



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

502-569-2301 t  
chemours.com

December 11, 2018

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 8, 2018, 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 2002), NNOCs were not detected above laboratory detection limits (see Table 1).

As you are aware, replacement of the GAC cylinders is typically done during the annual groundwater sampling; however, this was done on May 1, 2018 to coincide with plumbing repairs you scheduled to address frozen pipes. An inspection of the system and repairs made in May was conducted at the time of 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 fourth quarter of 2019. 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: Chris Saari, 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	CLUB HOUSE- INFLOW	CLUB HOUSE- INFLOW	CLUB HOUSE- INFLOW	CLUB HOUSE- INFLOW	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	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	<0.026	--	<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	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	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 U</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-Trinitroxylyene	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	<b>0.044 J</b>	<0.039	<0.049	<0.049
Nitroglycerin	UG/L	<5.0	--	<5.0	<5.0	<5.0	<5.0	<5.0	--	<5.0	--	--	--
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</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</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	<b>73.0</b>	--	<b>76.0</b>	<b>78.0</b>	<b>80.0</b>	<b>76.0</b>	<b>100</b>	--	<b>86.0</b>	--	--	--
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  
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 DNX = Dinitroxylyene  
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 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  
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 µg/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	CLUB HOUSE- INFLOW	CLUB HOUSE- INFLOW	CLUB HOUSE- INFLOW	
Date Sampled		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	8/4/2016*
Parameter Name	Report Units	Report Result	Report Result	Report Result	Report Result	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	<0.025	<0.025	<0.025	<0.015	<0.018	--	<0.010	<0.016	<0.016	<0.016	<0.017	<0.017	<0.017
1,3-Dinitrobenzene	UG/L	<0.023	<0.023	<0.023	<0.014	<0.019	--	<0.011	<0.014	<0.013	<0.014	<0.014	<0.014	<0.014
1-Methyl-3-Nitrobenzene	UG/L	<0.027	<0.027	<0.027	<0.019	<0.064	--	<0.025	<0.024	<0.024	<0.024	<0.025	<0.025	<0.025
1-Methyl-4-Nitrobenzene	UG/L	<0.025	<0.025	<0.025	<0.018	<0.061	--	<0.026	<0.025	<0.025	<0.025	<0.026	<0.026	<0.026
2-Amino-4,6-Dinitrotoluene	UG/L	<0.036	<0.036	<0.036	<0.012	<0.017	--	<0.021	<0.020	<0.020	<0.020	<0.021	<0.021	<0.021
2-Nitrotoluene	UG/L	<0.026	<0.026	<0.026	<0.023	<0.057	--	<0.022	<0.021	<0.021	<0.021	<0.021	<0.022	<0.022
2- And 4-Nitrotoluene	UG/L	--	--	--	--	--	--	--	--	--	--	--	--	--
2,4,6-Trinitrotoluene	UG/L	<0.021	<0.021	<0.021	<0.015	<0.026	--	<0.022	<0.021	<0.021	<0.021	<0.022	<0.022	<0.022
2,4,6-Trinitroxylyene	UG/L	--	--	--	--	--	--	--	--	<0.011	<0.012	--	<0.012	<0.012
4-Amino-2,6-Dinitrotoluene	UG/L	<0.020	<0.020	<0.020	<0.015	<0.022	--	<0.019	<0.018	<0.018	<0.018	<0.019	<0.019	<0.019
Nitrobenzene	UG/L	<0.030	<0.030	<0.030	<0.039	<0.042	--	<0.045	<0.044	<0.043	<0.032	<0.033	<0.033	<0.033
Nitroglycerin	UG/L	--	--	--	--	--	--	--	--	--	<0.043	<0.045	<0.045	<0.044
HMX	UG/L	<0.040	<0.040	<0.040	<0.016	<0.017	--	<0.019	<0.018	<0.018	<0.018	<0.019	<0.019	<0.019
PETN	UG/L	<0.051	<0.051	<0.051	<0.031	<0.038	--	<0.015	<0.017	<0.017	<0.017	<0.018	<0.018	<0.018
RDX	UG/L	<0.020	<0.020	<0.020	<0.012	<0.013	--	<0.021	<0.020	<0.020	<0.020	<0.021	<0.021	<0.021
Tetryl	UG/L	<0.024	<0.024	<0.024	<0.012	<0.017	--	<0.021	<0.020	<0.020	<0.020	<0.021	<0.021	<0.021
<b>NNOCs DNT Isomers (µg/L)</b>														
2,3-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	<0.015	<0.014	<0.014	--	<0.015	<0.015
2,4-Dinitrotoluene	UG/L	<0.026	<0.026	<0.026	<0.019	<0.038	--	<0.019	<0.018	<0.018	<0.018	--	<0.019	<0.019
2,5-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	--	<0.013	<0.014	--	<0.014	<0.014
2,6-Dinitrotoluene	UG/L	<0.022	<0.022	<0.022	<0.015	<0.037	--	<0.022	<0.021	<0.021	<0.021	--	<0.022	<0.022
3,4-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	<0.019	<0.019	<0.019	--	<0.020	<0.020
3,5-Dinitrotoluene	UG/L	--	--	--	--	--	--	--	<0.033	<0.032	<0.033	--	<0.034	<0.034
<b>NNOCs DNX Isomers (µg/L)</b>														
1,2-Dimethyl-3,4-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	<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	<0.39	--	--
1,2-Dimethyl-4,5-Dinitrobenzene	UG/L	--	--	--	--	--	--	--	--	--	<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	<b>57.0</b>	<b>77.0</b>	--	--	--	--	--	--	--	<0.76	<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:**  
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 \* 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
Date Sampled		11/30/2016	04/25/2017	06/06/2017	10/08/2018
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	--	<0.016 UJ	<0.017	<0.018
1,3-Dinitrobenzene	UG/L	--	<0.013 UJ	<0.014	<0.015
1-Methyl-3-Nitrobenzene	UG/L	--	<0.024 UJ	<0.025	<0.027
1-Methyl-4-Nitrobenzene	UG/L	--	<0.025 UJ	<0.025	<0.028
2-Amino-4,6-Dinitrotoluene	UG/L	--	<0.020 UJ	<0.021	<0.022
2-Nitrotoluene	UG/L	--	<0.021 UJ	<0.022	<0.023
2- And 4-Nitrotoluene	UG/L	--	--	--	--
2,4,6-Trinitrotoluene	UG/L	--	<0.021 UJ	<0.022	<0.023
2,4,6-Trinitroxylene	UG/L	--	<0.012 UJ	<0.012	<0.013
4-Amino-2,6-Dinitrotoluene	UG/L	--	<0.018 UJ	<0.019	<0.020
Nitrobenzene	UG/L	--	<b>0.072 J<sup>H</sup></b>	<0.032	<0.035
Nitroglycerin	UG/L	--	<0.043 UJ	<0.044	<0.048
HMX	UG/L	--	<0.018 UJ	<0.019	<0.020
PETN	UG/L	--	<0.017 UJ	<0.018	<0.019
RDX	UG/L	--	<0.020 UJ	<0.021	<0.022
Tetryl	UG/L	--	<0.020 UJ	<0.021	<0.022
<b>NNOCs DNT Isomers (µg/L)</b>					
2,3-Dinitrotoluene	UG/L	--	<0.014 UJ	<0.015	<0.016
2,4-Dinitrotoluene	UG/L	--	<0.018 UJ	<0.019	<0.020
2,5-Dinitrotoluene	UG/L	--	<0.013 UJ	<0.014	<0.015
2,6-Dinitrotoluene	UG/L	--	<0.021 UJ	<0.022	<0.023
3,4-Dinitrotoluene	UG/L	--	<0.019 UJ	<0.020	<0.021
3,5-Dinitrotoluene	UG/L	--	<0.033 UJ	<0.033	<0.036
<b>NNOCs DNX Isomers (µg/L)</b>					
1,2-Dimethyl-3,4-Dinitrobenzene	UG/L	<0.23	<0.23	--	<0.25
1,2-Dimethyl-3,5-Dinitrobenzene	UG/L	<0.32	<0.32	--	<0.35
1,2-Dimethyl-3,6-Dinitrobenzene	UG/L	<0.40	<0.40	--	<0.43
1,2-Dimethyl-4,5-Dinitrobenzene	UG/L	<0.38	<0.38	--	<0.41
1,3-Dimethyl-2,4-Dinitrobenzene	UG/L	<0.44	<0.44	--	<0.48
1,3-Dimethyl-2,5-Dinitrobenzene	UG/L	<0.41	<0.41	--	<0.44
1,4-Dimethyl-2,3-Dinitrobenzene	UG/L	<0.37	<0.37	--	<0.40
1,4-Dimethyl-2,5-Dinitrobenzene	UG/L	<0.74	<0.74	--	<0.80
1,4-Dimethyl-2,6-Dinitrobenzene	UG/L	<0.22	<0.21	--	<0.23
1,5-Dimethyl-2,3-Dinitrobenzene	UG/L	<0.25	<0.25	--	<0.28
1,5-Dimethyl-2,4-Dinitrobenzene	UG/L	<0.26	<0.26	--	<0.29
<b>SVOCs (µg/L)</b>					
Naphthalene	UG/L	--	--	--	--
<b>Anions (µg/L)</b>					
Perchlorate	UG/L	--	--	--	--

**Notes:**

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Note: Detections not observed in effluent samples



O:\GIS\BAR\_GIS\Map\_Files\BrettingClubhouse.tl2016\Fig01\_SystemDiagram.mxd

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:  
 60563363

DATE:  
 Dec 2018

FIGURE NUMBER:

1

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

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

TestAmerica Job ID: 280-115350-1

Client Project/Site: BAR-Clubhouse Well Sampling 2018

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:  
10/23/2018 10:19:13 AM

Michelle Johnston, Project Manager II  
(303)736-0110  
[michelle.johnston@testamericainc.com](mailto:michelle.johnston@testamericainc.com)

### LINKS

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*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 2018

TestAmerica Job ID: 280-115350-1

## Qualifiers

### GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### 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.
α	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 2018

TestAmerica Job ID: 280-115350-1

**Job ID: 280-115350-1**

**Laboratory: TestAmerica Denver**

## Narrative

### CASE NARRATIVE

**Client: The Chemours Company FC, LLC**  
**Project: BAR-Clubhouse Well Sampling 2018**  
**Report Number: 280-115350-1**

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.

