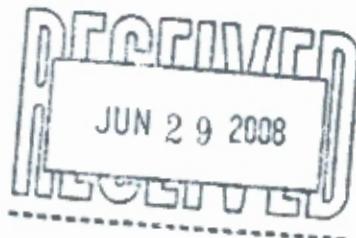




June 25, 2008



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 Kilham
for Joseph Kubale

Enclosure

Environmental Chemistry Consulting Services, Inc.

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

Technical Memorandum

Kuhlman Electric Corporation (KEC)

Crystal Springs, Mississippi



TECHNICAL MEMORANDUM

June 25, 2008

To: Robert Martin
Martin and Slagle

From: Joseph Kubale *JK*
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 May 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 |

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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-Dichloropropene | 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– May

TABLE 1

| | Kuhlman Electric - Crystal Springs, I issippi - Volatiles Detected in Water | | | | | | | | | | |
|---------------------------|--|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| | W2285 | W2286 | W2287 | W2288 | W2289 | W2290 | W2291 | W2292 | W2293 | | |
| | CSW | CSW | CSW | CSW | CSW | CSW | CSW | CSW | CSW | CSW | |
| | WA8 | WA3 | WA1 | WA2 | WA5 | WA6 | WA6 | WA6 | WA6 | WA6 | Duplicate |
| Depth | 0.24 | 0.24 | 0.24 | 0.24 | 0.19 | 0.19 | - | - | - | - | |
| Date Collected | 6-May-08 | 6-May-08 | 6-May-08 | 6-May-08 | 6-May-08 | 6-May-08 | 6-May-08 | 6-May-08 | 6-May-08 | 6-May-08 | |
| Time Collected | 8:29 | 8:40 | 8:50 | 9:00 | 9:04 | 9:30 | 9:40 | 9:53 | 9:53 | 9:53 | |
| Date Analyzed | 7-May-08 | 7-May-08 | 7-May-08 | 7-May-08 | 7-May-08 | 7-May-08 | 7-May-08 | 7-May-08 | 7-May-08 | 7-May-08 | |
| Reporting Limit ug/L | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | |
| VOLATILES | | | | | | | | | | | |
| Dichlorodifluoromethane | 1.0 | < 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 | < 1.0 |
| Vinyl Chloride | 1.0 | < 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 | < 1.0 |
| Chloroethane | 1.0 | < 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 | < 1.0 |
| 1,1-Dichloroethene | 1.0 | < 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 | < 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 | < 1.0 |
| 1,1-Dichloroethane | 1.0 | < 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 | < 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 | < 1.0 |
| Bromochloromethane | 1.0 | < 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 | < 1.0 |
| 1,1,1-Trichloroethane | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| 1,1-Dichloropropene | 1.0 | < 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 | < 1.0 |
| Benzene | 1.0 | < 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 | < 1.0 |
| Trichloroethene | 1.0 | < 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 | < 1.0 |
| Dibromomethane | 1.0 | < 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 | < 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 | < 2.0 |
| Tetrachloroethene | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Toluene | 1.0 | < 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 | < 1.0 |
| 1,1,2-Trichloroethane | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Ethyl Benzene | 1.0 | < 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 | < 1.0 |
| 1,1,2-Tetrachloroethane | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |
| Ethyl Benzene | 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 |

