August 6, 2007

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

Dear Mr. Martin,

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

Sincerely,

Kari-Ann Killion

jk Joseph Kubale

Enclosure

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Technical Memorandum

Kuhlman Electric Corporation (KEC)

Crystal Springs, Mississippi

TECHNICAL MEMORANDUM

August 6, 2007

To: Robert Martin
Martin and Slagle

From: Joseph Kubale
ECCS

Re: Field Analytical Methods
Volatile Organic Compounds (VOC) , 1,4-Dioxane
Kuhlman Electric Corporation (KEC)
Crystal Springs, MS

Introduction

This Technical Memorandum provides documentation of the field analytical test methods used to analyze water samples collected in March 2007 during the waterloo profile groundwater investigation near the Kuhlman Electric Corporation (KEC) facility in Crystal Springs, MS. The samples were analyzed by purge and trap GC/MSD for the VOCs listed below and by direct injection GC/MSD/SIM for 1,4-Dioxane.

Narrative

Waters
Water samples were analyzed for VOCs directly by purge and trap GC/MSD and for 1,4-Dioxane by direct injection GC/MSD/SIM.

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

	Purge and Trap GC/MSD
Dichlorodifluoromethane	1.0
Chloromethane	1.0
Vinyl chloride	1.0
Bromomethane	1.0
Chloroethane	1.0
Trichlorofluoromethane	1.0

Purge and Trap GC/MSD

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

	Purge and Trap GC/MSD
Naphthalene	3.0
1,2,3-Trichlorobenzene	1.0
	Direct Injection GC/MSD/SIM
1,4-Dioxane	1.0

A summary of volatile test results is provided in Table 1. A summary of 1,4-Dioxane results is provided in table 2. A summary of method blanks and matrix spike/matrix spike duplicate data is provided in Table 3 and 4, respectively.

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

VOC Method Summary

Water Samples

Water samples were provided by the client to the field lab in 40mL VOC vials. A 10mL aliquot of the sample was withdrawn from the vial with a 10mL Luer-Lok ™ syringe. 10 µL of a 25µg/mL surrogate and internal standard solution was added to the sample in the 10 mL syringe. The sample was then immediately loaded onto a Tekmar ALS 2016 autosampler with a Tekmar LSC 2000 purge and trap concentrator for GC\MSD analysis.

GC/MSD Procedure:

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

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

Quality control consisted of the following items:

- Initial calibration with % relative standard deviation less than 15% of individual response factors obtained from analysis of calibration standards
- Continuing Calibration Verification standards analyzed at a frequency of every ten samples or less
- Surrogate standard additions to samples
- Blank and LCS samples analyzed every twenty samples or less with a minimum of one per day per matrix.
- MS/MSD samples analyzed every twenty samples or less per matrix.
- Information documented in Field Logbook 150.

1,4-Dioxane Method Summary

Water Samples

Water samples were provided by the client to the field lab in 40mL VOA vials. 200 grams of sample was transferred to the filtering apparatus, spiked with 40uL 25ug/mL surrogate solution and 40uL 25ug/mL spike solution (if necessary) then filtered through a 3M 2272 activated carbon disk. The activated carbon disk was placed in a 3 dram vial containing 8mL acetone and sonicated for 15 minutes. A 0.8mL aliquot of the sample extract was spiked with 10uL 25ug/mL internal standard solution and analyzed by direct inject GC/MSD/SIM.

GC/MSD Procedure:

Identification of the target compound was done by matching retention times, quantitaion and qualifier ion relative responses to that of an authentic standard. Quantitation is accomplished by comparing the response of the major (quantitation) ion relative to an in internal standard using a seven point calibration curve. These levels equate to 0.5, 1.0, 2.5, 5.0, 10, 50 and 100 ug/L for water samples.

A Hewlett-Packard 5890 Series II gas chromatograph with a 30m x 0.32mm 1.8u film, RTX-624 micro-capillary column interfaced to a Hewlett-Packard 5972 MSD was used. The data system included a Hewlett-Packard Enviroquant chromatography workstation for data handling.