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

#### **Sample Receipt**

The samples were received on 10/10/2018 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 3.4° C, 3.6° C, 5.3° C and 5.3° C.

#### **Receipt Exceptions**

Two of four coolers were received on 10/10/2018, at 0900 and two of four coolers were delayed and received on 10/11/2018, at 0910. All coolers were received within temperature criteria. It can be noted that parent sample volume for GW2018-PZ-16-POT INFLOW (280-115350-1) as well as all sample volume for GW2018-CLUBHOUSE EFFLUENT (280-115350-4) and GW2018-CLUBHOUSE INFLOW (280-115350-5) were received in the two coolers received on 10/11/2018.

The start date of the job was logged as 10/11/2018, and the requested analyses were logged on a 15 business day turn around time due to current laboratory capacity. The client was notified on 10/11/2018.

No other anomalies were observed during sample receipt.

#### **Semivolatiles - Method 8270C DNX**

Samples GW2018-PZ-16-POT INFLOW (280-115350-1), GW2018-PZ-16-POT INFLOW DUP (280-115350-2), GW2018-PZ-16-POT EFFLUENT (280-115350-3), GW2018-CLUBHOUSE EFFLUENT (280-115350-4) and GW2018-CLUBHOUSE INFLOW (280-115350-5) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 10/15/2018 and analyzed on 10/18/2018 and 10/19/2018.

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

#### **Explosives - Method 8321A**

Samples GW2018-PZ-16-POT INFLOW (280-115350-1), GW2018-PZ-16-POT INFLOW DUP (280-115350-2), GW2018-PZ-16-POT EFFLUENT (280-115350-3), GW2018-CLUBHOUSE EFFLUENT (280-115350-4) and GW2018-CLUBHOUSE INFLOW (280-115350-5) were analyzed for explosives in accordance with EPA SW-846 Method 8321A. The samples were prepared on 10/13/2018 and analyzed on 10/15/2018.

Internal standard response for RDX13C3 (48.5%) was below acceptance limits (50-200%) for the following sample: GW2018-PZ-16-POT INFLOW (280-115350-1[MS]). The sample shows evidence of matrix interference; therefore, corrective action was not performed.

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

## Detection Summary

Client: Chemours Company FC, LLC The  
Project/Site: BAR-Clubhouse Well Sampling 2018

TestAmerica Job ID: 280-115350-1

**Client Sample ID: GW2018-PZ-16-POT INFLOW**

**Lab Sample ID: 280-115350-1**

No Detections.

**Client Sample ID: GW2018-PZ-16-POT INFLOW DUP**

**Lab Sample ID: 280-115350-2**

No Detections.

**Client Sample ID: GW2018-PZ-16-POT EFFLUENT**

**Lab Sample ID: 280-115350-3**

No Detections.

**Client Sample ID: GW2018-CLUBHOUSE EFFLUENT**

**Lab Sample ID: 280-115350-4**

No Detections.

**Client Sample ID: GW2018-CLUBHOUSE INFLOW**

**Lab Sample ID: 280-115350-5**

No Detections.

This Detection Summary does not include radiochemical test results.

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# Method Summary

Client: Chemours Company FC, LLC The  
Project/Site: BAR-Clubhouse Well Sampling 2018

TestAmerica Job ID: 280-115350-1

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 = 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 2018

TestAmerica Job ID: 280-115350-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
280-115350-1	GW2018-PZ-16-POT INFLOW	Water	10/08/18 14:30	10/11/18 09:10
280-115350-2	GW2018-PZ-16-POT INFLOW DUP	Water	10/08/18 14:30	10/10/18 09:00
280-115350-3	GW2018-PZ-16-POT EFFLUENT	Water	10/08/18 15:30	10/10/18 09:00
280-115350-4	GW2018-CLUBHOUSE EFFLUENT	Water	10/08/18 16:30	10/11/18 09:10
280-115350-5	GW2018-CLUBHOUSE INFLOW	Water	10/08/18 17:00	10/11/18 09:10

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# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-Clubhouse Well Sampling 2018

TestAmerica Job ID: 280-115350-1

**Client Sample ID: GW2018-PZ-16-POT INFLOW**

**Lab Sample ID: 280-115350-1**

**Date Collected: 10/08/18 14:30**

**Matrix: Water**

**Date Received: 10/11/18 09:10**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dimethyl-3,4-Dinitrobenzene	0.25	U	5.2	0.25	ug/L		10/15/18 10:26	10/18/18 23:12	1
1,2-Dimethyl-3,5-Dinitrobenzene	0.34	U	5.2	0.34	ug/L		10/15/18 10:26	10/18/18 23:12	1
1,2-Dimethyl-3,6-Dinitrobenzene	0.43	U	5.2	0.43	ug/L		10/15/18 10:26	10/18/18 23:12	1
1,2-Dimethyl-4,5-Dinitrobenzene	0.41	U	5.2	0.41	ug/L		10/15/18 10:26	10/18/18 23:12	1
1,3-Dimethyl-2,4-Dinitrobenzene	0.47	U	5.2	0.47	ug/L		10/15/18 10:26	10/18/18 23:12	1
1,3-Dimethyl-2,5-Dinitrobenzene	0.44	U	5.2	0.44	ug/L		10/15/18 10:26	10/18/18 23:12	1
1,4-Dimethyl-2,3-Dinitrobenzene	0.40	U	5.2	0.40	ug/L		10/15/18 10:26	10/18/18 23:12	1
1,4-Dimethyl-2,5-Dinitrobenzene	0.79	U	10000	0.79	ug/L		10/15/18 10:26	10/18/18 23:12	1
1,4-Dimethyl-2,6-Dinitrobenzene	0.23	U	5.2	0.23	ug/L		10/15/18 10:26	10/18/18 23:12	1
1,5-Dimethyl-2,3-Dinitrobenzene	0.27	U	5.2	0.27	ug/L		10/15/18 10:26	10/18/18 23:12	1
1,5-Dimethyl-2,4-Dinitrobenzene	0.28	U	5.2	0.28	ug/L		10/15/18 10:26	10/18/18 23:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	74		48 - 135	10/15/18 10:26	10/18/18 23:12	1
2-Fluorobiphenyl	77		48 - 135	10/15/18 10:26	10/18/18 23:12	1
2-Fluorophenol	80		41 - 135	10/15/18 10:26	10/18/18 23:12	1
Nitrobenzene-d5	75		42 - 135	10/15/18 10:26	10/18/18 23:12	1
Phenol-d5	80		46 - 135	10/15/18 10:26	10/18/18 23:12	1
Terphenyl-d14	79		20 - 135	10/15/18 10:26	10/18/18 23:12	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	0.018	U	0.10	0.018	ug/L		10/13/18 13:04	10/15/18 18:44	1
1,3-Dinitrobenzene	0.015	U	0.10	0.015	ug/L		10/13/18 13:04	10/15/18 18:44	1
2,3-Dinitrotoluene	0.016	U	0.10	0.016	ug/L		10/13/18 13:04	10/15/18 18:44	1
2,4,6-Trinitro-3-xylene	0.013	U	0.10	0.013	ug/L		10/13/18 13:04	10/15/18 18:44	1
2,4,6-Trinitrotoluene	0.023	U	0.10	0.023	ug/L		10/13/18 13:04	10/15/18 18:44	1
2,4-Dinitrotoluene	0.020	U	0.10	0.020	ug/L		10/13/18 13:04	10/15/18 18:44	1
2,5-Dinitrotoluene	0.015	U	0.10	0.015	ug/L		10/13/18 13:04	10/15/18 18:44	1
2,6-Dinitrotoluene	0.023	U	0.10	0.023	ug/L		10/13/18 13:04	10/15/18 18:44	1
2-Amino-4,6-dinitrotoluene	0.022	U	0.10	0.022	ug/L		10/13/18 13:04	10/15/18 18:44	1
2-Nitrotoluene	0.023	U	0.10	0.023	ug/L		10/13/18 13:04	10/15/18 18:44	1
3,4-Dinitrotoluene	0.021	U	0.10	0.021	ug/L		10/13/18 13:04	10/15/18 18:44	1
3,5-Dinitrotoluene	0.036	U	0.10	0.036	ug/L		10/13/18 13:04	10/15/18 18:44	1
3-Nitrotoluene	0.026	U	0.10	0.026	ug/L		10/13/18 13:04	10/15/18 18:44	1
4-Amino-2,6-dinitrotoluene	0.020	U	0.10	0.020	ug/L		10/13/18 13:04	10/15/18 18:44	1
4-Nitrotoluene	0.027	U	0.10	0.027	ug/L		10/13/18 13:04	10/15/18 18:44	1
HMX	0.020	U	0.10	0.020	ug/L		10/13/18 13:04	10/15/18 18:44	1
Nitrobenzene	0.035	U	0.10	0.035	ug/L		10/13/18 13:04	10/15/18 18:44	1
Nitroglycerin	0.047	U	0.15	0.047	ug/L		10/13/18 13:04	10/15/18 18:44	1
PETN	0.019	U	0.10	0.019	ug/L		10/13/18 13:04	10/15/18 18:44	1
RDX	0.022	U	0.10	0.022	ug/L		10/13/18 13:04	10/15/18 18:44	1
Tetryl	0.022	U	0.10	0.022	ug/L		10/13/18 13:04	10/15/18 18:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	119		48 - 130	10/13/18 13:04	10/15/18 18:44	1

TestAmerica Denver

# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-Clubhouse Well Sampling 2018

