



The Chemours Company
500 West Jefferson Street
Suite 1600
Louisville, KY 40202

502-569-2301 [t](#)
[chemours.com](#)

November 27, 2019

Mr. Paul Bretting
Betting Development Corporation
3401 Lake Park Road
Ashland, WI 54806

**RE: Clubhouse Groundwater Sample Results and Carbon Cylinder Replacement
72315 State Highway 13
Town of Barksdale, Wisconsin**

Dear Mr. Bretting:

On August 21, 2019, a Chemours representative collected groundwater samples from the inflow port (i.e., preceding the granular activated carbon [GAC] cylinders) connected to the clubhouse well (see Figure 1). The samples were submitted to TestAmerica Laboratories for nitroaromatic and nitramine organic constituents (NNOCs) analysis. As has been the case historically (since 2000), NNOCs were not detected above laboratory detection limits (see Table 1).

The GAC cylinders were replaced on August 26, 2019. A visual inspection of the system was conducted on August 26, 2019 after the cylinders were replaced and no issues were identified. If you happen to notice any issues with the system (i.e., leaks, broken fittings, etc.), please let me know.

I anticipate the next round of groundwater sampling (for NNOCs only) and GAC cylinder replacement will be conducted sometime in the third or fourth quarter of 2020. If you have any questions or comments, please feel free to contact me by telephone at (812) 923-1136 or by email at Bradley.S.Nave@chemours.com.

Sincerely,

A handwritten signature in blue ink that reads "Bradley S. Nave".

Bradley S. Nave
Chemours Corporate Remediation Group

Attachments: Table 1 - Historical Clubhouse Inflow Groundwater Sample Results
 Figure 1 - Clubhouse Water System Flow Diagram
 TestAmerica Laboratory Analytical Report

Cc: Chris Saari, WDNR
 Phil Richard, WDNR
 Cary E. Pooler, AECOM
 Eric Schmidt, AECOM
 Nicholas F. Shorkey, AECOM

Table 1
Historical Clubhouse Inflow Ground Water Sample Results
Former DuPont Barksdale Works
Barksdale, Wisconsin

Location ID		CLUB HOUSE-INFLOW	CLUB HOUSE-INFLOW	CLUB HOUSE-INFLOW	CLUB HOUSE-INFLOW								
Date Sampled		12/02/1998	12/04/1998	04/14/1999	07/12/1999	10/12/1999	12/14/1999	04/20/2000	07/11/2000	10/17/2000	12/12/2000	04/23/2001	10/16/2001
Parameter Name	Report Units	Report Result	Report Result	Report Result	Report Result								
NNOCs Target Analytes (µg/L)													
1,3,5-Trinitrobenzene	UG/L	<0.026	--	<0.019	<0.019	<0.019	<0.019	<0.030	<0.038	<0.033	<0.033	<0.017	<0.017
1,3-Dinitrobenzene	UG/L	<0.011	--	<0.012	<0.012	<0.012	<0.012	<0.010	<0.069	<0.035	<0.035	<0.020	<0.020
1-Methyl-3-Nitrobenzene (3-Nitrotoluene)	UG/L	<0.030	--	<0.18	<0.18	<0.18	<0.18	<0.080	<0.061	<0.017	<0.017	<0.019	<0.019
1-Methyl-4-Nitrobenzene (4-Nitrotoluene)	UG/L	--	--	--	--	--	--	<0.50	--	--	--	<0.019	<0.019
2-Amino-4,6-Dinitrotoluene	UG/L	<0.024	--	<0.034	<0.034	<0.034	<0.034	<0.020	<0.082	<0.039	<0.039	<0.013	<0.013
2-Nitrotoluene	UG/L	--	--	--	--	--	--	<0.080	--	--	--	<0.019	<0.019
2- And 4-Nitrotoluene	UG/L	<0.024	--	<0.16	<0.16	<0.16	<0.16	--	<0.063	0.18 J^{1,A}	<0.090	--	--
2,4,6-Trinitrotoluene	UG/L	<0.018	--	<0.059	<0.059	<0.059	<0.059	<0.030	<0.058	<0.032	<0.032	<0.049	<0.049
2,4,6-Trinitroxylen	UG/L	--	--	--	--	--	--	--	--	--	--	--	--
4-Amino-2,6-Dinitrotoluene	UG/L	<0.021	--	<0.011	<0.011	<0.011	<0.011	<0.040	<0.046	<0.037 UJ	<0.037	<0.017	<0.017
Nitrobenzene	UG/L	<0.088	--	<0.088	<0.088	<0.088	<0.088	--	<0.088	<0.033 ^A	<0.039	<0.049	<0.049
Nitroglycerin	UG/L	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	--	0.044 J^{1,A}	--	--	--
HMX	UG/L	<0.047	--	<0.036	<0.036	<0.036	<0.036	<0.040	<0.036	<0.040 UJ	<0.040	<0.022	<0.022
PETN	UG/L	<0.069	--	<0.069	<0.069	<0.069	<0.069	<0.20	<0.069	<0.033	<0.033	<0.020	<0.020
RDX	UG/L	<0.043	--	<0.015	<0.015	<0.015	<0.015	<0.060	<0.075	<0.027 UJ	<0.027	<0.028	<0.028
Tetryl	UG/L	<0.030	--	<0.043	<0.043	<0.043	<0.043	<0.020	<0.065	<0.037	<0.037	<0.019	<0.019
NNOCs DNT Isomers (µg/L)													
2,3-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	UG/L	<0.025	--	<0.017	<0.017	<0.017	<0.017	<0.030	<0.115	0.13 J¹	<0.040	<0.016	<0.016
2,5-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	--	--	--	--	--
2,6-Dinitrotoluene	UG/L	<0.020	--	<0.010	<0.010	<0.010	<0.010	<0.040	<0.054	0.045 J¹	<0.039	<0.012	<0.012
3,4-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	--	--	--	--	--
3,5-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	--	--	--	--	--
NNOCs DNX Isomers (µg/L)													
1,2-Dimethyl-3,4-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dimethyl-3,5-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dimethyl-3,6-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dimethyl-4,5-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dimethyl-2,4-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dimethyl-2,5-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dimethyl-2,3-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dimethyl-2,5-Dinitrobenzene	UG/L	--A	--	--A	--A	--A	--A						
1,4-Dimethyl-2,6-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	--	--	--
1,5-Dimethyl-2,3-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	--	--	--
1,5-Dimethyl-2,4-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	--	--	--
SVOCs (µg/L)													
Naphthalene	UG/L	--	--	--	--	--	--	--	--	--	<0.15	--	--
Anions (µg/L)													
Perchlorate	UG/L	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

NNOC = Nitroaromatic and Nitramine Organic Compounds

DNT = Dinitrotoluene

DNX = Dinitroxylen

SVOC = Semi Volatile Organic Compound

< = not detected above the laboratory reporting limit

-- = data not available

Bolded text indicates a laboratory reported detection

J = analyte present; however, reported value may not be accurate or precise

J¹ = analyte was detected between the method detection limit and the laboratory reporting limit. Detected results on 10/17/00 are suspected to be due to inadvertent laboratory contamination.J^H = In addition to the "J qualifier", the result was also qualified with an "H" due to an issue with the holding time being exceeded when re-extraction was performed by the laboratory. Due to suspected laboratory error, a confirmation sample was collected in June 2017. The compound was not detected in the confirmation sample.^A = Results updated to correct data entry errata identified in some pre-2003 results.

U: Analyte was analyzed, but not detected

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UG/L = micrograms per liter or parts per billion

* DNX isomer inadvertently omitted by the analytical laboratory

Note: Detections not observed in effluent samples

Table 1
Historical Clubhouse Inflow Ground Water Sample Results
Former DuPont Barksdale Works
Barksdale, Wisconsin

Location ID		CLUB HOUSE-INFLOW												
Date Sampled		10/16/2001	05/15/2002	05/15/2002	12/10/2002	09/09/2003	08/25/2004	11/15/2005	08/01/2007	07/27/2011	12/04/2013	09/16/2014	09/03/2015	10/09/2015
Parameter Name	Report Units	Report Result												
NNOCs Target Analytes (µg/L)														
1,3,5-Trinitrobenzene	UG/L	<0.017	<0.025	<0.025	<0.025	<0.015	<0.018	--	<0.010	<0.016	<0.016	<0.016	<0.017	<0.017
1,3-Dinitrobenzene	UG/L	<0.020	<0.023	<0.023	<0.023	<0.014	<0.019	--	<0.011	<0.014	<0.013	<0.014	<0.014	<0.014
1-Methyl-3-Nitrobenzene (3-Nitrotoluene)	UG/L	<0.019	<0.027	<0.027	<0.027	<0.019	<0.064	--	<0.025	<0.024	<0.024	<0.024	<0.025	<0.025
1-Methyl-4-Nitrobenzene (4-Nitrotoluene)	UG/L	<0.019	<0.025	<0.025	<0.025	<0.018	<0.061	--	<0.026	<0.025	<0.025	<0.025	<0.026	<0.026
2-Amino-4,6-Dinitrotoluene	UG/L	<0.013	<0.036	<0.036	<0.036	<0.012	<0.017	--	<0.021	<0.020	<0.020	<0.020	<0.021	<0.021
2-Nitrotoluene	UG/L	<0.019	<0.026	<0.026	<0.026	<0.023	<0.057	--	<0.022	<0.021	<0.021	<0.021	<0.022	<0.022
2-And 4-Nitrotoluene	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trinitrotoluene	UG/L	<0.049	<0.021	<0.021	<0.021	<0.015	<0.026	--	<0.022	<0.021	<0.021	<0.021	<0.022	<0.022
2,4,6-Trinitroxylen	UG/L	--	--	--	--	--	--	--	--	--	<0.011	<0.012	--	<0.012
4-Amino-2,6-Dinitrotoluene	UG/L	<0.017	<0.020	<0.020	<0.020	<0.015	<0.022	--	<0.019	<0.018	<0.018	<0.018	<0.019	<0.019
Nitrobenzene	UG/L	<0.049	<0.030	<0.030	<0.030	<0.039	<0.042	--	<0.045	<0.044	<0.043	<0.032	<0.033	<0.033
Nitroglycerin	UG/L	--	--	--	--	--	--	--	--	--	<0.043	<0.045	<0.045	<0.045
HMX	UG/L	<0.022	<0.040	<0.040	<0.040	<0.016	<0.017	--	<0.019	<0.018	<0.018	<0.018	<0.019	<0.019
PETN	UG/L	<0.020	<0.051	<0.051	<0.051	<0.031	<0.038	--	<0.015	<0.017	<0.017	<0.017	<0.018	<0.018
RDX	UG/L	<0.028	<0.020	<0.020	<0.020	<0.012	<0.013	--	<0.021	<0.020	<0.020	<0.020	<0.021	<0.021
Tetryl	UG/L	<0.019	<0.024	<0.024	<0.024	<0.012	<0.017	--	<0.021	<0.020	<0.020	<0.020	<0.021	<0.021
NNOCs DNT Isomers (µg/L)														
2,3-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	<0.015	<0.014	<0.014	--	--	<0.015
2,4-Dinitrotoluene	UG/L	<0.016	<0.026	<0.026	<0.026	<0.019	<0.038	--	<0.019	<0.018	<0.018	<0.018	--	<0.019
2,5-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	--	--	<0.013	<0.014	--	<0.014
2,6-Dinitrotoluene	UG/L	<0.012	<0.022	<0.022	<0.022	<0.015	<0.037	--	<0.022	<0.021	<0.021	<0.021	--	<0.022
3,4-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	--	<0.019	<0.019	<0.019	--	<0.020
3,5-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	<0.033	<0.032	<0.033	--	--	<0.034
NNOCs DNX Isomers (µg/L)														
1,2-Dimethyl-3,4-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	--	--	<0.24	<0.23	--	--
1,2-Dimethyl-3,5-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	--	<0.33	<0.33	<0.31	--	--
1,2-Dimethyl-3,6-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	--	--	<0.41	<0.39	--	--
1,2-Dimethyl-4,5-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	--	--	<0.39	<0.37	--	--
1,3-Dimethyl-2,4-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	--	<0.45	<0.45	<0.42	--	--
1,3-Dimethyl-2,5-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	--	<0.42	<0.42	<0.40	--	--
1,4-Dimethyl-2,3-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	--	<0.38	<0.38	<0.36	--	--
1,4-Dimethyl-2,5-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	--	--	<0.76	<0.72	--	--
1,4-Dimethyl-2,6-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	--	<0.22	<0.22	<0.21	--	--
1,5-Dimethyl-2,3-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	--	<0.26	<0.26	<0.25	--	--
1,5-Dimethyl-2,4-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	--	<0.27	<0.27	<0.25	--	--
SVOCs (µg/L)														
Naphthalene	UG/L	--	<0.78	<0.78	--	--	--	--	--	--	--	--	--	--
Anions (µg/L)														
Perchlorate	UG/L	--	--	--	--	--	--	--	<0.0022	--	--	--	--	--

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* DNX isomer inadvertently omitted by the analytical laboratory

Note: Detections not observed in effluent samples

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Barksdale, Wisconsin

Location ID		CLUB HOUSE-INFLOW	CLUB HOUSE-INFLOW	CLUB HOUSE-INFLOW	CLUB HOUSE-INFLOW	CLUB HOUSE-INFLOW	CLUB HOUSE-INFLOW
Date Sampled		8/4/2016*	11/30/2016	04/25/2017	06/06/2017	10/08/2018	08/21/2019
Parameter Name	Report Units	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
NNOCs Target Analytes (µg/L)							
1,3,5-Trinitrobenzene	UG/L	<0.017	--	<0.016 UJ	<0.017	<0.018	<0.016
1,3-Dinitrobenzene	UG/L	<0.014	--	<0.013 UJ	<0.014	<0.015	<0.013
1-Methyl-3-Nitrobenzene (3-Nitrotoluene)	UG/L	<0.025	--	<0.024 UJ	<0.025	<0.027	<0.024
1-Methyl-4-Nitrobenzene (4-Nitrotoluene)	UG/L	<0.026	--	<0.025 UJ	<0.025	<0.028	<0.025
2-Amino-4,6-Dinitrotoluene	UG/L	<0.021	--	<0.020 UJ	<0.021	<0.022	<0.020
2-Nitrotoluene	UG/L	<0.022	--	<0.021 UJ	<0.022	<0.023	<0.021
2- And 4-Nitrotoluene	UG/L	--	--	--	--	--	--
2,4,6-Trinitrotoluene	UG/L	<0.022	--	<0.021 UJ	<0.022	<0.023	<0.021
2,4,6-Trinitroxylen	UG/L	<0.012	--	<0.012 UJ	<0.012	<0.013	<0.011
4-Amino-2,6-Dinitrotoluene	UG/L	<0.019	--	<0.018 UJ	<0.019	<0.020	<0.018
Nitrobenzene	UG/L	<0.033	--	0.072 J^H	<0.032	<0.035	<0.031
Nitroglycerin	UG/L	<0.044	--	<0.043 UJ	<0.044	<0.048	<0.016
HMX	UG/L	<0.019	--	<0.018 UJ	<0.019	<0.020	<0.018
PETN	UG/L	<0.018	--	<0.017 UJ	<0.018	<0.019	<0.017
RDX	UG/L	<0.021	--	<0.020 UJ	<0.021	<0.022	<0.020
Tetryl	UG/L	<0.021	--	<0.020 UJ	<0.021	<0.022	<0.020
NNOCs DNT Isomers (µg/L)							
2,3-Dinitrotoluene	UG/L	<0.015	--	<0.014 UJ	<0.015	<0.016	<0.014
2,4-Dinitrotoluene	UG/L	<0.019	--	<0.018 UJ	<0.019	<0.020	<0.018
2,5-Dinitrotoluene	UG/L	<0.014	--	<0.013 UJ	<0.014	<0.015	<0.013
2,6-Dinitrotoluene	UG/L	<0.022	--	<0.021 UJ	<0.022	<0.023	<0.021
3,4-Dinitrotoluene	UG/L	<0.020	--	<0.019 UJ	<0.020	<0.021	<0.019
3,5-Dinitrotoluene	UG/L	<0.034	--	<0.033 UJ	<0.033	<0.036	<0.032
NNOCs DNX Isomers (µg/L)							
1,2-Dimethyl-3,4-Dinitrobenzene	UG/L	--	<0.23	<0.23	--	<0.25	<0.48
1,2-Dimethyl-3,5-Dinitrobenzene	UG/L	--	<0.32	<0.32	--	<0.35	<0.66
1,2-Dimethyl-3,6-Dinitrobenzene	UG/L	--	<0.40	<0.40	--	<0.43	<0.82
1,2-Dimethyl-4,5-Dinitrobenzene	UG/L	--	<0.38	<0.38	--	<0.41	<0.78
1,3-Dimethyl-2,4-Dinitrobenzene	UG/L	--	<0.44	<0.44	--	<0.48	<0.90
1,3-Dimethyl-2,5-Dinitrobenzene	UG/L	--	<0.41	<0.41	--	<0.44	<0.84
1,4-Dimethyl-2,3-Dinitrobenzene	UG/L	--	<0.37	<0.37	--	<0.40	<0.76
1,4-Dimethyl-2,5-Dinitrobenzene	UG/L	--	<0.74	<0.74	--	<0.80	<1.5
1,4-Dimethyl-2,6-Dinitrobenzene	UG/L	--	<0.22	<0.21	--	<0.23	<0.44
1,5-Dimethyl-2,3-Dinitrobenzene	UG/L	--	<0.25	<0.25	--	<0.28	<0.52
1,5-Dimethyl-2,4-Dinitrobenzene	UG/L	--	<0.26	<0.26	--	<0.29	<0.54
SVOCs (µg/L)							
Naphthalene	UG/L	--	--	--	--	--	--
Anions (µg/L)							
Perchlorate	UG/L	--	--	--	--	--	--

Notes:

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DNT = Dinitrotoluene

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Note: Detections not observed in effluent samples



Area Map (Optional)

FILE NUMBER:	
DESIGNED BY:	NS
DRAWN BY:	KJB
DATA QUALITY CHECK BY:	NS



The Chemours Company
500 West Jefferson Street
Suite 1600
Louisville, Kentucky 40202

Clubhouse Water System Flow Diagram

Former DuPont Barksdale Works
Barksdale, Wisconsin 54806

PROJECT NUMBER:
60595142

DATE:
Nov 2019

FIGURE NUMBER:

1



Environment Testing TestAmerica



ANALYTICAL REPORT

Eurofins TestAmerica, Denver
4955 Yarrow Street
Arvada, CO 80002
Tel: (303)736-0100

Laboratory Job ID: 280-127609-1

Client Project/Site: BAR-Clubhouse Well Sampling 2019

For:

Chemours Company FC, LLC The
c/o AECOM
Sabre Building, Suite 300
4051 Ogletown Road
Newark, Delaware 19713

Attn: Sharon Nordstrom

Authorized for release by:

9/17/2019 11:09:01 AM

Stephanie Rothmeyer, Project Manager I

(303)736-0182

stephanie.rothmeyer@testamericainc.com

Designee for

Michelle Johnston, Project Manager II

(303)736-0110

michelle.johnston@testamericainc.com

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

Client: Chemours Company FC, LLC The
Project/Site: BAR-Clubhouse Well Sampling 2019

Job ID: 280-127609-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

LCMS

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
%	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Chemours Company FC, LLC The
Project/Site: BAR-Clubhouse Well Sampling 2019

Job ID: 280-127609-1

Job ID: 280-127609-1

Laboratory: Eurofins TestAmerica, Denver

Narrative

CASE NARRATIVE

Client: Chemours Company FC, LLC The

Project: BAR-Clubhouse Well Sampling 2019

Report Number: 280-127609-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

Throughout this report the MDL is equivalent to the LOD and the RL is equivalent to the LOQ.

The LOD and LOQ have been adjusted for all dilutions performed.

RECEIPT

The sample was received on 8/23/2019 at 8:35 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.9° C.

SEMICVOLATILE ORGANIC COMPOUNDS (GC-MS)

Sample GW2019-CLUBHOUSE-INFLOW (280-127609-1) was analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 08/27/2019 and analyzed on 09/10/2019.

1,5-Dimethyl-2,3-Dinitrobenzene failed the recovery criteria low for the MS and MSD of sample GW2019-CLUBHOUSE-INFLOW (280-127609-1) in batch 280-470229. Refer to the QC report for details.

The initial calibration verification (ICV) result for batch 280-470229 was above the upper control limit for 1,2-Dimethyl-4,5-Dinitrobenzene. Sample results were non-detect, and have been reported as qualified data.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

EXPLOSIVES

Sample GW2019-CLUBHOUSE-INFLOW (280-127609-1) was analyzed for explosives in accordance with EPA SW-846 Method 8321A. The samples were prepared on 08/26/2019 and analyzed on 08/27/2019.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 280-468823. A LCSD was analyzed to demonstrate batch precision.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Chemours Company FC, LLC The
Project/Site: BAR-Clubhouse Well Sampling 2019

Job ID: 280-127609-1

Client Sample ID: GW2019-CLUBHOUSE-INFLOW

Lab Sample ID: 280-127609-1

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Denver

Method Summary

Client: Chemours Company FC, LLC The
Project/Site: BAR-Clubhouse Well Sampling 2019

Job ID: 280-127609-1

Method	Method Description	Protocol	Laboratory
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL DEN
8321A	Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)	SW846	TAL DEN
3520C	Liquid-Liquid Extraction (Continuous)	SW846	TAL DEN
3535	Solid-Phase Extraction (SPE)	SW846	TAL DEN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: Chemours Company FC, LLC The
Project/Site: BAR-Clubhouse Well Sampling 2019

Job ID: 280-127609-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
280-127609-1	GW2019-CLUBHOUSE-INFLOW	Water	08/21/19 15:30	08/23/19 08:35	

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Client Sample Results

Client: Chemours Company FC, LLC The
Project/Site: BAR-Clubhouse Well Sampling 2019

Job ID: 280-127609-1

Client Sample ID: GW2019-CLUBHOUSE-INFLOW

Lab Sample ID: 280-127609-1

Matrix: Water

Date Collected: 08/21/19 15:30

Date Received: 08/23/19 08:35

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dimethyl-3,4-Dinitrobenzene	0.48	U	10	0.48	ug/L		08/27/19 14:38	09/10/19 21:59	1
1,2-Dimethyl-3,5-Dinitrobenzene	0.66	U	10	0.66	ug/L		08/27/19 14:38	09/10/19 21:59	1
1,2-Dimethyl-3,6-Dinitrobenzene	0.82	U	10	0.82	ug/L		08/27/19 14:38	09/10/19 21:59	1
1,2-Dimethyl-4,5-Dinitrobenzene	0.78	U	10	0.78	ug/L		08/27/19 14:38	09/10/19 21:59	1
1,3-Dimethyl-2,4-Dinitrobenzene	0.90	U	10	0.90	ug/L		08/27/19 14:38	09/10/19 21:59	1
1,3-Dimethyl-2,5-Dinitrobenzene	0.84	U	10	0.84	ug/L		08/27/19 14:38	09/10/19 21:59	1
1,4-Dimethyl-2,3-Dinitrobenzene	0.76	U	10	0.76	ug/L		08/27/19 14:38	09/10/19 21:59	1
1,4-Dimethyl-2,5-Dinitrobenzene	1.5	U	20000	1.5	ug/L		08/27/19 14:38	09/10/19 21:59	1
1,4-Dimethyl-2,6-Dinitrobenzene	0.44	U	10	0.44	ug/L		08/27/19 14:38	09/10/19 21:59	1
1,5-Dimethyl-2,3-Dinitrobenzene	0.52	U F1	10	0.52	ug/L		08/27/19 14:38	09/10/19 21:59	1
1,5-Dimethyl-2,4-Dinitrobenzene	0.54	U	10	0.54	ug/L		08/27/19 14:38	09/10/19 21:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	71		48 - 135				08/27/19 14:38	09/10/19 21:59	1
2-Fluorobiphenyl	79		48 - 135				08/27/19 14:38	09/10/19 21:59	1
2-Fluorophenol	70		41 - 135				08/27/19 14:38	09/10/19 21:59	1
Nitrobenzene-d5	81		42 - 135				08/27/19 14:38	09/10/19 21:59	1
Phenol-d5	73		46 - 135				08/27/19 14:38	09/10/19 21:59	1
Terphenyl-d14	93		20 - 135				08/27/19 14:38	09/10/19 21:59	1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.016	U	0.095	0.016	ug/L		08/26/19 15:50	08/27/19 19:39	1
1,3-Dinitrobenzene	0.013	U	0.095	0.013	ug/L		08/26/19 15:50	08/27/19 19:39	1
2,3-Dinitrotoluene	0.014	U	0.095	0.014	ug/L		08/26/19 15:50	08/27/19 19:39	1
2,4,6-Trinitro-3-xylene	0.011	U	0.095	0.011	ug/L		08/26/19 15:50	08/27/19 19:39	1
2,4,6-Trinitrotoluene	0.021	U	0.095	0.021	ug/L		08/26/19 15:50	08/27/19 19:39	1
2,4-Dinitrotoluene	0.018	U	0.095	0.018	ug/L		08/26/19 15:50	08/27/19 19:39	1
2,5-Dinitrotoluene	0.013	U	0.095	0.013	ug/L		08/26/19 15:50	08/27/19 19:39	1
2,6-Dinitrotoluene	0.021	U	0.095	0.021	ug/L		08/26/19 15:50	08/27/19 19:39	1
2-Amino-4,6-dinitrotoluene	0.020	U	0.095	0.020	ug/L		08/26/19 15:50	08/27/19 19:39	1
2-Nitrotoluene	0.021	U	0.095	0.021	ug/L		08/26/19 15:50	08/27/19 19:39	1
3,4-Dinitrotoluene	0.019	U	0.095	0.019	ug/L		08/26/19 15:50	08/27/19 19:39	1
3,5-Dinitrotoluene	0.032	U	0.095	0.032	ug/L		08/26/19 15:50	08/27/19 19:39	1
3-Nitrotoluene	0.024	U	0.095	0.024	ug/L		08/26/19 15:50	08/27/19 19:39	1
4-Amino-2,6-dinitrotoluene	0.018	U	0.095	0.018	ug/L		08/26/19 15:50	08/27/19 19:39	1
4-Nitrotoluene	0.025	U	0.095	0.025	ug/L		08/26/19 15:50	08/27/19 19:39	1
HMX	0.018	U	0.095	0.018	ug/L		08/26/19 15:50	08/27/19 19:39	1
Nitrobenzene	0.031	U	0.095	0.031	ug/L		08/26/19 15:50	08/27/19 19:39	1
Nitroglycerin	0.016	U	0.13	0.016	ug/L		08/26/19 15:50	08/27/19 19:39	1
PETN	0.017	U	0.095	0.017	ug/L		08/26/19 15:50	08/27/19 19:39	1
RDX	0.020	U	0.095	0.020	ug/L		08/26/19 15:50	08/27/19 19:39	1
Tetryl	0.020	U	0.095	0.020	ug/L		08/26/19 15:50	08/27/19 19:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	79		48 - 130				08/26/19 15:50	08/27/19 19:39	1

Eurofins TestAmerica, Denver

Surrogate Summary

Client: Chemours Company FC, LLC The
Project/Site: BAR-Clubhouse Well Sampling 2019

Job ID: 280-127609-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (48-135)	FBP (48-135)	2FP (41-135)	NBZ (42-135)	PHL (46-135)	TPHL (20-135)
280-127609-1	GW2019-CLUBHOUSE-INFLOV	71	79	70	81	73	93
280-127609-1 MS	GW2019-CLUBHOUSE-INFLOV	78	89	73	89	72	96
280-127609-1 MSD	GW2019-CLUBHOUSE-INFLOV	79	89	76	91	81	97
LCS 280-468946/2-A	Lab Control Sample	79	87	78	89	81	95
MB 280-468946/1-A	Method Blank	74	84	76	88	78	94

Surrogate Legend

TBP = 2,4,6-Tribromophenol
 FBP = 2-Fluorobiphenyl
 2FP = 2-Fluorophenol
 NBZ = Nitrobenzene-d5
 PHL = Phenol-d5
 TPHL = Terphenyl-d14

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		NBZ (48-130)					
280-127609-1	GW2019-CLUBHOUSE-INFLOV	79					
LCS 280-468823/2-A	Lab Control Sample	83					
LCSD 280-468823/3-A	Lab Control Sample Dup	82					
MB 280-468823/1-A	Method Blank	70					

Surrogate Legend

NBZ = Nitrobenzene-d5

QC Sample Results

Client: Chemours Company FC, LLC The
Project/Site: BAR-Clubhouse Well Sampling 2019

Job ID: 280-127609-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 280-468946/1-A

Matrix: Water

Analysis Batch: 470229

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 468946

Analyte	MB		RL	MDL	Unit	D	Prepared		Dil Fac
	Result	Qualifier					Prepared	Analyzed	
1,2-Dimethyl-3,4-Dinitrobenzene	0.24	U	5.0	0.24	ug/L	08/27/19 14:38	09/10/19 19:31	1	
1,2-Dimethyl-3,5-Dinitrobenzene	0.33	U	5.0	0.33	ug/L	08/27/19 14:38	09/10/19 19:31	1	
1,2-Dimethyl-3,6-Dinitrobenzene	0.41	U	5.0	0.41	ug/L	08/27/19 14:38	09/10/19 19:31	1	
1,2-Dimethyl-4,5-Dinitrobenzene	0.39	U	5.0	0.39	ug/L	08/27/19 14:38	09/10/19 19:31	1	
1,3-Dimethyl-2,4-Dinitrobenzene	0.45	U	5.0	0.45	ug/L	08/27/19 14:38	09/10/19 19:31	1	
1,3-Dimethyl-2,5-Dinitrobenzene	0.42	U	5.0	0.42	ug/L	08/27/19 14:38	09/10/19 19:31	1	
1,4-Dimethyl-2,3-Dinitrobenzene	0.38	U	5.0	0.38	ug/L	08/27/19 14:38	09/10/19 19:31	1	
1,4-Dimethyl-2,5-Dinitrobenzene	0.76	U	10000	0.76	ug/L	08/27/19 14:38	09/10/19 19:31	1	
1,4-Dimethyl-2,6-Dinitrobenzene	0.22	U	5.0	0.22	ug/L	08/27/19 14:38	09/10/19 19:31	1	
1,5-Dimethyl-2,3-Dinitrobenzene	0.26	U	5.0	0.26	ug/L	08/27/19 14:38	09/10/19 19:31	1	
1,5-Dimethyl-2,4-Dinitrobenzene	0.27	U	5.0	0.27	ug/L	08/27/19 14:38	09/10/19 19:31	1	
Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac			
	%Recovery	Qualifier					Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	74		48 - 135	08/27/19 14:38	09/10/19 19:31	1			
2-Fluorobiphenyl	84		48 - 135	08/27/19 14:38	09/10/19 19:31	1			
2-Fluorophenol	76		41 - 135	08/27/19 14:38	09/10/19 19:31	1			
Nitrobenzene-d5	88		42 - 135	08/27/19 14:38	09/10/19 19:31	1			
Phenol-d5	78		46 - 135	08/27/19 14:38	09/10/19 19:31	1			
Terphenyl-d14	94		20 - 135	08/27/19 14:38	09/10/19 19:31	1			

Lab Sample ID: LCS 280-468946/2-A

Matrix: Water

Analysis Batch: 470229

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 468946

Analyte	Spike		LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
	Added							Limits	Limits
1,2-Dimethyl-3,4-Dinitrobenzene	50.0		46.0		ug/L		92	50 - 135	
1,2-Dimethyl-3,5-Dinitrobenzene	50.0		46.0		ug/L		92	50 - 135	
1,2-Dimethyl-3,6-Dinitrobenzene	50.0		46.4		ug/L		93	50 - 135	
1,2-Dimethyl-4,5-Dinitrobenzene	50.0		46.9		ug/L		94	50 - 135	
1,3-Dimethyl-2,4-Dinitrobenzene	50.0		45.8		ug/L		92	50 - 135	
1,3-Dimethyl-2,5-Dinitrobenzene	50.0		45.7		ug/L		91	50 - 135	
1,4-Dimethyl-2,3-Dinitrobenzene	50.0		46.4		ug/L		93	50 - 135	
1,4-Dimethyl-2,5-Dinitrobenzene	50.0	J	45.4		ug/L		91	50 - 135	
1,4-Dimethyl-2,6-Dinitrobenzene	50.0		47.4		ug/L		95	50 - 135	
1,5-Dimethyl-2,3-Dinitrobenzene	50.0		45.7		ug/L		91	50 - 135	
1,5-Dimethyl-2,4-Dinitrobenzene	50.0		46.9		ug/L		94	50 - 135	
Surrogate	LCS		LCS Result	LCS Qualifier	Unit	D	%Rec		
	%Recovery	Qualifier						Limits	Limits
2,4,6-Tribromophenol	79		48 - 135						
2-Fluorobiphenyl	87		48 - 135						
2-Fluorophenol	78		41 - 135						
Nitrobenzene-d5	89		42 - 135						
Phenol-d5	81		46 - 135						
Terphenyl-d14	95		20 - 135						

Eurofins TestAmerica, Denver

QC Sample Results

Client: Chemours Company FC, LLC The
Project/Site: BAR-Clubhouse Well Sampling 2019

Job ID: 280-127609-1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 280-127609-1 MS

Client Sample ID: GW2019-CLUBHOUSE-INFLOW

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 470229

Prep Batch: 468946

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	Limits
1,2-Dimethyl-3,4-Dinitrobenzene	0.48	U	100	94.2		ug/L		94	50 - 135	
1,2-Dimethyl-3,5-Dinitrobenzene	0.66	U	100	95.5		ug/L		96	50 - 135	
1,2-Dimethyl-3,6-Dinitrobenzene	0.82	U	100	92.6		ug/L		93	50 - 135	
1,2-Dimethyl-4,5-Dinitrobenzene	0.78	U	100	91.9		ug/L		92	50 - 135	
1,3-Dimethyl-2,4-Dinitrobenzene	0.90	U	100	91.6		ug/L		92	50 - 135	
1,3-Dimethyl-2,5-Dinitrobenzene	0.84	U	100	91.9		ug/L		92	50 - 135	
1,4-Dimethyl-2,3-Dinitrobenzene	0.76	U	100	92.7		ug/L		93	50 - 135	
1,4-Dimethyl-2,5-Dinitrobenzene	1.5	U	100	90.1	J	ug/L		90	50 - 135	
1,4-Dimethyl-2,6-Dinitrobenzene	0.44	U	100	91.2		ug/L		91	50 - 135	
1,5-Dimethyl-2,3-Dinitrobenzene	0.52	U F1	100	0.52	U F1	ug/L		0	50 - 135	
1,5-Dimethyl-2,4-Dinitrobenzene	0.54	U	100	91.3		ug/L		91	50 - 135	
MS MS										
Surrogate	%Recovery	Qualifier		Limits						
2,4,6-Tribromophenol	78			48 - 135						
2-Fluorobiphenyl	89			48 - 135						
2-Fluorophenol	73			41 - 135						
Nitrobenzene-d5	89			42 - 135						
Phenol-d5	72			46 - 135						
Terphenyl-d14	96			20 - 135						

