

## Peltier, Hannah

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**From:** Gilliam, Allen  
**Sent:** Friday, May 08, 2015 10:05 AM  
**To:** chuck jones  
**Cc:** Peltier, Hannah; Arkadelphia - Brenda Gills  
**Subject:** AR0020605\_Danfoss ARP001040 late March 2015 quarterly pretreatment report\_20150507  
**Attachments:** 20150506122002231.pdf

Chuck,

Danfoss' March 2015 quarterly report was electronically received, reviewed deemed late, but complete and compliant with the reporting requirements in 40 CFR 403.12(e).

Please keep in mind your quarterly reports are due during the months of March, June, September and December of each year.

Monthly samples/analysis are not required for the metals nor the list of toxic organics listed in 40 CFR 433.11 ([http://www.ecfr.gov/cgi-bin/text-idx?SID=764cc398ae8a266ffb4ea9ad3a33f80b&mc=true&node=pt40.30.433&rgn=div5#se40.30.433\\_111](http://www.ecfr.gov/cgi-bin/text-idx?SID=764cc398ae8a266ffb4ea9ad3a33f80b&mc=true&node=pt40.30.433&rgn=div5#se40.30.433_111)). This office believes we've reached an agreement with Arkadelphia's Utilities Manager quarterly sampling for metals is sufficient and semi-annual sampling/analysis for the toxic organics is required until Danfoss submits an approvable toxic organic management plan (TOMP).

It's understood that Harbor Environmental is currently helping you draft a TOMP for approval. Once approved, Danfoss will no longer be required to sample/analyze/report the toxic organics and only certify that the management plan is being implemented (Section [6]B. of the attached report).

If there are further questions please feel free to contact this office.

Sincerely,

Allen Gilliam5/6/15  
ADEQ State Pretreatment Coordinator  
501.682.0625

ec: Brenda Gills, Arkadelphia Utilities Manager

E/NPDES/NPDES/Pretreatment/Reports

-----Original Message-----

From: Jones Chuck [<mailto:Chuck.Jones@danfoss.com>]  
Sent: Wednesday, May 06, 2015 12:44 PM  
To: Gilliam, Allen  
Subject: 1st quarter waste water report

Here you go sir this is for Jan-Apr  
Hope is well in your world  
Thanks

Chuck Jones, NREMT-P  
Environmental, Health and Safety Manager Commercial Compressors North America Danfoss LLC One Scroll Drive  
Arkadelphia, AR 71923 chuck.jones@danfoss.com  
Tel.: 870-246-0714  
Mobile: 501-617-3459  
Fax: 870-245-0150  
<http://www.danfoss.com>

-----Original Message-----

From: p2hr\_no\_reply@danfoss.com [mailto:p2hr\_no\_reply@danfoss.com]  
Sent: Wednesday, May 06, 2015 11:20 AM  
To: Jones Chuck  
Subject:

This E-mail was sent from "USARK01PI041791" (Aficio MP C4000).

Scan Date: 05.06.2015 12:20:02 (-0400)  
Queries to: p2hr\_no\_reply@danfoss.com

**SEMI-ANNUAL REPORT FOR INDUSTRIAL USERS REGULATED BY 40 CFR 433**

Use of this form is not an ADEQ requirement, but satisfies the reporting requirements in 40 CFR 403.12(c).

Attn: Water Div/NPDES Pretreatment

**(1) IDENTIFYING INFORMATION and NPDES Pretreatment Tracking # ARP001040**

**A. LEGAL NAME & MAILING ADDRESS**  
 Danfoss LCC  
 One Scroll Drive  
 Arkadelphia AR 71923

**B. FACILITY & LOCATION ADDRESS**  
 Danfoss LCC  
 One Scroll Drive  
 Arkadelphia AR 71923

**C. FACILITY CONTACT:** Chuck Jones    **TELEPHONE NUMBER:** 870-246-0714    **e-mail:** chuck.jones@danfoss.com

**(2) REPORTING PERIOD--FISCAL YEAR From                      to                      (Both Semi-Annual Reports must cover Fiscal Year)**

