ENVIRONMENTAL SAMPLING CORPORATION

Dedicated to Environmental Monitoring, Science & Technology

December 31, 2018

Mr. Jason Lowery
Wisconsin Department of Natural Resources
101 S. Webster St.
Madison, WI 53703

Re: October 2018 Environmental Monitoring Results
Delafield Sanitary Transfer and Landfill - WDNR License No. 00719
Delafield, Wisconsin

Dear Mr. Lowery

With this submission, Environmental Sampling Corporation (ESC) is providing a summary of the environmental monitoring conducted during the semi-annual monitoring event in October 2018. A data file containing analytical results and a data certification page will also be submitted to the WDNR GEMS data submittal contact.

In accordance with the April 24, 2017 Bidding Documents and follow-up WDNR correspondence on June 1, 2017, ESC staff was on site in October 29-30, 2018 to conduct the following semi-annual monitoring:

- Sample two groundwater monitoring wells,
- Sample one leachate monitoring location, and
- Sample six private water supply wells.

Information regarding the environmental monitoring conducted at the Delafield Sanitary Transfer and Landfill is provided in the following sections titled Groundwater Monitoring, Leachate Monitoring, and Private Well Monitoring. Landfill gas monitoring conducted during October 2018 was provided to WDNR during the reporting period via e-mail. Landfill gas monitoring data will continue to be submitted on a monthly basis and will be provided in electronic format under separate cover with the July 2018 – June 2019 Annual Report.

Groundwater Monitoring

Semi-annual groundwater monitoring at the facility includes depth to water measurements and sample collection at two groundwater monitoring wells (NR-2A and NR-2B). Water levels were recorded, and the groundwater wells were purged and sampled with disposable polyethylene bailers. Monitoring wells had four well volumes purged before sample collection.

All groundwater samples were analyzed for field parameters, inorganic parameters included in the bid documents, and volatile organic compounds (VOCs). Samples were unfiltered, with the exception of dissolved iron and dissolved manganese. Samples collected for these parameters were field filtered using disposable 0.45-micron filters. All samples were placed on ice, chain-of-custody was established, and samples were sent to CT laboratories (WDNR Lab Certification #15-7066030) for analysis via Waltco courier service.

Field parameters (pH, specific conductivity and temperature), were measured using a dual Cole-Parmer pH and conductivity meter which was calibrated and checked in the field during the sampling event. ESC personnel also recorded depth-to-water measurements, sample color, odor, and turbidity.

The groundwater quality results for the samples collected from the two monitoring wells were compared to the WDNR NR140 Preventative Action Limits (PALs) and Enforcement Standards (ES) for Public Health and Public Welfare parameters. Exceedances of NR140 standards for Public Health and Public Welfare are summarized below, followed by a discussion of VOC detections.

NR140 Pubic Health Parameter Exceedances:

The concentrations of arsenic and chromium in the samples collected from groundwater monitoring well NR-2A exceeded the NR 140 PAL during the October 2018 event. Concentrations of manganese (total) and lead in the samples collected from groundwater monitoring well NR-2A exceeded the NR 140 ES during the October 2018 event. The reported concentrations were consistent with recent historic data for NR-2A. The concentration of cadmium in the sample collected from NR-2A exceeded the PAL but was reported at a level that was between the laboratory Limit of Detection (LOD) and Limit of Quantitation (LOQ) and should be considered an estimate. The estimated concentration of cadmium below the LOQ is not considered an exceedance in accordance with NR140.14(c) and is therefore not included on the attached exceedance summary.

The concentrations of arsenic, lead, and manganese (total and dissolved) in the samples collected from groundwater monitoring well NR-2B exceeded the NR 140 PAL during the October 2018 event. The reported concentrations were consistent with recent historic data for NR-2B. A summary of NR140 Public Health Parameter exceedances is provided as **Table 1**.

NR140 Pubic Welfare Parameter Exceedances:

Concentrations of chloride in the samples collected from NR-2A and NR-2B exceeded the NR 140 PAL. The reported concentrations were similar to historic data. Concentrations of dissolved iron in the samples collected from NR-2A and NR-2B exceeded the NR 140 ES. The reported dissolved iron concentrations were within the range of historic data. Concentrations of manganese (total and dissolved) in the samples collected from NR-2A and NR-2B also exceeded the NR 140 PAL or ES. The WDNR has established both Public Health and Public Welfare parameters for manganese. The concentration of dissolved manganese in the sample collected from NR-2A was decreased from recent historic data. The concentrations of total manganese in the sample collected from NR-2A and the concentrations of total and dissolved manganese in the samples collected from NR-2B were similar to historic data. A summary of NR140 Public Welfare Parameter exceedances is provided as **Table 2**.

VOC Detections:

No VOCs were detected in the sample collected from NR-2A. Two VOCs, 1,1-dichloroethane and 1,4-dichlorobenzene, were detected at concentrations less than NR 140 standards in the sample collected from NR-2B. These concentrations were less than the LOQ which cannot be confirmed by the laboratory and should be considered estimates. These VOC detections are consistent with recent historic data.

Leachate Monitoring

ESC personnel attempted to collect a sample from the Leachate Wet Well during the October 2018 monitoring event. The leachate tank (wet well) area was flooded with during the monitoring event and a leachate sample could not be collected. A sample was collected from the leachate tank (wet well) location with a disposable polyethylene bailer on December 4, 2018. The leachate load out area and all tanks above were dry and there was no ponded surface water during the sampling event. Samples were analyzed for field parameters, inorganic parameters included in the bid documents, and VOCs. Leachate analytical results were generally consistent with recent historic data and were similar to or reduced from available historic data obtained from the GEMS database.

Private Well Monitoring

Six private well water samples were collected during the semi-annual monitoring event. The private well samples were collected after the wells had been purged for 15 minutes. The private well water samples were analyzed for field parameters, inorganic parameters included in the bid documents, and VOCs (Method 524.2).

Laboratory analytical data indicates that there were no VOCs detected and no exceedances of the primary or secondary drinking water standards for the six private well samples collected. Private well letters were provided to the homeowners on December 6, 2018.

This letter satisfies the reporting requirements for the October 2018 monitoring event. If you have any questions or comments regarding this submittal, please contact Frank Perugini, Director of Operations, or the undersigned at 414-427-5033.

Sincerely,
Environmental Sampling Corporation

Tracy Ipavec
Sr. Environmental Specialist

Attachments

cc: Tom Wentland: WDNR – Madison (electronic copy)
Gerald Demers: WDNR – Milwaukee (electronic copy)
Angela Carey: WDNR – Madison (electronic copy)
GEMS Data Submittal Contact: WDNR-Madison w/CD
Todd Watermolen: ESC (electronic copy)
Frank Perugini: ESC (electronic copy)

Table 1

Exceedance Summary
NR 140 Preventive Action Limit and Enforement Standard
Public Health Parameters

Delafield Sanitary Transfer and Landfill
License #00719
October 2018

WELL ID#	WDNR ID#	ANALYTE	WDNR CODE	SAMPLE DATE	RESULT	UNITS	EXCEEDS
NR-2A	380	Arsenic, total	01002	10/29/18	5.1	ug/L	PAL (1.0)
NR-2A	380	Chromium, total	01034	10/29/18	42.6	ug/L	PAL (10)
NR-2A	380	Manganese, total	01055	10/29/18	1,560	ug/L	ES (300)
NR-2A	380	Lead, total	01051	10/29/18	37.6	ug/L	ES (15)
NR-2B	381	Arsenic, total	01002	10/29/18	8.6	ug/L	PAL (1.0)
NR-2B	381	Manganese, total	01055	10/29/18	184	ug/L	PAL (60)
NR-2B	381	Manganese, dissolved	01056	10/29/18	166	ug/L	ES (300)
NR-2B	381	Lead, total	01051	10/29/18	5.8	ug/L	PAL (1.5)

Notes:
PAL -NR 140 Preventive Action Limits for Public Health parameters
ES - NR 140 Enforcement Standards for Public Health parameters

Table 2

Exceedance Summary
NR 140 Preventive Action Limit and Enforement Standard
Public Welfare Parameters

Delafield Sanitary Transfer and Landfill
License #00719
October 2018

WELL ID#	WDNR ID#	ANALYTE	WDNR CODE	SAMPLE DATE	RESULT	UNITS	EXCEEDS
NR-2A	380	Chloride	00940	10/29/18	130	mg/L	PAL (125)
NR-2A	380	Iron, dissolved	01046	10/29/18	348	ug/L	ES (300)
NR-2A	380	Manganese, total	01055	10/29/18	1,560	ug/L	ES (50)
NR-2A	380	Manganese, dissolved	01056	10/29/18	43.4	ug/L	PAL (25)
NR-2B	381	Chloride	00940	10/29/18	150	mg/L	PAL (125)
NR-2B	381	Iron, dissolved	01046	10/29/18	2,030	ug/L	ES (300)
NR-2B	381	Manganese, total	01055	10/29/18	184	ug/L	ES (50)
NR-2B	381	Manganese, dissolved	01056	10/29/18	166	ug/L	ES (50)

Notes:
PAL -NR 140 Preventive Action Limits for Public Welfare parameters
ES - NR 140 Enforcement Standards for Public Welfare parameters

CT LABORATORIES
delivering more than data from your environmental analyses

CT Laboratories LLC • 1230 Lange Ct • Baraboo, WI 53913
608-356-2760 • www.ctlaboratories.com

REVISED
ANALYTICAL REPORT

ENVIRONMENTAL SAMPLING CORP.
FRANK PERUGINI
W125 S9808 NORTH CAPE ROAD
MUSKEGO, WI 53150

Project Name: DELAFIELD LF
Project Phase:
Project #: 10-2018
Folder #: 140649
Purchase Order #:
Contract #: 3123

Arrival Temperature: See COC
Report Date: 11/19/2018
Date Received: 10/30/2018
Reprint Date: 12/18/2018
Revision Dat 12/05/2018

CT LAB#: 202504 Sample Description: 11 DNR License/Well #: 0719/235 Sampled: 10/29/2018 1110

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Total Kjeldahl Nitrogen	0.31	mg/L	0.23	0.76	1	J	10/31/2018 09:00	11/02/2018 14:00	MEZ	EPA 351.2
Nitrate Nitrogen Total	3.3	mg/L	0.12	0.40	1			10/30/2018 16:58	TMG	EPA 300.0
Nitrite Nitrogen Total	<0.14	mg/L	0.14	0.48	1	U		10/30/2018 16:58	TMG	EPA 300.0
Total Chloride	120	mg/L	10	32	10			10/31/2018 09:08	TMG	EPA 300.0
Total Sulfate	18	mg/L	0.80	2.5	1			10/30/2018 16:58	TMG	EPA 300.0

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

Notes: All LOD/LOQs are adjusted to reflect dilution, percent solids, and any differences in the sample weight / volume as compared to standard amounts. "U" qualifier indicates concentration of analyte was below the detection limit. "J" qualifer indicates an estimated value between the LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Eric T. Korthals
Project Manager
608-356-2760

Reason for Revis corrected field data temperature on NR2B

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030
Wisconsin (DATCP) Bacteriology ID# 105-289
Louisiana NELAP (primary) ID# ACC20160002
Illinois NELAP Lab ID# 200073
Kansas NELAP Lab ID# E-10368
Virginia NELAP Lab ID# 460203
Maryland Lab ID# WI00061
ISO/IEC 17025-2005 A2LA Cert # 3806.01
DoD-ELAP A2LA 3806.01
GA EPD Stipulation ID ACC20160002

CT LABORATORIES
delivering more than data from your environmental analyses

CT Laboratories LLC • 1230 Lange Ct • Baraboo, WI 53913
608-356-2760 • www.ctlaboratories.com

REVISED
ANALYTICAL REPORT

ENVIRONMENTAL SAMPLING CORP.
FRANK PERUGINI
W125 S9808 NORTH CAPE ROAD
MUSKEGO, WI 53150

Project Name: DELAFIELD LF
Project Phase:
Project #: 10-2018
Folder #: 140649
Purchase Order #:
Contract #: 3123

Arrival Temperature: See COC
Report Date: 11/19/2018
Date Received: 10/30/2018
Reprint Date: 12/18/2018
Revision Dat 12/05/2018

CT LAB#: 202506 Sample Description: 11 DNR License/Well #: 0719/235 Sampled: 10/29/2018 1110

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Field Results										
Color (Field)	CLEAR		N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Conductivity (Field)	983	umhos/cm	N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Odor (Field)	NONE		N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
pH (Field)	7.50	S.U.	N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Temperature (Field)	11.3	Deg. C	N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Turbidity (Field)	NONE		N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Inorganic Results										
Alkalinity	360	mg/L	4.0	4.0	1			11/09/2018 15:15	MEZ	SM 2320B
Total Cyanide	<0.0030	mg/L	0.0030	0.0090	1	U	11/05/2018 10:00	11/05/2018 12:38	LJS	EPA 335.4
Metals Results										
Total Barium	77.5	ug/L	0.70	2.5	1			10/31/2018 19:06	NAH	EPA 200.7
Total Beryllium	<0.38	ug/L	0.38	1.3	1	U		10/31/2018 19:06	NAH	EPA 200.7
Total Cadmium	<0.40	ug/L	0.40	1.4	1	U		10/31/2018 19:06	NAH	EPA 200.7
Total Calcium	85400	ug/L	31	110	1			10/31/2018 19:06	NAH	EPA 200.7
Total Chromium	<2.0	ug/L	2.0	8.0	1	U		10/31/2018 19:06	NAH	EPA 200.7

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202506 Sample Description:11 DNR License/Well #: 0719/235 Sampled: 10/29/2018 1110

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Total Copper	<3.9	ug/L	3.9	13	1	U		10/31/2018 19:06	NAH	EPA 200.7
Total Iron	<59	ug/L	59	200	1	U		10/31/2018 19:06	NAH	EPA 200.7
Total Magnesium	41100	ug/L	25	84	1			10/31/2018 19:06	NAH	EPA 200.7
Total Manganese	4.8	ug/L	2.2	7.3	1	J		10/31/2018 19:06	NAH	EPA 200.7
Total Zinc	<2.2	ug/L	2.2	7.3	1	U		10/31/2018 19:06	NAH	EPA 200.7
Total Antimony	<0.60	ug/L	0.60	1.9	1	U		11/07/2018 12:12	MDS	EPA 200.9
Total Arsenic	<0.60	ug/L	0.60	2.1	1	U	11/01/2018 09:00	11/01/2018 15:49	MDS	EPA 200.9
Total Lead	<0.43	ug/L	0.43	1.4	1	U		11/01/2018 11:29	MDS	EPA 200.9
Total Selenium	<1.0	ug/L	1.0	3.4	1	U	11/01/2018 09:00	11/02/2018 10:22	MDS	EPA 200.9
Total Thallium	<0.19	ug/L	0.19	0.61	1	U	11/01/2018 09:00	11/07/2018 16:44	MDS	EPA 200.9
Total Sodium	63.30	mg/L	0.030	0.10	1			10/31/2018 11:19	MDS	EPA 200.7
Total Hardness	382	mg/L	0.18	0.61	1			10/31/2018 19:06	NAH	SM 2340B/200.7
Organic Results										
1,1,1,2-Tetrachloroethane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 18:46	AGK	EPA 524.2
1,1,1-Trichloroethane	<0.28	ug/L	0.28	0.93	1	U		11/04/2018 18:46	AGK	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.50	ug/L	0.50	1.6	1	U		11/04/2018 18:46	AGK	EPA 524.2
1,1,2-Trichloroethane	<0.40	ug/L	0.40	1.3	1	U		11/04/2018 18:46	AGK	EPA 524.2
1,1-Dichloroethane	<0.28	ug/L	0.28	0.95	1	U		11/04/2018 18:46	AGK	EPA 524.2
1,1-Dichloroethene	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 18:46	AGK	EPA 524.2
1,1-Dichloropropene	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 18:46	AGK	EPA 524.2
1,2,3-Trichlorobenzene	<0.50	ug/L	0.50	1.6	1	U		11/04/2018 18:46	AGK	EPA 524.2
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	1	U		11/04/2018 18:46	AGK	EPA 524.2
1,2,4-Trichlorobenzene	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 18:46	AGK	EPA 524.2
1,2,4-Trimethylbenzene	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 18:46	AGK	EPA 524.2
1,2-Dichlorobenzene	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 18:46	AGK	EPA 524.2

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202506 Sample Description:11 DNR License/Well #: 0719/235 Sampled: 10/29/2018 1110

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2-Dichloroethane	<0.23	ug/L	0.23	0.76	1	U		11/04/2018 18:46	AGK	EPA 524.2
1,2-Dichloropropane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 18:46	AGK	EPA 524.2
1,3,5-Trimethylbenzene	<0.29	ug/L	0.29	0.98	1	U		11/04/2018 18:46	AGK	EPA 524.2
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.87	1	U		11/04/2018 18:46	AGK	EPA 524.2
1,3-Dichloropropane	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 18:46	AGK	EPA 524.2
1,4-Dichlorobenzene	<0.29	ug/L	0.29	0.98	1	U		11/04/2018 18:46	AGK	EPA 524.2
2,2-Dichloropropane	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 18:46	AGK	EPA 524.2
2-Chlorotoluene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 18:46	AGK	EPA 524.2
4-Chlorotoluene	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 18:46	AGK	EPA 524.2
Benzene	<0.26	ug/L	0.26	0.87	1	U		11/04/2018 18:46	AGK	EPA 524.2
Bromobenzene	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 18:46	AGK	EPA 524.2
Bromochloromethane	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 18:46	AGK	EPA 524.2
Bromodichloromethane	<0.24	ug/L	0.24	0.81	1	U		11/04/2018 18:46	AGK	EPA 524.2
Bromoform	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 18:46	AGK	EPA 524.2
Bromomethane	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 18:46	AGK	EPA 524.2
Carbon tetrachloride	<0.28	ug/L	0.28	0.94	1	U		11/04/2018 18:46	AGK	EPA 524.2
Chlorobenzene	<0.25	ug/L	0.25	0.84	1	U		11/04/2018 18:46	AGK	EPA 524.2
Chlorodibromomethane	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 18:46	AGK	EPA 524.2
Chloroethane	<0.30	ug/L	0.30	1.3	1	U		11/04/2018 18:46	AGK	EPA 524.2
Chloroform	<0.23	ug/L	0.23	0.78	1	U		11/04/2018 18:46	AGK	EPA 524.2
Chloromethane	<0.19	ug/L	0.19	0.63	1	U		11/04/2018 18:46	AGK	EPA 524.2
cis-1,2-Dichloroethene	<0.28	ug/L	0.28	0.94	1	U		11/04/2018 18:46	AGK	EPA 524.2
cis-1,3-Dichloropropene	<0.22	ug/L	0.22	0.73	1	U		11/04/2018 18:46	AGK	EPA 524.2
Dibromomethane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 18:46	AGK	EPA 524.2
Dichlorodifluoromethane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 18:46	AGK	EPA 524.2
Ethylbenzene	<0.27	ug/L	0.27	0.89	1	U		11/04/2018 18:46	AGK	EPA 524.2

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202506 Sample Description:11 DNR License/Well #: 0719/235 Sampled: 10/29/2018 1110

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 18:46	AGK	EPA 524.2
Isopropylbenzene	<0.29	ug/L	0.29	0.98	1	U		11/04/2018 18:46	AGK	EPA 524.2
Methyl tert-butyl ether	<0.26	ug/L	0.26	0.86	1	U		11/04/2018 18:46	AGK	EPA 524.2
Methylene chloride	<0.30	ug/L	0.30	0.99	1	U		11/04/2018 18:46	AGK	EPA 524.2
n-Butylbenzene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 18:46	AGK	EPA 524.2
n-Propylbenzene	<0.26	ug/L	0.26	0.85	1	U		11/04/2018 18:46	AGK	EPA 524.2
Naphthalene	<0.50	ug/L	0.50	1.5	1	U		11/04/2018 18:46	AGK	EPA 524.2
p-Isopropyltoluene	<0.25	ug/L	0.25	0.82	1	U		11/04/2018 18:46	AGK	EPA 524.2
sec-Butylbenzene	<0.26	ug/L	0.26	0.85	1	U		11/04/2018 18:46	AGK	EPA 524.2
Styrene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 18:46	AGK	EPA 524.2
tert-Butylbenzene	<0.24	ug/L	0.24	0.80	1	U		11/04/2018 18:46	AGK	EPA 524.2
Tetrachloroethene	<0.26	ug/L	0.26	0.87	1	U		11/04/2018 18:46	AGK	EPA 524.2
Toluene	<0.25	ug/L	0.25	0.84	1	U		11/04/2018 18:46	AGK	EPA 524.2
Total Xylene	<0.26	ug/L	0.26	0.88	1	U		11/04/2018 18:46	AGK	EPA 524.2
trans-1,2-Dichloroethene	<0.23	ug/L	0.23	0.75	1	U		11/04/2018 18:46	AGK	EPA 524.2
trans-1,3-Dichloropropene	<0.28	ug/L	0.28	0.93	1	U		11/04/2018 18:46	AGK	EPA 524.2
Trichloroethene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 18:46	AGK	EPA 524.2
Trichlorofluoromethane	<0.24	ug/L	0.24	0.80	1	U		11/04/2018 18:46	AGK	EPA 524.2
Vinyl chloride	<0.17	ug/L	0.17	0.58	1	U		11/04/2018 18:46	AGK	EPA 524.2

