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**From:** Pooler, Cary <cary.pooler@aecom.com>  
**Sent:** Wednesday, December 22, 2021 7:50 AM  
**To:** Paul Bretting  
**Cc:** Bradley.S.Nave@chemours.com; Richard, Philip E - DNR; Schmidt, Eric  
**Subject:** 2021 Clubhouse Groundwater Sampling Results  
**Attachments:** 2021 Clubhouse Groundwater Sample Results Letter\_12.22.2021.pdf

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Hi Paul:

On behalf of Chemours, attached are the laboratory analytical results for the groundwater sample collected in 2021 from the Clubhouse water supply well. As has been the case historically, no former production-related constituents were detected above laboratory detection limits in the sample.

Please note that Phil Richard with WDNR is copied on this communication.

If you have any questions or comments, feel free to contact me or Brad Nave at (812) 923-1136.

Thanks,

Cary

**C.E. "Cary" Pooler, III, P.G.**  
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December 22, 2021

Mr. Paul Bretting  
Bretting 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 October 10, 2021, 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) at the new clubhouse. 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 installed in the new clubhouse building in September 2021; however, the system is still connected to the original drinking water supply well (i.e. the same well that was connected to the former clubhouse building). A visual inspection of the system was conducted during sampling 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 2022. 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](mailto: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: Phil Richard, WDNR  
Cary E. Pooler, AECOM  
Eric Schmidt, 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								
<b>NNOCs Target Analytes (µg/L)</b>													
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	<b>0.18 J<sup>1</sup></b>	<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-Trinitroxyene	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	<0.029	--	<0.15	<0.15	<0.15	<0.15	<0.020	<0.049	<0.033	<0.033	<0.025	<0.025
Nitroglycerin	UG/L	<0.088	--	<0.088	<0.088	<0.088	<0.088	--	<0.088	<b>0.044 J<sup>1</sup></b>	<0.039	<0.049	<0.049
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
<b>NNOCs DNT Isomers (µg/L)</b>													
2,3-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	--	--	--	--	--
2,4-Dinitrotoluene	UG/L	<0.025	--	<0.017	<0.017	<0.017	<0.017	<0.030	<0.115	<b>0.13 J<sup>1</sup></b>	<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	<b>0.045 J<sup>1</sup></b>	<0.039	<0.012	<0.012
3,4-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	--	--	--	--	--
3,5-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	--	--	--	--	--
<b>NNOCs DNX Isomers (µg/L)</b>													
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	--	--	--	--	--	--	--	--	--	--	--	--
1,4-Dimethyl-2,6-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	--	--	--
1,5-Dimethyl-2,3-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	--	--	--
1,5-Dimethyl-2,4-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	--	--	--
<b>SVOCs (µg/L)</b>													
Naphthalene	UG/L	--	--	--	--	--	--	--	--	<0.15	--	--	--
<b>Anions (µg/L)</b>													
Perchlorate	UG/L	--	--	--	--	--	--	--	--	--	--	--	--

**Notes:**

NNOC = Nitroaromatic and Nitramine Organic Compounds

DNT = Dinitrotoluene

DNX = Dinitroxyene

SVOC = Semi Volatile Organic Compound

INFLOW-D = Duplicate Sample

< = 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

J<sup>1</sup> = 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<sup>H</sup> = 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.

U: Analyte was analyzed, but not detected

UJ: Not detected. Reporting limit may not be accurate or precise

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	Report Result											
<b>NNOCs Target Analytes (µg/L)</b>														
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-Trinitroxylyene	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	<0.025	<0.025	<0.025	<0.025	<0.020	<0.036	--	<0.033	<0.032	<0.031	<0.032	<0.033	<0.033
Nitroglycerin	UG/L	<0.049	<0.030	<0.030	<0.030	<0.039	<0.042	--	<0.045	<0.044	<0.043	<0.043	<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
<b>NNOCs DNT Isomers (µg/L)</b>														
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	--	<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
<b>NNOCs DNX Isomers (µg/L)</b>														
1,2-Dimethyl-3,4-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	<0.24	<0.24	<0.23	--
1,2-Dimethyl-3,5-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	<0.33	<0.33	<0.31	--
1,2-Dimethyl-3,6-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	<0.41	<0.41	<0.39	--
1,2-Dimethyl-4,5-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	<0.39	<0.39	<0.37	--
1,3-Dimethyl-2,4-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	<0.45	<0.45	<0.42	--
1,3-Dimethyl-2,5-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	<0.42	<0.42	<0.40	--
1,4-Dimethyl-2,3-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	<0.38	<0.38	<0.36	--
1,4-Dimethyl-2,5-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	<0.76	<0.72	<0.72	--
1,4-Dimethyl-2,6-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	<0.22	<0.22	<0.21	--
1,5-Dimethyl-2,3-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	<0.26	<0.26	<0.25	--
1,5-Dimethyl-2,4-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	<0.27	<0.27	<0.25	--
<b>SVOCs (µg/L)</b>														
Naphthalene	UG/L	--	<0.78	<0.78	--	--	--	--	--	--	--	--	--	--
<b>Anions (µg/L)</b>														
Perchlorate	UG/L	--	--	--	--	--	--	<0.0022	--	--	--	--	--	--

**Notes:**  
 NNOC = Nitroaromatic and Nitramine Organic Compounds  
 DNT = Dinitrotoluene  
 DNX = Dinitroxylyene  
 SVOC = Semi Volatile Organic Compound  
 INFLOW-D = Duplicate Sample  
 < = not detected above the laboratory reporting limit  
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 J<sup>1</sup> = 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<sup>H</sup> = 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.  
 U: Analyte was analyzed, but not detected  
 UJ: Not detected. Reporting limit may not be accurate or precise  
 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	CLUB HOUSE- INFLOW	CLUB HOUSE- INFLOW	CLUB HOUSE- INFLOW	CLUB HOUSE- INFLOW	CLUB HOUSE- INFLOW	CLUB HOUSE- INFLOW	CLUB HOUSE- INFLOW	CLUB HOUSE- INFLOW-D
Date Sampled		8/4/2016*	11/30/2016	04/25/2017	06/06/2017	10/08/2018	08/21/2019	08/25/2020	10/05/2021	10/05/2021
Parameter Name	Report Units	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result	Report Result
<b>NNOCs Target Analytes (µg/L)</b>										
1,3,5-Trinitrobenzene	UG/L	<0.017	--	<0.016 UJ	<0.017	<0.018	<0.016	<0.016	<0.016	<0.016
1,3-Dinitrobenzene	UG/L	<0.014	--	<0.013 UJ	<0.014	<0.015	<0.013	<0.013	<0.013	<0.013
1-Methyl-3-Nitrobenzene (3-Nitrotoluene)	UG/L	<0.025	--	<0.024 UJ	<0.025	<0.027	<0.024	<0.024	<0.024	<0.024
1-Methyl-4-Nitrobenzene (4-Nitrotoluene)	UG/L	<0.026	--	<0.025 UJ	<0.025	<0.028	<0.025	<0.025	<0.025	<0.025
2-Amino-4,6-Dinitrotoluene	UG/L	<0.021	--	<0.020 UJ	<0.021	<0.022	<0.020	<0.02	<0.02	<0.02
2-Nitrotoluene	UG/L	<0.022	--	<0.021 UJ	<0.022	<0.023	<0.021	<0.021	<0.021	<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	<0.021	<0.021	<0.021
2,4,6-Trinitroxylyene	UG/L	<0.012	--	<0.012 UJ	<0.012	<0.013	<0.011	<0.011	<0.012	<0.012
4-Amino-2,6-Dinitrotoluene	UG/L	<0.019	--	<0.018 UJ	<0.019	<0.020	<0.018	<0.018	<0.018	<0.018
Nitrobenzene	UG/L	<0.033	--	<b>0.072 J<sup>H</sup></b>	<0.032	<0.035	<0.031	<0.031	<0.032	<0.031
Nitroglycerin	UG/L	<0.044	--	<0.043 UJ	<0.044	<0.048	<0.016	<0.016	<0.016	<0.016
HMX	UG/L	<0.019	--	<0.018 UJ	<0.019	<0.020	<0.018	<0.018	<0.018	<0.018
PETN	UG/L	<0.018	--	<0.017 UJ	<0.018	<0.019	<0.017	<0.017	<0.017	<0.017
RDX	UG/L	<0.021	--	<0.020 UJ	<0.021	<0.022	<0.020	<0.020	<0.04	<0.04
Tetryl	UG/L	<0.021	--	<0.020 UJ	<0.021	<0.022	<0.020	<0.020	<0.02	<0.02
<b>NNOCs DNT Isomers (µg/L)</b>										
2,3-Dinitrotoluene	UG/L	<0.015	--	<0.014 UJ	<0.015	<0.016	<0.014	<0.014	<0.014	<0.014
2,4-Dinitrotoluene	UG/L	<0.019	--	<0.018 UJ	<0.019	<0.020	<0.018	<0.018	<0.018	<0.018
2,5-Dinitrotoluene	UG/L	<0.014	--	<0.013 UJ	<0.014	<0.015	<0.013	<0.013	<0.013	<0.013
2,6-Dinitrotoluene	UG/L	<0.022	--	<0.021 UJ	<0.022	<0.023	<0.021	<0.021	<0.021	<0.021
3,4-Dinitrotoluene	UG/L	<0.020	--	<0.019 UJ	<0.020	<0.021	<0.019	<0.019	<0.019	<0.019
3,5-Dinitrotoluene	UG/L	<0.034	--	<0.033 UJ	<0.033	<0.036	<0.032	<0.032	<0.033	<0.032
<b>NNOCs DNX Isomers (µg/L)</b>										
1,2-Dimethyl-3,4-Dinitrobenzene	UG/L	--	<0.23	<0.23	--	<0.25	<0.48	<0.23	<0.23	<0.23
1,2-Dimethyl-3,5-Dinitrobenzene	UG/L	--	<0.32	<0.32	--	<0.35	<0.66	<0.32	<0.32	<0.32
1,2-Dimethyl-3,6-Dinitrobenzene	UG/L	--	<0.40	<0.40	--	<0.43	<0.82	<0.39	<0.39	<0.39
1,2-Dimethyl-4,5-Dinitrobenzene	UG/L	--	<0.38	<0.38	--	<0.41	<0.78	<0.37	<0.37	<0.37
1,3-Dimethyl-2,4-Dinitrobenzene	UG/L	--	<0.44	<0.44	--	<0.48	<0.90	<0.43	<0.43	<0.43
1,3-Dimethyl-2,5-Dinitrobenzene	UG/L	--	<0.41	<0.41	--	<0.44	<0.84	<0.40	<0.40	<0.40
1,4-Dimethyl-2,3-Dinitrobenzene	UG/L	--	<0.37	<0.37	--	<0.40	<0.76	<0.36	<0.36	<0.36
1,4-Dimethyl-2,5-Dinitrobenzene	UG/L	--	<0.74	<0.74	--	<0.80	<1.5	<0.73	<0.73	<0.73
1,4-Dimethyl-2,6-Dinitrobenzene	UG/L	--	<0.22	<0.21	--	<0.23	<0.44	<0.21	<0.21	<0.21
1,5-Dimethyl-2,3-Dinitrobenzene	UG/L	--	<0.25	<0.25	--	<0.28	<0.52	<0.25	<0.25	<0.25
1,5-Dimethyl-2,4-Dinitrobenzene	UG/L	--	<0.26	<0.26	--	<0.29	<0.54	<0.26	<0.26	<0.26
<b>SVOCs (µg/L)</b>										
Naphthalene	UG/L	--	--	--	--	--	--	--	--	--
<b>Anions (µg/L)</b>										
Perchlorate	UG/L	--	--	--	--	--	--	--	--	--