**A. MONTHS WHICH REPORTS ARE DUE**  
  
 1<sup>st</sup> Quarter through June 2014

**B. PERIOD COVERED BY THIS REPORT**  
  
**FROM:**     Jan    **TO:** April

**(3) DESCRIPTION OF OPERATION**

**A. REGULATED PROCESSES**

**CORE PROCESS(ES)**

CHECK EACH APPLICABLE BLOCK

- Electroplating
- Electroless Plating
- Anodizing
- Coating (conversion)
- Chemical Etching and Milling
- Printed Circuit Board Manufacture

**ANCILLARY PROCESS(ES)\***

LIST BELOW EACH PROCESS USED IN THE FACILITY

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**B. CHANGES:**

SUMMARIZE ANY CHANGES IN THE REGULATED PROCESSES SINCE THE LAST REPORT. ATTACH AN ADDITIONAL SHEET IF THE SPACE BELOW IS INADEQUATE. PROVIDE A NEW SCHEMATIC IF APPROPRIATE.

April 2015 QR  
 ARP 001040  
 AR0020605  
 AFIN 10-00102  
 Filed Date 2015 05 06

\*SEE 40CFR433.10(a) FOR THE 40 ANCILLARY OPERATIONS

C. Number of Regular Employees at this Facility 195

D. [Reserved]

**(4) FLOW MEASUREMENT**

**INDIVIDUAL & TOTAL PROCESS FLOWS DISCHARGED TO POTW IN GALLONS PER DAY**

| Process                    | Average      | Maximum      | Type of Discharge* |
|----------------------------|--------------|--------------|--------------------|
| Regulated (Core & Cyanide) | 18142        | 62100        | Continuous         |
| ' 403.6(e) Unregulated*    | 0            | 0            | N/A                |
| ' 403.6(e) Dilute          | 0            | 0            | Batch              |
| Cooling Water              | 0            | 0            | Continuous         |
| Sanitary                   | 5800         | 10150        | Continuous         |
| <b>Total Flow to POTW</b>  | <b>23942</b> | <b>72250</b> | <b>*****</b>       |

\*If batch discharged please list the period of time of each batch discharge (300 gallons/day; 500 gallons/week, 2,000 gallons/3 months, etc). Do not normalize over that period for the average flow.

"Unregulated" has a precise legal meaning; see 40CFR403.6(e).

**(5) MEASUREMENT OF POLLUTANTS**

**A. TYPE OF TREATMENT SYSTEM**

CHECK EACH APPLICABLE BLOCK

Neutralization

Chemical Precipitation and Sedimentation

Chromium Reduction

Cyanide Destruction

Other \_\_\_\_\_

None

**B. COMMENTS ON TREATMENT SYSTEM**

C. THE INDUSTRIAL USER MUST PERFORM SAMPLING AND ANALYSIS OF THE EFFLUENT FROM ALL REGULATED PROCESSES--CORE & ANCILLARY--(AFTER TREATMENT, IF APPLICABLE). ATTACH THE LAB ANALYSIS WHICH SHOWS A MAXIMUM; TABULATE ALL THE ANALYTICAL DATA COLLECTED DURING THE REPORT PERIOD IN THE SPACE PROVIDED BELOW. ZERO CONCENTRATIONS ARE NOT ACCEPTABLE; LIST THE DETECTION LIMIT IF CONCENTRATION WAS BELOW DETECTION LIMIT.

| 40 CFR 433.17<br>Pollutant(mg/l)<br>limits | Cd     | Cr    | Cu    | Pb    | Ni   | Ag    | Zn    | CN   | TTO* |
|--|--------|-------|-------|-------|------|-------|-------|------|------|
| Max for 1 day                              | 0.11   | 2.77  | 3.38  | 0.69  | 3.98 | 0.43  | 2.61  | 1.20 | 2.13 |
| Monthly Avg                                | 0.07   | 1.71  | 2.07  | 0.43  | 2.38 | 0.24  | 1.48  | 0.65 | --   |
| Max Measured                               | .00052 | .0104 | .0113 | .0156 | .139 | .0208 | .0708 | .010 | *    |
| Avg Measured**                             | .00052 | .0104 | .0113 | .0156 | .139 | .0208 | .0708 | .010 | *    |

Sample Location After Pre-Treatment

Sample Type (Grab\* or Composite) Composite

\*If Grab, list # of grabs over what period of time

Number of Samples and Frequency Collected 1

40CFR136 Preservation and Analytical Methods Use:  Yes  No (include complete Chain of Custody)

\*If a TOMP has been submitted and approved by ADEQ place N/A.

