(360) 577-7222

(360) 636-1068 fax



November 18, 2008

Analytical Report for Service Request No: K0810178

Joe Kabale Environmental Chemistry Consulting Services, Inc. 2525 Advance Rd. Madison, WI 53718

#### **RE:** Kuhlman Electric

Dear Joe:

Enclosed are the results of the samples submitted to our laboratory on October 16, 2008. For your reference, these analyses have been assigned our service request number K0810178.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3376. You may also contact me via Email at GSalata@caslab.com.

Respectfully submitted,

#### **Columbia Analytical Services, Inc.**

Gregory Salata, Ph.D. Project Chemist

GS/ln

Page 1 of 30

cc: Chris Slagle, Martin and Slagle, Black Mountain, NC

## Acronyms

| ASTM       | American Society for Testing and Materials   |
|------------|--|
| A2LA       | American Association for Laboratory Accreditation                                    |
| CARB       | California Air Resources Board   |
| CAS Number | Chemical Abstract Service registry Number  |
| CFC        | Chlorofluorocarbon   |
| CFU        | Colony-Forming Unit  |
| DEC        | Department of Environmental Conservation   |
| DEQ        | Department of Environmental Quality  |
| DHS        | Department of Health Services  |
| DOE        | Department of Ecology  |
| DOH        | Department of Health   |
| EPA        | U. S. Environmental Protection Agency  |
| ELAP       | Environmental Laboratory Accreditation Program                                       |
| GC         | Gas Chromatography   |
| GC/MS      | Gas Chromatography/Mass Spectrometry   |
| LUFT       | Leaking Underground Fuel Tank  |
| Μ          | Modified   |
| MCL        | Maximum Contaminant Level is the highest permissible concentration of a              |
|            | substance allowed in drinking water as established by the USEPA.                     |
| MDL        | Method Detection Limit   |
| MPN        | Most Probable Number   |
| MRL        | Method Reporting Limit   |
| NA         | Not Applicable   |
| NC         | Not Calculated   |
| NCASI      | National Council of the Paper Industry for Air and Stream Improvement                |
| ND         | Not Detected   |
| NIOSH      | National Institute for Occupational Safety and Health                                |
| PQL        | Practical Quantitation Limit   |
| RCRA       | Resource Conservation and Recovery Act   |
| SIM        | Selected Ion Monitoring  |
| TPH        | Total Petroleum Hydrocarbons   |
| tr         | Trace level is the concentration of an analyte that is less than the PQL but greater |
|            | than or equal to the MDL.  |

#### **Inorganic Data Qualifiers**

- \* The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.

#### Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- B The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.
- \* The duplicate analysis not within control limits. See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.

#### **Organic Data Qualifiers**

- \* The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a chromatographic interference.
- X See case narrative.

#### Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

## Columbia Analytical Services, Inc. Kelso, WA State Certifications, Accreditations, and Licenses

| Program                | Number      |
|------------------------|-------------|
| Alaska DEC UST         | UST-040     |
| Arizona DHS            | AZ0339      |
| Arkansas - DEQ         | 88-0637     |
| California DHS         | 2286        |
| Colorado DPHE          | -           |
| Florida DOH            | E87412      |
| Hawaii DOH             | -           |
| Idaho DHW              | -           |
| Indiana DOH            | C-WA-01     |
| Louisiana DEQ          | 3016        |
| Louisiana DHH          | LA050010    |
| Maine DHS              | WA0035      |
| Michigan DEQ           | 9949        |
| Minnesota DOH          | 053-999-368 |
| Montana DPHHS          | CERT0047    |
| Nevada DEP             | WA35        |
| New Jersey DEP         | WA005       |
| New Mexico ED          | -           |
| North Carolina DWQ     | 605         |
| Oklahoma DEQ           | 9801        |
| Oregon - DHS           | WA200001    |
| South Carolina DHEC    | 61002       |
| Utah DOH               | COLU        |
| Washington DOE         | C1203       |
| Wisconsin DNR          | 998386840   |
| Wyoming (EPA Region 8) |             |







# **Case Narrative**

Client:Environmental Chemistry Consulting Services, Inc. Service Request No.:K0810178Project:Kuhlman ElectricDate Received:10/16/08Sample Matrix:Water

#### CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include: Matrix/Duplicate Matrix Spike (MS/DMS), and Laboratory Control Sample (LCS).

#### Sample Receipt

Two water samples were received for analysis at Columbia Analytical Services on 10/16/08. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

#### Volatile Organic Compounds by EPA Method 8260B

#### Initial Calibration (ICAL) Exceptions:

The primary evaluation criterion was exceeded for Dichlorodifluoromethane and Trichlorofluoromethane in ICAL ID 7782. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the mean Relative Standard Deviation (RSD) of all analytes in the calibration. The result of the mean RSD calculation was 7.9%. The calibration meets the alternative evaluation criteria. Note that CAS/Kelso policy does not allow the use of averaging if any analyte in the ICAL exceeds 30% RSD.

#### **Continuing Calibration Verification (CCV) Exceptions:**

The CAS control criterion for 1,2-Dibromo-3-chloropropane was not met in CCV J:\MS18\1027F003.D. In accordance with CAS standard operating procedures, an MRL check standard containing the analyte of concern was analyzed each day of analysis. The MRL check standard verifies instrument sensitivity was adequate to detect the analyte at the MRL on the day of analysis. Because the sensitivity was shown to be adequate to detect the compound in question, and the field samples analyzed in this sequence did not contain the analyte in question, the data quality has not been significantly affected. No further corrective action was feasible.

#### Lab Control Sample Exceptions:

The advisory criterion was exceeded for cis-1,3-Dichloropropene in Laboratory Control Sample (LCS) KWG0811472-3. As per the CAS/Kelso Standard Operating Procedure (SOP) for this method, this compound is not included in the subset of analytes used to control the analysis. The recovery information reported for this analyte is for advisory purposes only (i.e. to provide additional detail related to the performance of each individual compound). No further corrective action was required.

No other anomalies associated with the analysis of these samples were observed.

#### 1,4-Dioxane by EPA Method 8270C

No anomalies associated with the analysis of these samples were observed.

| Approved by Celefille Martin | Date 11/2010 |
|------------------------------|--------------|
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## Chain of Custody Documentation

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| Projector Market Alexandre                | 1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222  | <ul> <li>(360) 577-7222 • (800) 695-7222x07</li> </ul>           | 2x07 + FAX (360) 636-1068  | PAGE                                    | L<br>U   | COC #        |  |
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RCOC #1 06/03

| Columbia Analytical Services, Inc.<br>Cooler Receipt and Preservation Form  | PCG              | 2                |
|---|------------------|------------------|
| ient / Project: Kuhlman Electric, Service Request KO8 10178   |                  |                  |
| :ceived: 10/110/08 Opened: 10/110/08 By: #2   |                  |                  |
| Samples were received via? US Mail Fed Ex UPS DHL GH GS PDX Courier<br>Samples were received in: (circle) Cooler Box Envelope Other | " Hand Dei<br>NA | livered          |
| Were <u>custody seals</u> on coolers? NA Y N If yes, how many and where?  |                  |                  |
| If present, were custody seals intact? Y N If present, were they signed and dated?  | Y                | $\overline{(N)}$ |
| Is shipper's air-bill filed? If not, record air-bill number:  | NA (Y)           | N                |
| Temperature of cooler(s) upon receipt (°C):   |                  |                  |
| Temperature Blank (°C):         5.30  |                  | 100ABu           |
| If applicable, list Chain of Custody Numbers:   |                  |                  |
| Packing material used. Inserts Baggies Bubble Wrap Gel Packs (Vet Ice Sleeves Other   |                  |                  |
| Were custody papers properly filled out (ink. signed, etc.)?  | NA (Y)           | Ν                |
| Did all bottles arrive in good condition (unbroken)? Indicate in the table below.   | NA Y             | N                |
| Were all sample labels complete (i.e analysis, preservation, etc.)?   | NA M             | N                |
| Did all sample labels and tags agree with custody papers? Indicate in the table below   | NA Y             | Ν                |
| Were appropriate bottles/containers and volumes received for the tests indicated?   | NA (Y)           | N                |
| Were the pH-preserved bottles tested* received at the appropriate pH? Indicate in the table below                                   | (NA) Y           | Ν                |
| Were VOA vials and 1631 Mercury bottles received without headspace? Indicate in the table below.                                    | NA (Y)           | Ν                |
| Are CWA Microbiology samples received with >1/2 the 24hr. hold time remaining from collection?                                      | (NA) Y           | Ν                |
| Was C12/Res negative?   | (NA) Y           | Ň                |

