MWH

BUILDING A BETTER WORLD

November 13, 2008

Mr. Matt Hawes
Environmental Engineer
Water and Pollution Control Department
The City of Ames
300 East Fifth Street, Building 1
Ames, IA 50010

MWH #1914189.0101

RE: Quarterly Monitoring Report, Fourth Quarter 2008
Sauer-Danfoss US Company Groundwater Remediation Discharge

Dear Mr. Hawes:

MWH collected a sample from the groundwater remediation system discharge at the Sauer-Danfoss US Company (Sauer-Danfoss) facility in Ames, Iowa, on Monday, October 27, 2008. Analyses consisted of select volatile organic compounds (VOCs), as required by Sauer-Danfoss's Non-Domestic Wastewater Discharge Permit No. 6593-7; results are provided in Table 1, and laboratory analytical results are attached. Constituent concentrations were below the maximum expected concentrations detailed in MWH's letter dated July 31, 1996.

Between August 7, 2008 and October 27, 2008, 58,735 cubic feet (439,395 gallons) were pumped from the groundwater remediation system to the sanitary sewer. A breakdown of discharge volumes is provided in Table 2. An estimated total of 3,344,025 cubic feet (25,016,655 gallons) have been discharged since operation of the system began.

Next Steps

In accordance with Sauer-Danfoss's Non-Domestic Wastewater Discharge Permit No. 6593-7, the next sampling event will be conducted during the first quarter of 2009. Flow measurements will be recorded monthly and reported quarterly.

RCAP-RECEIVED
NOV 27 2008

489107
RCRA

11153 Aurora Avenue
Des Moines, IA 50322-7904
TEL 515 253 0830
FAX 515 253 9592
www.mwhglobal.com

If you have any questions or require additional information, please contact Keri Lewis or me at (515) 253-0830.

Sincerely,

Jeffrey L. Coon, P.E.
Project Manager

/kal:hls
Attachments
cc: Gerald Edgar, Sauer-Danfoss
Bob Aston, Environmental Protection Agency, Region VII

I certify under penalty of law that 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(s) 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.

Signed: _____ **Date:** 17 Nov 08
Authorized Representative

P:\Word Processing\SAUER-DANFOSS (formerly Sauer-Sundstrand)\AMES, IA SITE\MONITORING REPORTS\2008\Ltr-11-08-Hawes-4th Qtr 2008.doc

TABLE 1

GROUNDWATER REMEDIAL SYSTEM CONCENTRATIONS

Constituent	Concentration 10-27-08 Sample	Maximum Expected Concentration
Volatile Organic Compounds (µg/L)		
Acetone	<10.0	44
1,1-Dichloroethane	9.82	370
1,1-Dichloroethene	18.7	170
cis-1,2-Dichloroethene	77.1	490
Tetrachloroethene	465	1,700
1,1,1-Trichloroethane	64.8	650
Trichloroethene	24.8	110
Total Xylenes	< 3.00	11

µg/L = Micrograms per liter.

TABLE 2

MONTHLY DISCHARGE TO SANITARY SEWER

Time Period	Discharge (cubic feet)[1]
August (8-7-08 to 8-31-08)	18,985
September (9-1-08 to 9-30-08)	20,255
October (10-1-08 to 10-27-08)	19,495
TOTAL	**58,735**

[1] Monthly breakout calculated from flow rate data.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
704 Enterprise Drive Cedar Falls, IA 50613 * 800-750-2401 * Fax 319-277-2425

November 04, 2008

Client:
MWH - DES MOINES
11153 Aurora Avenue
Des Moines, IA 50322

Attn: Keri Lewis

Work Order: CRJ1616
Project Name: Sauer Danfoss
Project Number: 1914189.0101

Date Received: 10/29/08

The Chain(s) of Custody, 2 pages, are included and are an integral part of this report.

If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-(800)750-2401

SAMPLE IDENTIFICATION	LAB NUMBER	COLLECTION DATE AND TIME
RS- 1008	CRJ1616-01	10/27/08 09:48

Samples were received into laboratory at a temperature of 0 °C.