**\*\*A value here is the average of all samples taken during one (1) calendar month regardless of number of samples taken. If only one (1) sample is taken it must meet the monthly average limitation.**

**(6) CERTIFICATION (ONLY IF A TOMP HAS BEEN SUBMITTED/APPROVED BY ADEQ)**

**B. CHECK ONE:  '433.11(e) TOXIC ORGANIC ANALYSIS ATTACHED     '433.12(a) TTO CERTIFICATION**

Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewaters has occurred since filing of the last semi-annual compliance report. I further certify that this facility is implementing the toxic organic management plan submitted to Arkansas Department of Environmental Quality.

\_\_\_\_\_  
(Typed/Printed Name)

\_\_\_\_\_  
(Corporate Officer or authorized representative signature)

Date of Signature \_\_\_\_\_

**(7) POLLUTION PREVENTION ACT OF 1990 [42 U.S.C. 13101 et seq.]**

\*6602 [42 U.S.C. 13101] Findings and Policy para (b) Policy.--The Congress hereby declares it to be the national policy of the United States that pollution should be prevented or reduced at the source whenever feasible; pollution that cannot be prevented should be recycled in an environmentally safe manner, whenever feasible; pollution that cannot be prevented or recycled should be treated in an environmentally safe manner whenever feasible; and disposal or other release into the environment should be employed only as a last resort and should be conducted in an environmentally safe manner.

**The User may list any new or ongoing Pollution Prevention practices including Best or Environmental Management Practices, Source Reduction, Waste Minimization, Lean Manufacturing, Water and/or Energy Conservaton:**

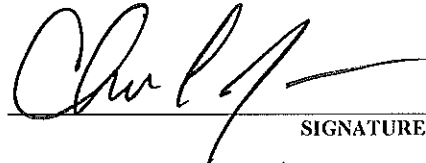
1.    We continue to use mechanical separation of oil and grease prior to pre-treatment.
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

**(8) GENERAL COMMENTS**

**(9) SEMI-ANNUAL/PERIODIC REPORT CERTIFICATION STATEMENT REQUIRED UNDER 40 CFR 403.12(l)**

I certify under penalty of law that I have personally examined and am familiar with the information in this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Chuck Jones  
NAME OF CORPORATE OFFICER OR AUTHORIZED REPRESENTATIVE