**Notes:**

NNOC = Nitroaromatic and Nitramine Organic Compounds

DNT = Dinitrotoluene

DNX = Dinitroxylyene

SVOC = Semi Volatile Organic Compound

INFLOW-D = Duplicate Sample

< = 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

J<sup>1</sup> = 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<sup>H</sup> = 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.

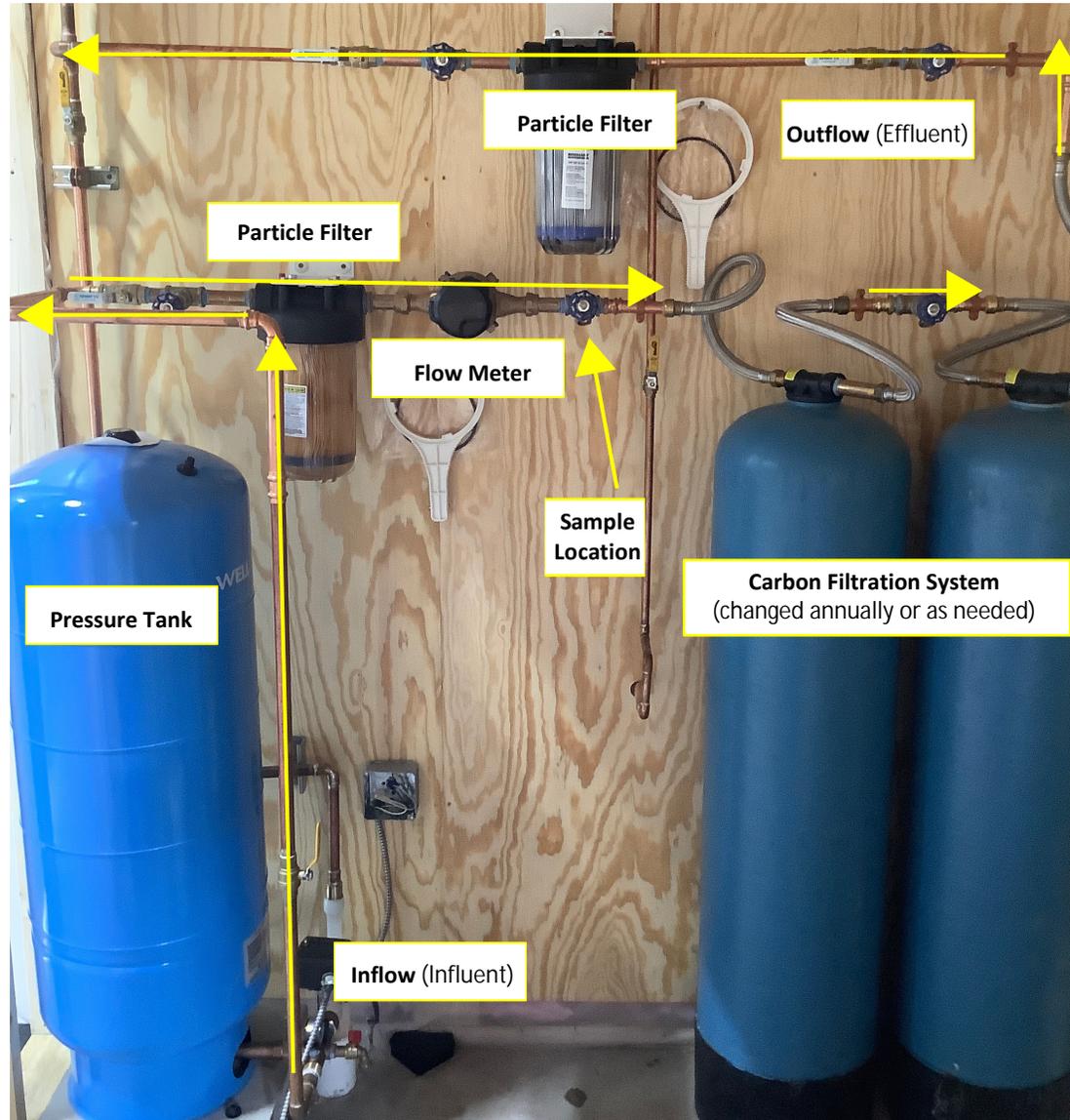
U: Analyte was analyzed, but not detected

UJ: Not detected. Reporting limit may not be accurate or precise

UG/L = micrograms per liter or parts per billion

\* DNX isomer inadvertently omitted by the analytical laboratory

Note: Detections not observed in effluent samples



O:\GIS\BAR\_GIS\Map\_Files\BrettingClubhouse\12016\Fig01\_SystemDiagram.mxd

Area Map (Optional)

FILE NUMBER:	
DESIGNED BY:	DN
DRAWN BY:	DN
DATA QUALITY CHECK BY:	ES



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:  
 60648641

DATE:  
 Dec 2021

FIGURE NUMBER:

1

## ANALYTICAL REPORT

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

Laboratory Job ID: 280-153843-2

Client Project/Site: BAR-Clubhouse Well Sampling 2021  
Revision: 1

**For:**

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

Attn: Sharon Nordstrom



Authorized for release by:  
12/20/2021 11:07:48 AM

Michelle Johnston, Project Manager II  
(303)736-0110

[Michelle.Johnston@Eurofinset.com](mailto:Michelle.Johnston@Eurofinset.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

*The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 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: The Chemours Company FC, LLC  
Project/Site: BAR-Clubhouse Well Sampling 2021

Job ID: 280-153843-2

## Qualifiers

### GC/MS Semi VOA

Qualifier	Qualifier Description
J	Reported value was between the limit of detection and the limit of quantitation.

### LCMS

Qualifier	Qualifier Description
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.

## 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
CFU	Colony Forming Unit
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)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
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)
TNTC	Too Numerous To Count

# Case Narrative

Client: The Chemours Company FC, LLC  
Project/Site: BAR-Clubhouse Well Sampling 2021

Job ID: 280-153843-2

**Job ID: 280-153843-2**

**Laboratory: Eurofins TestAmerica, Denver**

## Narrative

### CASE NARRATIVE

**Client: The Chemours Company FC, LLC**  
**Project: BAR-Clubhouse Well Sampling 2021**  
**Report Number: 280-153843-2**

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.

The LOD and LOQ for soil samples have been dry weight adjusted.

#### **Revision - 12/20/2021**

The report was revised for the following:

- Report sample GW2021-CLUBHOUSE-INFLOW (280-153843-2) as ND for all DNT analytes, including 3,4-DNT and 2,3-DNT.
- Additional case narrative comment added to section Explosives.

#### **Sample Arrival and Receipt**

The samples were received on 10/7/2021 10:55 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 5.4° C, 5.6° C and 5.8° C.

#### **Receipt Exceptions**

In accordance with the client's instruction received 11/3/2021, sample GW2021-PZ16-POT-INFLOW (280-153843-1) was reported under separate cover (280-153843-1).

No other anomalies were observed during sample receipt.

#### **Semivolatiles**

Samples GW2021-CLUBHOUSE-INFLOW (280-153843-2) and GW2021-CLUBHOUSE-INFLOW-D (280-153843-3) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 10/12/2021 and analyzed on 10/25/2021.

The CCV and ICAL standard are outside of laboratory 1 year SOP expiration: GW2021-CLUBHOUSE-INFLOW (280-153843-2), GW2021-CLUBHOUSE-INFLOW (280-153843-2[MS]), GW2021-CLUBHOUSE-INFLOW (280-153843-2[MSD]) and GW2021-CLUBHOUSE-INFLOW-D (280-153843-3).

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

#### **Explosives**

Samples GW2021-CLUBHOUSE-INFLOW (280-153843-2) and GW2021-CLUBHOUSE-INFLOW-D (280-153843-3) were analyzed for explosives in accordance with EPA SW-846 Method 8321A. The samples were prepared on 10/08/2021 and analyzed on 10/12/2021 and 10/14/2021.

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the method. Due to matrix interference with the 13C3 RDX internal standard, samples GW2021-CLUBHOUSE-INFLOW (280-153843-2) and GW2021-CLUBHOUSE-INFLOW-D (280-153843-3) had to be analyzed at dilutions. The surrogate recoveries were calculated from diluted samples. The reporting limits have been adjusted relative to the dilutions required.

# Case Narrative

Client: The Chemours Company FC, LLC  
Project/Site: BAR-Clubhouse Well Sampling 2021

Job ID: 280-153843-2

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## Job ID: 280-153843-2 (Continued)

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### Laboratory: Eurofins TestAmerica, Denver (Continued)

The 3,4-Dinitrotoluene, 2,3-Dinitrotoluene, 3,5-Dinitrotoluene, 2,4,6-Trinitro-3-xylene and 2,5-Dinitrotoluene spiking solution was omitted during the extraction process for the LCS, LCSD, MS and MSD associated with prep batch 280-552841 due to the unavailability of 2,4,6-Trinitro-3-xylene; therefore, percent recoveries are unavailable.

Target analytes 3,4-Dinitrotoluene, 2,3-Dinitrotoluene, 3,5-Dinitrotoluene, 2,4,6-Trinitro-3-xylene and 2,5-Dinitrotoluene were not available for inclusion in the initial calibration (ICAL) and continuing calibration (CCV) standards associated with this analysis. Presence/absence of these analytes in samples was assessed by review of chromatographic response at the expected retention times of these analytes (based on a previous ICAL). These analytes were determined to be Non-Detected (ND) and are reported as such at the historically generated LOD/LOQ values.

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



# Detection Summary

Client: The Chemours Company FC, LLC  
Project/Site: BAR-Clubhouse Well Sampling 2021

Job ID: 280-153843-2

**Client Sample ID: GW2021-CLUBHOUSE-INFLOW**

**Lab Sample ID: 280-153843-2**

No Detections.

**Client Sample ID: GW2021-CLUBHOUSE-INFLOW-D**

**Lab Sample ID: 280-153843-3**

No Detections.

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This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Denver

# Method Summary

Client: The Chemours Company FC, LLC  
Project/Site: BAR-Clubhouse Well Sampling 2021

Job ID: 280-153843-2

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: The Chemours Company FC, LLC  
Project/Site: BAR-Clubhouse Well Sampling 2021

Job ID: 280-153843-2

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<u>Lab Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Collected</u>	<u>Received</u>
280-153843-2	GW2021-CLUBHOUSE-INFLOW	Water	10/05/21 12:00	10/07/21 10:55
280-153843-3	GW2021-CLUBHOUSE-INFLOW-D	Water	10/05/21 12:00	10/07/21 10:55

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# Client Sample Results

Client: The Chemours Company FC, LLC  
 Project/Site: BAR-Clubhouse Well Sampling 2021

Job ID: 280-153843-2

**Client Sample ID: GW2021-CLUBHOUSE-INFLOW**

**Lab Sample ID: 280-153843-2**

**Date Collected: 10/05/21 12:00**

**Matrix: Water**

**Date Received: 10/07/21 10:55**

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dimethyl-3,4-Dinitrobenzene	<0.23		4.8	0.23	ug/L		10/12/21 16:10	10/25/21 13:00	1
1,2-Dimethyl-3,5-Dinitrobenzene	<0.32		4.8	0.32	ug/L		10/12/21 16:10	10/25/21 13:00	1
1,2-Dimethyl-3,6-Dinitrobenzene	<0.39		4.8	0.39	ug/L		10/12/21 16:10	10/25/21 13:00	1
1,2-Dimethyl-4,5-Dinitrobenzene	<0.37		4.8	0.37	ug/L		10/12/21 16:10	10/25/21 13:00	1
1,3-Dimethyl-2,4-Dinitrobenzene	<0.43		4.8	0.43	ug/L		10/12/21 16:10	10/25/21 13:00	1
1,3-Dimethyl-2,5-Dinitrobenzene	<0.40		4.8	0.40	ug/L		10/12/21 16:10	10/25/21 13:00	1
1,4-Dimethyl-2,3-Dinitrobenzene	<0.36		4.8	0.36	ug/L		10/12/21 16:10	10/25/21 13:00	1
1,4-Dimethyl-2,5-Dinitrobenzene	<0.73		9600	0.73	ug/L		10/12/21 16:10	10/25/21 13:00	1
1,4-Dimethyl-2,6-Dinitrobenzene	<0.21		4.8	0.21	ug/L		10/12/21 16:10	10/25/21 13:00	1
1,5-Dimethyl-2,3-Dinitrobenzene	<0.25		4.8	0.25	ug/L		10/12/21 16:10	10/25/21 13:00	1
1,5-Dimethyl-2,4-Dinitrobenzene	<0.26		4.8	0.26	ug/L		10/12/21 16:10	10/25/21 13:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	74		48 - 135	10/12/21 16:10	10/25/21 13:00	1
2-Fluorobiphenyl	65		48 - 135	10/12/21 16:10	10/25/21 13:00	1
2-Fluorophenol	61		41 - 135	10/12/21 16:10	10/25/21 13:00	1
Nitrobenzene-d5	61		42 - 135	10/12/21 16:10	10/25/21 13:00	1
Phenol-d5	66		46 - 135	10/12/21 16:10	10/25/21 13:00	1
Terphenyl-d14	84		20 - 135	10/12/21 16:10	10/25/21 13:00	1

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	<0.016		0.096	0.016	ug/L		10/08/21 17:59	10/12/21 17:56	1
1,3-Dinitrobenzene	<0.013		0.096	0.013	ug/L		10/08/21 17:59	10/12/21 17:56	1
2,3-Dinitrotoluene	<0.014		0.096	0.014	ug/L		10/08/21 17:59	10/12/21 17:56	1
2,4,6-Trinitro-3-xylene	<0.012		0.096	0.012	ug/L		10/08/21 17:59	10/12/21 17:56	1
2,4,6-Trinitrotoluene	<0.021		0.096	0.021	ug/L		10/08/21 17:59	10/12/21 17:56	1
2,4-Dinitrotoluene	<0.018		0.096	0.018	ug/L		10/08/21 17:59	10/12/21 17:56	1
2,5-Dinitrotoluene	<0.013		0.096	0.013	ug/L		10/08/21 17:59	10/12/21 17:56	1
2,6-Dinitrotoluene	<0.021		0.096	0.021	ug/L		10/08/21 17:59	10/12/21 17:56	1
2-Amino-4,6-dinitrotoluene	<0.020		0.096	0.020	ug/L		10/08/21 17:59	10/12/21 17:56	1
2-Nitrotoluene	<0.021		0.096	0.021	ug/L		10/08/21 17:59	10/12/21 17:56	1
3,4-Dinitrotoluene	<0.019		0.096	0.019	ug/L		10/08/21 17:59	10/12/21 17:56	1
3,5-Dinitrotoluene	<0.033		0.096	0.033	ug/L		10/08/21 17:59	10/12/21 17:56	1
3-Nitrotoluene	<0.024		0.096	0.024	ug/L		10/08/21 17:59	10/12/21 17:56	1
4-Amino-2,6-dinitrotoluene	<0.018		0.096	0.018	ug/L		10/08/21 17:59	10/12/21 17:56	1
4-Nitrotoluene	<0.025		0.096	0.025	ug/L		10/08/21 17:59	10/12/21 17:56	1
HMX	<0.018		0.096	0.018	ug/L		10/08/21 17:59	10/12/21 17:56	1
Nitrobenzene	<0.032		0.096	0.032	ug/L		10/08/21 17:59	10/12/21 17:56	1
Nitroglycerin	<0.016		0.13	0.016	ug/L		10/08/21 17:59	10/12/21 17:56	1
PETN	<0.017		0.096	0.017	ug/L		10/08/21 17:59	10/12/21 17:56	1
Tetryl	<0.020		0.096	0.020	ug/L		10/08/21 17:59	10/12/21 17:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	89		48 - 130	10/08/21 17:59	10/12/21 17:56	1

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
RDX	<0.040		0.19	0.040	ug/L		10/08/21 17:59	10/14/21 12:24	2

Eurofins TestAmerica, Denver

# Client Sample Results

Client: The Chemours Company FC, LLC  
Project/Site: BAR-Clubhouse Well Sampling 2021

Job ID: 280-153843-2

**Client Sample ID: GW2021-CLUBHOUSE-INFLOW**

**Lab Sample ID: 280-153843-2**

**Date Collected: 10/05/21 12:00**

**Matrix: Water**

**Date Received: 10/07/21 10:55**

<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Nitrobenzene-d5	80	D	48 - 130	10/08/21 17:59	10/14/21 12:24	2

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# Client Sample Results

Client: The Chemours Company FC, LLC  
 Project/Site: BAR-Clubhouse Well Sampling 2021

Job ID: 280-153843-2

**Client Sample ID: GW2021-CLUBHOUSE-INFLOW-D**

**Lab Sample ID: 280-153843-3**

**Date Collected: 10/05/21 12:00**

**Matrix: Water**

**Date Received: 10/07/21 10:55**

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dimethyl-3,4-Dinitrobenzene	<0.23		4.8	0.23	ug/L		10/12/21 16:10	10/25/21 14:19	1
1,2-Dimethyl-3,5-Dinitrobenzene	<0.31		4.8	0.31	ug/L		10/12/21 16:10	10/25/21 14:19	1
1,2-Dimethyl-3,6-Dinitrobenzene	<0.39		4.8	0.39	ug/L		10/12/21 16:10	10/25/21 14:19	1
1,2-Dimethyl-4,5-Dinitrobenzene	<0.37		4.8	0.37	ug/L		10/12/21 16:10	10/25/21 14:19	1
1,3-Dimethyl-2,4-Dinitrobenzene	<0.43		4.8	0.43	ug/L		10/12/21 16:10	10/25/21 14:19	1
1,3-Dimethyl-2,5-Dinitrobenzene	<0.40		4.8	0.40	ug/L		10/12/21 16:10	10/25/21 14:19	1
1,4-Dimethyl-2,3-Dinitrobenzene	<0.36		4.8	0.36	ug/L		10/12/21 16:10	10/25/21 14:19	1
1,4-Dimethyl-2,5-Dinitrobenzene	<0.73		9500	0.73	ug/L		10/12/21 16:10	10/25/21 14:19	1
1,4-Dimethyl-2,6-Dinitrobenzene	<0.21		4.8	0.21	ug/L		10/12/21 16:10	10/25/21 14:19	1
1,5-Dimethyl-2,3-Dinitrobenzene	<0.25		4.8	0.25	ug/L		10/12/21 16:10	10/25/21 14:19	1
1,5-Dimethyl-2,4-Dinitrobenzene	<0.26		4.8	0.26	ug/L		10/12/21 16:10	10/25/21 14:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	67		48 - 135	10/12/21 16:10	10/25/21 14:19	1
2-Fluorobiphenyl	64		48 - 135	10/12/21 16:10	10/25/21 14:19	1
2-Fluorophenol	67		41 - 135	10/12/21 16:10	10/25/21 14:19	1
Nitrobenzene-d5	64		42 - 135	10/12/21 16:10	10/25/21 14:19	1
Phenol-d5	66		46 - 135	10/12/21 16:10	10/25/21 14:19	1
Terphenyl-d14	82		20 - 135	10/12/21 16:10	10/25/21 14:19	1

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	<0.016		0.095	0.016	ug/L		10/08/21 17:59	10/12/21 18:33	1
1,3-Dinitrobenzene	<0.013		0.095	0.013	ug/L		10/08/21 17:59	10/12/21 18:33	1
2,3-Dinitrotoluene	<0.014		0.095	0.014	ug/L		10/08/21 17:59	10/12/21 18:33	1
2,4,6-Trinitro-3-xylene	<0.011		0.095	0.011	ug/L		10/08/21 17:59	10/12/21 18:33	1
2,4,6-Trinitrotoluene	<0.021		0.095	0.021	ug/L		10/08/21 17:59	10/12/21 18:33	1
2,4-Dinitrotoluene	<0.018		0.095	0.018	ug/L		10/08/21 17:59	10/12/21 18:33	1
2,5-Dinitrotoluene	<0.013		0.095	0.013	ug/L		10/08/21 17:59	10/12/21 18:33	1
2,6-Dinitrotoluene	<0.021		0.095	0.021	ug/L		10/08/21 17:59	10/12/21 18:33	1
2-Amino-4,6-dinitrotoluene	<0.020		0.095	0.020	ug/L		10/08/21 17:59	10/12/21 18:33	1
2-Nitrotoluene	<0.021		0.095	0.021	ug/L		10/08/21 17:59	10/12/21 18:33	1
3,4-Dinitrotoluene	<0.019		0.095	0.019	ug/L		10/08/21 17:59	10/12/21 18:33	1
3,5-Dinitrotoluene	<0.032		0.095	0.032	ug/L		10/08/21 17:59	10/12/21 18:33	1
3-Nitrotoluene	<0.024		0.095	0.024	ug/L		10/08/21 17:59	10/12/21 18:33	1
4-Amino-2,6-dinitrotoluene	<0.018		0.095	0.018	ug/L		10/08/21 17:59	10/12/21 18:33	1
4-Nitrotoluene	<0.025		0.095	0.025	ug/L		10/08/21 17:59	10/12/21 18:33	1
HMX	<0.018		0.095	0.018	ug/L		10/08/21 17:59	10/12/21 18:33	1
Nitrobenzene	<0.031		0.095	0.031	ug/L		10/08/21 17:59	10/12/21 18:33	1
Nitroglycerin	<0.016		0.13	0.016	ug/L		10/08/21 17:59	10/12/21 18:33	1
PETN	<0.017		0.095	0.017	ug/L		10/08/21 17:59	10/12/21 18:33	1
Tetryl	<0.020		0.095	0.020	ug/L		10/08/21 17:59	10/12/21 18:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	86		48 - 130	10/08/21 17:59	10/12/21 18:33	1

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

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
RDX	<0.040		0.19	0.040	ug/L		10/08/21 17:59	10/14/21 13:00	2

Eurofins TestAmerica, Denver

# Client Sample Results

Client: The Chemours Company FC, LLC  
Project/Site: BAR-Clubhouse Well Sampling 2021

Job ID: 280-153843-2

**Client Sample ID: GW2021-CLUBHOUSE-INFLOW-D**

**Lab Sample ID: 280-153843-3**

**Date Collected: 10/05/21 12:00**

**Matrix: Water**

**Date Received: 10/07/21 10:55**

<u>Surrogate</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
Nitrobenzene-d5	100	D	48 - 130	10/08/21 17:59	10/14/21 13:00	2

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# Surrogate Summary

Client: The Chemours Company FC, LLC  
 Project/Site: BAR-Clubhouse Well Sampling 2021

Job ID: 280-153843-2

## 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)
280-153843-2	GW2021-CLUBHOUSE-INFLOW	74	65	61	61	66	84
280-153843-2 MS	GW2021-CLUBHOUSE-INFLOW	70	53	43	45	46	83
280-153843-2 MSD	GW2021-CLUBHOUSE-INFLOW	67	59	62	58	61	83
280-153843-3	GW2021-CLUBHOUSE-INFLOW -D	67	64	67	64	66	82
LCS 280-553243/2-A	Lab Control Sample	68	69	67	67	65	81
MB 280-553243/1-A	Method Blank	59	57	68	61	65	77

### 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	NBZ
		(48-130)
280-153843-2	GW2021-CLUBHOUSE-INFLOW	89
280-153843-2 - DL	GW2021-CLUBHOUSE-INFLOW	80 D
280-153843-2 MS	GW2021-CLUBHOUSE-INFLOW	86
280-153843-2 MS - DL	GW2021-CLUBHOUSE-INFLOW	100 D
280-153843-2 MSD	GW2021-CLUBHOUSE-INFLOW	96
280-153843-2 MSD - DL	GW2021-CLUBHOUSE-INFLOW	90 D
280-153843-3	GW2021-CLUBHOUSE-INFLOW -D	86
280-153843-3 - DL	GW2021-CLUBHOUSE-INFLOW -D	100 D
LCS 280-552841/2-A	Lab Control Sample	85
MB 280-552841/1-A	Method Blank	79

### Surrogate Legend

NBZ = Nitrobenzene-d5

# QC Sample Results

Client: The Chemours Company FC, LLC  
 Project/Site: BAR-Clubhouse Well Sampling 2021

Job ID: 280-153843-2

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

**Lab Sample ID: MB 280-553243/1-A**  
**Matrix: Water**  
**Analysis Batch: 554828**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 553243**

Analyte	MB	MB	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2-Dimethyl-3,4-Dinitrobenzene	<0.24		5.0	0.24	ug/L		10/12/21 16:10	10/25/21 11:42	1
1,2-Dimethyl-3,5-Dinitrobenzene	<0.33		5.0	0.33	ug/L		10/12/21 16:10	10/25/21 11:42	1
1,2-Dimethyl-3,6-Dinitrobenzene	<0.41		5.0	0.41	ug/L		10/12/21 16:10	10/25/21 11:42	1
1,2-Dimethyl-4,5-Dinitrobenzene	<0.39		5.0	0.39	ug/L		10/12/21 16:10	10/25/21 11:42	1
1,3-Dimethyl-2,4-Dinitrobenzene	<0.45		5.0	0.45	ug/L		10/12/21 16:10	10/25/21 11:42	1
1,3-Dimethyl-2,5-Dinitrobenzene	<0.42		5.0	0.42	ug/L		10/12/21 16:10	10/25/21 11:42	1
1,4-Dimethyl-2,3-Dinitrobenzene	<0.38		5.0	0.38	ug/L		10/12/21 16:10	10/25/21 11:42	1
1,4-Dimethyl-2,5-Dinitrobenzene	<0.76		10000	0.76	ug/L		10/12/21 16:10	10/25/21 11:42	1
1,4-Dimethyl-2,6-Dinitrobenzene	<0.22		5.0	0.22	ug/L		10/12/21 16:10	10/25/21 11:42	1
1,5-Dimethyl-2,3-Dinitrobenzene	<0.26		5.0	0.26	ug/L		10/12/21 16:10	10/25/21 11:42	1
1,5-Dimethyl-2,4-Dinitrobenzene	<0.27		5.0	0.27	ug/L		10/12/21 16:10	10/25/21 11:42	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2,4,6-Tribromophenol	59		48 - 135	10/12/21 16:10	10/25/21 11:42	1
2-Fluorobiphenyl	57		48 - 135	10/12/21 16:10	10/25/21 11:42	1
2-Fluorophenol	68		41 - 135	10/12/21 16:10	10/25/21 11:42	1
Nitrobenzene-d5	61		42 - 135	10/12/21 16:10	10/25/21 11:42	1
Phenol-d5	65		46 - 135	10/12/21 16:10	10/25/21 11:42	1
Terphenyl-d14	77		20 - 135	10/12/21 16:10	10/25/21 11:42	1

**Lab Sample ID: LCS 280-553243/2-A**  
**Matrix: Water**  
**Analysis Batch: 554828**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 553243**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
1,2-Dimethyl-3,4-Dinitrobenzene	52.0	45.9		ug/L		88	50 - 135
1,2-Dimethyl-3,5-Dinitrobenzene	49.8	45.8		ug/L		92	50 - 135
1,2-Dimethyl-3,6-Dinitrobenzene	50.5	44.3		ug/L		88	50 - 135
1,2-Dimethyl-4,5-Dinitrobenzene	51.5	45.1		ug/L		88	50 - 135
1,3-Dimethyl-2,4-Dinitrobenzene	49.5	42.4		ug/L		86	50 - 135
1,3-Dimethyl-2,5-Dinitrobenzene	51.5	46.8		ug/L		91	50 - 135
1,4-Dimethyl-2,3-Dinitrobenzene	51.8	47.0		ug/L		91	50 - 135
1,4-Dimethyl-2,5-Dinitrobenzene	51.0	45.8	J	ug/L		90	50 - 135
1,4-Dimethyl-2,6-Dinitrobenzene	51.5	47.5		ug/L		92	50 - 135
1,5-Dimethyl-2,3-Dinitrobenzene	51.5	45.5		ug/L		88	50 - 135
1,5-Dimethyl-2,4-Dinitrobenzene	52.0	46.3		ug/L		89	50 - 135

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol	68		48 - 135
2-Fluorobiphenyl	69		48 - 135
2-Fluorophenol	67		41 - 135
Nitrobenzene-d5	67		42 - 135
Phenol-d5	65		46 - 135
Terphenyl-d14	81		20 - 135

# QC Sample Results

Client: The Chemours Company FC, LLC  
 Project/Site: BAR-Clubhouse Well Sampling 2021

Job ID: 280-153843-2

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

**Lab Sample ID: 280-153843-2 MS**

**Matrix: Water**

**Analysis Batch: 554828**

**Client Sample ID: GW2021-CLUBHOUSE-INFLOW**

**Prep Type: Total/NA**

**Prep Batch: 553243**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
1,2-Dimethyl-3,4-Dinitrobenzene	<0.23		49.5	45.5		ug/L		92	50 - 135
1,2-Dimethyl-3,5-Dinitrobenzene	<0.32		47.3	42.5		ug/L		90	50 - 135
1,2-Dimethyl-3,6-Dinitrobenzene	<0.39		48.1	43.9		ug/L		91	50 - 135
1,2-Dimethyl-4,5-Dinitrobenzene	<0.37		49.0	47.3		ug/L		97	50 - 135
1,3-Dimethyl-2,4-Dinitrobenzene	<0.43		47.1	41.8		ug/L		89	50 - 135
1,3-Dimethyl-2,5-Dinitrobenzene	<0.40		49.0	43.7		ug/L		89	50 - 135
1,4-Dimethyl-2,3-Dinitrobenzene	<0.36		49.3	43.6		ug/L		88	50 - 135
1,4-Dimethyl-2,5-Dinitrobenzene	<0.73		48.5	44.5	J	ug/L		92	50 - 135
1,4-Dimethyl-2,6-Dinitrobenzene	<0.21		49.0	45.3		ug/L		92	50 - 135
1,5-Dimethyl-2,3-Dinitrobenzene	<0.25		49.0	44.6		ug/L		91	50 - 135
1,5-Dimethyl-2,4-Dinitrobenzene	<0.26		49.5	47.0		ug/L		95	50 - 135

Surrogate	MS %Recovery	MS Qualifier	MS Limits
2,4,6-Tribromophenol	70		48 - 135
2-Fluorobiphenyl	53		48 - 135
2-Fluorophenol	43		41 - 135
Nitrobenzene-d5	45		42 - 135
Phenol-d5	46		46 - 135
Terphenyl-d14	83		20 - 135

**Lab Sample ID: 280-153843-2 MSD**

**Matrix: Water**

**Analysis Batch: 554828**

**Client Sample ID: GW2021-CLUBHOUSE-INFLOW**

**Prep Type: Total/NA**

**Prep Batch: 553243**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,2-Dimethyl-3,4-Dinitrobenzene	<0.23		49.8	45.6		ug/L		92	50 - 135	0	30
1,2-Dimethyl-3,5-Dinitrobenzene	<0.32		47.6	43.8		ug/L		92	50 - 135	3	30
1,2-Dimethyl-3,6-Dinitrobenzene	<0.39		48.3	42.4		ug/L		88	50 - 135	4	30
1,2-Dimethyl-4,5-Dinitrobenzene	<0.37		49.3	46.0		ug/L		93	50 - 135	3	30
1,3-Dimethyl-2,4-Dinitrobenzene	<0.43		47.4	38.9		ug/L		82	50 - 135	7	30
1,3-Dimethyl-2,5-Dinitrobenzene	<0.40		49.3	43.1		ug/L		87	50 - 135	1	30
1,4-Dimethyl-2,3-Dinitrobenzene	<0.36		49.5	42.5		ug/L		86	50 - 135	2	30
1,4-Dimethyl-2,5-Dinitrobenzene	<0.73		48.8	41.6	J	ug/L		85	50 - 135	7	30
1,4-Dimethyl-2,6-Dinitrobenzene	<0.21		49.3	45.3		ug/L		92	50 - 135	0	30
1,5-Dimethyl-2,3-Dinitrobenzene	<0.25		49.3	46.4		ug/L		94	50 - 135	4	30
1,5-Dimethyl-2,4-Dinitrobenzene	<0.26		49.8	47.6		ug/L		96	50 - 135	1	30

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
2,4,6-Tribromophenol	67		48 - 135
2-Fluorobiphenyl	59		48 - 135
2-Fluorophenol	62		41 - 135
Nitrobenzene-d5	58		42 - 135
Phenol-d5	61		46 - 135
Terphenyl-d14	83		20 - 135

# QC Sample Results

Client: The Chemours Company FC, LLC  
 Project/Site: BAR-Clubhouse Well Sampling 2021

Job ID: 280-153843-2

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

**Lab Sample ID: MB 280-552841/1-A**  
**Matrix: Water**  
**Analysis Batch: 553348**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 552841**

Analyte	MB	MB	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,3,5-Trinitrobenzene	<0.017		0.10	0.017	ug/L		10/08/21 17:59	10/12/21 17:20	1
1,3-Dinitrobenzene	<0.014		0.10	0.014	ug/L		10/08/21 17:59	10/12/21 17:20	1
2,3-Dinitrotoluene	<0.015		0.10	0.015	ug/L		10/08/21 17:59	10/12/21 17:20	1
2,4,6-Trinitro-3-xylene	NC		0.10	0.012	ug/L		10/08/21 17:59	10/12/21 17:20	1
2,4,6-Trinitrotoluene	<0.022		0.10	0.022	ug/L		10/08/21 17:59	10/12/21 17:20	1
2,4-Dinitrotoluene	<0.019		0.10	0.019	ug/L		10/08/21 17:59	10/12/21 17:20	1
2,5-Dinitrotoluene	<0.014		0.10	0.014	ug/L		10/08/21 17:59	10/12/21 17:20	1
2,6-Dinitrotoluene	<0.022		0.10	0.022	ug/L		10/08/21 17:59	10/12/21 17:20	1
2-Amino-4,6-dinitrotoluene	<0.021		0.10	0.021	ug/L		10/08/21 17:59	10/12/21 17:20	1
2-Nitrotoluene	<0.022		0.10	0.022	ug/L		10/08/21 17:59	10/12/21 17:20	1
3,4-Dinitrotoluene	<0.020		0.10	0.020	ug/L		10/08/21 17:59	10/12/21 17:20	1
3,5-Dinitrotoluene	<0.034		0.10	0.034	ug/L		10/08/21 17:59	10/12/21 17:20	1
3-Nitrotoluene	<0.025		0.10	0.025	ug/L		10/08/21 17:59	10/12/21 17:20	1
4-Amino-2,6-dinitrotoluene	<0.019		0.10	0.019	ug/L		10/08/21 17:59	10/12/21 17:20	1
4-Nitrotoluene	<0.026		0.10	0.026	ug/L		10/08/21 17:59	10/12/21 17:20	1
HMX	<0.019		0.10	0.019	ug/L		10/08/21 17:59	10/12/21 17:20	1
Nitrobenzene	<0.033		0.10	0.033	ug/L		10/08/21 17:59	10/12/21 17:20	1
Nitroglycerin	<0.017		0.14	0.017	ug/L		10/08/21 17:59	10/12/21 17:20	1
PETN	<0.018		0.10	0.018	ug/L		10/08/21 17:59	10/12/21 17:20	1
RDX	<0.021		0.10	0.021	ug/L		10/08/21 17:59	10/12/21 17:20	1
Tetryl	<0.021		0.10	0.021	ug/L		10/08/21 17:59	10/12/21 17:20	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Nitrobenzene-d5	79		48 - 130	10/08/21 17:59	10/12/21 17:20	1

**Lab Sample ID: LCS 280-552841/2-A**  
**Matrix: Water**  
**Analysis Batch: 553348**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 552841**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits
		Result	Qualifier				
1,3,5-Trinitrobenzene	0.500	0.511		ug/L		102	48 - 135
1,3-Dinitrobenzene	0.500	0.417		ug/L		83	64 - 122
2,4,6-Trinitrotoluene	0.500	0.471		ug/L		94	10 - 145
2,4-Dinitrotoluene	0.500	0.400		ug/L		80	55 - 117
2,6-Dinitrotoluene	0.500	0.454		ug/L		91	54 - 123
2-Amino-4,6-dinitrotoluene	0.500	0.491		ug/L		98	47 - 134
2-Nitrotoluene	0.500	0.471		ug/L		94	25 - 127
3-Nitrotoluene	0.500	0.416		ug/L		83	18 - 123
4-Amino-2,6-dinitrotoluene	0.500	0.558		ug/L		112	50 - 139
4-Nitrotoluene	0.500	0.461		ug/L		92	27 - 128
HMX	0.500	0.480		ug/L		96	63 - 119
Nitrobenzene	0.500	0.446		ug/L		89	39 - 131
Nitroglycerin	0.500	0.528		ug/L		106	60 - 121
PETN	0.500	0.585		ug/L		117	46 - 151
RDX	0.500	0.481		ug/L		96	71 - 127
Tetryl	0.500	0.614		ug/L		123	15 - 134

# QC Sample Results

Client: The Chemours Company FC, LLC  
 Project/Site: BAR-Clubhouse Well Sampling 2021

Job ID: 280-153843-2

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

**Lab Sample ID: LCS 280-552841/2-A**  
**Matrix: Water**  
**Analysis Batch: 553348**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 552841**

Surrogate	LCS		Limits
	%Recovery	Qualifier	
Nitrobenzene-d5	85		48 - 130

**Lab Sample ID: 280-153843-2 MS**  
**Matrix: Water**  
**Analysis Batch: 553348**

**Client Sample ID: GW2021-CLUBHOUSE-INFLOW**  
**Prep Type: Total/NA**  
**Prep Batch: 552841**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	Limits
				Result	Qualifier				
1,3,5-Trinitrobenzene	<0.016		0.484	0.461		ug/L		95	48 - 135
1,3-Dinitrobenzene	<0.013		0.484	0.396		ug/L		82	64 - 122
2,4,6-Trinitrotoluene	<0.021		0.484	0.457		ug/L		95	10 - 145
2,4-Dinitrotoluene	<0.018		0.484	0.424		ug/L		88	55 - 117
2,6-Dinitrotoluene	<0.021		0.484	0.432		ug/L		89	54 - 123
2-Amino-4,6-dinitrotoluene	<0.020		0.484	0.480		ug/L		99	47 - 134
2-Nitrotoluene	<0.021		0.484	0.489		ug/L		101	25 - 127
3-Nitrotoluene	<0.024		0.484	0.375		ug/L		78	18 - 123
4-Amino-2,6-dinitrotoluene	<0.018		0.484	0.535		ug/L		111	50 - 139
4-Nitrotoluene	<0.025		0.484	0.480		ug/L		99	27 - 128
HMX	<0.018		0.484	0.528		ug/L		109	63 - 119
Nitrobenzene	<0.032		0.484	0.449		ug/L		93	39 - 131
Nitroglycerin	<0.016		0.484	0.441		ug/L		91	60 - 121
PETN	<0.017		0.484	0.562		ug/L		116	46 - 151
Tetryl	<0.020		0.484	0.520		ug/L		108	15 - 134

Surrogate	MS		Limits
	%Recovery	Qualifier	
Nitrobenzene-d5	86		48 - 130

**Lab Sample ID: 280-153843-2 MSD**  
**Matrix: Water**  
**Analysis Batch: 553348**

**Client Sample ID: GW2021-CLUBHOUSE-INFLOW**  
**Prep Type: Total/NA**  
**Prep Batch: 552841**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	Limits	RPD	Limit
				Result	Qualifier						
1,3,5-Trinitrobenzene	<0.016		0.480	0.343		ug/L		71	48 - 135	29	52
1,3-Dinitrobenzene	<0.013		0.480	0.449		ug/L		93	64 - 122	12	30
2,4,6-Trinitrotoluene	<0.021		0.480	0.541		ug/L		113	10 - 145	17	70
2,4-Dinitrotoluene	<0.018		0.480	0.391		ug/L		81	55 - 117	8	27
2,6-Dinitrotoluene	<0.021		0.480	0.391		ug/L		81	54 - 123	10	46
2-Amino-4,6-dinitrotoluene	<0.020		0.480	0.534		ug/L		111	47 - 134	10	52
2-Nitrotoluene	<0.021		0.480	0.392		ug/L		82	25 - 127	22	67
3-Nitrotoluene	<0.024		0.480	0.349		ug/L		73	18 - 123	7	75
4-Amino-2,6-dinitrotoluene	<0.018		0.480	0.545		ug/L		114	50 - 139	2	68
4-Nitrotoluene	<0.025		0.480	0.382		ug/L		80	27 - 128	23	70
HMX	<0.018		0.480	0.476		ug/L		99	63 - 119	10	48
Nitrobenzene	<0.032		0.480	0.378		ug/L		79	39 - 131	17	55
Nitroglycerin	<0.016		0.480	0.406		ug/L		85	60 - 121	8	62
PETN	<0.017		0.480	0.561		ug/L		117	46 - 151	0	79
Tetryl	<0.020		0.480	0.563		ug/L		117	15 - 134	8	58

# QC Sample Results

Client: The Chemours Company FC, LLC  
 Project/Site: BAR-Clubhouse Well Sampling 2021

Job ID: 280-153843-2

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

Lab Sample ID: 280-153843-2 MSD  
 Matrix: Water  
 Analysis Batch: 553348

Client Sample ID: GW2021-CLUBHOUSE-INFLOW  
 Prep Type: Total/NA  
 Prep Batch: 552841

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Nitrobenzene-d5	96		48 - 130

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

Lab Sample ID: 280-153843-2 MS  
 Matrix: Water  
 Analysis Batch: 553552

Client Sample ID: GW2021-CLUBHOUSE-INFLOW  
 Prep Type: Total/NA  
 Prep Batch: 552841

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
RDX - DL	<0.040		0.484	0.454		ug/L		94	71 - 127

Surrogate	MS %Recovery	MS Qualifier	Limits
Nitrobenzene-d5 - DL	100	D	48 - 130

Lab Sample ID: 280-153843-2 MSD  
 Matrix: Water  
 Analysis Batch: 553552

Client Sample ID: GW2021-CLUBHOUSE-INFLOW  
 Prep Type: Total/NA  
 Prep Batch: 552841

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
RDX - DL	<0.040		0.480	0.467		ug/L		97	71 - 127	3	26

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Nitrobenzene-d5 - DL	90	D	48 - 130

# QC Association Summary

Client: The Chemours Company FC, LLC  
 Project/Site: BAR-Clubhouse Well Sampling 2021

Job ID: 280-153843-2

## GC/MS Semi VOA

### Prep Batch: 553243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-153843-2	GW2021-CLUBHOUSE-INFLOW	Total/NA	Water	3520C	
280-153843-3	GW2021-CLUBHOUSE-INFLOW-D	Total/NA	Water	3520C	
MB 280-553243/1-A	Method Blank	Total/NA	Water	3520C	
LCS 280-553243/2-A	Lab Control Sample	Total/NA	Water	3520C	
280-153843-2 MS	GW2021-CLUBHOUSE-INFLOW	Total/NA	Water	3520C	
280-153843-2 MSD	GW2021-CLUBHOUSE-INFLOW	Total/NA	Water	3520C	

### Analysis Batch: 554828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-153843-2	GW2021-CLUBHOUSE-INFLOW	Total/NA	Water	8270C	553243
280-153843-3	GW2021-CLUBHOUSE-INFLOW-D	Total/NA	Water	8270C	553243
MB 280-553243/1-A	Method Blank	Total/NA	Water	8270C	553243
LCS 280-553243/2-A	Lab Control Sample	Total/NA	Water	8270C	553243
280-153843-2 MS	GW2021-CLUBHOUSE-INFLOW	Total/NA	Water	8270C	553243
280-153843-2 MSD	GW2021-CLUBHOUSE-INFLOW	Total/NA	Water	8270C	553243

## LCMS

### Prep Batch: 552841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-153843-2 - DL	GW2021-CLUBHOUSE-INFLOW	Total/NA	Water	3535	
280-153843-2	GW2021-CLUBHOUSE-INFLOW	Total/NA	Water	3535	
280-153843-3 - DL	GW2021-CLUBHOUSE-INFLOW-D	Total/NA	Water	3535	
280-153843-3	GW2021-CLUBHOUSE-INFLOW-D	Total/NA	Water	3535	
MB 280-552841/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-552841/2-A	Lab Control Sample	Total/NA	Water	3535	
280-153843-2 MS - DL	GW2021-CLUBHOUSE-INFLOW	Total/NA	Water	3535	
280-153843-2 MS	GW2021-CLUBHOUSE-INFLOW	Total/NA	Water	3535	
280-153843-2 MSD - DL	GW2021-CLUBHOUSE-INFLOW	Total/NA	Water	3535	
280-153843-2 MSD	GW2021-CLUBHOUSE-INFLOW	Total/NA	Water	3535	

### Analysis Batch: 553348

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-153843-2	GW2021-CLUBHOUSE-INFLOW	Total/NA	Water	8321A	552841
280-153843-3	GW2021-CLUBHOUSE-INFLOW-D	Total/NA	Water	8321A	552841
MB 280-552841/1-A	Method Blank	Total/NA	Water	8321A	552841
LCS 280-552841/2-A	Lab Control Sample	Total/NA	Water	8321A	552841
280-153843-2 MS	GW2021-CLUBHOUSE-INFLOW	Total/NA	Water	8321A	552841
280-153843-2 MSD	GW2021-CLUBHOUSE-INFLOW	Total/NA	Water	8321A	552841

### Analysis Batch: 553552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-153843-2 - DL	GW2021-CLUBHOUSE-INFLOW	Total/NA	Water	8321A	552841
280-153843-3 - DL	GW2021-CLUBHOUSE-INFLOW-D	Total/NA	Water	8321A	552841
280-153843-2 MS - DL	GW2021-CLUBHOUSE-INFLOW	Total/NA	Water	8321A	552841
280-153843-2 MSD - DL	GW2021-CLUBHOUSE-INFLOW	Total/NA	Water	8321A	552841

# Lab Chronicle

Client: The Chemours Company FC, LLC  
 Project/Site: BAR-Clubhouse Well Sampling 2021

Job ID: 280-153843-2

## Client Sample ID: GW2021-CLUBHOUSE-INFLOW

## Lab Sample ID: 280-153843-2

Date Collected: 10/05/21 12:00

Matrix: Water

Date Received: 10/07/21 10:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1046.3 mL	1 mL	553243	10/12/21 16:10	EJL	TAL DEN
Total/NA	Analysis	8270C		1	200 uL	1.0 mL	554828	10/25/21 13:00	SP	TAL DEN
Total/NA	Prep	3535			1039.8 mL	5 mL	552841	10/08/21 17:59	DCL	TAL DEN
Total/NA	Analysis	8321A		1			553348	10/12/21 17:56	AGCM	TAL DEN
Total/NA	Prep	3535	DL		1039.8 mL	5 mL	552841	10/08/21 17:59	DCL	TAL DEN
Total/NA	Analysis	8321A	DL	2			553552	10/14/21 12:24	AGCM	TAL DEN

## Client Sample ID: GW2021-CLUBHOUSE-INFLOW-D

## Lab Sample ID: 280-153843-3

Date Collected: 10/05/21 12:00

Matrix: Water

Date Received: 10/07/21 10:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1048.1 mL	1 mL	553243	10/12/21 16:10	EJL	TAL DEN
Total/NA	Analysis	8270C		1	200 uL	1.0 mL	554828	10/25/21 14:19	SP	TAL DEN
Total/NA	Prep	3535			1051.2 mL	5 mL	552841	10/08/21 17:59	DCL	TAL DEN
Total/NA	Analysis	8321A		1			553348	10/12/21 18:33	AGCM	TAL DEN
Total/NA	Prep	3535	DL		1051.2 mL	5 mL	552841	10/08/21 17:59	DCL	TAL DEN
Total/NA	Analysis	8321A	DL	2			553552	10/14/21 13:00	AGCM	TAL DEN

## Client Sample ID: Method Blank

## Lab Sample ID: MB 280-552841/1-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			1000 mL	5 mL	552841	10/08/21 17:59	DCL	TAL DEN
Total/NA	Analysis	8321A		1			553348	10/12/21 17:20	AGCM	TAL DEN

