

October 1, 2008

Analytical Report for Service Request No: K0808709

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 September 10, 2008. For your reference, these analyses have been assigned our service request number K0808709.

All analyses were performed according to our laboratory's quality assurance program. Where applicable, the methods cited conform to the Methods Update Rule (effective 4/11/2007), which relates to the use of analytical methods for the drinking water and waste water programs. The test results meet requirements of the NELAC standards. Exceptions are noted in the case narrative report where applicable. 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. J

Project Chemist

GS/lb

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#### 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

M 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.
- 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.
- ${\mathbb Z}$  The chromatographic fingerprint does not resemble a petroleum product.

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

	4
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.:

K0808709

Project:

Kuhlman Electric

Date Received:

09/10/08

Sample 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/Duplicate Laboratory Control Sample (LCS/DLCS).

#### Sample Receipt

Three water samples were received for analysis at Columbia Analytical Services on 09/10/08. 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 Dichlorofluroromethane and Trichlorofluroromethane 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.

#### **Matrix Spike Recovery Exceptions:**

The control criteria for matrix spike recovery of Naphthalene for sample Batch QC is not applicable. The analyte concentration in the sample was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

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 Cheffall A The

Date 10/7/08

## **Chain of Custody Documentation**



# CHAIN OF CUSTODY

K0808709

1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222x07 • FAX (360) 636-1068

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Firm	Date/Time	RELINQUISHED BY:	V. EDD			III. Data Validation Report	required	)up., MS, MSD as	required	nod	REPORT REQUIREMENTS			9		TRIP BLANK -	SW-) LP-10ATE 9/9/08 -	SW-WA1-028 9/9/08 08	SAMPLE I.D. DATE TI	AMPLER'S SIGNATURE	HONE #	MAIL ADDRESS	April	OMPANY/ADDRESS MAKETIN - SCA	ROJECT MANAGER RUSERT MIN	ROJECT NUMBER
Printed Name	Signature	REC	Requested Report Date	Provide FAX Results	Standard (10-15 working days)	5 Day	טאט חבעו		ALLEA ALLEA ALLEA MANAGEMENT COMMISSION CONTRACTOR CONT	BIII TO: BIRG WAR NER	INVOICE INFORMATION P.O. #				-	ε.	2 3	0840 m S	TIME LAB I.D. MATRIX	Mar	FAX#		3.0	SUARUE	MARTIN	
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Drinted Name	Signature	RELINQUISHED			need 0.5 mg/L	137	COMMENTS:	DCARBON PROCEDURE:	Ba Be B Ca Cd Co Cr	Ba Be B Ca Cd Co Cr	nalyzed:								Oil PCE Aroc Pes 608 Chil	& Gra 1664 B's Nors Sticida Oropa	CID lease HE les/H 808;	Scre Scre Scre Scre Scre Scre Scre Scre	Of (FICE) PH Ogene ides 814	7664 1664	SGT	/ //
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Printed Name	Signature	RECEIVED BY:						T OTHER:(	Nì K Ag Na Se Sr	NI K Ag Na Se Sr							×	×	TOX /4	(902 Y)	PO D	NO AC	24, POS al-P, 2+NO DX 16	TKN, 3 550 S	10C, 50e	2 / 0 / 10
Firm	Date/Time	) BY:						(CIRCLE ONE)	TI Sn V Zn Hg	TI Sn V Zn Hg									/ REMARKS			\	\		\ \ \	\ \ \

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#### Columbia Analytical Services, Inc. Cooler Receipt and Preservation Form

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Received: 9 10 08	Opened:_	9/10	08	B:	y: <b>1</b>	Da	<u></u>		,			
<ol> <li>Samples were received via?</li> <li>Samples were received in: (circ</li> <li>Were <u>custody seals</u> on coolers?</li> </ol>			UPS x	Envelo	ре	<i>GH</i> <i>Other</i> many a			Courie		nd Del NA	ivered
If present, were custody seals in			Ø)	_		-	they sign				Y	(N)
4. Is shipper's air-bill filed? If no		oill number:_								NA	0	N
<ul> <li>5. Temperature of cooler(s) upor Temperature Blank (°C):</li> <li>6. If applicable, list Chain of Customark</li> </ul>	ody Numbers	3:	2.5 1.le									
7. Packing material used. <i>Insert</i>	0.0			el Paci	ks ) Wei	(Ice)	Sleeves	Other_		N.I.A.		N.I.
<ul><li>8. Were custody papers properly f</li><li>9. Did all bottles arrive in good of</li></ul>		-		in the	table be	lovo				NA NA	0	N N
10. Were all sample labels complet					tuble be.	row.				NA NA	0	N
11. Did all sample labels and tags a	•	•			he table	helow				NA	8	N
12. Were appropriate bottles/con	•						<b>?</b>			NA	<u>.</u>	N
13. Were the pH-preserved bottles								ЭW <sup>,</sup>		(NA)	Y	N
14. Were VOA vials and 1631 Mer		, ·	•	•						NA	$\bigcirc$	Ν
15. Are CWA Microbiology samp	oles received	with >1/2 tl	ie 24hr	. hold	time ren	naining	g from co	llection	?	MA	Y	N
16. Was C12/Res negative?										(NA)	Y	N
Sample ID on Bottle	Samp	le ID on COC			Sample	ID on f	Bottle		Sam	ple ID on	coc	
Sample ID	Bottle Count	Bottle Type	Out of Temp	Head- space	Broken	рН	Reag		olume added	Reagent Numb		Initials
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*Does not include all pH preserved sample at Additional Notes, Discrepancies,			ceiving S(	)P (SMC	J-GEN).							

### Volatile Organic Compounds EPA Method 8260B

Analytical Results

Client:

Environmental Chemistry Consulting Servi

**Project:** 

Kuhlman Electric

Sample Matrix:

Water

Service Request: K0808709 **Date Collected:** 09/09/2008

**Date Received:** 09/10/2008

#### **Volatile Organic Compounds**

Sample Name: Lab Code:

CSW-WA1-028 K0808709-001

**Extraction Method:** 

EPA 5030B

**Analysis Method:** 

8260B

Units: ug/L Basis: NA

Level: Low

Analyte Name	Result	0	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Chloromethane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Vinyl Chloride	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Bromomethane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Chloroethane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Trichlorofluoromethane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Acetone	ND	U	20	1	09/22/08	09/22/08	KWG0809796	
1,1-Dichloroethene	1.4		0.50	1	09/22/08	09/22/08	KWG0809796	
Carbon Disulfide	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Methylene Chloride	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
trans-1,2-Dichloroethene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,1-Dichloroethane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
2-Butanone (MEK)	ND		20	1	09/22/08	09/22/08	KWG0809796	
2,2-Dichloropropane	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
cis-1,2-Dichloroethene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Chloroform	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Bromochloromethane	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,1-Dichloropropene	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Carbon Tetrachloride	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Benzene	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Trichloroethene (TCE)	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
1,2-Dichloropropane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Bromodichloromethane	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Dibromomethane	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
2-Hexanone	ND	U	20	1	09/22/08	09/22/08	KWG0809796	
cis-1,3-Dichloropropene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Toluene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
trans-1,3-Dichloropropene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,1,2-Trichloroethane	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
4-Methyl-2-pentanone (MIBK)	ND		20	1	09/22/08	09/22/08	KWG0809796	
1,3-Dichloropropane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	

Comments:
Committees.