| Sample ID on Bottle | Sample ID on COC | Sample ID on Bottle | Sample ID on COC |
|---------------------|------------------|---------------------|------------------|
| · ·                 | · · · · ·        |                     |                  |
|                     |                  | 4                   | -                |
| :                   |                  |                     |                  |
|                     |                  |                     |                  |

| Sample ID | Bottle<br>Count | Out of<br>Temp |   |          | рH | Reagent | Volume<br>added | Reagent Lot<br>Number | Initial  |
|-----------|-----------------|----------------|---|----------|----|---------|-----------------|-----------------------|----------|
|           |                 |                |   | 141      | ·  |         |                 |                       |          |
|           |                 |                |   | 111      |    | 1       |                 |                       |          |
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|           |                 |                |   |          |    |         |                 |                       | -        |
|           |                 | <br>           |   |          |    |         |                 |                       |          |
|           |                 |                |   |          |    |         |                 |                       |          |
|           |                 |                | [ |          |    |         |                 |                       |          |
|           |                 | <br>           |   |          |    |         | 1               |                       | <u> </u> |
|           |                 |                |   |          |    |         |                 |                       |          |
|           |                 |                |   |          | ,  |         |                 |                       |          |

ves not include all pH preserved sample aliquois received. See sample receiving SOP (SMO-GEN). ditional Notes, Discrepancies, & Resolutions:\_\_\_\_\_

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## Volatile Organic Compounds EPA Method 8260B

#### Analytical Results

| Client:        | Environmental Chemistry Consulting Servi |
|----------------|--|
| Project:       | Kuhlman Electric                         |
| Sample Matrix: | Water                                    |

 Service Request:
 K0810178

 Date Collected:
 10/14/2008

 Date Received:
 10/16/2008

#### **Volatile Organic Compounds**

| Sample Name:                           | CSW-WA1-029        | Units: | 0   |
|--|--------------------|--------|-----|
| Lab Code:                              | K0810178-001       | Basis: |     |
| Extraction Method:<br>Analysis Method: | EPA 5030B<br>8260B | Level: | Low |

|                             |        |   |      | Dilution | Date      | Date     | Extraction |      |
|-----------------------------|--------|---|------|----------|-----------|----------|------------|------|
| Analyte Name                | Result | Q | MRL  | Factor   | Extracted | Analyzed | Lot        | Note |
| Dichlorodifluoromethane     | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Chloromethane               | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Vinyl Chloride              | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Bromomethane                | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Chloroethane                | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Trichlorofluoromethane      | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Acetone                     | ND     | U | 20   | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,1-Dichloroethene          | 1.4    |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Carbon Disulfide            | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Methylene Chloride          | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| trans-1,2-Dichloroethene    | ND     |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,1-Dichloroethane          | ND     |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 2-Butanone (MEK)            | ND     | U | 20   | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 2,2-Dichloropropane         | ND     |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| cis-1,2-Dichloroethene      | ND     |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Chloroform                  | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Bromochloromethane          | ND     |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,1,1-Trichloroethane (TCA) | ND     |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,1-Dichloropropene         | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Carbon Tetrachloride        | ND     |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,2-Dichloroethane (EDC)    | ND     |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Benzene                     | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Trichloroethene (TCE)       | ND     |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,2-Dichloropropane         | ND     |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Bromodichloromethane        | ND     |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Dibromomethane              | ND     |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 2-Hexanone                  | ND     |   | 20   | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| cis-1,3-Dichloropropene     | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 | *    |
| Toluene                     | ND     |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| trans-1,3-Dichloropropene   | ND     |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,1,2-Trichloroethane       | ND     |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 4-Methyl-2-pentanone (MIBK) | ND     |   | 20   | - 1      | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1.3-Dichloropropane         | ND     |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,5 2 1011010propund        |        |   |      |          |           |          |            |      |

**Comments:** 

Merged

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Analytical Results

| Client:        | Environmental Chemistry Consulting Servi |
|----------------|--|
| Project:       | Kuhlman Electric                         |
| Sample Matrix: | Water                                    |

 Service Request:
 K0810178

 Date Collected:
 10/14/2008

 Date Received:
 10/16/2008

#### **Volatile Organic Compounds**

| Sample Name:                           | CSW-WA1-029        | Units: | 0   |
|--|--------------------|--------|-----|
| Lab Code:                              | K0810178-001       | Basis: |     |
| Extraction Method:<br>Analysis Method: | EPA 5030B<br>8260B | Level: | Low |

|                             |          |      | Dilution | Date      | Date     | Extraction |      |
|-----------------------------|----------|------|----------|-----------|----------|------------|------|
| Analyte Name                | Result Q | MRL  | Factor   | Extracted | Analyzed | Lot        | Note |
| Tetrachloroethene (PCE)     | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Dibromochloromethane        | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,2-Dibromoethane (EDB)     | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Chlorobenzene               | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,1,1,2-Tetrachloroethane   | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Ethylbenzene                | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| m,p-Xylenes                 | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| o-Xylene                    | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Styrene                     | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Bromoform                   | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Isopropylbenzene            | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,1,2,2-Tetrachloroethane   | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,2,3-Trichloropropane      | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Bromobenzene                | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| n-Propylbenzene             | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 2-Chlorotoluene             | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 4-Chlorotoluene             | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,3,5-Trimethylbenzene      | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| tert-Butylbenzene           | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,2,4-Trimethylbenzene      | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| sec-Butylbenzene            | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,3-Dichlorobenzene         | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 4-Isopropyltoluene          | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,4-Dichlorobenzene         | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| n-Butylbenzene              | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,2-Dichlorobenzene         | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,2-Dibromo-3-chloropropane | ND U     | 2.0  | 1        | 10/27/08  | 10/27/08 | KWG0811472 | *    |
| 1.2.4-Trichlorobenzene      | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,2,3-Trichlorobenzene      | ND U     | 0.50 | . 1      | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Naphthalene                 | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Hexachlorobutadiene         | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,3,5-Trichlorobenzene      | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| · ·                         |          |      |          |           |          |            |      |

\* See Case Narrative

#### Comments:

Merged

2 of 3

#### Analytical Results

Client:Environmental Chemistry Consulting ServiProject:Kuhlman ElectricSample Matrix:Water

 Service Request:
 K0810178

 Date Collected:
 10/14/2008

 Date Received:
 10/16/2008

#### **Volatile Organic Compounds**

| Sample Name: | CSW-WA1-029  |
|--------------|--------------|
| Lab Code:    | K0810178-001 |

| Units:         | ug/I |
|----------------|------|
| <b>Basis</b> : | NA   |

| Surrogate Name       | %Rec | Control<br>Limits | Date<br>Analyzed | Note       |
|----------------------|------|-------------------|------------------|------------|
| Dibromofluoromethane | 90   | 75-120            | 10/27/08         | Acceptable |
| Toluene-d8           | 102  | 80-128            | 10/27/08         | Acceptable |
| 4-Bromofluorobenzene | 82   | 75-117            | 10/27/08         | Acceptable |

**Comments:** 

Merged

Analytical Results

| Client:        | Environmental Chemistry Consulting Servi |
|----------------|--|
| Project:       | Kuhlman Electric                         |
| Sample Matrix: | Water                                    |

