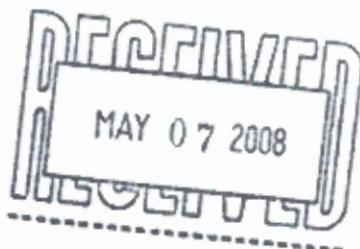




May 6, 2008



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 Kubale
Joseph Kubale

Enclosure

Environmental Chemistry Consulting Services, Inc.

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

Technical Memorandum

Kuhlman Electric Corporation (KEC)

Crystal Springs, Mississippi



TECHNICAL MEMORANDUM

May 6, 2008

To: Robert Martin
Martin and Slagle

From: Joseph Kubale
ECCS

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

Introduction

This Technical Memorandum provides documentation of the analytical test methods used to analyze water samples collected in March 2008 during the city well groundwater sampling event 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

Environmental Chemistry Consulting Services, Inc.

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

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 Columbia Analytical Services, Inc.
- C) Chain of custody sheets for samples sent to Columbia Analytical Services, Inc.

VOC Method Summary

Water Samples

Water samples were provided by the client to the 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 Logbook 150.

1,4-Dioxane Method Summary

Water Samples

Water samples were provided by the client to the lab in 1L amber bottle. 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 methanol 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, quantitation 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 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 Logbook 150.

Table 1

Sample Results Volatiles– March

TABLE 1

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

		W2185 CSW WA8 022	W2186 CSW WA3 022	W2187 CSW WA1 022	W2188 CSW WA2 022	W2189 CSW FB 022	W2190 CSW WA5 017	W2191 CSW WA6 017	W2192 CSW TP 022	W2193 CSW Duplicate
Depth	-	-	-	-	-	-	-	-	-	-
Date Collected	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08
Time Collected	8:20	8:32	8:42	8:57	8:55	9:27	9:36	9:52	9:52	-
Date Analyzed	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08
Reporting Limit ug/L	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08
VOLATILES										
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	< 1.0	< 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
1,1,2-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

		W2185	W2186	W2187	W2188	W2189	W2190	W2191	W2192
		CSW							
	Depth	WA8	WA3	WA1	WA2	FB	WA5	WA6	TP
	Date Collected	022	022	022	022	022	017	017	022
	Time Collected	-	-	-	-	-	-	-	-
	Date Analyzed	4-Mar-08							
	Reporting Limit	8:20	8:32	8:42	8:57	8:55	9:27	9:36	9:52
VOLATILES	ug/L	4-Mar-08							
Xylenes, Total	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
Bromoform	2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Isopropylbenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	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
1,2,3-Trichloropropane	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
2-Chlorotoluene	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
4-Chlorotoluene	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
1,2,4-Trimethylbenzene	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
1,3-Dichlorobenzene	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
1,4-Dichlorobenzene	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
1,2-Dichlorobenzene	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
1,3,5-Trichlorobenzene	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
Hexachlorobutadiene	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
1,2,3-Trichlorobenzene	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Surrogates:									
Dibromofluoromethane	%	98.6	103	99.2	107	98.7	103	107	102
Toluene-D8	%	92.7	95.0	99.8	100	95.8	96.5	101	94.6
4-Bromofluorobenzene	%	100	102	99.4	107	105	98.9	102	99.2

Table 2
Sample Results 1,4-Dioxane– March

TABLE 2

Kuhlman Electric - Crystal Springs, Mississippi - 1,4-Dioxane Detected in Water									
	W2185	W2186	W2187	W2188	W2189	W2190	W2191	W2192	W2193
	CSW	CSW	CSW	CSW	CSW	CSW	CSW	CSW	CSW
	WA8	WA3	WA1	WA2	FB	WA5	WA6	TP	Duplicate
Depth	0.22	0.22	0.22	0.22	0.22	0.17	0.17	0.22	
Date Collected	-	-	-	-	-	-	-	-	
Time Collected	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08
Date Analyzed	8:20	8:32	8:42	8:57	8:56	9:27	9:36	9:52	-
Reporting Limit ug/L	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	4-Mar-08	5-Mar-08	5-Mar-08	5-Mar-08	5-Mar-08
VOLATILES									
1,4-Dioxane	1.0	< 1.0	< 1.0	1.2	< 1.0	< 1.0	< 1.0	< 1.0	1.2
Surrogates:									
1,4-Dioxane-D8	%	94.2	101	109	86.5	93.0	96.9	95.1	104
									101

Table 3
QC Results Volatiles– March

TABLE 3
QC Report

Lab # associated with qc samples: W2185 through W2193

	Matrix	Matrix	Spike	Duplicate	Blank
		W2186		W2186	
Date Analyzed:	3/4/08	3/4/08	3/4/08		