## Client Sample ID: Method Blank

## Lab Sample ID: MB 280-553243/1-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1000 mL	1 mL	553243	10/12/21 16:10	EJL	TAL DEN
Total/NA	Analysis	8270C		1			554828	10/25/21 11:42	SP	TAL DEN

## Client Sample ID: Lab Control Sample

## Lab Sample ID: LCS 280-552841/2-A

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			1000 mL	5 mL	552841	10/08/21 17:59	DCL	TAL DEN
Total/NA	Analysis	8321A		1			553348	10/12/21 17:32	AGCM	TAL DEN

# Lab Chronicle

Client: The Chemours Company FC, LLC  
 Project/Site: BAR-Clubhouse Well Sampling 2021

Job ID: 280-153843-2

**Client Sample ID: Lab Control Sample**

**Lab Sample ID: LCS 280-553243/2-A**

Date Collected: N/A

Matrix: Water

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1000 mL	1 mL	553243	10/12/21 16:10	EJL	TAL DEN
Total/NA	Analysis	8270C		1			554828	10/25/21 12:08	SP	TAL DEN

**Client Sample ID: GW2021-CLUBHOUSE-INFLOW**

**Lab Sample ID: 280-153843-2 MS**

Date Collected: 10/05/21 12:00

Matrix: Water

Date Received: 10/07/21 10:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1050.7 mL	1 mL	553243	10/12/21 16:10	EJL	TAL DEN
Total/NA	Analysis	8270C		1	200 uL	1.0 mL	554828	10/25/21 13:27	SP	TAL DEN
Total/NA	Prep	3535			1033.5 mL	5 mL	552841	10/08/21 17:59	DCL	TAL DEN
Total/NA	Analysis	8321A		1			553348	10/12/21 18:08	AGCM	TAL DEN
Total/NA	Prep	3535	DL		1033.5 mL	5 mL	552841	10/08/21 17:59	DCL	TAL DEN
Total/NA	Analysis	8321A	DL	2			553552	10/14/21 12:36	AGCM	TAL DEN

**Client Sample ID: GW2021-CLUBHOUSE-INFLOW**

**Lab Sample ID: 280-153843-2 MSD**

Date Collected: 10/05/21 12:00

Matrix: Water

Date Received: 10/07/21 10:55

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			1044.6 mL	1 mL	553243	10/12/21 16:10	EJL	TAL DEN
Total/NA	Analysis	8270C		1	200 uL	1.0 mL	554828	10/25/21 13:53	SP	TAL DEN
Total/NA	Prep	3535			1040.8 mL	5 mL	552841	10/08/21 17:59	DCL	TAL DEN
Total/NA	Analysis	8321A		1			553348	10/12/21 18:20	AGCM	TAL DEN
Total/NA	Prep	3535	DL		1040.8 mL	5 mL	552841	10/08/21 17:59	DCL	TAL DEN
Total/NA	Analysis	8321A	DL	2			553552	10/14/21 12:48	AGCM	TAL DEN

**Laboratory References:**

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

# Accreditation/Certification Summary

Client: The Chemours Company FC, LLC  
Project/Site: BAR-Clubhouse Well Sampling 2021

Job ID: 280-153843-2

## Laboratory: Eurofins TestAmerica, Denver

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999615430	08-31-22

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15





**Chain of Custody Record**

*Cooler 2*

<b>Client Information</b> Client Contact: Sharon Nordstrom Company: The Chemours Company FC, LLC Address: c/o AECOM Sabre Building, Suite 300 4051 Ogletown Road City: Newark State, Zip: DE, 19713 Phone: 302-781-5936(Tel) Email: sharon.nordstrom@aecom.com Project Name: BAR-Clubhouse Well Sampling 2021 Site: Barksdale, WI		Sampler: <i>Desmond Nelson</i> Lab PIV: Johnston, Michelle A Phone: 715 533 0313 E-Mail: Michelle.Johnston@Eurofins.com Carrier Tracking No(s): <i>5293 4060</i> State of Origin: <i>WI</i>		COC No: 280-112629-26119.1 Page: <i>3 of 4</i> Job #: <i>0 + M</i>	
Due Date Requested: TAT Requested (days): 15 business day Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No PO #: LBIO-67048 / 77201000-WH06-507419 WO #:		<b>Analysis Requested</b>			
Matrix (Water, Solid, Onwaste, etc.) Preservation Code:		Preservation Codes: A - HCL B - NHOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:			
<b>Sample Identification</b> GW2021-CLUBHOUSE-INFLOW GW2021-CLUBHOUSE-INFLOW-MS GW2021-CLUBHOUSE-INFLOW-MSD GW2021-CLUBHOUSE-INFLOW-D		Sample Date 6/15/21 10/15/21 10/15/21 10/15/21	Sample Time 1200 1200 1200 1200	Sample Type (C=Comp, G=grab) G G G G	Matrix (Water, Solid, Onwaste, etc.) Water Water Water Water
<b>Possible Hazard Identification</b> <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Deliverable Requested: I, II, III, IV, Other (specify)			
Empty Kit Relinquished by: <i>Desmond Nelson</i>		Special Instructions/QC Requirements:			
Relinquished by: <i>Desmond Nelson</i>		Date/Time: 10/15/21 12:00		Date/Time: 10/17/2021 1055	
Relinquished by:		Date/Time:		Date/Time:	
Relinquished by:		Date/Time:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Company: AECOM Company: AECOM Company: AECOM	
Cooler Temperature(s) °C and Other Remarks:		Cooler 2			



# Chain of Custody Record

<b>Client Information</b>		Lab PM: Johnston, Michelle A		Carrier Tracking No(s) <b>5293 4334 4071</b>		COC No: 280-112629-26119.1						
Client Contact: Sharon Nordstrom		E-Mail: Michelle.Johnston@Eurofins.com		State of Origin: <b>WI</b>		Page: <b>4 of 4</b>						
Company: The Chemours Company FC, LLC		PWSID:		Analysis Requested		Job #: <b>OTM</b>						
Address: c/o AECOM Sabre Building, Suite 300 4051 Ogletown Road		Due Date Requested:		8270C DNK		Total Number of Containers						
City: Newark		TAT Requested (days): 15 business day		Perform MS/MSD (Yes or No)		Preservation Codes:						
State, Zip: DE, 19713		Compliance Project: <input type="checkbox"/> Yes <input type="checkbox"/> No		Field Filtered Sample (Yes or No)		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - EDTA L - EDA Other:						
Phone: 302-781-5936(Tel)		PO #: LBIO-67048 / 77201000-WH06-507419		8270C DNK		Special Instructions/Note:						
Email: sharon.nordstrom@aecom.com		WO #:		8270C DNK		Please log each COC in separate logs. <b>X4 in cooler 2</b> Do not log -MS or -MSD in the QC IDs. <b>X4 in cooler 2</b> <b>X2 in cooler 1, X2 in cooler 3</b> Field Duplicate <b>X4 in cooler 3</b>						
Project Name: BAR-Clubhouse Well Sampling 2021		Project #: 28003388		8270C DNK								
Site: Barksdale, WI		SSOW#:		8270C DNK								
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Newater, S-solid, O-wastewater, BT-Tissue, A-Air)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270C DNK	8270C DNK	Analysis Requested	Carrier Tracking No(s)	COC No:
GW2021-CLUBHOUSE-INFLOW	6/15/21	1200	G	Water		W	Y	X				280-112629-26119.1
GW2021-CLUBHOUSE-INFLOW-MS	10/15/21	1200	G	Water		W	Y	X				
GW2021-CLUBHOUSE-INFLOW-MSD	10/15/21	1200	G	Water		W	Y	X				
GW2021-CLUBHOUSE-INFLOW-D	10/15/21	1200	G	Water		W	Y	X				
<b>Possible Hazard Identification</b> <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological											Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month ) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Deliverable Requested: I, II, III, IV, Other (specify) _____											Special Instructions/QC Requirements: _____	
Empty Kit Relinquished by: <i>[Signature]</i>											Method of Shipment: _____	
Relinquished by: <i>[Signature]</i>											Received by: <i>[Signature]</i>	
Relinquished by: <i>[Signature]</i>											Received by: <i>[Signature]</i>	
Relinquished by: _____											Received by: _____	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No											Cooler Temperature(s) °C and Other Remarks: _____	



# Login Sample Receipt Checklist

Client: The Chemours Company FC, LLC

Job Number: 280-153843-2

**Login Number: 153843**

**List Source: Eurofins TestAmerica, Denver**

**List Number: 1**

**Creator: Johnston, Michelle A**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