 Service Request:
 K0810178

 Date Collected:
 10/16/2008

#### **Volatile Organic Compounds**

| Sample Name:                           | CSW-DUPLICATE      | Units: | 0   |
|--|--------------------|--------|-----|
| Lab Code:                              | K0810178-002       | Basis: |     |
| Extraction Method:<br>Analysis Method: | EPA 5030B<br>8260B | Level: | Low |

|   |          |   |        | Dilution | Date      | Date<br>Analyzed  | Extraction<br>Lot        | Note  |
|---|----------|---|--------|----------|-----------|---|--------------------------|-------|
| Analyte Name                                  | Result   | 202000000000000000000000000000000000000 | MRL    | Factor   | Extracted | and the second se | KWG0811472               | INOLC |
| Dichlorodifluoromethane                       | ND       |   | 0.50   | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
| Chloromethane                                 | ND       |   | 0.50   | 1        | 10/27/08  | 10/27/08  | KWG0811472<br>KWG0811472 |       |
| Vinyl Chloride                                | ND       | U                                       | 0.50   | 1        | 10/27/08  | 10/27/08  |                          |       |
| Bromomethane                                  | ND       | U                                       | 0.50   | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
| Chloroethane                                  | ND       | U                                       | 0.50   | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
| Trichlorofluoromethane                        | ND       | U                                       | 0.50   | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
| Acetone                                       | ND       | U                                       | 20     | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
| 1,1-Dichloroethene                            | 1.3      |   | 0.50   | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
| Carbon Disulfide                              | ND       |   | 0.50   | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
| Methylene Chloride                            | ND       | IJ                                      | 0,50   | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
| trans-1,2-Dichloroethene                      | ND       |   | 0.50   | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
| 1,1-Dichloroethane                            | ND       |   | 0.50   | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
| · · · · · · · · · · · · · · · · · · ·         | ND       |   | 20     | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
| 2-Butanone (MEK)                              | ND       |   | 0.50   | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
| 2,2-Dichloropropane<br>cis-1,2-Dichloroethene | ND       |   | 0.50   | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
| -   |          |   | 0.50   | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
| Chloroform                                    | ND       |   | 0.50   | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
| Bromochloromethane                            | ND<br>ND |   | 0.50   | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
| 1,1,1-Trichloroethane (TCA)                   |          |   |        |          | 10/27/08  | 10/27/08  | KWG0811472               |       |
| 1,1-Dichloropropene                           | ND       |   | 0.50   | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
| Carbon Tetrachloride                          | ND       |   | 0.50   | 1<br>1   | 10/27/08  | 10/27/08  | KWG0811472               |       |
| 1,2-Dichloroethane (EDC)                      | ND       |   | 0.50   |          |           |   | KWG0811472               |       |
| Benzene                                       | ND       |   | 0.50   | 1        | 10/27/08  | 10/27/08  |                          |       |
| Trichloroethene (TCE)                         | ND       |   | 0.50   | 1        | 10/27/08  | 10/27/08  | KWG0811472<br>KWG0811472 |       |
| 1,2-Dichloropropane                           | ND       | U                                       | 0.50   | 1        | 10/27/08  | 10/27/08  |                          |       |
| Bromodichloromethane                          | ND       | U                                       | 0.50   | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
| Dibromomethane                                | ND       | U                                       | 0.50   | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
| 2-Hexanone                                    | ND       | U                                       | 20     | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
| cis-1,3-Dichloropropene                       | ND       | U                                       | 0.50   | 1        | 10/27/08  | 10/27/08  | KWG0811472               | *     |
| Toluene                                       | ND       |   | 0.50   | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
| trans-1,3-Dichloropropene                     | ND       |   | 0.50   | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
| 1,1,2-Trichloroethane                         |          | ) U                                     | 0.50   | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
| 4-Methyl-2-pentanone (MIBK)                   |          | ) U                                     | 20     | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
| 1,3-Dichloropropane                           |          | ) U                                     | 0.50   | 1        | 10/27/08  | 10/27/08  | KWG0811472               |       |
|   |          |   | ···· · |          |           |   |                          |       |

#### **Comments:**

Merged

Form 1A - Organic

Analytical Results

| Client:        | Environmental Chemistry Consulting Servi |
|----------------|--|
| Project:       | Kuhlman Electric                         |
| Sample Matrix: | Water                                    |

Service Request: K0810178 Date Collected: Date Received: 10/16/2008

### **Volatile Organic Compounds**

| Sample Name:                           | CSW-DUPLICATE        | Units: | 0   |
|--|----------------------|--------|-----|
| Lab Code:                              | K0810178-002         | Basis: |     |
| Extraction Method:<br>Analysis Method: | EPA 5030B .<br>8260B | Level: | Low |

|                             |        |   |      | Dilution | Date      | Date     | Extraction |      |
|-----------------------------|--------|---|------|----------|-----------|----------|------------|------|
| Analyte Name                | Result | Q | MRL  | Factor   | Extracted | Analyzed | Lot        | Note |
| Tetrachloroethene (PCE)     | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Dibromochloromethane        | ND     |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,2-Dibromoethane (EDB)     | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Chlorobenzene               | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,1,1,2-Tetrachloroethane   | ND     |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Ethylbenzene                | ND     |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| m,p-Xylenes                 | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| o-Xylene                    | ND     |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Styrene                     | ND     |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Bromoform                   | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Isopropylbenzene            | ND     |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,1,2,2-Tetrachloroethane   | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,2,3-Trichloropropane      | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Bromobenzene                | ND     |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| n-Propylbenzene             | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 2-Chlorotoluene             | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 4-Chlorotoluene             | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,3,5-Trimethylbenzene      | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| tert-Butylbenzene           | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,2,4-Trimethylbenzene      | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| sec-Butylbenzene            | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,3-Dichlorobenzene         | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 4-Isopropyltoluene          | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,4-Dichlorobenzene         | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| n-Butylbenzene              | . ND   | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,2-Dichlorobenzene         | ND     |   | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,2-Dibromo-3-chloropropane | ND     |   | 2.0  | 1        | 10/27/08  | 10/27/08 | KWG0811472 | *    |
| 1,2,4-Trichlorobenzene      | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,2,3-Trichlorobenzene      | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Naphthalene                 | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| Hexachlorobutadiene         | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |
| 1,3,5-Trichlorobenzene      | ND     | U | 0.50 | 1        | 10/27/08  | 10/27/08 | KWG0811472 |      |

\* See Case Narrative

**Comments:** 

Merged

Analytical Results

| Client:        | Environmental Chemistry Consulting Servi |
|----------------|--|
| Project:       | Kuhlman Electric                         |
| Sample Matrix: | Water                                    |

Service Request: K0810178 Date Collected: Date Received: 10/16/2008

## **Volatile Organic Compounds**

| Sample Name: | CSW-DUPLICATE |
|--------------|---------------|
| Lab Code:    | K0810178-002  |

| Units:         | ug/I |
|----------------|------|
| <b>Basis</b> : | NA   |

| Surrogate Name       | %Rec | Control<br>Limits | Date<br>Analyzed | Note       |
|----------------------|------|-------------------|------------------|------------|
| Dibromofluoromethane | 92   | 75-120            | 10/27/08         | Acceptable |
| Toluene-d8           | 102  | 80-128            | 10/27/08         | Acceptable |
| 4-Bromofluorobenzene | 82   | 75-117            | 10/27/08         | Acceptable |

**Comments:** 

Merged

Form 1A - Organic

Analytical Results

| Client:        | Environmental Chemistry Consulting Servi |
|----------------|--|
| Project:       | Kuhlman Electric                         |
| Sample Matrix: | Water                                    |