Compound	% Rec		% Rec	RPD		ug/L
Dichlorodifluoromethane	88.8%		83.2%	6.5%		< 1.0
Chloromethane	93.6%		107%	13.5%		< 1.0
Vinyl chloride	107%		108%	0.7%		< 1.0
Bromomethane	102%		113%	10.4%		< 1.0
Chloroethane	115%		109%	5.4%		< 1.0
Trichlorofluoromethane	104%		102%	1.6%		< 1.0
1,1-Dichloroethene	99.4%		110%	9.8%		< 1.0
Methylene chloride	112%		120%	6.6%		< 1.0
trans-1,2-Dichloroethene	103%		106%	2.5%		< 1.0
1,1-Dichloroethane	108%		109%	1.5%		< 1.0
cis-1,2-Dichloroethene	98.0%		101%	3.0%		< 1.0
2,2-Dichloropropane	113%		111%	1.8%		< 1.0
Bromochloromethane	99.6%		96.6%	3.1%		< 1.0
Chloroform	105%		103%	2.1%		< 1.0
1,1,1-Trichloroethane	102%		101%	1.2%		< 1.0
1,1-Dichloropropene	95.8%		95.0%	0.8%		< 1.0
Carbon tetrachloride	100%		99.2%	1.0%		< 1.0
Benzene	100%		102%	1.2%		< 1.0
1,2-Dichloroethane	109%		105%	3.7%		< 1.0
Trichloroethene	98.6%		97.4%	1.2%		< 1.0
1,2-Dichloropropane	98.8%		99.4%	0.6%		< 1.0
Dibromomethane	104%		102%	2.1%		< 1.0
Bromodichloromethane	101%		102%	1.2%		< 1.0
cis-1,3-Dichloropropene	92.6%		90.4%	2.4%		< 2.0
Toluene	98.8%		98.2%	0.6%		< 1.0
trans-1,3-Dichloropropene	92.4%		94.2%	1.9%		< 1.0
1,1,2-Trichloroethane	102%		101%	0.6%		< 1.0
Tetrachloroethene	99.4%		100%	1.0%		< 1.0
1,3-Dichloropropane	98.6%		96.4%	2.3%		< 1.0
Dibromochloromethane	101%		99.0%	2.2%		< 1.0
1,2-Dibromoethane	97.4%		90.4%	7.5%		< 1.0
Chlorobenzene	101%		101%	0.0%		< 1.0
1,1,1,2-Tetrachloroethane	98.0%		95.2%	2.9%		< 1.0
Ethyl benzene	99.2%		97.2%	2.0%		< 1.0
Xylenes, Total	99.5%		97.2%	2.3%		< 2.0
Styrene	96.2%		98.0%	1.9%		< 1.0
Bromoform	97.6%		94.4%	3.3%		< 2.0

TABLE 3
QC Report

Lab # associated with qc samples: W2185 through W2193

	Matrix	Matrix	Spike	Duplicate	Blank
Date Analyzed:	3/4/08	3/4/08	3/4/08		

Compound	% Rec		% Rec	RPD		ug/L
Isopropylbenzene	93.2%		93.8%	0.6%		< 1.0
1,1,2,2-Tetrachloroethane	105%		101%	3.9%		< 2.0
Bromobenzene	98.4%		100%	1.8%		< 1.0
1,2,3-Trichloropropane	102%		103%	0.6%		< 2.0
n-Propylbenzene	99.2%		101%	2.2%		< 1.0
2-Chlorotoluene	102%		105%	2.9%		< 1.0
1,3,5-Trimethylbenzene	102%		102%	0.6%		< 1.0
4-Chlorotoluene	99.8%		101%	1.6%		< 1.0
tert-Butylbenzene	95.8%		94.6%	1.3%		< 1.0
1,2,4-Trimethylbenzene	98.6%		104%	5.7%		< 1.0
sec-Butylbenzene	98.6%		101%	2.6%		< 1.0
1,3-Dichlorobenzene	96.4%		99.8%	3.5%		< 1.0
p-Isopropyltoluene	95.6%		97.6%	2.1%		< 1.0
1,4-Dichlorobenzene	94.4%		102%	7.5%		< 1.0
n-Butylbenzene	97.0%		99.2%	2.2%		< 1.0
1,2-Dichlorobenzene	95.8%		97.8%	2.1%		< 1.0
1,2-Dibromo-3-chloropropane	90.8%		95.6%	5.2%		< 2.0
1,3,5-Trichlorobenzene	89.6%		95.0%	5.9%		< 1.0
1,2,4-Trichlorobenzene	86.0%		92.8%	7.6%		< 1.0
Hexachlorobutadiene	93.4%		97.6%	4.4%		< 1.0
Naphthalene	81.0%		85.2%	5.1%		< 3.0
1,2,3-Trichlorobenzene	87.8%		92.2%	4.9%		< 1.0

Table 4
QC Results 1,4-Dioxane– March

TABLE 4
QC Report

Lab # associated with qc samples: W2185 through W2193

		Matrix			LCS	Blank
	Matrix	Spike	Duplicate			
	Spike					
	W2186		W2186			
Date Extracted:	03/04/08	03/04/08			03/04/08	03/04/08
Date Analyzed:	03/04/08	03/04/08			03/04/08	03/04/08
Compound	% Rec		% Rec	RPD		% Rec ug/L
1,4-Dioxane	109%		103%	5.7%		104% < 1.0

Appendix A

Chain of Custody Sheets for Samples

Appendix B

FEDEX shipping label for Columbia Analytical Services, Inc.