  
SIGNATURE

EHS Manager  
OFFICIAL TITLE

5/16/15  
DATE SIGNED



**SORRELLS RESEARCH  
LABORATORY AND FIELD SERVICES**



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Little Rock, Arkansas 72209

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CHEMISTS  
ECOLOGISTS  
CONSULTANTS  
PLANNERS

LABORATORY ANALYSIS

Date of Report: April 9, 2015  
Date Received : March 18, 2015

For: DANFOSS - SCROLL TECHNOLOGIES  
ONE SCROLL DRIVE  
ARKADELPHIA, AR 71923-8813

Job: INDUSTRIAL WASTEWATER ANALYSIS / P.O.#8585034

Sample From: EFFLUENT / GRAB 03/18/15 1030

| ANALYTE                                     |   | RESULT | UNITS    | METHOD |
|---|---|--------|----------|--------|
| Acrolein                                    | < | 50.000 | ug/Liter | 624    |
| Acrylonitrile                               | < | 20.000 | ug/Liter | 624    |
| Benzene                                     | < | 10.000 | ug/Liter | 624    |
| Bromodichloromethane                        | < | 10.000 | ug/Liter | 624    |
| Bromoform                                   | < | 10.000 | ug/Liter | 624    |
| Bromomethane (Methyl bromide)               | < | 50.000 | ug/Liter | 624    |
| Carbon tetrachloride                        | < | 2.000  | ug/Liter | 624    |
| Chlorobenzene                               | < | 10.000 | ug/Liter | 624    |
| Chloroethane                                | < | 50.000 | ug/Liter | 624    |
| Chloroform                                  | < | 14.600 | ug/Liter | 624    |
| Chloroethylvinyl ether, 2-                  | < | 10.000 | ug/Liter | 624    |
| Chloromethane (Methyl chloride)             | < | 20.000 | ug/Liter | 624    |
| Chlorodibromomethane                        | < | 10.000 | ug/Liter | 624    |
| Dichloroethane, 1,1-                        | < | 10.000 | ug/Liter | 624    |
| Dichloroethylene, cis-1,2-                  | < | 10.000 | ug/Liter | 624    |
| Dichloroethane, 1,2-                        | < | 10.000 | ug/Liter | 624    |
| Dichloroethylene, trans-1,2-                | < | 10.000 | ug/Liter | 624    |
| Dichloroethylene, 1,1- (1,1-dichloroethene) | < | 10.000 | ug/Liter | 624    |
| Dichloropropane, 1,2-                       | < | 10.000 | ug/Liter | 624    |
| Dichloropropylene, cis-1,3-                 | < | 10.000 | ug/Liter | 624    |
| Dichloropropylene, trans-1,3-               | < | 10.000 | ug/Liter | 624    |
| Ethylbenzene                                | < | 10.000 | ug/Liter | 624    |
| Methylene chloride                          | < | 20.000 | ug/Liter | 624    |
| Tetrachloroethane, 1, 1, 2, 2               | < | 10.000 | ug/Liter | 624    |
| Tetrachloroethylene                         | < | 10.000 | ug/Liter | 624    |
| Toluene                                     | < | 10.000 | ug/Liter | 624    |
| Trichloroethane, 1, 1, 1-                   | < | 10.000 | ug/Liter | 624    |
| Trichloroethane, 1, 1, 2-                   | < | 10.000 | ug/Liter | 624    |
| Trichloroethylene                           | < | 10.000 | ug/Liter | 624    |
| Vinyl chloride                              | < | 10.000 | ug/Liter | 624    |
| Acenaphthene                                | < | 10.000 | ug/Liter | 625    |
| Acenaphthylene                              | < | 10.000 | ug/Liter | 625    |

Laboratory Number: 17986.0001



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**LABORATORY ANALYSIS**

Date of Report: April 9, 2015  
Date Received : March 18, 2015

For: DANFOSS - SCROLL TECHNOLOGIES  
ONE SCROLL DRIVE  
ARKADELPHIA, AR 71923-8813

Job: INDUSTRIAL WASTEWATER ANALYSIS / P.O.#8585034

Sample From: EFFLUENT / GRAB 03/18/15 1030

| ANALYTE                       |   | RESULT UNITS    | METHOD |
|-------------------------------|---|-----------------|--------|
| Anthracene                    | < | 10.000 ug/Liter | 625    |
| Benzidine                     | < | 50.000 ug/Liter | 625    |
| Benzo (a) anthracene          | < | 5.000 ug/Liter  | 625    |
| Benzo (a) pyrene              | < | 5.000 ug/Liter  | 625    |
| Benzo (b) fluoranthene        | < | 10.000 ug/Liter | 625    |
| Benzo (g,h,i) perylene        | < | 20.000 ug/Liter | 625    |
| Benzo (k) fluoranthene        | < | 5.000 ug/Liter  | 625    |
| bis (2-chloroethoxy) methane  | < | 10.000 ug/Liter | 625    |
| bis (2-chloroethyl) ether     | < | 10.000 ug/Liter | 625    |
| bis (2-chloroisopropyl) ether | < | 10.000 ug/Liter | 625    |
| bis (2-ethylhexyl) phthalate  | < | 12.900 ug/Liter | 625    |
| Bromophenyl phenyl ether, 4-  | < | 10.000 ug/Liter | 625    |
| Butylbenzyl phthalate         | < | 10.000 ug/Liter | 625    |
| Chloronaphthalene, 2-         | < | 10.000 ug/Liter | 625    |
| Chlorophenol, 2-              | < | 10.000 ug/Liter | 625    |
| Chlorophenyl phenyl ether, 4- | < | 10.000 ug/Liter | 625    |
| Chrysene                      | < | 5.000 ug/Liter  | 625    |
| Dibenzo (a,h) anthracene      | < | 10.000 ug/Liter | 625    |
| Dichlorobenzene, 1,2-         | < | 10.000 ug/Liter | 625    |
| Dichlorobenzene, 1,3-         | < | 10.000 ug/Liter | 625    |
| Dichlorobenzene, 1,4-         | < | 10.000 ug/Liter | 625    |
| Dichlorobenzidine, 3,3-       | < | 5.000 ug/Liter  | 625    |
| Dichlorophenol, 2,4-          | < | 10.000 ug/Liter | 625    |
| Diethylphthalate              | < | 10.000 ug/Liter | 625    |
| Dimethylphenol, 2,4-          | < | 10.000 ug/Liter | 625    |
| Dimethylphthalate             | < | 10.000 ug/Liter | 625    |
| Di-n-butyl phthalate          | < | 10.000 ug/Liter | 625    |
| Dinitro-o-cresol, 4,6-        | < | 10.000 ug/Liter | 625    |
| Dinitrophenol, 2,4-           | < | 50.000 ug/Liter | 625    |
| Dinitrotoluene, 2,4-          | < | 10.000 ug/Liter | 625    |
| Dinitrotoluene, 2,6-          | < | 10.000 ug/Liter | 625    |
| Di-n-octyl phthalate          | < | 10.000 ug/Liter | 625    |