Service Request: K0810178 Date Collected: NA Date Received: NA

#### **Volatile Organic Compounds**

| Sample Name:                           | Method Blank       | Units: | 0   |
|--|--------------------|--------|-----|
| Lab Code:                              | KWG0811472-4       | Basis: |     |
| Extraction Method:<br>Analysis Method: | EPA 5030B<br>8260B | Level: | Low |

| Analyte NameNC U0.50110/27/0810/27/08KWG0811472DichlorodifluoromethaneND U0.50110/27/0810/27/08KWG0811472Vinyl ChlorideND U0.50110/27/0810/27/08KWG0811472BromomethaneND U0.50110/27/0810/27/08KWG0811472ChloroethaneND U0.50110/27/0810/27/08KWG0811472ChloroethaneND U0.50110/27/0810/27/08KWG0811472TrichlorofluoromethaneND U0.50110/27/0810/27/08KWG0811472AcetoneND U0.50110/27/0810/27/08KWG0811472I,1-DichloroetheneND U0.50110/27/0810/27/08KWG0811472Carbon DisulfideND U0.50110/27/0810/27/08KWG0811472Methylene ChlorideND U0.50110/27/0810/27/08KWG0811472I,1-DichloroetheneND U0.50110/27/0810/27/08KWG0811472Z-Butanone (MEK)ND U0.50110/27/0810/27/08KWG08114722.2-DichloroetheneND U0.50110/27/0810/27/08KWG08114722.2-DichloroetheneND U0.50110/27/0810/27/08KWG08114722.2-DichloroetheneND U0.50110/27/0810/27/08KWG08114722.3-DichloroetheneND U0.5011   |                        |          |      | Dilution | Date      | Date  | Extraction |      |
|--|------------------------|----------|------|----------|-----------|---|------------|------|
| Dichlorodillutoroniethane         ND U         0.50         1         10/27/08         10/27/08         KWG0811472           Chloromethane         ND U         0.50         1         10/27/08         10/27/08         KWG0811472           Vinyl Chloride         ND U         0.50         1         10/27/08         10/27/08         KWG0811472           Bromomethane         ND U         0.50         1         10/27/08         10/27/08         KWG0811472           Chloroethane         ND U         0.50         1         10/27/08         10/27/08         KWG0811472           Trichlorofluoromethane         ND U         0.50         1         10/27/08         10/27/08         KWG0811472           Acetone         ND U         0.50         1         10/27/08         KWG0811472           I,1-Dichloroethene         ND U         0.50         1         10/27/08         KWG0811472           Carbon Disulfide         ND U         0.50         1         10/27/08         KWG0811472           Methylene Chloride         ND U         0.50         1         10/27/08         KWG0811472           I,1-Dichloroethene         ND U         0.50         1         10/27/08         KWG0811472 <t< th=""><th>alyte Name</th><th>Result Q</th><th>MRL</th><th>Factor</th><th>Extracted</th><th>and the second se</th><th></th><th>Note</th></t<> | alyte Name             | Result Q | MRL  | Factor   | Extracted | and the second se |            | Note |
| Chilorofinemate         ND_U         0.50         1         10/27/08         10/27/08         KWG0811472           Bromomethane         ND_U         0.50         1         10/27/08         10/27/08         KWG0811472           Chloroethane         ND_U         0.50         1         10/27/08         10/27/08         KWG0811472           Chloroethane         ND_U         0.50         1         10/27/08         10/27/08         KWG0811472           Trichlorofluoromethane         ND_U         0.50         1         10/27/08         10/27/08         KWG0811472           Acetone         ND_U         0.50         1         10/27/08         10/27/08         KWG0811472           1,1-Dichloroethene         ND_U         0.50         1         10/27/08         10/27/08         KWG0811472           Carbon Disulfide         ND_U         0.50         1         10/27/08         10/27/08         KWG0811472           Methylene Chloride         ND_U         0.50         1         10/27/08         10/27/08         KWG0811472           1,1-Dichloroethene         ND_U         0.50         1         10/27/08         10/27/08         KWG0811472           2Butanone (MEK)         ND_U         0.50  | chlorodifluoromethane  | ND U     | 0.50 | 1        |           |   |            |      |
| Vinyi Chloride         ND_U         0.50         1         10/27/08         10/27/08         KWG0811472           Bromomethane         ND_U         0.50         1         10/27/08         10/27/08         KWG0811472           Chloroethane         ND_U         0.50         1         10/27/08         10/27/08         KWG0811472           Trichlorofluoromethane         ND_U         0.50         1         10/27/08         10/27/08         KWG0811472           Acetone         ND_U         0.50         1         10/27/08         10/27/08         KWG0811472           1,1-Dichloroethene         ND_U         0.50         1         10/27/08         KWG0811472           Carbon Disulfide         ND_U         0.50         1         10/27/08         KWG0811472           Methylene Chloride         ND_U         0.50         1         10/27/08         KWG0811472           I,1-Dichloroethene         ND_U         0.50         1         10/27/08         KWG0811472           Z-Buchloroethene         ND_U         0.50         1         10/27/08         KWG0811472           1,1-Dichloroethene         ND_U         0.50         1         10/27/08         KWG0811472           2-Butanone (MEK)  | loromethane            | ND U     | 0.50 | 1        |           |   |            |      |
| BromomethaneNDU0.50110/27/08KWG0811472ChloroethaneNDU0.50110/27/08KWG0811472TrichlorofluoromethaneNDU0.50110/27/08KWG0811472AcetoneNDU20110/27/0810/27/08KWG08114721,1-DichloroetheneNDU0.50110/27/0810/27/08KWG0811472Carbon DisulfideNDU0.50110/27/0810/27/08KWG0811472Methylene ChlorideNDU0.50110/27/0810/27/08KWG0811472I,1-DichloroetheneNDU0.50110/27/0810/27/08KWG0811472Methylene ChlorideNDU0.50110/27/0810/27/08KWG0811472I,1-DichloroetheneNDU0.50110/27/0810/27/08KWG0811472J,1-DichloroetheneNDU0.50110/27/0810/27/08KWG0811472J,2-DichloroetheneNDU0.50110/27/0810/27/08KWG08114722Butanone (MEK)NDU20110/27/0810/27/08KWG08114722.2-DichloropropaneNDU0.50110/27/0810/27/08KWG0811472cis-1,2-DichloroetheneNDU0.50110/27/0810/27/08KWG0811472cis-1,2-DichloroetheneNDU0.50110/27/0810/27/08 <t< td=""><td></td><td>ND U</td><td>0.50</td><td>1</td><td>10/27/08</td><td>10/27/08</td><td>KWG0811472</td><td></td></t<>   |                        | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08  | KWG0811472 |      |
| Chloroethane         ND U         0.50         1         10/27/08         KWG0811472           Trichlorofluoromethane         ND U         0.50         1         10/27/08         10/27/08         KWG0811472           Acetone         ND U         20         1         10/27/08         10/27/08         KWG0811472           1,1-Dichloroethene         ND U         0.50         1         10/27/08         10/27/08         KWG0811472           Carbon Disulfide         ND U         0.50         1         10/27/08         10/27/08         KWG0811472           Methylene Chloride         ND U         0.50         1         10/27/08         10/27/08         KWG0811472           I,1-Dichloroethene         ND U         0.50         1         10/27/08         10/27/08         KWG0811472           Methylene Chloride         ND U         0.50         1         10/27/08         10/27/08         KWG0811472           1,1-Dichloroethane         ND U         0.50         1         10/27/08         10/27/08         KWG0811472           2-Butanone (MEK)         ND U         0.50         1         10/27/08         10/27/08         KWG0811472           2,2-Dichloropropane         ND U         0.50         1  | omomethane             | ND U     | 0.50 | 1        |           |   |            |      |