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Form 1A - Organic

Page 1 of 3 SuperSet Reference:

Analytical Results

Client: Environmental Chemistry Consulting Servi

Project: Kuhlman Electric

Sample Matrix: Water

**Service Request:** K0808709 **Date Collected:** 09/09/2008

**Date Received:** 09/10/2008

#### **Volatile Organic Compounds**

Sample Name: CSW-WA1-028 Lab Code: K0808709-001

**Extraction Method:** EPA 5030B

Analysis Method: 8260B

Units: ug/L Basis: NA

Level: Low

Analyte Name	Result	0	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND		0.50	<del></del>	09/22/08	09/22/08	KWG0809796	Note
Dibromochloromethane	ND ND		0.50	1	09/22/08	09/22/08	KWG0809796	
1,2-Dibromoethane (EDB)	ND ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Chlorobenzene	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
1,1,1,2-Tetrachloroethane	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Ethylbenzene	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
m,p-Xylenes	ND	IJ	0.50	1	09/22/08	09/22/08	KWG0809796	
o-Xylene	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Styrene	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Bromoform	ND	IJ	0.50	1	09/22/08	09/22/08	KWG0809796	
Isopropylbenzene	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
1,1,2,2-Tetrachloroethane	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
1,2,3-Trichloropropane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Bromobenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
n-Propylbenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
2-Chlorotoluene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
4-Chlorotoluene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,3,5-Trimethylbenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
tert-Butylbenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,2,4-Trimethylbenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
sec-Butylbenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,3-Dichlorobenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
4-Isopropyltoluene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,4-Dichlorobenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
n-Butylbenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,2-Dichlorobenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	09/22/08	09/22/08	KWG0809796	
1,2,4-Trichlorobenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,2,3-Trichlorobenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Naphthalene	ND	U	0.50	1	09/23/08	09/23/08	KWG0809872	
Hexachlorobutadiene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,3,5-Trichlorobenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	

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Form 1A - Organic

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Analytical Results

**Client:** 

Environmental Chemistry Consulting Servi

Project:

Kuhlman Electric

Sample Matrix: Water Service Request: K0808709 **Date Collected:** 09/09/2008

**Date Received:** 09/10/2008

**Volatile Organic Compounds** 

Sample Name: Lab Code:

CSW-WA1-028

K0808709-001

Units: ug/L Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Dibromofluoromethane	96	75-120	09/22/08	Acceptable	
Toluene-d8	102	80-128	09/22/08	Acceptable	
4-Bromofluorobenzene	102	75-117	09/22/08	Acceptable	

Comments:

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Form 1A - Organic

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Page 3 of 3

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SuperSet Reference: RR93004

Analytical Results

Client:

Environmental Chemistry Consulting Servi

Project:

Kuhlman Electric

Sample Matrix:

Water

Service Request: K0808709

**Date Collected:** 09/09/2008 **Date Received:** 09/10/2008

#### **Volatile Organic Compounds**

Sample Name: Lab Code: CSW-Duplicate K0808709-002

**Extraction Method:** 

KU000 / U9-UU2

Analysis Method:

EPA 5030B 8260B Units: ug/L Basis: NA

Level: Low

Analyte Name	Result	0	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Chloromethane	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Vinyl Chloride	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Bromomethane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Chloroethane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Trichlorofluoromethane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Acetone	ND	U	20	1	09/22/08	09/22/08	KWG0809796	
1,1-Dichloroethene	1.4		0.50	1	09/22/08	09/22/08	KWG0809796	
Carbon Disulfide	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Methylene Chloride	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
trans-1,2-Dichloroethene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,1-Dichloroethane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
2-Butanone (MEK)	ND	U	20	1	09/22/08	09/22/08	KWG0809796	
2,2-Dichloropropane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
cis-1,2-Dichloroethene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Chloroform	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Bromochloromethane	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,1-Dichloropropene	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Carbon Tetrachloride	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Benzene	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Trichloroethene (TCE)	ND		0,50	1	09/22/08	09/22/08	KWG0809796	
1,2-Dichloropropane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Bromodichloromethane	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Dibromomethane	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
2-Hexanone	ND	U	20	1	09/22/08	09/22/08	KWG0809796	
cis-1,3-Dichloropropene	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Toluene	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
trans-1,3-Dichloropropene	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
1,1,2-Trichloroethane	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
4-Methyl-2-pentanone (MIBK)	ND		20	1	09/22/08	09/22/08	KWG0809796	
1,3-Dichloropropane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	

Comments:

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Form 1A - Organic

 $\begin{array}{cccc} & & & Page & 1 & of & 3 \\ & & SuperSet \, Reference: & RR93004 & & & \end{array}$ 

Analytical Results

**Client:** 

Environmental Chemistry Consulting Servi

**Project:** 

Kuhlman Electric

Sample Matrix:

Water

Service Request: K0808709

**Date Collected:** 09/09/2008

**Date Received:** 09/10/2008

#### **Volatile Organic Compounds**

**Sample Name:** Lab Code:

CSW-Duplicate K0808709-002

**Extraction Method:** 

EPA 5030B

**Analysis Method:** 

8260B

Units: ug/L Basis: NA

Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Dibromochloromethane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,2-Dibromoethane (EDB)	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Chlorobenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Ethylbenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
m,p-Xylenes	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
o-Xylene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Styrene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Bromoform	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Isopropylbenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,2,3-Trichloropropane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Bromobenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
n-Propylbenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
2-Chlorotoluene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
4-Chlorotoluene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,3,5-Trimethylbenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
tert-Butylbenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	Abababaaaaaaaa
1,2,4-Trimethylbenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
sec-Butylbenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,3-Dichlorobenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
4-Isopropyltoluene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,4-Dichlorobenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
n-Butylbenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,2-Dichlorobenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	09/22/08	09/22/08	KWG0809796	
1,2,4-Trichlorobenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	***************************************
1,2,3-Trichlorobenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Naphthalene	ND	U	0.50	1	09/23/08	09/23/08	KWG0809872	
Hexachlorobutadiene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,3,5-Trichlorobenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	

Comments:
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Form 1A - Organic

SuperSet Reference:

RR93004

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Analytical Results

**Client:** 

Environmental Chemistry Consulting Servi

Project:

Kuhlman Electric

Sample Matrix:

Water

Service Request: K0808709 **Date Collected:** 09/09/2008 **Date Received:** 09/10/2008

**Volatile Organic Compounds** 

Sample Name: Lab Code:

**CSW-Duplicate** 

K0808709-002

Units: ug/L Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Dibromofluoromethane	96	75-120	09/22/08	Acceptable	
Toluene-d8	102	80-128	09/22/08	Acceptable	
4-Bromofluorobenzene	98	75-117	09/22/08	Acceptable	

**Comments:** 

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Form 1A - Organic

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Page 3 of 3

SuperSet Reference:

Analytical Results

Client:

Environmental Chemistry Consulting Servi

Project:

Kuhlman Electric

Sample Matrix: W

Water

Service Request: K0808709 Date Collected: 09/09/2008

**Date Received:** 09/10/2008

#### **Volatile Organic Compounds**

Sample Name: Lab Code: Trip Blank K0808709-003

**Extraction Method:** 

KU8U8/U9-UU3

**Analysis Method:** 

EPA 5030B 8260B Units: ug/L Basis: NA

Level: Low

Analyte Name	Result	0	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dichlorodifluoromethane	ND		0.50	1	09/22/08	09/22/08	KWG0809796	11010
Chloromethane	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Vinyl Chloride	ND		0.50	î	09/22/08	09/22/08	KWG0809796	
Bromomethane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Chloroethane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Trichlorofluoromethane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Acetone	ND		20	1	09/22/08	09/22/08	KWG0809796	
1,1-Dichloroethene	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Carbon Disulfide	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Methylene Chloride	ND	U	0,50	1	09/22/08	09/22/08	KWG0809796	
trans-1,2-Dichloroethene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,1-Dichloroethane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
2-Butanone (MEK)	ND	U	20	1	09/22/08	09/22/08	KWG0809796	
2,2-Dichloropropane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
cis-1,2-Dichloroethene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Chloroform	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Bromochloromethane	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,1-Dichloropropene	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Carbon Tetrachloride	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Benzene	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Trichloroethene (TCE)	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
1,2-Dichloropropane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Bromodichloromethane	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Dibromomethane	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
2-Hexanone	ND	U	20	1	09/22/08	09/22/08	KWG0809796	
cis-1,3-Dichloropropene	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Toluene		U	0.50	1	09/22/08	09/22/08	KWG0809796	
trans-1,3-Dichloropropene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,1,2-Trichloroethane	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
4-Methyl-2-pentanone (MIBK)	ND		20	1	09/22/08	09/22/08	KWG0809796	
1,3-Dichloropropane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	