Laboratory Number: 17986.0001





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**LABORATORY ANALYSIS**

Date of Report: April 9, 2015  
Date Received : March 18, 2015

For: DANFOSS - SCROLL TECHNOLOGIES  
ONE SCROLL DRIVE  
ARKADELPHIA, AR 71923-8813

Job: INDUSTRIAL WASTEWATER ANALYSIS / P.O.#8585034

Sample From: EFFLUENT / GRAB 03/18/15 1030

| ANALYTE                    |   | RESULT UNITS    | METHOD |
|----------------------------|---|-----------------|--------|
| Diphenylhydrazine, 1,2-    | < | 20.000 ug/Liter | 625    |
| Fluoranthene               | < | 10.000 ug/Liter | 625    |
| Fluorene                   | < | 10.000 ug/Liter | 625    |
| Hexachlorobenzene          | < | 5.000 ug/Liter  | 625    |
| Hexachlorobutadiene        | < | 10.000 ug/Liter | 625    |
| Hexachlorocyclopentadiene  | < | 10.000 ug/Liter | 625    |
| Hexachloroethane           | < | 20.000 ug/Liter | 625    |
| Indeno (1,2,3-Cd) pyrene   | < | 5.000 ug/Liter  | 625    |
| Isophorone                 | < | 10.000 ug/Liter | 625    |
| Naphthalene                | < | 10.000 ug/Liter | 625    |
| Nitrobenzene               | < | 10.000 ug/Liter | 625    |
| Nitrophenol, 2-            | < | 20.000 ug/Liter | 625    |
| Nitrophenol, 4-            | < | 50.000 ug/Liter | 625    |
| N-Nitrosodimethylamine     | < | 50.000 ug/Liter | 625    |
| N-nitrosodi-n-propylamine  | < | 20.000 ug/Liter | 625    |
| N-Nitrosodiphenylamine     | < | 20.000 ug/Liter | 625    |
| p-Chloro-m-cresol          | < | 10.000 ug/Liter | 625    |
| Pentachlorophenol          | < | 5.000 ug/Liter  | 625    |
| Phenanthrene               | < | 10.000 ug/Liter | 625    |
| Phenol                     | < | 10.000 ug/Liter | 625    |
| Pyrene                     | < | 10.000 ug/Liter | 625    |
| Trichlorobenzene, 1, 2, 4- | < | 10.000 ug/Liter | 625    |
| Trichlorophenol, 2, 4, 6-  | < | 10.000 ug/Liter | 625    |
| Aldrin                     | < | 0.010 ug/Liter  | 608    |
| BHC, Alpha                 | < | 0.050 ug/Liter  | 608    |
| BHC, Beta                  | < | 0.050 ug/Liter  | 608    |
| BHC, Delta                 | < | 0.050 ug/Liter  | 608    |
| BHC, Gamma (Lindane)       | < | 0.050 ug/Liter  | 608    |
| Chlordane                  | < | 0.200 ug/Liter  | 608    |
| 4, 4'-DDD                  | < | 0.100 ug/Liter  | 608    |
| 4, 4'-DDE                  | < | 0.100 ug/Liter  | 608    |
| 4, 4'-DDT                  | < | 0.020 ug/Liter  | 608    |