| Kuhlman Electric - Crystal Springs, Mississippi - Volatiles Detected in Water | | | | | | | | | | | |
|---|----------------------------|----------------------------|----------------------------|----------------------------|---------------------------|----------------------------|----------------------------|---------------------------|---------------------------|---------------|---------------|
| | W2285 CSW WA3 024 | W2286 CSW WA3 024 | W2287 CSW WA1 024 | W2288 CSW WA2 024 | W2289 CSW FB 024 | W2290 CSW WA5 019 | W2291 CSW WA6 019 | W2292 CSW TP 024 | W2293 CSW Duplicate | | |
| VOLATILES | Depth | Date Collected | Time Collected | Date Analyzed | Time Analyzed | Date Analyzed | Time Analyzed | Date Analyzed | Time Analyzed | Date Analyzed | Time Analyzed |
| | ug/L | | | | | | | | | | |
| Xylenes, Total | 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 |
| Bromoform | 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 |
| 1,1,2,2-Tetrachloroethane | 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 |
| 1,2,3-Trichloropropane | 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 |
| 2-Chlorotoluene | 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 |
| 4-Chlorotoluene | 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 |
| 1,2,4-Trimethylbenzene | 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 |
| 1,3-Dichlorobenzene | 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 |
| 1,4-Dichlorobenzene | 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 |
| 1,2-Dichlorobenzene | 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 |
| 1,3,5-Trichlorobenzene | 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 |
| Hexachlorobutadiene | 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 |
| 1,2,3-Trichlorobenzene | 1.0 | < | 1.0 | < | 1.0 | < | 1.0 | < | 1.0 | < | 1.0 |
| Surrogates: | | | | | | | | | | | |
| Dibromofluoromethane | % | 102 | 105 | 102 | 101 | 104 | 102 | 102 | 102 | 96.8 | |
| Toluene-D8 | % | 101 | 101 | 101 | 98.5 | 97.0 | 98.2 | 98.7 | 94.2 | 111 | |
| 4-Bromofluorobenzene | % | 102 | 99.6 | 100 | 98.7 | 96.6 | 98.1 | 95.4 | 96.2 | 107 | |

Table 2
Sample Results 1,4-Dioxane— May

TABLE 2
Kuhlman Electric - Crystal Springs, Mississippi - 1,4-Dioxane Detected in Water

| | | W2285 | W2286 | W2287 | W2288 | W2289 | W2290 | W2291 | W2292 | W2293 |
|----------------------|----------|----------|----------|------------|----------|----------|----------|----------|----------|------------|
| | | CSW | CSW | CSW | CSW | CSW | CSW | CSW | CSW | CSW |
| Depth | | WA8 | WA3 | WA1 | WA2 | FB | WA5 | WA6 | TP | Duplicate |
| 024 | 024 | 024 | 024 | 024 | 024 | 024 | 019 | 019 | 024 | |
| Depth | - | - | - | - | - | - | - | - | - | |
| Date Collected | 6-May-08 | 6-May-08 | 6-May-08 | 6-May-08 | 6-May-08 | 6-May-08 | 6-May-08 | 6-May-08 | 6-May-08 | 6-May-08 |
| Time Collected | 8:29 | 8:40 | 8:50 | 9:00 | 9:04 | 9:30 | 9:40 | 9:53 | - | - |
| Date Analyzed | 7-May-08 | 7-May-08 | 7-May-08 | 7-May-08 | 7-May-08 | 7-May-08 | 7-May-08 | 7-May-08 | 7-May-08 | 7-May-08 |
| Reporting Limit ug/L | | | | | | | | | | |
| VOLATILES | | | | | | | | | | |
| 1,4-Dioxane | 1.0 | < 1.0 | < 1.0 | 1.3 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | < 1.0 | 1.3 |
| Surrogates: | | | | | | | | | | |
| 1,4-Dioxane-D8 | % | 111 | 101 | 100 | 105 | 105 | 99.4 | 89.2 | 101 | 98.4 |

Table 3
QC Results Volatiles– May

TABLE 3
QC Report

Lab # associated with qc samples: W2285 through W2293

| Matrix | Matrix | Spike | Duplicate | Blank |
|----------------|--------|-------|-----------|--------|
| | Spike | | | |
| | W2285 | | W2285 | |
| Date Analyzed: | 5/7/08 | | 5/7/08 | 5/7/08 |

