003	5/18/2001	1345	5/18/2001	<0.10	6/4/2001	<0.160

May 25, 2001

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

Dear Mr. Martin,

Enclosed is the final Technical Memorandum for work recently completed at the former Borg Warner and current Kuhlman Electric facility at 414 Lee Street in Crystal Springs, Mississippi. If you have any questions concerning this information, please give me a call.

Sincerely,

Richard Johnson

Enclosure

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

Technical Memorandum

Garmet Shop Property
414 Lee Street
Crystal Springs, Mississippi

TECHNICAL MEMORANDUM

May 25, 2001

To: Robert Martin
Martin & Slagle, LLC

From: Richard Johnson
ECCS, Inc.

Re: Field Analytical Methods – QC Summary
Remediation at 414 Lee Street
Crystal Springs, Mississippi

INTRODUCTION

This Technical Memorandum provides documentation of the field analytical test methods used to analyze soil samples collected during a remediation episode, May 15, 2001 and May 18, 2001 around the former Borg Warner and current Kuhlman Electric facility at 414 Lee Street in Crystal Springs, Mississippi. Soil samples were analyzed for polychlorinated biphenyls (PCBs) by gas chromatography (GC) in accordance with ECCS's Polychlorinated Biphenyl (PCB) Mini Extraction Screening Procedure. A summary of test results for the episode is provided in Table 1.

The PCB mini-extraction procedure is based on the existing EPA SW846 method 8082/8141. The procedure incorporates all the quality control rigors of the full 8082 method 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 around the site using the accelerated site characterization approach. The mobile laboratory was required to provide data as quickly as possible to keep the excavation process on track while trying to maintain a goal of Level Three data quality.

CASE NARRATIVE

During the two day episode, 11 samples were collected and analyzed. To maintain rapid turnaround and to meet the project objective, two 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. Quality control data are found in Table 2.

2. All blanks, LCS's, MS and MSD's were within acceptable limts.

3. All surrogate recoveries for reported data were within acceptable limits.

4. All samples were analyzed within 14 days of sampling.

METHOD SUMMARY

This method employs a mini-extraction procedure and gas chromatography analysis for the detection of PCBs. 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 were prepared at six concentrations: PCBs – 0.05, 0.10, 0.20, 0.50, 1.0 and 2.0 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. Four 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. If sample is colored the extract is cleaned-up using concentrated sulfuric acid. An aliquot of the extract is transferred to an autosampler vial.

3. GC-ECD Analysis - A sample aliquot is injected into an HP5890 GC with an ECD linked to 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 an 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 40 and daily run sheets.
   - Blind duplicate samples were collected in the field and analyzed by the mobile laboratory.

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

Table 1
Garmet Shop Property
414 Lee Street
Crystal Springs, Mississippi
PCB Concentrations Detected in Soil

					Field Laboratory	
Field Lab Sample ID	Sample ID	Sample Depth (ft bgs)	Date Collected	Time Collected	Date Analyzed	Concentration (mg/kg)
2138	GSP-ESS-001		15-May-01	15:56	15-May-01	**0.13**
2139	GSP-ESS-002		15-May-01	16:00	15-May-01	**0.27**
2140	GSP-ESS-003		15-May-01	16:03	15-May-01	**1.2**
2141	GSP-ESS-004		15-May-01	16:02	15-May-01	**0.51**
2142	GSP-EFS-001		15-May-01	15:34	15-May-01	< 0.10
2143	GSP-EFS-002		15-May-01	15:36	15-May-01	< 0.10
2144	DUP GSP		15-May-01		15-May-01	< 0.10
2203	GSP-ESS-005		18-May-01	13:50	18-May-01	**0.21**
2204	GSP-ESS-006		18-May-01	13:52	18-May-01	**0.35**
2205	GSP-EFS-003		18-May-01	13:45	18-May-01	< 0.10
2206	DUP GSP		18-May-01		18-May-01	< 0.10