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

Notes: All LOD/LOQs are adjusted to reflect dilution, percent solids, and any differences in the sample weight / volume as compared to standard amounts. "U" qualifier indicates concentration of analyte was below the detection limit. "J" qualifer indicates an estimated value between the LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Eric T. Korthals
Project Manager
608-356-2760

Reason for Revis corrected field data temperature on NR2B

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030
Wisconsin (DATCP) Bacteriology ID# 105-289
Louisiana NELAP (primary) ID# ACC20160002
Illinois NELAP Lab ID# 200073
Kansas NELAP Lab ID# E-10368
Virginia NELAP Lab ID# 460203
Maryland Lab ID# WI00061
ISO/IEC 17025-2005 A2LA Cert # 3806.01
DoD-ELAP A2LA 3806.01
GA EPD Stipulation ID ACC20160002

CT LABORATORIES
delivering more than data from your environmental analyses

CT Laboratories LLC • 1230 Lange Ct • Baraboo, WI 53913
608-356-2760 • www.ctlaboratories.com

REVISED
ANALYTICAL REPORT

ENVIRONMENTAL SAMPLING CORP.
FRANK PERUGINI
W125 S9808 NORTH CAPE ROAD
MUSKEGO, WI 53150

Project Name: DELAFIELD LF
Project Phase:
Project #: 10-2018
Folder #: 140649
Purchase Order #:
Contract #: 3123

Arrival Temperature: See COC
Report Date: 11/19/2018
Date Received: 10/30/2018
Reprint Date: 12/18/2018
Revision Dat 12/05/2018

CT LAB#: 202507 Sample Description: 15 DNR License/Well #: 0719/239 Sampled: 10/29/2018 1245

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Total Kjeldahl Nitrogen	<0.23	mg/L	0.23	0.76	1	U	10/31/2018 09:00	11/02/2018 14:01	MEZ	EPA 351.2
Nitrate Nitrogen Total	1.4	mg/L	0.12	0.40	1			10/30/2018 17:18	TMG	EPA 300.0
Nitrite Nitrogen Total	<0.14	mg/L	0.14	0.48	1	U		10/30/2018 17:18	TMG	EPA 300.0
Total Chloride	25	mg/L	1.0	3.2	1			10/30/2018 17:18	TMG	EPA 300.0
Total Sulfate	52	mg/L	0.80	2.5	1			10/30/2018 17:18	TMG	EPA 300.0

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

Notes: All LOD/LOQs are adjusted to reflect dilution, percent solids, and any differences in the sample weight / volume as compared to standard amounts. "U" qualifier indicates concentration of analyte was below the detection limit. "J" qualifer indicates an estimated value between the LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Eric T. Korthals
Project Manager
608-356-2760

Reason for Revis corrected field data temperature on NR2B

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030
Wisconsin (DATCP) Bacteriology ID# 105-289
Louisiana NELAP (primary) ID# ACC20160002
Illinois NELAP Lab ID# 200073
Kansas NELAP Lab ID# E-10368
Virginia NELAP Lab ID# 460203
Maryland Lab ID# WI00061
ISO/IEC 17025-2005 A2LA Cert # 3806.01
DoD-ELAP A2LA 3806.01
GA EPD Stipulation ID ACC20160002

CT LABORATORIES
delivering more than data from your environmental analyses

CT Laboratories LLC • 1230 Lange Ct • Baraboo, WI 53913
608-356-2760 • www.ctlaboratories.com

REVISED
ANALYTICAL REPORT

ENVIRONMENTAL SAMPLING CORP.
FRANK PERUGINI
W125 S9808 NORTH CAPE ROAD
MUSKEGO, WI 53150

Project Name: DELAFIELD LF
Project Phase:
Project #: 10-2018
Folder #: 140649
Purchase Order #:
Contract #: 3123

Arrival Temperature: See COC
Report Date: 11/19/2018
Date Received: 10/30/2018
Reprint Date: 12/18/2018
Revision Dat 12/05/2018

CT LAB#: 202508 Sample Description: 15 DNR License/Well #: 0719/239 Sampled: 10/29/2018 1245

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Field Results										
Color (Field)	CLEAR		N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Conductivity (Field)	742	umhos/cm	N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Odor (Field)	NONE		N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
pH (Field)	7.64	S.U.	N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Temperature (Field)	8.3	Deg. C	N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Turbidity (Field)	NONE		N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Inorganic Results										
Alkalinity	320	mg/L	4.0	4.0	1			11/09/2018 15:15	MEZ	SM 2320B
Total Cyanide	<0.0030	mg/L	0.0030	0.0090	1	U	11/05/2018 10:00	11/05/2018 12:48	LJS	EPA 335.4
Metals Results										
Total Barium	132	ug/L	0.70	2.5	1			10/31/2018 19:14	NAH	EPA 200.7
Total Beryllium	<0.38	ug/L	0.38	1.3	1	U		10/31/2018 19:14	NAH	EPA 200.7
Total Cadmium	<0.40	ug/L	0.40	1.4	1	U		10/31/2018 19:14	NAH	EPA 200.7
Total Calcium	68200	ug/L	31	110	1			10/31/2018 19:14	NAH	EPA 200.7
Total Chromium	<2.0	ug/L	2.0	8.0	1	U		10/31/2018 19:14	NAH	EPA 200.7

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202508 Sample Description:15 DNR License/Well #: 0719/239 Sampled: 10/29/2018 1245

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Total Copper	4.9	ug/L	3.9	13	1	J		10/31/2018 19:14	NAH	EPA 200.7
Total Iron	<59	ug/L	59	200	1	U		10/31/2018 19:14	NAH	EPA 200.7
Total Magnesium	42300	ug/L	25	84	1			10/31/2018 19:14	NAH	EPA 200.7
Total Manganese	<2.2	ug/L	2.2	7.3	1	U		10/31/2018 19:14	NAH	EPA 200.7
Total Zinc	6.7	ug/L	2.2	7.3	1	J		10/31/2018 19:14	NAH	EPA 200.7
Total Antimony	<0.60	ug/L	0.60	1.9	1	U		11/07/2018 12:21	MDS	EPA 200.9
Total Arsenic	<0.60	ug/L	0.60	2.1	1	U	11/01/2018 09:00	11/01/2018 15:55	MDS	EPA 200.9
Total Lead	<0.43	ug/L	0.43	1.4	1	U		11/01/2018 11:40	MDS	EPA 200.9
Total Selenium	<1.0	ug/L	1.0	3.4	1	U	11/01/2018 09:00	11/02/2018 10:27	MDS	EPA 200.9
Total Thallium	<0.19	ug/L	0.19	0.61	1	U	11/01/2018 09:00	11/07/2018 16:56	MDS	EPA 200.9
Total Sodium	8.010	mg/L	0.030	0.10	1			10/31/2018 11:34	MDS	EPA 200.7
Total Hardness	344	mg/L	0.18	0.61	1			10/31/2018 19:14	NAH	SM 2340B/200.7
Organic Results										
1,1,1,2-Tetrachloroethane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 19:48	AGK	EPA 524.2
1,1,1-Trichloroethane	<0.28	ug/L	0.28	0.93	1	U		11/04/2018 19:48	AGK	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.50	ug/L	0.50	1.6	1	U		11/04/2018 19:48	AGK	EPA 524.2
1,1,2-Trichloroethane	<0.40	ug/L	0.40	1.3	1	U		11/04/2018 19:48	AGK	EPA 524.2
1,1-Dichloroethane	<0.28	ug/L	0.28	0.95	1	U		11/04/2018 19:48	AGK	EPA 524.2
1,1-Dichloroethene	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 19:48	AGK	EPA 524.2
1,1-Dichloropropene	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 19:48	AGK	EPA 524.2
1,2,3-Trichlorobenzene	<0.50	ug/L	0.50	1.6	1	U		11/04/2018 19:48	AGK	EPA 524.2
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	1	U		11/04/2018 19:48	AGK	EPA 524.2
1,2,4-Trichlorobenzene	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 19:48	AGK	EPA 524.2
1,2,4-Trimethylbenzene	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 19:48	AGK	EPA 524.2
1,2-Dichlorobenzene	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 19:48	AGK	EPA 524.2

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202508 Sample Description:15 DNR License/Well #: 0719/239 Sampled: 10/29/2018 1245

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2-Dichloroethane	<0.23	ug/L	0.23	0.76	1	U		11/04/2018 19:48	AGK	EPA 524.2
1,2-Dichloropropane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 19:48	AGK	EPA 524.2
1,3,5-Trimethylbenzene	<0.29	ug/L	0.29	0.98	1	U		11/04/2018 19:48	AGK	EPA 524.2
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.87	1	U		11/04/2018 19:48	AGK	EPA 524.2
1,3-Dichloropropane	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 19:48	AGK	EPA 524.2
1,4-Dichlorobenzene	<0.29	ug/L	0.29	0.98	1	U		11/04/2018 19:48	AGK	EPA 524.2
2,2-Dichloropropane	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 19:48	AGK	EPA 524.2
2-Chlorotoluene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 19:48	AGK	EPA 524.2
4-Chlorotoluene	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 19:48	AGK	EPA 524.2
Benzene	<0.26	ug/L	0.26	0.87	1	U		11/04/2018 19:48	AGK	EPA 524.2
Bromobenzene	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 19:48	AGK	EPA 524.2
Bromochloromethane	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 19:48	AGK	EPA 524.2
Bromodichloromethane	<0.24	ug/L	0.24	0.81	1	U		11/04/2018 19:48	AGK	EPA 524.2
Bromoform	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 19:48	AGK	EPA 524.2
Bromomethane	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 19:48	AGK	EPA 524.2
Carbon tetrachloride	<0.28	ug/L	0.28	0.94	1	U		11/04/2018 19:48	AGK	EPA 524.2
Chlorobenzene	<0.25	ug/L	0.25	0.84	1	U		11/04/2018 19:48	AGK	EPA 524.2
Chlorodibromomethane	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 19:48	AGK	EPA 524.2
Chloroethane	<0.30	ug/L	0.30	1.3	1	U		11/04/2018 19:48	AGK	EPA 524.2
Chloroform	<0.23	ug/L	0.23	0.78	1	U		11/04/2018 19:48	AGK	EPA 524.2
Chloromethane	<0.19	ug/L	0.19	0.63	1	U		11/04/2018 19:48	AGK	EPA 524.2
cis-1,2-Dichloroethene	<0.28	ug/L	0.28	0.94	1	U		11/04/2018 19:48	AGK	EPA 524.2
cis-1,3-Dichloropropene	<0.22	ug/L	0.22	0.73	1	U		11/04/2018 19:48	AGK	EPA 524.2
Dibromomethane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 19:48	AGK	EPA 524.2
Dichlorodifluoromethane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 19:48	AGK	EPA 524.2
Ethylbenzene	<0.27	ug/L	0.27	0.89	1	U		11/04/2018 19:48	AGK	EPA 524.2

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202508 Sample Description:15 DNR License/Well #: 0719/239 Sampled: 10/29/2018 1245

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 19:48	AGK	EPA 524.2
Isopropylbenzene	<0.29	ug/L	0.29	0.98	1	U		11/04/2018 19:48	AGK	EPA 524.2
Methyl tert-butyl ether	<0.26	ug/L	0.26	0.86	1	U		11/04/2018 19:48	AGK	EPA 524.2
Methylene chloride	<0.30	ug/L	0.30	0.99	1	U		11/04/2018 19:48	AGK	EPA 524.2
n-Butylbenzene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 19:48	AGK	EPA 524.2
n-Propylbenzene	<0.26	ug/L	0.26	0.85	1	U		11/04/2018 19:48	AGK	EPA 524.2
Naphthalene	<0.50	ug/L	0.50	1.5	1	U		11/04/2018 19:48	AGK	EPA 524.2
p-Isopropyltoluene	<0.25	ug/L	0.25	0.82	1	U		11/04/2018 19:48	AGK	EPA 524.2
sec-Butylbenzene	<0.26	ug/L	0.26	0.85	1	U		11/04/2018 19:48	AGK	EPA 524.2
Styrene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 19:48	AGK	EPA 524.2
tert-Butylbenzene	<0.24	ug/L	0.24	0.80	1	U		11/04/2018 19:48	AGK	EPA 524.2
Tetrachloroethene	<0.26	ug/L	0.26	0.87	1	U		11/04/2018 19:48	AGK	EPA 524.2
Toluene	<0.25	ug/L	0.25	0.84	1	U		11/04/2018 19:48	AGK	EPA 524.2
Total Xylene	<0.26	ug/L	0.26	0.88	1	U		11/04/2018 19:48	AGK	EPA 524.2
trans-1,2-Dichloroethene	<0.23	ug/L	0.23	0.75	1	U		11/04/2018 19:48	AGK	EPA 524.2
trans-1,3-Dichloropropene	<0.28	ug/L	0.28	0.93	1	U		11/04/2018 19:48	AGK	EPA 524.2
Trichloroethene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 19:48	AGK	EPA 524.2
Trichlorofluoromethane	<0.24	ug/L	0.24	0.80	1	U		11/04/2018 19:48	AGK	EPA 524.2
Vinyl chloride	<0.17	ug/L	0.17	0.58	1	U		11/04/2018 19:48	AGK	EPA 524.2

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

Notes: All LOD/LOQs are adjusted to reflect dilution, percent solids, and any differences in the sample weight / volume as compared to standard amounts. "U" qualifier indicates concentration of analyte was below the detection limit. "J" qualifer indicates an estimated value between the LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Eric T. Korthals
Project Manager
608-356-2760

Reason for Revis corrected field data temperature on NR2B

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030
Wisconsin (DATCP) Bacteriology ID# 105-289
Louisiana NELAP (primary) ID# ACC20160002
Illinois NELAP Lab ID# 200073
Kansas NELAP Lab ID# E-10368
Virginia NELAP Lab ID# 460203
Maryland Lab ID# WI00061
ISO/IEC 17025-2005 A2LA Cert # 3806.01
DoD-ELAP A2LA 3806.01
GA EPD Stipulation ID ACC20160002

CT LABORATORIES
delivering more than data from your environmental analyses

CT Laboratories LLC • 1230 Lange Ct • Baraboo, WI 53913
608-356-2760 • www.ctlaboratories.com

REVISED
ANALYTICAL REPORT

ENVIRONMENTAL SAMPLING CORP.
FRANK PERUGINI
W125 S9808 NORTH CAPE ROAD
MUSKEGO, WI 53150

Project Name: DELAFIELD LF
Project Phase:
Project #: 10-2018
Folder #: 140649
Purchase Order #:
Contract #: 3123

Arrival Temperature: See COC
Report Date: 11/19/2018
Date Received: 10/30/2018
Reprint Date: 12/18/2018
Revision Dat 12/05/2018

CT LAB#: 202509 Sample Description: 54 DNR License/Well #: 0719/281 Sampled: 10/29/2018 1220

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Total Kjeldahl Nitrogen	0.47	mg/L	0.23	0.76	1	J	10/31/2018 09:00	11/02/2018 14:02	MEZ	EPA 351.2
Nitrate Nitrogen Total	<0.12	mg/L	0.12	0.40	1	U		10/30/2018 17:38	TMG	EPA 300.0
Nitrite Nitrogen Total	<0.14	mg/L	0.14	0.48	1	U		10/30/2018 17:38	TMG	EPA 300.0
Total Chloride	110	mg/L	10	32	10			10/31/2018 09:28	TMG	EPA 300.0
Total Sulfate	55	mg/L	0.80	2.5	1			10/30/2018 17:38	TMG	EPA 300.0

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

Notes: All LOD/LOQs are adjusted to reflect dilution, percent solids, and any differences in the sample weight / volume as compared to standard amounts. "U" qualifier indicates concentration of analyte was below the detection limit. "J" qualifer indicates an estimated value between the LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Eric T. Korthals
Project Manager
608-356-2760

Reason for Revis corrected field data temperature on NR2B

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030
Wisconsin (DATCP) Bacteriology ID# 105-289
Louisiana NELAP (primary) ID# ACC20160002
Illinois NELAP Lab ID# 200073
Kansas NELAP Lab ID# E-10368
Virginia NELAP Lab ID# 460203
Maryland Lab ID# WI00061
ISO/IEC 17025-2005 A2LA Cert # 3806.01
DoD-ELAP A2LA 3806.01
GA EPD Stipulation ID ACC20160002

CT LABORATORIES
delivering more than data from your environmental analyses

CT Laboratories LLC • 1230 Lange Ct • Baraboo, WI 53913
608-356-2760 • www.ctlaboratories.com

REVISED
ANALYTICAL REPORT

ENVIRONMENTAL SAMPLING CORP.
FRANK PERUGINI
W125 S9808 NORTH CAPE ROAD
MUSKEGO, WI 53150

Project Name: DELAFIELD LF
Project Phase:
Project #: 10-2018
Folder #: 140649
Purchase Order #:
Contract #: 3123

Arrival Temperature: See COC
Report Date: 11/19/2018
Date Received: 10/30/2018
Reprint Date: 12/18/2018
Revision Dat 12/05/2018

CT LAB#: 202510 Sample Description: 54 DNR License/Well #: 0719/281 Sampled: 10/29/2018 1220

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Field Results										
Color (Field)	CLEAR		N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Conductivity (Field)	939	umhos/cm	N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Odor (Field)	SULFUR		N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
pH (Field)	7.96	S.U.	N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Temperature (Field)	11.0	Deg. C	N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Turbidity (Field)	NONE		N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Inorganic Results										
Alkalinity	190	mg/L	4.0	4.0	1			11/09/2018 15:15	MEZ	SM 2320B
Total Cyanide	<0.0030	mg/L	0.0030	0.0090	1	U	11/05/2018 10:00	11/05/2018 12:52	LJS	EPA 335.4
Metals Results										
Total Barium	94.5	ug/L	0.70	2.5	1			10/31/2018 19:22	NAH	EPA 200.7
Total Beryllium	<0.38	ug/L	0.38	1.3	1	U		10/31/2018 19:22	NAH	EPA 200.7
Total Cadmium	<0.40	ug/L	0.40	1.4	1	U		10/31/2018 19:22	NAH	EPA 200.7
Total Calcium	81400	ug/L	31	110	1			10/31/2018 19:22	NAH	EPA 200.7
Total Chromium	<2.0	ug/L	2.0	8.0	1	U		10/31/2018 19:22	NAH	EPA 200.7

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202510 Sample Description:54 DNR License/Well #: 0719/281 Sampled: 10/29/2018 1220

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Total Copper	<3.9	ug/L	3.9	13	1	U		10/31/2018 19:22	NAH	EPA 200.7
Total Iron	74.5	ug/L	59	200	1	J		10/31/2018 19:22	NAH	EPA 200.7
Total Magnesium	42800	ug/L	25	84	1			10/31/2018 19:22	NAH	EPA 200.7
Total Manganese	9.4	ug/L	2.2	7.3	1			10/31/2018 19:22	NAH	EPA 200.7
Total Zinc	8.8	ug/L	2.2	7.3	1			10/31/2018 19:22	NAH	EPA 200.7
Total Antimony	<0.60	ug/L	0.60	1.9	1	U		11/07/2018 12:26	MDS	EPA 200.9
Total Arsenic	<0.60	ug/L	0.60	2.1	1	U	11/01/2018 09:00	11/01/2018 16:13	MDS	EPA 200.9
Total Lead	<0.43	ug/L	0.43	1.4	1	U		11/01/2018 11:46	MDS	EPA 200.9
Total Selenium	<1.0	ug/L	1.0	3.4	1	U	11/01/2018 09:00	11/02/2018 10:33	MDS	EPA 200.9
Total Thallium	<0.19	ug/L	0.19	0.61	1	U	11/01/2018 09:00	11/07/2018 17:02	MDS	EPA 200.9
Total Sodium	48.40	mg/L	0.030	0.10	1			10/31/2018 11:37	MDS	EPA 200.7
Total Hardness	380	mg/L	0.18	0.61	1			10/31/2018 19:22	NAH	SM 2340B/200.7
Organic Results										
1,1,1,2-Tetrachloroethane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 20:19	AGK	EPA 524.2
1,1,1-Trichloroethane	<0.28	ug/L	0.28	0.93	1	U		11/04/2018 20:19	AGK	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.50	ug/L	0.50	1.6	1	U		11/04/2018 20:19	AGK	EPA 524.2
1,1,2-Trichloroethane	<0.40	ug/L	0.40	1.3	1	U		11/04/2018 20:19	AGK	EPA 524.2
1,1-Dichloroethane	<0.28	ug/L	0.28	0.95	1	U		11/04/2018 20:19	AGK	EPA 524.2
1,1-Dichloroethene	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 20:19	AGK	EPA 524.2
1,1-Dichloropropene	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 20:19	AGK	EPA 524.2
1,2,3-Trichlorobenzene	<0.50	ug/L	0.50	1.6	1	U		11/04/2018 20:19	AGK	EPA 524.2
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	1	U		11/04/2018 20:19	AGK	EPA 524.2
1,2,4-Trichlorobenzene	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 20:19	AGK	EPA 524.2
1,2,4-Trimethylbenzene	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 20:19	AGK	EPA 524.2
1,2-Dichlorobenzene	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 20:19	AGK	EPA 524.2

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202510 Sample Description:54 DNR License/Well #: 0719/281 Sampled: 10/29/2018 1220

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2-Dichloroethane	<0.23	ug/L	0.23	0.76	1	U		11/04/2018 20:19	AGK	EPA 524.2
1,2-Dichloropropane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 20:19	AGK	EPA 524.2
1,3,5-Trimethylbenzene	<0.29	ug/L	0.29	0.98	1	U		11/04/2018 20:19	AGK	EPA 524.2
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.87	1	U		11/04/2018 20:19	AGK	EPA 524.2
1,3-Dichloropropane	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 20:19	AGK	EPA 524.2
1,4-Dichlorobenzene	<0.29	ug/L	0.29	0.98	1	U		11/04/2018 20:19	AGK	EPA 524.2
2,2-Dichloropropane	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 20:19	AGK	EPA 524.2
2-Chlorotoluene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 20:19	AGK	EPA 524.2
4-Chlorotoluene	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 20:19	AGK	EPA 524.2
Benzene	<0.26	ug/L	0.26	0.87	1	U		11/04/2018 20:19	AGK	EPA 524.2
Bromobenzene	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 20:19	AGK	EPA 524.2
Bromochloromethane	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 20:19	AGK	EPA 524.2
Bromodichloromethane	<0.24	ug/L	0.24	0.81	1	U		11/04/2018 20:19	AGK	EPA 524.2
Bromoform	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 20:19	AGK	EPA 524.2
Bromomethane	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 20:19	AGK	EPA 524.2
Carbon tetrachloride	<0.28	ug/L	0.28	0.94	1	U		11/04/2018 20:19	AGK	EPA 524.2
Chlorobenzene	<0.25	ug/L	0.25	0.84	1	U		11/04/2018 20:19	AGK	EPA 524.2
Chlorodibromomethane	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 20:19	AGK	EPA 524.2
Chloroethane	<0.30	ug/L	0.30	1.3	1	U		11/04/2018 20:19	AGK	EPA 524.2
Chloroform	<0.23	ug/L	0.23	0.78	1	U		11/04/2018 20:19	AGK	EPA 524.2
Chloromethane	<0.19	ug/L	0.19	0.63	1	U		11/04/2018 20:19	AGK	EPA 524.2
cis-1,2-Dichloroethene	<0.28	ug/L	0.28	0.94	1	U		11/04/2018 20:19	AGK	EPA 524.2
cis-1,3-Dichloropropene	<0.22	ug/L	0.22	0.73	1	U		11/04/2018 20:19	AGK	EPA 524.2
Dibromomethane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 20:19	AGK	EPA 524.2
Dichlorodifluoromethane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 20:19	AGK	EPA 524.2
Ethylbenzene	<0.27	ug/L	0.27	0.89	1	U		11/04/2018 20:19	AGK	EPA 524.2

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202510 Sample Description:54 DNR License/Well #: 0719/281 Sampled: 10/29/2018 1220

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 20:19	AGK	EPA 524.2
Isopropylbenzene	<0.29	ug/L	0.29	0.98	1	U		11/04/2018 20:19	AGK	EPA 524.2
Methyl tert-butyl ether	<0.26	ug/L	0.26	0.86	1	U		11/04/2018 20:19	AGK	EPA 524.2
Methylene chloride	<0.30	ug/L	0.30	0.99	1	U		11/04/2018 20:19	AGK	EPA 524.2
n-Butylbenzene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 20:19	AGK	EPA 524.2
n-Propylbenzene	<0.26	ug/L	0.26	0.85	1	U		11/04/2018 20:19	AGK	EPA 524.2
Naphthalene	<0.50	ug/L	0.50	1.5	1	U		11/04/2018 20:19	AGK	EPA 524.2
p-Isopropyltoluene	<0.25	ug/L	0.25	0.82	1	U		11/04/2018 20:19	AGK	EPA 524.2
sec-Butylbenzene	<0.26	ug/L	0.26	0.85	1	U		11/04/2018 20:19	AGK	EPA 524.2
Styrene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 20:19	AGK	EPA 524.2
tert-Butylbenzene	<0.24	ug/L	0.24	0.80	1	U		11/04/2018 20:19	AGK	EPA 524.2
Tetrachloroethene	<0.26	ug/L	0.26	0.87	1	U		11/04/2018 20:19	AGK	EPA 524.2
Toluene	<0.25	ug/L	0.25	0.84	1	U		11/04/2018 20:19	AGK	EPA 524.2
Total Xylene	<0.26	ug/L	0.26	0.88	1	U		11/04/2018 20:19	AGK	EPA 524.2
trans-1,2-Dichloroethene	<0.23	ug/L	0.23	0.75	1	U		11/04/2018 20:19	AGK	EPA 524.2
trans-1,3-Dichloropropene	<0.28	ug/L	0.28	0.93	1	U		11/04/2018 20:19	AGK	EPA 524.2
Trichloroethene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 20:19	AGK	EPA 524.2
Trichlorofluoromethane	<0.24	ug/L	0.24	0.80	1	U		11/04/2018 20:19	AGK	EPA 524.2
Vinyl chloride	<0.17	ug/L	0.17	0.58	1	U		11/04/2018 20:19	AGK	EPA 524.2

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

Notes: All LOD/LOQs are adjusted to reflect dilution, percent solids, and any differences in the sample weight / volume as compared to standard amounts. "U" qualifier indicates concentration of analyte was below the detection limit. "J" qualifer indicates an estimated value between the LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Eric T. Korthals
Project Manager
608-356-2760

Reason for Revis corrected field data temperature on NR2B

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030
Wisconsin (DATCP) Bacteriology ID# 105-289
Louisiana NELAP (primary) ID# ACC20160002
Illinois NELAP Lab ID# 200073
Kansas NELAP Lab ID# E-10368
Virginia NELAP Lab ID# 460203
Maryland Lab ID# WI00061
ISO/IEC 17025-2005 A2LA Cert # 3806.01
DoD-ELAP A2LA 3806.01
GA EPD Stipulation ID ACC20160002

CT LABORATORIES
delivering more than data from your environmental analyses

CT Laboratories LLC • 1230 Lange Ct • Baraboo, WI 53913
608-356-2760 • www.ctlaboratories.com

REVISED
ANALYTICAL REPORT

ENVIRONMENTAL SAMPLING CORP.
FRANK PERUGINI
W125 S9808 NORTH CAPE ROAD
MUSKEGO, WI 53150

Project Name: DELAFIELD LF
Project Phase:
Project #: 10-2018
Folder #: 140649
Purchase Order #:
Contract #: 3123

Arrival Temperature: See COC
Report Date: 11/19/2018
Date Received: 10/30/2018
Reprint Date: 12/18/2018
Revision Dat 12/05/2018

CT LAB#: 202511 Sample Description: LOT 15 DNR License/Well #: 0719/382 Sampled: 10/29/2018 1140

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Total Kjeldahl Nitrogen	<0.23	mg/L	0.23	0.76	1	U	10/31/2018 09:00	11/02/2018 14:06	MEZ	EPA 351.2
Nitrate Nitrogen Total	<0.12	mg/L	0.12	0.40	1	U		10/30/2018 17:58	TMG	EPA 300.0
Nitrite Nitrogen Total	<0.14	mg/L	0.14	0.48	1	U		10/30/2018 17:58	TMG	EPA 300.0
Total Chloride	1.4	mg/L	1.0	3.2	1	J		10/30/2018 17:58	TMG	EPA 300.0
Total Sulfate	19	mg/L	0.80	2.5	1			10/30/2018 17:58	TMG	EPA 300.0

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

Notes: All LOD/LOQs are adjusted to reflect dilution, percent solids, and any differences in the sample weight / volume as compared to standard amounts. "U" qualifier indicates concentration of analyte was below the detection limit. "J" qualifer indicates an estimated value between the LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Eric T. Korthals
Project Manager
608-356-2760

Reason for Revis corrected field data temperature on NR2B

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030
Wisconsin (DATCP) Bacteriology ID# 105-289
Louisiana NELAP (primary) ID# ACC20160002
Illinois NELAP Lab ID# 200073
Kansas NELAP Lab ID# E-10368
Virginia NELAP Lab ID# 460203
Maryland Lab ID# WI00061
ISO/IEC 17025-2005 A2LA Cert # 3806.01
DoD-ELAP A2LA 3806.01
GA EPD Stipulation ID ACC20160002

CT LABORATORIES
delivering more than data from your environmental analyses

CT Laboratories LLC • 1230 Lange Ct • Baraboo, WI 53913
608-356-2760 • www.ctlaboratories.com

REVISED
ANALYTICAL REPORT

ENVIRONMENTAL SAMPLING CORP.
FRANK PERUGINI
W125 S9808 NORTH CAPE ROAD
MUSKEGO, WI 53150

Project Name: DELAFIELD LF
Project Phase:
Project #: 10-2018
Folder #: 140649
Purchase Order #:
Contract #: 3123

Arrival Temperature: See COC
Report Date: 11/19/2018
Date Received: 10/30/2018
Reprint Date: 12/18/2018
Revision Dat 12/05/2018

CT LAB#: 202512 Sample Description: LOT 15 DNR License/Well #: 0719/382 Sampled: 10/29/2018 1140

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Field Results										
Color (Field)	CLEAR		N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Conductivity (Field)	429	umhos/cm	N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Odor (Field)	NONE		N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
pH (Field)	7.68	S.U.	N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Temperature (Field)	11.9	Deg. C	N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Turbidity (Field)	NONE		N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Inorganic Results										
Alkalinity	240	mg/L	4.0	4.0	1			11/09/2018 15:15	MEZ	SM 2320B
Total Cyanide	<0.0030	mg/L	0.0030	0.0090	1	U	11/05/2018 10:00	11/05/2018 12:55	LJS	EPA 335.4
Metals Results										
Total Barium	50.4	ug/L	0.70	2.5	1			10/31/2018 19:30	NAH	EPA 200.7
Total Beryllium	<0.38	ug/L	0.38	1.3	1	U		10/31/2018 19:30	NAH	EPA 200.7
Total Cadmium	<0.40	ug/L	0.40	1.4	1	U		10/31/2018 19:30	NAH	EPA 200.7
Total Calcium	50000	ug/L	31	110	1			10/31/2018 19:30	NAH	EPA 200.7
Total Chromium	<2.0	ug/L	2.0	8.0	1	U		10/31/2018 19:30	NAH	EPA 200.7

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202512 Sample Description:LOT 15 DNR License/Well #: 0719/382 Sampled: 10/29/2018 1140

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Total Copper	<3.9	ug/L	3.9	13	1	U		10/31/2018 19:30	NAH	EPA 200.7
Total Iron	265	ug/L	59	200	1			10/31/2018 19:30	NAH	EPA 200.7
Total Magnesium	22900	ug/L	25	84	1			10/31/2018 19:30	NAH	EPA 200.7
Total Manganese	5.3	ug/L	2.2	7.3	1	J		10/31/2018 19:30	NAH	EPA 200.7
Total Zinc	261	ug/L	2.2	7.3	1			10/31/2018 19:30	NAH	EPA 200.7
Total Antimony	<0.60	ug/L	0.60	1.9	1	U		11/07/2018 12:31	MDS	EPA 200.9
Total Arsenic	<0.60	ug/L	0.60	2.1	1	U	11/01/2018 09:00	11/01/2018 16:19	MDS	EPA 200.9
Total Lead	0.59	ug/L	0.43	1.4	1	J		11/01/2018 11:51	MDS	EPA 200.9
Total Selenium	<1.0	ug/L	1.0	3.4	1	U	11/01/2018 09:00	11/02/2018 10:39	MDS	EPA 200.9
Total Thallium	<0.19	ug/L	0.19	0.61	1	U	11/01/2018 09:00	11/07/2018 17:08	MDS	EPA 200.9
Total Sodium	6.630	mg/L	0.030	0.10	1			10/31/2018 11:40	MDS	EPA 200.7
Total Hardness	219	mg/L	0.18	0.61	1			10/31/2018 19:30	NAH	SM 2340B/200.7
Organic Results										
1,1,1,2-Tetrachloroethane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 20:50	AGK	EPA 524.2
1,1,1-Trichloroethane	<0.28	ug/L	0.28	0.93	1	U		11/04/2018 20:50	AGK	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.50	ug/L	0.50	1.6	1	U		11/04/2018 20:50	AGK	EPA 524.2
1,1,2-Trichloroethane	<0.40	ug/L	0.40	1.3	1	U		11/04/2018 20:50	AGK	EPA 524.2
1,1-Dichloroethane	<0.28	ug/L	0.28	0.95	1	U		11/04/2018 20:50	AGK	EPA 524.2
1,1-Dichloroethene	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 20:50	AGK	EPA 524.2
1,1-Dichloropropene	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 20:50	AGK	EPA 524.2
1,2,3-Trichlorobenzene	<0.50	ug/L	0.50	1.6	1	U		11/04/2018 20:50	AGK	EPA 524.2
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	1	U		11/04/2018 20:50	AGK	EPA 524.2
1,2,4-Trichlorobenzene	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 20:50	AGK	EPA 524.2
1,2,4-Trimethylbenzene	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 20:50	AGK	EPA 524.2
1,2-Dichlorobenzene	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 20:50	AGK	EPA 524.2

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202512 Sample Description:LOT 15 DNR License/Well #: 0719/382 Sampled: 10/29/2018 1140

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2-Dichloroethane	<0.23	ug/L	0.23	0.76	1	U		11/04/2018 20:50	AGK	EPA 524.2
1,2-Dichloropropane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 20:50	AGK	EPA 524.2
1,3,5-Trimethylbenzene	<0.29	ug/L	0.29	0.98	1	U		11/04/2018 20:50	AGK	EPA 524.2
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.87	1	U		11/04/2018 20:50	AGK	EPA 524.2
1,3-Dichloropropane	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 20:50	AGK	EPA 524.2
1,4-Dichlorobenzene	<0.29	ug/L	0.29	0.98	1	U		11/04/2018 20:50	AGK	EPA 524.2
2,2-Dichloropropane	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 20:50	AGK	EPA 524.2
2-Chlorotoluene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 20:50	AGK	EPA 524.2
4-Chlorotoluene	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 20:50	AGK	EPA 524.2
Benzene	<0.26	ug/L	0.26	0.87	1	U		11/04/2018 20:50	AGK	EPA 524.2
Bromobenzene	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 20:50	AGK	EPA 524.2
Bromochloromethane	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 20:50	AGK	EPA 524.2
Bromodichloromethane	<0.24	ug/L	0.24	0.81	1	U		11/04/2018 20:50	AGK	EPA 524.2
Bromoform	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 20:50	AGK	EPA 524.2
Bromomethane	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 20:50	AGK	EPA 524.2
Carbon tetrachloride	<0.28	ug/L	0.28	0.94	1	U		11/04/2018 20:50	AGK	EPA 524.2
Chlorobenzene	<0.25	ug/L	0.25	0.84	1	U		11/04/2018 20:50	AGK	EPA 524.2
Chlorodibromomethane	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 20:50	AGK	EPA 524.2
Chloroethane	<0.30	ug/L	0.30	1.3	1	U		11/04/2018 20:50	AGK	EPA 524.2
Chloroform	<0.23	ug/L	0.23	0.78	1	U		11/04/2018 20:50	AGK	EPA 524.2
Chloromethane	<0.19	ug/L	0.19	0.63	1	U		11/04/2018 20:50	AGK	EPA 524.2
cis-1,2-Dichloroethene	<0.28	ug/L	0.28	0.94	1	U		11/04/2018 20:50	AGK	EPA 524.2
cis-1,3-Dichloropropene	<0.22	ug/L	0.22	0.73	1	U		11/04/2018 20:50	AGK	EPA 524.2
Dibromomethane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 20:50	AGK	EPA 524.2
Dichlorodifluoromethane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 20:50	AGK	EPA 524.2
Ethylbenzene	<0.27	ug/L	0.27	0.89	1	U		11/04/2018 20:50	AGK	EPA 524.2

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202512 Sample Description:LOT 15 DNR License/Well #: 0719/382 Sampled: 10/29/2018 1140

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 20:50	AGK	EPA 524.2
Isopropylbenzene	<0.29	ug/L	0.29	0.98	1	U		11/04/2018 20:50	AGK	EPA 524.2
Methyl tert-butyl ether	<0.26	ug/L	0.26	0.86	1	U		11/04/2018 20:50	AGK	EPA 524.2
Methylene chloride	<0.30	ug/L	0.30	0.99	1	U		11/04/2018 20:50	AGK	EPA 524.2
n-Butylbenzene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 20:50	AGK	EPA 524.2
n-Propylbenzene	<0.26	ug/L	0.26	0.85	1	U		11/04/2018 20:50	AGK	EPA 524.2
Naphthalene	<0.50	ug/L	0.50	1.5	1	U		11/04/2018 20:50	AGK	EPA 524.2
p-Isopropyltoluene	<0.25	ug/L	0.25	0.82	1	U		11/04/2018 20:50	AGK	EPA 524.2
sec-Butylbenzene	<0.26	ug/L	0.26	0.85	1	U		11/04/2018 20:50	AGK	EPA 524.2
Styrene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 20:50	AGK	EPA 524.2
tert-Butylbenzene	<0.24	ug/L	0.24	0.80	1	U		11/04/2018 20:50	AGK	EPA 524.2
Tetrachloroethene	<0.26	ug/L	0.26	0.87	1	U		11/04/2018 20:50	AGK	EPA 524.2
Toluene	<0.25	ug/L	0.25	0.84	1	U		11/04/2018 20:50	AGK	EPA 524.2
Total Xylene	<0.26	ug/L	0.26	0.88	1	U		11/04/2018 20:50	AGK	EPA 524.2
trans-1,2-Dichloroethene	<0.23	ug/L	0.23	0.75	1	U		11/04/2018 20:50	AGK	EPA 524.2
trans-1,3-Dichloropropene	<0.28	ug/L	0.28	0.93	1	U		11/04/2018 20:50	AGK	EPA 524.2
Trichloroethene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 20:50	AGK	EPA 524.2
Trichlorofluoromethane	<0.24	ug/L	0.24	0.80	1	U		11/04/2018 20:50	AGK	EPA 524.2
Vinyl chloride	<0.17	ug/L	0.17	0.58	1	U		11/04/2018 20:50	AGK	EPA 524.2

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

Notes: All LOD/LOQs are adjusted to reflect dilution, percent solids, and any differences in the sample weight / volume as compared to standard amounts. "U" qualifier indicates concentration of analyte was below the detection limit. "J" qualifer indicates an estimated value between the LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Eric T. Korthals
Project Manager
608-356-2760

Reason for Revis corrected field data temperature on NR2B

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030
Wisconsin (DATCP) Bacteriology ID# 105-289
Louisiana NELAP (primary) ID# ACC20160002
Illinois NELAP Lab ID# 200073
Kansas NELAP Lab ID# E-10368
Virginia NELAP Lab ID# 460203
Maryland Lab ID# WI00061
ISO/IEC 17025-2005 A2LA Cert # 3806.01
DoD-ELAP A2LA 3806.01
GA EPD Stipulation ID ACC20160002

CT LABORATORIES
delivering more than data from your environmental analyses

CT Laboratories LLC • 1230 Lange Ct • Baraboo, WI 53913
608-356-2760 • www.ctlaboratories.com

REVISED
ANALYTICAL REPORT

ENVIRONMENTAL SAMPLING CORP.
FRANK PERUGINI
W125 S9808 NORTH CAPE ROAD
MUSKEGO, WI 53150

Project Name: DELAFIELD LF
Project Phase:
Project #: 10-2018
Folder #: 140649
Purchase Order #:
Contract #: 3123

Arrival Temperature: See COC
Report Date: 11/19/2018
Date Received: 10/30/2018
Reprint Date: 12/18/2018
Revision Dat 12/05/2018

CT LAB#: 202513 Sample Description: 1916 DNR License/Well #: 0719/383 Sampled: 10/29/2018 1105

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Total Kjeldahl Nitrogen	<0.23	mg/L	0.23	0.76	1	U	10/31/2018 09:00	11/02/2018 14:07	MEZ	EPA 351.2
Nitrate Nitrogen Total	5.1	mg/L	0.12	0.40	1			10/30/2018 18:18	TMG	EPA 300.0
Nitrite Nitrogen Total	<0.14	mg/L	0.14	0.48	1	U		10/30/2018 18:18	TMG	EPA 300.0
Total Chloride	160	mg/L	10	32	10			10/31/2018 09:48	TMG	EPA 300.0
Total Sulfate	26	mg/L	0.80	2.5	1			10/30/2018 18:18	TMG	EPA 300.0

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

Notes: All LOD/LOQs are adjusted to reflect dilution, percent solids, and any differences in the sample weight / volume as compared to standard amounts. "U" qualifier indicates concentration of analyte was below the detection limit. "J" qualifer indicates an estimated value between the LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Eric T. Korthals
Project Manager
608-356-2760

Reason for Revis corrected field data temperature on NR2B

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030
Wisconsin (DATCP) Bacteriology ID# 105-289
Louisiana NELAP (primary) ID# ACC20160002
Illinois NELAP Lab ID# 200073
Kansas NELAP Lab ID# E-10368
Virginia NELAP Lab ID# 460203
Maryland Lab ID# WI00061
ISO/IEC 17025-2005 A2LA Cert # 3806.01
DoD-ELAP A2LA 3806.01
GA EPD Stipulation ID ACC20160002

CT LABORATORIES
delivering more than data from your environmental analyses

CT Laboratories LLC • 1230 Lange Ct • Baraboo, WI 53913
608-356-2760 • www.ctlaboratories.com

REVISED
ANALYTICAL REPORT

ENVIRONMENTAL SAMPLING CORP.
FRANK PERUGINI
W125 S9808 NORTH CAPE ROAD
MUSKEGO, WI 53150

Project Name: DELAFIELD LF
Project Phase:
Project #: 10-2018
Folder #: 140649
Purchase Order #:
Contract #: 3123

Arrival Temperature: See COC
Report Date: 11/19/2018
Date Received: 10/30/2018
Reprint Date: 12/18/2018
Revision Dat 12/05/2018

CT LAB#: 202514 Sample Description: 1916 DNR License/Well #: 0719/383 Sampled: 10/29/2018 1105

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Field Results										
Color (Field)	CLEAR		N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Conductivity (Field)	1102	umhos/cm	N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Odor (Field)	NONE		N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
pH (Field)	7.01	S.U.	N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Temperature (Field)	10.4	Deg. C	N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Turbidity (Field)	NONE		N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Inorganic Results										
Alkalinity	330	mg/L	4.0	4.0	1			11/09/2018 15:15	MEZ	SM 2320B
Total Cyanide	<0.0030	mg/L	0.0030	0.0090	1	U	11/05/2018 10:00	11/05/2018 12:59	LJS	EPA 335.4
Metals Results										
Total Barium	69.8	ug/L	0.70	2.5	1			10/31/2018 19:59	NAH	EPA 200.7
Total Beryllium	<0.38	ug/L	0.38	1.3	1	U		10/31/2018 19:59	NAH	EPA 200.7
Total Cadmium	<0.40	ug/L	0.40	1.4	1	U		10/31/2018 19:59	NAH	EPA 200.7
Total Calcium	96100	ug/L	31	110	1			10/31/2018 19:59	NAH	EPA 200.7
Total Chromium	<2.0	ug/L	2.0	8.0	1	U		10/31/2018 19:59	NAH	EPA 200.7

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202514 Sample Description:1916 DNR License/Well #: 0719/383 Sampled: 10/29/2018 1105

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Total Copper	4.2	ug/L	3.9	13	1	J		10/31/2018 19:59	NAH	EPA 200.7
Total Iron	<59	ug/L	59	200	1	U		10/31/2018 19:59	NAH	EPA 200.7
Total Magnesium	48300	ug/L	25	84	1			10/31/2018 19:59	NAH	EPA 200.7
Total Manganese	<2.2	ug/L	2.2	7.3	1	U		10/31/2018 19:59	NAH	EPA 200.7
Total Zinc	15.3	ug/L	2.2	7.3	1			10/31/2018 19:59	NAH	EPA 200.7
Total Antimony	<0.60	ug/L	0.60	1.9	1	U		11/07/2018 12:36	MDS	EPA 200.9
Total Arsenic	<0.60	ug/L	0.60	2.1	1	U	11/01/2018 09:00	11/01/2018 16:24	MDS	EPA 200.9
Total Lead	<0.43	ug/L	0.43	1.4	1	U		11/01/2018 11:57	MDS	EPA 200.9
Total Selenium	<1.0	ug/L	1.0	3.4	1	U	11/01/2018 09:00	11/02/2018 10:45	MDS	EPA 200.9
Total Thallium	0.30	ug/L	0.19	0.61	1	J	11/01/2018 09:00	11/07/2018 17:14	MDS	EPA 200.9
Total Sodium	65.10	mg/L	0.030	0.10	1			10/31/2018 11:43	MDS	EPA 200.7
Total Hardness	439	mg/L	0.18	0.61	1			10/31/2018 19:59	NAH	SM 2340B/200.7
Organic Results										
1,1,1,2-Tetrachloroethane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 21:21	AGK	EPA 524.2
1,1,1-Trichloroethane	<0.28	ug/L	0.28	0.93	1	U		11/04/2018 21:21	AGK	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.50	ug/L	0.50	1.6	1	U		11/04/2018 21:21	AGK	EPA 524.2
1,1,2-Trichloroethane	<0.40	ug/L	0.40	1.3	1	U		11/04/2018 21:21	AGK	EPA 524.2
1,1-Dichloroethane	<0.28	ug/L	0.28	0.95	1	U		11/04/2018 21:21	AGK	EPA 524.2
1,1-Dichloroethene	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 21:21	AGK	EPA 524.2
1,1-Dichloropropene	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 21:21	AGK	EPA 524.2
1,2,3-Trichlorobenzene	<0.50	ug/L	0.50	1.6	1	U		11/04/2018 21:21	AGK	EPA 524.2
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	1	U		11/04/2018 21:21	AGK	EPA 524.2
1,2,4-Trichlorobenzene	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 21:21	AGK	EPA 524.2
1,2,4-Trimethylbenzene	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 21:21	AGK	EPA 524.2
1,2-Dichlorobenzene	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 21:21	AGK	EPA 524.2

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202514 Sample Description:1916 DNR License/Well #: 0719/383 Sampled: 10/29/2018 1105

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2-Dichloroethane	<0.23	ug/L	0.23	0.76	1	U		11/04/2018 21:21	AGK	EPA 524.2
1,2-Dichloropropane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 21:21	AGK	EPA 524.2
1,3,5-Trimethylbenzene	<0.29	ug/L	0.29	0.98	1	U		11/04/2018 21:21	AGK	EPA 524.2
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.87	1	U		11/04/2018 21:21	AGK	EPA 524.2
1,3-Dichloropropane	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 21:21	AGK	EPA 524.2
1,4-Dichlorobenzene	<0.29	ug/L	0.29	0.98	1	U		11/04/2018 21:21	AGK	EPA 524.2
2,2-Dichloropropane	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 21:21	AGK	EPA 524.2
2-Chlorotoluene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 21:21	AGK	EPA 524.2
4-Chlorotoluene	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 21:21	AGK	EPA 524.2
Benzene	<0.26	ug/L	0.26	0.87	1	U		11/04/2018 21:21	AGK	EPA 524.2
Bromobenzene	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 21:21	AGK	EPA 524.2
Bromochloromethane	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 21:21	AGK	EPA 524.2
Bromodichloromethane	<0.24	ug/L	0.24	0.81	1	U		11/04/2018 21:21	AGK	EPA 524.2
Bromoform	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 21:21	AGK	EPA 524.2
Bromomethane	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 21:21	AGK	EPA 524.2
Carbon tetrachloride	<0.28	ug/L	0.28	0.94	1	U		11/04/2018 21:21	AGK	EPA 524.2
Chlorobenzene	<0.25	ug/L	0.25	0.84	1	U		11/04/2018 21:21	AGK	EPA 524.2
Chlorodibromomethane	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 21:21	AGK	EPA 524.2
Chloroethane	<0.30	ug/L	0.30	1.3	1	U		11/04/2018 21:21	AGK	EPA 524.2
Chloroform	<0.23	ug/L	0.23	0.78	1	U		11/04/2018 21:21	AGK	EPA 524.2
Chloromethane	<0.19	ug/L	0.19	0.63	1	U		11/04/2018 21:21	AGK	EPA 524.2
cis-1,2-Dichloroethene	<0.28	ug/L	0.28	0.94	1	U		11/04/2018 21:21	AGK	EPA 524.2
cis-1,3-Dichloropropene	<0.22	ug/L	0.22	0.73	1	U		11/04/2018 21:21	AGK	EPA 524.2
Dibromomethane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 21:21	AGK	EPA 524.2
Dichlorodifluoromethane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 21:21	AGK	EPA 524.2
Ethylbenzene	<0.27	ug/L	0.27	0.89	1	U		11/04/2018 21:21	AGK	EPA 524.2

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202514 Sample Description:1916 DNR License/Well #: 0719/383 Sampled: 10/29/2018 1105

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 21:21	AGK	EPA 524.2
Isopropylbenzene	<0.29	ug/L	0.29	0.98	1	U		11/04/2018 21:21	AGK	EPA 524.2
Methyl tert-butyl ether	<0.26	ug/L	0.26	0.86	1	U		11/04/2018 21:21	AGK	EPA 524.2
Methylene chloride	<0.30	ug/L	0.30	0.99	1	U		11/04/2018 21:21	AGK	EPA 524.2
n-Butylbenzene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 21:21	AGK	EPA 524.2
n-Propylbenzene	<0.26	ug/L	0.26	0.85	1	U		11/04/2018 21:21	AGK	EPA 524.2
Naphthalene	<0.50	ug/L	0.50	1.5	1	U		11/04/2018 21:21	AGK	EPA 524.2
p-Isopropyltoluene	<0.25	ug/L	0.25	0.82	1	U		11/04/2018 21:21	AGK	EPA 524.2
sec-Butylbenzene	<0.26	ug/L	0.26	0.85	1	U		11/04/2018 21:21	AGK	EPA 524.2
Styrene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 21:21	AGK	EPA 524.2
tert-Butylbenzene	<0.24	ug/L	0.24	0.80	1	U		11/04/2018 21:21	AGK	EPA 524.2
Tetrachloroethene	<0.26	ug/L	0.26	0.87	1	U		11/04/2018 21:21	AGK	EPA 524.2
Toluene	<0.25	ug/L	0.25	0.84	1	U		11/04/2018 21:21	AGK	EPA 524.2
Total Xylene	<0.26	ug/L	0.26	0.88	1	U		11/04/2018 21:21	AGK	EPA 524.2
trans-1,2-Dichloroethene	<0.23	ug/L	0.23	0.75	1	U		11/04/2018 21:21	AGK	EPA 524.2
trans-1,3-Dichloropropene	<0.28	ug/L	0.28	0.93	1	U		11/04/2018 21:21	AGK	EPA 524.2
Trichloroethene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 21:21	AGK	EPA 524.2
Trichlorofluoromethane	<0.24	ug/L	0.24	0.80	1	U		11/04/2018 21:21	AGK	EPA 524.2
Vinyl chloride	<0.17	ug/L	0.17	0.58	1	U		11/04/2018 21:21	AGK	EPA 524.2

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

Notes: All LOD/LOQs are adjusted to reflect dilution, percent solids, and any differences in the sample weight / volume as compared to standard amounts. "U" qualifier indicates concentration of analyte was below the detection limit. "J" qualifer indicates an estimated value between the LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Eric T. Korthals
Project Manager
608-356-2760

Reason for Revis corrected field data temperature on NR2B

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030
Wisconsin (DATCP) Bacteriology ID# 105-289
Louisiana NELAP (primary) ID# ACC20160002
Illinois NELAP Lab ID# 200073
Kansas NELAP Lab ID# E-10368
Virginia NELAP Lab ID# 460203
Maryland Lab ID# WI00061
ISO/IEC 17025-2005 A2LA Cert # 3806.01
DoD-ELAP A2LA 3806.01
GA EPD Stipulation ID ACC20160002

CT LABORATORIES
delivering more than data from your environmental analyses

CT Laboratories LLC • 1230 Lange Ct • Baraboo, WI 53913
608-356-2760 • www.ctlaboratories.com

REVISED
ANALYTICAL REPORT

ENVIRONMENTAL SAMPLING CORP.
FRANK PERUGINI
W125 S9808 NORTH CAPE ROAD
MUSKEGO, WI 53150

Project Name: DELAFIELD LF
Project Phase:
Project #: 10-2018
Folder #: 140649
Purchase Order #:
Contract #: 3123

Arrival Temperature: See COC
Report Date: 11/19/2018
Date Received: 10/30/2018
Reprint Date: 12/18/2018
Revision Dat 12/05/2018

CT LAB#: 202515 Sample Description: TRIP BLANK DNR License/Well #: 0719/999 Sampled: 10/29/2018

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Organic Results										
VOC 524.2 Safe Drinking Water Comments: Suspected methylene chloride and chloroform laboratory contamination.										
1,1,1,2-Tetrachloroethane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 17:10	AGK	EPA 524.2
1,1,1-Trichloroethane	<0.28	ug/L	0.28	0.93	1	U		11/04/2018 17:10	AGK	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.50	ug/L	0.50	1.6	1	U		11/04/2018 17:10	AGK	EPA 524.2
1,1,2-Trichloroethane	<0.40	ug/L	0.40	1.3	1	U		11/04/2018 17:10	AGK	EPA 524.2
1,1-Dichloroethane	<0.28	ug/L	0.28	0.95	1	U		11/04/2018 17:10	AGK	EPA 524.2
1,1-Dichloroethene	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 17:10	AGK	EPA 524.2
1,1-Dichloropropene	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 17:10	AGK	EPA 524.2
1,2,3-Trichlorobenzene	<0.50	ug/L	0.50	1.6	1	U		11/04/2018 17:10	AGK	EPA 524.2
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	1	U		11/04/2018 17:10	AGK	EPA 524.2
1,2,4-Trichlorobenzene	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 17:10	AGK	EPA 524.2
1,2,4-Trimethylbenzene	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 17:10	AGK	EPA 524.2
1,2-Dichlorobenzene	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 17:10	AGK	EPA 524.2
1,2-Dichloroethane	<0.23	ug/L	0.23	0.76	1	U		11/04/2018 17:10	AGK	EPA 524.2
1,2-Dichloropropane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 17:10	AGK	EPA 524.2

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202515 Sample Description:TRIP BLANK DNR License/Well #: 0719/999 Sampled: 10/29/2018

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
VOC 524.2 Safe Drinking Water Comments: Suspected methylene chloride and chloroform laboratory contamination.										
1,3,5-Trimethylbenzene	<0.29	ug/L	0.29	0.98	1	U		11/04/2018 17:10	AGK	EPA 524.2
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.87	1	U		11/04/2018 17:10	AGK	EPA 524.2
1,3-Dichloropropane	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 17:10	AGK	EPA 524.2
1,4-Dichlorobenzene	<0.29	ug/L	0.29	0.98	1	U		11/04/2018 17:10	AGK	EPA 524.2
2,2-Dichloropropane	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 17:10	AGK	EPA 524.2
2-Chlorotoluene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 17:10	AGK	EPA 524.2
4-Chlorotoluene	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 17:10	AGK	EPA 524.2
Benzene	<0.26	ug/L	0.26	0.87	1	U		11/04/2018 17:10	AGK	EPA 524.2
Bromobenzene	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 17:10	AGK	EPA 524.2
Bromochloromethane	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 17:10	AGK	EPA 524.2
Bromodichloromethane	<0.24	ug/L	0.24	0.81	1	U		11/04/2018 17:10	AGK	EPA 524.2
Bromoform	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 17:10	AGK	EPA 524.2
Bromomethane	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 17:10	AGK	EPA 524.2
Carbon tetrachloride	<0.28	ug/L	0.28	0.94	1	U		11/04/2018 17:10	AGK	EPA 524.2
Chlorobenzene	<0.25	ug/L	0.25	0.84	1	U		11/04/2018 17:10	AGK	EPA 524.2
Chlorodibromomethane	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 17:10	AGK	EPA 524.2
Chloroethane	<0.30	ug/L	0.30	1.3	1	U		11/04/2018 17:10	AGK	EPA 524.2
Chloroform	0.23	ug/L	0.23	0.78	1	J		11/04/2018 17:10	AGK	EPA 524.2
Chloromethane	<0.19	ug/L	0.19	0.63	1	U		11/04/2018 17:10	AGK	EPA 524.2
cis-1,2-Dichloroethene	<0.28	ug/L	0.28	0.94	1	U		11/04/2018 17:10	AGK	EPA 524.2
cis-1,3-Dichloropropene	<0.22	ug/L	0.22	0.73	1	U		11/04/2018 17:10	AGK	EPA 524.2
Dibromomethane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 17:10	AGK	EPA 524.2
Dichlorodifluoromethane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 17:10	AGK	EPA 524.2
Ethylbenzene	<0.27	ug/L	0.27	0.89	1	U		11/04/2018 17:10	AGK	EPA 524.2

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202515 Sample Description:TRIP BLANK DNR License/Well #: 0719/999 Sampled: 10/29/2018

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
VOC 524.2 Safe Drinking Water Comments: Suspected methylene chloride and chloroform laboratory contamination.										
Hexachlorobutadiene	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 17:10	AGK	EPA 524.2
Isopropylbenzene	<0.29	ug/L	0.29	0.98	1	U		11/04/2018 17:10	AGK	EPA 524.2
Methyl tert-butyl ether	<0.26	ug/L	0.26	0.86	1	U		11/04/2018 17:10	AGK	EPA 524.2
Methylene chloride	0.32	ug/L	0.30	0.99	1	J		11/04/2018 17:10	AGK	EPA 524.2
n-Butylbenzene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 17:10	AGK	EPA 524.2
n-Propylbenzene	<0.26	ug/L	0.26	0.85	1	U		11/04/2018 17:10	AGK	EPA 524.2
Naphthalene	<0.50	ug/L	0.50	1.5	1	U		11/04/2018 17:10	AGK	EPA 524.2
p-Isopropyltoluene	<0.25	ug/L	0.25	0.82	1	U		11/04/2018 17:10	AGK	EPA 524.2
sec-Butylbenzene	<0.26	ug/L	0.26	0.85	1	U		11/04/2018 17:10	AGK	EPA 524.2
Styrene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 17:10	AGK	EPA 524.2
tert-Butylbenzene	<0.24	ug/L	0.24	0.80	1	U		11/04/2018 17:10	AGK	EPA 524.2
Tetrachloroethene	<0.26	ug/L	0.26	0.87	1	U		11/04/2018 17:10	AGK	EPA 524.2
Toluene	<0.25	ug/L	0.25	0.84	1	U		11/04/2018 17:10	AGK	EPA 524.2
Total Xylene	<0.26	ug/L	0.26	0.88	1	U		11/04/2018 17:10	AGK	EPA 524.2
trans-1,2-Dichloroethene	<0.23	ug/L	0.23	0.75	1	U		11/04/2018 17:10	AGK	EPA 524.2
trans-1,3-Dichloropropene	<0.28	ug/L	0.28	0.93	1	U		11/04/2018 17:10	AGK	EPA 524.2
Trichloroethene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 17:10	AGK	EPA 524.2
Trichlorofluoromethane	<0.24	ug/L	0.24	0.80	1	U		11/04/2018 17:10	AGK	EPA 524.2
Vinyl chloride	<0.17	ug/L	0.17	0.58	1	U		11/04/2018 17:10	AGK	EPA 524.2

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

Notes: All LOD/LOQs are adjusted to reflect dilution, percent solids, and any differences in the sample weight / volume as compared to standard amounts. "U" qualifier indicates concentration of analyte was below the detection limit. "J" qualifer indicates an estimated value between the LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Eric T. Korthals
Project Manager
608-356-2760

Reason for Revis corrected field data temperature on NR2B

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030
Wisconsin (DATCP) Bacteriology ID# 105-289
Louisiana NELAP (primary) ID# ACC20160002
Illinois NELAP Lab ID# 200073
Kansas NELAP Lab ID# E-10368
Virginia NELAP Lab ID# 460203
Maryland Lab ID# WI00061
ISO/IEC 17025-2005 A2LA Cert # 3806.01
DoD-ELAP A2LA 3806.01
GA EPD Stipulation ID ACC20160002

CT LABORATORIES
delivering more than data from your environmental analyses

CT Laboratories LLC • 1230 Lange Ct • Baraboo, WI 53913
608-356-2760 • www.ctlaboratories.com

REVISED
ANALYTICAL REPORT

ENVIRONMENTAL SAMPLING CORP.
FRANK PERUGINI
W125 S9808 NORTH CAPE ROAD
MUSKEGO, WI 53150

Project Name: DELAFIELD LF
Project Phase:
Project #: 10-2018
Folder #: 140649
Purchase Order #:
Contract #: 3123

Arrival Temperature: See COC
Report Date: 11/19/2018
Date Received: 10/30/2018
Reprint Date: 12/18/2018
Revision Dat 12/05/2018

CT LAB#: 202516 Sample Description: NR2A DNR License/Well #: 0719/380 Sampled: 10/29/2018 1100

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Field Results										
Depth to Groundwater (Field)	59.15	Feet	N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Color (Field)	BROWN		N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Conductivity (Field)	678	umhos/cm	N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Odor (Field)	SLIGHT		N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
pH (Field)	7.67	S.U.	N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Temperature (Field)	10.9	Deg. C	N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Turbidity (Field)	HIGH		N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Metals Results										
Total Arsenic	5.1	ug/L	0.60	2.1	1		11/01/2018 09:00	11/01/2018 16:30	MDS	EPA 7010
Total Antimony	<3.0	ug/L	3.0	9.0	1	U	11/01/2018 11:11	11/03/2018 02:49	NAH	EPA 6010C
Total Barium	259	ug/L	1.0	3.3	1		11/01/2018 11:11	11/03/2018 02:49	NAH	EPA 6010C
Total Beryllium	<0.29	ug/L	0.29	0.97	1	U	11/01/2018 11:11	11/03/2018 02:49	NAH	EPA 6010C
Total Cadmium	0.57	ug/L	0.30	1.1	1	J	11/01/2018 11:11	11/03/2018 02:49	NAH	EPA 6010C
Total Calcium	607	mg/L	0.024	0.079	1		11/01/2018 11:11	11/03/2018 02:49	NAH	EPA 6010C
Total Chromium	42.6	ug/L	5.0	17	1		11/01/2018 11:11	11/03/2018 02:49	NAH	EPA 6010C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202516 Sample Description:NR2A DNR License/Well #: 0719/380 Sampled: 10/29/2018 1100

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Total Copper	86.3	ug/L	4.4	15	1		11/01/2018 11:11	11/03/2018 02:49	NAH	EPA 6010C
Total Lead	37.6	ug/L	1.4	4.6	1		11/01/2018 11:11	11/03/2018 02:49	NAH	EPA 6010C
Total Magnesium	258	mg/L	0.016	0.055	1		11/01/2018 11:11	11/03/2018 02:49	NAH	EPA 6010C
Total Manganese	1560	ug/L	3.4	11	1		11/01/2018 11:11	11/03/2018 02:49	NAH	EPA 6010C
Total Selenium	<4.0	ug/L	4.0	13	1	U	11/01/2018 11:11	11/03/2018 02:49	NAH	EPA 6010C
Total Thallium	<2.2	ug/L	2.2	7.5	1	U	11/01/2018 11:11	11/03/2018 02:49	NAH	EPA 6010C
Total Zinc	166	ug/L	2.8	9.4	1		11/01/2018 11:11	11/03/2018 02:49	NAH	EPA 6010C
Total Sodium	123	mg/L	0.10	0.35	1		11/01/2018 11:11	11/05/2018 16:16	MDS	EPA 6010C
Total Hardness	2580	mg/L	0.13	0.42	1		11/01/2018 11:11	11/03/2018 02:49	NAH	SM2340B/6010C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.60	ug/L	0.60	1.9	1	U		11/06/2018 14:30	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.50	ug/L	0.50	1.8	1	U		11/06/2018 14:30	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.70	ug/L	0.70	2.4	1	U		11/06/2018 14:30	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.40	ug/L	0.40	1.5	1	U		11/06/2018 14:30	RLD	EPA 8260C
1,1-Dichloroethane	<0.30	ug/L	0.30	1.1	1	U		11/06/2018 14:30	RLD	EPA 8260C
1,1-Dichloroethene	<0.40	ug/L	0.40	1.5	1	U		11/06/2018 14:30	RLD	EPA 8260C
1,1-Dichloropropene	<0.70	ug/L	0.70	2.2	1	U		11/06/2018 14:30	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.80	ug/L	0.80	2.6	1	U		11/06/2018 14:30	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.60	ug/L	0.60	1.9	1	U		11/06/2018 14:30	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.50	ug/L	0.50	1.7	1	U		11/06/2018 14:30	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.40	ug/L	0.40	1.2	1	U		11/06/2018 14:30	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.70	ug/L	0.70	2.4	1	U		11/06/2018 14:30	RLD	EPA 8260C
1,2-Dibromoethane	<0.60	ug/L	0.60	1.8	1	U		11/06/2018 14:30	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.60	ug/L	0.60	1.9	1	U		11/06/2018 14:30	RLD	EPA 8260C
1,2-Dichloroethane	<0.26	ug/L	0.26	0.87	1	U		11/06/2018 14:30	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202516 Sample Description:NR2A DNR License/Well #: 0719/380 Sampled: 10/29/2018 1100

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2-Dichloropropane	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 14:30	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.40	ug/L	0.40	1.3	1	U		11/06/2018 14:30	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.50	ug/L	0.50	1.8	1	U		11/06/2018 14:30	RLD	EPA 8260C
1,3-Dichloropropane	<0.50	ug/L	0.50	1.6	1	U		11/06/2018 14:30	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.60	ug/L	0.60	2.0	1	U		11/06/2018 14:30	RLD	EPA 8260C
2,2-Dichloropropane	<0.50	ug/L	0.50	1.6	1	U		11/06/2018 14:30	RLD	EPA 8260C
2-Butanone	<4.0	ug/L	4.0	14	1	U		11/06/2018 14:30	RLD	EPA 8260C
2-Chlorotoluene	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 14:30	RLD	EPA 8260C
2-Hexanone	<7.0	ug/L	7.0	24	1	U		11/06/2018 14:30	RLD	EPA 8260C
4-Chlorotoluene	<0.40	ug/L	0.40	1.5	1	U		11/06/2018 14:30	RLD	EPA 8260C
4-Methyl-2-pentanone	<6.0	ug/L	6.0	19	1	U		11/06/2018 14:30	RLD	EPA 8260C
Acetone	<9.0	ug/L	9.0	30	1	U		11/06/2018 14:30	RLD	EPA 8260C
Benzene	<0.24	ug/L	0.24	0.81	1	U		11/06/2018 14:30	RLD	EPA 8260C
Bromobenzene	<0.60	ug/L	0.60	1.9	1	U		11/06/2018 14:30	RLD	EPA 8260C
Bromochloromethane	<0.80	ug/L	0.80	2.5	1	U		11/06/2018 14:30	RLD	EPA 8260C
Bromodichloromethane	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 14:30	RLD	EPA 8260C
Bromoform	<0.70	ug/L	0.70	2.3	1	U		11/06/2018 14:30	RLD	EPA 8260C
Bromomethane	<0.70	ug/L	0.70	2.4	1	U		11/06/2018 14:30	RLD	EPA 8260C
Carbon disulfide	<0.50	ug/L	0.50	1.6	1	U		11/06/2018 14:30	RLD	EPA 8260C
Carbon tetrachloride	<0.50	ug/L	0.50	1.6	1	U		11/06/2018 14:30	RLD	EPA 8260C
Chlorobenzene	<0.50	ug/L	0.50	1.5	1	U		11/06/2018 14:30	RLD	EPA 8260C
Chloroethane	<0.50	ug/L	0.50	1.6	1	U		11/06/2018 14:30	RLD	EPA 8260C
Chloroform	<0.30	ug/L	0.30	0.90	1	U		11/06/2018 14:30	RLD	EPA 8260C
Chloromethane	<0.70	ug/L	0.70	2.5	1	U		11/06/2018 14:30	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.30	ug/L	0.30	1.0	1	U		11/06/2018 14:30	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.40	ug/L	0.40	1.2	1	U		11/06/2018 14:30	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202516 Sample Description:NR2A DNR License/Well #: 0719/380 Sampled: 10/29/2018 1100

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Dibromochloromethane	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 14:30	RLD	EPA 8260C
Dibromomethane	<0.80	ug/L	0.80	2.5	1	U		11/06/2018 14:30	RLD	EPA 8260C
Dichlorodifluoromethane	<0.40	ug/L	0.40	1.5	1	U		11/06/2018 14:30	RLD	EPA 8260C
Diisopropyl ether	<0.29	ug/L	0.29	0.97	1	U		11/06/2018 14:30	RLD	EPA 8260C
Ethylbenzene	<0.30	ug/L	0.30	1.1	1	U		11/06/2018 14:30	RLD	EPA 8260C
Hexachlorobutadiene	<0.90	ug/L	0.90	2.9	1	U		11/06/2018 14:30	RLD	EPA 8260C
Isopropylbenzene	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 14:30	RLD	EPA 8260C
m & p-Xylene	<0.50	ug/L	0.50	1.8	1	U		11/06/2018 14:30	RLD	EPA 8260C
Methyl tert-butyl ether	<0.30	ug/L	0.30	1.1	1	U		11/06/2018 14:30	RLD	EPA 8260C
Methylene chloride	<0.50	ug/L	0.50	1.7	1	U		11/06/2018 14:30	RLD	EPA 8260C
n-Butylbenzene	<0.40	ug/L	0.40	1.2	1	U		11/06/2018 14:30	RLD	EPA 8260C
n-Propylbenzene	<0.50	ug/L	0.50	1.8	1	U		11/06/2018 14:30	RLD	EPA 8260C
Naphthalene	<0.70	ug/L	0.70	2.2	1	U		11/06/2018 14:30	RLD	EPA 8260C
o-Xylene	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 14:30	RLD	EPA 8260C
p-Isopropyltoluene	<0.50	ug/L	0.50	1.5	1	U		11/06/2018 14:30	RLD	EPA 8260C
sec-Butylbenzene	<0.40	ug/L	0.40	1.3	1	U		11/06/2018 14:30	RLD	EPA 8260C
Styrene	<0.50	ug/L	0.50	1.7	1	U		11/06/2018 14:30	RLD	EPA 8260C
tert-Butylbenzene	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 14:30	RLD	EPA 8260C
Tetrachloroethene	<0.50	ug/L	0.50	1.8	1	U		11/06/2018 14:30	RLD	EPA 8260C
Tetrahydrofuran	<3.0	ug/L	3.0	10	1	U		11/06/2018 14:30	RLD	EPA 8260C
Toluene	<0.30	ug/L	0.30	1.1	1	U		11/06/2018 14:30	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.60	ug/L	0.60	1.9	1	U		11/06/2018 14:30	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 14:30	RLD	EPA 8260C
Trichloroethene	<0.30	ug/L	0.30	1.0	1	U		11/06/2018 14:30	RLD	EPA 8260C
Trichlorofluoromethane	<0.30	ug/L	0.30	1.1	1	U		11/06/2018 14:30	RLD	EPA 8260C
Vinyl chloride	<0.19	ug/L	0.19	0.64	1	U		11/06/2018 14:30	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

Notes: All LOD/LOQs are adjusted to reflect dilution, percent solids, and any differences in the sample weight / volume as compared to standard amounts.
"U" qualifier indicates concentration of analyte was below the detection limit. "J" qualifer indicates an estimated value between the LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Eric T. Korthals
Project Manager
608-356-2760

Reason for Revis corrected field data temperature on NR2B

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030
Wisconsin (DATCP) Bacteriology ID# 105-289
Louisiana NELAP (primary) ID# ACC20160002
Illinois NELAP Lab ID# 200073
Kansas NELAP Lab ID# E-10368
Virginia NELAP Lab ID# 460203
Maryland Lab ID# WI00061
ISO/IEC 17025-2005 A2LA Cert # 3806.01
DoD-ELAP A2LA 3806.01
GA EPD Stipulation ID ACC20160002

CT LABORATORIES
delivering more than data from your environmental analyses

CT Laboratories LLC • 1230 Lange Ct • Baraboo, WI 53913
608-356-2760 • www.ctlaboratories.com

REVISED
ANALYTICAL REPORT

ENVIRONMENTAL SAMPLING CORP.
FRANK PERUGINI
W125 S9808 NORTH CAPE ROAD
MUSKEGO, WI 53150

Project Name: DELAFIELD LF
Project Phase:
Project #: 10-2018
Folder #: 140649
Purchase Order #:
Contract #: 3123

Arrival Temperature: See COC
Report Date: 11/19/2018
Date Received: 10/30/2018
Reprint Date: 12/18/2018
Revision Dat 12/05/2018

CT LAB#: 202517 Sample Description: NR2A DNR License/Well #: 0719/380 Sampled: 10/29/2018 1100

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Alkalinity	250	mg/L	6.0	19	1			11/09/2018 12:35	MEZ	EPA 310.2
Nitrogen, Kjeldahl	<0.23	mg/L	0.23	0.76	1	U	10/31/2018 09:00	11/02/2018 14:09	MEZ	EPA 351.2
Chloride	130	mg/L	5.0	16	5			11/02/2018 21:34	TMG	EPA 9056A
Sulfate	14	mg/L	0.80	2.5	1			11/02/2018 21:54	TMG	EPA 9056A
Total Cyanide	<0.0030	mg/L	0.0030	0.0090	1	U	11/05/2018 10:00	11/05/2018 13:02	LJS	EPA 9012A
Nitrate+Nitrite Nitrogen	1.3	mg/L	0.057	0.19	1			11/06/2018 13:47	LJS	EPA 353.2
Metals Results										
Dissolved Iron	0.348	mg/L	0.059	0.20	1			11/01/2018 07:20	NAH	EPA 6010C
Dissolved Manganese	43.4	ug/L	2.2	7.3	1			11/01/2018 07:20	NAH	EPA 6010C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

Notes: All LOD/LOQs are adjusted to reflect dilution, percent solids, and any differences in the sample weight / volume as compared to standard amounts. "U" qualifier indicates concentration of analyte was below the detection limit. "J" qualifer indicates an estimated value between the LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Eric T. Korthals
Project Manager
608-356-2760

Reason for Revis corrected field data temperature on NR2B

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030
Wisconsin (DATCP) Bacteriology ID# 105-289
Louisiana NELAP (primary) ID# ACC20160002
Illinois NELAP Lab ID# 200073
Kansas NELAP Lab ID# E-10368
Virginia NELAP Lab ID# 460203
Maryland Lab ID# WI00061
ISO/IEC 17025-2005 A2LA Cert # 3806.01
DoD-ELAP A2LA 3806.01
GA EPD Stipulation ID ACC20160002

CT LABORATORIES
delivering more than data from your environmental analyses

CT Laboratories LLC • 1230 Lange Ct • Baraboo, WI 53913
608-356-2760 • www.ctlaboratories.com

REVISED
ANALYTICAL REPORT

ENVIRONMENTAL SAMPLING CORP.
FRANK PERUGINI
W125 S9808 NORTH CAPE ROAD
MUSKEGO, WI 53150

Project Name: DELAFIELD LF
Project Phase:
Project #: 10-2018
Folder #: 140649
Purchase Order #:
Contract #: 3123

Arrival Temperature: See COC
Report Date: 11/19/2018
Date Received: 10/30/2018
Reprint Date: 12/18/2018
Revision Dat 12/05/2018

CT LAB#: 202518 Sample Description: NR2B DNR License/Well #: 0719/381 Sampled: 10/29/2018 1245

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Field Results										
Depth to Groundwater (Field)	53.95	Feet	N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Color (Field)	CLEAR		N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Conductivity (Field)	1112	umhos/cm	N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Odor (Field)	NONE		N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
pH (Field)	7.24	S.U.	N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Temperature (Field)	10.9	Deg. C	N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Turbidity (Field)	NONE		N/A	N/A	1			10/29/2018 00:00	SUB	FIELD
Metals Results										
Total Arsenic	8.6	ug/L	0.60	2.1	1		11/01/2018 09:00	11/01/2018 16:36	MDS	EPA 7010
Total Antimony	<3.0	ug/L	3.0	9.0	1	U	11/01/2018 11:11	11/03/2018 02:56	NAH	EPA 6010C
Total Barium	253	ug/L	1.0	3.3	1		11/01/2018 11:11	11/03/2018 02:56	NAH	EPA 6010C
Total Beryllium	<0.29	ug/L	0.29	0.97	1	U	11/01/2018 11:11	11/03/2018 02:56	NAH	EPA 6010C
Total Cadmium	<0.30	ug/L	0.30	1.1	1	U	11/01/2018 11:11	11/03/2018 02:56	NAH	EPA 6010C
Total Calcium	121	mg/L	0.024	0.079	1		11/01/2018 11:11	11/03/2018 02:56	NAH	EPA 6010C
Total Chromium	<5.0	ug/L	5.0	17	1	U	11/01/2018 11:11	11/03/2018 02:56	NAH	EPA 6010C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202518 Sample Description:NR2B DNR License/Well #: 0719/381 Sampled: 10/29/2018 1245

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Total Copper	21.6	ug/L	4.4	15	1		11/01/2018 11:11	11/03/2018 02:56	NAH	EPA 6010C
Total Lead	5.8	ug/L	1.4	4.6	1		11/01/2018 11:11	11/03/2018 02:56	NAH	EPA 6010C
Total Magnesium	59.8	mg/L	0.016	0.055	1		11/01/2018 11:11	11/03/2018 02:56	NAH	EPA 6010C
Total Manganese	184	ug/L	3.4	11	1		11/01/2018 11:11	11/03/2018 02:56	NAH	EPA 6010C
Total Selenium	<4.0	ug/L	4.0	13	1	U	11/01/2018 11:11	11/03/2018 02:56	NAH	EPA 6010C
Total Thallium	<2.2	ug/L	2.2	7.5	1	U	11/01/2018 11:11	11/03/2018 02:56	NAH	EPA 6010C
Total Zinc	13.9	ug/L	2.8	9.4	1		11/01/2018 11:11	11/03/2018 02:56	NAH	EPA 6010C
Total Sodium	66.3	mg/L	0.10	0.35	1		11/01/2018 11:11	11/05/2018 16:19	MDS	EPA 6010C
Total Hardness	548	mg/L	0.13	0.42	1		11/01/2018 11:11	11/03/2018 02:56	NAH	SM2340B/6010C
Organic Results										
1,1,1,2-Tetrachloroethane	<0.60	ug/L	0.60	1.9	1	U		11/06/2018 14:58	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.50	ug/L	0.50	1.8	1	U		11/06/2018 14:58	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.70	ug/L	0.70	2.4	1	U		11/06/2018 14:58	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.40	ug/L	0.40	1.5	1	U		11/06/2018 14:58	RLD	EPA 8260C
1,1-Dichloroethane	0.97	ug/L	0.30	1.1	1	J		11/06/2018 14:58	RLD	EPA 8260C
1,1-Dichloroethene	<0.40	ug/L	0.40	1.5	1	U		11/06/2018 14:58	RLD	EPA 8260C
1,1-Dichloropropene	<0.70	ug/L	0.70	2.2	1	U		11/06/2018 14:58	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.80	ug/L	0.80	2.6	1	U		11/06/2018 14:58	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.60	ug/L	0.60	1.9	1	U		11/06/2018 14:58	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.50	ug/L	0.50	1.7	1	U		11/06/2018 14:58	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.40	ug/L	0.40	1.2	1	U		11/06/2018 14:58	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.70	ug/L	0.70	2.4	1	U		11/06/2018 14:58	RLD	EPA 8260C
1,2-Dibromoethane	<0.60	ug/L	0.60	1.8	1	U		11/06/2018 14:58	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.60	ug/L	0.60	1.9	1	U		11/06/2018 14:58	RLD	EPA 8260C
1,2-Dichloroethane	<0.26	ug/L	0.26	0.87	1	U		11/06/2018 14:58	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202518 Sample Description:NR2B DNR License/Well #: 0719/381 Sampled: 10/29/2018 1245

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2-Dichloropropane	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 14:58	RLD	EPA 8260C
1,3,5-Trimethylbenzene	<0.40	ug/L	0.40	1.3	1	U		11/06/2018 14:58	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.50	ug/L	0.50	1.8	1	U		11/06/2018 14:58	RLD	EPA 8260C
1,3-Dichloropropane	<0.50	ug/L	0.50	1.6	1	U		11/06/2018 14:58	RLD	EPA 8260C
1,4-Dichlorobenzene	0.64	ug/L	0.60	2.0	1	J		11/06/2018 14:58	RLD	EPA 8260C
2,2-Dichloropropane	<0.50	ug/L	0.50	1.6	1	U		11/06/2018 14:58	RLD	EPA 8260C
2-Butanone	<4.0	ug/L	4.0	14	1	U		11/06/2018 14:58	RLD	EPA 8260C
2-Chlorotoluene	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 14:58	RLD	EPA 8260C
2-Hexanone	<7.0	ug/L	7.0	24	1	U		11/06/2018 14:58	RLD	EPA 8260C
4-Chlorotoluene	<0.40	ug/L	0.40	1.5	1	U		11/06/2018 14:58	RLD	EPA 8260C
4-Methyl-2-pentanone	<6.0	ug/L	6.0	19	1	U		11/06/2018 14:58	RLD	EPA 8260C
Acetone	<9.0	ug/L	9.0	30	1	U		11/06/2018 14:58	RLD	EPA 8260C
Benzene	<0.24	ug/L	0.24	0.81	1	U		11/06/2018 14:58	RLD	EPA 8260C
Bromobenzene	<0.60	ug/L	0.60	1.9	1	U		11/06/2018 14:58	RLD	EPA 8260C
Bromochloromethane	<0.80	ug/L	0.80	2.5	1	U		11/06/2018 14:58	RLD	EPA 8260C
Bromodichloromethane	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 14:58	RLD	EPA 8260C
Bromoform	<0.70	ug/L	0.70	2.3	1	U		11/06/2018 14:58	RLD	EPA 8260C
Bromomethane	<0.70	ug/L	0.70	2.4	1	U		11/06/2018 14:58	RLD	EPA 8260C
Carbon disulfide	<0.50	ug/L	0.50	1.6	1	U		11/06/2018 14:58	RLD	EPA 8260C
Carbon tetrachloride	<0.50	ug/L	0.50	1.6	1	U		11/06/2018 14:58	RLD	EPA 8260C
Chlorobenzene	<0.50	ug/L	0.50	1.5	1	U		11/06/2018 14:58	RLD	EPA 8260C
Chloroethane	<0.50	ug/L	0.50	1.6	1	U		11/06/2018 14:58	RLD	EPA 8260C
Chloroform	<0.30	ug/L	0.30	0.90	1	U		11/06/2018 14:58	RLD	EPA 8260C
Chloromethane	<0.70	ug/L	0.70	2.5	1	U		11/06/2018 14:58	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.30	ug/L	0.30	1.0	1	U		11/06/2018 14:58	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.40	ug/L	0.40	1.2	1	U		11/06/2018 14:58	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202518 Sample Description:NR2B DNR License/Well #: 0719/381 Sampled: 10/29/2018 1245

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Dibromochloromethane	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 14:58	RLD	EPA 8260C
Dibromomethane	<0.80	ug/L	0.80	2.5	1	U		11/06/2018 14:58	RLD	EPA 8260C
Dichlorodifluoromethane	<0.40	ug/L	0.40	1.5	1	U		11/06/2018 14:58	RLD	EPA 8260C
Diisopropyl ether	<0.29	ug/L	0.29	0.97	1	U		11/06/2018 14:58	RLD	EPA 8260C
Ethylbenzene	<0.30	ug/L	0.30	1.1	1	U		11/06/2018 14:58	RLD	EPA 8260C
Hexachlorobutadiene	<0.90	ug/L	0.90	2.9	1	U		11/06/2018 14:58	RLD	EPA 8260C
Isopropylbenzene	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 14:58	RLD	EPA 8260C
m & p-Xylene	<0.50	ug/L	0.50	1.8	1	U		11/06/2018 14:58	RLD	EPA 8260C
Methyl tert-butyl ether	<0.30	ug/L	0.30	1.1	1	U		11/06/2018 14:58	RLD	EPA 8260C
Methylene chloride	<0.50	ug/L	0.50	1.7	1	U		11/06/2018 14:58	RLD	EPA 8260C
n-Butylbenzene	<0.40	ug/L	0.40	1.2	1	U		11/06/2018 14:58	RLD	EPA 8260C
n-Propylbenzene	<0.50	ug/L	0.50	1.8	1	U		11/06/2018 14:58	RLD	EPA 8260C
Naphthalene	<0.70	ug/L	0.70	2.2	1	U		11/06/2018 14:58	RLD	EPA 8260C
o-Xylene	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 14:58	RLD	EPA 8260C
p-Isopropyltoluene	<0.50	ug/L	0.50	1.5	1	U		11/06/2018 14:58	RLD	EPA 8260C
sec-Butylbenzene	<0.40	ug/L	0.40	1.3	1	U		11/06/2018 14:58	RLD	EPA 8260C
Styrene	<0.50	ug/L	0.50	1.7	1	U		11/06/2018 14:58	RLD	EPA 8260C
tert-Butylbenzene	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 14:58	RLD	EPA 8260C
Tetrachloroethene	<0.50	ug/L	0.50	1.8	1	U		11/06/2018 14:58	RLD	EPA 8260C
Tetrahydrofuran	<3.0	ug/L	3.0	10	1	U		11/06/2018 14:58	RLD	EPA 8260C
Toluene	<0.30	ug/L	0.30	1.1	1	U		11/06/2018 14:58	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.60	ug/L	0.60	1.9	1	U		11/06/2018 14:58	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 14:58	RLD	EPA 8260C
Trichloroethene	<0.30	ug/L	0.30	1.0	1	U		11/06/2018 14:58	RLD	EPA 8260C
Trichlorofluoromethane	<0.30	ug/L	0.30	1.1	1	U		11/06/2018 14:58	RLD	EPA 8260C
Vinyl chloride	<0.19	ug/L	0.19	0.64	1	U		11/06/2018 14:58	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

Notes: All LOD/LOQs are adjusted to reflect dilution, percent solids, and any differences in the sample weight / volume as compared to standard amounts.
"U" qualifier indicates concentration of analyte was below the detection limit. "J" qualifer indicates an estimated value between the LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Eric T. Korthals
Project Manager
608-356-2760

Reason for Revis corrected field data temperature on NR2B

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030
Wisconsin (DATCP) Bacteriology ID# 105-289
Louisiana NELAP (primary) ID# ACC20160002
Illinois NELAP Lab ID# 200073
Kansas NELAP Lab ID# E-10368
Virginia NELAP Lab ID# 460203
Maryland Lab ID# WI00061
ISO/IEC 17025-2005 A2LA Cert # 3806.01
DoD-ELAP A2LA 3806.01
GA EPD Stipulation ID ACC20160002

CT LABORATORIES
delivering more than data from your environmental analyses

CT Laboratories LLC • 1230 Lange Ct • Baraboo, WI 53913
608-356-2760 • www.ctlaboratories.com

REVISED
ANALYTICAL REPORT

ENVIRONMENTAL SAMPLING CORP.
FRANK PERUGINI
W125 S9808 NORTH CAPE ROAD
MUSKEGO, WI 53150

Project Name: DELAFIELD LF
Project Phase:
Project #: 10-2018
Folder #: 140649
Purchase Order #:
Contract #: 3123

Arrival Temperature: See COC
Report Date: 11/19/2018
Date Received: 10/30/2018
Reprint Date: 12/18/2018
Revision Dat 12/05/2018

CT LAB#: 202519 Sample Description: NR2B DNR License/Well #: 0719/381 Sampled: 10/29/2018 1245

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Alkalinity	590	mg/L	6.0	19	1			11/09/2018 12:37	MEZ	EPA 310.2
Nitrogen, Kjeldahl	9.3	mg/L	0.23	0.76	1		10/31/2018 09:00	11/02/2018 14:12	MEZ	EPA 351.2
Chloride	150	mg/L	5.0	16	5			11/02/2018 22:13	TMG	EPA 9056A
Sulfate	18	mg/L	0.80	2.5	1			11/02/2018 22:32	TMG	EPA 9056A
Total Cyanide	0.0077	mg/L	0.0030	0.0090	1	J	11/05/2018 10:00	11/05/2018 13:19	LJS	EPA 9012A
Nitrate+Nitrite Nitrogen	<0.057	mg/L	0.057	0.19	1	U		11/06/2018 13:50	LJS	EPA 353.2
Metals Results										
Dissolved Iron	2.03	mg/L	0.059	0.20	1			11/01/2018 07:28	NAH	EPA 6010C
Dissolved Manganese	166	ug/L	2.2	7.3	1	M		11/01/2018 07:28	NAH	EPA 6010C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

Notes: All LOD/LOQs are adjusted to reflect dilution, percent solids, and any differences in the sample weight / volume as compared to standard amounts. "U" qualifier indicates concentration of analyte was below the detection limit. "J" qualifer indicates an estimated value between the LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Eric T. Korthals
Project Manager
608-356-2760

Reason for Revis corrected field data temperature on NR2B

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030
Wisconsin (DATCP) Bacteriology ID# 105-289
Louisiana NELAP (primary) ID# ACC20160002
Illinois NELAP Lab ID# 200073
Kansas NELAP Lab ID# E-10368
Virginia NELAP Lab ID# 460203
Maryland Lab ID# WI00061
ISO/IEC 17025-2005 A2LA Cert # 3806.01
DoD-ELAP A2LA 3806.01
GA EPD Stipulation ID ACC20160002

CT LABORATORIES
delivering more than data from your environmental analyses

CT Laboratories LLC • 1230 Lange Ct • Baraboo, WI 53913
608-356-2760 • www.ctlaboratories.com

REVISED
ANALYTICAL REPORT

ENVIRONMENTAL SAMPLING CORP.
FRANK PERUGINI
W125 S9808 NORTH CAPE ROAD
MUSKEGO, WI 53150

Project Name: DELAFIELD LF
Project Phase:
Project #: 10-2018
Folder #: 140649
Purchase Order #:
Contract #: 3123

Arrival Temperature: See COC
Report Date: 11/19/2018
Date Received: 10/30/2018
Reprint Date: 12/18/2018
Revision Dat 12/05/2018

CT LAB#: 202520 Sample Description: TRIP BLANK DNR License/Well #: 0719/999 Sampled: 10/29/2018

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Organic Results										
1,1,1,2-Tetrachloroethane	<0.60	ug/L	0.60	1.9	1	U		11/06/2018 10:15	RLD	EPA 8260C
1,1,1-Trichloroethane	<0.50	ug/L	0.50	1.8	1	U		11/06/2018 10:15	RLD	EPA 8260C
1,1,2,2-Tetrachloroethane	<0.70	ug/L	0.70	2.4	1	U		11/06/2018 10:15	RLD	EPA 8260C
1,1,2-Trichloroethane	<0.40	ug/L	0.40	1.5	1	U		11/06/2018 10:15	RLD	EPA 8260C
1,1-Dichloroethane	<0.30	ug/L	0.30	1.1	1	U		11/06/2018 10:15	RLD	EPA 8260C
1,1-Dichloroethene	<0.40	ug/L	0.40	1.5	1	U		11/06/2018 10:15	RLD	EPA 8260C
1,1-Dichloropropene	<0.70	ug/L	0.70	2.2	1	U		11/06/2018 10:15	RLD	EPA 8260C
1,2,3-Trichlorobenzene	<0.80	ug/L	0.80	2.6	1	U		11/06/2018 10:15	RLD	EPA 8260C
1,2,3-Trichloropropane	<0.60	ug/L	0.60	1.9	1	U		11/06/2018 10:15	RLD	EPA 8260C
1,2,4-Trichlorobenzene	<0.50	ug/L	0.50	1.7	1	U		11/06/2018 10:15	RLD	EPA 8260C
1,2,4-Trimethylbenzene	<0.40	ug/L	0.40	1.2	1	U		11/06/2018 10:15	RLD	EPA 8260C
1,2-Dibromo-3-chloropropane	<0.70	ug/L	0.70	2.4	1	U		11/06/2018 10:15	RLD	EPA 8260C
1,2-Dibromoethane	<0.60	ug/L	0.60	1.8	1	U		11/06/2018 10:15	RLD	EPA 8260C
1,2-Dichlorobenzene	<0.60	ug/L	0.60	1.9	1	U		11/06/2018 10:15	RLD	EPA 8260C
1,2-Dichloroethane	<0.26	ug/L	0.26	0.87	1	U		11/06/2018 10:15	RLD	EPA 8260C
1,2-Dichloropropane	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 10:15	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202520 Sample Description:TRIP BLANK DNR License/Well #: 0719/999 Sampled: 10/29/2018

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,3,5-Trimethylbenzene	<0.40	ug/L	0.40	1.3	1	U		11/06/2018 10:15	RLD	EPA 8260C
1,3-Dichlorobenzene	<0.50	ug/L	0.50	1.8	1	U		11/06/2018 10:15	RLD	EPA 8260C
1,3-Dichloropropane	<0.50	ug/L	0.50	1.6	1	U		11/06/2018 10:15	RLD	EPA 8260C
1,4-Dichlorobenzene	<0.60	ug/L	0.60	2.0	1	U		11/06/2018 10:15	RLD	EPA 8260C
2,2-Dichloropropane	<0.50	ug/L	0.50	1.6	1	U		11/06/2018 10:15	RLD	EPA 8260C
2-Butanone	<4.0	ug/L	4.0	14	1	U		11/06/2018 10:15	RLD	EPA 8260C
2-Chlorotoluene	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 10:15	RLD	EPA 8260C
2-Hexanone	<7.0	ug/L	7.0	24	1	U		11/06/2018 10:15	RLD	EPA 8260C
4-Chlorotoluene	<0.40	ug/L	0.40	1.5	1	U		11/06/2018 10:15	RLD	EPA 8260C
4-Methyl-2-pentanone	<6.0	ug/L	6.0	19	1	U		11/06/2018 10:15	RLD	EPA 8260C
Acetone	<9.0	ug/L	9.0	30	1	U		11/06/2018 10:15	RLD	EPA 8260C
Benzene	<0.24	ug/L	0.24	0.81	1	U		11/06/2018 10:15	RLD	EPA 8260C
Bromobenzene	<0.60	ug/L	0.60	1.9	1	U		11/06/2018 10:15	RLD	EPA 8260C
Bromochloromethane	<0.80	ug/L	0.80	2.5	1	U		11/06/2018 10:15	RLD	EPA 8260C
Bromodichloromethane	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 10:15	RLD	EPA 8260C
Bromoform	<0.70	ug/L	0.70	2.3	1	U		11/06/2018 10:15	RLD	EPA 8260C
Bromomethane	<0.70	ug/L	0.70	2.4	1	U		11/06/2018 10:15	RLD	EPA 8260C
Carbon disulfide	<0.50	ug/L	0.50	1.6	1	U		11/06/2018 10:15	RLD	EPA 8260C
Carbon tetrachloride	<0.50	ug/L	0.50	1.6	1	U		11/06/2018 10:15	RLD	EPA 8260C
Chlorobenzene	<0.50	ug/L	0.50	1.5	1	U		11/06/2018 10:15	RLD	EPA 8260C
Chloroethane	<0.50	ug/L	0.50	1.6	1	U		11/06/2018 10:15	RLD	EPA 8260C
Chloroform	<0.30	ug/L	0.30	0.90	1	U		11/06/2018 10:15	RLD	EPA 8260C
Chloromethane	<0.70	ug/L	0.70	2.5	1	U		11/06/2018 10:15	RLD	EPA 8260C
cis-1,2-Dichloroethene	<0.30	ug/L	0.30	1.0	1	U		11/06/2018 10:15	RLD	EPA 8260C
cis-1,3-Dichloropropene	<0.40	ug/L	0.40	1.2	1	U		11/06/2018 10:15	RLD	EPA 8260C
Dibromochloromethane	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 10:15	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 202520 Sample Description:TRIP BLANK DNR License/Well #: 0719/999 Sampled: 10/29/2018

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Dibromomethane	<0.80	ug/L	0.80	2.5	1	U		11/06/2018 10:15	RLD	EPA 8260C
Dichlorodifluoromethane	<0.40	ug/L	0.40	1.5	1	U		11/06/2018 10:15	RLD	EPA 8260C
Diisopropyl ether	<0.29	ug/L	0.29	0.97	1	U		11/06/2018 10:15	RLD	EPA 8260C
Ethylbenzene	<0.30	ug/L	0.30	1.1	1	U		11/06/2018 10:15	RLD	EPA 8260C
Hexachlorobutadiene	<0.90	ug/L	0.90	2.9	1	U		11/06/2018 10:15	RLD	EPA 8260C
Isopropylbenzene	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 10:15	RLD	EPA 8260C
m & p-Xylene	<0.50	ug/L	0.50	1.8	1	U		11/06/2018 10:15	RLD	EPA 8260C
Methyl tert-butyl ether	<0.30	ug/L	0.30	1.1	1	U		11/06/2018 10:15	RLD	EPA 8260C
Methylene chloride	<0.50	ug/L	0.50	1.7	1	U		11/06/2018 10:15	RLD	EPA 8260C
n-Butylbenzene	<0.40	ug/L	0.40	1.2	1	U		11/06/2018 10:15	RLD	EPA 8260C
n-Propylbenzene	<0.50	ug/L	0.50	1.8	1	U		11/06/2018 10:15	RLD	EPA 8260C
Naphthalene	<0.70	ug/L	0.70	2.2	1	U		11/06/2018 10:15	RLD	EPA 8260C
o-Xylene	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 10:15	RLD	EPA 8260C
p-Isopropyltoluene	<0.50	ug/L	0.50	1.5	1	U		11/06/2018 10:15	RLD	EPA 8260C
sec-Butylbenzene	<0.40	ug/L	0.40	1.3	1	U		11/06/2018 10:15	RLD	EPA 8260C
Styrene	<0.50	ug/L	0.50	1.7	1	U		11/06/2018 10:15	RLD	EPA 8260C
tert-Butylbenzene	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 10:15	RLD	EPA 8260C
Tetrachloroethene	<0.50	ug/L	0.50	1.8	1	U		11/06/2018 10:15	RLD	EPA 8260C
Tetrahydrofuran	<3.0	ug/L	3.0	10	1	U		11/06/2018 10:15	RLD	EPA 8260C
Toluene	<0.30	ug/L	0.30	1.1	1	U		11/06/2018 10:15	RLD	EPA 8260C
trans-1,2-Dichloroethene	<0.60	ug/L	0.60	1.9	1	U		11/06/2018 10:15	RLD	EPA 8260C
trans-1,3-Dichloropropene	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 10:15	RLD	EPA 8260C
Trichloroethene	<0.30	ug/L	0.30	1.0	1	U		11/06/2018 10:15	RLD	EPA 8260C
Trichlorofluoromethane	<0.30	ug/L	0.30	1.1	1	U		11/06/2018 10:15	RLD	EPA 8260C
Vinyl chloride	<0.19	ug/L	0.19	0.64	1	U		11/06/2018 10:15	RLD	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

Notes: All LOD/LOQs are adjusted to reflect dilution, percent solids, and any differences in the sample weight / volume as compared to standard amounts. "U" qualifier indicates concentration of analyte was below the detection limit. "J" qualifer indicates an estimated value between the LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Eric T. Korthals
Project Manager
608-356-2760

Reason for Revis corrected field data temperature on NR2B

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030
Wisconsin (DATCP) Bacteriology ID# 105-289
Louisiana NELAP (primary) ID# ACC20160002
Illinois NELAP Lab ID# 200073
Kansas NELAP Lab ID# E-10368
Virginia NELAP Lab ID# 460203
Maryland Lab ID# WI00061
ISO/IEC 17025-2005 A2LA Cert # 3806.01
DoD-ELAP A2LA 3806.01
GA EPD Stipulation ID ACC20160002

ENVIRONMENTAL SAMPLING CORPORATION GROUNDWATER MONITORING FIELD FORM

MONTH: October 2018

Purging Phase

Well ID	Date (2018)	Time (24hrs.)	Top of Well Elevation (ft.MSL)	Depth to Water (ft.)	Groundwater Elevation (ft.MSL)	Total Depth (ft.)	Height of Water Col. (ft.)	Req. Gal. to Purge (4 vol.)	Amount Purged (min.)
11 (235)	10/29	1055	--	--	--	--	--	--	15
13 (237)	10/30	1030	--	--	--	--	--	--	15
15 (239)	10/29	1230	--	--	--	--	--	--	15
54 (281)	10/29	1205	--	--	--	--	--	--	15
Lot 15 (382)	10/29	1125	--	--	--	--	--	--	15
1916 (383)	10/29	0950	--	--	--	--	--	--	15

Well ID	Date (2017)	Time (24hrs.)	Top of Well Elevation (ft.MSL)	Depth to Water (ft.)	Groundwater Elevation (ft.MSL)	Total Depth (ft.)	Height of Water Col. (ft.)	Req. Gal. to Purge (4 vol.)	Amount Purged (gal.)
NR-2A (380)	10/29	0955	--	59.15	--	66.0	6.85	4.5	4.5
NR-2B (381)	10/29	1120	--	53.95	--	106.0	52.05	33.9	34.0
Leachate Wet Well (339)	--	--	--	--	--	--	--	--	--

Sampling Phase

Date (2018)	Time (24hrs.)	pH (s.u.)	Spec. Cond. (25C)	Temp. (deg.C)	Color before Filter	Color after Filter	Odor	Turb before Filter	Turb after Filter	Number of Filters Used
10/29	1110	7.50	983	11.3	clear	--	none	none	--	--
10/30	1045	7.19	409	12.1	clear	--	none	none	--	--
10/29	1245	7.64	742	8.3	clear	--	none	none	--	--
10/29	1220	7.96	939	11.0	clear	--	sulfur	none	--	--
10/29	1140	7.68	429	11.9	clear	--	none	none	--	--
10/29	1005	7.01	1,102	10.4	clear	--	none	none	--	--
10/29	1100	7.67	678	10.9	brown	slight	none	high	low	2C
10/29	1245	7.24	1,112	10.9	clear	clear	none	none	none	1C

Area Flooded - No Sample Collected

Casing I.D. (inches) : Gallons per foot to get one well volume.
1.5" well : 0.092 gal. 2" well : 0.163 gal. 3" well : 0.377 gal. 4" well : 0.653 gal.

NOTES: Groundwater well total depth obtained from GEMS Database.
Groundwater wells located on Wal-Mart property.
Groundwater well samples need one filtered and one unfiltered metals bottle. All other samples are **unfiltered**.
Private well 13 had a new well pump installed in early October. Well was chlorinated after installation.

WEATHER **Wind Speed:** 5-10 mph **Direction:** NW **Temp.:** 45
Date: 10/29/18 **Overview:** partly cloudy
Date Equipment Used: 10/29/18
pH Meter: Cole-Parmer **pH 7.0:** 7.0 **pH 4.0:** 4.01 **Slope:** 93%
Spec. Cond. Meter: Cole-Parmer **Standard:** 1,413 **Reading:** 1,432
Temperature: 15.5

Facility Name: Delafield Sanitary Transfer & Landfill (lic. # 00719)
Facility Address: Delafield, WI
ESC Personnel: TI/EC

ENVIRONMENTAL SAMPLING CORPORATION
414-427-5033

Client: WDNR **Page:** 1 **of** 1
Project: Delafield Semi-Annual Event 10/18
Prepared by: EC **Date:** 10/29/2018
Checked by: SF **Date:** 11/06/2018

Private Wells:

11: N11 W31230 Bunker Hill
13: W311 N1052 Fairfield Way
15: N9 W31146 Concord Ct.
54: W312 N1055 Fairfield Way
Lot 15: W310 N1055 Bunker Hill Tr. / W310 N 1054 Bunker Hill Tr.
1916: 1916 Hillside Ct.

Rev. 3/2015

CHAIN OF CUSTODY

Page 1 of 1

Company: ESC
Project Contact: Frank Perugini
Telephone: 414-427-5033
Project Name: Delafield
Project #: 10-2018
Location: Delafield, WI
Sampled By: Tracy Pearce

CT LABORATORIES
1230 Lange Court, Baraboo, WI 53913
608-356-2760 Fax 608-356-2766
www.ctlaboratories.com

Folder #: 140649
Company: ENVIRONMENTAL SA
Project: DELAFIELD LF
Logged By: JLS PM: BM

Program:
QSM RCRA SDWA NPDES
Solid Waste Other _____
PO #

Report To:
EMAIL: ESC - Frank Perugini
Company: escstaff@yahoo.com
Address: ESC
PO Box 12
Invoice To:* Muskego, WI 53150
EMAIL:
Company:
Address: (Same as above)

*Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions

Client Special Instructions
Please use the attached sheet for analytical request
0719

Matrix:
GW – groundwater SW - surface water WW - wastewater DW - drinking water
S - soil/sediment SL - sludge A - air M - misc/waste

ANALYSES REQUESTED

Collection Date (2018)	Time	Matrix	Grab/ Comp	Sample #	Sample ID Description	Filtered? Y/N	H_2SO_4 - TKN	HNO_3 - Metals	NaOH - CN	Unpres. - Alk, Anions	HCl - VOCs (524)	Total # Containers	Designated MS/MSD	CT Lab ID # (Lab use only)
							Fill in Spaces with Bottles per Test							
10/29	1110	DW	G	235	11	N	1	1	1	1	3	7	—	202504/506
10/29	1245	DW	G	239	15	N	1	1	1	1	3	7	—	202507/508
10/29	1220	DW	G	281	54	N	1	1	1	1	3	7	—	202509/510
10/29	1140	DW	G	382	Lot 15	N	1	1	1	1	3	7	—	202511/512
10/29	1005	DW	G	383	1916 3	N	1	1	1	1	3	7	—	202513/514
10/29	—	DW	G	999	Trip Blank	N	—	—	—		1	1	—	202515

Turnaround Time
Normal RUSH*
Date Needed: _____
Rush analysis requires prior CT Laboratories' approval
Surcharges:
24 hr 200%
2-3 days 100%
4-9 days 50%

Relinquished By:	Date/Time	Received By:	Date/Time
Tracy Pearce	10/29/18 1445	JLS	10/30/18 1110
Received by:	Date/Time	Received for Laboratory by:	Date/Time
		JLS	10/30/18 1200

Lab Use Only
Ice Present Yes No
Temp 3.1°, 2.7° IR Gun 24
Cooler # 6039, 5930

Rev. 02/2017

CHAIN OF CUSTODY

Page 1 of 1

Company: ESC
Project Contact: Frank Perugini
Telephone: 414-427-5033
Project Name: Delafield
Project #: 10-2018
Location: Delafield, WI
Sampled By: Elizabeth Carlson

CT LABORATORIES

1230 Lange Court, Baraboo, WI 53913
608-356-2760 Fax 608-356-2766
www.ctlaboratories.com

Lab Use Only
Place Header Sticker Here:

140649

Program:
QSM RCRA SDWA NPDES
(Solid Waste) Other _____

PO #

Report To: ESC-Frank Perugini
EMAIL: escstaff@yahoo.com
Company: ESC
Address: P.O. Box 12
Muskego, WI 53150

Invoice To:*
EMAIL:
Company: Same as Rpt to
Address:

*Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions

Client Special Instructions
Please use the attached sheet for analytical request
0719 F=field filtered

Matrix:
GW – groundwater SW - surface water WW - wastewater DW - drinking water
S - soil/sediment SL - sludge A - air M - misc/waste

Collection Date	Collection Time	Matrix	Grab/ Comp	Sample #	Sample ID Description	Filtered? Y/N	DisSTKN,NO2+NO3 (Y)	Total Metals (N)	Diss Metals (Y)	Cyanide Diss (Y)	Alkalinity, Anions (Y)	VOC (N)	Total # Containers	Designated MS/MSD	CT Lab ID # (Lab use only)
					ANALYSES REQUESTED										
							Fill in Spaces with Bottles per Test								
10/29/18	1100	GW	G	380	NR-2A		1/F 1	1/F	1/F	1/F	1/F	3	8		202516/517
10/29/18	1245	GW	G	381	NR-2B		1/F 1	1/F	1/F	1/F	1/F	3	8		202518/519
←				999	Trip Blank	N	—	—	—	—	—	1	1		202520

Turnaround Time
(Normal) RUSH*
Date Needed: _____
Rush analysis requires prior CT Laboratories' approval
Surcharges:
24 hr 200%
2-3 days 100%
4-9 days 50%

Relinquished By:	Date/Time	Received By:	Date/Time
Elizabeth Carlson / ESC	10/29/18 1700	GS	10/30/18 1110
Received by:	Date/Time	Received for Laboratory by:	Date/Time
		GS	10/30/18 1200

Lab Use Only
Ice Present (Yes) No
Temp 3.1°, 2.7° IR Gun 24
Cooler # 6039, 5930

CT LABORATORIES
delivering more than data from your environmental analyses

CT Laboratories LLC • 1230 Lange Ct • Baraboo, WI 53913
608-356-2760 • www.ctlaboratories.com

ANALYTICAL REPORT

ENVIRONMENTAL SAMPLING CORP.
FRANK PERUGINI
W125 S9808 NORTH CAPE ROAD
MUSKEGO, WI 53150

Project Name: DELAFIELD LF
Project Phase:
Project #:
Folder #: 140712
Purchase Order #:
Contract #: 3123

Arrival Temperature: See COC
Report Date: 11/19/2018
Date Received: 11/01/2018
Reprint Date: 12/05/2018

CT LAB#: 203713 Sample Description: P.W.-13 DNR License/Well #: 0719/237 Sampled: 10/30/2018 1045

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Inorganic Results										
Total Kjeldahl Nitrogen	<0.23	mg/L	0.23	0.76	1	U M	11/07/2018 14:00	11/09/2018 11:46	LJS	EPA 351.2
Nitrate Nitrogen Total	0.56	mg/L	0.12	0.40	1			11/01/2018 10:46	TMG	EPA 300.0
Nitrite Nitrogen Total	<0.14	mg/L	0.14	0.48	1	U		11/01/2018 10:46	TMG	EPA 300.0
Total Chloride	16	mg/L	1.0	3.2	1			11/01/2018 10:46	TMG	EPA 300.0
Total Sulfate	34	mg/L	0.80	2.5	1	M		11/01/2018 10:46	TMG	EPA 300.0

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

Notes: All LOD/LOQs are adjusted to reflect dilution, percent solids, and any differences in the sample weight / volume as compared to standard amounts. "U" qualifier indicates concentration of analyte was below the detection limit. "J" qualifer indicates an estimated value between the LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Brett M. Szymanski
Project Manager
608-356-2760

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030
Wisconsin (DATCP) Bacteriology ID# 105-289
Louisiana NELAP (primary) ID# ACC20160002
Illinois NELAP Lab ID# 200073
Kansas NELAP Lab ID# E-10368
Virginia NELAP Lab ID# 460203
Maryland Lab ID# WI00061
ISO/IEC 17025-2005 A2LA Cert # 3806.01
DoD-ELAP A2LA 3806.01
GA EPD Stipulation ID ACC20160002

CT LABORATORIES
delivering more than data from your environmental analyses

CT Laboratories LLC • 1230 Lange Ct • Baraboo, WI 53913
608-356-2760 • www.ctlaboratories.com

ANALYTICAL REPORT

ENVIRONMENTAL SAMPLING CORP.
FRANK PERUGINI
W125 S9808 NORTH CAPE ROAD
MUSKEGO, WI 53150

Project Name: DELAFIELD LF
Project Phase:
Project #:
Folder #: 140712
Purchase Order #:
Contract #: 3123

Arrival Temperature: See COC
Report Date: 11/19/2018
Date Received: 11/01/2018
Reprint Date: 11/19/2018

CT LAB#: 203714 Sample Description: P.W.-13 DNR License/Well #: 0719/237 Sampled: 10/30/2018 1045

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Field Results										
Color (Field)	CLEAR		N/A	N/A	1			10/30/2018 00:00	SUB	FIELD
Conductivity (Field)	409	umhos/cm	N/A	N/A	1			10/30/2018 00:00	SUB	FIELD
Odor (Field)	NONE		N/A	N/A	1			10/30/2018 00:00	SUB	FIELD
pH (Field)	7.19	S.U.	N/A	N/A	1			10/30/2018 00:00	SUB	FIELD
Temperature (Field)	12.1	Deg. C	N/A	N/A	1			10/30/2018 00:00	SUB	FIELD
Turbidity (Field)	NONE		N/A	N/A	1			10/30/2018 00:00	SUB	FIELD
Inorganic Results										
Alkalinity	300	mg/L	4.0	4.0	1			11/09/2018 15:15	MEZ	SM 2320B
Total Cyanide	<0.0030	mg/L	0.0030	0.0090	1	U	11/05/2018 10:00	11/05/2018 13:23	LJS	EPA 335.4
Metals Results										
Total Barium	110	ug/L	0.70	2.5	1			11/06/2018 20:27	NAH	EPA 200.7
Total Beryllium	<0.38	ug/L	0.38	1.3	1	U		11/06/2018 20:27	NAH	EPA 200.7
Total Cadmium	<0.40	ug/L	0.40	1.4	1	U		11/06/2018 20:27	NAH	EPA 200.7
Total Calcium	65800	ug/L	31	110	1			11/06/2018 20:27	NAH	EPA 200.7
Total Chromium	<2.0	ug/L	2.0	8.0	1	U		11/06/2018 20:27	NAH	EPA 200.7

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 203714 Sample Description:P.W.-13 DNR License/Well #: 0719/237 Sampled: 10/30/2018 1045

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Total Copper	9.0	ug/L	3.9	13	1	J		11/06/2018 20:27	NAH	EPA 200.7
Total Iron	69.4	ug/L	59	200	1	J		11/06/2018 20:27	NAH	EPA 200.7
Total Magnesium	43300	ug/L	25	84	1			11/06/2018 20:27	NAH	EPA 200.7
Total Manganese	<2.2	ug/L	2.2	7.3	1	U		11/06/2018 20:27	NAH	EPA 200.7
Total Zinc	<2.2	ug/L	2.2	7.3	1	U		11/06/2018 20:27	NAH	EPA 200.7
Total Antimony	<0.60	ug/L	0.60	1.9	1	U		11/07/2018 12:56	MDS	EPA 200.9
Total Arsenic	<0.60	ug/L	0.60	2.1	1	U	11/05/2018 12:30	11/06/2018 09:28	MDS	EPA 200.9
Total Lead	<0.43	ug/L	0.43	1.4	1	U		11/08/2018 09:45	MDS	EPA 200.9
Total Selenium	<1.0	ug/L	1.0	3.4	1	U	11/05/2018 12:30	11/06/2018 14:36	MDS	EPA 200.9
Total Thallium	<0.19	ug/L	0.19	0.61	1	U M	11/06/2018 09:30	11/08/2018 07:34	MDS	EPA 200.9
Total Sodium	6.830	mg/L	0.030	0.10	1			11/05/2018 11:00	MDS	EPA 200.7
Total Hardness	343	mg/L	0.18	0.61	1			11/06/2018 20:27	NAH	SM 2340B/200.7
Organic Results										
1,1,1,2-Tetrachloroethane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 21:52	AGK	EPA 524.2
1,1,1-Trichloroethane	<0.28	ug/L	0.28	0.93	1	U		11/04/2018 21:52	AGK	EPA 524.2
1,1,2,2-Tetrachloroethane	<0.50	ug/L	0.50	1.6	1	U		11/04/2018 21:52	AGK	EPA 524.2
1,1,2-Trichloroethane	<0.40	ug/L	0.40	1.3	1	U		11/04/2018 21:52	AGK	EPA 524.2
1,1-Dichloroethane	<0.28	ug/L	0.28	0.95	1	U		11/04/2018 21:52	AGK	EPA 524.2
1,1-Dichloroethene	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 21:52	AGK	EPA 524.2
1,1-Dichloropropene	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 21:52	AGK	EPA 524.2
1,2,3-Trichlorobenzene	<0.50	ug/L	0.50	1.6	1	U		11/04/2018 21:52	AGK	EPA 524.2
1,2,3-Trichloropropane	<0.25	ug/L	0.25	0.83	1	U		11/04/2018 21:52	AGK	EPA 524.2
1,2,4-Trichlorobenzene	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 21:52	AGK	EPA 524.2
1,2,4-Trimethylbenzene	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 21:52	AGK	EPA 524.2
1,2-Dichlorobenzene	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 21:52	AGK	EPA 524.2

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 203714 Sample Description:P.W.-13 DNR License/Well #: 0719/237 Sampled: 10/30/2018 1045

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
1,2-Dichloroethane	<0.23	ug/L	0.23	0.76	1	U		11/04/2018 21:52	AGK	EPA 524.2
1,2-Dichloropropane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 21:52	AGK	EPA 524.2
1,3,5-Trimethylbenzene	<0.29	ug/L	0.29	0.98	1	U		11/04/2018 21:52	AGK	EPA 524.2
1,3-Dichlorobenzene	<0.26	ug/L	0.26	0.87	1	U		11/04/2018 21:52	AGK	EPA 524.2
1,3-Dichloropropane	<0.30	ug/L	0.30	1.1	1	U		11/04/2018 21:52	AGK	EPA 524.2
1,4-Dichlorobenzene	<0.29	ug/L	0.29	0.98	1	U		11/04/2018 21:52	AGK	EPA 524.2
2,2-Dichloropropane	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 21:52	AGK	EPA 524.2
2-Chlorotoluene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 21:52	AGK	EPA 524.2
4-Chlorotoluene	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 21:52	AGK	EPA 524.2
Benzene	<0.26	ug/L	0.26	0.87	1	U		11/04/2018 21:52	AGK	EPA 524.2
Bromobenzene	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 21:52	AGK	EPA 524.2
Bromochloromethane	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 21:52	AGK	EPA 524.2
Bromodichloromethane	<0.24	ug/L	0.24	0.81	1	U		11/04/2018 21:52	AGK	EPA 524.2
Bromoform	<0.40	ug/L	0.40	1.2	1	U		11/04/2018 21:52	AGK	EPA 524.2
Bromomethane	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 21:52	AGK	EPA 524.2
Carbon tetrachloride	<0.28	ug/L	0.28	0.94	1	U		11/04/2018 21:52	AGK	EPA 524.2
Chlorobenzene	<0.25	ug/L	0.25	0.84	1	U		11/04/2018 21:52	AGK	EPA 524.2
Chlorodibromomethane	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 21:52	AGK	EPA 524.2
Chloroethane	<0.30	ug/L	0.30	1.3	1	U		11/04/2018 21:52	AGK	EPA 524.2
Chloroform	<0.23	ug/L	0.23	0.78	1	U		11/04/2018 21:52	AGK	EPA 524.2
Chloromethane	<0.19	ug/L	0.19	0.63	1	U		11/04/2018 21:52	AGK	EPA 524.2
cis-1,2-Dichloroethene	<0.28	ug/L	0.28	0.94	1	U		11/04/2018 21:52	AGK	EPA 524.2
cis-1,3-Dichloropropene	<0.22	ug/L	0.22	0.73	1	U		11/04/2018 21:52	AGK	EPA 524.2
Dibromomethane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 21:52	AGK	EPA 524.2
Dichlorodifluoromethane	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 21:52	AGK	EPA 524.2
Ethylbenzene	<0.27	ug/L	0.27	0.89	1	U		11/04/2018 21:52	AGK	EPA 524.2

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 203714 Sample Description:P.W.-13 DNR License/Well #: 0719/237 Sampled: 10/30/2018 1045

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Hexachlorobutadiene	<0.40	ug/L	0.40	1.4	1	U		11/04/2018 21:52	AGK	EPA 524.2
Isopropylbenzene	<0.29	ug/L	0.29	0.98	1	U		11/04/2018 21:52	AGK	EPA 524.2
Methyl tert-butyl ether	<0.26	ug/L	0.26	0.86	1	U		11/04/2018 21:52	AGK	EPA 524.2
Methylene chloride	<0.30	ug/L	0.30	0.99	1	U		11/04/2018 21:52	AGK	EPA 524.2
n-Butylbenzene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 21:52	AGK	EPA 524.2
n-Propylbenzene	<0.26	ug/L	0.26	0.85	1	U		11/04/2018 21:52	AGK	EPA 524.2
Naphthalene	<0.50	ug/L	0.50	1.5	1	U		11/04/2018 21:52	AGK	EPA 524.2
p-Isopropyltoluene	<0.25	ug/L	0.25	0.82	1	U		11/04/2018 21:52	AGK	EPA 524.2
sec-Butylbenzene	<0.26	ug/L	0.26	0.85	1	U		11/04/2018 21:52	AGK	EPA 524.2
Styrene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 21:52	AGK	EPA 524.2
tert-Butylbenzene	<0.24	ug/L	0.24	0.80	1	U		11/04/2018 21:52	AGK	EPA 524.2
Tetrachloroethene	<0.26	ug/L	0.26	0.87	1	U		11/04/2018 21:52	AGK	EPA 524.2
Toluene	<0.25	ug/L	0.25	0.84	1	U		11/04/2018 21:52	AGK	EPA 524.2
Total Xylene	<0.26	ug/L	0.26	0.88	1	U		11/04/2018 21:52	AGK	EPA 524.2
trans-1,2-Dichloroethene	<0.23	ug/L	0.23	0.75	1	U		11/04/2018 21:52	AGK	EPA 524.2
trans-1,3-Dichloropropene	<0.28	ug/L	0.28	0.93	1	U		11/04/2018 21:52	AGK	EPA 524.2
Trichloroethene	<0.30	ug/L	0.30	1.0	1	U		11/04/2018 21:52	AGK	EPA 524.2
Trichlorofluoromethane	<0.24	ug/L	0.24	0.80	1	U		11/04/2018 21:52	AGK	EPA 524.2
Vinyl chloride	<0.17	ug/L	0.17	0.58	1	U		11/04/2018 21:52	AGK	EPA 524.2

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

Notes: All LOD/LOQs are adjusted to reflect dilution, percent solids, and any differences in the sample weight / volume as compared to standard amounts. "U" qualifier indicates concentration of analyte was below the detection limit. "J" qualifer indicates an estimated value between the LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Brett M. Szymanski
Project Manager
608-356-2760

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030
Wisconsin (DATCP) Bacteriology ID# 105-289
Louisiana NELAP (primary) ID# ACC20160002
Illinois NELAP Lab ID# 200073
Kansas NELAP Lab ID# E-10368
Virginia NELAP Lab ID# 460203
Maryland Lab ID# WI00061
ISO/IEC 17025-2005 A2LA Cert # 3806.01
DoD-ELAP A2LA 3806.01
GA EPD Stipulation ID ACC20160002

Rev. 3/2015

CHAIN OF CUSTODY

Page 1 of 1

Company: ESC
Project Contact: Frank Perugini
Telephone: 414-427-5033
Project Name: Delafield
Project #: 10-2018
Location: Delafield, WI
Sampled By:

CT LABORATORIES

1230 Lange Court, Baraboo, WI 53913
608-356-2760 Fax 608-356-2766
www.ctlaboratories.com

Folder #: 140712
Company: ENVIRONMENTAL SA
Project: DELAFIELD LF
Logged By: DRT PM: BM

Program:
QSM RCRA SDWA NPDES
Solid Waste Other _____

PO #

Report To:
EMAIL: ESC - Frank Perugini
Company: escstaff@yahoo.com
Address: ESC
PO Box 12
Invoice To:* Muskego, WI 53150
EMAIL:
Company:
Address: (Same as above)

*Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions

Client Special Instructions
Please use the attached sheet for analytical request

Matrix:
GW – groundwater SW - surface water WW - wastewater DW - drinking water
S - soil/sediment SL - sludge A - air M - misc/waste

Collection Date	Collection Time	Matrix	Grab/ Comp	Sample #	Sample ID Description	Filtered? Y/N	H_2SO_4 - TKN	HNO_3 - Metals	NaOH - CN	Unpres. - Alk, Anions	HCl - VOCs (524)											Total # Containers	Designated MS/MSD	CT Lab ID # (Lab use only)
							Fill in Spaces with Bottles per Test																		
10/30/18	1045	DW	GRAB	7	PW-13 (#237)	N	1	1	1	1	3													203713/203714
10/30/18	1045	TB			Trip Blank						X													203717

Relinquished By:	Date/Time	Received By:	Date/Time	Lab Use Only
	10/30/18 1500		10/31/18 1420	Ice Present (Yes) No
Received by:	Date/Time	Received for Laboratory by:	Date/Time	Temp 3.2 IR Gun 22
			11/1/18 0920	Cooler # TAC

CT LABORATORIES
delivering more than data from your environmental analyses

CT Laboratories LLC • 1230 Lange Ct • Baraboo, WI 53913
608-356-2760 • www.ctlaboratories.com

ANALYTICAL REPORT

ENVIRONMENTAL SAMPLING CORP.
FRANK PERUGINI
W125 S9808 NORTH CAPE ROAD
MUSKEGO, WI 53150

Project Name: DELAFIELD LF
Project Phase:
Project #: 10/2018
Folder #: 141500
Purchase Order #: 10/2018+SPECIAL PROJECT
Contract #: 3123

Arrival Temperature: See COC
Report Date: 12/20/2018
Date Received: 12/05/2018
Reprint Date: 12/20/2018

CT LAB#: 218126 Sample Description: LEACHATE TANK DNR License/Well #: 00719/339 Sampled: 12/04/2018 1400

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Field Results										
Color (Field)	LT TAN		N/A	N/A	1			12/04/2018 00:00	SUB	FIELD
Conductivity (Field)	7230	umhos/cm	N/A	N/A	1			12/04/2018 00:00	SUB	FIELD
Odor (Field)	SLIGHT		N/A	N/A	1			12/04/2018 00:00	SUB	FIELD
pH (Field)	6.69	S.U.	N/A	N/A	1			12/04/2018 00:00	SUB	FIELD
Temperature (Field)	6.8	Deg. C	N/A	N/A	1			12/04/2018 00:00	SUB	FIELD
Turbidity (Field)	LOW		N/A	N/A	1			12/04/2018 00:00	SUB	FIELD
Inorganic Results										
BOD 5-Day	63	mg/L	24	N/A	1	Y	12/05/2018 15:00	12/10/2018 12:45	SAW	SM 5210B
Total Kjeldahl Nitrogen	88	mg/L	2.3	7.6	10		12/12/2018 12:00	12/14/2018 13:09	LJS	EPA 351.2
Total Suspended Solids	40	mg/L	6.7		1			12/06/2018 16:00	CLB	SM 2540D
Total Chloride	980	mg/L	100	320	100			12/19/2018 05:11	TMG	EPA 9056A
Total Sulfate	2.1	mg/L	0.80	2.5	1	J		12/19/2018 12:33	TMG	EPA 9056A
Total Cyanide	0.0075	mg/L	0.0030	0.0090	1	J M	12/10/2018 16:30	12/11/2018 15:40	LJS	EPA 9012A
Oil and Grease	<12	mg/L	12	42	1	U	12/14/2018 10:00	12/14/2018 10:00	JLH	EPA 1664A
Alkalinity	2900	mg/L	4.0	4.0	1			12/13/2018 14:00	LJS	SM 2320B

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 218126 Sample Description:LEACHATE TANK DNR License/Well #: 00719/339 Sampled: 12/04/2018 1400

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Nitrate+Nitrite Nitrogen Total	2.0	mg/L	0.11	0.38	2	M		12/14/2018 18:37	SAW	EPA 353.2
Metals Results										
Total Antimony	<3.0	ug/L	3.0	9.0	1	U	12/06/2018 11:46	12/10/2018 21:03	NAH	EPA 6010C
Total Arsenic	<3.0	ug/L	3.0	10	1	U	12/06/2018 11:46	12/10/2018 21:03	NAH	EPA 6010C
Total Barium	306	ug/L	1.0	3.3	1		12/06/2018 11:46	12/10/2018 21:03	NAH	EPA 6010C
Total Beryllium	<0.29	ug/L	0.29	0.97	1	U	12/06/2018 11:46	12/10/2018 21:03	NAH	EPA 6010C
Total Cadmium	<0.30	ug/L	0.30	1.1	1	U	12/06/2018 11:46	12/10/2018 21:03	NAH	EPA 6010C
Total Calcium	91.4	mg/L	0.024	0.079	1		12/06/2018 11:46	12/10/2018 21:03	NAH	EPA 6010C
Total Chromium	10.9	ug/L	5.0	17	1	J	12/06/2018 11:46	12/10/2018 21:03	NAH	EPA 6010C
Total Copper	<4.4	ug/L	4.4	15	1	U	12/06/2018 11:46	12/10/2018 21:03	NAH	EPA 6010C
Total Lead	3.2	ug/L	1.4	4.6	1	J	12/06/2018 11:46	12/10/2018 21:03	NAH	EPA 6010C
Total Magnesium	155	mg/L	0.016	0.055	1		12/06/2018 11:46	12/10/2018 21:03	NAH	EPA 6010C
Total Manganese	85.0	ug/L	3.4	11	1		12/06/2018 11:46	12/10/2018 21:03	NAH	EPA 6010C
Total Selenium	<4.0	ug/L	4.0	13	1	U	12/06/2018 11:46	12/10/2018 21:03	NAH	EPA 6010C
Total Thallium	<2.2	ug/L	2.2	7.5	1	U	12/06/2018 11:46	12/10/2018 21:03	NAH	EPA 6010C
Total Zinc	16.4	ug/L	2.8	9.4	1		12/06/2018 11:46	12/10/2018 21:03	NAH	EPA 6010C
Total Sodium	720	mg/L	0.50	1.8	5		12/06/2018 11:46	12/10/2018 10:15	MDS	EPA 6010C
Total Hardness	867	mg/L	0.13	0.42	1		12/06/2018 11:46	12/10/2018 21:03	NAH	SM2340B/6010C
Organic Results										
Volatile Organic Compounds 8260 Comments: Elevated Reporting Limits due to necessary dilution of a foaming sample.										
Qualifiers applying to all Analytes of Method EPA 8260C: V										
1,1,1,2-Tetrachloroethane	<6.0	ug/L	6.0	19	10	U		12/14/2018 23:24	AGK	EPA 8260C
1,1,1-Trichloroethane	<5.0	ug/L	5.0	18	10	U		12/14/2018 23:24	AGK	EPA 8260C
1,1,2,2-Tetrachloroethane	<7.0	ug/L	7.0	24	10	U		12/14/2018 23:24	AGK	EPA 8260C
1,1,2-Trichloroethane	<4.0	ug/L	4.0	15	10	U		12/14/2018 23:24	AGK	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 218126 Sample Description:LEACHATE TANK DNR License/Well #: 00719/339 Sampled: 12/04/2018 1400

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Volatile Organic Compounds 8260 Comments: Elevated Reporting Limits due to necessary dilution of a foaming sample.										
Qualifiers applying to all Analytes of Method EPA 8260C: V										
1,1-Dichloroethane	<3.0	ug/L	3.0	11	10	U		12/14/2018 23:24	AGK	EPA 8260C
1,1-Dichloroethene	<4.0	ug/L	4.0	15	10	U		12/14/2018 23:24	AGK	EPA 8260C
1,1-Dichloropropene	<7.0	ug/L	7.0	22	10	U		12/14/2018 23:24	AGK	EPA 8260C
1,2,3-Trichlorobenzene	<8.0	ug/L	8.0	26	10	U		12/14/2018 23:24	AGK	EPA 8260C
1,2,3-Trichloropropane	<6.0	ug/L	6.0	19	10	U		12/14/2018 23:24	AGK	EPA 8260C
1,2,4-Trichlorobenzene	<5.0	ug/L	5.0	17	10	U		12/14/2018 23:24	AGK	EPA 8260C
1,2,4-Trimethylbenzene	<4.0	ug/L	4.0	12	10	U		12/14/2018 23:24	AGK	EPA 8260C
1,2-Dibromo-3-chloropropane	<7.0	ug/L	7.0	24	10	U		12/14/2018 23:24	AGK	EPA 8260C
1,2-Dibromoethane	<6.0	ug/L	6.0	18	10	U		12/14/2018 23:24	AGK	EPA 8260C
1,2-Dichlorobenzene	<6.0	ug/L	6.0	19	10	U		12/14/2018 23:24	AGK	EPA 8260C
1,2-Dichloroethane	<2.6	ug/L	2.6	8.7	10	U		12/14/2018 23:24	AGK	EPA 8260C
1,2-Dichloropropane	<4.0	ug/L	4.0	14	10	U		12/14/2018 23:24	AGK	EPA 8260C
1,3,5-Trimethylbenzene	<4.0	ug/L	4.0	13	10	U		12/14/2018 23:24	AGK	EPA 8260C
1,3-Dichlorobenzene	<5.0	ug/L	5.0	18	10	U		12/14/2018 23:24	AGK	EPA 8260C
1,3-Dichloropropane	<5.0	ug/L	5.0	16	10	U		12/14/2018 23:24	AGK	EPA 8260C
1,4-Dichlorobenzene	<6.0	ug/L	6.0	20	10	U		12/14/2018 23:24	AGK	EPA 8260C
2,2-Dichloropropane	<5.0	ug/L	5.0	16	10	U Y		12/14/2018 23:24	AGK	EPA 8260C
2-Butanone	<40	ug/L	40	140	10	U		12/14/2018 23:24	AGK	EPA 8260C
2-Chlorotoluene	<4.0	ug/L	4.0	14	10	U		12/14/2018 23:24	AGK	EPA 8260C
2-Hexanone	<70	ug/L	70	240	10	U		12/14/2018 23:24	AGK	EPA 8260C
4-Chlorotoluene	<4.0	ug/L	4.0	15	10	U		12/14/2018 23:24	AGK	EPA 8260C
4-Methyl-2-pentanone	<60	ug/L	60	190	10	U		12/14/2018 23:24	AGK	EPA 8260C
Acetone	<90	ug/L	90	300	10	U		12/14/2018 23:24	AGK	EPA 8260C
Benzene	4.4	ug/L	2.4	8.1	10	J		12/14/2018 23:24	AGK	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 218126 Sample Description:LEACHATE TANK DNR License/Well #: 00719/339 Sampled: 12/04/2018 1400

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Volatile Organic Compounds 8260 Comments: Elevated Reporting Limits due to necessary dilution of a foaming sample.										
Qualifiers applying to all Analytes of Method EPA 8260C: V										
Bromobenzene	<6.0	ug/L	6.0	19	10	U		12/14/2018 23:24	AGK	EPA 8260C
Bromochloromethane	<8.0	ug/L	8.0	25	10	U		12/14/2018 23:24	AGK	EPA 8260C
Bromodichloromethane	<4.0	ug/L	4.0	14	10	U		12/14/2018 23:24	AGK	EPA 8260C
Bromoform	<7.0	ug/L	7.0	23	10	U		12/14/2018 23:24	AGK	EPA 8260C
Bromomethane	<7.0	ug/L	7.0	24	10	U Y		12/14/2018 23:24	AGK	EPA 8260C
Carbon disulfide	<5.0	ug/L	5.0	16	10	U		12/14/2018 23:24	AGK	EPA 8260C
Carbon tetrachloride	<5.0	ug/L	5.0	16	10	U		12/14/2018 23:24	AGK	EPA 8260C
Chlorobenzene	<5.0	ug/L	5.0	15	10	U		12/14/2018 23:24	AGK	EPA 8260C
Chloroethane	18	ug/L	5.0	16	10			12/14/2018 23:24	AGK	EPA 8260C
Chloroform	<3.0	ug/L	3.0	9.0	10	U		12/14/2018 23:24	AGK	EPA 8260C
Chloromethane	<7.0	ug/L	7.0	25	10	U Y		12/14/2018 23:24	AGK	EPA 8260C
cis-1,2-Dichloroethene	<3.0	ug/L	3.0	10	10	U		12/14/2018 23:24	AGK	EPA 8260C
cis-1,3-Dichloropropene	<4.0	ug/L	4.0	12	10	U		12/14/2018 23:24	AGK	EPA 8260C
Dibromochloromethane	<4.0	ug/L	4.0	14	10	U		12/14/2018 23:24	AGK	EPA 8260C
Dibromomethane	<8.0	ug/L	8.0	25	10	U		12/14/2018 23:24	AGK	EPA 8260C
Dichlorodifluoromethane	<4.0	ug/L	4.0	15	10	U		12/14/2018 23:24	AGK	EPA 8260C
Diisopropyl ether	<2.9	ug/L	2.9	9.7	10	U		12/14/2018 23:24	AGK	EPA 8260C
Ethylbenzene	<3.0	ug/L	3.0	11	10	U		12/14/2018 23:24	AGK	EPA 8260C
Hexachlorobutadiene	<9.0	ug/L	9.0	29	10	U		12/14/2018 23:24	AGK	EPA 8260C
Isopropylbenzene	<4.0	ug/L	4.0	14	10	U		12/14/2018 23:24	AGK	EPA 8260C
m & p-Xylene	<5.0	ug/L	5.0	18	10	U		12/14/2018 23:24	AGK	EPA 8260C
Methyl tert-butyl ether	<3.0	ug/L	3.0	11	10	U		12/14/2018 23:24	AGK	EPA 8260C
Methylene chloride	<5.0	ug/L	5.0	17	10	U		12/14/2018 23:24	AGK	EPA 8260C
n-Butylbenzene	<4.0	ug/L	4.0	12	10	U		12/14/2018 23:24	AGK	EPA 8260C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

CT LAB#: 218126 Sample Description:LEACHATE TANK DNR License/Well #: 00719/339 Sampled: 12/04/2018 1400

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Volatile Organic Compounds 8260 Comments: Elevated Reporting Limits due to necessary dilution of a foaming sample.										
Qualifiers applying to all Analytes of Method EPA 8260C: V										
n-Propylbenzene	<5.0	ug/L	5.0	18	10	U		12/14/2018 23:24	AGK	EPA 8260C
Naphthalene	<7.0	ug/L	7.0	22	10	U		12/14/2018 23:24	AGK	EPA 8260C
o-Xylene	<4.0	ug/L	4.0	14	10	U		12/14/2018 23:24	AGK	EPA 8260C
p-Isopropyltoluene	<5.0	ug/L	5.0	15	10	U		12/14/2018 23:24	AGK	EPA 8260C
sec-Butylbenzene	<4.0	ug/L	4.0	13	10	U		12/14/2018 23:24	AGK	EPA 8260C
Styrene	<5.0	ug/L	5.0	17	10	U		12/14/2018 23:24	AGK	EPA 8260C
tert-Butylbenzene	<4.0	ug/L	4.0	14	10	U		12/14/2018 23:24	AGK	EPA 8260C
Tetrachloroethene	<5.0	ug/L	5.0	18	10	U		12/14/2018 23:24	AGK	EPA 8260C
Tetrahydrofuran	260	ug/L	30	100	10			12/14/2018 23:24	AGK	EPA 8260C
Toluene	<3.0	ug/L	3.0	11	10	U		12/14/2018 23:24	AGK	EPA 8260C
trans-1,2-Dichloroethene	<6.0	ug/L	6.0	19	10	U		12/14/2018 23:24	AGK	EPA 8260C
trans-1,3-Dichloropropene	<4.0	ug/L	4.0	14	10	U		12/14/2018 23:24	AGK	EPA 8260C
Trichloroethene	<3.0	ug/L	3.0	10	10	U		12/14/2018 23:24	AGK	EPA 8260C
Trichlorofluoromethane	<3.0	ug/L	3.0	11	10	U		12/14/2018 23:24	AGK	EPA 8260C
Vinyl chloride	<1.9	ug/L	1.9	6.4	10	U		12/14/2018 23:24	AGK	EPA 8260C

Notes: All LOD/LOQs are adjusted to reflect dilution, percent solids, and any differences in the sample weight / volume as compared to standard amounts. "U" qualifier indicates concentration of analyte was below the detection limit. "J" qualifer indicates an estimated value between the LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Eric T. Korthals
Project Manager
608-356-2760

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030
Wisconsin (DATCP) Bacteriology ID# 105-289
Louisiana NELAP (primary) ID# ACC20160002
Illinois NELAP Lab ID# 200073
Kansas NELAP Lab ID# E-10368
Virginia NELAP Lab ID# 460203
Maryland Lab ID# WI00061
ISO/IEC 17025-2005 A2LA Cert # 3806.01
DoD-ELAP A2LA 3806.01
GA EPD Stipulation ID ACC20160002

CT LABORATORIES
delivering more than data from your environmental analyses

CT Laboratories LLC • 1230 Lange Ct • Baraboo, WI 53913
608-356-2760 • www.ctlaboratories.com

ANALYTICAL REPORT

ENVIRONMENTAL SAMPLING CORP.
FRANK PERUGINI
W125 S9808 NORTH CAPE ROAD
MUSKEGO, WI 53150

Project Name: DELAFIELD LF
Project Phase:
Project #: 10/2018
Folder #: 141500
Purchase Order #: 10/2018+SPECIAL PROJECT
Contract #: 3123

Arrival Temperature: See COC
Report Date: 12/20/2018
Date Received: 12/05/2018
Reprint Date: 12/20/2018

CT LAB#: 218233 Sample Description: LEACHATE TANK DNR License/Well #: 00719/339 Sampled: 12/04/2018 1400

Analyte	Result	Units	LOD	LOQ	Dilution	Qualifier	Prep Date/Time	Analysis Date/Time	Analyst	Method
Metals Results										
Dissolved Iron	0.976	mg/L	0.059	0.20	1	M		12/07/2018 18:16	NAH	EPA 6010C
Dissolved Manganese	77.3	ug/L	2.2	7.3	1			12/07/2018 18:16	NAH	EPA 6010C

Unless specifically stated to the contrary, soil/sediment/sludge sample results/LOD/LOQ/RLs were reported on a Dry Weight Basis

Notes: All LOD/LOQs are adjusted to reflect dilution, percent solids, and any differences in the sample weight / volume as compared to standard amounts. "U" qualifier indicates concentration of analyte was below the detection limit. "J" qualifer indicates an estimated value between the LOD and LOQ.

All samples were received intact and properly preserved unless otherwise noted. The results reported relate only to the samples tested. This report shall not be reproduced, except in full, without written approval of this laboratory. The Chain of Custody is attached.

Submitted by: Eric T. Korthals
Project Manager
608-356-2760

QC Qualifiers

Code	Description
B	Analyte detected in the associated Method Blank.
C	Toxicity present in BOD sample.
D	Diluted Out.
E	Safe, No Total Coliform detected.
F	Unsafe, Total Coliform detected, no E. Coli detected.
G	Unsafe, Total Coliform detected and E. Coli detected.
H	Holding time exceeded.
I	Incubator temperature was outside acceptance limits during test period.
J	Estimated value.
L	Significant peaks were detected outside the chromatographic window.
M	Matrix spike and/or Matrix Spike Duplicate recovery outside acceptance limits.
N	Insufficient BOD oxygen depletion.
O	Complete BOD oxygen depletion.
P	Concentration of analyte differs more than 40% between primary and confirmation analysis.
Q	Laboratory Control Sample outside acceptance limits.
R	See Narrative at end of report.
S	Surrogate standard recovery outside acceptance limits due to apparent matrix effects.
T	Sample received with improper preservation or temperature.
U	Analyte concentration was below detection limit.
V	Raised Quantitation or Reporting Limit due to limited sample amount or dilution for matrix background interference.
W	Sample amount received was below program minimum.
X	Analyte exceeded calibration range.
Y	Replicate/Duplicate precision outside acceptance limits.
Z	Specified calibration criteria was not met.

Current CT Laboratories Certifications

Wisconsin (WDNR) Chemistry ID# 157066030
Wisconsin (DATCP) Bacteriology ID# 105-289
Louisiana NELAP (primary) ID# ACC20160002
Illinois NELAP Lab ID# 200073
Kansas NELAP Lab ID# E-10368
Virginia NELAP Lab ID# 460203
Maryland Lab ID# WI00061
ISO/IEC 17025-2005 A2LA Cert # 3806.01
DoD-ELAP A2LA 3806.01
GA EPD Stipulation ID ACC20160002

Rev. 02/2017

Company: ESC
Project Contact: FRANK P.
Telephone: 414/333-9453
Project Name: DELAFIELD L.F.
Project #: 10/2018
Location: DELAFIELD, WI
Sampled By: FRANK PERAINO

Folder #: 141500
Company: ENVIRONMENTAL SA
Project: DELAFIELD LF
Logged By: JLS PM: BM

1410

1230 Lange Court, Baraboo, WI 53913
608-356-2760 Fax 608-356-2766
www.ctlaboratories.com

Program:
QSM RCRA SDWA NPDES
Solid Waste (circled) Other ________

PO # DELAFIELD – 10/2018 + SPECIAL PROJECT

Report To: ESC
EMAIL: ESCSTAFF@YAHOO.COM
Company: ESC
Address: P.O. BOX 12 MUSKEGO, WI 53150

Invoice To:* ESC
EMAIL: ISABBC@ESCMIDWEST.COM
Company: ESC
Address:

*Party listed is responsible for payment of invoice as per CT Laboratories' terms and conditions

Client Special Instructions

Matrix:
GW – groundwater SW - surface water WW - wastewater DW - drinking water
S - soil/sediment SL - sludge A - air M - misc/waste

ANALYSES REQUESTED

1. 125 mL – H_2SO_4 TKN/NO_2+NO_3
2. 250 mL HNO_3 TOTAL METALS
3. 250 mL HNO_3 DISS. METALS
4. 250 mL – NaOH T. CYANIDE
5. 500 mL – NONE CHLORIDE & ALK. & ANIONS
6. 1 LITER – NONE BOD/TSS
7. 250 mL H_2SO_4 OIL & GREASE
8. 40 mL – HCL VOC - 8260

Collection Date	Collection Time	Matrix	Grab/Comp	Sample #	Sample ID Description	Filtered? Y/N	1	2	3	4	5	6	7	8	Total # Containers	Designated MS/MSD	CT Lab ID # (Lab use only)
12/4/18	1400	GW	GRAB		DELAFIELD – LEACHATE TANK		1N	1N	1Y	1N	1N	1N	1N	3N	10		218126/233

Fill in Spaces with Bottles per Test

Turnaround Time
Normal (circled) RUSH*
Date Needed: ________
Rush analysis requires prior CT Laboratories' approval
Surcharges:
24 hr 200%
2-3 days 100%
4-9 days 50%

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	12/4/18 1630	[signature]	12/5/18 1230
Received by:	**Date/Time**	**Received for Laboratory by:**	**Date/Time**
		[signature]	12/5/18 1309

Lab Use Only
Ice Present Yes (circled) No
Temp 0.9 IR Gun 24
Cooler # 5723