NELAC states that samples which require thermal preservation shall be considered acceptable if the arrival temperature is within 2 degrees C of the required temperature or the method specified range. For samples with a temperature requirement of 4 degrees C, an arrival temperature from 0 degrees C to 6 degrees C meets specifications. Samples that are delivered to the laboratory on the same day that they are collected may not meet these criteria. In these cases, the samples are considered acceptable if there is evidence that the chilling process has begun, such as arrival on ice.

Please refer to the Temperature and Sample Receipt form that is included with this report for additional information regarding the condition of samples at the time of receipt by the laboratory.

The reported results were obtained in compliance with the 2003 NELAC standards unless otherwise noted.
Iowa Certification Number: 007

Reproduction of this analytical report is permitted only in its entirety. This report shall not be reproduced except in full without the written approval of the laboratory.

TestAmerica Laboratories, Inc. certifies that the analytical results contained herein apply only to the specific sample analyzed.

Approved By:

Angela Miller

TestAmerica Cedar Falls
Angie Miller
Project Coordinator

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
704 Enterprise Drive Cedar Falls, IA 50613 * 800-750-2401 * Fax 319-277-2425

MWH - DES MOINES
11153 Aurora Avenue
Des Moines, IA 50322
Keri Lewis

Work Order: CRJ1616
Project: Sauer Danfoss
Project Number: 1914189.0101

Received: 10/29/08
Reported: 11/04/08 15:55

ANALYTICAL REPORT

Analyte	Sample Result	Data Qualifiers	Units	MDL	Quan Limit	Dilution Factor	Date Analyzed	Analyst	Seq/ Batch	Method
Sample ID: CRJ1616-01 (RS- 1008 - Ground Water)						**Sampled: 10/27/08 09:48**			**Recvd: 10/29/08 19:45**	
Sampled By:	**Angel Shawda/Karin Wilheim**			**Phone**		**515-253-0830**				
Volatile Organic Compounds										
Acetone	<10.0		ug/L		10.0	1	11/02/08 16:50	SJN	8110088	SW 8260B
1,1-Dichloroethane	**9.82**		ug/L		1.00	1	11/02/08 16:50	SJN	8110088	SW 8260B
1,2-Dichloroethane	<1.00		ug/L		1.00	1	11/02/08 16:50	SJN	8110088	SW 8260B
1,1-Dichloroethene	**18.7**		ug/L		2.00	1	11/02/08 16:50	SJN	8110088	SW 8260B
cis-1,2-Dichloroethene	**77.1**		ug/L		1.00	1	11/02/08 16:50	SJN	8110088	SW 8260B
trans-1,2-Dichloroethene	**1.05**		ug/L		1.00	1	11/02/08 16:50	SJN	8110088	SW 8260B
Methylene Chloride	<5.00		ug/L		5.00	1	11/02/08 16:50	SJN	8110088	SW 8260B
Tetrachloroethene	**465**		ug/L		1.00	1	11/02/08 16:50	SJN	8110088	SW 8260B
1,1,1-Trichloroethane	**64.8**		ug/L		1.00	1	11/02/08 16:50	SJN	8110088	SW 8260B
1,1,2-Trichloroethane	<1.00		ug/L		1.00	1	11/02/08 16:50	SJN	8110088	SW 8260B
Trichloroethene	**24.8**		ug/L		1.00	1	11/02/08 16:50	SJN	8110088	SW 8260B
Vinyl chloride	<1.00		ug/L		1.00	1	11/02/08 16:50	SJN	8110088	SW 8260B
Xylenes, total	<3.00		ug/L		3.00	1	11/02/08 16:50	SJN	8110088	SW 8260B
Surr: Dibromofluoromethane (80-120%)	*93 %*									
Surr: Toluene-d8 (80-110%)	*89 %*									
Surr: 4-Bromofluorobenzene (65-115%)	*97 %*									
VOC Preservation Check										
pH	<2.00		units		2.00	1	11/04/08 13:58	fmk	8110107	SW