Laboratory Number: 17986.0001



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**LABORATORY ANALYSIS**

Date of Report: April 9, 2015  
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For: DANFOSS - SCROLL TECHNOLOGIES  
ONE SCROLL DRIVE  
ARKADELPHIA, AR 71923-8813

Job: INDUSTRIAL WASTEWATER ANALYSIS / P.O.#8585034

Sample From: EFFLUENT / GRAB 03/18/15 1030

| ANALYTE                          |   | RESULT UNITS    | METHOD |
|----------------------------------|---|-----------------|--------|
| Dieldrin                         | < | 0.020 ug/Liter  | 608    |
| Endosulfan, Alpha-               | < | 0.010 ug/Liter  | 608    |
| Endosulfan, Beta-                | < | 0.020 ug/Liter  | 608    |
| Endosulfan sulfate               | < | 0.100 ug/Liter  | 608    |
| Endrin                           | < | 0.020 ug/Liter  | 608    |
| Endrin aldehyde                  | < | 0.100 ug/Liter  | 608    |
| Heptachlor                       | < | 0.010 ug/Liter  | 608    |
| Heptachlor epoxide (beta)        | < | 0.010 ug/Liter  | 608    |
| 2, 3, 7, 8- TCDD                 | < | 10.000 ug/Liter | 625    |
| Toxaphene                        | < | 0.300 ug/Liter  | 608    |
| PCB-1016                         | < | 0.300 ug/L      | 608    |
| PCB-1221                         | < | 0.200 ug/L      | 608    |
| PCB-1232                         | < | 0.200 ug/L      | 608    |
| PCB-1242                         | < | 0.200 ug/L      | 608    |
| PCB-1248                         | < | 0.200 ug/l      | 608    |
| PCB-1254                         | < | 0.200 ug/L      | 608    |
| PCB-1260                         | < | 0.200 ug/L      | 608    |
| TTO, Total Toxic Organics        | < | 0.090 mg/Liter  | Calc.  |
| Extraction, Base-Neutrals, Acids | = | 1.000 ea        | 3510   |
| Extraction, Pesticides, PCB's    | = | 1.000 ea        | 3510   |

Laboratory Number: 17986.0001



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Sample From: EFFLUENT / GRAB 03/18/15 1030

| ANALYTE | RESULT UNITS | METHOD |
|---------|--------------|--------|
|---------|--------------|--------|

STANDARD METHODS, 20TH ED.; EPA METHODS, 3RD ED.

Collected by:

ERIC A. SORRELLS on 03/18/15 at 10:30

Analysis by :

SEE ATTACHED QUALITY ASSURANCE PAGE.

Sample preservation and Laboratory Analysis conducted according to EPA 40 CFR Part 136. Test/Analyst/Time/Coeff./Var./ QA plan filed with ADPC&E. Includes 10 % replication and 10 % recovery studies by random selection. Instruments maintained and calibrated and records kept. See Attached.

Copies to:

MR. CHUCK JONES  
 ENV. HEALTH & SAFETY MGR

ONE SCROLL DRIVE  
 ARKADELPHIA, AR 71923-

Laboratory Number: 17986.0001 TKR Reviewed By: K. E. Sorrells, M.S. [ ]



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**QUALITY ASSURANCE**

March 18, 2015

The following QA represents SRA's Quality Assurance values for this report.

| ANALYTE                  | ANALYST | BEG.<br>DATE | BEG.<br>TIME | FIN.<br>DATE | FIN.<br>TIME | S.D.<br>% | SPK.<br>REC. | #IN<br>BAT |
|--------------------------|---------|--------------|--------------|--------------|--------------|-----------|--------------|------------|
| Arkansas Analytical Inc. | QA OF   | / /          | 0            | / /          | 0            | 0.00      | 0.0          | 0          |

Field PH/TEMP/D.O. Sampler or Courier/ at time of sampling or pick up  
 Sample preservation and laboratory analysis conducted according to EPA  
 40 CFR Part 136 TEST/ANALYST/TIME/COEF. VAR.\* QA PLAN filed with  
 ADPC&E. Include replication.