TestAmerica Job ID: 280-115350-1

**Client Sample ID: GW2018-PZ-16-POT INFLOW DUP**

**Lab Sample ID: 280-115350-2**

**Date Collected: 10/08/18 14:30**

**Matrix: Water**

**Date Received: 10/10/18 09:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dimethyl-3,4-Dinitrobenzene	0.26	U	5.3	0.26	ug/L		10/15/18 10:26	10/19/18 00:25	1
1,2-Dimethyl-3,5-Dinitrobenzene	0.35	U	5.3	0.35	ug/L		10/15/18 10:26	10/19/18 00:25	1
1,2-Dimethyl-3,6-Dinitrobenzene	0.44	U	5.3	0.44	ug/L		10/15/18 10:26	10/19/18 00:25	1
1,2-Dimethyl-4,5-Dinitrobenzene	0.42	U	5.3	0.42	ug/L		10/15/18 10:26	10/19/18 00:25	1
1,3-Dimethyl-2,4-Dinitrobenzene	0.48	U	5.3	0.48	ug/L		10/15/18 10:26	10/19/18 00:25	1
1,3-Dimethyl-2,5-Dinitrobenzene	0.45	U	5.3	0.45	ug/L		10/15/18 10:26	10/19/18 00:25	1
1,4-Dimethyl-2,3-Dinitrobenzene	0.41	U	5.3	0.41	ug/L		10/15/18 10:26	10/19/18 00:25	1
1,4-Dimethyl-2,5-Dinitrobenzene	0.81	U	11000	0.81	ug/L		10/15/18 10:26	10/19/18 00:25	1
1,4-Dimethyl-2,6-Dinitrobenzene	0.23	U	5.3	0.23	ug/L		10/15/18 10:26	10/19/18 00:25	1
1,5-Dimethyl-2,3-Dinitrobenzene	0.28	U	5.3	0.28	ug/L		10/15/18 10:26	10/19/18 00:25	1
1,5-Dimethyl-2,4-Dinitrobenzene	0.29	U	5.3	0.29	ug/L		10/15/18 10:26	10/19/18 00:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	81		48 - 135	10/15/18 10:26	10/19/18 00:25	1
2-Fluorobiphenyl	83		48 - 135	10/15/18 10:26	10/19/18 00:25	1
2-Fluorophenol	86		41 - 135	10/15/18 10:26	10/19/18 00:25	1
Nitrobenzene-d5	82		42 - 135	10/15/18 10:26	10/19/18 00:25	1
Phenol-d5	85		46 - 135	10/15/18 10:26	10/19/18 00:25	1
Terphenyl-d14	84		20 - 135	10/15/18 10:26	10/19/18 00:25	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	0.018	U	0.11	0.018	ug/L		10/13/18 13:04	10/15/18 20:20	1
1,3-Dinitrobenzene	0.015	U	0.11	0.015	ug/L		10/13/18 13:04	10/15/18 20:20	1
2,3-Dinitrotoluene	0.016	U	0.11	0.016	ug/L		10/13/18 13:04	10/15/18 20:20	1
2,4,6-Trinitro-3-xylene	0.013	U	0.11	0.013	ug/L		10/13/18 13:04	10/15/18 20:20	1
2,4,6-Trinitrotoluene	0.023	U	0.11	0.023	ug/L		10/13/18 13:04	10/15/18 20:20	1
2,4-Dinitrotoluene	0.020	U	0.11	0.020	ug/L		10/13/18 13:04	10/15/18 20:20	1
2,5-Dinitrotoluene	0.015	U	0.11	0.015	ug/L		10/13/18 13:04	10/15/18 20:20	1
2,6-Dinitrotoluene	0.023	U	0.11	0.023	ug/L		10/13/18 13:04	10/15/18 20:20	1
2-Amino-4,6-dinitrotoluene	0.022	U	0.11	0.022	ug/L		10/13/18 13:04	10/15/18 20:20	1
2-Nitrotoluene	0.023	U	0.11	0.023	ug/L		10/13/18 13:04	10/15/18 20:20	1
3,4-Dinitrotoluene	0.021	U	0.11	0.021	ug/L		10/13/18 13:04	10/15/18 20:20	1
3,5-Dinitrotoluene	0.036	U	0.11	0.036	ug/L		10/13/18 13:04	10/15/18 20:20	1
3-Nitrotoluene	0.026	U	0.11	0.026	ug/L		10/13/18 13:04	10/15/18 20:20	1
4-Amino-2,6-dinitrotoluene	0.020	U	0.11	0.020	ug/L		10/13/18 13:04	10/15/18 20:20	1
4-Nitrotoluene	0.028	U	0.11	0.028	ug/L		10/13/18 13:04	10/15/18 20:20	1
HMX	0.020	U	0.11	0.020	ug/L		10/13/18 13:04	10/15/18 20:20	1
Nitrobenzene	0.035	U	0.11	0.035	ug/L		10/13/18 13:04	10/15/18 20:20	1
Nitroglycerin	0.048	U	0.15	0.048	ug/L		10/13/18 13:04	10/15/18 20:20	1
PETN	0.019	U	0.11	0.019	ug/L		10/13/18 13:04	10/15/18 20:20	1
RDX	0.022	U	0.11	0.022	ug/L		10/13/18 13:04	10/15/18 20:20	1
Tetryl	0.022	U	0.11	0.022	ug/L		10/13/18 13:04	10/15/18 20:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	84		48 - 130	10/13/18 13:04	10/15/18 20:20	1

TestAmerica Denver

# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-Clubhouse Well Sampling 2018

TestAmerica Job ID: 280-115350-1

**Client Sample ID: GW2018-PZ-16-POT EFFLUENT**

**Lab Sample ID: 280-115350-3**

**Date Collected: 10/08/18 15:30**

**Matrix: Water**

**Date Received: 10/10/18 09:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dimethyl-3,4-Dinitrobenzene	0.25	U	5.1	0.25	ug/L		10/15/18 10:26	10/19/18 00:50	1
1,2-Dimethyl-3,5-Dinitrobenzene	0.34	U	5.1	0.34	ug/L		10/15/18 10:26	10/19/18 00:50	1
1,2-Dimethyl-3,6-Dinitrobenzene	0.42	U	5.1	0.42	ug/L		10/15/18 10:26	10/19/18 00:50	1
1,2-Dimethyl-4,5-Dinitrobenzene	0.40	U	5.1	0.40	ug/L		10/15/18 10:26	10/19/18 00:50	1
1,3-Dimethyl-2,4-Dinitrobenzene	0.46	U	5.1	0.46	ug/L		10/15/18 10:26	10/19/18 00:50	1
1,3-Dimethyl-2,5-Dinitrobenzene	0.43	U	5.1	0.43	ug/L		10/15/18 10:26	10/19/18 00:50	1
1,4-Dimethyl-2,3-Dinitrobenzene	0.39	U	5.1	0.39	ug/L		10/15/18 10:26	10/19/18 00:50	1
1,4-Dimethyl-2,5-Dinitrobenzene	0.78	U	10000	0.78	ug/L		10/15/18 10:26	10/19/18 00:50	1
1,4-Dimethyl-2,6-Dinitrobenzene	0.23	U	5.1	0.23	ug/L		10/15/18 10:26	10/19/18 00:50	1
1,5-Dimethyl-2,3-Dinitrobenzene	0.27	U	5.1	0.27	ug/L		10/15/18 10:26	10/19/18 00:50	1
1,5-Dimethyl-2,4-Dinitrobenzene	0.28	U	5.1	0.28	ug/L		10/15/18 10:26	10/19/18 00:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	80		48 - 135	10/15/18 10:26	10/19/18 00:50	1
2-Fluorobiphenyl	81		48 - 135	10/15/18 10:26	10/19/18 00:50	1
2-Fluorophenol	87		41 - 135	10/15/18 10:26	10/19/18 00:50	1
Nitrobenzene-d5	78		42 - 135	10/15/18 10:26	10/19/18 00:50	1
Phenol-d5	86		46 - 135	10/15/18 10:26	10/19/18 00:50	1
Terphenyl-d14	84		20 - 135	10/15/18 10:26	10/19/18 00:50	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	0.018	U	0.10	0.018	ug/L		10/13/18 13:04	10/15/18 20:52	1
1,3-Dinitrobenzene	0.014	U	0.10	0.014	ug/L		10/13/18 13:04	10/15/18 20:52	1
2,3-Dinitrotoluene	0.015	U	0.10	0.015	ug/L		10/13/18 13:04	10/15/18 20:52	1
2,4,6-Trinitro-3-xylene	0.012	U	0.10	0.012	ug/L		10/13/18 13:04	10/15/18 20:52	1
2,4,6-Trinitrotoluene	0.023	U	0.10	0.023	ug/L		10/13/18 13:04	10/15/18 20:52	1
2,4-Dinitrotoluene	0.020	U	0.10	0.020	ug/L		10/13/18 13:04	10/15/18 20:52	1
2,5-Dinitrotoluene	0.014	U	0.10	0.014	ug/L		10/13/18 13:04	10/15/18 20:52	1
2,6-Dinitrotoluene	0.023	U	0.10	0.023	ug/L		10/13/18 13:04	10/15/18 20:52	1
2-Amino-4,6-dinitrotoluene	0.022	U	0.10	0.022	ug/L		10/13/18 13:04	10/15/18 20:52	1
2-Nitrotoluene	0.023	U	0.10	0.023	ug/L		10/13/18 13:04	10/15/18 20:52	1
3,4-Dinitrotoluene	0.021	U	0.10	0.021	ug/L		10/13/18 13:04	10/15/18 20:52	1
3,5-Dinitrotoluene	0.035	U	0.10	0.035	ug/L		10/13/18 13:04	10/15/18 20:52	1
3-Nitrotoluene	0.026	U	0.10	0.026	ug/L		10/13/18 13:04	10/15/18 20:52	1
4-Amino-2,6-dinitrotoluene	0.020	U	0.10	0.020	ug/L		10/13/18 13:04	10/15/18 20:52	1
4-Nitrotoluene	0.027	U	0.10	0.027	ug/L		10/13/18 13:04	10/15/18 20:52	1
HMX	0.020	U	0.10	0.020	ug/L		10/13/18 13:04	10/15/18 20:52	1
Nitrobenzene	0.034	U	0.10	0.034	ug/L		10/13/18 13:04	10/15/18 20:52	1
Nitroglycerin	0.046	U	0.14	0.046	ug/L		10/13/18 13:04	10/15/18 20:52	1
PETN	0.019	U	0.10	0.019	ug/L		10/13/18 13:04	10/15/18 20:52	1
RDX	0.022	U	0.10	0.022	ug/L		10/13/18 13:04	10/15/18 20:52	1
Tetryl	0.022	U	0.10	0.022	ug/L		10/13/18 13:04	10/15/18 20:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	63		48 - 130	10/13/18 13:04	10/15/18 20:52	1