Comments:
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Form 1A - Organic

SuperSet Reference: RR93004

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Analytical Results

Client: Environmental Chemistry Consulting Servi

**Project:** Kuhlman Electric

**Sample Matrix:** Water Service Request: K0808709 **Date Collected:** 09/09/2008 **Date Received:** 09/10/2008

#### **Volatile Organic Compounds**

Sample Name: Trip Blank Units: ug/L Lab Code: K0808709-003 Basis: NA **Extraction Method:** EPA 5030B Level: Low **Analysis Method:** 8260B

				Dilution	Date	Date	Extraction	
Analyte Name	Result	Q	MRL	Factor	Extracted	Analyzed	Lot	Note
Tetrachloroethene (PCE)	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Dibromochloromethane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,2-Dibromoethane (EDB)	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Chlorobenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,1,1,2-Tetrachloroethane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Ethylbenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
m,p-Xylenes	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
o-Xylene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Styrene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Bromoform	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Isopropylbenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,2,3-Trichloropropane	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Bromobenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
n-Propylbenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
2-Chlorotoluene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
4-Chlorotoluene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,3,5-Trimethylbenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
tert-Butylbenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,2,4-Trimethylbenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
sec-Butylbenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,3-Dichlorobenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
4-Isopropyltoluene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,4-Dichlorobenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
n-Butylbenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	***************************************
1,2-Dichlorobenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,2-Dibromo-3-chloropropane	ND	U	2.0	1	09/22/08	09/22/08	KWG0809796	
1,2,4-Trichlorobenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,2,3-Trichlorobenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Naphthalene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	*
Hexachlorobutadiene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,3,5-Trichlorobenzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	

<sup>\*</sup> See Case Narrative

Comments:	

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Form 1A - Organic

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Analytical Results

**Client:** 

Environmental Chemistry Consulting Servi

Project:

Kuhlman Electric

Sample Matrix:

Water

Service Request: K0808709

Date Collected: 09/09/2008

**Date Received:** 09/10/2008

**Volatile Organic Compounds** 

Sample Name: Lab Code: Trip Blank

K0808709-003

Units: ug/L Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Dibromofluoromethane	97	75-120	09/22/08	Acceptable	
Toluene-d8	101	80-128	09/22/08	Acceptable	
4-Bromofluorobenzene	100	75-117	09/22/08	Acceptable	

Comments:

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Form 1A - Organic

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RR93004

Analytical Results

Client:

**Environmental Chemistry Consulting Servi** 

Project:

Kuhlman Electric

Sample Matrix:

Water

Service Request: K0808709

Date Collected: NA
Date Received: NA

#### **Volatile Organic Compounds**

Sample Name: Lab Code: Method Blank KWG0809796-4

**Extraction Method:** 

EPA 5030B

**Analysis Method:** 

8260B

Units: ug/L Basis: NA

Level: Low

Analyte Name	D14	0	AFDI	Dilution	Date	Date	Extraction	<b>T</b>
Dichlorodifluoromethane	Result		MRL	Factor	Extracted	Analyzed	Lot	Note
Chloromethane	ND ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Vinyl Chloride	ND ND		0.50 0.50	1	09/22/08 09/22/08	09/22/08	KWG0809796 KWG0809796	
-	***************************************			1		09/22/08		
Bromomethane	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Chloroethane	ND	_	0.50	1	09/22/08	09/22/08	KWG0809796	
Trichlorofluoromethane	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Acetone	ND		20	1	09/22/08	09/22/08	KWG0809796	
1,1-Dichloroethene	ND		0.50	1	09/22/08	09/22/08	KWG0809796	
Carbon Disulfide	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Methylene Chloride	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
trans-1,2-Dichloroethene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,1-Dichloroethane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
2-Butanone (MEK)	ND	U	20	1	09/22/08	09/22/08	KWG0809796	
2,2-Dichloropropane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
cis-1,2-Dichloroethene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Chloroform	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Bromochloromethane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,1-Dichloropropene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Carbon Tetrachloride	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Benzene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Trichloroethene (TCE)	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,2-Dichloropropane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Bromodichloromethane	ND	U	0,50	1	09/22/08	09/22/08	KWG0809796	
Dibromomethane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
2-Hexanone	ND	U	20	1	09/22/08	09/22/08	KWG0809796	
cis-1,3-Dichloropropene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
Toluene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
trans-1,3-Dichloropropene	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
1,1,2-Trichloroethane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	
4-Methyl-2-pentanone (MIBK)	ND	U	20	1	09/22/08	09/22/08	KWG0809796	
1,3-Dichloropropane	ND	U	0.50	1	09/22/08	09/22/08	KWG0809796	

Comments:
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Form 1A - Organic

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Analytical Results

Client: Environmental Chemistry Consulting Servi

Project:

Kuhlman Electric

Sample Matrix: Water

Service Request: K0808709

Date Collected: NA
Date Received: NA

#### **Volatile Organic Compounds**

Sample Name: Lab Code: Method Blank KWG0809796-4

**Extraction Method:** 

EPA 5030B

Analysis Method:

8260B

Units: ug/L Basis: NA

Level: Low

Analyte Name	Result (	Q MRL	Dilutio Factor		Date Analyzed	Extraction Lot	Note
Tetrachloroethene (PCE)	ND I	U 0,50	1	09/22/08	09/22/08	KWG0809796	
Dibromochloromethane	ND I	U 0.50	1	09/22/08	09/22/08	KWG0809796	
1,2-Dibromoethane (EDB)	ND I	U 0.50	1	09/22/08	09/22/08	KWG0809796	
Chlorobenzene	ND U	U 0.50	1	09/22/08	09/22/08	KWG0809796	
1,1,1,2-Tetrachloroethane	ND I	U 0.50	1	09/22/08	09/22/08	KWG0809796	
Ethylbenzene	ND U	U 0.50	1	09/22/08	09/22/08	KWG0809796	
m,p-Xylenes	ND I		1	09/22/08	09/22/08	KWG0809796	
o-Xylene	ND U	U 0.50	1	09/22/08	09/22/08	KWG0809796	
Styrene	ND U	U 0.50	1	09/22/08	09/22/08	KWG0809796	
Bromoform	ND U	J 0.50	1	09/22/08	09/22/08	KWG0809796	
Isopropylbenzene	ND U	J 0.50	1	09/22/08	09/22/08	KWG0809796	
1,1,2,2-Tetrachloroethane	ND U	J 0.50	1	09/22/08	09/22/08	KWG0809796	
1,2,3-Trichloropropane	ND U	J 0.50	1	09/22/08	09/22/08	KWG0809796	
Bromobenzene	ND U	J 0,50	1	09/22/08	09/22/08	KWG0809796	
n-Propylbenzene	ND U	J 0.50	1	09/22/08	09/22/08	KWG0809796	
2-Chlorotoluene	ND U	J 0.50	1	09/22/08	09/22/08	KWG0809796	
4-Chlorotoluene	ND U	J 0.50	1	09/22/08	09/22/08	KWG0809796	
1,3,5-Trimethylbenzene	ND U	J 0.50	1	09/22/08	09/22/08	KWG0809796	
tert-Butylbenzene	ND U	J 0.50	1	09/22/08	09/22/08	KWG0809796	
1,2,4-Trimethylbenzene	ND U	J 0.50	1	09/22/08	09/22/08	KWG0809796	
sec-Butylbenzene	ND U	J 0.50	1	09/22/08	09/22/08	KWG0809796	
1,3-Dichlorobenzene	ND U	J 0.50	1	09/22/08	09/22/08	KWG0809796	
4-Isopropyltoluene	ND U	J 0.50	1	09/22/08	09/22/08	KWG0809796	
1,4-Dichlorobenzene	ND U	J 0.50	1	09/22/08	09/22/08	KWG0809796	
n-Butylbenzene	ND U	J 0.50	1	09/22/08	09/22/08	KWG0809796	
1,2-Dichlorobenzene	ND U	J 0.50	1	09/22/08	09/22/08	KWG0809796	
1,2-Dibromo-3-chloropropane	ND U	J 2.0	1	09/22/08	09/22/08	KWG0809796	
1,2,4-Trichlorobenzene	ND U	J 0.50	1	09/22/08	09/22/08	KWG0809796	
1,2,3-Trichlorobenzene	ND U	J 0.50	1	09/22/08	09/22/08	KWG0809796	
Naphthalene	ND U	J 0.50	1	09/22/08	09/22/08	KWG0809796	*
Hexachlorobutadiene	ND U	J 0.50	1	09/22/08	09/22/08	KWG0809796	
1,3,5-Trichlorobenzene	ND U	J 0.50	1	09/22/08	09/22/08	KWG0809796	