Lab Sample ID: 280-127609-1 MSD

Client Sample ID: GW2019-CLUBHOUSE-INFLOW

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 470229

Prep Batch: 468946

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD Limit
1,2-Dimethyl-3,4-Dinitrobenzene	0.48	U	100	95.2		ug/L		95	50 - 135	1	30
1,2-Dimethyl-3,5-Dinitrobenzene	0.66	U	100	96.0		ug/L		96	50 - 135	1	30
1,2-Dimethyl-3,6-Dinitrobenzene	0.82	U	100	97.0		ug/L		97	50 - 135	5	30
1,2-Dimethyl-4,5-Dinitrobenzene	0.78	U	100	96.4		ug/L		96	50 - 135	5	30
1,3-Dimethyl-2,4-Dinitrobenzene	0.90	U	100	94.5		ug/L		94	50 - 135	3	30
1,3-Dimethyl-2,5-Dinitrobenzene	0.84	U	100	95.3		ug/L		95	50 - 135	4	30
1,4-Dimethyl-2,3-Dinitrobenzene	0.76	U	100	97.9		ug/L		98	50 - 135	5	30
1,4-Dimethyl-2,5-Dinitrobenzene	1.5	U	100	96.2	J	ug/L		96	50 - 135	7	30
1,4-Dimethyl-2,6-Dinitrobenzene	0.44	U	100	96.3		ug/L		96	50 - 135	5	30
1,5-Dimethyl-2,3-Dinitrobenzene	0.52	U F1	100	0.52	U F1	ug/L		0	50 - 135	NC	30
1,5-Dimethyl-2,4-Dinitrobenzene	0.54	U	100	97.4		ug/L		97	50 - 135	6	30
MSD MSD											
Surrogate	%Recovery	Qualifier		Limits							
2,4,6-Tribromophenol	79			48 - 135							
2-Fluorobiphenyl	89			48 - 135							
2-Fluorophenol	76			41 - 135							
Nitrobenzene-d5	91			42 - 135							
Phenol-d5	81			46 - 135							
Terphenyl-d14	97			20 - 135							

Eurofins TestAmerica, Denver

QC Sample Results

Client: Chemours Company FC, LLC The
Project/Site: BAR-Clubhouse Well Sampling 2019

Job ID: 280-127609-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS)

Lab Sample ID: MB 280-468823/1-A

Matrix: Water

Analysis Batch: 468900

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 468823

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,3,5-Trinitrobenzene	0.017	U	0.10	0.017	ug/L		08/26/19 15:50	08/27/19 18:03	1
1,3-Dinitrobenzene	0.014	U	0.10	0.014	ug/L		08/26/19 15:50	08/27/19 18:03	1
2,3-Dinitrotoluene	0.015	U	0.10	0.015	ug/L		08/26/19 15:50	08/27/19 18:03	1
2,4,6-Trinitro-3-xylene	0.012	U	0.10	0.012	ug/L		08/26/19 15:50	08/27/19 18:03	1
2,4,6-Trinitrotoluene	0.022	U	0.10	0.022	ug/L		08/26/19 15:50	08/27/19 18:03	1
2,4-Dinitrotoluene	0.019	U	0.10	0.019	ug/L		08/26/19 15:50	08/27/19 18:03	1
2,5-Dinitrotoluene	0.014	U	0.10	0.014	ug/L		08/26/19 15:50	08/27/19 18:03	1
2,6-Dinitrotoluene	0.022	U	0.10	0.022	ug/L		08/26/19 15:50	08/27/19 18:03	1
2-Amino-4,6-dinitrotoluene	0.021	U	0.10	0.021	ug/L		08/26/19 15:50	08/27/19 18:03	1
2-Nitrotoluene	0.022	U	0.10	0.022	ug/L		08/26/19 15:50	08/27/19 18:03	1
3,4-Dinitrotoluene	0.020	U	0.10	0.020	ug/L		08/26/19 15:50	08/27/19 18:03	1
3,5-Dinitrotoluene	0.034	U	0.10	0.034	ug/L		08/26/19 15:50	08/27/19 18:03	1
3-Nitrotoluene	0.025	U	0.10	0.025	ug/L		08/26/19 15:50	08/27/19 18:03	1
4-Amino-2,6-dinitrotoluene	0.019	U	0.10	0.019	ug/L		08/26/19 15:50	08/27/19 18:03	1
4-Nitrotoluene	0.026	U	0.10	0.026	ug/L		08/26/19 15:50	08/27/19 18:03	1
HMX	0.019	U	0.10	0.019	ug/L		08/26/19 15:50	08/27/19 18:03	1
Nitrobenzene	0.033	U	0.10	0.033	ug/L		08/26/19 15:50	08/27/19 18:03	1
Nitroglycerin	0.017	U	0.14	0.017	ug/L		08/26/19 15:50	08/27/19 18:03	1
PETN	0.018	U	0.10	0.018	ug/L		08/26/19 15:50	08/27/19 18:03	1
RDX	0.021	U	0.10	0.021	ug/L		08/26/19 15:50	08/27/19 18:03	1
Tetryl	0.021	U	0.10	0.021	ug/L		08/26/19 15:50	08/27/19 18:03	1
Surrogate	MB	MB					Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	%Recovery	Qualifier	Limits				08/26/19 15:50	08/27/19 18:03	1
	70		48 - 130						

Lab Sample ID: LCS 280-468823/2-A

Matrix: Water

Analysis Batch: 468900

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 468823

Analyte	Spike Added	LC S	LC S	D	%Rec	Limits
		Result	Qualifier			
1,3,5-Trinitrobenzene	0.500	0.502		ug/L	100	48 - 135
1,3-Dinitrobenzene	0.500	0.485		ug/L	97	64 - 122
2,3-Dinitrotoluene	0.500	0.404		ug/L	81	50 - 150
2,4,6-Trinitro-3-xylene	0.500	0.450		ug/L	90	50 - 150
2,4,6-Trinitrotoluene	0.500	0.424		ug/L	85	10 - 145
2,4-Dinitrotoluene	0.500	0.445		ug/L	89	55 - 117
2,5-Dinitrotoluene	0.500	0.417		ug/L	83	50 - 150
2,6-Dinitrotoluene	0.500	0.421		ug/L	84	54 - 123
2-Amino-4,6-dinitrotoluene	0.500	0.455		ug/L	91	47 - 134
2-Nitrotoluene	0.500	0.350		ug/L	70	25 - 127
3,4-Dinitrotoluene	0.501	0.433		ug/L	86	50 - 150
3,5-Dinitrotoluene	0.500	0.434		ug/L	87	50 - 150
3-Nitrotoluene	0.500	0.350		ug/L	70	18 - 123
4-Amino-2,6-dinitrotoluene	0.500	0.440		ug/L	88	50 - 139
4-Nitrotoluene	0.500	0.379		ug/L	76	27 - 128
HMX	0.500	0.468		ug/L	94	63 - 119
Nitrobenzene	0.500	0.424		ug/L	85	39 - 131
Nitroglycerin	0.500	0.429		ug/L	86	60 - 121

Eurofins TestAmerica, Denver

QC Sample Results

Client: Chemours Company FC, LLC The
Project/Site: BAR-Clubhouse Well Sampling 2019

Job ID: 280-127609-1

Method: 8321A - Nitroaromatic and Nitramine Compounds (Explosives) (LC/MS) (Continued)

Lab Sample ID: LCS 280-468823/2-A

Matrix: Water

Analysis Batch: 468900

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 468823

%Rec.

Limits

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	
PETN	0.500	0.429		ug/L		86	46 - 151
RDX	0.500	0.484		ug/L		97	71 - 127
Tetryl	0.500	0.590		ug/L		118	15 - 134
Surrogate	LCS %Recovery	LCS Qualifier	LCS Limits				
Nitrobenzene-d5	83		48 - 130				

Lab Sample ID: LCSD 280-468823/3-A

Matrix: Water

Analysis Batch: 468900

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 468823

%Rec.

RPD

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec		
1,3,5-Trinitrobenzene	0.500	0.507		ug/L		101	48 - 135	1
1,3-Dinitrobenzene	0.500	0.427		ug/L		85	64 - 122	13
2,3-Dinitrotoluene	0.500	0.418		ug/L		84	50 - 150	3
2,4,6-Trinitro-3-xylene	0.500	0.473		ug/L		95	50 - 150	5
2,4,6-Trinitrotoluene	0.500	0.418		ug/L		84	10 - 145	1
2,4-Dinitrotoluene	0.500	0.447		ug/L		89	55 - 117	0
2,5-Dinitrotoluene	0.500	0.291		ug/L		58	50 - 150	36
2,6-Dinitrotoluene	0.500	0.464		ug/L		93	54 - 123	10
2-Amino-4,6-dinitrotoluene	0.500	0.444		ug/L		89	47 - 134	2
2-Nitrotoluene	0.500	0.377		ug/L		75	25 - 127	7
3,4-Dinitrotoluene	0.501	0.318		ug/L		64	50 - 150	30
3,5-Dinitrotoluene	0.500	0.432		ug/L		86	50 - 150	1
3-Nitrotoluene	0.500	0.370		ug/L		74	18 - 123	6
4-Amino-2,6-dinitrotoluene	0.500	0.481		ug/L		96	50 - 139	9
4-Nitrotoluene	0.500	0.366		ug/L		73	27 - 128	3
HMX	0.500	0.471		ug/L		94	63 - 119	1
Nitrobenzene	0.500	0.417		ug/L		83	39 - 131	2
Nitroglycerin	0.500	0.439		ug/L		88	60 - 121	2
PETN	0.500	0.416		ug/L		83	46 - 151	3
RDX	0.500	0.505		ug/L		101	71 - 127	4
Tetryl	0.500	0.629		ug/L		126	15 - 134	6
Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits				RPD	Limit
Nitrobenzene-d5	82		48 - 130					

Eurofins TestAmerica, Denver

QC Association Summary

Client: Chemours Company FC, LLC The
Project/Site: BAR-Clubhouse Well Sampling 2019

Job ID: 280-127609-1

GC/MS Semi VOA

Prep Batch: 468946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-127609-1	GW2019-CLUBHOUSE-INFLOW	Total/NA	Water	3520C	
MB 280-468946/1-A	Method Blank	Total/NA	Water	3520C	
LCS 280-468946/2-A	Lab Control Sample	Total/NA	Water	3520C	
280-127609-1 MS	GW2019-CLUBHOUSE-INFLOW	Total/NA	Water	3520C	
280-127609-1 MSD	GW2019-CLUBHOUSE-INFLOW	Total/NA	Water	3520C	

Analysis Batch: 470229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-127609-1	GW2019-CLUBHOUSE-INFLOW	Total/NA	Water	8270C	468946
MB 280-468946/1-A	Method Blank	Total/NA	Water	8270C	468946
LCS 280-468946/2-A	Lab Control Sample	Total/NA	Water	8270C	468946
280-127609-1 MS	GW2019-CLUBHOUSE-INFLOW	Total/NA	Water	8270C	468946
280-127609-1 MSD	GW2019-CLUBHOUSE-INFLOW	Total/NA	Water	8270C	468946

LCMS

Prep Batch: 468823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-127609-1	GW2019-CLUBHOUSE-INFLOW	Total/NA	Water	3535	
MB 280-468823/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-468823/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 280-468823/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 468900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-127609-1	GW2019-CLUBHOUSE-INFLOW	Total/NA	Water	8321A	468823
MB 280-468823/1-A	Method Blank	Total/NA	Water	8321A	468823
LCS 280-468823/2-A	Lab Control Sample	Total/NA	Water	8321A	468823
LCSD 280-468823/3-A	Lab Control Sample Dup	Total/NA	Water	8321A	468823

Lab Chronicle

Client: Chemours Company FC, LLC The
Project/Site: BAR-Clubhouse Well Sampling 2019

Job ID: 280-127609-1

Client Sample ID: GW2019-CLUBHOUSE-INFLOW

Lab Sample ID: 280-127609-1

Matrix: Water

Date Collected: 08/21/19 15:30

Date Received: 08/23/19 08:35

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			500 mL	1 mL	468946	08/27/19 14:38	FGL	TAL DEN
Total/NA	Analysis	8270C		1	200 uL	1.0 mL	470229	09/10/19 21:59	MPF	TAL DEN
Total/NA	Prep	3535			1048 mL	5 mL	468823	08/26/19 15:50	KSA	TAL DEN
Total/NA	Analysis	8321A		1			468900	08/27/19 19:39	AGCM	TAL DEN

Laboratory References:

TAL DEN = Eurofins TestAmerica, Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Accreditation/Certification Summary

Client: Chemours Company FC, LLC The
Project/Site: BAR-Clubhouse Well Sampling 2019

Job ID: 280-127609-1

Laboratory: Eurofins TestAmerica, Denver

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State Program	999615430	08-31-20

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Login Sample Receipt Checklist

Client: Chemours Company FC, LLC The

Job Number: 280-127609-1

Login Number: 127609

List Source: Eurofins TestAmerica, Denver

List Number: 1

Creator: Zimmerman, Steven M

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	