Quality control consisted of the following items:

- Initial calibration with % relative standard deviation less than 15% of individual response factors obtained from analysis of calibration standards
- Continuing Calibration Verification standards analyzed at a frequency of every ten samples or less
- Surrogate standard additions to samples
- Blank and LCS samples analyzed every twenty samples or less with a minimum of one per day per matrix.
- MS/MSD samples analyzed every twenty samples or less per matrix.
- Information documented in Field Logbook 150.

Table 1

Sample Results Volatiles– March

TABLE 1

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

VOLATILES	Reporting Limit ug/L	W1837 CSW WA8 009 - 13-Mar-07 8:35 13-Mar-07	W1838 CSW WA3 009 - 13-Mar-07 8:50 13-Mar-07	W1839 CSW FB 009 - 13-Mar-07 9:08 13-Mar-07	W1840 CSW WA1 009 - 13-Mar-07 9:17 13-Mar-07	W1841 CSW WA2 009 - 13-Mar-07 9:25 13-Mar-07	W1842 CSW WA5 005 - 13-Mar-07 9:50 13-Mar-07	W1843 CSW WA6 005 - 13-Mar-07 10:10 13-Mar-07	W1844 CSW TP 009 - 13-Mar-07 10:25 13-Mar-07	W1845 CSW Duplicate - 13-Mar-07 - 13-Mar-07
Dichlorodifluoromethane	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl Chloride	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene Chloride	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,2-Dichloroethene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2,2-Dichloropropane	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromochloromethane	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloropropene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Tetrachloride	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Benzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromomethane	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**1.0**	< 1.0
cis-1,3-Dichloropropene	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Toluene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichloropropane	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**2.1**	< 1.0
1,2-Dibromoethane	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1,2-Tetrachloroethane	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethyl Benzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

TABLE 1

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

VOLATILES	Reporting Limit ug/L	W1837 CSW WA8 009	W1838 CSW WA3 009	W1839 CSW FB 009	W1840 CSW WA1 009	W1841 CSW WA2 009	W1842 CSW WA5 005	W1843 CSW WA6 005	W1844 CSW TP 009	W1845 CSW Duplicate
Depth		-	-	-	-	-	-	-	-	
Date Collected		13-Mar-07	13-Mar-07	13-Mar-07	13-Mar-07	13-Mar-07	13-Mar-07	13-Mar-07	13-Mar-07	13-Mar-07
Time Collected		8:35	8:50	9:08	9:17	9:25	9:50	10:10	10:25	-
Date Analyzed		13-Mar-07	13-Mar-07	13-Mar-07	13-Mar-07	13-Mar-07	13-Mar-07	13-Mar-07	13-Mar-07	13-Mar-07
Xylenes, Total	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Styrene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	**3.0**	< 2.0
Isopropylbenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Bromobenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,3-Trichloropropane	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
n-Propylbenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Chlorotoluene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3,5-Trimethylbenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
4-Chlorotoluene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
tert-Butylbenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trimethylbenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
sec-Butylbenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
p-Isopropyltoluene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
n-Butylbenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-Chloropropane	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
1,3,5-Trichlorobenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Hexachlorobutadiene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Naphthalene	3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
1,2,3-Trichlorobenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Surrogates:										
Dibromofluoromethane	%	104	99.9	102	105	108	112	106	106	108
Toluene-D8	%	99.2	99.6	101	101	98.9	100	101	101	101
4-Bromofluorobenzene	%	94.8	94.4	100	93.3	94.0	93.2	94.2	93.6	93.5