Table 2
QC Summary

Lab # associated with qc samples: 2138 through 2144

	Matrix Spike 2136	Matrix Spike Duplicate 2136		Blank 193	LCS 193
Date Analyzed:	5/15/01	5/15/01		5/15/01	5/15/01

Compound	% Rec		% Rec		% RPD	mg/kg	% Rec
PCB as 1260	91.6		102		-11%	< 0.1	92.4

Table 2
QC Summary

Lab # associated with qc samples: 2203 through 2206

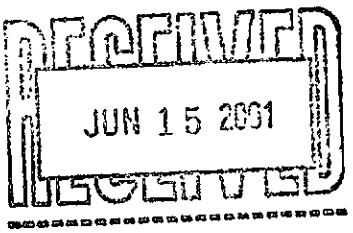
	Matrix Spike 2193	Matrix Spike Duplicate 2193		Blank 195	LCS 195
Date Analyzed:	5/18/01	5/18/01		5/18/01	5/18/01

Compound	% Rec		% Rec		% RPD	mg/kg	% Rec
PCB as 1260	91.3		98.4		-7%	< 0.1	96.1

PARADIGM ANALYTICAL LABORATORIES, INC.
2627 Northchase Parkway S.E.
Wilmington, North Carolina 28405
(910) 350-1903
Fax (910) 350-1557

Mr. Robert Martin
Martin & Slagle
Box 1023
Black Mountain, NC 28711

June 13, 2001



Report Number: G442-22

Client Project ID: Kuhlman Electric

Dear Mr. Martin,

Enclosed are the results of the analytical services performed under the referenced project. Copies of this report and supporting data will be retained in our files for a period of five years in the event they are required for future reference. Any samples submitted to our laboratory will be retained for a maximum of thirty (30) days from the date of this report unless other arrangements are requested.

If there are any questions about the report or the services performed during this project, please call for assistance. We will be happy to answer any questions or concerns which you may have.

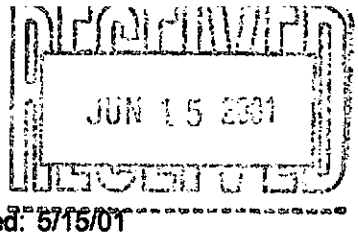
Thank you for using Paradigm Analytical Labs for your analytical services. We look forward to working with you again on any additional analytical needs which you may have.

Sincerely,

Paradigm Analytical Laboratories, Inc.

Laboratory Director
Mark Randall

PARADIGM ANALYTICAL LABORATORIES, INC.



Results for PCBs
by EPA 8082

Client Sample ID: GSP-ESS-003
Client Project ID: Kuhlman Electric
Lab Sample ID: 20647
Lab Project ID: G442-22
Matrix: Soil %SOLIDS: 84.8

Date Collected: 5/15/01
Date Received: 5/22/01
Date Analyzed: 6/4/01
Analyzed By: CLP
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Aroclor-1016	180	BQL
Aroclor-1221	180	BQL
Aroclor-1232	180	BQL
Aroclor-1242	180	BQL
Aroclor-1248	180	BQL
Aroclor-1254	180	BQL
Aroclor-1260	180	**280**
Aroclor-1262	180	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	60	60

*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:
BQL = Below Quantitation Limit
NA = Not applicable, surrogate diluted out.

Reviewed By: _____

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs
by EPA 8082

Client Sample ID: GSP Duplicate
Client Project ID: Kuhlman Electric
Lab Sample ID: 20648
Lab Project ID: G442-22
Matrix: Soil %SOLIDS: 82.6

Date Collected: 5/15/01
Date Received: 5/22/01
Date Analyzed: 6/4/01
Analyzed By: CLP
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Aroclor-1016	180	BQL
Aroclor-1221	180	BQL
Aroclor-1232	180	BQL
Aroclor-1242	180	BQL
Aroclor-1248	180	BQL
Aroclor-1254	180	BQL
Aroclor-1260	180	BQL
Aroclor-1262	180	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	49	49

Comments:
BQL = Below Quantitation Limit
NA = Not applicable, surrogate diluted out.