TestAmerica Denver

# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-Clubhouse Well Sampling 2018

TestAmerica Job ID: 280-115350-1

**Client Sample ID: GW2018-CLUBHOUSE EFFLUENT**

**Lab Sample ID: 280-115350-4**

**Date Collected: 10/08/18 16:30**

**Matrix: Water**

**Date Received: 10/11/18 09:10**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dimethyl-3,4-Dinitrobenzene	0.25	U	5.2	0.25	ug/L		10/15/18 10:26	10/19/18 01:15	1
1,2-Dimethyl-3,5-Dinitrobenzene	0.34	U	5.2	0.34	ug/L		10/15/18 10:26	10/19/18 01:15	1
1,2-Dimethyl-3,6-Dinitrobenzene	0.42	U	5.2	0.42	ug/L		10/15/18 10:26	10/19/18 01:15	1
1,2-Dimethyl-4,5-Dinitrobenzene	0.40	U	5.2	0.40	ug/L		10/15/18 10:26	10/19/18 01:15	1
1,3-Dimethyl-2,4-Dinitrobenzene	0.47	U	5.2	0.47	ug/L		10/15/18 10:26	10/19/18 01:15	1
1,3-Dimethyl-2,5-Dinitrobenzene	0.44	U	5.2	0.44	ug/L		10/15/18 10:26	10/19/18 01:15	1
1,4-Dimethyl-2,3-Dinitrobenzene	0.39	U	5.2	0.39	ug/L		10/15/18 10:26	10/19/18 01:15	1
1,4-Dimethyl-2,5-Dinitrobenzene	0.79	U	10000	0.79	ug/L		10/15/18 10:26	10/19/18 01:15	1
1,4-Dimethyl-2,6-Dinitrobenzene	0.23	U	5.2	0.23	ug/L		10/15/18 10:26	10/19/18 01:15	1
1,5-Dimethyl-2,3-Dinitrobenzene	0.27	U	5.2	0.27	ug/L		10/15/18 10:26	10/19/18 01:15	1
1,5-Dimethyl-2,4-Dinitrobenzene	0.28	U	5.2	0.28	ug/L		10/15/18 10:26	10/19/18 01:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	70		48 - 135	10/15/18 10:26	10/19/18 01:15	1
2-Fluorobiphenyl	69		48 - 135	10/15/18 10:26	10/19/18 01:15	1
2-Fluorophenol	74		41 - 135	10/15/18 10:26	10/19/18 01:15	1
Nitrobenzene-d5	68		42 - 135	10/15/18 10:26	10/19/18 01:15	1
Phenol-d5	73		46 - 135	10/15/18 10:26	10/19/18 01:15	1
Terphenyl-d14	78		20 - 135	10/15/18 10:26	10/19/18 01:15	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	0.018	U	0.10	0.018	ug/L		10/13/18 13:04	10/15/18 21:25	1
1,3-Dinitrobenzene	0.015	U	0.10	0.015	ug/L		10/13/18 13:04	10/15/18 21:25	1
2,3-Dinitrotoluene	0.016	U	0.10	0.016	ug/L		10/13/18 13:04	10/15/18 21:25	1
2,4,6-Trinitro-3-xylene	0.013	U	0.10	0.013	ug/L		10/13/18 13:04	10/15/18 21:25	1
2,4,6-Trinitrotoluene	0.023	U	0.10	0.023	ug/L		10/13/18 13:04	10/15/18 21:25	1
2,4-Dinitrotoluene	0.020	U	0.10	0.020	ug/L		10/13/18 13:04	10/15/18 21:25	1
2,5-Dinitrotoluene	0.015	U	0.10	0.015	ug/L		10/13/18 13:04	10/15/18 21:25	1
2,6-Dinitrotoluene	0.023	U	0.10	0.023	ug/L		10/13/18 13:04	10/15/18 21:25	1
2-Amino-4,6-dinitrotoluene	0.022	U	0.10	0.022	ug/L		10/13/18 13:04	10/15/18 21:25	1
2-Nitrotoluene	0.023	U	0.10	0.023	ug/L		10/13/18 13:04	10/15/18 21:25	1
3,4-Dinitrotoluene	0.021	U	0.10	0.021	ug/L		10/13/18 13:04	10/15/18 21:25	1
3,5-Dinitrotoluene	0.035	U	0.10	0.035	ug/L		10/13/18 13:04	10/15/18 21:25	1
3-Nitrotoluene	0.026	U	0.10	0.026	ug/L		10/13/18 13:04	10/15/18 21:25	1
4-Amino-2,6-dinitrotoluene	0.020	U	0.10	0.020	ug/L		10/13/18 13:04	10/15/18 21:25	1
4-Nitrotoluene	0.027	U	0.10	0.027	ug/L		10/13/18 13:04	10/15/18 21:25	1
HMX	0.020	U	0.10	0.020	ug/L		10/13/18 13:04	10/15/18 21:25	1
Nitrobenzene	0.034	U	0.10	0.034	ug/L		10/13/18 13:04	10/15/18 21:25	1
Nitroglycerin	0.047	U	0.15	0.047	ug/L		10/13/18 13:04	10/15/18 21:25	1
PETN	0.019	U	0.10	0.019	ug/L		10/13/18 13:04	10/15/18 21:25	1
RDX	0.022	U	0.10	0.022	ug/L		10/13/18 13:04	10/15/18 21:25	1
Tetryl	0.022	U	0.10	0.022	ug/L		10/13/18 13:04	10/15/18 21:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	86		48 - 130	10/13/18 13:04	10/15/18 21:25	1

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# Client Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-Clubhouse Well Sampling 2018

TestAmerica Job ID: 280-115350-1

**Client Sample ID: GW2018-CLUBHOUSE INFLOW**

**Lab Sample ID: 280-115350-5**

**Date Collected: 10/08/18 17:00**

**Matrix: Water**

**Date Received: 10/11/18 09:10**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dimethyl-3,4-Dinitrobenzene	0.25	U	5.3	0.25	ug/L		10/15/18 10:26	10/19/18 01:40	1
1,2-Dimethyl-3,5-Dinitrobenzene	0.35	U	5.3	0.35	ug/L		10/15/18 10:26	10/19/18 01:40	1
1,2-Dimethyl-3,6-Dinitrobenzene	0.43	U	5.3	0.43	ug/L		10/15/18 10:26	10/19/18 01:40	1
1,2-Dimethyl-4,5-Dinitrobenzene	0.41	U	5.3	0.41	ug/L		10/15/18 10:26	10/19/18 01:40	1
1,3-Dimethyl-2,4-Dinitrobenzene	0.48	U	5.3	0.48	ug/L		10/15/18 10:26	10/19/18 01:40	1
1,3-Dimethyl-2,5-Dinitrobenzene	0.44	U	5.3	0.44	ug/L		10/15/18 10:26	10/19/18 01:40	1
1,4-Dimethyl-2,3-Dinitrobenzene	0.40	U	5.3	0.40	ug/L		10/15/18 10:26	10/19/18 01:40	1
1,4-Dimethyl-2,5-Dinitrobenzene	0.80	U	11000	0.80	ug/L		10/15/18 10:26	10/19/18 01:40	1
1,4-Dimethyl-2,6-Dinitrobenzene	0.23	U	5.3	0.23	ug/L		10/15/18 10:26	10/19/18 01:40	1
1,5-Dimethyl-2,3-Dinitrobenzene	0.28	U	5.3	0.28	ug/L		10/15/18 10:26	10/19/18 01:40	1
1,5-Dimethyl-2,4-Dinitrobenzene	0.29	U	5.3	0.29	ug/L		10/15/18 10:26	10/19/18 01:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	75		48 - 135	10/15/18 10:26	10/19/18 01:40	1
2-Fluorobiphenyl	77		48 - 135	10/15/18 10:26	10/19/18 01:40	1
2-Fluorophenol	79		41 - 135	10/15/18 10:26	10/19/18 01:40	1
Nitrobenzene-d5	76		42 - 135	10/15/18 10:26	10/19/18 01:40	1
Phenol-d5	79		46 - 135	10/15/18 10:26	10/19/18 01:40	1
Terphenyl-d14	79		20 - 135	10/15/18 10:26	10/19/18 01:40	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	0.018	U	0.11	0.018	ug/L		10/13/18 13:04	10/15/18 21:57	1
1,3-Dinitrobenzene	0.015	U	0.11	0.015	ug/L		10/13/18 13:04	10/15/18 21:57	1
2,3-Dinitrotoluene	0.016	U	0.11	0.016	ug/L		10/13/18 13:04	10/15/18 21:57	1
2,4,6-Trinitro-3-xylene	0.013	U	0.11	0.013	ug/L		10/13/18 13:04	10/15/18 21:57	1
2,4,6-Trinitrotoluene	0.023	U	0.11	0.023	ug/L		10/13/18 13:04	10/15/18 21:57	1
2,4-Dinitrotoluene	0.020	U	0.11	0.020	ug/L		10/13/18 13:04	10/15/18 21:57	1
2,5-Dinitrotoluene	0.015	U	0.11	0.015	ug/L		10/13/18 13:04	10/15/18 21:57	1
2,6-Dinitrotoluene	0.023	U	0.11	0.023	ug/L		10/13/18 13:04	10/15/18 21:57	1
2-Amino-4,6-dinitrotoluene	0.022	U	0.11	0.022	ug/L		10/13/18 13:04	10/15/18 21:57	1
2-Nitrotoluene	0.023	U	0.11	0.023	ug/L		10/13/18 13:04	10/15/18 21:57	1
3,4-Dinitrotoluene	0.021	U	0.11	0.021	ug/L		10/13/18 13:04	10/15/18 21:57	1
3,5-Dinitrotoluene	0.036	U	0.11	0.036	ug/L		10/13/18 13:04	10/15/18 21:57	1
3-Nitrotoluene	0.027	U	0.11	0.027	ug/L		10/13/18 13:04	10/15/18 21:57	1
4-Amino-2,6-dinitrotoluene	0.020	U	0.11	0.020	ug/L		10/13/18 13:04	10/15/18 21:57	1
4-Nitrotoluene	0.028	U	0.11	0.028	ug/L		10/13/18 13:04	10/15/18 21:57	1
HMX	0.020	U	0.11	0.020	ug/L		10/13/18 13:04	10/15/18 21:57	1
Nitrobenzene	0.035	U	0.11	0.035	ug/L		10/13/18 13:04	10/15/18 21:57	1
Nitroglycerin	0.048	U	0.15	0.048	ug/L		10/13/18 13:04	10/15/18 21:57	1
PETN	0.019	U	0.11	0.019	ug/L		10/13/18 13:04	10/15/18 21:57	1
RDX	0.022	U	0.11	0.022	ug/L		10/13/18 13:04	10/15/18 21:57	1
Tetryl	0.022	U	0.11	0.022	ug/L		10/13/18 13:04	10/15/18 21:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	91		48 - 130	10/13/18 13:04	10/15/18 21:57	1