KES = K. E. Sorrells  
 JBS = James B. Sorrells  
 CAS = Cecil A. Sorrells  
 MKM = Mark Kyle McKenzie

KESII = K. E. Sorrells, II  
 TJS = Todd J. Sanders  
 JHD = J. Henry Dodson

Laboratory Number: 17986.0001 TKR



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Job: INDUSTRIAL WASTEWATER ANALYSIS / P.O.#8585034

Sample From: EFFLUENT GRAB 03/18/15 1030

| ANALYTE                      |   | RESULT   | UNITS     | METHOD |
|------------------------------|---|----------|-----------|--------|
| Biochemical oxygen demand    |   | 59.900   | mg/Liter  | 5210 B |
| Total suspended solids       |   | 23.500   | mg/Liter  | 2540D  |
| Oil and grease - Gravimetric |   | 6.700    | mg/Liter  | 1664   |
| Cyanide, total               | < | 0.010    | mg/Liter  | 4500CN |
| pH (-H+)                     |   | 8.810    | units     | 4500 B |
| Temperature                  |   | 21.100   | .C        | 2550 B |
| Arsenic, As                  | < | 10.400   | ug/Liter  | 200.7  |
| Cadmium, Cd                  | < | 0.520    | ug/Liter  | 200.7  |
| Chromium, Cr                 | < | 10.400   | ug/Liter  | 200.7  |
| Copper, Cu                   |   | 11.300   | ug/Liter  | 200.7  |
| Lead, Pb                     | < | 15.600   | ug/Liter  | 200.7  |
| Manganese, Mn                |   | 2440.000 | ug/Liter  | 200.7  |
| Nickel, Ni                   |   | 139.000  | ug/Liter  | 200.7  |
| Silver, Ag                   | < | 20.800   | ug/Liter  | 200.7  |
| Zinc, Zn                     |   | 70.800   | ug/Liter  | 200.7  |
| Metals, Digestion for        | = | 1.000    | ea sample | 3030 D |

Laboratory Number: 17986.0001A



CHEMISTS  
 ECOLOGISTS  
 CONSULTANTS  
 PLANNERS



**SORRELLS RESEARCH  
 LABORATORY AND FIELD SERVICES**

8100 National Drive  
 Little Rock, Arkansas 72209

**WEF**



Phone 501-562-8139  
 Fax 501-562-7025  
 Toll Free 1-800-331-8139

LABORATORY ANALYSIS

Date of Report: April 9, 2015  
 Date Received : March 18, 2015

For: DANFOSS - SCROLL TECHNOLOGIES  
 ONE SCROLL DRIVE  
 ARKADELPHIA, AR 71923-8813

Job: INDUSTRIAL WASTEWATER ANALYSIS / P.O.#8585034

Sample From: EFFLUENT GRAB 03/18/15 1030

| ANALYTE | RESULT UNITS | METHOD |
|---------|--------------|--------|
|---------|--------------|--------|

STANDARD METHODS, 20TH ED.; EPA METHODS, 3RD ED.

Collected by:

ERIC A. SORRELLS on 03/18/15 at 10:30

Analysis by :

SEE ATTACHED QUALITY ASSURANCE PAGE.

Sample preservation and Laboratory Analysis conducted according to EPA 40 CFR Part 136. Test/Analyst/Time/Coeff./Var./ QA plan filed with ADPC&E. Includes 10 % replication and 10 % recovery studies by random selection. Instruments maintained and calibrated and records kept. See Attached.

Copies to:

MR. CHUCK JONES  
 ENV. HEALTH & SAFETY MGR

ONE SCROLL DRIVE  
 ARKADELPHIA, AR 71923-

Laboratory Number: 17986.0001A TKR Reviewed By: K. E. Sorrells, M.S. [ ]



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**QUALITY ASSURANCE**

March 18, 2015

The following QA represents SRA's Quality Assurance values for this report.

| ANALYTE                  | ANALYST | BEG.<br>DATE | BEG.<br>TIME | FIN.<br>DATE | FIN.<br>TIME | S.D.<br>% | SPK.<br>REC. | #IN<br>BAT |
|--------------------------|---------|--------------|--------------|--------------|--------------|-----------|--------------|------------|
| Arkansas Analytical Inc. | QA OF   | / /          | 0            | / /          | 0            | 0.00      | 0.0          | 0          |
| pH <-H+>                 | EAS     | 03/18/15     | 1021         | 03/18/15     | 1030         | 1.00      | 0.0          | 1          |
| Temperature              | EAS     | 03/18/15     | 1021         | 03/18/15     | 1030         | 0.00      | 0.0          | 1          |

Field PH/TEMP/D.O. Sampler or Courier/ at time of sampling or pick up  
Sample preservation and laboratory analysis conducted according to EPA  
40 CFR Part 136 TEST/ANALYST/TIME/COEF. VAR.\* QA PLAN filed with  
ADPC&E. Include replication.