<sup>\*</sup> See Case Narrative

Comments:	
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Form 1A - Organic

Page 2 of 3

Analytical Results

Client:

Environmental Chemistry Consulting Servi

Project:

Kuhlman Electric

Sample Matrix:

Water

Service Request: K0808709

Date Collected: NA
Date Received: NA

**Volatile Organic Compounds** 

Sample Name:

Method Blank

Lab Code:

KWG0809796-4

Units: ug/L Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Dibromofluoromethane	93	75-120	09/22/08	Acceptable	
Toluene-d8	101	80-128	09/22/08	Acceptable	
4-Bromofluorobenzene	100	75-117	09/22/08	Acceptable	

Comments:

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Form 1A - Organic

SuperSet Reference: RR93004

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Analytical Results

Client:

Environmental Chemistry Consulting Servi

Project:

Kuhlman Electric

Sample Matrix:

Water

Service Request: K0808709

Date Collected: NA
Date Received: NA

#### **Volatile Organic Compounds**

Sample Name: Lab Code: Method Blank KWG0809872-3

**Extraction Method:** 

FID 4 5000D

Analysis Method:

EPA 5030B 8260B Units: ug/L Basis: NA

Level: Low

Analyte Name         Result Q         MRL         Factor         Extracted         Analyzed         Lo           Dichlorodifluoromethane         ND U         0.50         1         09/23/08         09/23/08         KWG08           Chloromethane         ND U         0.50         1         09/23/08         09/23/08         KWG08           Vinyl Chloride         ND U         0.50         1         09/23/08         09/23/08         KWG08	09872
Chloromethane ND U 0.50 1 09/23/08 09/23/08 KWG08	
1 07/25/00 07/25/00	09872
Villyl Childride ND U 0.50 1 09/23/08 09/23/08 KWG08	00073
Bromomethane ND U 0.50 1 09/23/08 09/23/08 KWG08	
Chloroethane ND U 0.50 1 09/23/08 09/23/08 KWG08	
Trichlorofluoromethane ND U 0.50 1 09/23/08 09/23/08 KWG08	
Acetone ND U 20 1 09/23/08 09/23/08 KWG08	
1,1-Dichloroethene ND U 0.50 1 09/23/08 09/23/08 KWG08	
Carbon Disulfide ND U 0.50 1 09/23/08 09/23/08 KWG08	09872
Methylene Chloride ND U 0.50 1 09/23/08 09/23/08 KWG08	09872
trans-1,2-Dichloroethene ND U 0.50 1 09/23/08 09/23/08 KWG08	09872
1,1-Dichloroethane ND U 0.50 1 09/23/08 09/23/08 KWG08	09872
2-Butanone (MEK) ND U 20 1 09/23/08 09/23/08 KWG08	09872
2,2-Dichloropropane ND U 0.50 1 09/23/08 09/23/08 KWG08	09872
cis-1,2-Dichloroethene ND U 0.50 1 09/23/08 09/23/08 KWG08	09872
Chloroform ND U 0.50 1 09/23/08 09/23/08 KWG08	09872
Bromochloromethane ND U 0.50 1 09/23/08 09/23/08 KWG08	09872
1,1,1-Trichloroethane (TCA) ND U 0.50 1 09/23/08 09/23/08 KWG08	09872
1,1-Dichloropropene ND U 0.50 1 09/23/08 09/23/08 KWG08	09872
Carbon Tetrachloride ND U 0.50 1 09/23/08 09/23/08 KWG08	09872
1,2-Dichloroethane (EDC) ND U 0.50 1 09/23/08 09/23/08 KWG08	09872
Benzene ND U 0.50 1 09/23/08 09/23/08 KWG08	09872
Trichloroethene (TCE) ND U 0.50 1 09/23/08 09/23/08 KWG08	09872
1,2-Dichloropropane ND U 0.50 1 09/23/08 09/23/08 KWG08	09872
Bromodichloromethane ND U 0.50 1 09/23/08 09/23/08 KWG08	09872
Dibromomethane ND U 0.50 1 09/23/08 09/23/08 KWG08	09872
2-Hexanone ND U 20 1 09/23/08 09/23/08 KWG08	09872
cis-1,3-Dichloropropene ND U 0.50 1 09/23/08 09/23/08 KWG08	09872
Toluene ND U 0.50 1 09/23/08 09/23/08 KWG08	09872
trans-1,3-Dichloropropene ND U 0.50 1 09/23/08 09/23/08 KWG08	09872
1,1,2-Trichloroethane ND U 0.50 1 09/23/08 09/23/08 KWG08	09872
4-Methyl-2-pentanone (MIBK) ND U 20 1 09/23/08 09/23/08 KWG08	09872
1,3-Dichloropropane ND U 0.50 1 09/23/08 09/23/08 KWG08	09872

Comments:
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Form 1A - Organic

SuperSet Reference: RR93004

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Analytical Results

**Client:** 

Environmental Chemistry Consulting Servi

Project:

Kuhlman Electric

Sample Matrix:

Water

Service Request: K0808709

Date Collected: NA Date Received: NA

#### **Volatile Organic Compounds**

Sample Name:

Method Blank

Lab Code:

KWG0809872-3

Extraction Method: EPA 5030B

Units: ug/L Basis: NA

Level: Low

Analysis	Method:	8260B
Analysis	Method:	8260E

Tetrachloroethene (PCE)					Dilution	Date	Date	Extraction	
Dibromochloromethane   ND U   0.50	Analyte Name	Result	Q	MRL	Factor	Extracted	Analyzed	Lot	Note
1,2-Dibromoethane (EDB)   ND U   0.50   1   09/23/08   09/23/08   KWG0809872     1,1,1,2-Tetrachloroethane   ND U   0.50   1   09/23/08   09/23/08   KWG0809872     1,1,2-Tetrachloroethane   ND U   0.50   1   09/23/08   09/23/08   KWG0809872     1,2,3-Trichloropropane   ND U   0.50   1   09/23/08   09/23/08   KWG0809872     1,2,3-Trichloroethane   ND U   0.50   1   09/23/08   09/23/08   KWG0809872     1,2,3-Trichloroethane   ND U   0.50   1   09/23/08   09/23/08   KWG0809872     1,2,3-Trichloroethane   ND U   0.50   1   09/23/08   09/23/08   KWG0809872     1,2-Tetrachloroethane   ND U   0.50   1   09/23/08   09/23/08   KWG0809872     1,3-Trichloroethane   ND U   0.50   1   09/23/08   09/23/08   KWG0809872     1,2-Tetrachloroethane   ND U   0.50   1   09/23/08   09/23/08   KWG0809872     1,2-Tetrachloroethane   ND U   0.50   1   09/23/08   09/23/08   KWG0809872     1,2-Tetrachloroethane   ND U   0.50   1   09/23/08   09/23/08   KWG0809872     1,3-Dichlorobenzene   ND U   0.50   1   09/23/08   09/23/08   KWG0809872     1,3-Dichlorobenzene   ND U   0.50   1   09/23/08   09/23/08   KWG0809872     1,4-Dichlorobenzene   ND U   0.50   1   09/23/		ND	U	0.50	1	09/23/08	09/23/08	KWG0809872	
Chlorobenzene				0.50	1	09/23/08	09/23/08	KWG0809872	
1,1,1,2-Tetrachloroethane	1,2-Dibromoethane (EDB)	ND	U	0.50	1	09/23/08	09/23/08	KWG0809872	
Ethylbenzene				0.50	1	09/23/08	09/23/08	KWG0809872	
Mp_Xylenes				0.50	1	09/23/08	09/23/08	KWG0809872	
o-Xylene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           Styrene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           Bromoform         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           Isopropylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,1,2,2-Tetrachlorocthane         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,2,3-Trichloropropane         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           Bromobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1-Propylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           2-Chlorotoluene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           4-Chlorotoluene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           4-Chlorotoluene         ND U         0.50         1<	Ethylbenzene	ND	U	0.50	1	09/23/08	09/23/08	KWG0809872	
Styrene				0.50	1	09/23/08	09/23/08	KWG0809872	***************************************
Bromoform	•			0.50	1	09/23/08	09/23/08	KWG0809872	
Isopropylbenzene	Styrene	ND	U	0.50	1	09/23/08	09/23/08	KWG0809872	
1,1,2,2-Tetrachloroethane         ND U         0.50         1         09/23/08         KWG0809872           1,2,3-Trichloropropane         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           Bromobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           n-Propylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           2-Chlorotoluene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           4-Chlorotoluene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,3,5-Trimethylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           tert-Butylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,2,4-Trimethylbenzene         1.5         0.50         1         09/23/08         09/23/08         KWG0809872           1,3-Dichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,4-Dichlorobenzene         ND U         0.50 <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>09/23/08</td> <td>09/23/08</td> <td>KWG0809872</td> <td></td>					1	09/23/08	09/23/08	KWG0809872	
1,2,3-Trichloropropane					1	09/23/08	09/23/08	KWG0809872	
Bromobenzene	1,1,2,2-Tetrachloroethane	ND	U	0.50	1	09/23/08	09/23/08	KWG0809872	
n-Propylbenzene         ND U         0.50         1         09/23/08         69/23/08         KWG0809872           2-Chlorotoluene         ND U         0.50         1         09/23/08         KWG0809872           4-Chlorotoluene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,3,5-Trimethylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           tert-Butylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,2,4-Trimethylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,3-Dichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,3-Dichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           4-Isopropyltoluene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,4-Dichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           n-Butylbenzene         ND U         0.50					1		09/23/08		
2-Chlorotoluene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           4-Chlorotoluene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,3,5-Trimethylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           tert-Butylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,2,4-Trimethylbenzene         1.5         0.50         1         09/23/08         09/23/08         KWG0809872           sec-Butylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,3-Dichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           4-Isopropyltoluene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,4-Dichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           n-Butylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,2-Dichlorobenzene         ND U					1	09/23/08	09/23/08	KWG0809872	
4-Chlorotoluene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,3,5-Trimethylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           tert-Butylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,2,4-Trimethylbenzene         1.5         0.50         1         09/23/08         09/23/08         KWG0809872           sec-Butylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,3-Dichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           4-Isopropyltoluene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,4-Dichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           n-Butylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,2-Dichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,2-Dibromo-3-chloropropane <t< td=""><td>n-Propylbenzene</td><td>ND</td><td>U</td><td>0.50</td><td>1</td><td>09/23/08</td><td>09/23/08</td><td>KWG0809872</td><td></td></t<>	n-Propylbenzene	ND	U	0.50	1	09/23/08	09/23/08	KWG0809872	
1,3,5-Trimethylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           tert-Butylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,2,4-Trimethylbenzene         1.5         0.50         1         09/23/08         09/23/08         KWG0809872           sec-Butylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,3-Dichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           4-Isopropyltoluene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,4-Dichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           n-Butylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,2-Dichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,2-Dibromo-3-chloropropane         ND U         0.50         1         09/23/08         KWG0809872           1,2,4-Trichlorobenzene         ND U					1	09/23/08	09/23/08		
tert-ButylbenzeneND U0.50109/23/0809/23/08KWG08098721,2,4-Trimethylbenzene1.50.50109/23/0809/23/08KWG0809872sec-ButylbenzeneND U0.50109/23/0809/23/08KWG08098721,3-DichlorobenzeneND U0.50109/23/0809/23/08KWG08098724-IsopropyltolueneND U0.50109/23/0809/23/08KWG08098721,4-DichlorobenzeneND U0.50109/23/0809/23/08KWG0809872n-ButylbenzeneND U0.50109/23/0809/23/08KWG08098721,2-DichlorobenzeneND U0.50109/23/0809/23/08KWG08098721,2-Dibromo-3-chloropropaneND U0.50109/23/0809/23/08KWG08098721,2,4-TrichlorobenzeneND U0.50109/23/0809/23/08KWG0809872					1	09/23/08	09/23/08	KWG0809872	
1,2,4-Trimethylbenzene1.50.50109/23/0809/23/08KWG0809872sec-ButylbenzeneND U0.50109/23/0809/23/08KWG08098721,3-DichlorobenzeneND U0.50109/23/0809/23/08KWG08098724-IsopropyltolueneND U0.50109/23/0809/23/08KWG08098721,4-DichlorobenzeneND U0.50109/23/0809/23/08KWG0809872n-ButylbenzeneND U0.50109/23/0809/23/08KWG08098721,2-DichlorobenzeneND U0.50109/23/0809/23/08KWG08098721,2-Dibromo-3-chloropropaneND U2.0109/23/0809/23/08KWG08098721,2,4-TrichlorobenzeneND U0.50109/23/0809/23/08KWG0809872		ND	U	0.50	1	09/23/08	09/23/08	KWG0809872	
sec-Butylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,3-Dichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           4-Isopropyltoluene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,4-Dichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           n-Butylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,2-Dichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,2-Dibromo-3-chloropropane         ND U         2.0         1         09/23/08         KWG0809872           1,2,4-Trichlorobenzene         ND U         0.50         1         09/23/08         KWG0809872	•		U		1	09/23/08	09/23/08	KWG0809872	
1,3-Dichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           4-Isopropyltoluene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,4-Dichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           n-Butylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,2-Dichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,2-Dibromo-3-chloropropane         ND U         2.0         1         09/23/08         WG0809872           1,2,4-Trichlorobenzene         ND U         0.50         1         09/23/08         WG0809872					1	09/23/08	09/23/08		
4-Isopropyltoluene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,4-Dichlorobenzene         ND U         0.50         1         09/23/08         69/23/08         KWG0809872           n-Butylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,2-Dichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,2-Dibromo-3-chloropropane         ND U         2.0         1         09/23/08         WG0809872           1,2,4-Trichlorobenzene         ND U         0.50         1         09/23/08         WG0809872		ND	U	0.50	1	09/23/08	09/23/08	KWG0809872	
1,4-Dichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           n-Butylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,2-Dichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,2-Dibromo-3-chloropropane         ND U         2.0         1         09/23/08         KWG0809872           1,2,4-Trichlorobenzene         ND U         0.50         1         09/23/08         WG0809872		ND	U	0.50	1	09/23/08	09/23/08	KWG0809872	
n-Butylbenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,2-Dichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,2-Dibromo-3-chloropropane         ND U         2.0         1         09/23/08         09/23/08         KWG0809872           1,2,4-Trichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872		ND	U	0.50	1	09/23/08	09/23/08	KWG0809872	
1,2-Dichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872           1,2-Dibromo-3-chloropropane         ND U         2.0         1         09/23/08         09/23/08         KWG0809872           1,2,4-Trichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872	1,4-Dichlorobenzene	ND	U	0.50	1	09/23/08	09/23/08	KWG0809872	
1,2-Dibromo-3-chloropropane         ND U         2.0         1         09/23/08         09/23/08         KWG0809872           1,2,4-Trichlorobenzene         ND U         0.50         1         09/23/08         09/23/08         KWG0809872		ND	U	0.50	1	09/23/08	09/23/08	KWG0809872	
1,2,4-Trichlorobenzene ND U 0.50 1 09/23/08 KWG0809872		ND	U	0.50	1	09/23/08	09/23/08	KWG0809872	
	1,2-Dibromo-3-chloropropane	ND	U	2.0	1	09/23/08	09/23/08	KWG0809872	
1,2,3-Trichlorobenzene ND U 0.50 1 09/23/08 09/23/08 KWG0809872	1,2,4-Trichlorobenzene	ND	U	0.50	1	09/23/08	09/23/08	KWG0809872	
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	1,2,3-Trichlorobenzene	ND	U	0.50	1	09/23/08	09/23/08	KWG0809872	
Naphthalene ND U 0.50 1 09/23/08 09/23/08 KWG0809872	Naphthalene	ND	U	0.50	1	09/23/08	09/23/08	KWG0809872	
Hexachlorobutadiene ND U 0.50 1 09/23/08 09/23/08 KWG0809872		ND	U	0.50	1	09/23/08	09/23/08	KWG0809872	
1,3,5-Trichlorobenzene ND U 0.50 1 09/23/08 09/23/08 KWG0809872	1,3,5-Trichlorobenzene	ND	U	0.50	1	09/23/08	09/23/08	KWG0809872	