| IncluiorNDU0.00110/27/0810/27/08KWG0811472AcetoneNDU0.50110/27/0810/27/08KWG08114721,1-DichloroetheneNDU0.50110/27/0810/27/08KWG0811472Carbon DisulfideNDU0.50110/27/0810/27/08KWG0811472Methylene ChlorideNDU0.50110/27/0810/27/08KWG0811472trans-1,2-DichloroetheneNDU0.50110/27/0810/27/08KWG08114721,1-DichloroethaneNDU0.50110/27/0810/27/08KWG08114722-Butanone (MEK)NDU20110/27/0810/27/08KWG08114722,2-DichloropropaneNDU0.50110/27/0810/27/08KWG0811472cis-1,2-DichloroetheneNDU0.50110/27/0810/27/08KWG0811472   |                        | ND U     | 0.50 | 1        |           |   |            |      |
| AcceloneND U20110/27/0810/27/08KWG08114721,1-DichloroetheneND U0.50110/27/0810/27/08KWG0811472Carbon DisulfideND U0.50110/27/0810/27/08KWG0811472Methylene ChlorideND U0.50110/27/0810/27/08KWG0811472trans-1,2-DichloroetheneND U0.50110/27/0810/27/08KWG08114721,1-DichloroetheneND U0.50110/27/0810/27/08KWG08114722-Butanone (MEK)ND U20110/27/0810/27/08KWG08114722,2-DichloropropaneND U0.50110/27/0810/27/08KWG0811472cis-1,2-DichloroetheneND U0.50110/27/0810/27/08KWG0811472   | chlorofluoromethane    | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08  |            |      |
| 1,1-DichloroetheneND U0.50110/27/0810/27/08KWG0811472Carbon DisulfideND U0.50110/27/0810/27/08KWG0811472Methylene ChlorideND U0.50110/27/0810/27/08KWG0811472trans-1,2-DichloroetheneND U0.50110/27/0810/27/08KWG08114721,1-DichloroethaneND U0.50110/27/0810/27/08KWG08114722-Butanone (MEK)ND U20110/27/0810/27/08KWG08114722,2-DichloropropaneND U0.50110/27/0810/27/08KWG0811472cis-1,2-DichloroetheneND U0.50110/27/0810/27/08KWG0811472  | etone                  | ND U     | 20   | 1        |           |   |            |      |
| Carbon DisulfideND U0.50110/27/0810/27/08KWG0811472Methylene ChlorideND U0.50110/27/0810/27/08KWG0811472trans-1,2-DichloroetheneND U0.50110/27/0810/27/08KWG08114721,1-DichloroethaneND U0.50110/27/0810/27/08KWG08114722-Butanone (MEK)ND U20110/27/0810/27/08KWG08114722,2-DichloropropaneND U0.50110/27/0810/27/08KWG0811472cis-1,2-DichloroetheneND U0.50110/27/0810/27/08KWG0811472   |                        | ND U     | 0.50 | 1        | 10/27/08  |   |            |      |
| Methylehe Chloride     ND     U     0.50     1     10/27/08     KWG0811472       trans-1,2-Dichloroethene     ND     U     0.50     1     10/27/08     KWG0811472       1,1-Dichloroethane     ND     U     0.50     1     10/27/08     KWG0811472       2-Butanone (MEK)     ND     U     20     1     10/27/08     10/27/08     KWG0811472       2,2-Dichloropropane     ND     U     0.50     1     10/27/08     10/27/08     KWG0811472       cis-1,2-Dichloroethene     ND     U     0.50     1     10/27/08     10/27/08     KWG0811472  |                        | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08  |            |      |
| trans-1,2-DichloroetheneND U0.50110/27/0810/27/08KWG08114721,1-DichloroethaneND U0.50110/27/0810/27/08KWG08114722-Butanone (MEK)ND U20110/27/0810/27/08KWG08114722,2-DichloropropaneND U0.50110/27/0810/27/08KWG0811472cis-1,2-DichloroetheneND U0.50110/27/0810/27/08KWG0811472   | thylene Chloride       | ND U     | 0.50 | 1        | 10/27/08  |   |            |      |
| 1,1-DichloroethaneND U0.50110/27/0810/27/08KWG08114722-Butanone (MEK)ND U20110/27/0810/27/08KWG08114722,2-DichloropropaneND U0.50110/27/0810/27/08KWG0811472cis-1,2-DichloroetheneND U0.50110/27/0810/27/08KWG0811472  |                        | ND U     | 0.50 | 1        | 10/27/08  |   |            |      |
| 2-Butanole (MEK)     ND U     20     1     10/27/08     10/27/08     KWG0811472       2,2-Dichloropropane     ND U     0.50     1     10/27/08     10/27/08     KWG0811472       cis-1,2-Dichloroethene     ND U     0.50     1     10/27/08     10/27/08     KWG0811472   |                        | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08  | KWG0811472 |      |
| 2,2-DichloropropaneND U0.50110/27/0810/27/08KWG0811472cis-1,2-DichloroetheneND U0.50110/27/0810/27/08KWG0811472  | Butanone (MEK)         | ND U     | 20   | 1        | 10/27/08  |   |            |      |
| cis-1,2-Dichloroethene ND U 0.50 1 10/27/08 10/27/08 KWG0811472  |                        | ND U     | 0.50 | 1        | 10/27/08  |   |            |      |
| Chloroform ND U 0.50 1 10/27/08 10/27/08 KWG0811472  | * *                    | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08  | KWG0811472 |      |
|  | loroform               | ND U     | 0.50 | 1        |           |   |            |      |
| Bromochloromethane ND U 0.50 1 10/27/08 10/27/08 KWG0811472  |                        | ND U     | 0.50 | 1        |           |   |            |      |
| 1,1,1-Trichloroethane (TCA) ND U 0.50 1 10/27/08 KWG0811472  |                        | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08  |            |      |
| 1,1-Dichloropropene ND U 0.50 1 10/27/08 10/27/08 KWG0811472   | -Dichloropropene       | ND U     | 0.50 | 1        |           |   |            |      |
| Carbon Tetrachloride ND U 0.50 1 10/27/08 KWG0811472   |                        | ND U     | 0.50 | 1        |           |   |            |      |
| 1,2-Dichloroethane (EDC) ND U 0.50 1 10/27/08 KWG0811472   | 2-Dichloroethane (EDC) | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08  |            |      |
| Benzene ND U 0.50 1 10/27/08 10/27/08 KWG0811472   | nzene                  | ND U     | 0.50 | 1        | 10/27/08  |   |            |      |
| Trichloroethene (TCE) ND U 0.50 1 10/27/08 10/27/08 KWG0811472   |                        | ND U     | 0.50 | 1        | 10/27/08  |   |            |      |
| 1,2-Dichloropropane ND U 0.50 1 10/27/08 KWG0811472  |                        | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08  | KWG0811472 |      |
| Bromodichloromethane ND U 0.50 1 10/27/08 KWG0811472   | omodichloromethane     | ND U     | 0.50 | 1        |           |   |            |      |
| Dibromomethane ND U 0.50 1 10/27/08 KWG0811472   |                        | ND U     | 0.50 | 1        | 10/27/08  |   |            |      |
| 2-Hexanone ND U 20 1 10/27/08 KWG0811472   |                        | ND U     | 20   | 1        | 10/27/08  | 10/27/08  |            |      |
| cis-1.3-Dichloropropene ND U 0.50 I 10/2//08 10/2//08 KWGGG1472  | -1.3-Dichloropropene   | ND U     | 0.50 | 1        | 10/27/08  |   |            | *    |
| Toluene ND U 0.50 1 10/27/08 10/27/08 KWG0811472   |                        | ND U     | 0.50 | 1        |           |   |            |      |
| trans-1,3-Dichloropropene ND U 0.50 1 10/27/08 KWG0811472  |                        | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08  | KWG0811472 |      |
| 1.1.2-Trichloroethane ND U 0.50 1 10/27/08 KWG0811472  |                        | ND U     | 0.50 | 1        |           |   |            |      |
| 4-Methyl-2-pentanone (MIBK) ND U 20 1 10/27/08 KWG0811472  |                        |          | 20   | 1        |           |   |            |      |
| 1,3-Dichloropropane ND U 0.50 1 10/27/08 KWG0811472  |                        | ND U     | 0.50 | 1        | 10/27/08  | 10/27/08  | KWG0811472 |      |