Reviewed By: _____

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs
by EPA 8082

Client Sample ID: GSP-ESS-001
Client Project ID: Kuhlman Electric
Lab Sample ID: 20649
Lab Project ID: G442-22
Matrix: Soil %SOLIDS: 84.9

Date Collected: 5/15/01
Date Received: 5/22/01
Date Analyzed: 6/4/01
Analyzed By: CLP
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Aroclor-1016	230	BQL
Aroclor-1221	230	BQL
Aroclor-1232	230	BQL
Aroclor-1242	230	BQL
Aroclor-1248	230	BQL
Aroclor-1254	230	BQL
Aroclor-1260	230	BQL
Aroclor-1262	230	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	91	91

Comments:
BQL = Below Quantitation Limit
NA = Not applicable, surrogate diluted out.

Reviewed By: MA

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs
by EPA 8082

Client Sample ID:	GSP-ESS-006	Date Collected:	5/18/01
Client Project ID:	Kuhlman Electric	Date Received:	5/22/01
Lab Sample ID:	20650	Date Analyzed:	6/4/01
Lab Project ID:	G442-22	Analyzed By:	CLP
Matrix:	Soil %SOLIDS: 85.4	Dilution:	1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Aroclor-1016	180	BQL
Aroclor-1221	180	BQL
Aroclor-1232	180	BQL
Aroclor-1242	180	BQL
Aroclor-1248	180	BQL
Aroclor-1254	180	BQL
Aroclor-1260	180	**190**
Aroclor-1262	180	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	80	80

*Sample was quantitated as Aroclor 1260, but appears to contain a mixture of Aroclor 1260 and Aroclor 1262.

Comments:
BQL = Below Quantitation Limit
NA = Not applicable, surrogate diluted out.

Reviewed By: _____

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs
by EPA 8082

Client Sample ID:	GSP-EFS-003	Date Collected:	5/18/01
Client Project ID:	Kuhlman Electric	Date Received:	5/22/01
Lab Sample ID:	20651	Date Analyzed:	6/4/01
Lab Project ID:	G442-22	Analyzed By:	CLP
Matrix:	Soil %SOLIDS: 87.7	Dilution:	1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Aroclor-1016	160	BQL
Aroclor-1221	160	BQL
Aroclor-1232	160	BQL
Aroclor-1242	160	BQL
Aroclor-1248	160	BQL
Aroclor-1254	160	BQL
Aroclor-1260	160	BQL
Aroclor-1262	160	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	88	88

Comments:
BQL = Below Quantitation Limit
NA = Not applicable, surrogate diluted out.

Reviewed By: _____

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs
by EPA 8082

Client Sample ID: GSP Duplicate
Client Project ID: Kuhlman Electric
Lab Sample ID: 20652
Lab Project ID: G442-22
Matrix: Soil %SOLIDS: 87.2

Date Collected: 5/18/01
Date Received: 5/22/01
Date Analyzed: 6/4/01
Analyzed By: CLP
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Aroclor-1016	170	BQL
Aroclor-1221	170	BQL
Aroclor-1232	170	BQL
Aroclor-1242	170	BQL
Aroclor-1248	170	BQL
Aroclor-1254	170	BQL
Aroclor-1260	170	BQL
Aroclor-1262	170	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	104	104

Comments:
BQL = Below Quantitation Limit
NA = Not applicable, surrogate diluted out.

Reviewed By: MA

PARADIGM ANALYTICAL LABORATORIES, INC.

MS/MSD Results for PCBs
by GC 8082

Client Sample ID:	Batch QC	Date Analyzed:	6/6/01
Client Project ID:	Kuhlman	Analyzed By:	CLP
Lab Sample ID:	SQC 37	Dilution:	1.0
Lab Project ID:	G442-22		
Matrix:	Soil		

Compound	Sample	MS	%Rec	MSD	%Rec	RPD
Aroclor-1260	BQL	697	70%	635	64%	9.3

Comments:
BQL = Below Quantitation Limit
Results reported are on-column amounts in ug/L.