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# Surrogate Summary

Client: Chemours Company FC, LLC The  
Project/Site: BAR-Clubhouse Well Sampling 2018

TestAmerica Job ID: 280-115350-1

## 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)
280-115350-1	GW2018-PZ-16-POT INFLOW	74	77	80	75	80	79
280-115350-1 MS	GW2018-PZ-16-POT INFLOW	79	76	77	72	77	82
280-115350-1 MSD	GW2018-PZ-16-POT INFLOW	79	73	73	69	75	82
280-115350-2	GW2018-PZ-16-POT INFLOW DUP	81	83	86	82	85	84
280-115350-3	GW2018-PZ-16-POT EFFLUEN	80	81	87	78	86	84
280-115350-4	GW2018-CLUBHOUSE EFFLUENT	70	69	74	68	73	78
280-115350-5	GW2018-CLUBHOUSE INFLOV	75	77	79	76	79	79
LCS 280-433392/2-A	Lab Control Sample	82	80	82	75	83	81
MB 280-433392/1-A	Method Blank	76	78	80	77	81	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	Percent Surrogate Recovery (Acceptance Limits)
		NBZ (48-130)
280-115350-1	GW2018-PZ-16-POT INFLOW	119
280-115350-1 MS	GW2018-PZ-16-POT INFLOW	71
280-115350-1 MSD	GW2018-PZ-16-POT INFLOW	85
280-115350-2	GW2018-PZ-16-POT INFLOW DUP	84
280-115350-3	GW2018-PZ-16-POT EFFLUEN	63
280-115350-4	GW2018-CLUBHOUSE EFFLUENT	86
280-115350-5	GW2018-CLUBHOUSE INFLOV	91
LCS 280-433265/2-A	Lab Control Sample	87
MB 280-433265/1-A	Method Blank	82

### Surrogate Legend

NBZ = Nitrobenzene-d5

# QC Sample Results

Client: Chemours Company FC, LLC The  
 Project/Site: BAR-Clubhouse Well Sampling 2018

TestAmerica Job ID: 280-115350-1

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

**Lab Sample ID: MB 280-433392/1-A**  
**Matrix: Water**  
**Analysis Batch: 434017**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 433392**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dimethyl-3,4-Dinitrobenzene	0.24	U	5.0	0.24	ug/L		10/15/18 10:26	10/18/18 21:09	1
1,2-Dimethyl-3,5-Dinitrobenzene	0.33	U	5.0	0.33	ug/L		10/15/18 10:26	10/18/18 21:09	1
1,2-Dimethyl-3,6-Dinitrobenzene	0.41	U	5.0	0.41	ug/L		10/15/18 10:26	10/18/18 21:09	1
1,2-Dimethyl-4,5-Dinitrobenzene	0.39	U	5.0	0.39	ug/L		10/15/18 10:26	10/18/18 21:09	1
1,3-Dimethyl-2,4-Dinitrobenzene	0.45	U	5.0	0.45	ug/L		10/15/18 10:26	10/18/18 21:09	1
1,3-Dimethyl-2,5-Dinitrobenzene	0.42	U	5.0	0.42	ug/L		10/15/18 10:26	10/18/18 21:09	1
1,4-Dimethyl-2,3-Dinitrobenzene	0.38	U	5.0	0.38	ug/L		10/15/18 10:26	10/18/18 21:09	1
1,4-Dimethyl-2,5-Dinitrobenzene	0.76	U	10000	0.76	ug/L		10/15/18 10:26	10/18/18 21:09	1
1,4-Dimethyl-2,6-Dinitrobenzene	0.22	U	5.0	0.22	ug/L		10/15/18 10:26	10/18/18 21:09	1
1,5-Dimethyl-2,3-Dinitrobenzene	0.26	U	5.0	0.26	ug/L		10/15/18 10:26	10/18/18 21:09	1
1,5-Dimethyl-2,4-Dinitrobenzene	0.27	U	5.0	0.27	ug/L		10/15/18 10:26	10/18/18 21:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	76		48 - 135	10/15/18 10:26	10/18/18 21:09	1
2-Fluorobiphenyl	78		48 - 135	10/15/18 10:26	10/18/18 21:09	1
2-Fluorophenol	80		41 - 135	10/15/18 10:26	10/18/18 21:09	1
Nitrobenzene-d5	77		42 - 135	10/15/18 10:26	10/18/18 21:09	1
Phenol-d5	81		46 - 135	10/15/18 10:26	10/18/18 21:09	1
Terphenyl-d14	77		20 - 135	10/15/18 10:26	10/18/18 21:09	1

**Lab Sample ID: LCS 280-433392/2-A**  
**Matrix: Water**  
**Analysis Batch: 434017**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 433392**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,2-Dimethyl-3,4-Dinitrobenzene	50.0	50.9		ug/L		102	50 - 135
1,2-Dimethyl-3,5-Dinitrobenzene	50.0	50.5		ug/L		101	50 - 135
1,2-Dimethyl-3,6-Dinitrobenzene	50.0	50.5		ug/L		101	50 - 135
1,2-Dimethyl-4,5-Dinitrobenzene	50.0	47.4		ug/L		95	50 - 135
1,3-Dimethyl-2,4-Dinitrobenzene	50.0	49.2		ug/L		98	50 - 135
1,3-Dimethyl-2,5-Dinitrobenzene	50.0	51.0		ug/L		102	50 - 135
1,4-Dimethyl-2,3-Dinitrobenzene	50.0	50.5		ug/L		101	50 - 135
1,4-Dimethyl-2,5-Dinitrobenzene	50.0	50.4	J	ug/L		101	50 - 135
1,4-Dimethyl-2,6-Dinitrobenzene	50.0	50.8		ug/L		102	50 - 135
1,5-Dimethyl-2,3-Dinitrobenzene	50.0	50.3		ug/L		101	50 - 135
1,5-Dimethyl-2,4-Dinitrobenzene	50.0	51.5		ug/L		103	50 - 135

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol	82		48 - 135
2-Fluorobiphenyl	80		48 - 135
2-Fluorophenol	82		41 - 135
Nitrobenzene-d5	75		42 - 135
Phenol-d5	83		46 - 135
Terphenyl-d14	81		20 - 135

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# QC Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-Clubhouse Well Sampling 2018

TestAmerica Job ID: 280-115350-1

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

**Lab Sample ID: 280-115350-1 MS**

**Matrix: Water**

**Analysis Batch: 434017**

**Client Sample ID: GW2018-PZ-16-POT INFLOW**

**Prep Type: Total/NA**

**Prep Batch: 433392**

Analyte	Sample	Sample	Spike	MS MS		Unit	D	%Rec	Limits
	Result	Qualifier		Result	Qualifier				
1,2-Dimethyl-3,4-Dinitrobenzene	0.25	U	52.8	52.7		ug/L		100	50 - 135
1,2-Dimethyl-3,5-Dinitrobenzene	0.34	U	52.8	52.4		ug/L		99	50 - 135
1,2-Dimethyl-3,6-Dinitrobenzene	0.43	U	52.8	52.1		ug/L		99	50 - 135
1,2-Dimethyl-4,5-Dinitrobenzene	0.41	U	52.8	50.7		ug/L		96	50 - 135
1,3-Dimethyl-2,4-Dinitrobenzene	0.47	U	52.8	51.0		ug/L		97	50 - 135
1,3-Dimethyl-2,5-Dinitrobenzene	0.44	U	52.8	52.4		ug/L		99	50 - 135
1,4-Dimethyl-2,3-Dinitrobenzene	0.40	U	52.8	51.0		ug/L		97	50 - 135
1,4-Dimethyl-2,5-Dinitrobenzene	0.79	U	52.8	50.5	J	ug/L		96	50 - 135
1,4-Dimethyl-2,6-Dinitrobenzene	0.23	U	52.8	50.9		ug/L		96	50 - 135
1,5-Dimethyl-2,3-Dinitrobenzene	0.27	U	52.8	51.3		ug/L		97	50 - 135
1,5-Dimethyl-2,4-Dinitrobenzene	0.28	U	52.8	52.6		ug/L		100	50 - 135

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol	79		48 - 135
2-Fluorobiphenyl	76		48 - 135
2-Fluorophenol	77		41 - 135
Nitrobenzene-d5	72		42 - 135
Phenol-d5	77		46 - 135
Terphenyl-d14	82		20 - 135

**Lab Sample ID: 280-115350-1 MSD**

**Matrix: Water**

**Analysis Batch: 434017**

**Client Sample ID: GW2018-PZ-16-POT INFLOW**

**Prep Type: Total/NA**

**Prep Batch: 433392**

Analyte	Sample	Sample	Spike	MSD MSD		Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier						
1,2-Dimethyl-3,4-Dinitrobenzene	0.25	U	52.1	51.5		ug/L		99	50 - 135	2	30
1,2-Dimethyl-3,5-Dinitrobenzene	0.34	U	52.1	52.0		ug/L		100	50 - 135	1	30
1,2-Dimethyl-3,6-Dinitrobenzene	0.43	U	52.1	50.0		ug/L		96	50 - 135	4	30
1,2-Dimethyl-4,5-Dinitrobenzene	0.41	U	52.1	49.9		ug/L		96	50 - 135	1	30
1,3-Dimethyl-2,4-Dinitrobenzene	0.47	U	52.1	48.8		ug/L		94	50 - 135	4	30
1,3-Dimethyl-2,5-Dinitrobenzene	0.44	U	52.1	51.6		ug/L		99	50 - 135	2	30
1,4-Dimethyl-2,3-Dinitrobenzene	0.40	U	52.1	49.9		ug/L		96	50 - 135	2	30
1,4-Dimethyl-2,5-Dinitrobenzene	0.79	U	52.1	49.2	J	ug/L		95	50 - 135	3	30
1,4-Dimethyl-2,6-Dinitrobenzene	0.23	U	52.1	49.8		ug/L		96	50 - 135	2	30
1,5-Dimethyl-2,3-Dinitrobenzene	0.27	U	52.1	50.3		ug/L		97	50 - 135	2	30
1,5-Dimethyl-2,4-Dinitrobenzene	0.28	U	52.1	51.0		ug/L		98	50 - 135	3	30