Table 2

Sample Results 1,4-Dioxane– March

TABLE 2

Kuhlman Electric - Crystal Springs, Mississippi - 1,4-Dioxane Detected in Water

		W1837	W1838	W1839	W1840	W1841	W1842	W1843	W1844	1845
		CSW	CSW	CSW	CSW	CSW	CSW	CSW	CSW	CSW
		WA8	WA3	FB	WA1	WA2	WA5	WA6	TP	Duplicate
		009	009	009	009	009	005	005	009	
	Depth	-	-	-	-	-	-	-	-	
	Date Collected	13-Mar-07	13-Mar-07	13-Mar-07	13-Mar-07	13-Mar-07	13-Mar-07	13-Mar-07	13-Mar-07	13-Mar-07
	Time Collected	8:35	8:50	9:08	9:17	9:25	9:50	10:10	10:25	-
	Date Analyzed	13-Mar-07	13-Mar-07	13-Mar-07	13-Mar-07	13-Mar-07	13-Mar-07	13-Mar-07	13-Mar-07	13-Mar-07
VOLATILES	Reporting Limit ug/L									
1,4-Dioxane	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Surrogates:										
1,4-Dioxane-D8	%	83.6	79.5	77.6	83.3	87.4	79.4	79.7	86.4	79.8

Table 3

QC Results Volatiles– March

TABLE 3
QC Report

Lab # associated with qc samples: W1837 through W1845

	Matrix Spike W1840		Matrix Spike Duplicate W1840			Blank
Date Analyzed:	3/13/07		3/13/07			3/13/07
Compound	% Rec		% Rec	RPD		ug/L
Dichlorodifluoromethane	100%		90.4%	10.1%		< 1.0
Chloromethane	129%		120%	7.2%		< 1.0
Vinyl chloride	124%		114%	8.4%		< 1.0
Bromomethane	115%		110%	4.4%		< 1.0
Chloroethane	129%		124%	4.0%		< 1.0
Trichlorofluoromethane	122%		111%	9.4%		< 1.0
1,1-Dichloroethene	130%		116%	11.4%		< 1.0
Methylene chloride	125%		111%	11.9%		< 1.0
trans-1,2-Dichloroethene	127%		113%	11.7%		< 1.0
1,1-Dichloroethane	120%		110%	8.7%		< 1.0
cis-1,2-Dichloroethene	122%		110%	10.3%		< 1.0
2,2-Dichloropropane	111%		103%	7.5%		< 1.0
omochloromethane	128%		106%	18.8%		< 1.0
Chloroform	137%		109%	22.8%		< 1.0
1,1,1-Trichloroethane	108%		98.4%	9.3%		< 1.0
1,1-Dichloropropene	102%		94.6%	7.5%		< 1.0
Carbon tetrachloride	109%		107%	1.9%		< 1.0
Benzene	106%		101%	4.8%		< 1.0
1,2-Dichloroethane	106%		99.8%	6.0%		< 1.0
Trichloroethene	102%		96.4%	5.6%		< 1.0
1,2-Dichloropropane	105%		100%	4.9%		< 1.0
Dibromomethane	100%		95.2%	4.9%		< 1.0
Bromodichloromethane	103%		97.0%	6.0%		< 1.0
cis-1,3-Dichloropropene	89.0%		87.2%	2.0%		< 2.0
Toluene	107%		97.8%	9.0%		< 1.0
trans-1,3-Dichloropropene	94.0%		86.4%	8.4%		< 1.0
1,1,2-Trichloroethane	102%		96.2%	5.9%		< 1.0
Tetrachloroethene	104%		96.2%	7.8%		< 1.0
1,3-Dichloropropane	95.8%		91.2%	4.9%		< 1.0
Dibromochloromethane	99.2%		94.6%	4.7%		< 1.0
1,2-Dibromoethane	94.6%		89.4%	5.7%		< 1.0
Chlorobenzene	112%		102%	9.3%		< 1.0
1,1,1,2-Tetrachloroethane	110%		107%	2.8%		< 1.0
thyl benzene	108%		101%	6.7%		< 1.0
Xylenes, Total	110%		103%	6.6%		< 2.0
Styrene	108%		99.6%	8.1%		< 1.0
Bromoform	100%		91.2%	9.2%		< 2.0

TABLE 3
QC Report

Lab # associated with qc samples: W1837 through W1845

	Matrix Spike W1840	Matrix Spike Duplicate W1840	Blank
Date Analyzed:	3/13/07	3/13/07	3/13/07