KES = K. E. Sorrells  
JBS = James B. Sorrells  
CAS = Cecil A. Sorrells  
MKM = Mark Kyle McKenzie

KESII = K. E. Sorrells, II  
TJS = Todd J. Sanders  
JHD = J. Henry Dodson

Laboratory Number: 17986.0001A TKR

# SORRELLS RESEARCH ASSOCIATES, INC

8100 NATIONAL DRIVE, LITTLE ROCK, AR 72209

501-562-8139 800-331-8139

FAX 501-562-7025

## CHAIN OF CUSTODY RECORD

TURN AROUND TIME

RUSH 24HR. 48 HR.

5 DAY REG

OTHER \_\_\_\_\_

FOR LAB/OFFICE USE ONLY

LAB # 17986.0001

CLIENT # 41017

P.O.# \_\_\_\_\_

STANDARD METHODS PRESERVATION PER EPA 40 CFR

C 4= COOL TO 4.C

S<2= SULFURIC ACID TO pH<2

N<2= NITRIC ACID TO pH<2

T= THIOSULFATE FOR DECHLORINATION

W= WINKLER AZIDE MODIFICATION

P= MEMBRANE ELECTRODE

NaOH= pH >12

NAME OF COMPANY, CITY, OR PROJECT

PROJECT NO:

SAMPLER(S) NAME: (PRINT)

11051362

Dan Foss

Industrial wastewater

*E. Sorrells*

| SAMPLE NO: | SAMPLE ID AND/OR COLLECTION LOCATION | START     | END       | COMP | FIELD ANALYSIS |        |      |     | D.O (W) | CONTAINER TYPE     | ANALYSIS REQUIRED          |
|------------|--------------------------------------|-----------|-----------|------|----------------|--------|------|-----|---------|--------------------|----------------------------|
|            |                                      | DATE/TIME | DATE/TIME | GRAB | pH             | TEMP   | FLOW | CL2 | D.O(P)  | PRESERVATIVE       |                            |
|            | Effluent Grab                        | 3.18.15   | 3.18.15   | G    |                |        |      |     |         | 1/4 plastic C<4    | BOD, TSS                   |
|            | "                                    | 1021      | 1030      | G    |                |        |      |     |         | 1000 ml glass s<2  | Oil & grease               |
|            | "                                    |           |           | G    |                |        |      |     |         | 1000 ml glass s<2  | Phenols                    |
|            | "                                    |           |           | G    |                |        |      |     |         | 50 ml vial P HNO3  | As,Cd,Cr,Cu,Pb,Mn,Ni,Ag,Zn |
|            | "                                    |           |           | G    |                |        |      |     |         | 500 P NaOH         | CN-                        |
|            |                                      |           |           | G    |                |        |      |     |         | 2L ATC C4, 3(40ml) | TTO (see list)             |
|            |                                      |           |           |      | 8.81           | 21.1°C |      |     |         | onsite             | pH, temp,                  |

METHOD OF SHIPMENT (CIRCLE)

FED EX WALK IN  SRA UPS OTHER

FIELD CALIBRATION RECORD

|       |       |        |
|-------|-------|--------|
| pH 7  | 7.00  | 7.01   |
| pH 4  | 4.01  | 3.99   |
| pH 10 | 10.00 | 10.02  |
| D.O   |       | @ 1023 |

NOTES/COMMENTS/OBSERVATIONS

All containers at C4

TYPE OF SAMPLE(S): (CIRCLE)

WATER SOIL  WAW SLUDGE OTHER

FIELD ANALYSIS CONDUCTED BY: (CIRCLE)  SRA CLIENT

RELINQUISHED BY:

*Mike Bell*

DATE/TIME:

RECEIVED BY:

*[Signature]*

DATE/TIME:

1630  
3.18.15

RELINQUISHED BY:

DATE/TIME:

RECEIVED BY(LAB):

DATE/TIME:

650  
3.18.15