From Please print and assess here
Date 3/6/08 Sender's FedEx Account Number 226281991

Sender's Name Joe Kubale Phone (608) 345-1974

Company ECR, INC

Address 2525 ADVANCE RD

City MADISON State WI ZIP 53718

Your Internal Billing Reference

Fax/ID characters will appear on invoice.

To Recipient's Name SAMPLE CUSTODIAN Phone (360) 1577-7222

Company COLUMBIA ANALYTICAL

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

Address 1317 50 13th AVE

City KELSO State WA ZIP 98626

[My online shipping at fedex.com](#)

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

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

0200

Senders Copy

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 street locations
- FedEx 2Day Second business day FedEx Express Saver Third business day
FedEx Envelope rate not available. Minimum charter 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 details.

* Declared value limit \$500

5 Packaging

- FedEx Envelope* FedEx Pak* Included FedEx Small Pak, FedEx Large Pak, and FedEx Standy Pak Other

6 Special Handling

- SATURDAY Delivery Available ONLY for FedEx Priority Overnight and FedEx 2Day to select ZIP codes HOLD Weekday at FedEx Location NOT Available for FedEx Next Overnight
- Includes FedEx address in Section 1.
- at FedEx Location Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations
- Do this shipment contain dangerous goods?
- No Yes Shipper's Declaration not required
- One box must be checked.
- Dangerous Goods (including Dry Ice) cannot be shipped in FedEx packaging.

7 Payment Bill to:

- Sender Acc. No. in Section 1 will be listed. Recipient Third Party Credit Card Cash/Check
- Enter FedEx Acct. No. or Credit Card Num. (optional)
- 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.

8 Release Signature

Sign to authorize delivery without receiving 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.

Rev. Date 10/01/FedEx/50012-01001-2001 FedEx PRINTED IN U.S.A. WGLS 02 446

Appendix C

Chain of Custody Sheets for samples sent to Columbia Analytical Services, Inc.



Columbia
Analytical
Services

CHAIN OF CUSTODY

1317 South 13th Ave : Kelso WA 98626 : (360) 577-2222 : (800) 695-7222x07 : FAX : (360) 638-1068
Mr. T. R. Gray : (360) 638-1068
PAGE _____ OF _____ COG # _____

An Employee Owned Company
1317 South 13th Ave. • KELSO, WA 98526 • (360) 577-7222 • (800) 695-7220 • FAX (360) 636-1088

PAGE _____ OF _____ COC

444

PROJECT NUMBER		JCNWLMR2		CIECEN1C	
PROJECT MANAGER		PROJECT DIRECTOR			
COMPANY/ADDRESS		MARKET & SERVICE			
E-MAIL ADDRESS		JCNWLMR@MARKET.COM			
PHONE #				FAX#	
SAMPLES SIGNATURE		John W. L. M. R.		FAX#	
SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS
KEP-DP-079-011	3/10/04	1030	5	1	X
KEP-DP-079-013	3/11/04	2045	5	1	X
KEP-DP-039-016	3/12/04	2101	5	2	X
Duplicate	3/10/04	—	5	2	X
C5W-WA1-022	3/4/04	0842	6	—	X
Duplicate	3/4/04	—	6	4	X
KEP-WP-048-003	3/4/04	2115	6	4	X
Duplicate 2	3/4/04	—	6	4	X
TRIP BULK			6	2	
REMARKS					
<p>REPORT REQUIREMENTS</p> <ul style="list-style-type: none"> I. Routine Report: Method Blank, Surrogate, as required II. Report Dup., MS, MSD as required III. Data Validation Report (includes all raw data) IV. CLP Deliverable Report V. EDD 					
<p>INVOICE INFORMATION</p> <p>P.O. # <u>1626144111</u></p> <p>Bill To: <u>MARKET INC.</u></p>					
<p>TURNOAROUND REQUIREMENTS</p> <p>24 hr. 48 hr.</p> <p>5 Day Standard (10-15 working days)</p> <p>Provide FAX Results</p> <p>Requested Report Date</p>					
RELINQUISHED BY: <u>John W. L. M. R.</u> Signature Date/Time Firm		RECEIVED BY: Signature Date/Time Printed Name Firm		RELINQUISHED BY: Signature Date/Time Printed Name Firm	
RECEIVED BY: Signature Date/Time Printed Name Firm		RELINQUISHED BY: Signature Date/Time Printed Name Firm		RECEIVED BY: Signature Date/Time Printed Name Firm	
<p>Circle which metals are to be analyzed:</p> <p>Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Ti Sn V Zn Hg</p> <p>Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Ti Sn V Zn Hg</p> <p>*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: (CIRCLE ONE)</p> <p>SPECIAL INSTRUCTIONS/COMMENTS:</p> <p>1. Hydrocarbons by F270/F144</p>					