Compound	% Rec		% Rec	RPD		ug/L
Isopropylbenzene	103%		97.2%	5.8%		< 1.0
1,1,2,2-Tetrachloroethane	96.6%		96.2%	0.4%		< 2.0
Bromobenzene	111%		100%	10.4%		< 1.0
1,2,3-Trichloropropane	104%		103%	1.0%		< 2.0
n-Propylbenzene	109%		102%	6.6%		< 1.0
2-Chlorotoluene	114%		105%	8.2%		< 1.0
1,3,5-Trimethylbenzene	111%		106%	4.6%		< 1.0
4-Chlorotoluene	112%		103%	8.4%		< 1.0
tert-Butylbenzene	107%		102%	4.8%		< 1.0
1,2,4-Trimethylbenzene	112%		104%	7.4%		< 1.0
sec-Butylbenzene	109%		103%	5.7%		< 1.0
1,3-Dichlorobenzene	112%		103%	8.4%		< 1.0
Isopropyltoluene	108%		98.8%	8.9%		< 1.0
1,4-Dichlorobenzene	115%		98.0%	16.0%		< 1.0
n-Butylbenzene	110%		100%	9.5%		< 1.0
1,2-Dichlorobenzene	109%		99.6%	9.0%		< 1.0
1,2-Dibromo-3-chloropropane	92.8%		91.2%	1.7%		< 2.0
1,3,5-Trichlorobenzene	105%		94.8%	10.2%		< 1.0
1,2,4-Trichlorobenzene	97.2%		89.8%	7.9%		< 1.0
Hexachlorobutadiene	113%		102%	10.2%		< 1.0
Naphthalene	84.8%		78.8%	7.3%		< 3.0
1,2,3-Trichlorobenzene	95.8%		91.2%	4.9%		< 1.0

Table 4

QC Results 1,4-Dioxane– March

TABLE 4
QC Report

Lab # associated with qc samples: W1837 through W1845

	Matrix Spike	Matrix Spike Duplicate		LCS	Blank
	W1837	W1837			
Date Extracted:	03/13/07	03/13/07		03/13/07	03/13/07
Date Analyzed:	03/13/07	03/13/07		03/13/07	03/13/07

Compound	% Rec		% Rec	RPD		% Rec	ug/L
1,4-Dioxane	76.8%		80.8%	5.1%		82.8%	< 1.0

Appendix A

Chain of Custody Sheets for Samples

Environmental Chemistry Consulting Services, Inc.

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

CHAIN OF CUSTODY

City Well

No. 012576 *

Page 1 of 1

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

Sample Description	Collection Date	Collection Time	Matrix	Total Bottles	Preserv*	Analysis Requested	Comments	Laboratory Number
CSW-WA 8-009	3/13/07	0835	W	4	A	1,4 Dioxane + 8260B		W1837
CSW-WA 3-009		0850		4	A			W1838
CSW-FB-009		0908		4	A			W1839
CSW-WA1-009		0917		13 10	A/B			W1840
CSW-WA2-009		0925		4	A			W1841
CSW-WA5-005		0950		4	A			W1842
CSW-WA6-005		1010		4	A			W1843
CSW-TP-009		1025		4	A			W1844
DUPLICATE		—		10	A/B			W1845

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

Relinquished By: Chuck Paul	Date/Time: 3/13/07 1030	Received By:	Date/Time: 3/13/07 1030
Relinquished By:	Date/Time:	Received By:	Date/Time:

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

Shipped Via:

Receipt Temp:

Temp Blank Y N

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

Appendix B

FEDEX shipping label for Paradigm Labs

MUR11

FedEx Express **US Airbill**

FedEx Tracking Number 8567 8745 2313

Form ID No. 0215

Sender's Copy

From *Please print and press hard.*

Date 3/14/07 Sender's FedEx Account Number

Sender's Name CHUCK PERL Phone (601) 898-2792

Company PERL CONSULTING

Address 140 CHAPEL LANE

Dept./Floor/Suite/Room

City MADISON State MS ZIP 39110

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

To

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

Company PARADIGM ANALYTICAL LABS

Recipient's Address 5500 BUSINESS DR

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Dept./Floor/Suite/Room

Address

To request a package be held at a specific FedEx location, print FedEx address here.