#### Comments:

Merged

17

#### Analytical Results

| Client:<br>Project:<br>Sample Matrix: | Environmental Chemistry Consulting Servi<br>Kuhlman Electric<br>Water | ~15 | Service Request:<br>Date Collected:<br>Date Received: | NA |
|---------------------------------------|---|-----|---|----|
|---------------------------------------|---|-----|---|----|

### **Volatile Organic Compounds**

| Sample Name:                           | Method Blank       | Units: | NA  |
|--|--------------------|--------|-----|
| Lab Code:                              | KWG0811472-4       | Basis: |     |
| Extraction Method:<br>Analysis Method: | EPA 5030B<br>8260B | Level: | Low |

|   |              |  | Dilution | Date      | Date<br>Analyzed   | Extraction<br>Lot        | Note  |
|---|--------------|--|----------|-----------|--|--------------------------|-------|
| Analyte Name                                  | Result Q     | and the second | Factor   | Extracted | monocommenter and a second | KWG0811472               | 11010 |
| Tetrachloroethene (PCE)                       | ND U         | 0.50   | 1        | 10/27/08  | 10/27/08<br>10/27/08   | KWG0811472               |       |
| Dibromochloromethane                          | ND U         |  | 1        | 10/27/08  |  | KWG0811472<br>KWG0811472 |       |
| 1,2-Dibromoethane (EDB)                       | ND U         | 0,50   | 1        | 10/27/08  | 10/27/08   |                          |       |
| Chlorobenzene                                 | ND U         | 0.50   | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
| 1,1,1,2-Tetrachloroethane                     | ND U         | 0.50   | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
| Ethylbenzene                                  | ND U         | 0.50   | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
| m,p-Xylenes                                   | ND U         | 0.50   | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
| o-Xylene                                      | ND U         |  | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
| Styrene                                       | ND U         |  | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
|   | ND U         |  | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
| Bromoform                                     | ND U         |  | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
| Isopropylbenzene<br>1,1,2,2-Tetrachloroethane | ND U         |  | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
|   | ND U         |  | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
| 1,2,3-Trichloropropane                        | ND U<br>ND U |  | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
| Bromobenzene                                  | ND U<br>ND U |  | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
| n-Propylbenzene                               |              |  | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
| 2-Chlorotoluene                               | ND U         |  | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
| 4-Chlorotoluene                               | ND U         |  | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
| 1,3,5-Trimethylbenzene                        | ND U         |  |          |           | 10/27/08   | KWG0811472               |       |
| tert-Butylbenzene                             | ND U         |  | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
| 1,2,4-Trimethylbenzene                        | ND U         |  | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
| sec-Butylbenzene                              | ND L         | J 0.50   | 1        | 10/27/08  |  |                          |       |
| 1.3-Dichlorobenzene                           | ND U         |  | 1        | 10/27/08  | 10/27/08   | KWG0811472<br>KWG0811472 |       |
| 4-Isopropyltoluene                            | ND U         |  | 1        | 10/27/08  | 10/27/08   |                          |       |
| 1,4-Dichlorobenzene                           | ND U         | J 0.50   | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
| n-Butylbenzene                                | ND U         | J 0.50   | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
| 1.2-Dichlorobenzene                           | ND U         |  | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
| 1,2-Dibromo-3-chloropropane                   | ND U         |  | 1        | 10/27/08  | 10/27/08   | KWG0811472               | *     |
| 1.2.4-Trichlorobenzene                        | ND U         |  | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
| 1,2,3-Trichlorobenzene                        | ND U         | <del>.</del>   | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
| Naphthalene                                   | ND U         |  | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
|   | ND U         |  | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
| Hexachlorobutadiene                           | ND U<br>ND U | -  | 1        | 10/27/08  | 10/27/08   | KWG0811472               |       |
| 1,3,5-Trichlorobenzene                        |              | 0.50   | *        |           |  |                          |       |

\* See Case Narrative

Comments:

Merged

2 of 3

Analytical Results

Client:Environmental Chemistry Consulting ServiProject:Kuhlman ElectricSample Matrix:Water

Service Request: K0810178 Date Collected: NA Date Received: NA

## **Volatile Organic Compounds**

| Sample Name:<br>Lab Code: | Method Blank<br>KWG0811472-4 | Units:<br>Basis: | • |
|---------------------------|------------------------------|------------------|---|
|                           |                              |                  |   |

| Surrogate Name       | %Rec | Control<br>Limits | Date<br>Analyzed | Note       |
|----------------------|------|-------------------|------------------|------------|
| Dibromofluoromethane | 89   | 75-120            | 10/27/08         | Acceptable |
| Toluene-d8           | 100  | 80-128            | 10/27/08         | Acceptable |
| 4-Bromofluorobenzene | 83   | 75-117            | 10/27/08         | Acceptable |

Comments:

Merged

#### QA/QC Report

Client:Environmental Chemistry Consulting ServiProject:Kuhlman ElectricSample Matrix:Water

Service Request: K0810178

#### Surrogate Recovery Summary Volatile Organic Compounds

| <b>Extraction Method:</b> | EPA 5030B |
|---------------------------|-----------|
| Analysis Method:          | 8260B     |

Units: PERCENT Level: Low

| Sample Name        | Lab Code     | <u>Sur1</u> | <u>Sur2</u> | <u>Sur3</u> |
|--------------------|--------------|-------------|-------------|-------------|
| CSW-WA1-029        | K0810178-001 | 90          | 102         | 82          |
| CSW-DUPLICATE      | K0810178-002 | 92          | 102         | 82          |
| Method Blank       | KWG0811472-4 | 89          | 100         | 83          |
| Batch QC           | K0810166-013 | 90          | 101         | 82          |
| Batch QCMS         | KWG0811472-1 | 94          | 104         | 85          |
| Batch QCDMS        | KWG0811472-2 | 94          | 104         | 85          |
| Lab Control Sample | KWG0811472-3 | 97          | 105         | 85          |

Surrogate Recovery Control Limits (%)

| Sur1 = Dibromofluoromethane | 75-120 |
|-----------------------------|--------|
| Sur2 = Toluene-d8           | 80-128 |
| Sur3 = 4-Bromofluorobenzene | 75-117 |

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

QA/QC Report

| Client:        | Environmental Chemistry Consulting Servi |
|----------------|--|
| Project:       | Kuhlman Electric                         |
| Sample Matrix: | Water                                    |

## Matrix Spike/Duplicate Matrix Spike Summary Volatile Organic Compounds

| Sample Name:       | Batch QC     | Units:          |  |
|--------------------|--------------|-----------------|--|
| Lab Code:          | K0810166-013 | Basis:          |  |
| Extraction Method: | EPA 5030B    | Level:          |  |
| Analysis Method:   | 8260B        | Extraction Lot: |  |

|                                       | Sample | K۷     | atch QCMS<br>VG0811472-<br>Matrix Spike | 1    | KV     | ntch QCDMS<br>VG0811472-2<br>cate Matrix S | 2    | %Rec   |     | RPD   |
|---------------------------------------|--------|--------|---|------|--------|--|------|--------|-----|-------|
| Analyte Name                          | Result | Result | Expected                                | %Rec | Result | Expected                                   | %Rec | Limits | RPD | Limit |
| 1,1-Dichloroethene                    | ND     | 94.4   | 100                                     | 94   | 108    | 100  | 108  | 67-147 | 14  | 30    |
| · · · · · · · · · · · · · · · · · · · | ND     | 85.3   | 100                                     | 85   | 95.0   | 100  | 95   | 69-126 | 11  | 30    |
| Benzene                               | ND     | 83.3   | 100                                     | 83   | 94.5   | 100  | 95   | 56-137 | 13  | 30    |
| Trichloroethene (TCE)                 | ND     | 83.5   | 100                                     | 84   | 92.9   | 100  | 93   | 66-128 | 11  | 30    |
| Toluene                               | ND     | 87.8   | 100                                     | 88   | 95.1   | 100  | 95   | 68-120 | 8   | 30    |
| Chlorobenzene                         | ND     | 87.5   | 100                                     | 83   | 86.7   | 100  | 87   | 67-116 | 5   | 30    |
| 1,2-Dichlorobenzene<br>Naphthalene    | ND     | 82.3   | 100                                     | 80   | 82.1   | 100  | 82   | 61-137 | 2   | 30    |