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
2,4,6-Tribromophenol	79		48 - 135
2-Fluorobiphenyl	73		48 - 135
2-Fluorophenol	73		41 - 135
Nitrobenzene-d5	69		42 - 135
Phenol-d5	75		46 - 135
Terphenyl-d14	82		20 - 135

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# QC Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-Clubhouse Well Sampling 2018

TestAmerica Job ID: 280-115350-1

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

**Lab Sample ID: MB 280-433265/1-A**

**Matrix: Water**

**Analysis Batch: 433719**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 433265**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trinitrobenzene	0.017	U	0.10	0.017	ug/L		10/13/18 13:04	10/15/18 17:07	1
1,3-Dinitrobenzene	0.014	U	0.10	0.014	ug/L		10/13/18 13:04	10/15/18 17:07	1
2,3-Dinitrotoluene	0.015	U	0.10	0.015	ug/L		10/13/18 13:04	10/15/18 17:07	1
2,4,6-Trinitro-3-xylene	0.012	U	0.10	0.012	ug/L		10/13/18 13:04	10/15/18 17:07	1
2,4,6-Trinitrotoluene	0.022	U	0.10	0.022	ug/L		10/13/18 13:04	10/15/18 17:07	1
2,4-Dinitrotoluene	0.019	U	0.10	0.019	ug/L		10/13/18 13:04	10/15/18 17:07	1
2,5-Dinitrotoluene	0.014	U	0.10	0.014	ug/L		10/13/18 13:04	10/15/18 17:07	1
2,6-Dinitrotoluene	0.022	U	0.10	0.022	ug/L		10/13/18 13:04	10/15/18 17:07	1
2-Amino-4,6-dinitrotoluene	0.021	U	0.10	0.021	ug/L		10/13/18 13:04	10/15/18 17:07	1
2-Nitrotoluene	0.022	U	0.10	0.022	ug/L		10/13/18 13:04	10/15/18 17:07	1
3,4-Dinitrotoluene	0.020	U	0.10	0.020	ug/L		10/13/18 13:04	10/15/18 17:07	1
3,5-Dinitrotoluene	0.034	U	0.10	0.034	ug/L		10/13/18 13:04	10/15/18 17:07	1
3-Nitrotoluene	0.025	U	0.10	0.025	ug/L		10/13/18 13:04	10/15/18 17:07	1
4-Amino-2,6-dinitrotoluene	0.019	U	0.10	0.019	ug/L		10/13/18 13:04	10/15/18 17:07	1
4-Nitrotoluene	0.026	U	0.10	0.026	ug/L		10/13/18 13:04	10/15/18 17:07	1
HMX	0.019	U	0.10	0.019	ug/L		10/13/18 13:04	10/15/18 17:07	1
Nitrobenzene	0.033	U	0.10	0.033	ug/L		10/13/18 13:04	10/15/18 17:07	1
Nitroglycerin	0.045	U	0.14	0.045	ug/L		10/13/18 13:04	10/15/18 17:07	1
PETN	0.018	U	0.10	0.018	ug/L		10/13/18 13:04	10/15/18 17:07	1
RDX	0.021	U	0.10	0.021	ug/L		10/13/18 13:04	10/15/18 17:07	1
Tetryl	0.021	U	0.10	0.021	ug/L		10/13/18 13:04	10/15/18 17:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	82		48 - 130	10/13/18 13:04	10/15/18 17:07	1

**Lab Sample ID: LCS 280-433265/2-A**

**Matrix: Water**

**Analysis Batch: 433719**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 433265**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,3,5-Trinitrobenzene	0.500	0.497		ug/L		99	48 - 135
1,3-Dinitrobenzene	0.500	0.472		ug/L		94	64 - 122
2,3-Dinitrotoluene	0.500	0.461		ug/L		92	50 - 150
2,4,6-Trinitro-3-xylene	0.500	0.532		ug/L		106	50 - 150
2,4,6-Trinitrotoluene	0.500	0.426		ug/L		85	10 - 145
2,4-Dinitrotoluene	0.500	0.466		ug/L		93	55 - 117
2,5-Dinitrotoluene	0.500	0.455		ug/L		91	50 - 150
2,6-Dinitrotoluene	0.500	0.467		ug/L		93	54 - 123
2-Amino-4,6-dinitrotoluene	0.500	0.426		ug/L		85	47 - 134
2-Nitrotoluene	0.500	0.494		ug/L		99	25 - 127
3,4-Dinitrotoluene	0.501	0.474		ug/L		95	50 - 150
3,5-Dinitrotoluene	0.500	0.562		ug/L		112	50 - 150
3-Nitrotoluene	0.500	0.450		ug/L		90	18 - 123
4-Amino-2,6-dinitrotoluene	0.500	0.447		ug/L		89	50 - 139
4-Nitrotoluene	0.500	0.482		ug/L		96	27 - 128
HMX	0.500	0.453		ug/L		91	63 - 119
Nitrobenzene	0.500	0.397		ug/L		79	39 - 131
Nitroglycerin	0.500	0.430		ug/L		86	60 - 121

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# QC Sample Results

Client: Chemours Company FC, LLC The  
Project/Site: BAR-Clubhouse Well Sampling 2018

TestAmerica Job ID: 280-115350-1

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

**Lab Sample ID: LCS 280-433265/2-A**

**Matrix: Water**

**Analysis Batch: 433719**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 433265**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
PETN	0.500	0.539		ug/L		108	46 - 151	
RDX	0.500	0.474		ug/L		95	71 - 127	
Tetryl	0.500	0.474		ug/L		95	15 - 134	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5	87		48 - 130

**Lab Sample ID: 280-115350-1 MS**

**Matrix: Water**

**Analysis Batch: 433719**

**Client Sample ID: GW2018-PZ-16-POT INFLOW**

**Prep Type: Total/NA**

**Prep Batch: 433265**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	
1,3,5-Trinitrobenzene	0.018	U	0.524	0.590		ug/L		113	48 - 135	
1,3-Dinitrobenzene	0.015	U	0.524	0.545		ug/L		104	64 - 122	
2,3-Dinitrotoluene	0.016	U	0.524	0.509		ug/L		97	50 - 150	
2,4,6-Trinitro-3-xylene	0.013	U	0.524	0.482		ug/L		92	50 - 150	
2,4,6-Trinitrotoluene	0.023	U	0.524	0.442		ug/L		84	10 - 145	
2,4-Dinitrotoluene	0.020	U	0.524	0.502		ug/L		96	55 - 117	
2,5-Dinitrotoluene	0.015	U	0.524	0.606		ug/L		115	50 - 150	
2,6-Dinitrotoluene	0.023	U	0.524	0.511		ug/L		98	54 - 123	
2-Amino-4,6-dinitrotoluene	0.022	U	0.524	0.542		ug/L		103	47 - 134	
2-Nitrotoluene	0.023	U	0.524	0.386		ug/L		74	25 - 127	
3,4-Dinitrotoluene	0.021	U	0.525	0.450		ug/L		86	50 - 150	
3,5-Dinitrotoluene	0.036	U	0.524	0.532		ug/L		102	50 - 150	
3-Nitrotoluene	0.026	U	0.524	0.365		ug/L		70	18 - 123	
4-Amino-2,6-dinitrotoluene	0.020	U	0.524	0.506		ug/L		96	50 - 139	
4-Nitrotoluene	0.027	U	0.524	0.423		ug/L		81	27 - 128	
HMX	0.020	U	0.524	0.563		ug/L		107	63 - 119	
Nitrobenzene	0.035	U	0.524	0.386		ug/L		74	39 - 131	
Nitroglycerin	0.047	U	0.524	0.443		ug/L		84	60 - 121	
PETN	0.019	U	0.524	0.472		ug/L		90	46 - 151	
RDX	0.022	U	0.524	0.524		ug/L		100	71 - 127	
Tetryl	0.022	U	0.524	0.452		ug/L		86	15 - 134	

Surrogate	MS %Recovery	MS Qualifier	Limits
Nitrobenzene-d5	71		48 - 130

**Lab Sample ID: 280-115350-1 MSD**

**Matrix: Water**

**Analysis Batch: 433719**

**Client Sample ID: GW2018-PZ-16-POT INFLOW**

**Prep Type: Total/NA**

**Prep Batch: 433265**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	
											RPD	Limit
1,3,5-Trinitrobenzene	0.018	U	0.526	0.514		ug/L		98	48 - 135	14	52	
1,3-Dinitrobenzene	0.015	U	0.526	0.478		ug/L		91	64 - 122	13	30	
2,3-Dinitrotoluene	0.016	U	0.526	0.516		ug/L		98	50 - 150	1	30	
2,4,6-Trinitro-3-xylene	0.013	U	0.526	0.522		ug/L		99	50 - 150	8	30	
2,4,6-Trinitrotoluene	0.023	U	0.526	0.558		ug/L		106	10 - 145	23	70	
2,4-Dinitrotoluene	0.020	U	0.526	0.482		ug/L		92	55 - 117	4	27	

TestAmerica Denver

# QC Sample Results

Client: Chemours Company FC, LLC The  
 Project/Site: BAR-Clubhouse Well Sampling 2018