City WILMINGTON State NC ZIP 28405-8446

0331513763

Ship and track packages at fedex.com
Simplify your shipping. Manage your account. Access all the tools you need.

4a Express Package Service

Packages up to 150 lbs.

- [x] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations.* Saturday Delivery NOT available.
- [ ] FedEx 2Day — Second business day.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

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

* To most locations.

4b Express Freight Service

Packages over 150 lbs.

- [ ] FedEx 1Day Freight* — Next business day.** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx 2Day Freight — Second business day.** Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx 3Day Freight — Third business day.** Saturday Delivery NOT available.

* Call for Confirmation: ** To most locations.

5 Packaging

- [ ] FedEx Envelope*
- [ ] FedEx Pak* — Includes FedEx Small Pak, FedEx Large Pak, and FedEx Sturdy Pak.
- [ ] FedEx Box
- [ ] FedEx Tube
- [x] Other

* Declared value limit $500.

6 Special Handling

Include FedEx address in Section 3.

- [ ] **SATURDAY Delivery** NOT Available for FedEx Standard Overnight, FedEx First Overnight, FedEx Express Saver, or FedEx 3Day Freight.
- [ ] **HOLD Weekday** at FedEx Location NOT Available for FedEx First Overnight.
- [ ] **HOLD Saturday** at FedEx Location Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

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

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

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging.

- [ ] Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below.

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

FedEx Acct. No. or 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. By using this Airbill you agree to the service conditions on the back of this Airbill and in the current FedEx Service Guide, including terms that limit our liability.

FedEx Use Only

8 *NEW* Residential Delivery Signature Options

If you require a signature, check Direct or Indirect.

- [ ] No Signature Required — Package may be left without obtaining a signature for delivery.
- [ ] Direct Signature — Anyone at recipient's address may sign for delivery. *Fee applies.*
- [ ] Indirect Signature — If no one is available at recipient's address, anyone at a neighboring address may sign for delivery. *Fee applies.*

519

Appendix C

Chain of Custody Sheets for samples sent to Paradigm Labs

CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

Locations Nationwide
- Alaska
- Hawaii
- Louisiana
- Maryland
- New Jersey
- North Carolina
- West Virginia

www.us.sgs.com

054084

(1)

CLIENT: MARTIN + SLAGLE

CONTACT: ROBERT MARTIN PHONE NO:( )

PROJECT: KUHLMAN ELECTRIC SITE/PWSID# :

REPORTS TO: SAME FAX NO.:( )

INVOICE TO: SAME QUOTE # P.O. NUMBER

SGS Reference:

PAGE 1 OF 1

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE (C=COMP G=GRAB)	Preservatives Used: HCL / None	Analysis Required (3): 8260B / 1,4 Dioxane *	MOBIL LAB #	REMARKS
	CSW-WA1-009	3/13/07	0917	W	6		X	X	W1840	
	DUPLICATE	3/13/07	—	W	6		X	X	W1845	
	TRIP BLANK	—	—	W	2					
										* Meet 0.5 µg/L Report Limit for 1,4 Dioxane

(5)

Collected/Relinquished By:(1)	Date	Time	Received By:
Charles Peel	3/14/07	1400	
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received By:

(4)

Shipping Carrier: Samples Received Cold? (Circle) YES NO

Shipping Ticket No: Temperature °C: _____ °F _____

Special Deliverable Requirements: Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Requested Turnaround Time and Special Instructions:

❑ 200 W. Potter Drive **Anchorage, AK 99518** Tel: (907) 562-2343 Fax: (907) 561-5301
❑ 5500 Business Drive **Wilmington, NC 28405** Tel: (910) 350-1903 Fax: (910) 350-1557
❑ 1258 Greenbrier Street **Charleston, WV 25311** Tel: (304) 346-0725 Fax: (304) 346-0761

White - Retained by Lab
Yellow - Returned with Report