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

1 of 1

Service Request: K0810178

Date Extracted:10/27/2008Date Analyzed:10/27/2008

#### QA/QC Report

Client:Environmental Chemistry Consulting ServiProject:Kuhlman ElectricSample Matrix:Water

#### Lab Control Spike Summary Volatile Organic Compounds

| <b>Extraction Method:</b> | EPA 5030B |
|---------------------------|-----------|
| Analysis Method:          | 8260B     |

| Units:                 | ug/L       |
|------------------------|------------|
| <b>Basis</b> :         | NA         |
| Level:                 | Low        |
| <b>Extraction Lot:</b> | KWG0811472 |

Service Request: K0810178

Date Extracted: 10/27/2008

Date Analyzed: 10/27/2008

|                             | Lab Control Sample<br>KWG0811472-3<br>Lab Control Spike |          |      | %Rec   |
|-----------------------------|---|----------|------|--------|
| Analyte Name                | Result  | Expected | %Rec | Limits |
| Dichlorodifluoromethane     | 6.34  | 10.0     | 63   | 21-156 |
| Chloromethane               | 6.04  | 10.0     | 60   | 45-135 |
| Vinyl Chloride              | 8.45  | 10.0     | 85   | 59-135 |
| Bromomethane                | 9.80  | 10.0     | 98   | 24-144 |
| Chloroethane                | 7.32  | 10.0     | 73   | 60-128 |
| Trichlorofluoromethane      | 8.70  | 10.0     | 87   | 54-129 |
| Acetone                     | 37.7  | 50.0     | 75   | 53-129 |
| 1,1-Dichloroethene          | 8.78  | 10.0     | 88   | 70-136 |
| Carbon Disulfide            | 13.5  | 20.0     | 68   | 64-129 |
| Methylene Chloride          | 8.72  | 10.0     | 87   | 64-137 |
| trans-1,2-Dichloroethene    | 8.65  | 10.0     | 87   | 70-121 |
| 1,1-Dichloroethane          | 7.58  | 10.0     | 76   | 72-122 |
| 2-Butanone (MEK)            | 37.7  | 50.0     | 75   | 56-137 |
| 2,2-Dichloropropane         | 6.21  | 10.0     | 62   | 48-133 |
| cis-1,2-Dichloroethene      | 8.22  | 10.0     | 82   | 76-125 |
| Chloroform                  | 8.17  | 10.0     | 82   | 71-118 |
| Bromochloromethane          | 8.21  | 10.0     | 82   | 72-123 |
| 1,1,1-Trichloroethane (TCA) | 7.56  | 10.0     | 76   | 65-126 |
| 1,1-Dichloropropene         | 7.80  | 10.0     | 78   | 71-119 |
| Carbon Tetrachloride        | 7.30  | 10.0     | 73   | 58-133 |
| 1,2-Dichloroethane (EDC)    | 8.20  | 10.0     | 82   | 69-125 |
| Benzene                     | 8.11  | 10.0     | 81   | 74-118 |
| Trichloroethene (TCE)       | 8.07  | 10.0     | 81   | 71-122 |
| 1,2-Dichloropropane         | 7.52  | 10.0     | 75   | 73-123 |
| Bromodichloromethane        | 7.52  | 10.0     | 75   | 72-127 |
| Dibromomethane              | 7.28  | 10.0     | 73   | 71-124 |
| 2-Hexanone                  | 31.0  | 50.0     | 62   | 44-135 |
| cis-1,3-Dichloropropene     | 6.59  | 10.0     | 66 * | 71-125 |
| Toluene                     | 8.04  | 10.0     | 80   | 74-117 |
| trans-1,3-Dichloropropene   | 5.72  | 10.0     | 57   | 56-121 |
| 1.1.2-Trichloroethane       | 8.02  | 10.0     | 80   | 73-122 |
| 4-Methyl-2-pentanone (MIBK) | 33.0  | 50.0     | 66   | 57-129 |
| 1,3-Dichloropropane         | 8.24  | 10.0     | 82   | 74-120 |
| Tetrachloroethene (PCE)     | 9.19  | 10.0     | 92   | 65-121 |
| Dibromochloromethane        | 7.45  | 10.0     | 75   | 67-124 |
| Dioioniochioromethane       | 1.15  |          |      |        |

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

| Client:        | Environmental Chemistry Consulting Servi |
|----------------|--|
| Project:       | Kuhlman Electric                         |
| Sample Matrix: | Water                                    |

#### Lab Control Spike Summary Volatile Organic Compounds

| <b>Extraction Method:</b> | EPA 5030B |
|---------------------------|-----------|
| Analysis Method:          | 8260B     |

Units: ug/L Basis: NA Level: Low Extraction Lot: KWG0811472

Service Request: K0810178

**Date Extracted:** 10/27/2008 **Date Analyzed:** 10/27/2008

|                                    | Lab Control Sample<br>KWG0811472-3<br>Lab Control Spike |              | %Rec |        |
|------------------------------------|---|--------------|------|--------|
| Analyte Name                       | Result  | Expected     | %Rec | Limits |
| 1,2-Dibromoethane (EDB)            | 8.00  | 10.0         | 80   | 71-120 |
| Chlorobenzene                      | 8.44  | 10.0         | 84   | 74-115 |
| 1,1,1,2-Tetrachloroethane          | 7.72  | 10.0         | 77   | 71-118 |
| Ethylbenzene                       | 8.50  | 10.0         | 85   | 71-118 |
| m,p-Xylenes                        | 17.1  | 20.0         | 86   | 73-119 |
| o-Xylene                           | 8.12  | 10.0         | 81   | 74-120 |
| Styrene                            | 7.92  | 10.0         | 79   | 75-123 |
| Bromoform                          | 5.83  | 10.0         | 58   | 57-135 |
| Isopropylbenzene                   | 7.53  | 10.0         | 75   | 65-110 |
| 1,1,2,2-Tetrachloroethane          | 7.14  | 10.0         | 71   | 63-126 |
| 1,2,3-Trichloropropane             | 7.52  | 10.0         | 75   | 67-123 |
| Bromobenzene                       | 8.35  | 10.0         | 84   | 76-111 |
| n-Propylbenzene                    | 7.97  | 10.0         | 80   | 69-122 |
| 2-Chlorotoluene                    | 7.86  | 10.0         | 79   | 72-120 |
| 4-Chlorotoluene                    | 7.66  | 10.0         | 77   | 70-118 |
| 1,3,5-Trimethylbenzene             | 7.91  | 10.0         | 79   | 70-120 |
| tert-Butylbenzene                  | 7.77  | 10.0         | 78   | 72-118 |
| 1,2,4-Trimethylbenzene             | 7.94  | 10.0         | 79   | 72-121 |
| sec-Butylbenzene                   | 7.70  | 10.0         | 77   | 73-130 |
| 1.3-Dichlorobenzene                | 8.13  | 10.0         | 81   | 76-110 |
| 4-Isopropyltoluene                 | 7.63  | 10.0         | 76   | 67-115 |
| 1,4-Dichlorobenzene                | 7.97  | 10.0         | 80   | 74-112 |
| n-Butylbenzene                     | 7.81  | 10.0         | 78   | 62-123 |
| 1,2-Dichlorobenzene                | 8.10  | 10.0         | 81   | 75-110 |
| 1,2-Dibromo-3-chloropropane        | 5.75  | 10.0         | 58   | 49-124 |
| 1,2,4-Trichlorobenzene             | 8.20  | 10.0         | 82   | 66-115 |
| 1,2,3-Trichlorobenzene             | 8.66  | 10.0         | 87   | 64-120 |
|                                    | 7.59  | 10.0         | 76   | 58-132 |
| Naphthalene<br>Hexachlorobutadiene | 8.34  | 10.0         | 83   | 61-124 |
|                                    | 39.2  | 40.0         | 98   | 46-133 |
| 1,3,5-Trichlorobenzene             | 37.2  | <b>H</b> U.U | 20   | 10 100 |