TestAmerica Job ID: 280-115350-1

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

Lab Sample ID: 280-115350-1 MSD

Matrix: Water

Analysis Batch: 433719

Client Sample ID: GW2018-PZ-16-POT INFLOW

Prep Type: Total/NA

Prep Batch: 433265

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
2,5-Dinitrotoluene	0.015	U	0.526	0.497		ug/L		95	50 - 150	20	50
2,6-Dinitrotoluene	0.023	U	0.526	0.581		ug/L		110	54 - 123	13	46
2-Amino-4,6-dinitrotoluene	0.022	U	0.526	0.421		ug/L		80	47 - 134	25	52
2-Nitrotoluene	0.023	U	0.526	0.359		ug/L		68	25 - 127	7	67
3,4-Dinitrotoluene	0.021	U	0.526	0.603		ug/L		115	50 - 150	29	30
3,5-Dinitrotoluene	0.036	U	0.526	0.402		ug/L		77	50 - 150	28	30
3-Nitrotoluene	0.026	U	0.526	0.402		ug/L		76	18 - 123	10	75
4-Amino-2,6-dinitrotoluene	0.020	U	0.526	0.508		ug/L		97	50 - 139	0	68
4-Nitrotoluene	0.027	U	0.526	0.450		ug/L		85	27 - 128	6	70
HMX	0.020	U	0.526	0.496		ug/L		94	63 - 119	13	48
Nitrobenzene	0.035	U	0.526	0.385		ug/L		73	39 - 131	0	55
Nitroglycerin	0.047	U	0.526	0.478		ug/L		91	60 - 121	8	62
PETN	0.019	U	0.526	0.524		ug/L		100	46 - 151	10	79
RDX	0.022	U	0.526	0.532		ug/L		101	71 - 127	1	26
Tetryl	0.022	U	0.526	0.412		ug/L		78	15 - 134	9	58

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

# QC Association Summary

Client: Chemours Company FC, LLC The  
Project/Site: BAR-Clubhouse Well Sampling 2018

TestAmerica Job ID: 280-115350-1

## GC/MS Semi VOA

### Prep Batch: 433392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-115350-1	GW2018-PZ-16-POT INFLOW	Total/NA	Water	3520C	
280-115350-2	GW2018-PZ-16-POT INFLOW DUP	Total/NA	Water	3520C	
280-115350-3	GW2018-PZ-16-POT EFFLUENT	Total/NA	Water	3520C	
280-115350-4	GW2018-CLUBHOUSE EFFLUENT	Total/NA	Water	3520C	
280-115350-5	GW2018-CLUBHOUSE INFLOW	Total/NA	Water	3520C	
MB 280-433392/1-A	Method Blank	Total/NA	Water	3520C	
LCS 280-433392/2-A	Lab Control Sample	Total/NA	Water	3520C	
280-115350-1 MS	GW2018-PZ-16-POT INFLOW	Total/NA	Water	3520C	
280-115350-1 MSD	GW2018-PZ-16-POT INFLOW	Total/NA	Water	3520C	

### Analysis Batch: 434017

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-115350-1	GW2018-PZ-16-POT INFLOW	Total/NA	Water	8270C	433392
280-115350-2	GW2018-PZ-16-POT INFLOW DUP	Total/NA	Water	8270C	433392
280-115350-3	GW2018-PZ-16-POT EFFLUENT	Total/NA	Water	8270C	433392
280-115350-4	GW2018-CLUBHOUSE EFFLUENT	Total/NA	Water	8270C	433392
280-115350-5	GW2018-CLUBHOUSE INFLOW	Total/NA	Water	8270C	433392
MB 280-433392/1-A	Method Blank	Total/NA	Water	8270C	433392
LCS 280-433392/2-A	Lab Control Sample	Total/NA	Water	8270C	433392
280-115350-1 MS	GW2018-PZ-16-POT INFLOW	Total/NA	Water	8270C	433392
280-115350-1 MSD	GW2018-PZ-16-POT INFLOW	Total/NA	Water	8270C	433392

## LCMS

### Prep Batch: 433265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-115350-1	GW2018-PZ-16-POT INFLOW	Total/NA	Water	3535	
280-115350-2	GW2018-PZ-16-POT INFLOW DUP	Total/NA	Water	3535	
280-115350-3	GW2018-PZ-16-POT EFFLUENT	Total/NA	Water	3535	
280-115350-4	GW2018-CLUBHOUSE EFFLUENT	Total/NA	Water	3535	
280-115350-5	GW2018-CLUBHOUSE INFLOW	Total/NA	Water	3535	
MB 280-433265/1-A	Method Blank	Total/NA	Water	3535	
LCS 280-433265/2-A	Lab Control Sample	Total/NA	Water	3535	
280-115350-1 MS	GW2018-PZ-16-POT INFLOW	Total/NA	Water	3535	
280-115350-1 MSD	GW2018-PZ-16-POT INFLOW	Total/NA	Water	3535	

### Analysis Batch: 433719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
280-115350-1	GW2018-PZ-16-POT INFLOW	Total/NA	Water	8321A	433265
280-115350-2	GW2018-PZ-16-POT INFLOW DUP	Total/NA	Water	8321A	433265
280-115350-3	GW2018-PZ-16-POT EFFLUENT	Total/NA	Water	8321A	433265
280-115350-4	GW2018-CLUBHOUSE EFFLUENT	Total/NA	Water	8321A	433265
280-115350-5	GW2018-CLUBHOUSE INFLOW	Total/NA	Water	8321A	433265
MB 280-433265/1-A	Method Blank	Total/NA	Water	8321A	433265
LCS 280-433265/2-A	Lab Control Sample	Total/NA	Water	8321A	433265
280-115350-1 MS	GW2018-PZ-16-POT INFLOW	Total/NA	Water	8321A	433265
280-115350-1 MSD	GW2018-PZ-16-POT INFLOW	Total/NA	Water	8321A	433265

TestAmerica Denver



# Lab Chronicle

Client: Chemours Company FC, LLC The  
Project/Site: BAR-Clubhouse Well Sampling 2018

TestAmerica Job ID: 280-115350-1

## Client Sample ID: GW2018-PZ-16-POT INFLOW

## Lab Sample ID: 280-115350-1

Date Collected: 10/08/18 14:30

Matrix: Water

Date Received: 10/11/18 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			961.3 mL	1 mL	433392	10/15/18 10:26	JZ	TAL DEN
Total/NA	Analysis	8270C		1			434017	10/18/18 23:12	DCK	TAL DEN
Total/NA	Prep	3535			955.7 mL	5 mL	433265	10/13/18 13:04	CBB	TAL DEN
Total/NA	Analysis	8321A		1			433719	10/15/18 18:44	AGCM	TAL DEN

## Client Sample ID: GW2018-PZ-16-POT INFLOW DUP

## Lab Sample ID: 280-115350-2

Date Collected: 10/08/18 14:30

Matrix: Water

Date Received: 10/10/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			937.4 mL	1 mL	433392	10/15/18 10:26	JZ	TAL DEN
Total/NA	Analysis	8270C		1			434017	10/19/18 00:25	DCK	TAL DEN
Total/NA	Prep	3535			944.4 mL	5 mL	433265	10/13/18 13:04	CBB	TAL DEN
Total/NA	Analysis	8321A		1			433719	10/15/18 20:20	AGCM	TAL DEN

## Client Sample ID: GW2018-PZ-16-POT EFFLUENT

## Lab Sample ID: 280-115350-3

Date Collected: 10/08/18 15:30

Matrix: Water

Date Received: 10/10/18 09:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			973.2 mL	1 mL	433392	10/15/18 10:26	JZ	TAL DEN
Total/NA	Analysis	8270C		1			434017	10/19/18 00:50	DCK	TAL DEN
Total/NA	Prep	3535			969.1 mL	5 mL	433265	10/13/18 13:04	CBB	TAL DEN
Total/NA	Analysis	8321A		1			433719	10/15/18 20:52	AGCM	TAL DEN

## Client Sample ID: GW2018-CLUBHOUSE EFFLUENT

## Lab Sample ID: 280-115350-4

Date Collected: 10/08/18 16:30

Matrix: Water

Date Received: 10/11/18 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			965.3 mL	1 mL	433392	10/15/18 10:26	JZ	TAL DEN
Total/NA	Analysis	8270C		1			434017	10/19/18 01:15	DCK	TAL DEN
Total/NA	Prep	3535			959.6 mL	5 mL	433265	10/13/18 13:04	CBB	TAL DEN
Total/NA	Analysis	8321A		1			433719	10/15/18 21:25	AGCM	TAL DEN

## Client Sample ID: GW2018-CLUBHOUSE INFLOW

## Lab Sample ID: 280-115350-5

Date Collected: 10/08/18 17:00

Matrix: Water

Date Received: 10/11/18 09:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			945.4 mL	1 mL	433392	10/15/18 10:26	JZ	TAL DEN
Total/NA	Analysis	8270C		1			434017	10/19/18 01:40	DCK	TAL DEN
Total/NA	Prep	3535			943.1 mL	5 mL	433265	10/13/18 13:04	CBB	TAL DEN

TestAmerica Denver

# Lab Chronicle

Client: Chemours Company FC, LLC The  
Project/Site: BAR-Clubhouse Well Sampling 2018

TestAmerica Job ID: 280-115350-1

**Client Sample ID: GW2018-CLUBHOUSE INFLOW**

**Lab Sample ID: 280-115350-5**

**Date Collected: 10/08/18 17:00**

**Matrix: Water**

**Date Received: 10/11/18 09:10**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8321A		1			433719	10/15/18 21:57	AGCM	TAL DEN

**Laboratory References:**

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

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# Accreditation/Certification Summary

Client: Chemours Company FC, LLC The  
Project/Site: BAR-Clubhouse Well Sampling 2018

TestAmerica Job ID: 280-115350-1

## Laboratory: TestAmerica Denver


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

Authority	Program	EPA Region	Identification Number	Expiration Date
Wisconsin	State Program	5	999615430	08-31-19 *

\* Accreditation/Certification renewal pending - accreditation/certification considered valid.