Comments:

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Form 1A - Organic

SuperSet Reference:

Page 2 of 3 RR93004

Analytical Results

Client:

Environmental Chemistry Consulting Servi

**Project:** 

Kuhlman Electric

Sample Matrix:

Water

Service Request: K0808709

Date Collected: NA Date Received: NA

**Volatile Organic Compounds** 

Sample Name:

Method Blank

Lab Code:

KWG0809872-3

Units: ug/L Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
Dibromofluoromethane	84	75-120	09/23/08	Acceptable	
Toluene-d8	99	80-128	09/23/08	Acceptable	
4-Bromofluorobenzene	86	75-117	09/23/08	Acceptable	

Comments:

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QA/QC Report

Client:

Environmental Chemistry Consulting Servi

Project:

Kuhlman Electric

Sample Matrix:

Water

Surrogate Recovery Summary Volatile Organic Compounds

**Extraction Method:** 

EPA 5030B

**Analysis Method:** 

8260B

Units: PERCENT

Level: Low

Service Request: K0808709

Sample Name	Lab Code	Sur1	Sur2	Sur3
CSW-WA1-028	K0808709-001	96	102	102
CSW-Duplicate	K0808709-002	96	102	98
Trip Blank	K0808709-003	97	101	100
Method Blank	KWG0809796-4	93	101	100
Method Blank	KWG0809872-3	84	99	86
Batch QC	K0808718-004	94	100	89
Batch QCMS	KWG0809796-1	98	103	99
Batch QCDMS	KWG0809796-2	100	103	99
Lab Control Sample	KWG0809796-3	99	102	100
Lab Control Sample	KWG0809872-1	85	97	88
Duplicate Lab Control Sample	KWG0809872-2	86	97	87

#### 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.

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Form 2A - Organic

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QA/QC Report

Client:

Environmental Chemistry Consulting Servi

Project:

Kuhlman Electric

Sample Matrix:

Water

Service Request: K0808709

**Date Extracted:** 09/22/2008 **Date Analyzed:** 09/22/2008

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

Sample Name: Lab Code:

**Extraction Method:** 

Analysis Method:

Batch QC

K0808718-004

EPA 5030B

8260B

Units: ug/L Basis: NA

Level: Low

Extraction Lot: KWG0809796

Batch QCMS

Batch QCDMS

	Sample		WG0809796- Matrix Spike	1		VG0809796-: cate Matrix S	%Rec	RPD		
Analyte Name	Result	Result	Expected	%Rec	Result	Expected	%Rec	Limits	RPD	Limit
1,1-Dichloroethene	ND	222	200	111	219	200	110	67-147	1	30
Benzene	34	234	200	100	231	200	98	69-126	1	30
Trichloroethene (TCE)	ND	210	200	105	209	200	105	56-137	0	30
Toluene	18	216	200	99	215	200	99	66-128	0	30
Chlorobenzene	ND	196	200	98	192	200	96	68-120	2	30
1,2-Dichlorobenzene	ND	196	200	98	189	200	94	67-116	4	30
Naphthalene	440	437	200	-2 *	470	200	14 *	61-137	7	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.

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Form 3A - Organic

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Page SuperSet Reference:

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QA/QC Report

**Client:** 

Environmental Chemistry Consulting Servi

**Project:** 

Kuhlman Electric

Sample Matrix: Water **Date Extracted:** 09/22/2008

Service Request: K0808709

**Date Analyzed:** 09/22/2008

Lab Control Spike Summary **Volatile Organic Compounds** 

**Extraction Method: Analysis Method:** 

EPA 5030B

8260B

Units: ug/L Basis: NA

Level: Low

Extraction Lot: KWG0809796

Lab Control Sample KWG0809796-3 Lab Control Spike

	Lab	Control Spik	e	%Rec
Analyte Name	Result	Expected	%Rec	Limits
Dichlorodifluoromethane	10.2	10.0	102	21-156
Chloromethane	9.98	10.0	100	45-135
Vinyl Chloride	10.2	10.0	102	59-135
Bromomethane	14.0	10.0	140	24-144
Chloroethane	9.87	10.0	99	60-128
Trichlorofluoromethane	9.97	10.0	100	54-129
Acetone	44.1	50.0	88	53-129
1,1-Dichloroethene	10.7	10.0	107	70-136
Carbon Disulfide	18.7	20.0	93	64-129
Methylene Chloride	10.1	10.0	101	64-137
trans-1,2-Dichloroethene	10.0	10.0	100	70-121
1,1-Dichloroethane	10.2	10.0	102	72-122
2-Butanone (MEK)	42.7	50.0	85	56-137
2,2-Dichloropropane	11.0	10.0	110	48-133
cis-1,2-Dichloroethene	9.68	10.0	97	76-125
Chloroform	9.83	10.0	98	71-118
Bromochloromethane	9.83	10.0	98	72-123
1,1,1-Trichloroethane (TCA)	10.5	10.0	105	65-126
1,1-Dichloropropene	10.2	10.0	102	71-119
Carbon Tetrachloride	9.86	10.0	99	58-133
1,2-Dichloroethane (EDC)	10.2	10.0	102	69-125
Benzene	9.71	10.0	97	74-118
Trichloroethene (TCE)	10.1	10.0	101	71-122
1,2-Dichloropropane	9.69	10.0	97	73-123
Bromodichloromethane	9.65	10.0	97	72-127
Dibromomethane	9.36	10.0	94	71-124
2-Hexanone	41.4	50.0	83	44-135
cis-1,3-Dichloropropene	9.26	10.0	93	71-125
Toluene	9.61	10.0	96	74-117
trans-1,3-Dichloropropene	8.13	10.0	81	56-121
1,1,2-Trichloroethane	9.19	10.0	92	73-122
4-Methyl-2-pentanone (MIBK)	42.8	50.0	86	57-129
1,3-Dichloropropane	9.25	10.0	93	74-120
Tetrachloroethene (PCE)	9.93	10.0	99	65-121
Dibromochloromethane	8.53	10.0	85	67-124

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.