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

# 1,4-Dioxane by GC/MS

24

#### Analytical Results

| Client:        | Environmental Chemistry Consulting Servi | Service Request:       | K0810178   |
|----------------|--|------------------------|------------|
| Project:       | Kuhlman Electric                         | <b>Date Collected:</b> | 10/14/2008 |
| Sample Matrix: | Water                                    | Date Received:         | 10/16/2008 |

## 1,4-Dioxane by GC/MS

| Sample Name:<br>Lab Code:              | CSW-WA1-029<br>K0810178-001 |                 |          |           |          | Units: ug/L<br>Basis: NA |      |
|--|-----------------------------|-----------------|----------|-----------|----------|--------------------------|------|
| Extraction Method:<br>Analysis Method: | EPA 3510C<br>8270C SIM      |                 |          |           | ]        | Level: Low               |      |
|  |                             |                 | Dilution | Date      | Date     | Extraction               |      |
| Analyte Name                           | Result Q                    | MRL             | Factor   | Extracted | Analyzed | Lot                      | Note |
| Analyte Name<br>1,4-Dioxane            | Result Q<br>0.75            | <b>MRL</b> 0.50 |          |           |          |                          | Note |

| Surrogate Name | %Rec | Control<br>Limits | Date<br>Analyzed | Note       |  |
|----------------|------|-------------------|------------------|------------|--|
| 1,4-Dioxane-d8 | 75   | 55-100            | 10/29/08         | Acceptable |  |

Comments:

#### Analytical Results

| Client:        | Environmental Chemistry Consulting Servi | Service Request: | K0810178   |
|----------------|--|------------------|------------|
| Project:       | Kuhlman Electric                         | Date Collected:  |            |
| Sample Matrix: | Water                                    | Date Received:   | 10/16/2008 |

## 1,4-Dioxane by GC/MS

| Sample Name:<br>Lab Code:              | CSW-DUPLICATE<br>K0810178-002 |      |                    |                   |                  | <b>Units:</b> ug/L<br><b>Basis:</b> NA |      |
|--|-------------------------------|------|--------------------|-------------------|------------------|--|------|
| Extraction Method:<br>Analysis Method: | EPA 3510C<br>8270C SIM        |      |                    |                   | ]                | Level: Low                             |      |
| Analyte Name                           | Result Q                      | MRL  | Dilution<br>Factor | Date<br>Extracted | Date<br>Analyzed | Extraction<br>Lot                      | Note |
| 1,4-Dioxane                            | 0.79                          | 0.50 | feed.              | 10/21/08          | 10/29/08         | KWG0811207                             |      |
|  |                               |      |                    |                   |                  |  |      |

| Surrogate Name | %Rec | Control<br>Limits | Date<br>Analyzed | Note       |
|----------------|------|-------------------|------------------|------------|
| 1,4-Dioxane-d8 | 75   | 55-100            | 10/29/08         | Acceptable |

Comments:

1 of 1

#### Analytical Results

| Client:        | Environmental Chemistry Consulting Servi | Service Request:       | K0810178 |
|----------------|--|------------------------|----------|
| Project:       | Kuhlman Electric                         | <b>Date Collected:</b> | NA       |
| Sample Matrix: | Water                                    | Date Received:         | NA       |

## 1,4-Dioxane by GC/MS

| Sample Name:<br>Lab Code:              | Method Blank<br>KWG0811207-7 |   |      |                           |                   |                  | Units: ug/L<br>Basis: NA |      |
|--|------------------------------|---|------|---------------------------|-------------------|------------------|--------------------------|------|
| Extraction Method:<br>Analysis Method: | EPA 3510C<br>8270C SIM       |   |      |                           |                   | ]                | Level: Low               |      |
| Analyte Name                           | Result                       | Q | MRL  | <b>Dilution</b><br>Factor | Date<br>Extracted | Date<br>Analyzed | Extraction<br>Lot        | Note |
| 1,4-Dioxane                            | ND                           | U | 0.50 | 1                         | 10/21/08          | 10/29/08         | KWG0811207               |      |

| Surrogate Name | %Rec | Control<br>Limits | Date<br>Analyzed | Note       |
|----------------|------|-------------------|------------------|------------|
| 1,4-Dioxane-d8 | 85   | 55-100            | 10/29/08         | Acceptable |

#### Comments:

QA/QC Report

Client:Environmental Chemistry Consulting ServiProject:Kuhlman ElectricSample Matrix:Water

#### Service Request: K0810178

#### Surrogate Recovery Summary 1,4-Dioxane by GC/MS

| <b>Extraction Me</b> | ethod: | EPA 3510C |  |
|----------------------|--------|-----------|--|
| Analysis Meth        | od:    | 8270C SIM |  |

Units: PERCENT Level: Low

| Sample Name        | Lab Code     | <u>Sur1</u> |
|--------------------|--------------|-------------|
| CSW-WA1-029        | K0810178-001 | 75          |
| CSW-DUPLICATE      | K0810178-002 | 75          |
| Method Blank       | KWG0811207-7 | 85          |
| CSW-DUPLICATEMS    | KWG0811207-1 | 79          |
| CSW-DUPLICATEDMS   | KWG0811207-2 | 80          |
| Lab Control Sample | KWG0811207-3 | 80          |

Surrogate Recovery Control Limits (%)

Sur1 = 1,4-Dioxane-d8

55-100

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Form 2A - Organic

#### QA/QC Report

Client:Environmental Chemistry Consulting ServiProject:Kuhlman ElectricSample Matrix:Water

 Service Request:
 K0810178

 Date Extracted:
 10/21/2008

 Date Analyzed:
 10/29/2008

#### Matrix Spike/Duplicate Matrix Spike Summary 1,4-Dioxane by GC/MS

| Sample Name:<br>Lab Code:              | CSW-DUPLICATE<br>K0810178-002 |   |          |      |   |          |         | Units:<br>Basis:   | -            |        |
|--|-------------------------------|---|----------|------|---|----------|---------|--------------------|--------------|--------|
| Extraction Method:<br>Analysis Method: | EPA 3510C<br>8270C SIM        |   |          |      |   |          | Extract | Level:<br>ion Lot: | Low<br>KWG08 | 311207 |
|  | Sample                        | CSW-DUPLICATEMS<br>KWG0811207-1<br>Matrix Spike |          | KV   | DUPLICATE<br>VG0811207-2<br>cate Matrix S | 2        | %Rec    |                    | RPD          |        |
| Analyte Name                           | Result                        | Result  | Expected | %Rec | Result                                    | Expected | %Rec    | Limits             |              | Limit  |
| 1,4-Dioxane                            | 0.79                          | 17.0  | 25.0     | 65   | 17.4                                      | 25.0     | 66      | 53-105             | 2            | 30     |

Results flagged with an asterisk (\*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

1 of 1

QA/QC Report

Client:Environmental Chemistry Consulting ServiProject:Kuhlman ElectricSample Matrix:Water

#### Lab Control Spike Summary 1,4-Dioxane by GC/MS

| Extraction Method:<br>Analysis Method: |                    | Units:<br>Basis: | 0          |
|--|--------------------|------------------|------------|
|  |                    | Level:           | Low        |
|  |                    | Extraction Lot:  | KWG0811207 |
|  | Lab Control Sample |                  |            |

|              | KW<br>Lab |          | %Rec |        |
|--------------|-----------|----------|------|--------|
| Analyte Name | Result    | Expected | %Rec |        |
| 1,4-Dioxane  | 16.7      | 25.0     | 67   | 56-107 |

Results flagged with an asterisk (\*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

1 of 1

Service Request: K0810178

Date Extracted: 10/21/2008

Date Analyzed: 10/29/2008