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
704 Enterprise Drive Cedar Falls, IA 50613 * 800-750-2401 * Fax 319-277-2425

MWH - DES MOINES
11153 Aurora Avenue
Des Moines, IA 50322
Keri Lewis

Work Order: CRJ1616
Project: Sauer Danfoss
Project Number: 1914189.0101

Received: 10/29/08
Reported: 11/04/08 15:55

LABORATORY BLANK QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
Volatile Organic Compounds														
Acetone	8110088			ug/L	N/A	10.0	<10.0							
1,1-Dichloroethane	8110088			ug/L	N/A	1.00	<1.00							
1,2-Dichloroethane	8110088			ug/L	N/A	1.00	<1.00							
1,1-Dichloroethene	8110088			ug/L	N/A	2.00	<2.00							
cis-1,2-Dichloroethene	8110088			ug/L	N/A	1.00	<1.00							
trans-1,2-Dichloroethene	8110088			ug/L	N/A	1.00	<1.00							
Methylene Chloride	8110088			ug/L	N/A	5.00	<5.00							
Tetrachloroethene	8110088			ug/L	N/A	1.00	<1.00							
1,1,1-Trichloroethane	8110088			ug/L	N/A	1.00	<1.00							
1,1,2-Trichloroethane	8110088			ug/L	N/A	1.00	<1.00							
Trichloroethene	8110088			ug/L	N/A	1.00	<1.00							
Vinyl chloride	8110088			ug/L	N/A	1.00	<1.00							
Xylenes, total	8110088			ug/L	N/A	3.00	<3.00							
Surrogate: Dibromofluoromethane	*8110088*			ug/L					*98*		*80-120*			
Surrogate: Toluene-d8	*8110088*			ug/L					*89*		*80-110*			
Surrogate: 4-Bromofluorobenzene	*8110088*			ug/L					*95*		*65-115*			

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MWH - DES MOINES
11153 Aurora Avenue
Des Moines, IA 50322
Keri Lewis

Work Order: CRJ1616
Project: Sauer Danfoss
Project Number: 1914189.0101

Received: 10/29/08
Reported: 11/04/08 15:55

LCS/LCS DUPLICATE QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
Volatile Organic Compounds														
Acetone	8110088		20.0	ug/L	N/A	N/A	22.9		114		50-145			
1,1-Dichloroethane	8110088		20.0	ug/L	N/A	N/A	18.6		93		50-145			
1,2-Dichloroethane	8110088		20.0	ug/L	N/A	N/A	18.3		92		70-130			
1,1-Dichloroethene	8110088		20.0	ug/L	N/A	N/A	20.1		100		65-135			
cis-1,2-Dichloroethene	8110088		20.0	ug/L	N/A	N/A	21.4		107		75-130			
trans-1,2-Dichloroethene	8110088		20.0	ug/L	N/A	N/A	20.1		101		65-130			
Methylene Chloride	8110088		20.0	ug/L	N/A	N/A	19.6		98		65-135			
Tetrachloroethene	8110088		20.0	ug/L	N/A	N/A	19.3		97		70-120			
1,1,1-Trichloroethane	8110088		20.0	ug/L	N/A	N/A	18.8		94		70-120			
1,1,2-Trichloroethane	8110088		20.0	ug/L	N/A	N/A	20.1		101		75-120			
Trichloroethene	8110088		20.0	ug/L	N/A	N/A	19.8		99		75-120			
Vinyl chloride	8110088		20.0	ug/L	N/A	N/A	19.1		96		60-135			
Xylenes, total	8110088		60.0	ug/L	N/A	N/A	59.6		99		75-125			
Surrogate: Dibromofluoromethane	*8110088*			ug/L					*97*		*80-115*			
Surrogate: Toluene-d8	*8110088*			ug/L					*95*		*85-110*			
Surrogate: 4-Bromofluorobenzene	*8110088*			ug/L					*100*		*80-115*			

TestAmerica Cedar Falls
Angie Miller
Project Coordinator

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MWH - DES MOINES
11153 Aurora Avenue
Des Moines, IA 50322
Keri Lewis

Work Order: CRJ1616
Project: Sauer Danfoss
Project Number: 1914189.0101

Received: 10/29/08
Reported: 11/04/08 15:55

MATRIX SPIKE/MATRIX SPIKE DUPLICATE QC DATA

Analyte	Seq/ Batch	Source Result	Spike Level	Units	MDL	MRL	Result	Dup Result	% REC	Dup %REC	% REC Limits	RPD	RPD Limit	Q
Volatile Organic Compounds														
QC Source Sample: CRJ1617-08														
Acetone	8110088	<10.0	20.0	ug/L	N/A	N/A	21.6	21.0	108	105	50-145	3	35	
1,1-Dichloroethane	8110088	<1.00	20.0	ug/L	N/A	N/A	18.9	18.9	95	94	55-135	0	20	
1,2-Dichloroethane	8110088	<1.00	20.0	ug/L	N/A	N/A	19.3	19.1	97	95	60-140	1	30	
1,1-Dichloroethene	8110088	<2.00	20.0	ug/L	N/A	N/A	18.0	17.6	90	88	55-130	2	20	
cis-1,2-Dichloroethene	8110088	<1.00	20.0	ug/L	N/A	N/A	21.2	21.2	106	106	65-135	0	20	
trans-1,2-Dichloroethene	8110088	<1.00	20.0	ug/L	N/A	N/A	18.9	19.1	94	96	60-125	1	20	
Methylene Chloride	8110088	<5.00	20.0	ug/L	N/A	N/A	19.7	19.9	99	99	60-135	1	20	
Tetrachloroethene	8110088	<1.00	20.0	ug/L	N/A	N/A	16.8	16.8	84	84	60-125	0	20	
1,1,1-Trichloroethane	8110088	<1.00	20.0	ug/L	N/A	N/A	16.5	16.1	82	81	60-120	2	20	
1,1,2-Trichloroethane	8110088	<1.00	20.0	ug/L	N/A	N/A	20.4	20.2	102	101	70-125	1	20	
Trichloroethene	8110088	<1.00	20.0	ug/L	N/A	N/A	18.6	17.8	93	89	60-120	4	30	
Vinyl chloride	8110088	<1.00	20.0	ug/L	N/A	N/A	16.6	16.9	83	85	55-130	2	20	
Xylenes, total	8110088	<3.00	60.0	ug/L	N/A	N/A	54.2	55.6	90	93	50-135	3	35	
Surrogate: Dibromofluoromethane	*8110088*			ug/L					*99*	*100*	*85-120*			
Surrogate: Toluene-d8	*8110088*			ug/L					*95*	*97*	*85-110*			
Surrogate: 4-Bromofluorobenzene	*8110088*			ug/L					*98*	*101*	*75-115*			

TestAmerica Cedar Falls
Angie Miller
Project Coordinator

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
704 Enterprise Drive Cedar Falls, IA 50613 * 800-750-2401 * Fax 319-277-2425

MWH - DES MOINES 11153 Aurora Avenue Des Moines, IA 50322 Keri Lewis	Work Order: CRJ1616 Project: Sauer Danfoss Project Number: 1914189.0101	Received: 10/29/08 Reported: 11/04/08 15:55	

CERTIFICATION SUMMARY

TestAmerica Cedar Falls

Method	Matrix	Nelac	Iowa
SW 8260B	Water - NonPotable	X	X
SW	Water - NonPotable		

Any abnormalities or departures from sample acceptance policy shall be documented on the 'Sample Receipt and Termperature Log Form' and 'Sample Non-conformance Form' (if applicable) included with this report.

For information concerning certifications of this facility or another TestAmerica facility, please visit our website at www.TestAmericaInc.com

Samples collected by TestAmerica Field Services personnel are noted on the Chain of Custody (COC) and are sampled in accordance with TA-CF SOP CF-FSS-01.

TestAmerica Cedar Falls
Angie Miller
Project Coordinator

TestAmerica ANALYTICAL TESTING CORPORATION

Cedar Falls Division
704 Enterprise Drive
Cedar Falls, IA 50613

Phone 319-277-2401 or 800-750-2401
Fax 319-277-2425

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?
Compliance Monitoring _____

Client Name: MWH Client #: _____
Address: 11153 Aurora Avenue
City/State/Zip Code: Des Moines, IA 50322
Project Manager: Keri Lewis
Telephone Number: 515 253-0830 Fax: 515 253-9592
Sampler Name: (Print Name) Karin Wilhelm / Angel Shawda
Sampler Signature: Karin Wilhelm / Angel Shawda
Email Address: keri.a.lewis@mwhglobal.com

Project Name: Sauer Danfoss
Project #: 19141189.0101
Site/Location ID: Ames, ~~IA~~ ABS State: IA
Report To: Keri Lewis
Invoice To: Keri Lewis
Quote #: _____ PO#: _____

TAT
X Standard
___ Rush (surcharges may apply)
Date Needed: _____
Fax Results: Y (N)
Email Results: (Y) N

QC Deliverables
___ None
X Level 2 (Batch QC)
___ Level 3
___ Level 4
Other: _____

SAMPLE ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix (SL - Sludge, DW - Drinking Water, GW - Groundwater, S - Soil/Solid, WW - Wastewater, Specify Other)	Preservation & # of Containers: HNO_3	HCl	NaOH	H_2SO_4	Methanol	None	Other (Specify)	Analyze For: VOCs (Full List) EPA 8260	REMARKS
RS-1008	10/27/08	948	G	N	GW	–	3						X	

Special Instructions: Acetone; 1,1-DCA; 1,2-DCA; 1,1-DCE; cis-1,2-DCE; trans-1,2-DCE; methylene chloride; PCE; 1,1,1-TCA; 1,1,2-TCA; TCE; Vinyl Chloride; Total Xylenes

LABORATORY COMMENTS:

Relinquished By:	Date: 10/29/08	Time: 810	Received By: TestAmerica	Date: 10-29-08	Time: 3:00 pm
Relinquished By:	Date: 10-29-08	Time: 6:45 pm	Received By:	Date: 10-29-08	Time: 19:45
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

Test America
ANALYTICAL TESTING CORPORATION

704 ENTERPRISE DRIVE • CEDAR FALLS, IA 50613 • 800-750-2401 • 319-277-2425 FAX

Sample Receipt and Temperature Log Form

Client: MWH

Project: Sauer Danfoss

City: Des Moines, IA

ZB 10-29-08
18:45

Date: 10-29-08 Receiver's Initials: ZB Time (Delivered): ~~19:45~~

Temperature Record:

Cooler ID# (If Applicable)
A301

6.9 °C / On Ice

Thermometer:

- [ ] IR - 61997670 'A'
- [x] IR - 61997671 'B'
- [ ] IR - 61854108
- [ ] 22126775

Courier:

- [ ] UPS
- [ ] FedEx
- [ ] DHL
- [ ] US Postal Service
- [ ] Spee-Dee
- [x] TA Courier
- [ ] TA Field Services
- [ ] Client
- [ ] Other

- [x] Temp Blank
- [ ] Temperature out of compliance

Custody seals present?
- [x] Yes

Custody seals intact?
- [x] Yes
- [ ] No

- [ ] Non-Conformance report started

Exceptions Noted

- [ ] Sample(s) not received in a cooler.
- [ ] Samples(s) received same day of sampling.
- [ ] Evidence of a chilling process
- [ ] Temperature not taken:

***Refer to SOP CF01-01 for Temperature Criteria**

H:\QA Folder\QA Forms & Log Book pgs\Cooler Receipt rev11.doc