| Compound | % Rec | % Rec | RPD | ug/L |
|---------------------------|-------|-------|-------|-------|
| Dichlorodifluoromethane | 116% | 106% | 9.5% | < 1.0 |
| Chloromethane | 135% | 114% | 17.1% | < 1.0 |
| Vinyl chloride | 119% | 108% | 9.8% | < 1.0 |
| Bromomethane | 132% | 120% | 9.7% | < 1.0 |
| Chloroethane | 119% | 105% | 12.5% | < 1.0 |
| Trichlorofluoromethane | 94.4% | 95.6% | 1.3% | < 1.0 |
| 1,1-Dichloroethene | 102% | 100% | 1.6% | < 1.0 |
| Methylene chloride | 122% | 117% | 3.9% | < 1.0 |
| trans-1,2-Dichloroethene | 99.0% | 94.8% | 4.3% | < 1.0 |
| 1,1-Dichloroethane | 101% | 100% | 1.0% | < 1.0 |
| cis-1,2-Dichloroethene | 101% | 97.4% | 3.6% | < 1.0 |
| 2,2-Dichloropropane | 96.0% | 91.6% | 4.7% | < 1.0 |
| Bromochloromethane | 106% | 102% | 4.4% | < 1.0 |
| Chloroform | 102% | 98.8% | 3.0% | < 1.0 |
| 1,1,1-Trichloroethane | 95.6% | 94.2% | 1.5% | < 1.0 |
| 1,1-Dichloropropene | 93.8% | 94.2% | 0.4% | < 1.0 |
| Carbon tetrachloride | 93.4% | 91.6% | 1.9% | < 1.0 |
| Benzene | 98.0% | 98.6% | 0.6% | < 1.0 |
| 1,2-Dichloroethane | 101% | 102% | 1.0% | < 1.0 |
| Trichloroethene | 96.0% | 93.4% | 2.7% | < 1.0 |
| 1,2-Dichloropropane | 97.6% | 100% | 2.8% | < 1.0 |
| Dibromomethane | 108% | 111% | 2.7% | < 1.0 |
| Bromodichloromethane | 103% | 101% | 2.0% | < 1.0 |
| cis-1,3-Dichloropropene | 102% | 99.0% | 3.2% | < 2.0 |
| Toluene | 109% | 105% | 3.4% | < 1.0 |
| trans-1,3-Dichloropropene | 111% | 104% | 5.9% | < 1.0 |
| 1,1,2-Trichloroethane | 110% | 108% | 2.2% | < 1.0 |
| Tetrachloroethene | 104% | 103% | 1.5% | < 1.0 |
| 1,3-Dichloropropane | 109% | 106% | 2.8% | < 1.0 |
| Dibromochloromethane | 110% | 102% | 7.4% | < 1.0 |
| 1,2-Dibromoethane | 110% | 108% | 2.6% | < 1.0 |
| Chlorobenzene | 103% | 102% | 0.6% | < 1.0 |
| 1,1,1,2-Tetrachloroethane | 93.0% | 93.6% | 0.6% | < 1.0 |
| Ethyl benzene | 97.6% | 96.8% | 0.8% | < 1.0 |
| Xylenes, Total | 98.8% | 99.3% | 0.5% | < 2.0 |
| Styrene | 106% | 101% | 4.1% | < 1.0 |
| Bromoform | 101% | 102% | 1.2% | < 2.0 |

TABLE 3
QC Report

Lab # associated with qc samples: W2285 through W2293

| | Matrix | Spike | | |
|----------------|--------|-----------|-------|--------|
| | Spike | Duplicate | Blank | |
| Date Analyzed: | W2285 | W2285 | | 5/7/08 |
| | 5/7/08 | 5/7/08 | | 5/7/08 |

| Compound | % Rec | | % Rec | RPD | | ug/L |
|-----------------------------|-------|--|-------|------|--|-------|
| Isopropylbenzene | 102% | | 101% | 1.0% | | < 1.0 |
| 1,1,2,2-Tetrachloroethane | 122% | | 116% | 5.2% | | < 2.0 |
| Bromobenzene | 109% | | 105% | 3.7% | | < 1.0 |
| 1,2,3-Trichloropropane | 119% | | 113% | 4.8% | | < 2.0 |
| n-Propylbenzene | 108% | | 104% | 4.0% | | < 1.0 |
| 2-Chlorotoluene | 112% | | 102% | 8.6% | | < 1.0 |
| 1,3,5-Trimethylbenzene | 111% | | 106% | 4.2% | | < 1.0 |
| 4-Chlorotoluene | 110% | | 106% | 4.1% | | < 1.0 |
| tert-Butylbenzene | 106% | | 107% | 1.1% | | < 1.0 |
| 1,2,4-Trimethylbenzene | 114% | | 108% | 5.6% | | < 1.0 |
| sec-Butylbenzene | 112% | | 105% | 6.5% | | < 1.0 |
| 1,3-Dichlorobenzene | 101% | | 101% | 0.6% | | < 1.0 |
| p-Isopropyltoluene | 98.6% | | 97.2% | 1.4% | | < 1.0 |
| 1,4-Dichlorobenzene | 105% | | 104% | 0.4% | | < 1.0 |
| n-Butylbenzene | 101% | | 99.6% | 1.2% | | < 1.0 |
| 1,2-Dichlorobenzene | 104% | | 104% | 0.2% | | < 1.0 |
| 1,2-Dibromo-3-chloropropane | 107% | | 111% | 3.5% | | < 2.0 |
| 1,3,5-Trichlorobenzene | 102% | | 102% | 0.6% | | < 1.0 |
| 1,2,4-Trichlorobenzene | 103% | | 104% | 1.5% | | < 1.0 |
| Hexachlorobutadiene | 100% | | 96.6% | 3.5% | | < 1.0 |
| Naphthalene | 105% | | 105% | 0.4% | | < 3.0 |
| 1,2,3-Trichlorobenzene | 106% | | 107% | 0.6% | | < 1.0 |

Table 4
QC Results 1,4-Dioxane– May

TABLE 4
QC Report

Lab # associated with qc samples: W2285 through W2293

| | | Matrix | | | LCS | Blank |
|-----------------|----------|----------|-----------|------|----------|------------|
| | Matrix | Spike | Duplicate | | | |
| | W2285 | W2285 | | | | |
| Date Extracted: | 05/06/08 | 05/06/08 | | | 05/06/08 | 05/06/08 |
| Date Analyzed: | 05/08/08 | 05/08/08 | | | 05/07/08 | 05/07/08 |
| Compound | % Rec | | % Rec | RPD | | % Rec ug/L |
| 1,4-Dioxane | 112% | | 110% | 1.8% | | 107% < 1.0 |
| | | | | | | |

Appendix A

Chain of Custody Sheets for Samples

Appendix B

FEDEX shipping label for Columbia Analytical Services, Inc.



USA Airbill

FedEx
Tracking
Number

837597992229

From Please print and preprintSender's FedEx
Account Number

226281991

Date 5/7/08

Sender's Name

Joe Kubale

Phone (608) 345-1974

Company

ECS, INC

Address

2525 ADVANCE RD

Dept/Floor/Suite/Room

City

MADISON

State

WI

ZIP

53718

Your Internal Billing Reference

First 24 characters will appear on invoice.

To

Recipient's Name

SAMPLE CUSTODIAN

Phone (360) 577-7222

Company

COLUMBIA ANALYTICAL

Address

To "400" or FedEx location, print FedEx address.

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

Address

1317 So 13th Ave

Dept/Floor/Suite/Room

City

KELSV

State

WA

ZIP

98126

Try online shipping at fedex.com

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

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

0200

Sender's Copy

4a Express Package Service

Packages up to 150 lbs.

 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 dayFedEx Envelope[®]

not available. Minimum charge: One-pound fee

 FedEx Express Saver
Third business day

Delivery commitment may be later in some areas.

4b Express Freight Service

Packages over 150 lbs.

 FedEx 1Day Freight[®]
Next business day FedEx 2Day Freight
Second business day FedEx 3Day Freight
Third business day

* Call for Confirmation _____

* Declared value limit \$500

5 Packaging

 FedEx Envelope[®] FedEx Pak[®]
Includes FedEx Small Pak, FedEx Large Pak, and FedEx Standy Pak Other

6 Special Handling

Include FedEx address in Section 5.

SATURDAY Delivery

 Available ONLY for
FedEx Priority Overnight and
FedEx 2Day to select ZIP codes HOLD Weekday
at FedEx Location
NOT Available for
FedEx First Overnight HOLD Saturday
at FedEx Location
NOT Available ONLY for
FedEx Priority Overnight and
FedEx 2Day to select locations

Does this shipment contain dangerous goods?

One box shall be checked:

 No Yes Yes
Shipper's Declaration
not required Dangerous Goods (including Dry Ice) cannot be shipped in FedEx packaging Dry Ice(Dry Ice, UN 1845) Cargo Aircraft Only

7 Payment Bill to:

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

 Sender
Acct. No. in Section 5
will be used. Recipient Third Party Credit Card Cash/CheckFedEx Acct. No.
Credit Card No.Box
DataTotal Packages Total Weight Total Declared Value[®]

\$.00

FedEx User Only

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

8 Release Signature

Sign to authorize delivery without retaining 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.

FedEx 10/01 Part #P05011 • ID#986-7001 FedEx® Printed in U.S.A. WCG1 02

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Appendix C

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



An Empowerment - Oriented Community
Services Inc.

CHAIN OF CUSTODY