Chain of Custody Record

<b>Client Information</b> Client Contact: Sharon Nordstrom Company: Chemours Company FC, LLC The 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 2018 Site: <b>BARENDALE</b>		Job PM: Johnston, Michelle A E-Mail: michelle.johnston@testamericainc.com Job #: 280-79831-26119.1 Page: 1 of 1	
Sampler: ERIC SHERMAN Phone: 920-621-3878		Carmer Tracking No(s): FENEX Cooler 3: 4516 7351 9623 Cooler 4: 4516 9351 9614	
Due Date Requested: <b>NO DATE</b> TAT Requested (days):		<b>Analysis Requested</b>	
PO #: LBIO-6704877201000-WH06-507975 WO #: 7419 Project #: 28003388 SSONW#:		Preservation Codes: A - HCL B - NaOH 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> Sample Date: 10/18/18 Sample Time: 1430 Matrix: Water		Special Instructions/Note: COOLER 2 COOLER 3 COOLER 3 COOLER 4 COOLER 4	
Sample Date: 10/18/18 Sample Time: 1430 Matrix: Water		Special Instructions/Note: COOLER 2 COOLER 3 COOLER 3 COOLER 4 COOLER 4	
Sample Date: 10/18/18 Sample Time: 1430 Matrix: Water		Special Instructions/Note: COOLER 2 COOLER 3 COOLER 3 COOLER 4 COOLER 4	
Sample Date: 10/18/18 Sample Time: 1430 Matrix: Water		Special Instructions/Note: COOLER 2 COOLER 3 COOLER 3 COOLER 4 COOLER 4	
Sample Date: 10/18/18 Sample Time: 1530 Matrix: WATER		Special Instructions/Note: COOLER 2 COOLER 3 COOLER 3 COOLER 4 COOLER 4	
 280-115350 Chain of Custody			
Possible Hazard Identification <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:			
Relinquished by: [Signature] Date: 10/18/18 Company: AECOM		Relinquished by: [Signature] Date: 10/18/18 Company: AECOM	
Relinquished by: [Signature] Date: 10/18/18 Company: AECOM		Relinquished by: [Signature] Date: 10/18/18 Company: AECOM	
Relinquished by: [Signature] Date: 10/18/18 Company: AECOM		Relinquished by: [Signature] Date: 10/18/18 Company: AECOM	
Special Instructions/QC Requirements:			
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			
Method of Shipment:			
Relinquished by: [Signature] Date: 10/18/18 Company: AECOM		Relinquished by: [Signature] Date: 10/18/18 Company: AECOM	
Relinquished by: [Signature] Date: 10/18/18 Company: AECOM		Relinquished by: [Signature] Date: 10/18/18 Company: AECOM	
Relinquished by: [Signature] Date: 10/18/18 Company: AECOM		Relinquished by: [Signature] Date: 10/18/18 Company: AECOM	
Custody Seal Interf. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Custody Seal No. 926948 LR 927507 & Par by GFC 10/10/18			



Client Information  
 Client Contact: Sharon Nordstrom  
 Company: Chemours Company FC, LLC The  
 Address: c/o AECOM Sabre Building, Suite 300, 4051 Oglethorpe Road  
 City: Newark  
 State, Zip: DE, 19713  
 Phone: 302-781-5936 (Tel)  
 Email: Sharon.nordstrom@aecom.com  
 Project Name: BAR-Clubhouse Well Sampling 2018  
 City: BARNSDALE

Sampler: ERIC SHIMD  
 Lab PM: Johnston, Michelle A  
 Phone: 720-621-3878  
 E-Mail: michelle.johnston@testamericainc.com  
 Camer Tracking Net(s): FENEX  
 Location 3: 4516 7351 9603  
 Location 4: 4516 7351 9614  
 Job #: \_\_\_\_\_  
 IOC No: 280-79831-26119.1  
 Page: Page 1 of 1

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (w/water, s/water, o/water, b/water, A=Air)	Analysis Requested		Special Instructions/Note:
					8321A Explosive - (MOD) Explosives	8270C - (MOD) DNx spike list	
GW2018-P3-16-POT INFLOW	10/19/18	1430	GRAB	Water			COOLER 2
GW2018-P3-16-POT INFLOW DUP	10/19/18	1430	GRAB	Water			COOLER 3
GW2018-P3-16-POT INFLOW MS	10/19/18	1430	GRAB	Water			COOLER 3
GW2018-P3-16-POT INFLOW MSD	10/19/18	1430	GRAB	Water			COOLER 4
GW2018-P3-16-POT EFFLUENT	10/19/18	1530	GRAB	WATER			COOLER 4

Possible Hazard Identification  
 Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown  Radiological  
 Deliverable Requested:  I, II, III, IV, Other (specify) \_\_\_\_\_

Empty Kit Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_

Company: AECOM Company: \_\_\_\_\_  
 Date/Time: 10/19/18 1200 Date/Time: \_\_\_\_\_  
 Received by: \_\_\_\_\_ Received by: \_\_\_\_\_  
 Date/Time: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Method of Shipment: \_\_\_\_\_  
 Return to Client:  Disposal By Lab:  Archive For: \_\_\_\_\_ Months

Special Instructions/QC Requirements:  
 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)  
 Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months

TestAmerica Denver  
4955 Yarrow Street  
Arvada, CO 80002  
Phone (303) 736-0100 Fax (303) 431-7171

Sampler: Eric Sandert Lab Pk: Johnston, Michelle A Carmer Tracking No(s): 280-79831-26119.1  
 Client Information: FEDEX COOLER 1 - 4546 9351 9739 Page: 1 of 1  
 Client Contact: Sharone Nordstrom E-Mail: michelle.johnston@testamericainc.com Job #: 280-79831-26119.1

Due Date Requested: NOV 20 16  
 TAT Requested (days): NOV 20 16  
 PO #: LBIO-67048/7201000-WH06-507975  
 Project #: 28003388  
 SOW#: 7419

Address: c/o AECCOM Sabre Building, Suite 300 4051 Ogletown Road  
 City: Newark  
 State, Zip: DE, 19713  
 Phone: 302-781-5986 (Tel)  
 Email: sharon.nordstrom@aeecom.com  
 Project Name: BAR-Clubhouse Well Sampling 2018  
 Site: BARSDALE

Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (w=water, s=solid, o=soil, t=tissue, a=air)
10/19/18	1630	G	Water
↓	1700	G	Water
			Water
			Water

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (w=water, s=solid, o=soil, t=tissue, a=air)	Preservation Codes	Analysis Requested	Special Instructions/Note
GW2018-CLUBHOUSE EFFLUENT	10/19/18	1630	G	Water		8270C - (MOD) DNK spike list	cooler 1
GW2018-CLUBHOUSE INFLOW		1700	G	Water		8270A Explosive - (MOD) Explosives	cooler 1, 1/2 cooler 2
GW2018-				Water			
GW2018-				Water			

Analysis Requested: NOV 20 16

Special Instructions/Note:  cooler 1, 1/2 cooler 2

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)  
 Return To Client  Disposal By Lab  Archive For Months

Special Instructions/QC Requirements:

Empty Kit Relinquished by: Eric Sandert Date: 10/19/18 Time: 1700  
 Relinquished by: Eric Sandert Company: AECCOM  
 Relinquished by: Eric Sandert Date: 10/19/18 Time: 1700  
 Relinquished by: Eric Sandert Date: 10/19/18 Time: 1700

Relinquished by: Eric Sandert Date: 10/19/18 Time: 1700  
 Company: AECCOM

Relinquished by: Eric Sandert Date: 10/19/18 Time: 1700  
 Company: AECCOM

Relinquished by: Eric Sandert Date: 10/19/18 Time: 1700  
 Company: AECCOM

Date/Time	Received by	Company
10/19/18 1700	<u>Eric Sandert</u>	AECCOM
10/19/18 1700	<u>Eric Sandert</u>	AECCOM
10/19/18 1700	<u>Eric Sandert</u>	AECCOM

TestAmerica Denver  
 4855 Yarrow Street  
 Arvada, CO 80002  
 Phone (303) 736-0100 Fax (303) 431-7171

Chain of Custody Record

TestAmerica Duluth SC  
 269

TestAmerica  
 THE LEADER IN ENVIRONMENTAL TESTING

<b>Client Information</b> Client Contact: Sharon Nordstrom Company: Chemours Company FC, LLC The Address: c/o AECOM Sabre Building, Suite 300 4051 Ogletown Road City: Newark State: DE, 19713 Phone: 302-781-5936(Tel) Email: sharon.nordstrom@aecom.com Project Name: BAR-Clubhouse Well Sampling 2018 Site: <b>BARSALE</b>		Sampler: <b>ERIC SANDER</b> Lab PM: Johnston, Michelle A E-Mail: michelle.johnston@testamericainc.com Phone: 920-621-3878 Carrier Tracking No(s): <b>FENEX</b> <b>COOLER 3: 4546 9351 9603</b> <b>COOLER 4: 4546 9351 9614</b>		COC No: 280-79831-26119.1 Page: 1 of 1 Job #:	
Due Date Requested: <b>None</b> TAT Requested (days):		<b>Analysis Requested</b> 8270C - (MOD) DNx spike list 8271A Explosive - (MOD) Explosives High Level Samples (YES OR NO)		Preservation Codes: A - HCL B - NaOH 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: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=soil, O=wastewater, BT=Tissue, A=air)	Special Instructions/Note:
GW2018-P2-16-POT INFLOW	10/19/18	1430	G=grab	Water	COOLER 2
GW2018-P2-16-POT INFLOW DUR		1430		Water	COOLER 3
GW2018-P2-16-POT INFLOW MS		1430		Water	COOLER 3
GW2018-P2-16-POT INFLOW MSD		1430		Water	COOLER 4
GW2018-P2-16-POT EFFLUENT		1530	↓	WATER	COOLER 4
<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:		Date:		Method of Shipment:	
Relinquished by: <i>[Signature]</i>		Date/Time: 10/19/18 1200		Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months	
Relinquished by:		Date/Time:		Received by: <i>[Signature]</i> Company: AECOM Company	
Relinquished by:		Date/Time:		Received by: <i>[Signature]</i> Company: AECOM Company	
Relinquished by:		Date/Time:		Received by: <i>[Signature]</i> Company: AECOM Company	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.		Cooler Temperature(s) °C and Other/Remarks:	

# Login Sample Receipt Checklist

Client: Chemours Company FC, LLC The

Job Number: 280-115350-1

**Login Number: 115350**

**List Number: 1**

**Creator: Lujan, Jacob P**

**List Source: TestAmerica Denver**

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").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	