Reviewed By:

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for Laboratory Control Spike (LCS)

by GC 8082

Client Sample ID: Batch QC
Client Project ID:
Lab Sample ID: SLCS 37
Lab Project ID: G442-22
Matrix: Soil

Date Analyzed: 6/6/01
Analyzed By: CLP
Dilution: 1.0

Compound	Spiked (ug/KG)	Result (ug/KG)	Limits Lower	Upper
Aroclor 1260	313	303	219	406

Reviewed By:

PARADIGM ANALYTICAL LABORATORIES, INC.

Results for PCBs
by EPA 8082

Client Sample ID: Method Blank
Client Project ID: Kuhlman Electric
Lab Sample ID: SBlk 5/25/01
Lab Project ID: G442-22
Matrix: Soil %SOLIDS: 100.0

Date Collected:
Date Received:
Date Analyzed: 6/4/01
Analyzed By: CLP
Dilution: 1

Compound	Quantitation Limit (ug/KG)	Result (ug/KG)
Aroclor-1016	160	BQL
Aroclor-1221	160	BQL
Aroclor-1232	160	BQL
Aroclor-1242	160	BQL
Aroclor-1248	160	BQL
Aroclor-1254	160	BQL
Aroclor-1260	160	BQL
Aroclor-1262	160	BQL

Surrogate Spike Recoveries	Spike Added	Spike Result	Percent Recovered
TCMX	100	95	95

Comments:
BQL = Below Quantitation Limit
NA = Not applicable, surrogate diluted out.

Reviewed By:

FOR CAUTION SPS

Environmental Chemistry Consulting Services, Inc.

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

CHAIN OF CUSTODY No 03070

Page 1 of 1

15MAY01

Project Number:	Mail Report To:
Project Name: KUHLMAN ELECTRIC	Company: MARTIN & SCAGGS
Project Location: CRYSTAL SPRINGS, MISS	Address: GARNET SHOP PROPERTY 414 LEE ST.
Sampled By (Print): CHUCK PEEL	

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
GSP-ESS-001	15 MAY 01	1556	S	1	NA	PCB's		2138
002		1600						2139
003		1603						2140
004		1602						2141
GSP-EFS-001		1534						2142
002		1536						2143
DOPLICATE GSP		—						2144

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

Relinquished By: Charles Peel Date/Time: 5/15/01 1615
Received By: R Johnson 1620 Date/Time: 15MAY01 1620

Relinquished By: Date/Time:
Received By: Date/Time:

Custody Seal: Present/Absent Intact/Not Intact Seal #'s
Receipt Temp:
Temp Blank Y N
Shipped Via:

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

Environmental Chemistry Consulting Services, Inc.

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

EVALUATION SPLS

CHAIN OF CUSTODY

No. 103078

Page 1 of 1

18MY01

Project Number:	Mail Report To:
Project Name: KUHLMAN ELECTRIC	Company: MARTIN SCHOLER
Project Location: CRYSTAL SPRINGS MISS	Address:
Sampled By (Print): CHUCK PEEL	

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
GSP-ESS-005	18MY01	1350	S	1	NA	PCBs		2203
006		1352						2204
EFS-005 (D)		1345						2205
GSP DUPLICATE		—						2206
(D) WR3206 # 18MY01								

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

Relinquished By: Charles Peel	Date/Time: 5/18/01 1605	Received By: R Polson 1610	Date/Time: 1801
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

PARADIGM ANALYTICAL LABORATORIES, INC.
2627 Northchase Parkway SE, Wilmington, NC 28405
Phone: (910)-350-1903 FAX: (910)-350-1557

Chain-of Custody Record & Analytical Request

COC# 1[illegible]

Page 1 of ____

Client: MARTIN SCAGLE
Address: BLACK MOUNTAIN NC
Address: ____
Quote #: ____

Project ID: KUHLMAN ELECTRIC
Contact: ROBERT MARTIN
Phone: 828-669-3925
Fax: ____

Date: 21 MAY 01
Turnaround: 5 DAY
Job Number: ____
P.O. Number: ____

Report To: ROBERT MARTIN
Invoice To: ____

Sample ID	Date	Time	Matrix	Preservatives	Analyses	Comments: Please specify any special reporting requirements
				NA	PCB's 8082	G442-22
BSP-ESS-003	5/15/01	1603	S			MOBIL #
BSP DUPLICATE		—				2140
BSP-ESS-001		1556				~~2140~~ 2144 WORK ORDER # 01121401
BSP-ESS-006	5/18/01	1352				2138
BSP-EFS-003		1345		5/18/01 WORK ORDER #		2204
BSP DUPLICATE		—				2205
						2206

Relinquished By	Date	Time	Received By	Date	Time	Temperature
Charles Peel	5/21/01	1700	Julie Johnson	5/22/01	0950	3.0C

State Certification Requested
NC ____ SC ____ Other ____

SEE REVERSE FOR TERMS AND CONDITIONS

DATA REVIEW SUMMARY
ECCS

	Acceptable	Unacceptable	Control Limits Met
Holding Times	√		
Completeness	√		
LCS	√		Yes
MS/MSD	√		Yes
MS/MSD/RPD	√		Yes
Blind Duplicates	√		Yes

DATA REVIEW SUMMARY
PARADIGM

	Acceptable	Unacceptable	Control Limits Met
Holding Times	√		
Completeness	√		
LCS	√		Yes
MS/MSD	√		Yes
MS/MSD/RPD	√		Yes
Blind Duplicates	√		Yes

Comparison of Fixed and Field Laboratory Split Sample Data

Sample ID	Date Collected	PCBs (1260)		
		Field Lab	Fixed Lab	RPD
PKP-ES-003	4/17/2001	5.000 E	0.770	**147%**
PKP-EFS-004	4/17/2001	< 0.100	< 0.190	0%
PKP-EFS-009	4/18/2001	< 0.100	< 0.180	0%
PKP-EFS-019	4/18/2001	< 0.100	< 0.190	0%
PKP-EFS-027	4/18/2001	0.400 J	< 0.180	NC5
PKP-EFS-029	4/19/2001	< 0.100	< 0.180	0%
PKP-ESS-003	4/19/2001	0.140	< 0.180	NC5
PKP-ESS-004	4/19/2001	< 0.100	< 0.180	0%
PKP-ESS-001	4/19/2001	0.230	< 0.180	NC5
PKP-ESS-019	4/19/2001	0.500	< 0.180	NC5
PKP-EFS-032-02	4/20/2001	< 0.100	< 0.190	0%
PKP-ESS-024	4/20/2001	0.140	< 0.170	NC5
PKP-EFS-042	4/20/2001	0.480	< 0.180	NC5
PKP-EFS-048	4/20/2001	3.200	< 0.190	NC
PKP-ESS-036	4/20/2001	2.500	0.380	**147%**
KFP-ESS-006	4/25/2001	1.100	< 0.180	**NC**
KFP-ESS-010	4/25/2001	< 0.100	< 0.190	0%
KFP-ESS-015	4/25/2001	3.300	0.460	**151%**
KFP-EFS-006	4/25/2001	0.150	< 0.180	NC5
KFP-ESS-020	4/26/2001	< 0.200	< 0.200	0%
KFP-ESS-024	4/26/2001	1.000	0.320	**103%**
JEP-EFS-002	5/2/2001	1.100	0.640	53%
JEP-EFS-013	5/2/2001	< 0.100	< 0.180	0%
JEP-EFS-015	5/2/2001	< 0.100	< 0.110	0%
JEP-EFS-029	5/2/2001	< 0.100	< 0.190	0%
JEP-EFS-037	5/2/2001	< 0.100	< 0.190	0%
JEP-ESS-007	5/2/2001	0.430	< 0.180	NC5
JEP-ESS-013	5/2/2001	< 0.100	< 0.200	0%
PKP-EFS-047-02	5/3/2001	0.240	< 0.180	NC5
JEP-EFS-044	5/3/2001	< 0.100	< 0.180	0%
JEP-ESS-025	5/3/2001	0.110	< 0.170	43%
JEP-EFS-059	5/3/2001	1.400	0.540	89%
KFP-EFS-010	5/4/2001	< 0.100	< 0.190	0%
KFP-ESS-025	5/4/2001	< 0.100	0.320	NC5

Acceptable = RPD <100% or NC5
Unacceptable = RPD >100% or NC
NC5 = Detection < 5 times
the other lab's quantitation limit.
NC = Not confirmed.

86% of data set = Acceptable

E= Estimated, exceeds calibration range
J= Elevated reporting limit due to the presence of toxaphene

Comparison of Fixed and Field Laboratory Split Sample Data

Sample ID	Date Collected	PCBs (1260)		
		Field Lab	Fixed Lab	RPD
JEP-ESS-028	5/4/2001	< 0.100	< 0.190	0%
JEP-EFS-061	5/4/2001	< 0.100	< 0.190	0%
PKP-ESS-036-02	5/5/2001	0.310	< 0.170	NC5
KFP-EFS-011	5/7/2001	< 0.100	< 0.200	0%
KFP-ESS-026	5/7/2001	0.120	< 0.200	50%
PKP-ESS-041	5/9/2001	1.400	0.530	90%
PKP-EFS-049	5/9/2001	0.440	< 0.170	NC5
JEP-EFS-002-02	5/10/2001	< 0.100	< 0.190	0%
JEP-ESS-031	5/10/2001	< 0.100	< 0.180	0%
PKP-ESS-041-02	5/11/2001	1.800	0.580	**103%**
PKP-ESS-042	5/11/2001	1.100	0.300	**114%**
JEP-EFS-064	5/11/2001	< 0.100	< 0.180	0%
JEP-EFS-066	5/11/2001	< 0.100	< 0.180	0%
JEP-ESS-040	5/11/2001	< 0.100	< 0.190	0%
GSP-ESS-001	5/15/2001	0.130	< 0.230	56%
GSP-ESS-003	5/15/2001	1.200	0.280	**124%**
GSP-ESS-006	5/18/2001	0.350	0.190	59%
GSP-EFS-003	5/18/2001	< 0.100	< 0.160	0%
PKP-EFS-050	5/18/2001	< 0.100	< 0.190	0%
PKP-EFS-051	5/18/2001	< 0.100	< 0.190	0%
PKP-ESS-035-02	5/21/2001	0.400	< 0.190	NC5
PKP-EFS-007-02	5/21/2001	< 0.100	< 0.260	0%

Acceptable = RPD <100% or NC5
Unacceptable = RPD >100% or NC
NC5 = Detection < 5 times
the other lab's quantitation limit.
NC = Not confirmed.

86% of data set = Acceptable

E= Estimated, exceeds calibration range
J= Elevated reporting limit due to the presence of toxaphene

FIXED LABORATORY BLIND DUPLICATE SAMPLE DATA

PCBs (Aroclor 1260)				
SAMPLE ID		FIXED LAB		
Sample	Duplicate	Sample	Duplicate	RPD
JEP-EFS-013	Duplicate	< 0.18	< 0.11	48.28%
JEP-EFS-044 [1]	JEP Duplicate	< 0.18	< 0.18	0.00%
JEP-EFS-061	Blind Duplicate	< 0.19	< 0.19	0.00%
JEP-EFS-002-02	JEP Duplicate	< 0.19	< 0.26	31.11%
JEP-EFS-064	JEP Duplicate	< 0.18	< 0.19	5.41%
JEP-EFS-056-02	JEP Duplicate	< 0.19	< 0.2	5.13%
KFP-ESS-002	Duplicate P	< 0.20	< 0.20	0.00%
KFP-EFS-009	Duplicate P	< 0.20	< 0.20	0.00%
KFP-EFS-006	Duplicate P 4/25/01	< 0.18	< 0.18	0.00%
KFP-ESS-020	Duplicate P 4/26/01	< 0.2	< 0.2	0.00%
KFP-EFS-010	KFP Duplicate	< 0.19	< 0.17	11.11%
KFP-EFS-011	KFP Duplicate	< 0.20	< 0.20	0.00%
PKP-EFS-004	Duplicate1850	< 0.190	< 0.190	0.00%
PKP-EFS-009	Duplicate 1862	< 0.180	< 0.180	0.00%
PKP-EFS-029	Duplicate 1878	< 0.180	< 0.180	0.00%
PKP-EFS-032-02 [2]	Duplicate	< 0.190	< 0.190	0.00%
PKP-EFS-042	Blind Duplicate	< 0.180	< 0.180	0.00%
PKP-BKF-001	Blind Duplicate	< 0.180	< 0.190	5.41%
PKP-EFS-049	PKP-Duplicate	< 0.170	< 0.180	5.71%
PKP-ESS-042	PKP-Duplicate	0.300	0.350	15.38%
PKP-EFS-050	Duplicate	< 0.190	< 0.220	14.63%
PKP-EFS-007-02	PKP-Duplicate	< 0.260	< 0.250	3.92%
GSP-ESS-001	GSP Duplicate	< 0.230	< 0.180	24.39%
GSP-EFS-003	GSP Duplicate	< 0.160	< 0.160	0.00%

Results reported in mg/kg

[1] = sample name is incorrect on paradigm chain of custudy

[2] = lacks -02 on c.oc.'s

FIELD LABORATORY BLIND DUPLICATE SAMPLE DATA

		PCBs (Aroclor 1260)		
SAMPLE ID		FIELD LAB		
Sample	Duplicate	Sample	Duplicate	RPD
PKP-EFS-004	DUP 4/17/01	< 0.10	< 0.10	0.00%
KFP-EFS-006	Duplicate P 4/25/01	< 0.18	< 0.18	0.00%
KFP-ESS-020	Duplicate P 4/26/01	< 0.2	< 0.2	0.00%
PKP-EFS-009	DUP 4/18/01	< 0.10	< 0.10	0.00%
PKP-EFS-031	*Duplicate-1	0.97	0.79	20.45%
PKP-EFS-031	*Duplicate-2	0.97	1.10	12.56%
PKP-EFS-029	DUP 4/19/01	< 0.10	< 0.10	0.00%
PKP-EFS-032	BLIND DUP	2.30	< 0.10	183.33%
PKP-EFS-042	DUP 4/30/01	0.48	0.40	18.18%
PKP-BKF-001	BLIND DUP	< 0.10	< 0.10	0.00%
PKP-EFS-049	PKP-DUP	0.44	0.35	22.78%
PKP-ESS-042	PKP-DUP	1.10	0.86	24.49%
PKP-EFS-050	PKP-DUP	< 0.10	< 0.10	0.00%
PKP-EFS-007-02	PKP-DUP	< 0.10	< 0.10	0.00%
KFP-ESS-002	DUP 4/25/01	< 0.20	< 0.20	0.00%
KFP-EFS-009	DUP 4/26/01	< 0.20	< 0.20	0.00%
KFP-EFS-010	DUP 5/4/01	< 0.10	< 0.10	0.00%
KFP-EFS-011	DUP 5/7/01	< 0.10	< 0.10	0.00%
JEP-EFS-013	DUP 5/2/01	< 0.10	< 0.10	0.00%
JEP-EFS-044	DUP 5/3/01	< 0.10	< 0.10	0.00%
JEP-EFS-061	DUP 5/4/01	< 0.10	< 0.10	0.00%
JEP-EFS-002-02	DUP 5/10/01	< 0.10	< 0.10	0.00%
JEP-EFS-064	DUP 5/11/01	< 0.10	< 0.10	0.00%
JEP-EFS-056-02	DUP 5/17/01	< 0.10	< 0.10	0.00%
GSP-ESS-001	DUP GSP	0.13	< 0.10	26.09%
GSP-EFS-003	DUP GSP	1.2	< 0.10	169.23%

E = VALUE EXCEEDS CALIBRATION RANGE.

Reported in mg/kg