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Form 3C - Organic

Page SuperSet Reference: RR93004

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QA/QC Report

Client:

Environmental Chemistry Consulting Servi

Project:

Kuhlman Electric

Sample Matrix:

Water

Service Request: K0808709 **Date Extracted:** 09/22/2008

**Date Analyzed:** 09/22/2008

#### Lab Control Spike Summary **Volatile Organic Compounds**

Extraction Method: EPA 5030B **Analysis Method:** 

8260B

Units: ug/L Basis: NA

Level: Low Extraction Lot: KWG0809796

Lab Control Sample KWG0809796-3 Lab Control Snike

Lab	Control Spik	<u>e</u>	%Rec
Result	Expected	%Rec	Limits
8.79	10.0	88	71-120
9.65			74-115
			71-118
			71-118
			73-119
9.76			74-120
9.31			75-123
7.68	10.0	77	57-135
9.11	10.0	91	65-110
9.16	10.0	92	63-126
9.48	10.0	95	67-123
9.41	10.0	94	76-111
10.1	10.0	101	69-122
10.2	10.0	102	72-120
9.89	10.0	99	70-118
9.67	10.0	97	70-120
10.2	10.0	102	72-118
9.37	10.0	94	72-121
10.3	10.0	103	73-130
9.62	10.0	96	76-110
9.51	10.0	95	67-115
9.41	10.0	94	74-112
9.07	10.0	91	62-123
9.42	10.0	94	75-110
7.54	10.0		49-124
8.50	10.0	85	66-115
8.38	10.0	84	64-120
7.20	10.0	72	58-132
10.2	10.0	102	61-124
37.1	40.0	93	46-133
	8.79 9.65 9.02 9.58 19.4 9.76 9.31 7.68 9.11 9.16 9.48 9.41 10.1 10.2 9.89 9.67 10.2 9.37 10.3 9.62 9.51 9.41 9.07 9.42 7.54 8.50 8.38 7.20 10.2	Result         Expected           8.79         10.0           9.65         10.0           9.02         10.0           9.58         10.0           19.4         20.0           9.76         10.0           9.31         10.0           7.68         10.0           9.11         10.0           9.48         10.0           9.41         10.0           10.2         10.0           9.89         10.0           9.67         10.0           10.2         10.0           9.37         10.0           9.62         10.0           9.51         10.0           9.41         10.0           9.51         10.0           9.42         10.0           7.54         10.0           8.50         10.0           8.38         10.0           7.20         10.0           10.2         10.0	8.79

#### 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.

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QA/QC Report

Client:

Environmental Chemistry Consulting Servi

Project:

Kuhlman Electric

**Sample Matrix:** 

Water

Service Request: K0808709

Date Extracted: 09/23/2008

**Date Analyzed:** 09/23/2008

#### Lab Control Spike/Duplicate Lab Control Spike Summary Volatile Organic Compounds

**Extraction Method:** 

EPA 5030B

**Analysis Method:** 

8260B

voiame Organic Compound

Units: ug/L

Basis: NA Level: Low

Extraction Lot: KWG0809872

Lab Control Sample KWG0809872-1 Duplicate Lab Control Sample KWG0809872-2

	Lab Control Spike Du			Ouplicate Lab Control Spike				RPD	
Analyte Name	Result	Expected	%Rec	Result	Expected	%Rec	%Rec Limits	RPD	Limit
Dichlorodifluoromethane	8.76	10.0	88	7.35	10.0	74	21-156	18	30
Chloromethane	8.19	10.0	82	7.63	10.0	76	45-135	7	30
Vinyl Chloride	9.12	10.0	91	8.28	10.0	83	59-135	10	30
Bromomethane	8.31	10.0	83	8.20	10.0	82	24-144	1	30
Chloroethane	9.31	10.0	93	8.67	10.0	87	60-128	7	30
Trichlorofluoromethane	8.59	10.0	86	7.96	10.0	80	54-129	8	30
Acetone	35.0	50.0	70	35.4	50.0	71	53-129	1	30
1,1-Dichloroethene	9.91	10.0	99	9.26	10.0	93	70-136	7	30
Carbon Disulfide	16.7	20.0	84	15.5	20.0	77	64-129	8	30
Methylene Chloride	8.88	10.0	89	8.64	10.0	86	64-137	3	.30
trans-1,2-Dichloroethene	9.18	10.0	92	8.58	10.0	86	70-121	7	30
1,1-Dichloroethane	8.53	10.0	85	8.06	10.0	81	72-122	6	30
2-Butanone (MEK)	38.7	50.0	77	39.2	50.0	78	56-137	1	30
2,2-Dichloropropane	7.77	10.0	78	7.48	10.0	75	48-133	4	30
cis-1,2-Dichloroethene	8.89	10.0	89	8.49	10.0	85	76-125	5	30
Chloroform	8.64	10.0	86	8.36	10.0	84	71-118	3	30
Bromochloromethane	9.19	10.0	92	8.76	10.0	88	72-123	5	30
1,1,1-Trichloroethane (TCA)	8.29	10.0	83	7.90	10.0	79	65-126	5	30
1,1-Dichloropropene	8.83	10.0	88	8.33	10.0	83	71-119	6	30
Carbon Tetrachloride	8.17	10.0	82	7.79	10.0	78	58-133	5	30
1,2-Dichloroethane (EDC)	8.02	10.0	80	7.70	10.0	77	69-125	4	30
Benzene	8.89	10.0	89	8.45	10.0	85	74-118	5	30
Trichloroethene (TCE)	8.83	10.0	88	8.21	10.0	82	71-122	7	30
1,2-Dichloropropane	8.29	10.0	83	8.07	10.0	81	73-123	3	30
Bromodichloromethane	8.01	10.0	80	7.88	10.0	79	72-127	2	30
Dibromomethane	8.06	10.0	81	8.08	10.0	81	71-124	0	30
2-Hexanone	40.2	50.0	80	39.0	50.0	78	44-135	3	30
cis-1,3-Dichloropropene	7.91	10.0	79	7.74	10.0	77	71-125	2	30
Toluene	8.92	10.0	89	8.55	10.0	86	74-117	4	30
trans-1,3-Dichloropropene	7.63	10.0	76	7.52	10.0	75	56-121	1	30
1,1,2-Trichloroethane	9.54	10.0	95	9.11	10.0	91	73-122	5	30
4-Methyl-2-pentanone (MIBK)	37.7	50.0	75	37.6	50.0	75	57-129	0	30
1,3-Dichloropropane	9.44	10.0	94	9.40	10.0	94	74-120	0	30
Tetrachloroethene (PCE)	11.2	10.0	112	10.7	10.0	107	65-121	4	30
Dibromochloromethane	8.93	10.0	89	8.67	10.0	87	67-124	3	30

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.

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Form 3C - Organic

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SuperSet Reference: RR93004

QA/QC Report

Client:

Environmental Chemistry Consulting Servi

Project:

Kuhlman Electric

**Sample Matrix:** 

Water

Service Request: K0808709 **Date Extracted:** 09/23/2008

**Date Analyzed:** 09/23/2008

#### Lab Control Spike/Duplicate Lab Control Spike Summary **Volatile Organic Compounds**

Extraction Method: EPA 5030B

**Analysis Method:** 

8260B

Units: ug/L Basis: NA

Level: Low

Extraction Lot: KWG0809872

Lab Control Sample KWG0809872-1

**Duplicate Lab Control Sample** KWG0809872-2

		Control Spik		Duplicate Lab Control Spike			%Rec		RPD
Analyte Name	Result	Expected	%Rec	Result	Expected	%Rec	Limits	RPD	Limit
1,2-Dibromoethane (EDB)	9.47	10.0	95	9.35	10.0	94	71-120	1	30
Chlorobenzene	10.4	10.0	104	10.1	10.0	101	74-115	2	30
1,1,1,2-Tetrachloroethane	9.12	10.0	91	8.92	10.0	89	71-118	2	30
Ethylbenzene	10.5	10.0	105	10.0	10.0	100	71-118	4	30
m,p-Xylenes	21.6	20.0	108	20.8	20.0	104	73-119	4	30
o-Xylene	10.6	10.0	106	10.3	10.0	103	74-120	3	30
Styrene	10.1	10.0	101	9.73	10.0	97	75-123	3	30
Bromoform	8.64	10.0	86	8.52	10.0	85	57-135	1	30
Isopropylbenzene	9.78	10.0	98	9.41	10.0	94	65-110	4	30
1,1,2,2-Tetrachloroethane	8.97	10.0	90	8.87	10.0	89	63-126	1	30
1,2,3-Trichloropropane	8.50	10.0	85	8.66	10.0	87	67-123	2	30
Bromobenzene	9.48	10.0	95	9.49	10.0	95	76-111	0	30
n-Propylbenzene	9.90	10.0	99	9.58	10.0	96	69-122	3	30
2-Chlorotoluene	9.62	10.0	96	9.41	10.0	94	72-120	2	30
4-Chlorotoluene	9.38	10.0	94	9.17	10.0	92	70-118	2	30
1,3,5-Trimethylbenzene	9.57	10.0	96	9.32	10.0	93	70-120	3	30
tert-Butylbenzene	9.92	10.0	99	9.62	10.0	96	72-118	3	30
1,2,4-Trimethylbenzene	9.34	10.0	93	9.10	10.0	91	72-121	3	30
sec-Butylbenzene	9.79	10.0	98	9.50	10.0	95	73-130	3	30
1,3-Dichlorobenzene	9.86	10.0	99	9.75	10.0	98	76-110	1	30
4-Isopropyltoluene	9.36	10.0	94	9.11	10.0	91	67-115	3	30
1,4-Dichlorobenzene	9.78	10.0	98	9.57	10.0	96	74-112	2	30
n-Butylbenzene	8.91	10.0	89	8.83	10.0	88	62-123	1	30
1,2-Dichlorobenzene	9.83	10.0	98	9.63	10.0	96	75-110	2	30
1,2-Dibromo-3-chloropropane	8.04	10.0	80	8.74	10.0	87	49-124	8	30
1,2,4-Trichlorobenzene	9.16	10.0	92	9.19	10.0	92	66-115	0	30
1,2,3-Trichlorobenzene	9.40	10.0	94	9.45	10.0	95	64-120	1	30
Naphthalene	8.17	10.0	82	8.56	10.0	86	58-132	5	30
Hexachlorobutadiene	9.50	10.0	95	9.43	10.0	94	61-124	1	30
1,3,5-Trichlorobenzene	38.6	40.0	97	39.9	40.0	100	46-133	3	30

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.

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1,4-Dioxane by GC/MS

Analytical Results

Client:

Environmental Chemistry Consulting Servi

Project:

Kuhlman Electric

**Sample Matrix:** 

Water

Service Request: K0808709

**Date Collected:** 09/09/2008 **Date Received:** 09/10/2008

1,4-Dioxane by GC/MS

Sample Name:

CSW-WA1-028

Lab Code:

K0808709-001

**Extraction Method:** 

EPA 3510C

Units: ug/L

Basis: NA

Level: Low

**Analysis Method:** 

8270C SIM

			Dilution	Date	Date	Extraction	
Analyte Name	Result Q	MRL	Factor	Extracted	Analyzed	Lot	Note
1,4-Dioxane	0.91	0.50	1	09/12/08	09/29/08	KWG0809256	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note	
1,4-Dioxane-d8	82	55-100	09/29/08	Acceptable	

Comments:

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Form 1A - Organic

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SuperSet Reference:

RR93079

Analytical Results

**Client:** 

Environmental Chemistry Consulting Servi

**Project:** 

Kuhlman Electric

Sample Matrix:

Water

Service Request: K0808709

**Date Collected:** 09/09/2008

**Date Received:** 09/10/2008

1,4-Dioxane by GC/MS

Sample Name:

**CSW-Duplicate** 

Lab Code:

K0808709-002

**Extraction Method:** 

EPA 3510C

**Analysis Method:** 

8270C SIM

Units: ug/L Basis: NA

Level: Low

**Analyte Name** 

**MRL** 

Dilution **Factor** 1

Date Extracted

Date Analyzed

**Extraction** Lot

Note

1,4-Dioxane

Result Q 0.91

0.50

09/12/08

09/29/08

KWG0809256

Surrogate Name

1,4-Dioxane-d8

%Rec 81

Control Date Limits 55-100 09/29/08

Analyzed

Note

Acceptable

Comments:

Printed: 09/30/2008 14:41:03

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Form 1A - Organic

SuperSet Reference:

RR93079

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Analytical Results

Client:

**Environmental Chemistry Consulting Servi** 

Project:

Kuhlman Electric

Sample Matrix:

Water

Service Request: K0808709

Date Collected: NA

Date Received: NA

1,4-Dioxane by GC/MS

Sample Name:

Method Blank

Lab Code:

KWG0809256-6

**Extraction Method:** 

EPA 3510C

**Analysis Method:** 

8270C SIM

Units: ug/L Basis: NA

Level: Low

Note

**Analyte Name** 1,4-Dioxane

Dilution Date Extraction **Date** Lot **Analyzed** Result Q **MRL Factor** Extracted KWG0809256 09/29/08 09/12/08 ND U 0.50 1

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1.4-Dioxane-d8	89	55-100	09/29/08	Acceptable

Comments:

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Merged

Form 1A - Organic

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SuperSet Reference:

RR93079

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QA/QC Report

**Client:** 

Environmental Chemistry Consulting Servi

Project:

Kuhlman Electric

Sample Matrix:

Water

Service Request: K0808709

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

**Extraction Method:** 

EPA 3510C

**Analysis Method:** 

8270C SIM

Units: PERCENT

Level: Low

Sample Name	Lab Code	<u>Sur1</u>
CSW-WA1-028	K0808709-001	82
CSW-Duplicate	K0808709-002	81
Method Blank	KWG0809256-6	89
CSW-WA1-028MS	KWG0809256-3	86
CSW-WA1-028DMS	KWG0809256-4	86
Lab Control Sample	KWG0809256-5	84

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.

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Form 2A - Organic

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RR93079 SuperSet Reference:

QA/QC Report

Client:

**Environmental Chemistry Consulting Servi** 

Project:

Kuhlman Electric

Sample Matrix:

Water

Service Request: K0808709

**Date Extracted:** 09/12/2008

**Date Analyzed:** 09/29/2008

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

Sample Name:

CSW-WA1-028 K0808709-001

EPA 3510C

**Extraction Method: Analysis Method:** 

Lab Code:

8270C SIM

Units: ug/L Basis: NA

Level: Low Extraction Lot: KWG0809256

CSW-WA1-028MS

KWG0809256-3

CSW-WA1-028DMS

KWG0809256-4

Matrix Spike **Duplicate Matrix Spike RPD** %Rec Sample Limits **RPD** Limit Result %Rec **Analyte Name** Result %Rec Result **Expected Expected** 79 53-105 30 1,4-Dioxane 0.91 21.2 25.0 20.6 25.0 3 81

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.

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Form 3A - Organic

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RR93079

SuperSet Reference:

QA/QC Report

Client:

Environmental Chemistry Consulting Servi

Project:

Kuhlman Electric

Sample Matrix:

Water

Service Request: K0808709

**Date Extracted:** 09/12/2008

**Date Analyzed:** 09/29/2008

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

**Extraction Method:** 

EPA 3510C

Units: ug/L Basis: NA

Level: Low

Extraction Lot: KWG0809256

8270C SIM **Analysis Method:** 

> Lab Control Sample KWG0809256-5

Lab Control Spike

%Rec Limits

56-107

**Expected** %Rec **Analyte Name** Result 1,4-Dioxane 19.9 25.0 80

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.

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Form 3C - Organic

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RR93079 SuperSet Reference: