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ANALYSIS REPORT

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

CRG-The Chemours Co. FC, LLC
AECOM
Sabre Building
4051 Ogletown Road, Suite 300
Newark DE 19713

Report Date: December 14, 2017 15:06

Project: CWK - DE RIVER NAPL DELINEATION PHASE III

Account #: 07032
Group Number: 1871169
PO Number: LBIO-67047
State of Sample Origin: NJ

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Respectfully Submitted,

Nancy Jean Bornholm

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Principal Specialist

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SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE#
D15-BOR-22-(0-0.5) Soil	11/03/2017 13:15	9299863
D15-BOR-22-(0.5-1.0) Soil	11/03/2017 13:20	9299864
D15-BOR-22-(2.0-2.5) Soil	11/03/2017 13:25	9299865
D15-BOR-22-(7.0-7.5) Soil	11/03/2017 13:40	9299866
D15-BOR-22-(7.8-8.0) Soil	11/03/2017 14:05	9299867
D15-BOR-22-(8.0-8.2) Soil	11/03/2017 14:10	9299868
D15-BOR-22-(8.0-8.5) Soil	11/03/2017 14:15	9299869
D15-BOR-22-(8.0-8.2)-D Soil	11/03/2017 14:10	9299870
D15-BOR-23-(0-0.5) Soil	11/03/2017 11:15	9299871
D15-BOR-23-(0.5-1.0) Soil	11/03/2017 11:20	9299872
D15-BOR-23-(3.0-3.5) Soil	11/03/2017 11:25	9299873
D15-BOR-23-(5.0-6.0) Soil	11/03/2017 11:45	9299874
D15-BOR-23-(8.0-8.5) Soil	11/03/2017 12:00	9299875
D15-BOR-23-(9.5-9.7) Soil	11/03/2017 12:05	9299876
E16-BOR-07-(0-0.5) Soil	11/03/2017 15:05	9299877
E16-BOR-07-(0.5-1.0) Soil	11/03/2017 15:10	9299878
CWKDERIVER3-EQBLK-3 Blank Water	11/02/2017 09:00	9299879
CWKDERIVER3-TBLK-3 Blank Water	11/02/2017 09:00	9299880

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

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DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE SUMMARY QUESTIONNAIRE

Laboratory Name: Eurofins Lancaster Laboratories Environmental
Client: CRG-The Chemours Co. FC, LLC
Project: CWK - DE RIVER NAPL DELINEATION PHASE III
Sampling Date(s): 11/02/17 - 11/03/17
Laboratory Sample ID(s): 9299863-9299880
List DKQP Methods Used (e.g., 8260, 8270, et cetera)
ASTM D422; SM 2540 G-1997 %Moisture Calc; SW-846 6010B; SW-846 6020; SW-846 7470A; SW-846 7471A; SW-846 8260B; SW-846 8260FRN Modified; SW-846 8270C; SW-846 9060A; SW-846 9060A modified

		Yes or No
1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	Yes
1A	Were the method specified handling, preservation, and holding time requirements met?	Yes
1B	***EPH Method*:** Was the EPH method conducted without significant modifications (see Section 11.3 of respective DKQ methods)?	NA
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	Yes
3	Were samples received at an appropriate temperature (</=6° C)?	Yes
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	No
5A	Were reporting limits* specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?	Yes
5B	Were these reporting limits met?	No
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	No
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for "Data of Known Quality."
***The Limit of Quantitation (LOQ) meets requirements for the Reporting Limit (RL) as defined in the NJDEP Data of Known Quality performance standards, unless otherwise noted.**

Dorothy M Love

Dorothy M. Love
Director

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12/14/2017

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Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III
ELLE Group #: 1871169

General Comments:

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below.

Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are not included in this data set.

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

For dual column analyses, the surrogate (for multi-surrogate tests, at least one surrogate) must be within the acceptance limits on at least one of the two columns.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

Analysis Specific Comments:

SW-846 8260B, GC/MS Volatiles

Sample #s: 9299866, 9299867, 9299873, 9299874

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

Sample #s: 9299879, 9299880

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

The NJ DKQP required reporting limit could not be attained for1,2-Dibromoethane.

Sample #s: 9299863

The percent drift for the following is >20% in the continuing calibration verification standard associated with this sample: Methyl Tertiary Butyl Ether and Dichlorofluoromethane

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The concentrations reported for Trichlorofluoromethane and Freon 113 are estimated since they exceed the calibration range of the instrument when determined by the low level method, but are not detected by the high level method. The results reported are from the low level determination.

Sample #s: 9299868, 9299870, 9299876

The percent drift for the following is >20% in the continuing calibration

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verification standard associated with this sample: Chloroethane and 2-Butanone

The NJ DKQP required reporting limit could not be attained for 1,2-Dibromoethane.

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

Sample #s: 9299871, 9299872, 9299877

The percent drift for the following is >20% in the continuing calibration verification standard associated with this sample: chloroethane and 2-butanone.

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

Sample #s: 9299864, 9299865, 9299875

The percent drift for the following is >20% in the continuing calibration verification standard associated with this sample: Freon 133a

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

Sample #s: 9299878

The percent drift for the following is >20% in the continuing calibration verification standard associated with this sample: chloroethane.

The NJ DKQP required reporting limit could not be attained for 1,2-dibromoethane.

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

Batch #: R173162AA (Sample number(s): 9299863, 9299868, 9299870-9299872, 9299876-9299877 UNSPK: P294438)

The recovery(ies) for the following analyte(s) in the MS and/or MSD exceeded the acceptance window indicating a positive bias: Trichlorofluoromethane, Benzene, Tetrachloroethene, Chlorobenzene, 1,4-Dichlorobenzene, 1,2-Dichlorobenzene, Freon 113

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window: n-Hexane, Dichlorodifluoromethane, Vinyl Chloride

The relative percent difference(s) for the following analyte(s) in the MS/MSD were outside acceptance windows: Trichlorofluoromethane, Freon 113

The recovery(ies) for one or more surrogates were below the acceptance window for sample(s) 9299871, 9299872, 9299877, MS, MSD

Batch #: R173171AA (Sample number(s): 9299866, 9299872, 9299878 UNSPK: P300729)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD were below the acceptance window: Chlorotrifluoroethene

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window:

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Dichlorodifluoromethane, Chlorobenzene

Batch #: X173131AA (Sample number(s): 9299863)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD exceeded the acceptance window indicating a positive bias: Chlorotrifluoroethene

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD were below the acceptance window: Dichlorofluoromethane

Batch #: X173172AA (Sample number(s): 9299864-9299865, 9299875)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD exceeded the acceptance window indicating a positive bias: Chlorotrifluoroethene

SW-846 8260FRN Modified, GC/MS Volatiles

Sample #s: 9299871

The concentrations reported for Dichlorotrifluoroethane and 1,2-Dichlorotrifluoroethane are estimated since they exceed the calibration range of the instrument.

Sample #s: 9299872

The recovery for the sample internal standard is outside the QC acceptance limits. A re-analysis was not performed.

Sample #s: 9299865, 9299873, 9299875, 9299878, 9299879, 9299880

Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

Sample #s: 9299877

Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

The concentration reported for 1,2-Dichlorotrifluoroethane is estimated since it exceeds the calibration range of the instrument.

Sample #s: 9299876

Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

The concentration reported for Dichlorotrifluoroethane is estimated since it exceeds the calibration range of the instrument.

Batch #: J173111AA (Sample number(s): 9299879-9299880)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD exceeded the acceptance window indicating a positive bias: 1,1,2-Trifluoroethane, Chlorofluoromethane, Dichlorotrifluoroethane, 1,2-Dichlorotrifluoroethane, 1,2-Dichloro-1-fluoroethane

Batch #: J173141AA (Sample number(s): 9299863-9299864, 9299866-9299868, 9299870-9299872, 9299874)

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The recovery(ies) for the following analyte(s) in the LCS and/or LCSD exceeded the acceptance window indicating a positive bias: Chloropentafluoroethane

Batch #: J173171AA (Sample number(s): 9299865, 9299873, 9299875, 9299877-9299878)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD exceeded the acceptance window indicating a positive bias: Fluoromethane

Batch #: J173181AA (Sample number(s): 9299876 UNSPK: P300729)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD exceeded the acceptance window indicating a positive bias: Fluoromethane

SW-846 8270C, GC/MS Semivolatiles

Sample #s: 9299863

Project defined QC acceptance limits are not met. All QC except 4-Aminobiphenyl is compliant with the laboratory statistically generated limits.
The recovery for a 4-Aminobiphenyl in the Laboratory Control Spike is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte was not detected in the sample, the data is reported.

Sample #s: 9299864

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

Sample #s: 9299865, 9299866, 9299867, 9299868, 9299870, 9299871, 9299872, 9299873, 9299874, 9299875, 9299876, 9299877, 9299878

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

Sample #s: 9299879

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted outside the method required holding time and the QC is again outside of the acceptance limits.

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted outside the method required holding time and the QC is compliant.

The data is reported from the initial trial. Similar results were obtained in both trials.

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Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

Batch #: 17310SLI026 (Sample number(s): 9299863 UNSPK: P294438)

The recovery(ies) for the following analyte(s) in the LCS exceeded the acceptance window indicating a positive bias: 4-Aminobiphenyl

The recovery(ies) for the following analyte(s) in the LCS were below the acceptance window: 1-Naphthylamine, 2-Naphthylamine, o-Toluidine, 4-Chloroaniline

The recovery(ies) for the following analyte(s) in the MS and/or MSD exceeded the acceptance window indicating a positive bias: Fluorene, Phenanthrene, 2-Chloronaphthalene

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window: 4,6-Dinitro-2-methylphenol, Hexachlorocyclopentadiene, Benzidine, 3,3'-Dichlorobenzidine, Benzo(b)fluoranthene, Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene, 1-Naphthylamine, 2-Naphthylamine, 4-Chloroaniline, o-Toluidine

The relative percent difference(s) for the following analyte(s) in the MS/MSD were outside acceptance windows: 2,4-Dinitrophenol, Fluorene, Phenanthrene, Benzidine, Aniline, 1-Naphthylamine, 2-Naphthylamine, Dibenzofuran

Batch #: 17310WAE026 (Sample number(s): 9299879)

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD exceeded the acceptance window indicating a positive bias: 4-Aminobiphenyl

The recovery(ies) for the following analyte(s) in the LCS and/or LCSD were below the acceptance window: 1-Naphthylamine, 2-Naphthylamine, o-Toluidine, 4-Chloroaniline, 2-Methylnaphthalene, 2,4-Dimethylphenol, 1,2,4-Trichlorobenzene, Naphthalene, Hexachlorobutadiene, Hexachlorocyclopentadiene, 2-Chloronaphthalene, Dimethylphthalate, Benzidine, 2-Methylphenol, 2,2'-oxybis(1-Chloropropane)

The relative percent difference(s) for the following analyte(s) in the LCS/LCSD were outside acceptance windows: 2-Naphthylamine, 2,4-Dinitrophenol, Benzidine. When the individual % recovery is within the acceptance limits, the data is reported.

The recovery(ies) for one or more surrogates were below the acceptance window for sample(s) 9299879

Batch #: 17313SLI026 (Sample number(s): 9299865-9299868, 9299870-9299878 UNSPK: 9299865)

The recovery(ies) for the following analyte(s) in the LCS exceeded the acceptance window indicating a positive bias: 4-Aminobiphenyl

The recovery(ies) for the following analyte(s) in the LCS were below the acceptance window: 1-Naphthylamine, 2-Naphthylamine, o-Toluidine, 4-Chloroaniline

The recovery(ies) for the following analyte(s) in the MS and/or MSD exceeded the acceptance window indicating a positive bias: 4-Aminobiphenyl

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window: 1-Naphthylamine, 2-Naphthylamine, 4-Chloroaniline, o-Toluidine

The relative percent difference(s) for the following analyte(s) in the MS/MSD were outside acceptance windows: 4-Aminobiphenyl, 1-Naphthylamine, 2-Naphthylamine, o-Toluidine, 4-Chloroaniline

Batch #: 17314SLE026 (Sample number(s): 9299864 UNSPK: P300729)

The recovery(ies) for the following analyte(s) in the LCS exceeded the acceptance window indicating a

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positive bias: 2-Chloronaphthalene, 4-Aminobiphenyl

The recovery(ies) for the following analyte(s) in the LCS were below the acceptance window: 1-Naphthylamine, 2-Naphthylamine, o-Toluidine, 4-Chloroaniline

The recovery(ies) for the following analyte(s) in the MS and/or MSD exceeded the acceptance window indicating a positive bias: 4-Aminobiphenyl

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window: 3,3'-Dichlorobenzidine, 1-Naphthylamine, 2-Naphthylamine, o-Toluidine, 4-Chloroaniline

SW-846 6010B, Metals

Sample #s: 9299879

The NJ DKQP analyte list requirement was not met for Metals. The client specified list is reported.

Batch #: 173100570504 (Sample number(s): 9299879 UNSPK: P292995 BKG: P292995)

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Iron

Batch #: 173100570805 (Sample number(s): 9299863-9299864, 9299871-9299872, 9299877-9299878 UNSPK: P300729 BKG: P300729)

The recovery(ies) for the following analyte(s) in the MS and/or MSD exceeded the acceptance window indicating a positive bias: Aluminum, Iron, Magnesium, Potassium

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Aluminum, Iron, Magnesium, Zinc

SW-846 6020, Metals

Sample #s: 9299863, 9299864, 9299871, 9299872, 9299877, 9299878, 9299879

The NJ DKQP analyte list requirement was not met for Metals. The client specified list is reported.

Batch #: 173100570805A (Sample number(s): 9299863-9299864, 9299871-9299872, 9299877-9299878 UNSPK: P300729 BKG: P300729)

The recovery(ies) for the following analyte(s) in the MS and/or MSD exceeded the acceptance window indicating a positive bias: Manganese, Lead

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window: Antimony

The relative percent difference(s) for the following analyte(s) in the MS/MSD were outside acceptance windows: Lead

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Copper, Manganese, Nickel, Thallium

Batch #: 173100570805D (Sample number(s): 9299863-9299864, 9299871-9299872, 9299877-9299878 UNSPK: P300729 BKG: P300729)

The recovery(ies) for the following analyte(s) in the MS and/or MSD exceeded the acceptance window indicating a positive bias: Barium

The relative percent difference(s) for the following analyte(s) in the MS/MSD were outside acceptance windows: Barium

Batch #: 173100605001A (Sample number(s): 9299879 UNSPK: P298505 BKG: P298505)

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Arsenic, Copper, Lead

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SW-846 7471A, Metals

Batch #: 173100571105 (Sample number(s): 9299863-9299864, 9299871-9299872 UNSPK: P294438 BKG: P294438)

The recovery(ies) for the following analyte(s) in the MS and/or MSD were below the acceptance window: Mercury

SW-846 9060A, Wet Chemistry

Sample #s: 9299879

The reported result is the average of the following trials:

0 mg/l
0 mg/l
0 mg/l
0 mg/l

SW-846 9060A modified, Wet Chemistry

Sample #s: 9299865, 9299866, 9299873, 9299874, 9299875

Due to the nature of this sample matrix, the sample cup was filled to capacity with less than 1000 mg of sample being used. The lowered sample weight has resulted in a raised reporting limit.

Batch #: 17317667633A (Sample number(s): 9299873-9299878 UNSPK: 9299875 BKG: 9299875)

The duplicate RPD for the following analyte(s) exceeded the acceptance window: TOC Solids/Sludges Combustion

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Analysis Report

Sample Description: **D15-BOR-22-(0-0.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:15

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299863
ELLE Group #: 1871169
Matrix: Soil

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	**Acetone**	67-64-1	**430**		14	40	1.18
10237	**Benzene**	71-43-2	**220**		1	10	1.18
10237	Bromodichloromethane	75-27-4	2	U	2	10	1.18
10237	**2-Butanone**	78-93-3	**34**		8	20	1.18
10237	**n-Butylbenzene**	104-51-8	**4**	**J**	2	10	1.18
10237	**sec-Butylbenzene**	135-98-8	**14**		2	10	1.18
10237	**tert-Butylbenzene**	98-06-6	**8**	**J**	2	10	1.18
10237	**Carbon Disulfide**	75-15-0	**83**		2	10	1.18
10237	Carbon Tetrachloride	56-23-5	2	U	2	10	1.18
10237	**Chlorobenzene**	108-90-7	**9,500**		100	500	58.41
10237	Chloroethane	75-00-3	4	U	4	10	1.18
10237	**Chloroform**	67-66-3	**160**		2	10	1.18
10237	Chloromethane	74-87-3	4	U	4	10	1.18
10237	**2-Chlorotoluene**	95-49-8	**10**	**J**	2	10	1.18
10237	**4-Chlorotoluene**	106-43-4	**4**	**J**	2	10	1.18
10237	**Chlorotrifluoroethene**	79-38-9	**26**		4	10	1.18
10237	Dibromochloromethane	124-48-1	2	U	2	10	1.18
10237	1,2-Dibromoethane	106-93-4	2	U	2	10	1.18
10237	**1,2-Dichlorobenzene**	95-50-1	**4,300**		100	500	58.41
10237	**1,3-Dichlorobenzene**	541-73-1	**310**		2	10	1.18
10237	**1,4-Dichlorobenzene**	106-46-7	**11,000**		100	500	58.41
10237	**Dichlorodifluoromethane**	75-71-8	**34**		4	10	1.18
10237	1,1-Dichloroethane	75-34-3	2	U	2	10	1.18
10237	1,2-Dichloroethane	107-06-2	2	U	2	10	1.18
10237	**1,1-Dichloroethene**	75-35-4	**68**		2	10	1.18
10237	**cis-1,2-Dichloroethene**	156-59-2	**14**		2	10	1.18
10237	trans-1,2-Dichloroethene	156-60-5	2	U	2	10	1.18
10237	**1,2-Dichloroethene (Total)**	540-59-0	**14**		2	10	1.18
10237	Dichlorofluoromethane	75-43-4	4	U	4	10	1.18
10237	1,2-Dichloropropane	78-87-5	2	U	2	10	1.18
10237	1,1-Dichloropropene	563-58-6	2	U	2	10	1.18
10237	cis-1,3-Dichloropropene	10061-01-5	2	U	2	10	1.18
10237	**Ethylbenzene**	100-41-4	**13**		2	10	1.18
10237	**Freon 113**	76-13-1	**980**	**J**	200	1,000	58.41
10237	Freon 133a	75-88-7	4	U	4	10	1.18
10237	n-Hexane	110-54-3	2	U	2	10	1.18
10237	2-Hexanone	591-78-6	6	U	6	20	1.18
10237	Isobutyl Alcohol	78-83-1	200	U	200	500	1.18
10237	**Isopropylbenzene**	98-82-8	**320**		2	10	1.18
10237	**p-Isopropyltoluene**	99-87-6	**14**		2	10	1.18
10237	Methacrylonitrile	126-98-7	10	U	10	100	1.18
10237	Methyl Methacrylate	80-62-6	2	U	2	10	1.18

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-22-(0-0.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299863
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	Methyl Tertiary Butyl Ether	1634-04-4	1	U	1	10	1.18
10237	4-Methyl-2-pentanone	108-10-1	6	U	6	20	1.18
10237	**Methylene Chloride**	75-09-2	**11**		4	10	1.18
10237	Propionitrile	107-12-0	60	U	60	200	1.18
10237	**n-Propylbenzene**	103-65-1	**10**	**J**	2	10	1.18
10237	Styrene	100-42-5	2	U	2	10	1.18
10237	**1,1,1,2-Tetrachloroethane**	630-20-6	**4**	**J**	2	10	1.18
10237	**1,1,2,2-Tetrachloroethane**	79-34-5	**8**	**J**	2	10	1.18
10237	**Tetrachloroethene**	127-18-4	**6,500**		100	500	58.41
10237	Tetrahydrofuran	109-99-9	8	U	8	16	1.18
10237	**Toluene**	108-88-3	**6**	**J**	2	10	1.18
10237	1,1,1-Trichloroethane	71-55-6	2	U	2	10	1.18
10237	1,1,2-Trichloroethane	79-00-5	2	U	2	10	1.18
10237	**Trichloroethene**	79-01-6	**260**		2	10	1.18
10237	**Trichlorofluoromethane**	75-69-4	**310**	**J**	200	500	58.41
10237	**1,2,4-Trimethylbenzene**	95-63-6	**39**		2	10	1.18
10237	**1,3,5-Trimethylbenzene**	108-67-8	**6**	**J**	2	10	1.18
10237	**Vinyl Chloride**	75-01-4	**6**	**J**	2	10	1.18
10237	**m+p-Xylene**	179601-23-1	**12**		2	10	1.18
10237	**o-Xylene**	95-47-6	**9**	**J**	2	10	1.18
10237	**Xylene (Total)**	1330-20-7	**21**		2	10	1.18

The project QA/QC requirements were not met.

The percent drift for the following is >20% in the continuing calibration verification standard associated with this sample: Methyl Tertiary Butyl Ether and Dichlorofluoromethane

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The concentrations reported for Trichlorofluoromethane and Freon 113 are estimated since they exceed the calibration range of the instrument when determined by the low level method, but are not detected by the high level method. The results reported are from the low level determination.

GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/kg**		**ug/kg**	**ug/kg**	
13101	Chlorodifluoroethane	75-68-3	2	U	2	11	1.25
13101	Chlorodifluoromethane	75-45-6	4	U	4	11	1.25
13101	Chlorofluoromethane	593-70-4	2	U	2	11	1.25
13101	Chloropentafluoroethane	76-15-3	32	U	32	110	1.25
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	2	U	2	11	1.25

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-22-(0-0.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299863
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/kg**		**ug/kg**	**ug/kg**	
13101	1,2-Dichloro-1-fluoroethane	430-57-9	2	U	2	11	1.25
13101	**Dichlorotetrafluoroethane**	76-14-2	**34**		4	11	1.25
13101	**1,2-Dichlorotrifluoroethane**	354-23-4	**110**		2	11	1.25
13101	**Dichlorotrifluoroethane**	306-83-2	**100**		2	11	1.25
13101	Fluoromethane	593-53-3	6	U	6	21	1.25
13101	Freon 113a	354-58-5	11	U	11	43	1.25
13101	1,1,2-Trifluoroethane	430-66-0	4	U	4	11	1.25
13101	Vinyl fluoride	75-02-5	13	U	13	43	1.25

00884 Volatile Library Search - 15

The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	**Acenaphthene**	83-32-9	**170**		6	29	1
10723	**Acenaphthylene**	208-96-8	**24**	**J**	6	29	1
10723	Acetophenone	98-86-2	28	U	28	56	1
10723	4-Aminobiphenyl	92-67-1	280	U	280	840	1
10723	Aniline	62-53-3	280	U	280	840	1
10723	**Anthracene**	120-12-7	**59**		6	29	1
10723	Benzidine	92-87-5	420	U	420	840	1
10723	**Benzo(a)anthracene**	56-55-3	**100**		6	29	1
10723	**Benzo(a)pyrene**	50-32-8	**86**		6	29	1
10723	**Benzo(b)fluoranthene**	205-99-2	**98**		6	29	1
10723	**Benzo(g,h,i)perylene**	191-24-2	**50**		6	29	1
10723	**Benzo(k)fluoranthene**	207-08-9	**49**		6	29	1
10723	**1,1'-Biphenyl**	92-52-4	**120**		28	56	1
10723	4-Bromophenyl-phenylether	101-55-3	28	U	28	56	1
10723	Butylbenzylphthalate	85-68-7	110	U	110	280	1
10723	Di-n-butylphthalate	84-74-2	110	U	110	280	1
10723	**Carbazole**	86-74-8	**100**		28	56	1
10723	4-Chloro-3-methylphenol	59-50-7	28	U	28	56	1
10723	4-Chloroaniline	106-47-8	56	U	56	110	1
10723	bis(2-Chloroethoxy)methane	111-91-1	28	U	28	56	1
10723	bis(2-Chloroethyl)ether	111-44-4	28	U	28	56	1
10723	2-Chloronaphthalene	91-58-7	11	U	11	56	1
10723	2-Chlorophenol	95-57-8	28	U	28	56	1
10723	4-Chlorophenyl-phenylether	7005-72-3	28	U	28	56	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	28	U	28	56	1

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-22-(0-0.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299863
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	**Chrysene**	218-01-9	**200**		6	29	1
10723	**Dibenz(a,h)anthracene**	53-70-3	**15**	**J**	6	29	1
10723	**Dibenzofuran**	132-64-9	**280**		28	56	1
10723	3,3'-Dichlorobenzidine	91-94-1	170	U	170	560	1
10723	2,4-Dichlorophenol	120-83-2	28	U	28	56	1
10723	Diethylphthalate	84-66-2	110	U	110	280	1
10723	2,4-Dimethylphenol	105-67-9	28	U	28	56	1
10723	Dimethylphthalate	131-11-3	110	U	110	280	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	280	U	280	840	1
10723	2,4-Dinitrophenol	51-28-5	500	U	500	1,700	1
10723	2,4-Dinitrotoluene	121-14-2	110	U	110	280	1
10723	2,6-Dinitrotoluene	606-20-2	28	U	28	56	1
10723	1,4-Dioxane	123-91-1	170	U	170	560	1
10723	Diphenyl ether	101-84-8	28	U	28	56	1
10723	1,2-Diphenylhydrazine	122-66-7	28	U	28	56	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	110	U	110	290	1
10723	**Fluoranthene**	206-44-0	**150**		6	29	1
10723	**Fluorene**	86-73-7	**260**		6	29	1
10723	Hexachlorobenzene	118-74-1	6	U	6	29	1
10723	**Hexachlorobutadiene**	87-68-3	**130**		28	56	1
10723	Hexachlorocyclopentadiene	77-47-4	280	U	280	840	1
10723	Hexachloroethane	67-72-1	56	U	56	280	1
10723	**Indeno(1,2,3-cd)pyrene**	193-39-5	**39**		6	29	1
10723	Isophorone	78-59-1	28	U	28	56	1
10723	**2-Methylnaphthalene**	91-57-6	**210**		6	29	1
10723	2-Methylphenol	95-48-7	28	U	28	56	1
10723	4-Methylphenol	106-44-5	28	U	28	56	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10723	**Naphthalene**	91-20-3	**430**		6	29	1
10723	1-Naphthylamine	134-32-7	280	U	280	840	1
10723	2-Naphthylamine	91-59-8	280	U	280	840	1
10723	2-Nitroaniline	88-74-4	28	U	28	56	1
10723	3-Nitroaniline	99-09-2	110	U	110	280	1
10723	4-Nitroaniline	100-01-6	110	U	110	280	1
10723	Nitrobenzene	98-95-3	28	U	28	56	1
10723	2-Nitrophenol	88-75-5	28	U	28	56	1
10723	4-Nitrophenol	100-02-7	280	U	280	840	1
10723	N-Nitrosodimethylamine	62-75-9	110	U	110	280	1

*=This limit was used in the evaluation of the final result

Sample Description: D15-BOR-22-(0-0.5) Soil
DE RIVER NAPL DELINEATION PHASE III

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:15

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299863
ELLE Group #: 1871169
Matrix: Soil

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	N-Nitroso-di-n-propylamine	621-64-7	28	U	28	56	1
10723	N-Nitrosodiphenylamine	86-30-6	28	U	28	56	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10723	Di-n-octylphthalate	117-84-0	110	U	110	280	1
10723	Parathion	56-38-2	280	U	280	840	1
10723	**Pentachlorobenzene**	608-93-5	**55**	**J**	28	56	1
10723	Pentachlorophenol	87-86-5	56	U	56	290	1
10723	**Phenanthrene**	85-01-8	**1,000**		6	29	1
10723	Phenol	108-95-2	28	U	28	56	1
10723	**Pyrene**	129-00-0	**160**		6	29	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	110	U	110	280	1
10723	o-Toluidine	95-53-4	340	U	340	1,100	1
10723	**1,2,4-Trichlorobenzene**	120-82-1	**2,000**		28	56	1
10723	2,4,5-Trichlorophenol	95-95-4	28	U	28	56	1
10723	2,4,6-Trichlorophenol	88-06-2	28	U	28	56	1

The project QA/QC requirements were not met.
Project defined QC acceptance limits are not met. All QC except 4-Aminobiphenyl is compliant with the laboratory statistically generated limits.
The recovery for a 4-Aminobiphenyl in the Laboratory Control Spike is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte was not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	**Aluminum**	7429-90-5	**14,300**		13.1	29.4	1
01650	**Calcium**	7440-70-2	**3,080**		4.89	29.4	1
01654	**Iron**	7439-89-6	**21,700**		11.8	29.4	1
01657	**Magnesium**	7439-95-4	**4,100**		3.57	14.7	1
01662	**Potassium**	7440-09-7	**2,680**		24.5	73.4	1
01667	**Sodium**	7440-23-5	**475**		24.5	147	1
06972	**Zinc**	7440-66-6	**115**		0.352	2.94	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	**Antimony**	7440-36-0	**0.238**	**J**	0.137	0.294	2
	The NJ DKQP analyte list requirement was not met for Metals. The client specified list is reported.						
06125	**Arsenic**	7440-38-2	**6.87**		0.188	0.587	2
06126	**Barium**	7440-39-3	**79.4**		0.267	0.587	2

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: D15-BOR-22-(0-0.5) Soil
DE RIVER NAPL DELINEATION PHASE III

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:15

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299863
ELLE Group #: 1871169
Matrix: Soil

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals		**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	
06127	**Beryllium**		7440-41-7	**0.703**	0.0154	0.147	2
06128	**Cadmium**		7440-43-9	**0.381**	0.0505	0.147	2
06131	**Chromium**		7440-47-3	**37.1**	0.256	0.587	2
06132	**Cobalt**		7440-48-4	**10.2**	0.0458	0.147	2
06133	**Copper**		7440-50-8	**23.1**	0.157	0.587	2
06135	**Lead**		7439-92-1	**30.9**	0.0326	0.294	2
06137	**Manganese**		7439-96-5	**393**	0.266	0.587	2
06139	**Nickel**		7440-02-0	**20.8**	0.293	0.587	2
06141	**Selenium**		7782-49-2	**0.415 J**	0.147	0.587	2
06142	**Silver**		7440-22-4	**0.214**	0.0429	0.147	2
06145	**Thallium**		7440-28-0	**0.148**	0.0367	0.147	2
06148	**Vanadium**		7440-62-2	**34.3**	0.0626	0.147	2
		SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	
00159	**Mercury**		7439-97-6	**0.829**	0.0168	0.168	1
Wet Chemistry		**SW-846 9060A modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02079	**Total Organic Carbon (TOC)**		n.a.	**20,200**	779	2,340	1
Wet Chemistry		**ASTM D422**		**% Passing**	**% Passing**	**% Passing**	
07103	**75 mm**		n.a.	**100**	0.50	0.50	1
07103	**37.5 mm**		n.a.	**100**	0.50	0.50	1
07103	**19 mm**		n.a.	**100**	0.50	0.50	1
07103	**4.75 mm**		n.a.	**99.5**	0.50	0.50	1
07103	**3.35 mm**		n.a.	**99.1**	0.50	0.50	1
07103	**2.36 mm**		n.a.	**98.7**	0.50	0.50	1
07103	**1.18 mm**		n.a.	**98.1**	0.50	0.50	1
07103	**0.6 mm**		n.a.	**95.2**	0.50	0.50	1
07103	**0.3 mm**		n.a.	**83.3**	0.50	0.50	1
07103	**0.15 mm**		n.a.	**72.3**	0.50	0.50	1
07103	**0.075 mm**		n.a.	**60.7**	0.50	0.50	1
07103	**0.064 mm**		n.a.	**56.0**	0.50	0.50	1
07103	**0.05 mm**		n.a.	**44.5**	0.50	0.50	1
07103	**0.02 mm**		n.a.	**22.5**	0.50	0.50	1
07103	**0.005 mm**		n.a.	**7.0**	0.50	0.50	1
07103	**0.002 mm**		n.a.	**3.0**	0.50	0.50	1
07103	**0.001 mm**		n.a.	**1.0**	0.50	0.50	1
Wet Chemistry		**SM 2540 G-1997 %Moisture Calc**		**%**	**%**	**%**	
00111	**Moisture**		n.a.	**41.3**	0.50	0.50	1

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-22-(0-0.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:15

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299863
ELLE Group #: 1871169
Matrix: Soil

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**SM 2540 G-1997 %Moisture Calc**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	X173131AA	11/09/2017 17:21	Linda C Pape	1.18
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	R173162AA	11/12/2017 21:56	Stephen C Nolte	58.41
13101	Freons	SW-846 8260FRN Modified	1	J173141AA	11/11/2017 02:05	Patrick T Herres	1.25
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201730847752	11/04/2017 10:29	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201730847752	11/04/2017 10:30	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201730847752	11/04/2017 10:31	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201730847752	11/04/2017 10:32	Anastasia K Jaynes	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201730847752	11/04/2017 10:28	Anastasia K Jaynes	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17310SLI026	11/09/2017 18:06	Emily Gruver	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17310SLI026	11/07/2017 16:55	Ashley R Transue	1
01643	Aluminum	SW-846 6010B	1	173100570805	11/12/2017 21:59	Elaine F Stoltzfus	1
01650	Calcium	SW-846 6010B	1	173100570805	11/12/2017 21:59	Elaine F Stoltzfus	1
01654	Iron	SW-846 6010B	1	173100570805	11/12/2017 21:59	Elaine F Stoltzfus	1
01657	Magnesium	SW-846 6010B	1	173100570805	11/12/2017 21:59	Elaine F Stoltzfus	1
01662	Potassium	SW-846 6010B	1	173100570805	11/12/2017 21:59	Elaine F Stoltzfus	1
01667	Sodium	SW-846 6010B	1	173100570805	11/12/2017 21:59	Elaine F Stoltzfus	1
06972	Zinc	SW-846 6010B	1	173100570805	11/12/2017 21:59	Elaine F Stoltzfus	1
06124	Antimony	SW-846 6020	1	173100570805A	11/13/2017 19:04	Bradley M Berlot	2
06125	Arsenic	SW-846 6020	1	173100570805A	11/13/2017 19:04	Bradley M Berlot	2
06126	Barium	SW-846 6020	1	173100570805D	11/13/2017 19:04	Bradley M Berlot	2
06127	Beryllium	SW-846 6020	1	173100570805A	11/13/2017 19:04	Bradley M Berlot	2
06128	Cadmium	SW-846 6020	1	173100570805A	11/13/2017 19:04	Bradley M Berlot	2
06131	Chromium	SW-846 6020	1	173100570805A	11/13/2017 19:04	Bradley M Berlot	2
06132	Cobalt	SW-846 6020	1	173100570805A	11/13/2017 19:04	Bradley M Berlot	2
06133	Copper	SW-846 6020	1	173100570805A	11/13/2017 19:04	Bradley M Berlot	2
06135	Lead	SW-846 6020	1	173100570805A	11/13/2017 19:04	Bradley M Berlot	2
06137	Manganese	SW-846 6020	1	173100570805A	11/13/2017 19:04	Bradley M Berlot	2
06139	Nickel	SW-846 6020	1	173100570805A	11/13/2017 19:04	Bradley M Berlot	2
06141	Selenium	SW-846 6020	1	173100570805B	11/13/2017 19:04	Bradley M Berlot	2
06142	Silver	SW-846 6020	1	173100570805A	11/13/2017 19:04	Bradley M Berlot	2
06145	Thallium	SW-846 6020	1	173100570805A	11/13/2017 19:04	Bradley M Berlot	2
06148	Vanadium	SW-846 6020	1	173100570805A	11/13/2017 19:04	Bradley M Berlot	2

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-22-(0-0.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299863
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	Mercury	SW-846 7471A	1	173100571105	11/09/2017 07:16	Damary Valentin	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	173100570805	11/09/2017 05:21	James L Mertz	1
05711	Hg-SW, 7471A - U3	SW-846 7471A	1	173100571105	11/08/2017 19:45	Barbara A Kane	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17317667632B	11/14/2017 23:16	Drew M Gerhart	1
07103	Grain Size to 1 um	ASTM D422	1	17335710302A	12/01/2017 21:20	Joshua P Trost	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17310820005A	11/06/2017 20:09	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15B01

Lab Name: Lancaster Laboratories Contract:_____
Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____
Matrix: (soil/water) SOIL Lab Sample ID: 9299863
Sample wt/vol: 4.25 (g/mL) g Lab File ID: HP09193.i/17nov09a.b/xn09s14.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: not dec. 41.3 Date Analyzed: 11/09/17
Column: (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	1.96	120	J
2.	Unknown	3.28	24	J
3. 591-76-4	Hexane, 2-methyl-	6.79	19	J
4. 565-59-3	Pentane, 2,3-dimethyl-	6.91	13	J
5. 589-34-4	Hexane, 3-methyl-	7.04	28	J
6.	Unknown alkane	7.40	120	J
7. 592-76-7	1-Heptene	7.52	35	J
8. 76-12-0	Ethane, 1,1,2,2-tetrachloro-	8.04	140	J
9. 108-87-2	Cyclohexane, methyl-	8.43	170	J
10. 1640-89-7	Cyclopentane, ethyl-	8.65	11	J
11.				
12. VOCTIC	Total VOC TICs		680	J
13.				
14.				
15.				
16.				
17.				
18.				
19.				
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24.				
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29.				
30.				

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FORM I VOA-TIC

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15B01

Lab Name: Lancaster Laboratories Contract:
Lab Code: LANCAS Case No.: SAS No.: SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 9299863
Sample wt/vol: 30.45(g/mL) g Lab File ID: ok0459.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: 41.3 Decanted: (Y/N) Date Extracted: 11/07/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/09/17
Injection Volume: 1 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Mic
CONCENTRATION UNITS:
Number TICs found: 21 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.590-90-9	CH3C(O)CH2CH2OH	2.057	280	J
2.6012-97-1	Thiophene, tetrachloro-	7.010	570	J
3.	Unknown	8.163	730	J
4.	Unknown	8.510	420	J
5.645-08-9	3-Hydroxy-4-methoxybenzoic a	8.592	350	J
6.1000297-95-5	4-((1E)-3-Hydroxy-1-propenyl	9.439	480	J
7.	Unknown	9.498	2200	J
8.	Unknown	10.092	400	J
9.	Unknown	10.398	430	J
10.	Unknown	10.486	1300	J
11.	Unknown	10.598	800	J
12.	Unknown	10.645	620	J
13.	Unknown	10.680	500	J
14.	Unknown	10.721	550	J
15.1135-40-6	CAPS	10.745	510	J
16.	Unknown	10.780	680	J
17.80-05-7	Phenol, 4,4'-(1-methylethyli	11.192	3900	J
18.1599-67-3	1-Docosene	12.886	460	J
19.1000105-67-0	Cholest-6-ene-3.beta.,5.beta	14.815	500	J
20.	Unknown	14.915	330	J
21.	Unknown	15.127	610	J
22.				
23.SVOCTIC	Total SVOC TICs		17000	J
24.				
25.				
26.				
27.				
28.				
29.				
30.				

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FORM I SV-1

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Analysis Report

Sample Description: **D15-BOR-22-(0.5-1.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:20

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299864
ELLE Group #: 1871169
Matrix: Soil

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	**Acetone**	67-64-1	**53**		8	23	0.98
10237	**Benzene**	71-43-2	**17**		0.6	6	0.98
10237	Bromodichloromethane	75-27-4	1	U	1	6	0.98
10237	2-Butanone	78-93-3	5	U	5	12	0.98
10237	n-Butylbenzene	104-51-8	1	U	1	6	0.98
10237	sec-Butylbenzene	135-98-8	1	U	1	6	0.98
10237	tert-Butylbenzene	98-06-6	1	U	1	6	0.98
10237	**Carbon Disulfide**	75-15-0	**16**		1	6	0.98
10237	Carbon Tetrachloride	56-23-5	1	U	1	6	0.98
10237	**Chlorobenzene**	108-90-7	**200**		1	6	0.98
10237	Chloroethane	75-00-3	2	U	2	6	0.98
10237	**Chloroform**	67-66-3	**25**		1	6	0.98
10237	Chloromethane	74-87-3	2	U	2	6	0.98
10237	2-Chlorotoluene	95-49-8	1	U	1	6	0.98
10237	4-Chlorotoluene	106-43-4	1	U	1	6	0.98
10237	Chlorotrifluoroethene	79-38-9	2	U	2	6	0.98
10237	Dibromochloromethane	124-48-1	1	U	1	6	0.98
10237	1,2-Dibromoethane	106-93-4	1	U	1	6	0.98
10237	**1,2-Dichlorobenzene**	95-50-1	**39**		1	6	0.98
10237	**1,3-Dichlorobenzene**	541-73-1	**1**	**J**	1	6	0.98
10237	**1,4-Dichlorobenzene**	106-46-7	**63**		1	6	0.98
10237	Dichlorodifluoromethane	75-71-8	2	U	2	6	0.98
10237	1,1-Dichloroethane	75-34-3	1	U	1	6	0.98
10237	1,2-Dichloroethane	107-06-2	1	U	1	6	0.98
10237	**1,1-Dichloroethene**	75-35-4	**3**	**J**	1	6	0.98
10237	cis-1,2-Dichloroethene	156-59-2	1	U	1	6	0.98
10237	trans-1,2-Dichloroethene	156-60-5	1	U	1	6	0.98
10237	1,2-Dichloroethene (Total)	540-59-0	1	U	1	6	0.98
10237	**Dichlorofluoromethane**	75-43-4	**16**		2	6	0.98
10237	1,2-Dichloropropane	78-87-5	1	U	1	6	0.98
10237	1,1-Dichloropropene	563-58-6	1	U	1	6	0.98
10237	cis-1,3-Dichloropropene	10061-01-5	1	U	1	6	0.98
10237	Ethylbenzene	100-41-4	1	U	1	6	0.98
10237	**Freon 113**	76-13-1	**150**		2	12	0.98
10237	Freon 133a	75-88-7	2	U	2	6	0.98
10237	n-Hexane	110-54-3	1	U	1	6	0.98
10237	2-Hexanone	591-78-6	4	U	4	12	0.98
10237	Isobutyl Alcohol	78-83-1	120	U	120	290	0.98
10237	Isopropylbenzene	98-82-8	1	U	1	6	0.98
10237	p-Isopropyltoluene	99-87-6	1	U	1	6	0.98
10237	Methacrylonitrile	126-98-7	6	U	6	59	0.98
10237	Methyl Methacrylate	80-62-6	1	U	1	6	0.98

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-22-(0.5-1.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299864
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:20

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.6	U	0.6	6	0.98
10237	4-Methyl-2-pentanone	108-10-1	4	U	4	12	0.98
10237	**Methylene Chloride**	75-09-2	**4**	**J**	2	6	0.98
10237	Propionitrile	107-12-0	35	U	35	120	0.98
10237	n-Propylbenzene	103-65-1	1	U	1	6	0.98
10237	Styrene	100-42-5	1	U	1	6	0.98
10237	**1,1,1,2-Tetrachloroethane**	630-20-6	**3**	**J**	1	6	0.98
10237	1,1,2,2-Tetrachloroethane	79-34-5	1	U	1	6	0.98
10237	**Tetrachloroethene**	127-18-4	**100**		1	6	0.98
10237	Tetrahydrofuran	109-99-9	5	U	5	9	0.98
10237	Toluene	108-88-3	1	U	1	6	0.98
10237	1,1,1-Trichloroethane	71-55-6	1	U	1	6	0.98
10237	1,1,2-Trichloroethane	79-00-5	1	U	1	6	0.98
10237	**Trichloroethene**	79-01-6	**9**		1	6	0.98
10237	**Trichlorofluoromethane**	75-69-4	**220**		2	6	0.98
10237	1,2,4-Trimethylbenzene	95-63-6	1	U	1	6	0.98
10237	1,3,5-Trimethylbenzene	108-67-8	1	U	1	6	0.98
10237	Vinyl Chloride	75-01-4	1	U	1	6	0.98
10237	m+p-Xylene	179601-23-1	1	U	1	6	0.98
10237	o-Xylene	95-47-6	1	U	1	6	0.98
10237	Xylene (Total)	1330-20-7	1	U	1	6	0.98

The project QA/QC requirements were not met.

The percent drift for the following is >20% in the continuing calibration verification standard associated with this sample: Freon 133a

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/kg**		**ug/kg**	**ug/kg**	
13101	Chlorodifluoroethane	75-68-3	1	U	1	6	0.96
13101	Chlorodifluoromethane	75-45-6	2	U	2	6	0.96
13101	Chlorofluoromethane	593-70-4	1	U	1	6	0.96
13101	Chloropentafluoroethane	76-15-3	17	U	17	57	0.96
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	1	U	1	6	0.96
13101	1,2-Dichloro-1-fluoroethane	430-57-9	1	U	1	6	0.96
13101	Dichlorotetrafluoroethane	76-14-2	2	U	2	6	0.96
13101	1,2-Dichlorotrifluoroethane	354-23-4	1	U	1	6	0.96
13101	Dichlorotrifluoroethane	306-83-2	1	U	1	6	0.96
13101	Fluoromethane	593-53-3	3	U	3	11	0.96
13101	Freon 113a	354-58-5	6	U	6	23	0.96
13101	1,1,2-Trifluoroethane	430-66-0	2	U	2	6	0.96
13101	Vinyl fluoride	75-02-5	7	U	7	23	0.96

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-22-(0.5-1.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299864
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:20

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
00884	**Volatile Library Search - 15**						
	The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.						
GC/MS Semivolatiles		**SW-846 8270C**	**ug/kg**		**ug/kg**	**ug/kg**	
10723	**Acenaphthene**	83-32-9	**5**	**J**	4	20	1
10723	Acenaphthylene	208-96-8	4	U	4	20	1
10723	Acetophenone	98-86-2	20	U	20	40	1
10723	4-Aminobiphenyl	92-67-1	200	U	200	590	1
10723	Aniline	62-53-3	200	U	200	590	1
10723	Anthracene	120-12-7	4	U	4	20	1
10723	Benzidine	92-87-5	300	U	300	590	1
10723	Benzo(a)anthracene	56-55-3	4	U	4	20	1
10723	Benzo(a)pyrene	50-32-8	4	U	4	20	1
10723	Benzo(b)fluoranthene	205-99-2	4	U	4	20	1
10723	Benzo(g,h,i)perylene	191-24-2	4	U	4	20	1
10723	Benzo(k)fluoranthene	207-08-9	4	U	4	20	1
10723	1,1'-Biphenyl	92-52-4	20	U	20	40	1
10723	4-Bromophenyl-phenylether	101-55-3	20	U	20	40	1
10723	Butylbenzylphthalate	85-68-7	79	U	79	200	1
10723	Di-n-butylphthalate	84-74-2	79	U	79	200	1
10723	Carbazole	86-74-8	20	U	20	40	1
10723	4-Chloro-3-methylphenol	59-50-7	20	U	20	40	1
10723	4-Chloroaniline	106-47-8	40	U	40	79	1
10723	bis(2-Chloroethoxy)methane	111-91-1	20	U	20	40	1
10723	bis(2-Chloroethyl)ether	111-44-4	20	U	20	40	1
10723	2-Chloronaphthalene	91-58-7	8	U	8	40	1
10723	2-Chlorophenol	95-57-8	20	U	20	40	1
10723	4-Chlorophenyl-phenylether	7005-72-3	20	U	20	40	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	20	U	20	40	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	4	U	4	20	1
10723	Dibenz(a,h)anthracene	53-70-3	4	U	4	20	1
10723	Dibenzofuran	132-64-9	20	U	20	40	1
10723	3,3'-Dichlorobenzidine	91-94-1	120	U	120	400	1
10723	2,4-Dichlorophenol	120-83-2	20	U	20	40	1
10723	Diethylphthalate	84-66-2	79	U	79	200	1
10723	2,4-Dimethylphenol	105-67-9	20	U	20	40	1
10723	Dimethylphthalate	131-11-3	79	U	79	200	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	200	U	200	590	1
10723	2,4-Dinitrophenol	51-28-5	360	U	360	1,200	1

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-22-(0.5-1.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299864
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:20

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	2,4-Dinitrotoluene	121-14-2	79	U	79	200	1
10723	2,6-Dinitrotoluene	606-20-2	20	U	20	40	1
10723	1,4-Dioxane	123-91-1	120	U	120	400	1
10723	Diphenyl ether	101-84-8	20	U	20	40	1
10723	1,2-Diphenylhydrazine	122-66-7	20	U	20	40	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	79	U	79	200	1
10723	Fluoranthene	206-44-0	4	U	4	20	1
10723	**Fluorene**	86-73-7	**16**	**J**	4	20	1
10723	Hexachlorobenzene	118-74-1	4	U	4	20	1
10723	Hexachlorobutadiene	87-68-3	20	U	20	40	1
10723	Hexachlorocyclopentadiene	77-47-4	200	U	200	590	1
10723	Hexachloroethane	67-72-1	40	U	40	200	1
10723	Indeno(1,2,3-cd)pyrene	193-39-5	4	U	4	20	1
10723	Isophorone	78-59-1	20	U	20	40	1
10723	**2-Methylnaphthalene**	91-57-6	**7**	**J**	4	20	1
10723	2-Methylphenol	95-48-7	20	U	20	40	1
10723	4-Methylphenol	106-44-5	20	U	20	40	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10723	**Naphthalene**	91-20-3	**24**		4	20	1
10723	1-Naphthylamine	134-32-7	200	U	200	590	1
10723	2-Naphthylamine	91-59-8	200	U	200	590	1
10723	2-Nitroaniline	88-74-4	20	U	20	40	1
10723	3-Nitroaniline	99-09-2	79	U	79	200	1
10723	4-Nitroaniline	100-01-6	79	U	79	200	1
10723	Nitrobenzene	98-95-3	20	U	20	40	1
10723	2-Nitrophenol	88-75-5	20	U	20	40	1
10723	4-Nitrophenol	100-02-7	200	U	200	590	1
10723	N-Nitrosodimethylamine	62-75-9	79	U	79	200	1
10723	N-Nitroso-di-n-propylamine	621-64-7	20	U	20	40	1
10723	N-Nitrosodiphenylamine	86-30-6	20	U	20	40	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10723	Di-n-octylphthalate	117-84-0	79	U	79	200	1
10723	Parathion	56-38-2	200	U	200	590	1
10723	Pentachlorobenzene	608-93-5	20	U	20	40	1
10723	Pentachlorophenol	87-86-5	40	U	40	200	1
10723	**Phenanthrene**	85-01-8	**55**		4	20	1
10723	Phenol	108-95-2	20	U	20	40	1
10723	Pyrene	129-00-0	4	U	4	20	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	79	U	79	200	1

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-22-(0.5-1.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299864
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:20

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**	**ug/kg**	**ug/kg**	
10723	o-Toluidine	95-53-4	240 U	240	790	1
10723	1,2,4-Trichlorobenzene	120-82-1	20 U	20	40	1
10723	2,4,5-Trichlorophenol	95-95-4	20 U	20	40	1
10723	2,4,6-Trichlorophenol	88-06-2	20 U	20	40	1

The project QA/QC requirements were not met.
Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Metals	**SW-846 6010B**		**mg/kg**	**mg/kg**	**mg/kg**	
01643	**Aluminum**	7429-90-5	**10,500**	9.28	20.8	1
01650	**Calcium**	7440-70-2	**179**	3.46	20.8	1
01654	**Iron**	7439-89-6	**9,100**	8.35	20.8	1
01657	**Magnesium**	7439-95-4	**2,120**	2.52	10.4	1
01662	**Potassium**	7440-09-7	**2,040**	17.3	51.9	1
01667	**Sodium**	7440-23-5	**112**	17.3	104	1
06972	**Zinc**	7440-66-6	**57.8**	0.249	2.08	1
	SW-846 6020		**mg/kg**	**mg/kg**	**mg/kg**	
06124	**Antimony**	7440-36-0	**0.254**	0.0967	0.208	2
	The NJ DKQP analyte list requirement was not met for Metals. The client specified list is reported.					
06125	**Arsenic**	7440-38-2	**2.09**	0.133	0.415	2
06126	**Barium**	7440-39-3	**46.0**	0.188	0.415	2
06127	**Beryllium**	7440-41-7	**0.297**	0.0109	0.104	2
06128	**Cadmium**	7440-43-9	**0.173**	0.0357	0.104	2
06131	**Chromium**	7440-47-3	**16.9**	0.181	0.415	2
06132	**Cobalt**	7440-48-4	**10.1**	0.0324	0.104	2
06133	**Copper**	7440-50-8	**13.6**	0.111	0.415	2
06135	**Lead**	7439-92-1	**10.5**	0.0230	0.208	2
06137	**Manganese**	7439-96-5	**67.6**	0.188	0.415	2
06139	**Nickel**	7440-02-0	**16.6**	0.207	0.415	2
06141	Selenium	7782-49-2	0.104 U	0.104	0.415	2
06142	Silver	7440-22-4	0.0303 U	0.0303	0.104	2
06145	**Thallium**	7440-28-0	**0.130**	0.0259	0.104	2
06148	**Vanadium**	7440-62-2	**17.0**	0.0442	0.104	2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	
00159	Mercury	7439-97-6	0.0112 U	0.0112	0.112	1

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-22-(0.5-1.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299864
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:20

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**SW-846 9060A modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02079	**Total Organic Carbon (TOC)**	n.a.	**550**	125	376	1
Wet Chemistry	**ASTM D422**		**% Passing**	**% Passing**	**% Passing**	
07103	**75 mm**	n.a.	**100**	0.50	0.50	1
07103	**37.5 mm**	n.a.	**100**	0.50	0.50	1
07103	**19 mm**	n.a.	**100**	0.50	0.50	1
07103	**4.75 mm**	n.a.	**85.5**	0.50	0.50	1
07103	**3.35 mm**	n.a.	**81.8**	0.50	0.50	1
07103	**2.36 mm**	n.a.	**77.6**	0.50	0.50	1
07103	**1.18 mm**	n.a.	**68.5**	0.50	0.50	1
07103	**0.6 mm**	n.a.	**43.2**	0.50	0.50	1
07103	**0.3 mm**	n.a.	**7.1**	0.50	0.50	1
07103	**0.15 mm**	n.a.	**3.9**	0.50	0.50	1
07103	**0.075 mm**	n.a.	**3.4**	0.50	0.50	1
07103	**0.064 mm**	n.a.	**3.0**	0.50	0.50	1
07103	**0.05 mm**	n.a.	**1.5**	0.50	0.50	1
07103	0.02 mm	n.a.	0.50 U	0.50	0.50	1
07103	0.005 mm	n.a.	0.50 U	0.50	0.50	1
07103	0.002 mm	n.a.	0.50 U	0.50	0.50	1
07103	0.001 mm	n.a.	0.50 U	0.50	0.50	1
Wet Chemistry	**SM 2540 G-1997 %Moisture Calc**		**%**	**%**	**%**	
00111	**Moisture**	n.a.	**16.2**	0.50	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	X173172AA	11/13/2017 17:56	Linda C Pape	0.98
13101	Freons	SW-846 8260FRN Modified	1	J173141AA	11/10/2017 22:36	Patrick T Herres	0.96
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201730847752	11/04/2017 10:34	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201730847752	11/04/2017 10:34	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201730847752	11/04/2017 10:35	Anastasia K Jaynes	n.a.

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-22-(0.5-1.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299864
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:20

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201730847752	11/04/2017 10:35	Anastasia K Jaynes	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201730847752	11/04/2017 10:34	Anastasia K Jaynes	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17314SLE026	11/13/2017 15:11	Linda M Hartenstine	1
10813	BNA Soil Microwave APP IX	SW-846 3546	2	17314SLE026	11/11/2017 08:00	David S Schrum	1
01643	Aluminum	SW-846 6010B	1	173100570805	11/12/2017 22:03	Elaine F Stoltzfus	1
01650	Calcium	SW-846 6010B	1	173100570805	11/14/2017 05:44	Jonathan J Allen	1
01654	Iron	SW-846 6010B	1	173100570805	11/12/2017 22:03	Elaine F Stoltzfus	1
01657	Magnesium	SW-846 6010B	1	173100570805	11/12/2017 22:03	Elaine F Stoltzfus	1
01662	Potassium	SW-846 6010B	1	173100570805	11/12/2017 22:03	Elaine F Stoltzfus	1
01667	Sodium	SW-846 6010B	1	173100570805	11/12/2017 22:03	Elaine F Stoltzfus	1
06972	Zinc	SW-846 6010B	1	173100570805	11/12/2017 22:03	Elaine F Stoltzfus	1
06124	Antimony	SW-846 6020	1	173100570805A	11/13/2017 19:07	Bradley M Berlot	2
06125	Arsenic	SW-846 6020	1	173100570805A	11/13/2017 19:07	Bradley M Berlot	2
06126	Barium	SW-846 6020	1	173100570805D	11/13/2017 19:07	Bradley M Berlot	2
06127	Beryllium	SW-846 6020	1	173100570805A	11/13/2017 19:07	Bradley M Berlot	2
06128	Cadmium	SW-846 6020	1	173100570805A	11/13/2017 19:07	Bradley M Berlot	2
06131	Chromium	SW-846 6020	1	173100570805A	11/13/2017 19:07	Bradley M Berlot	2
06132	Cobalt	SW-846 6020	1	173100570805A	11/13/2017 19:07	Bradley M Berlot	2
06133	Copper	SW-846 6020	1	173100570805A	11/13/2017 19:07	Bradley M Berlot	2
06135	Lead	SW-846 6020	1	173100570805A	11/13/2017 19:07	Bradley M Berlot	2
06137	Manganese	SW-846 6020	1	173100570805A	11/13/2017 19:07	Bradley M Berlot	2
06139	Nickel	SW-846 6020	1	173100570805A	11/13/2017 19:07	Bradley M Berlot	2
06141	Selenium	SW-846 6020	1	173100570805B	11/13/2017 19:07	Bradley M Berlot	2
06142	Silver	SW-846 6020	1	173100570805A	11/13/2017 19:07	Bradley M Berlot	2
06145	Thallium	SW-846 6020	1	173100570805A	11/13/2017 19:07	Bradley M Berlot	2
06148	Vanadium	SW-846 6020	1	173100570805A	11/13/2017 19:07	Bradley M Berlot	2
00159	Mercury	SW-846 7471A	1	173100571105	11/09/2017 07:18	Damary Valentin	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	173100570805	11/09/2017 05:21	James L Mertz	1
05711	Hg-SW, 7471A - U3	SW-846 7471A	1	173100571105	11/08/2017 19:45	Barbara A Kane	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17317667632B	11/14/2017 23:29	Drew M Gerhart	1
07103	Grain Size to 1 um	ASTM D422	1	17335710302A	12/01/2017 21:20	Joshua P Trost	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17310820005A	11/06/2017 20:09	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15B02

Lab Name: Lancaster Laboratories Contract:_____
Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____
Matrix: (soil/water) SOIL Lab Sample ID: 9299864
Sample wt/vol: 5.09 (g/mL) g Lab File ID: HP09193.i/17nov13a.b/xn13s37.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: not dec. 16.2 Date Analyzed: 11/13/17
Column: (pack/cap) CAP Dilution Factor: 1.0
CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
2.				
3.				
4.				
5.				
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FORM I VOA-TIC

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15B02

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9299864
Sample wt/vol: 30.1 (g/mL) g Lab File ID: ok0573.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: 16.2 Decanted: (Y/N) Date Extracted: 11/11/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/13/17
Injection Volume: 1 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:
Number TICs found: 8 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown Aldol Condensate	2.999	430	JB
2. 57-10-3	n-Hexadecanoic acid	10.322	180	J
3.	Unknown	10.457	260	J
4.	Unknown	10.710	180	J
5.	Unknown	10.763	260	J
6.	Unknown	10.804	290	J
7. 10544-50-0	Cyclic octaatomic sulfur	10.839	2000	J
8. 80-05-7	Phenol, 4,4'-(1-methylethyli	11.175	210	J
9.				
10. SVOCTIC	Total SVOC TICs		3800	JB
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FORM I SV-1

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Analysis Report

Sample Description: **D15-BOR-22-(2.0-2.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:25

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299865
ELLE Group #: 1871169
Matrix: Soil

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	**Acetone**	67-64-1	**29**		8	23	1.02
10237	**Benzene**	71-43-2	**1**	**J**	0.6	6	1.02
10237	Bromodichloromethane	75-27-4	1	U	1	6	1.02
10237	2-Butanone	78-93-3	5	U	5	11	1.02
10237	n-Butylbenzene	104-51-8	1	U	1	6	1.02
10237	sec-Butylbenzene	135-98-8	1	U	1	6	1.02
10237	tert-Butylbenzene	98-06-6	1	U	1	6	1.02
10237	Carbon Disulfide	75-15-0	1	U	1	6	1.02
10237	Carbon Tetrachloride	56-23-5	1	U	1	6	1.02
10237	**Chlorobenzene**	108-90-7	**7**		1	6	1.02
10237	Chloroethane	75-00-3	2	U	2	6	1.02
10237	Chloroform	67-66-3	1	U	1	6	1.02
10237	Chloromethane	74-87-3	2	U	2	6	1.02
10237	2-Chlorotoluene	95-49-8	1	U	1	6	1.02
10237	4-Chlorotoluene	106-43-4	1	U	1	6	1.02
10237	Chlorotrifluoroethene	79-38-9	2	U	2	6	1.02
10237	Dibromochloromethane	124-48-1	1	U	1	6	1.02
10237	1,2-Dibromoethane	106-93-4	1	U	1	6	1.02
10237	**1,2-Dichlorobenzene**	95-50-1	**6**	**J**	1	6	1.02
10237	1,3-Dichlorobenzene	541-73-1	1	U	1	6	1.02
10237	**1,4-Dichlorobenzene**	106-46-7	**6**		1	6	1.02
10237	Dichlorodifluoromethane	75-71-8	2	U	2	6	1.02
10237	1,1-Dichloroethane	75-34-3	1	U	1	6	1.02
10237	1,2-Dichloroethane	107-06-2	1	U	1	6	1.02
10237	1,1-Dichloroethene	75-35-4	1	U	1	6	1.02
10237	cis-1,2-Dichloroethene	156-59-2	1	U	1	6	1.02
10237	trans-1,2-Dichloroethene	156-60-5	1	U	1	6	1.02
10237	1,2-Dichloroethene (Total)	540-59-0	1	U	1	6	1.02
10237	Dichlorofluoromethane	75-43-4	2	U	2	6	1.02
10237	1,2-Dichloropropane	78-87-5	1	U	1	6	1.02
10237	1,1-Dichloropropene	563-58-6	1	U	1	6	1.02
10237	cis-1,3-Dichloropropene	10061-01-5	1	U	1	6	1.02
10237	Ethylbenzene	100-41-4	1	U	1	6	1.02
10237	**Freon 113**	76-13-1	**14**		2	11	1.02
10237	Freon 133a	75-88-7	2	U	2	6	1.02
10237	n-Hexane	110-54-3	1	U	1	6	1.02
10237	2-Hexanone	591-78-6	3	U	3	11	1.02
10237	Isobutyl Alcohol	78-83-1	110	U	110	280	1.02
10237	Isopropylbenzene	98-82-8	1	U	1	6	1.02
10237	p-Isopropyltoluene	99-87-6	1	U	1	6	1.02
10237	Methacrylonitrile	126-98-7	6	U	6	57	1.02
10237	Methyl Methacrylate	80-62-6	1	U	1	6	1.02

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-22-(2.0-2.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299865
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:25

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.6	U	0.6	6	1.02
10237	4-Methyl-2-pentanone	108-10-1	3	U	3	11	1.02
10237	Methylene Chloride	75-09-2	2	U	2	6	1.02
10237	Propionitrile	107-12-0	34	U	34	110	1.02
10237	n-Propylbenzene	103-65-1	1	U	1	6	1.02
10237	Styrene	100-42-5	1	U	1	6	1.02
10237	1,1,1,2-Tetrachloroethane	630-20-6	1	U	1	6	1.02
10237	1,1,2,2-Tetrachloroethane	79-34-5	1	U	1	6	1.02
10237	**Tetrachloroethene**	127-18-4	**2**	**J**	1	6	1.02
10237	Tetrahydrofuran	109-99-9	5	U	5	9	1.02
10237	Toluene	108-88-3	1	U	1	6	1.02
10237	1,1,1-Trichloroethane	71-55-6	1	U	1	6	1.02
10237	1,1,2-Trichloroethane	79-00-5	1	U	1	6	1.02
10237	Trichloroethene	79-01-6	1	U	1	6	1.02
10237	**Trichlorofluoromethane**	75-69-4	**5**	**J**	2	6	1.02
10237	1,2,4-Trimethylbenzene	95-63-6	1	U	1	6	1.02
10237	1,3,5-Trimethylbenzene	108-67-8	1	U	1	6	1.02
10237	Vinyl Chloride	75-01-4	1	U	1	6	1.02
10237	m+p-Xylene	179601-23-1	1	U	1	6	1.02
10237	o-Xylene	95-47-6	1	U	1	6	1.02
10237	Xylene (Total)	1330-20-7	1	U	1	6	1.02

The project QA/QC requirements were not met.

The percent drift for the following is >20% in the continuing calibration verification standard associated with this sample: Freon 133a

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/kg**		**ug/kg**	**ug/kg**	
13101	Chlorodifluoroethane	75-68-3	1	U	1	5	0.9
13101	Chlorodifluoromethane	75-45-6	2	U	2	5	0.9
13101	Chlorofluoromethane	593-70-4	1	U	1	5	0.9
13101	Chloropentafluoroethane	76-15-3	15	UZ	15	50	0.9
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	1	U	1	5	0.9
13101	1,2-Dichloro-1-fluoroethane	430-57-9	1	U	1	5	0.9
13101	Dichlorotetrafluoroethane	76-14-2	2	U	2	5	0.9
13101	1,2-Dichlorotrifluoroethane	354-23-4	1	U	1	5	0.9
13101	Dichlorotrifluoroethane	306-83-2	1	U	1	5	0.9
13101	Fluoromethane	593-53-3	3	UZ	3	10	0.9
13101	Freon 113a	354-58-5	5	U	5	20	0.9
13101	1,1,2-Trifluoroethane	430-66-0	2	U	2	5	0.9
13101	Vinyl fluoride	75-02-5	6	U	6	20	0.9

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-22-(2.0-2.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299865
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:25

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.						

00884 Volatile Library Search - 15

The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

GC/MS Semivolatiles	SW-846 8270C		ug/kg		ug/kg	ug/kg	
10723	Acenaphthene	83-32-9	4	U	4	19	1
10723	Acenaphthylene	208-96-8	4	U	4	19	1
10723	Acetophenone	98-86-2	18	U	18	37	1
10723	4-Aminobiphenyl	92-67-1	180	UZ	180	550	1
10723	Aniline	62-53-3	180	U	180	550	1
10723	Anthracene	120-12-7	4	U	4	19	1
10723	Benzidine	92-87-5	280	U	280	550	1
10723	Benzo(a)anthracene	56-55-3	4	U	4	19	1
10723	Benzo(a)pyrene	50-32-8	4	U	4	19	1
10723	Benzo(b)fluoranthene	205-99-2	4	U	4	19	1
10723	Benzo(g,h,i)perylene	191-24-2	4	U	4	19	1
10723	Benzo(k)fluoranthene	207-08-9	4	U	4	19	1
10723	1,1'-Biphenyl	92-52-4	18	U	18	37	1
10723	4-Bromophenyl-phenylether	101-55-3	18	U	18	37	1
10723	Butylbenzylphthalate	85-68-7	74	U	74	180	1
10723	Di-n-butylphthalate	84-74-2	74	U	74	180	1
10723	Carbazole	86-74-8	18	U	18	37	1
10723	4-Chloro-3-methylphenol	59-50-7	18	U	18	37	1
10723	4-Chloroaniline	106-47-8	37	U	37	74	1
10723	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	37	1
10723	bis(2-Chloroethyl)ether	111-44-4	18	U	18	37	1
10723	2-Chloronaphthalene	91-58-7	7	U	7	36	1
10723	2-Chlorophenol	95-57-8	18	U	18	37	1
10723	4-Chlorophenyl-phenylether	7005-72-3	18	U	18	37	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	18	U	18	37	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	4	U	4	19	1
10723	Dibenz(a,h)anthracene	53-70-3	4	U	4	19	1
10723	Dibenzofuran	132-64-9	18	U	18	37	1
10723	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370	1
10723	2,4-Dichlorophenol	120-83-2	18	U	18	37	1
10723	Diethylphthalate	84-66-2	74	U	74	180	1

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-22-(2.0-2.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299865
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:25

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	2,4-Dimethylphenol	105-67-9	18	U	18	37	1
10723	Dimethylphthalate	131-11-3	74	U	74	180	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550	1
10723	2,4-Dinitrophenol	51-28-5	330	U	330	1,100	1
10723	2,4-Dinitrotoluene	121-14-2	74	U	74	180	1
10723	2,6-Dinitrotoluene	606-20-2	18	U	18	37	1
10723	1,4-Dioxane	123-91-1	110	U	110	370	1
10723	Diphenyl ether	101-84-8	18	U	18	37	1
10723	1,2-Diphenylhydrazine	122-66-7	18	U	18	37	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	74	U	74	190	1
10723	Fluoranthene	206-44-0	4	U	4	19	1
10723	Fluorene	86-73-7	4	U	4	19	1
10723	Hexachlorobenzene	118-74-1	4	U	4	19	1
10723	Hexachlorobutadiene	87-68-3	18	U	18	37	1
10723	Hexachlorocyclopentadiene	77-47-4	180	U	180	550	1
10723	Hexachloroethane	67-72-1	37	U	37	180	1
10723	Indeno(1,2,3-cd)pyrene	193-39-5	4	U	4	19	1
10723	Isophorone	78-59-1	18	U	18	37	1
10723	2-Methylnaphthalene	91-57-6	4	U	4	19	1
10723	2-Methylphenol	95-48-7	18	U	18	37	1
10723	4-Methylphenol	106-44-5	18	U	18	37	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10723	**Naphthalene**	91-20-3	**4**	**J**	4	19	1
10723	1-Naphthylamine	134-32-7	180	U	180	550	1
10723	2-Naphthylamine	91-59-8	180	U	180	550	1
10723	2-Nitroaniline	88-74-4	18	U	18	37	1
10723	3-Nitroaniline	99-09-2	74	U	74	180	1
10723	4-Nitroaniline	100-01-6	74	U	74	180	1
10723	Nitrobenzene	98-95-3	18	U	18	37	1
10723	2-Nitrophenol	88-75-5	18	U	18	37	1
10723	4-Nitrophenol	100-02-7	180	U	180	550	1
10723	N-Nitrosodimethylamine	62-75-9	74	U	74	180	1
10723	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	37	1
10723	N-Nitrosodiphenylamine	86-30-6	18	U	18	37	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10723	Di-n-octylphthalate	117-84-0	74	U	74	180	1
10723	Parathion	56-38-2	180	U	180	550	1
10723	Pentachlorobenzene	608-93-5	18	U	18	37	1
10723	Pentachlorophenol	87-86-5	37	U	37	190	1

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-22-(2.0-2.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299865
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:25

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	**Phenanthrene**	85-01-8	**19**		4	19	1
10723	Phenol	108-95-2	18	U	18	37	1
10723	Pyrene	129-00-0	4	U	4	19	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	74	U	74	180	1
10723	o-Toluidine	95-53-4	220	U	220	740	1
10723	1,2,4-Trichlorobenzene	120-82-1	18	U	18	37	1
10723	2,4,5-Trichlorophenol	95-95-4	18	U	18	37	1
10723	2,4,6-Trichlorophenol	88-06-2	18	U	18	37	1

The project QA/QC requirements were not met.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Wet Chemistry	**SW-846 9060A modified**		**mg/kg**		**mg/kg**	**mg/kg**	
02079	**Total Organic Carbon (TOC)**	n.a.	**231**	**J**	112	336	1

Due to the nature of this sample matrix, the sample cup was filled to capacity with less than 1000 mg of sample being used. The lowered sample weight has resulted in a raised reporting limit.

Wet Chemistry	**SM 2540 G-1997 %Moisture Calc**		**%**		**%**	**%**	
00111	**Moisture**	n.a.	**9.9**		0.50	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-22-(2.0-2.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299865
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:25

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	X173172AA	11/13/2017 18:20	Linda C Pape	1.02
13101	Freons	SW-846 8260FRN Modified	1	J173171AA	11/13/2017 15:55	Kevin A Sposito	0.9
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201730847752	11/04/2017 10:37	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201730847752	11/04/2017 10:38	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201730847752	11/04/2017 10:38	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201730847752	11/04/2017 10:38	Anastasia K Jaynes	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201730847752	11/04/2017 10:37	Anastasia K Jaynes	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17313SLI026	11/15/2017 22:44	Anthony P Bauer	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17313SLI026	11/10/2017 16:10	Ashley R Transue	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17317667632B	11/14/2017 23:42	Drew M Gerhart	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17310820005A	11/06/2017 20:09	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15B03

Lab Name: Lancaster Laboratories Contract:_____
Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____
Matrix: (soil/water) SOIL Lab Sample ID: 9299865
Sample wt/vol: 4.88 (g/mL) g Lab File ID: HP09193.i/17nov13a.b/xn13s38.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: not dec. 9.9 Date Analyzed: 11/13/17
Column: (pack/cap) CAP Dilution Factor: 1.0
CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
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3.				
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FORM I VOA-TIC

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15B03

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9299865
Sample wt/vol: 30.2 (g/mL) g Lab File ID: pk0557.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: 9.9 Decanted: (Y/N) Date Extracted: 11/10/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/15/17
Injection Volume: 1 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:
Number TICs found: 2 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.625-86-5	Furan, 2,5-dimethyl-	1.902	150	JB
2.	Unknown Aldol Condensate	4.007	380	JB
3.				
4.SVOCTIC	Total SVOC TICs		520	JB
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FORM I SV-1

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Analysis Report

Sample Description: **D15-BOR-22-(7.0-7.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:40

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299866
ELLE Group #: 1871169
Matrix: Soil

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	**Acetone**	67-64-1	**36**		8	22	1
10237	**Benzene**	71-43-2	**5**	**J**	0.6	6	1
10237	Bromodichloromethane	75-27-4	1	U	1	6	1
10237	2-Butanone	78-93-3	4	U	4	11	1
10237	n-Butylbenzene	104-51-8	1	U	1	6	1
10237	sec-Butylbenzene	135-98-8	1	U	1	6	1
10237	tert-Butylbenzene	98-06-6	1	U	1	6	1
10237	Carbon Disulfide	75-15-0	1	U	1	6	1
10237	Carbon Tetrachloride	56-23-5	1	U	1	6	1
10237	**Chlorobenzene**	108-90-7	**480**		50	250	44.88
10237	Chloroethane	75-00-3	2	U	2	6	1
10237	**Chloroform**	67-66-3	**7**		1	6	1
10237	Chloromethane	74-87-3	2	U	2	6	1
10237	2-Chlorotoluene	95-49-8	1	U	1	6	1
10237	4-Chlorotoluene	106-43-4	1	U	1	6	1
10237	Chlorotrifluoroethene	79-38-9	2	U	2	6	1
10237	Dibromochloromethane	124-48-1	1	U	1	6	1
10237	1,2-Dibromoethane	106-93-4	1	U	1	6	1
10237	**1,2-Dichlorobenzene**	95-50-1	**180**		1	6	1
10237	**1,3-Dichlorobenzene**	541-73-1	**8**		1	6	1
10237	**1,4-Dichlorobenzene**	106-46-7	**240**		1	6	1
10237	Dichlorodifluoromethane	75-71-8	2	U	2	6	1
10237	1,1-Dichloroethane	75-34-3	1	U	1	6	1
10237	1,2-Dichloroethane	107-06-2	1	U	1	6	1
10237	1,1-Dichloroethene	75-35-4	1	U	1	6	1
10237	cis-1,2-Dichloroethene	156-59-2	1	U	1	6	1
10237	trans-1,2-Dichloroethene	156-60-5	1	U	1	6	1
10237	1,2-Dichloroethene (Total)	540-59-0	1	U	1	6	1
10237	Dichlorofluoromethane	75-43-4	2	U	2	6	1
10237	1,2-Dichloropropane	78-87-5	1	U	1	6	1
10237	1,1-Dichloropropene	563-58-6	1	U	1	6	1
10237	cis-1,3-Dichloropropene	10061-01-5	1	U	1	6	1
10237	**Ethylbenzene**	100-41-4	**3**	**J**	1	6	1
10237	**Freon 113**	76-13-1	**18**		2	11	1
10237	Freon 133a	75-88-7	2	U	2	6	1
10237	n-Hexane	110-54-3	1	U	1	6	1
10237	2-Hexanone	591-78-6	3	U	3	11	1
10237	Isobutyl Alcohol	78-83-1	110	U	110	280	1
10237	Isopropylbenzene	98-82-8	1	U	1	6	1
10237	p-Isopropyltoluene	99-87-6	1	U	1	6	1
10237	Methacrylonitrile	126-98-7	6	U	6	55	1
10237	Methyl Methacrylate	80-62-6	1	U	1	6	1

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-22-(7.0-7.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299866
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:40

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.6	U	0.6	6	1
10237	4-Methyl-2-pentanone	108-10-1	3	U	3	11	1
10237	Methylene Chloride	75-09-2	2	U	2	6	1
10237	Propionitrile	107-12-0	33	U	33	110	1
10237	n-Propylbenzene	103-65-1	1	U	1	6	1
10237	Styrene	100-42-5	1	U	1	6	1
10237	**1,1,1,2-Tetrachloroethane**	630-20-6	**1**	**J**	1	6	1
10237	1,1,2,2-Tetrachloroethane	79-34-5	1	U	1	6	1
10237	**Tetrachloroethene**	127-18-4	**15**		1	6	1
10237	Tetrahydrofuran	109-99-9	4	U	4	9	1
10237	**Toluene**	108-88-3	**13**		1	6	1
10237	1,1,1-Trichloroethane	71-55-6	1	U	1	6	1
10237	1,1,2-Trichloroethane	79-00-5	1	U	1	6	1
10237	**Trichloroethene**	79-01-6	**1**	**J**	1	6	1
10237	**Trichlorofluoromethane**	75-69-4	**6**		2	6	1
10237	1,2,4-Trimethylbenzene	95-63-6	1	U	1	6	1
10237	1,3,5-Trimethylbenzene	108-67-8	1	U	1	6	1
10237	Vinyl Chloride	75-01-4	1	U	1	6	1
10237	**m+p-Xylene**	179601-23-1	**20**		1	6	1
10237	**o-Xylene**	95-47-6	**9**		1	6	1
10237	**Xylene (Total)**	1330-20-7	**29**		1	6	1

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/kg**		**ug/kg**	**ug/kg**	
13101	Chlorodifluoroethane	75-68-3	1	U	1	5	0.96
13101	Chlorodifluoromethane	75-45-6	2	U	2	5	0.96
13101	Chlorofluoromethane	593-70-4	1	U	1	5	0.96
13101	Chloropentafluoroethane	76-15-3	16	U	16	53	0.96
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	1	U	1	5	0.96
13101	1,2-Dichloro-1-fluoroethane	430-57-9	1	U	1	5	0.96
13101	**Dichlorotetrafluoroethane**	76-14-2	**3**	**J**	2	5	0.96
13101	**1,2-Dichlorotrifluoroethane**	354-23-4	**2**	**J**	1	5	0.96
13101	**Dichlorotrifluoroethane**	306-83-2	**12**		1	5	0.96
13101	Fluoromethane	593-53-3	3	U	3	11	0.96
13101	Freon 113a	354-58-5	5	U	5	21	0.96
13101	1,1,2-Trifluoroethane	430-66-0	2	U	2	5	0.96
13101	Vinyl fluoride	75-02-5	6	U	6	21	0.96

00884 Volatile Library Search - 15

The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-22-(7.0-7.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299866
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:40

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	Acenaphthene	83-32-9	4	U	4	19	1
10723	Acenaphthylene	208-96-8	4	U	4	19	1
10723	Acetophenone	98-86-2	18	U	18	37	1
10723	4-Aminobiphenyl	92-67-1	180	UZ	180	550	1
10723	Aniline	62-53-3	180	U	180	550	1
10723	Anthracene	120-12-7	4	U	4	19	1
10723	Benzidine	92-87-5	280	U	280	550	1
10723	Benzo(a)anthracene	56-55-3	4	U	4	19	1
10723	Benzo(a)pyrene	50-32-8	4	U	4	19	1
10723	Benzo(b)fluoranthene	205-99-2	4	U	4	19	1
10723	Benzo(g,h,i)perylene	191-24-2	4	U	4	19	1
10723	Benzo(k)fluoranthene	207-08-9	4	U	4	19	1
10723	1,1'-Biphenyl	92-52-4	18	U	18	37	1
10723	4-Bromophenyl-phenylether	101-55-3	18	U	18	37	1
10723	Butylbenzylphthalate	85-68-7	74	U	74	180	1
10723	Di-n-butylphthalate	84-74-2	74	U	74	180	1
10723	Carbazole	86-74-8	18	U	18	37	1
10723	4-Chloro-3-methylphenol	59-50-7	18	U	18	37	1
10723	4-Chloroaniline	106-47-8	37	U	37	74	1
10723	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	37	1
10723	bis(2-Chloroethyl)ether	111-44-4	18	U	18	37	1
10723	2-Chloronaphthalene	91-58-7	7	U	7	37	1
10723	2-Chlorophenol	95-57-8	18	U	18	37	1
10723	4-Chlorophenyl-phenylether	7005-72-3	18	U	18	37	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	18	U	18	37	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	4	U	4	19	1
10723	Dibenz(a,h)anthracene	53-70-3	4	U	4	19	1
10723	Dibenzofuran	132-64-9	18	U	18	37	1
10723	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370	1
10723	2,4-Dichlorophenol	120-83-2	18	U	18	37	1
10723	Diethylphthalate	84-66-2	74	U	74	180	1
10723	2,4-Dimethylphenol	105-67-9	18	U	18	37	1
10723	Dimethylphthalate	131-11-3	74	U	74	180	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550	1
10723	2,4-Dinitrophenol	51-28-5	330	U	330	1,100	1
10723	2,4-Dinitrotoluene	121-14-2	74	U	74	180	1
10723	2,6-Dinitrotoluene	606-20-2	18	U	18	37	1
10723	1,4-Dioxane	123-91-1	110	U	110	370	1
10723	Diphenyl ether	101-84-8	18	U	18	37	1

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-22-(7.0-7.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299866
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:40

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	1,2-Diphenylhydrazine	122-66-7	18	U	18	37	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	74	U	74	190	1
10723	Fluoranthene	206-44-0	4	U	4	19	1
10723	Fluorene	86-73-7	4	U	4	19	1
10723	Hexachlorobenzene	118-74-1	4	U	4	19	1
10723	Hexachlorobutadiene	87-68-3	18	U	18	37	1
10723	Hexachlorocyclopentadiene	77-47-4	180	U	180	550	1
10723	Hexachloroethane	67-72-1	37	U	37	180	1
10723	Indeno(1,2,3-cd)pyrene	193-39-5	4	U	4	19	1
10723	Isophorone	78-59-1	18	U	18	37	1
10723	2-Methylnaphthalene	91-57-6	4	U	4	19	1
10723	2-Methylphenol	95-48-7	18	U	18	37	1
10723	4-Methylphenol	106-44-5	18	U	18	37	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10723	**Naphthalene**	91-20-3	**14**	**J**	4	19	1
10723	1-Naphthylamine	134-32-7	180	U	180	550	1
10723	2-Naphthylamine	91-59-8	180	U	180	550	1
10723	2-Nitroaniline	88-74-4	18	U	18	37	1
10723	3-Nitroaniline	99-09-2	74	U	74	180	1
10723	4-Nitroaniline	100-01-6	74	U	74	180	1
10723	Nitrobenzene	98-95-3	18	U	18	37	1
10723	2-Nitrophenol	88-75-5	18	U	18	37	1
10723	4-Nitrophenol	100-02-7	180	U	180	550	1
10723	N-Nitrosodimethylamine	62-75-9	74	U	74	180	1
10723	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	37	1
10723	N-Nitrosodiphenylamine	86-30-6	18	U	18	37	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10723	Di-n-octylphthalate	117-84-0	74	U	74	180	1
10723	Parathion	56-38-2	180	U	180	550	1
10723	Pentachlorobenzene	608-93-5	18	U	18	37	1
10723	Pentachlorophenol	87-86-5	37	U	37	190	1
10723	**Phenanthrene**	85-01-8	**7**	**J**	4	19	1
10723	Phenol	108-95-2	18	U	18	37	1
10723	Pyrene	129-00-0	4	U	4	19	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	74	U	74	180	1
10723	o-Toluidine	95-53-4	220	U	220	740	1
10723	1,2,4-Trichlorobenzene	120-82-1	18	U	18	37	1
10723	2,4,5-Trichlorophenol	95-95-4	18	U	18	37	1
10723	2,4,6-Trichlorophenol	88-06-2	18	U	18	37	1

The project QA/QC requirements were not met.

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-22-(7.0-7.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299866
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:40

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Wet Chemistry	**SW-846 9060A modified**		**mg/kg**		**mg/kg**	**mg/kg**	
02079	**Total Organic Carbon (TOC)**	n.a.	**255**	**J**	112	337	1

Due to the nature of this sample matrix, the sample cup was filled to capacity with less than 1000 mg of sample being used. The lowered sample weight has resulted in a raised reporting limit.

Wet Chemistry	**SM 2540 G-1997 %Moisture Calc**		**%**		**%**	**%**	
00111	**Moisture**	n.a.	**10**		0.50	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	X173143AA	11/10/2017 17:54	Linda C Pape	1
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	R173171AA	11/13/2017 23:35	Stephen C Nolte	44.88
13101	Freons	SW-846 8260FRN Modified	1	J173141AA	11/10/2017 23:35	Patrick T Herres	0.96
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201730847752	11/04/2017 10:40	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201730847752	11/04/2017 10:41	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201730847752	11/04/2017 10:41	Anastasia K Jaynes	n.a.

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-22-(7.0-7.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 13:40

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299866
ELLE Group #: 1871169
Matrix: Soil

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201730847752	11/04/2017 10:41	Anastasia K Jaynes	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201730847752	11/04/2017 10:40	Anastasia K Jaynes	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17313SLI026	11/15/2017 23:57	Anthony P Bauer	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17313SLI026	11/10/2017 16:10	Ashley R Transue	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17317667632B	11/14/2017 23:55	Drew M Gerhart	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17310820005A	11/06/2017 20:09	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15B04

Lab Name: Lancaster Laboratories Contract:_____
Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____
Matrix: (soil/water) SOIL Lab Sample ID: 9299866
Sample wt/vol: 5.01 (g/mL) g Lab File ID: HP09193.i/17nov10a.b/xn10s37.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: not dec. 10 Date Analyzed: 11/10/17
Column: (pack/cap) CAP Dilution Factor: 1.0
CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
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FORM I VOA-TIC

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15B04

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9299866
Sample wt/vol: 30.04(g/mL) g Lab File ID: pk0560.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: 10 Decanted: (Y/N) Date Extracted: 11/10/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/15/17
Injection Volume: 1 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:
Number TICs found: 2 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 625-86-5	Furan, 2,5-dimethyl-	1.902	190	JB
2.	Unknown Aldol Condensate	4.007	370	JB
3.				
4. SVOCTIC	Total SVOC TICs		560	JB
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FORM I SV-1

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Analysis Report

Sample Description: **D15-BOR-22-(7.8-8.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299867
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 14:05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	**Acetone**	67-64-1	**48**		8	22	1
10237	**Benzene**	71-43-2	**4**	**J**	0.6	6	1
10237	Bromodichloromethane	75-27-4	1	U	1	6	1
10237	2-Butanone	78-93-3	4	U	4	11	1
10237	n-Butylbenzene	104-51-8	1	U	1	6	1
10237	sec-Butylbenzene	135-98-8	1	U	1	6	1
10237	tert-Butylbenzene	98-06-6	1	U	1	6	1
10237	Carbon Disulfide	75-15-0	1	U	1	6	1
10237	Carbon Tetrachloride	56-23-5	1	U	1	6	1
10237	**Chlorobenzene**	108-90-7	**43**		1	6	1
10237	Chloroethane	75-00-3	2	U	2	6	1
10237	**Chloroform**	67-66-3	**4**	**J**	1	6	1
10237	Chloromethane	74-87-3	2	U	2	6	1
10237	2-Chlorotoluene	95-49-8	1	U	1	6	1
10237	4-Chlorotoluene	106-43-4	1	U	1	6	1
10237	Chlorotrifluoroethene	79-38-9	2	U	2	6	1
10237	Dibromochloromethane	124-48-1	1	U	1	6	1
10237	1,2-Dibromoethane	106-93-4	1	U	1	6	1
10237	**1,2-Dichlorobenzene**	95-50-1	**7**		1	6	1
10237	1,3-Dichlorobenzene	541-73-1	1	U	1	6	1
10237	**1,4-Dichlorobenzene**	106-46-7	**9**		1	6	1
10237	Dichlorodifluoromethane	75-71-8	2	U	2	6	1
10237	1,1-Dichloroethane	75-34-3	1	U	1	6	1
10237	1,2-Dichloroethane	107-06-2	1	U	1	6	1
10237	1,1-Dichloroethene	75-35-4	1	U	1	6	1
10237	cis-1,2-Dichloroethene	156-59-2	1	U	1	6	1
10237	trans-1,2-Dichloroethene	156-60-5	1	U	1	6	1
10237	1,2-Dichloroethene (Total)	540-59-0	1	U	1	6	1
10237	Dichlorofluoromethane	75-43-4	2	U	2	6	1
10237	1,2-Dichloropropane	78-87-5	1	U	1	6	1
10237	1,1-Dichloropropene	563-58-6	1	U	1	6	1
10237	cis-1,3-Dichloropropene	10061-01-5	1	U	1	6	1
10237	Ethylbenzene	100-41-4	1	U	1	6	1
10237	**Freon 113**	76-13-1	**3**	**J**	2	11	1
10237	Freon 133a	75-88-7	2	U	2	6	1
10237	n-Hexane	110-54-3	1	U	1	6	1
10237	2-Hexanone	591-78-6	3	U	3	11	1
10237	Isobutyl Alcohol	78-83-1	110	U	110	280	1
10237	Isopropylbenzene	98-82-8	1	U	1	6	1
10237	p-Isopropyltoluene	99-87-6	1	U	1	6	1
10237	Methacrylonitrile	126-98-7	6	U	6	55	1
10237	Methyl Methacrylate	80-62-6	1	U	1	6	1

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-22-(7.8-8.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299867
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 14:05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.6	U	0.6	6	1
10237	4-Methyl-2-pentanone	108-10-1	3	U	3	11	1
10237	Methylene Chloride	75-09-2	2	U	2	6	1
10237	Propionitrile	107-12-0	33	U	33	110	1
10237	n-Propylbenzene	103-65-1	1	U	1	6	1
10237	Styrene	100-42-5	1	U	1	6	1
10237	1,1,1,2-Tetrachloroethane	630-20-6	1	U	1	6	1
10237	1,1,2,2-Tetrachloroethane	79-34-5	1	U	1	6	1
10237	Tetrachloroethene	127-18-4	1	U	1	6	1
10237	Tetrahydrofuran	109-99-9	4	U	4	9	1
10237	**Toluene**	108-88-3	**1**	**J**	1	6	1
10237	1,1,1-Trichloroethane	71-55-6	1	U	1	6	1
10237	1,1,2-Trichloroethane	79-00-5	1	U	1	6	1
10237	Trichloroethene	79-01-6	1	U	1	6	1
10237	Trichlorofluoromethane	75-69-4	2	U	2	6	1
10237	1,2,4-Trimethylbenzene	95-63-6	1	U	1	6	1
10237	1,3,5-Trimethylbenzene	108-67-8	1	U	1	6	1
10237	Vinyl Chloride	75-01-4	1	U	1	6	1
10237	m+p-Xylene	179601-23-1	1	U	1	6	1
10237	o-Xylene	95-47-6	1	U	1	6	1
10237	Xylene (Total)	1330-20-7	1	U	1	6	1

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/kg**		**ug/kg**	**ug/kg**	
13101	Chlorodifluoroethane	75-68-3	1	U	1	6	1
13101	Chlorodifluoromethane	75-45-6	2	U	2	6	1
13101	Chlorofluoromethane	593-70-4	1	U	1	6	1
13101	Chloropentafluoroethane	76-15-3	17	U	17	55	1
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	1	U	1	6	1
13101	1,2-Dichloro-1-fluoroethane	430-57-9	1	U	1	6	1
13101	Dichlorotetrafluoroethane	76-14-2	2	U	2	6	1
13101	1,2-Dichlorotrifluoroethane	354-23-4	1	U	1	6	1
13101	**Dichlorotrifluoroethane**	306-83-2	**2**	**J**	1	6	1
13101	Fluoromethane	593-53-3	3	U	3	11	1
13101	Freon 113a	354-58-5	6	U	6	22	1
13101	1,1,2-Trifluoroethane	430-66-0	2	U	2	6	1
13101	Vinyl fluoride	75-02-5	7	U	7	22	1

00884 Volatile Library Search - 15

The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-22-(7.8-8.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299867
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 14:05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	Acenaphthene	83-32-9	4	U	4	19	1
10723	Acenaphthylene	208-96-8	4	U	4	19	1
10723	Acetophenone	98-86-2	18	U	18	36	1
10723	4-Aminobiphenyl	92-67-1	180	UZ	180	550	1
10723	Aniline	62-53-3	180	U	180	550	1
10723	Anthracene	120-12-7	4	U	4	19	1
10723	Benzidine	92-87-5	270	U	270	550	1
10723	Benzo(a)anthracene	56-55-3	4	U	4	19	1
10723	Benzo(a)pyrene	50-32-8	4	U	4	19	1
10723	Benzo(b)fluoranthene	205-99-2	4	U	4	19	1
10723	Benzo(g,h,i)perylene	191-24-2	4	U	4	19	1
10723	Benzo(k)fluoranthene	207-08-9	4	U	4	19	1
10723	1,1'-Biphenyl	92-52-4	18	U	18	36	1
10723	4-Bromophenyl-phenylether	101-55-3	18	U	18	36	1
10723	Butylbenzylphthalate	85-68-7	73	U	73	180	1
10723	Di-n-butylphthalate	84-74-2	73	U	73	180	1
10723	Carbazole	86-74-8	18	U	18	36	1
10723	4-Chloro-3-methylphenol	59-50-7	18	U	18	36	1
10723	4-Chloroaniline	106-47-8	36	U	36	73	1
10723	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	36	1
10723	bis(2-Chloroethyl)ether	111-44-4	18	U	18	36	1
10723	2-Chloronaphthalene	91-58-7	7	U	7	36	1
10723	2-Chlorophenol	95-57-8	18	U	18	36	1
10723	4-Chlorophenyl-phenylether	7005-72-3	18	U	18	36	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	18	U	18	36	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	4	U	4	19	1
10723	Dibenz(a,h)anthracene	53-70-3	4	U	4	19	1
10723	Dibenzofuran	132-64-9	18	U	18	36	1
10723	3,3'-Dichlorobenzidine	91-94-1	110	U	110	360	1
10723	2,4-Dichlorophenol	120-83-2	18	U	18	36	1
10723	Diethylphthalate	84-66-2	73	U	73	180	1
10723	2,4-Dimethylphenol	105-67-9	18	U	18	36	1
10723	Dimethylphthalate	131-11-3	73	U	73	180	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550	1
10723	2,4-Dinitrophenol	51-28-5	330	U	330	1,100	1
10723	2,4-Dinitrotoluene	121-14-2	73	U	73	180	1
10723	2,6-Dinitrotoluene	606-20-2	18	U	18	36	1
10723	1,4-Dioxane	123-91-1	110	U	110	360	1
10723	Diphenyl ether	101-84-8	18	U	18	36	1

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-22-(7.8-8.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299867
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 14:05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	1,2-Diphenylhydrazine	122-66-7	18	U	18	36	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	73	U	73	190	1
10723	Fluoranthene	206-44-0	4	U	4	19	1
10723	Fluorene	86-73-7	4	U	4	19	1
10723	Hexachlorobenzene	118-74-1	4	U	4	19	1
10723	Hexachlorobutadiene	87-68-3	18	U	18	36	1
10723	Hexachlorocyclopentadiene	77-47-4	180	U	180	550	1
10723	Hexachloroethane	67-72-1	36	U	36	180	1
10723	Indeno(1,2,3-cd)pyrene	193-39-5	4	U	4	19	1
10723	Isophorone	78-59-1	18	U	18	36	1
10723	2-Methylnaphthalene	91-57-6	4	U	4	19	1
10723	2-Methylphenol	95-48-7	18	U	18	36	1
10723	4-Methylphenol	106-44-5	18	U	18	36	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10723	**Naphthalene**	91-20-3	**8**	**J**	4	19	1
10723	1-Naphthylamine	134-32-7	180	U	180	550	1
10723	2-Naphthylamine	91-59-8	180	U	180	550	1
10723	2-Nitroaniline	88-74-4	18	U	18	36	1
10723	3-Nitroaniline	99-09-2	73	U	73	180	1
10723	4-Nitroaniline	100-01-6	73	U	73	180	1
10723	Nitrobenzene	98-95-3	18	U	18	36	1
10723	2-Nitrophenol	88-75-5	18	U	18	36	1
10723	4-Nitrophenol	100-02-7	180	U	180	550	1
10723	N-Nitrosodimethylamine	62-75-9	73	U	73	180	1
10723	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	36	1
10723	N-Nitrosodiphenylamine	86-30-6	18	U	18	36	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10723	Di-n-octylphthalate	117-84-0	73	U	73	180	1
10723	Parathion	56-38-2	180	U	180	550	1
10723	Pentachlorobenzene	608-93-5	18	U	18	36	1
10723	Pentachlorophenol	87-86-5	36	U	36	190	1
10723	**Phenanthrene**	85-01-8	**6**	**J**	4	19	1
10723	Phenol	108-95-2	18	U	18	36	1
10723	Pyrene	129-00-0	4	U	4	19	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	73	U	73	180	1
10723	o-Toluidine	95-53-4	220	U	220	730	1
10723	1,2,4-Trichlorobenzene	120-82-1	18	U	18	36	1
10723	2,4,5-Trichlorophenol	95-95-4	18	U	18	36	1
10723	2,4,6-Trichlorophenol	88-06-2	18	U	18	36	1

The project QA/QC requirements were not met.

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-22-(7.8-8.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299867
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 14:05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Wet Chemistry	**SW-846 9060A modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02079	**Total Organic Carbon (TOC)**	n.a.	**607**	114	341	1
Wet Chemistry	**SM 2540 G-1997 %Moisture Calc**		**%**	**%**	**%**	
00111	**Moisture**	n.a.	**9.5**	0.50	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	X173143AA	11/10/2017 18:17	Linda C Pape	1
13101	Freons	SW-846 8260FRN Modified	1	J173141AA	11/11/2017 00:05	Patrick T Herres	1
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201730847752	11/04/2017 10:43	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201730847752	11/04/2017 10:44	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201730847752	11/04/2017 10:44	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201730847752	11/04/2017 10:44	Anastasia K Jaynes	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201730847752	11/04/2017 10:43	Anastasia K Jaynes	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17313SLI026	11/16/2017 00:21	Anthony P Bauer	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17313SLI026	11/10/2017 16:10	Ashley R Transue	1

*=This limit was used in the evaluation of the final result

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Analysis Report

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Sample Description: **D15-BOR-22-(7.8-8.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 14:05

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299867
ELLE Group #: 1871169
Matrix: Soil

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17317667632B	11/15/2017 00:08	Drew M Gerhart	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17310820005A	11/06/2017 20:09	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15B05

Lab Name: Lancaster Laboratories Contract:_____
Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____
Matrix: (soil/water) SOIL Lab Sample ID: 9299867
Sample wt/vol: 5.0 (g/mL) g Lab File ID: HP09193.i/17nov10a.b/xn10s38.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: not dec. 9.5 Date Analyzed: 11/10/17
Column: (pack/cap) CAP Dilution Factor: 1.0
CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
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page 1 of 1

FORM I VOA-TIC

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

15B05

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9299867
Sample wt/vol: 30.37(g/mL) g Lab File ID: pk0561.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: 9.5 Decanted: (Y/N) Date Extracted: 11/10/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/17
Injection Volume: 1 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:
Number TICs found: 2 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.625-86-5	Furan, 2,5-dimethyl-	1.907	150	JB
2.	Unknown Aldol Condensate	4.007	360	JB
3.				
4.SVOCTIC	Total SVOC TICs		510	JB
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FORM I SV-1

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Analysis Report

Sample Description: **D15-BOR-22-(8.0-8.2) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299868
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 14:10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	Acetone	67-64-1	430	U	430	1,200	48.36
10237	**Benzene**	71-43-2	**200**	**J**	30	300	48.36
10237	Bromodichloromethane	75-27-4	61	U	61	300	48.36
10237	2-Butanone	78-93-3	240	U	240	610	48.36
10237	n-Butylbenzene	104-51-8	61	U	61	300	48.36
10237	sec-Butylbenzene	135-98-8	61	U	61	300	48.36
10237	tert-Butylbenzene	98-06-6	61	U	61	300	48.36
10237	Carbon Disulfide	75-15-0	61	U	61	300	48.36
10237	Carbon Tetrachloride	56-23-5	61	U	61	300	48.36
10237	**Chlorobenzene**	108-90-7	**4,500**		61	300	48.36
10237	Chloroethane	75-00-3	120	U	120	300	48.36
10237	**Chloroform**	67-66-3	**110**	**J**	61	300	48.36
10237	Chloromethane	74-87-3	120	U	120	300	48.36
10237	2-Chlorotoluene	95-49-8	61	U	61	300	48.36
10237	4-Chlorotoluene	106-43-4	61	U	61	300	48.36
10237	Chlorotrifluoroethene	79-38-9	120	U	120	300	48.36
10237	Dibromochloromethane	124-48-1	61	U	61	300	48.36
10237	1,2-Dibromoethane	106-93-4	61	U	61	300	48.36
10237	**1,2-Dichlorobenzene**	95-50-1	**980**		61	300	48.36
10237	1,3-Dichlorobenzene	541-73-1	61	U	61	300	48.36
10237	**1,4-Dichlorobenzene**	106-46-7	**1,600**		61	300	48.36
10237	Dichlorodifluoromethane	75-71-8	120	U	120	300	48.36
10237	1,1-Dichloroethane	75-34-3	61	U	61	300	48.36
10237	1,2-Dichloroethane	107-06-2	61	U	61	300	48.36
10237	1,1-Dichloroethene	75-35-4	61	U	61	300	48.36
10237	cis-1,2-Dichloroethene	156-59-2	61	U	61	300	48.36
10237	trans-1,2-Dichloroethene	156-60-5	61	U	61	300	48.36
10237	1,2-Dichloroethene (Total)	540-59-0	61	U	61	300	48.36
10237	Dichlorofluoromethane	75-43-4	120	U	120	300	48.36
10237	1,2-Dichloropropane	78-87-5	61	U	61	300	48.36
10237	1,1-Dichloropropene	563-58-6	61	U	61	300	48.36
10237	cis-1,3-Dichloropropene	10061-01-5	61	U	61	300	48.36
10237	Ethylbenzene	100-41-4	61	U	61	300	48.36
10237	Freon 113	76-13-1	120	U	120	610	48.36
10237	Freon 133a	75-88-7	120	U	120	300	48.36
10237	n-Hexane	110-54-3	61	U	61	300	48.36
10237	2-Hexanone	591-78-6	180	U	180	610	48.36
10237	Isobutyl Alcohol	78-83-1	6,100	U	6,100	15,000	48.36
10237	Isopropylbenzene	98-82-8	61	U	61	300	48.36
10237	p-Isopropyltoluene	99-87-6	61	U	61	300	48.36
10237	Methacrylonitrile	126-98-7	300	U	300	3,000	48.36
10237	Methyl Methacrylate	80-62-6	61	U	61	300	48.36

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-22-(8.0-8.2) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299868
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 14:10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	Methyl Tertiary Butyl Ether	1634-04-4	30	U	30	300	48.36
10237	4-Methyl-2-pentanone	108-10-1	180	U	180	610	48.36
10237	Methylene Chloride	75-09-2	120	U	120	300	48.36
10237	Propionitrile	107-12-0	1,800	U	1,800	6,100	48.36
10237	n-Propylbenzene	103-65-1	61	U	61	300	48.36
10237	Styrene	100-42-5	61	U	61	300	48.36
10237	1,1,1,2-Tetrachloroethane	630-20-6	61	U	61	300	48.36
10237	1,1,2,2-Tetrachloroethane	79-34-5	61	U	61	300	48.36
10237	**Tetrachloroethene**	127-18-4	**170**	**J**	61	300	48.36
10237	Tetrahydrofuran	109-99-9	240	U	240	490	48.36
10237	Toluene	108-88-3	61	U	61	300	48.36
10237	1,1,1-Trichloroethane	71-55-6	61	U	61	300	48.36
10237	1,1,2-Trichloroethane	79-00-5	61	U	61	300	48.36
10237	Trichloroethene	79-01-6	61	U	61	300	48.36
10237	Trichlorofluoromethane	75-69-4	120	U	120	300	48.36
10237	1,2,4-Trimethylbenzene	95-63-6	61	U	61	300	48.36
10237	1,3,5-Trimethylbenzene	108-67-8	61	U	61	300	48.36
10237	Vinyl Chloride	75-01-4	61	U	61	300	48.36
10237	**m+p-Xylene**	179601-23-1	**110**	**J**	61	300	48.36
10237	**o-Xylene**	95-47-6	**90**	**J**	61	300	48.36
10237	**Xylene (Total)**	1330-20-7	**200**	**J**	61	300	48.36

The project QA/QC requirements were not met.

The percent drift for the following is >20% in the continuing calibration verification standard associated with this sample: Chloroethane and 2-Butanone

The NJ DKQP required reporting limit could not be attained for 1,2-Dibromoethane.

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/kg**		**ug/kg**	**ug/kg**	
13101	Chlorodifluoroethane	75-68-3	1	U	1	6	0.94
13101	Chlorodifluoromethane	75-45-6	2	U	2	6	0.94
13101	Chlorofluoromethane	593-70-4	1	U	1	6	0.94
13101	Chloropentafluoroethane	76-15-3	18	U	18	59	0.94
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	1	U	1	6	0.94
13101	1,2-Dichloro-1-fluoroethane	430-57-9	1	U	1	6	0.94
13101	Dichlorotetrafluoroethane	76-14-2	2	U	2	6	0.94
13101	1,2-Dichlorotrifluoroethane	354-23-4	1	U	1	6	0.94
13101	**Dichlorotrifluoroethane**	306-83-2	**5**	**J**	1	6	0.94

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-22-(8.0-8.2) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299868
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 14:10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/kg**		**ug/kg**	**ug/kg**	
13101	Fluoromethane	593-53-3	4	U	4	12	0.94
13101	Freon 113a	354-58-5	6	U	6	24	0.94
13101	1,1,2-Trifluoroethane	430-66-0	2	U	2	6	0.94
13101	Vinyl fluoride	75-02-5	7	U	7	24	0.94

00884 Volatile Library Search - 15

The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	Acenaphthene	83-32-9	4	U	4	21	1
10723	Acenaphthylene	208-96-8	4	U	4	21	1
10723	Acetophenone	98-86-2	21	U	21	42	1
10723	4-Aminobiphenyl	92-67-1	210	U	210	620	1
10723	Aniline	62-53-3	210	U	210	620	1
10723	Anthracene	120-12-7	4	U	4	21	1
10723	Benzidine	92-87-5	310	U	310	620	1
10723	Benzo(a)anthracene	56-55-3	4	U	4	21	1
10723	Benzo(a)pyrene	50-32-8	4	U	4	21	1
10723	Benzo(b)fluoranthene	205-99-2	4	U	4	21	1
10723	Benzo(g,h,i)perylene	191-24-2	4	U	4	21	1
10723	Benzo(k)fluoranthene	207-08-9	4	U	4	21	1
10723	1,1'-Biphenyl	92-52-4	21	U	21	42	1
10723	4-Bromophenyl-phenylether	101-55-3	21	U	21	42	1
10723	Butylbenzylphthalate	85-68-7	83	U	83	210	1
10723	Di-n-butylphthalate	84-74-2	83	U	83	210	1
10723	Carbazole	86-74-8	21	U	21	42	1
10723	4-Chloro-3-methylphenol	59-50-7	21	U	21	42	1
10723	4-Chloroaniline	106-47-8	42	U	42	83	1
10723	bis(2-Chloroethoxy)methane	111-91-1	21	U	21	42	1
10723	bis(2-Chloroethyl)ether	111-44-4	21	U	21	42	1
10723	2-Chloronaphthalene	91-58-7	8	U	8	41	1
10723	2-Chlorophenol	95-57-8	21	U	21	42	1
10723	4-Chlorophenyl-phenylether	7005-72-3	21	U	21	42	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	21	U	21	42	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	4	U	4	21	1
10723	Dibenz(a,h)anthracene	53-70-3	4	U	4	21	1
10723	Dibenzofuran	132-64-9	21	U	21	42	1

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-22-(8.0-8.2) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299868
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 14:10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	3,3'-Dichlorobenzidine	91-94-1	120	U	120	420	1
10723	2,4-Dichlorophenol	120-83-2	21	U	21	42	1
10723	Diethylphthalate	84-66-2	83	U	83	210	1
10723	2,4-Dimethylphenol	105-67-9	21	U	21	42	1
10723	Dimethylphthalate	131-11-3	83	U	83	210	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	210	U	210	620	1
10723	2,4-Dinitrophenol	51-28-5	370	U	370	1,200	1
10723	2,4-Dinitrotoluene	121-14-2	83	U	83	210	1
10723	2,6-Dinitrotoluene	606-20-2	21	U	21	42	1
10723	1,4-Dioxane	123-91-1	120	U	120	420	1
10723	Diphenyl ether	101-84-8	21	U	21	42	1
10723	1,2-Diphenylhydrazine	122-66-7	21	U	21	42	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	83	U	83	210	1
10723	Fluoranthene	206-44-0	4	U	4	21	1
10723	Fluorene	86-73-7	4	U	4	21	1
10723	Hexachlorobenzene	118-74-1	4	U	4	21	1
10723	Hexachlorobutadiene	87-68-3	21	U	21	42	1
10723	Hexachlorocyclopentadiene	77-47-4	210	U	210	620	1
10723	Hexachloroethane	67-72-1	42	U	42	210	1
10723	Indeno(1,2,3-cd)pyrene	193-39-5	4	U	4	21	1
10723	Isophorone	78-59-1	21	U	21	42	1
10723	2-Methylnaphthalene	91-57-6	4	U	4	21	1
10723	2-Methylphenol	95-48-7	21	U	21	42	1
10723	4-Methylphenol	106-44-5	21	U	21	42	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10723	**Naphthalene**	91-20-3	**41**		4	21	1
10723	1-Naphthylamine	134-32-7	210	U	210	620	1
10723	2-Naphthylamine	91-59-8	210	U	210	620	1
10723	2-Nitroaniline	88-74-4	21	U	21	42	1
10723	3-Nitroaniline	99-09-2	83	U	83	210	1
10723	4-Nitroaniline	100-01-6	83	U	83	210	1
10723	Nitrobenzene	98-95-3	21	U	21	42	1
10723	2-Nitrophenol	88-75-5	21	U	21	42	1
10723	4-Nitrophenol	100-02-7	210	U	210	620	1
10723	N-Nitrosodimethylamine	62-75-9	83	U	83	210	1
10723	N-Nitroso-di-n-propylamine	621-64-7	21	U	21	42	1
10723	N-Nitrosodiphenylamine	86-30-6	21	U	21	42	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10723	Di-n-octylphthalate	117-84-0	83	U	83	210	1

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-22-(8.0-8.2) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299868
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 14:10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	Parathion	56-38-2	210	U	210	620	1
10723	Pentachlorobenzene	608-93-5	21	U	21	42	1
10723	Pentachlorophenol	87-86-5	42	U	42	210	1
10723	**Phenanthrene**	85-01-8	**10**	**J**	4	21	1
10723	Phenol	108-95-2	21	U	21	42	1
10723	Pyrene	129-00-0	4	U	4	21	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	83	U	83	210	1
10723	o-Toluidine	95-53-4	250	U	250	830	1
10723	1,2,4-Trichlorobenzene	120-82-1	21	U	21	42	1
10723	2,4,5-Trichlorophenol	95-95-4	21	U	21	42	1
10723	2,4,6-Trichlorophenol	88-06-2	21	U	21	42	1

The project QA/QC requirements were not met.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Wet Chemistry	**SW-846 9060A modified**		**mg/kg**		**mg/kg**	**mg/kg**	
02079	**Total Organic Carbon (TOC)**	n.a.	**1,310**		131	393	1
Wet Chemistry	**SM 2540 G-1997 %Moisture Calc**		**%**		**%**	**%**	
00111	**Moisture**	n.a.	**20.6**		0.50	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-22-(8.0-8.2) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 14:10

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299868
ELLE Group #: 1871169
Matrix: Soil

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	R173162AA	11/13/2017 01:35	Stephen C Nolte	48.36
13101	Freons	SW-846 8260FRN Modified	1	J173141AA	11/11/2017 02:34	Patrick T Herres	0.94
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201730847752	11/04/2017 10:46	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201730847752	11/04/2017 10:46	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201730847752	11/04/2017 10:47	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201730847752	11/04/2017 10:47	Anastasia K Jaynes	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201730847752	11/04/2017 10:45	Anastasia K Jaynes	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17313SLI026	11/16/2017 00:45	Anthony P Bauer	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17313SLI026	11/10/2017 16:10	Ashley R Transue	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17317667632B	11/15/2017 00:20	Drew M Gerhart	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17310820005A	11/06/2017 20:09	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15B06

Lab Name: Lancaster Laboratories Contract:_____
Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____
Matrix: (soil/water) SOIL Lab Sample ID: 9299868
Sample wt/vol: 5.17 (g/mL) g Lab File ID: HP07566.i/17nov12a.b/rn12s42.d
Level: (low/med) MED Date Received: 11/03/17
% Moisture: not dec. 20.6 Date Analyzed: 11/13/17
Column: (pack/cap) CAP Dilution Factor: 48.4
CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
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FORM I VOA-TIC

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15B06

Lab Name: Lancaster Laboratories Contract:
Lab Code: LANCAS Case No.: SAS No.: SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 9299868
Sample wt/vol: 30.23(g/mL) g Lab File ID: pk0562.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: 20.6 Decanted: (Y/N) Date Extracted: 11/10/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/17
Injection Volume: 1 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:
Number TICs found: 2 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown Aldol Condensate	4.007	400	JB
2. 57-10-3	n-Hexadecanoic acid	10.954	200	J
3.				
4. SVOCTIC	Total SVOC TICs		600	JB
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FORM I SV-1

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Analysis Report

Sample Description: **D15-BOR-22-(8.0-8.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299869
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 14:15

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**ASTM D422**		% Passing	% Passing	% Passing	
07103	**75 mm**		n.a.	**100**	0.50	0.50	1
07103	**37.5 mm**		n.a.	**100**	0.50	0.50	1
07103	**19 mm**		n.a.	**100**	0.50	0.50	1
07103	**4.75 mm**		n.a.	**100**	0.50	0.50	1
07103	**3.35 mm**		n.a.	**100**	0.50	0.50	1
07103	**2.36 mm**		n.a.	**99.7**	0.50	0.50	1
07103	**1.18 mm**		n.a.	**99.4**	0.50	0.50	1
07103	**0.6 mm**		n.a.	**98.7**	0.50	0.50	1
07103	**0.3 mm**		n.a.	**97.7**	0.50	0.50	1
07103	**0.15 mm**		n.a.	**95.2**	0.50	0.50	1
07103	**0.075 mm**		n.a.	**87.7**	0.50	0.50	1
07103	**0.064 mm**		n.a.	**85.5**	0.50	0.50	1
07103	**0.05 mm**		n.a.	**80.5**	0.50	0.50	1
07103	**0.02 mm**		n.a.	**63.0**	0.50	0.50	1
07103	**0.005 mm**		n.a.	**36.0**	0.50	0.50	1
07103	**0.002 mm**		n.a.	**27.0**	0.50	0.50	1
07103	**0.001 mm**		n.a.	**21.5**	0.50	0.50	1

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07103	Grain Size to 1 um	ASTM D422	1	17335710302A	12/01/2017 21:20	Joshua P Trost	1

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-22-(8.0-8.2)-D Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 14:10

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299870
ELLE Group #: 1871169
Matrix: Soil

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	Acetone	67-64-1	400	U	400	1,100	45.37
10237	**Benzene**	71-43-2	**370**		29	290	45.37
10237	Bromodichloromethane	75-27-4	57	U	57	290	45.37
10237	2-Butanone	78-93-3	230	U	230	570	45.37
10237	n-Butylbenzene	104-51-8	57	U	57	290	45.37
10237	sec-Butylbenzene	135-98-8	57	U	57	290	45.37
10237	tert-Butylbenzene	98-06-6	57	U	57	290	45.37
10237	Carbon Disulfide	75-15-0	57	U	57	290	45.37
10237	Carbon Tetrachloride	56-23-5	57	U	57	290	45.37
10237	**Chlorobenzene**	108-90-7	**7,200**		57	290	45.37
10237	Chloroethane	75-00-3	110	U	110	290	45.37
10237	**Chloroform**	67-66-3	**220**	**J**	57	290	45.37
10237	Chloromethane	74-87-3	110	U	110	290	45.37
10237	2-Chlorotoluene	95-49-8	57	U	57	290	45.37
10237	4-Chlorotoluene	106-43-4	57	U	57	290	45.37
10237	Chlorotrifluoroethene	79-38-9	110	U	110	290	45.37
10237	Dibromochloromethane	124-48-1	57	U	57	290	45.37
10237	1,2-Dibromoethane	106-93-4	57	U	57	290	45.37
10237	**1,2-Dichlorobenzene**	95-50-1	**1,300**		57	290	45.37
10237	**1,3-Dichlorobenzene**	541-73-1	**72**	**J**	57	290	45.37
10237	**1,4-Dichlorobenzene**	106-46-7	**2,100**		57	290	45.37
10237	Dichlorodifluoromethane	75-71-8	110	U	110	290	45.37
10237	1,1-Dichloroethane	75-34-3	57	U	57	290	45.37
10237	1,2-Dichloroethane	107-06-2	57	U	57	290	45.37
10237	1,1-Dichloroethene	75-35-4	57	U	57	290	45.37
10237	cis-1,2-Dichloroethene	156-59-2	57	U	57	290	45.37
10237	trans-1,2-Dichloroethene	156-60-5	57	U	57	290	45.37
10237	1,2-Dichloroethene (Total)	540-59-0	57	U	57	290	45.37
10237	Dichlorofluoromethane	75-43-4	110	U	110	290	45.37
10237	1,2-Dichloropropane	78-87-5	57	U	57	290	45.37
10237	1,1-Dichloropropene	563-58-6	57	U	57	290	45.37
10237	cis-1,3-Dichloropropene	10061-01-5	57	U	57	290	45.37
10237	**Ethylbenzene**	100-41-4	**69**	**J**	57	290	45.37
10237	Freon 113	76-13-1	110	U	110	570	45.37
10237	Freon 133a	75-88-7	110	U	110	290	45.37
10237	n-Hexane	110-54-3	57	U	57	290	45.37
10237	2-Hexanone	591-78-6	170	U	170	570	45.37
10237	Isobutyl Alcohol	78-83-1	5,700	U	5,700	14,000	45.37
10237	Isopropylbenzene	98-82-8	57	U	57	290	45.37
10237	p-Isopropyltoluene	99-87-6	57	U	57	290	45.37
10237	Methacrylonitrile	126-98-7	290	U	290	2,900	45.37
10237	Methyl Methacrylate	80-62-6	57	U	57	290	45.37

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-22-(8.0-8.2)-D Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 14:10

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299870
ELLE Group #: 1871169
Matrix: Soil

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	Methyl Tertiary Butyl Ether	1634-04-4	29	U	29	290	45.37
10237	4-Methyl-2-pentanone	108-10-1	170	U	170	570	45.37
10237	Methylene Chloride	75-09-2	110	U	110	290	45.37
10237	Propionitrile	107-12-0	1,700	U	1,700	5,700	45.37
10237	n-Propylbenzene	103-65-1	57	U	57	290	45.37
10237	Styrene	100-42-5	57	U	57	290	45.37
10237	1,1,1,2-Tetrachloroethane	630-20-6	57	U	57	290	45.37
10237	1,1,2,2-Tetrachloroethane	79-34-5	57	U	57	290	45.37
10237	**Tetrachloroethene**	127-18-4	**290**		57	290	45.37
10237	Tetrahydrofuran	109-99-9	230	U	230	460	45.37
10237	**Toluene**	108-88-3	**80**	**J**	57	290	45.37
10237	1,1,1-Trichloroethane	71-55-6	57	U	57	290	45.37
10237	1,1,2-Trichloroethane	79-00-5	57	U	57	290	45.37
10237	Trichloroethene	79-01-6	57	U	57	290	45.37
10237	Trichlorofluoromethane	75-69-4	110	U	110	290	45.37
10237	1,2,4-Trimethylbenzene	95-63-6	57	U	57	290	45.37
10237	1,3,5-Trimethylbenzene	108-67-8	57	U	57	290	45.37
10237	Vinyl Chloride	75-01-4	57	U	57	290	45.37
10237	**m+p-Xylene**	179601-23-1	**200**	**J**	57	290	45.37
10237	**o-Xylene**	95-47-6	**140**	**J**	57	290	45.37
10237	**Xylene (Total)**	1330-20-7	**340**		57	290	45.37

The project QA/QC requirements were not met.

The percent drift for the following is >20% in the continuing calibration verification standard associated with this sample: Chloroethane and 2-Butanone

The NJ DKQP required reporting limit could not be attained for 1,2-Dibromoethane.

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/kg**		**ug/kg**	**ug/kg**	
13101	Chlorodifluoroethane	75-68-3	1	U	1	6	0.97
13101	Chlorodifluoromethane	75-45-6	2	U	2	6	0.97
13101	Chlorofluoromethane	593-70-4	1	U	1	6	0.97
13101	Chloropentafluoroethane	76-15-3	19	U	19	62	0.97
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	1	U	1	6	0.97
13101	1,2-Dichloro-1-fluoroethane	430-57-9	1	U	1	6	0.97
13101	**Dichlorotetrafluoroethane**	76-14-2	**4**	**J**	2	6	0.97
13101	**1,2-Dichlorotrifluoroethane**	354-23-4	**3**	**J**	1	6	0.97
13101	**Dichlorotrifluoroethane**	306-83-2	**19**		1	6	0.97

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-22-(8.0-8.2)-D Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299870
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 14:10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/kg**		**ug/kg**	**ug/kg**	
13101	Fluoromethane	593-53-3	4	U	4	12	0.97
13101	Freon 113a	354-58-5	6	U	6	25	0.97
13101	1,1,2-Trifluoroethane	430-66-0	2	U	2	6	0.97
13101	Vinyl fluoride	75-02-5	7	U	7	25	0.97

00884 Volatile Library Search - 15
The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	Acenaphthene	83-32-9	4	U	4	21	1
10723	Acenaphthylene	208-96-8	4	U	4	21	1
10723	Acetophenone	98-86-2	21	U	21	42	1
10723	4-Aminobiphenyl	92-67-1	210	UZ	210	630	1
10723	Aniline	62-53-3	210	U	210	630	1
10723	Anthracene	120-12-7	4	U	4	21	1
10723	Benzidine	92-87-5	310	U	310	630	1
10723	Benzo(a)anthracene	56-55-3	4	U	4	21	1
10723	Benzo(a)pyrene	50-32-8	4	U	4	21	1
10723	Benzo(b)fluoranthene	205-99-2	4	U	4	21	1
10723	Benzo(g,h,i)perylene	191-24-2	4	U	4	21	1
10723	Benzo(k)fluoranthene	207-08-9	4	U	4	21	1
10723	1,1'-Biphenyl	92-52-4	21	U	21	42	1
10723	4-Bromophenyl-phenylether	101-55-3	21	U	21	42	1
10723	Butylbenzylphthalate	85-68-7	84	U	84	210	1
10723	Di-n-butylphthalate	84-74-2	84	U	84	210	1
10723	Carbazole	86-74-8	21	U	21	42	1
10723	4-Chloro-3-methylphenol	59-50-7	21	U	21	42	1
10723	4-Chloroaniline	106-47-8	42	U	42	84	1
10723	bis(2-Chloroethoxy)methane	111-91-1	21	U	21	42	1
10723	bis(2-Chloroethyl)ether	111-44-4	21	U	21	42	1
10723	2-Chloronaphthalene	91-58-7	8	U	8	42	1
10723	**2-Chlorophenol**	95-57-8	**26**	**J**	21	42	1
10723	4-Chlorophenyl-phenylether	7005-72-3	21	U	21	42	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	21	U	21	42	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	4	U	4	21	1
10723	Dibenz(a,h)anthracene	53-70-3	4	U	4	21	1
10723	Dibenzofuran	132-64-9	21	U	21	42	1

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-22-(8.0-8.2)-D Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299870
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 14:10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	3,3'-Dichlorobenzidine	91-94-1	130	U	130	420	1
10723	2,4-Dichlorophenol	120-83-2	21	U	21	42	1
10723	Diethylphthalate	84-66-2	84	U	84	210	1
10723	2,4-Dimethylphenol	105-67-9	21	U	21	42	1
10723	Dimethylphthalate	131-11-3	84	U	84	210	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	210	U	210	630	1
10723	2,4-Dinitrophenol	51-28-5	380	U	380	1,300	1
10723	2,4-Dinitrotoluene	121-14-2	84	U	84	210	1
10723	2,6-Dinitrotoluene	606-20-2	21	U	21	42	1
10723	1,4-Dioxane	123-91-1	130	U	130	420	1
10723	Diphenyl ether	101-84-8	21	U	21	42	1
10723	1,2-Diphenylhydrazine	122-66-7	21	U	21	42	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	84	U	84	210	1
10723	Fluoranthene	206-44-0	4	U	4	21	1
10723	**Fluorene**	86-73-7	**4**	**J**	4	21	1
10723	Hexachlorobenzene	118-74-1	4	U	4	21	1
10723	Hexachlorobutadiene	87-68-3	21	U	21	42	1
10723	Hexachlorocyclopentadiene	77-47-4	210	U	210	630	1
10723	Hexachloroethane	67-72-1	42	U	42	210	1
10723	Indeno(1,2,3-cd)pyrene	193-39-5	4	U	4	21	1
10723	Isophorone	78-59-1	21	U	21	42	1
10723	**2-Methylnaphthalene**	91-57-6	**9**	**J**	4	21	1
10723	2-Methylphenol	95-48-7	21	U	21	42	1
10723	4-Methylphenol	106-44-5	21	U	21	42	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10723	**Naphthalene**	91-20-3	**60**		4	21	1
10723	1-Naphthylamine	134-32-7	210	U	210	630	1
10723	2-Naphthylamine	91-59-8	210	U	210	630	1
10723	2-Nitroaniline	88-74-4	21	U	21	42	1
10723	3-Nitroaniline	99-09-2	84	U	84	210	1
10723	4-Nitroaniline	100-01-6	84	U	84	210	1
10723	Nitrobenzene	98-95-3	21	U	21	42	1
10723	2-Nitrophenol	88-75-5	21	U	21	42	1
10723	4-Nitrophenol	100-02-7	210	U	210	630	1
10723	N-Nitrosodimethylamine	62-75-9	84	U	84	210	1
10723	N-Nitroso-di-n-propylamine	621-64-7	21	U	21	42	1
10723	N-Nitrosodiphenylamine	86-30-6	21	U	21	42	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10723	Di-n-octylphthalate	117-84-0	84	U	84	210	1

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-22-(8.0-8.2)-D Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299870
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 14:10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	Parathion	56-38-2	210	U	210	630	1
10723	Pentachlorobenzene	608-93-5	21	U	21	42	1
10723	Pentachlorophenol	87-86-5	42	U	42	210	1
10723	**Phenanthrene**	85-01-8	**11**	**J**	4	21	1
10723	Phenol	108-95-2	21	U	21	42	1
10723	Pyrene	129-00-0	4	U	4	21	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	84	U	84	210	1
10723	o-Toluidine	95-53-4	250	U	250	840	1
10723	**1,2,4-Trichlorobenzene**	120-82-1	**26**	**J**	21	42	1
10723	2,4,5-Trichlorophenol	95-95-4	21	U	21	42	1
10723	2,4,6-Trichlorophenol	88-06-2	21	U	21	42	1

The project QA/QC requirements were not met.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Wet Chemistry	**SW-846 9060A modified**		**mg/kg**		**mg/kg**	**mg/kg**	
02079	**Total Organic Carbon (TOC)**	n.a.	**1,340**		129	387	1
Wet Chemistry	**SM 2540 G-1997 %Moisture Calc**		**%**		**%**	**%**	
00111	**Moisture**	n.a.	**21.0**		0.50	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-22-(8.0-8.2)-D Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 14:10

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299870
ELLE Group #: 1871169
Matrix: Soil

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	R173162AA	11/13/2017 01:59	Stephen C Nolte	45.37
13101	Freons	SW-846 8260FRN Modified	1	J173141AA	11/11/2017 04:04	Patrick T Herres	0.97
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201730847752	11/04/2017 10:54	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201730847752	11/04/2017 10:54	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201730847752	11/04/2017 10:54	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201730847752	11/04/2017 10:55	Anastasia K Jaynes	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201730847752	11/04/2017 10:53	Anastasia K Jaynes	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17313SLI026	11/16/2017 01:09	Anthony P Bauer	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17313SLI026	11/10/2017 16:10	Ashley R Transue	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17317667632B	11/15/2017 01:25	Drew M Gerhart	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17310820005A	11/06/2017 20:09	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15B08

Lab Name: Lancaster Laboratories Contract:_____
Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____
Matrix: (soil/water) SOIL Lab Sample ID: 9299870
Sample wt/vol: 5.51 (g/mL) g Lab File ID: HP07566.i/17nov12a.b/rn12s43.d
Level: (low/med) MED Date Received: 11/03/17
% Moisture: not dec. 21 Date Analyzed: 11/13/17
Column: (pack/cap) CAP Dilution Factor: 45.4
CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
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page 1 of 1

FORM I VOA-TIC

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15B08

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9299870
Sample wt/vol: 30.16(g/mL) g Lab File ID: pk0563.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: 21 Decanted: (Y/N) Date Extracted: 11/10/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/17
Injection Volume: 1 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:
Number TICs found: 2 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown Aldol Condensate	4.007	380	JB
2. 57-10-3	n-Hexadecanoic acid	10.954	240	J
3.				
4. SVOCTIC	Total SVOC TICs		610	JB
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FORM I SV-1

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Analysis Report

Sample Description: **D15-BOR-23-(0-0.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299871
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	Acetone	67-64-1	840	U	840	2,400	62.19
10237	**Benzene**	71-43-2	**2,200**		60	600	62.19
10237	Bromodichloromethane	75-27-4	120	U	120	600	62.19
10237	2-Butanone	78-93-3	480	U	480	1,200	62.19
10237	n-Butylbenzene	104-51-8	120	U	120	600	62.19
10237	sec-Butylbenzene	135-98-8	120	U	120	600	62.19
10237	tert-Butylbenzene	98-06-6	120	U	120	600	62.19
10237	Carbon Disulfide	75-15-0	120	U	120	600	62.19
10237	Carbon Tetrachloride	56-23-5	120	U	120	600	62.19
10237	**Chlorobenzene**	108-90-7	**88,000**		1,200	6,000	621.89
10237	Chloroethane	75-00-3	240	U	240	600	62.19
10237	**Chloroform**	67-66-3	**210**	**J**	120	600	62.19
10237	Chloromethane	74-87-3	240	U	240	600	62.19
10237	**2-Chlorotoluene**	95-49-8	**150**	**J**	120	600	62.19
10237	4-Chlorotoluene	106-43-4	120	U	120	600	62.19
10237	Chlorotrifluoroethene	79-38-9	240	U	240	600	62.19
10237	Dibromochloromethane	124-48-1	120	U	120	600	62.19
10237	1,2-Dibromoethane	106-93-4	120	U	120	600	62.19
10237	**1,2-Dichlorobenzene**	95-50-1	**7,800**		120	600	62.19
10237	**1,3-Dichlorobenzene**	541-73-1	**310**	**J**	120	600	62.19
10237	**1,4-Dichlorobenzene**	106-46-7	**13,000**		120	600	62.19
10237	Dichlorodifluoromethane	75-71-8	240	U	240	600	62.19
10237	1,1-Dichloroethane	75-34-3	120	U	120	600	62.19
10237	1,2-Dichloroethane	107-06-2	120	U	120	600	62.19
10237	1,1-Dichloroethene	75-35-4	120	U	120	600	62.19
10237	cis-1,2-Dichloroethene	156-59-2	120	U	120	600	62.19
10237	trans-1,2-Dichloroethene	156-60-5	120	U	120	600	62.19
10237	1,2-Dichloroethene (Total)	540-59-0	120	U	120	600	62.19
10237	**Dichlorofluoromethane**	75-43-4	**470**	**J**	240	600	62.19
10237	1,2-Dichloropropane	78-87-5	120	U	120	600	62.19
10237	1,1-Dichloropropene	563-58-6	120	U	120	600	62.19
10237	cis-1,3-Dichloropropene	10061-01-5	120	U	120	600	62.19
10237	Ethylbenzene	100-41-4	120	U	120	600	62.19
10237	**Freon 113**	76-13-1	**610**	**J**	240	1,200	62.19
10237	Freon 133a	75-88-7	240	U	240	600	62.19
10237	n-Hexane	110-54-3	120	U	120	600	62.19
10237	2-Hexanone	591-78-6	360	U	360	1,200	62.19
10237	Isobutyl Alcohol	78-83-1	12,000	U	12,000	30,000	62.19
10237	Isopropylbenzene	98-82-8	120	U	120	600	62.19
10237	p-Isopropyltoluene	99-87-6	120	U	120	600	62.19
10237	Methacrylonitrile	126-98-7	600	U	600	6,000	62.19
10237	Methyl Methacrylate	80-62-6	120	U	120	600	62.19

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-23-(0-0.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299871
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	Methyl Tertiary Butyl Ether	1634-04-4	60	U	60	600	62.19
10237	4-Methyl-2-pentanone	108-10-1	360	U	360	1,200	62.19
10237	**Methylene Chloride**	75-09-2	**360**	**J**	240	600	62.19
10237	Propionitrile	107-12-0	3,600	U	3,600	12,000	62.19
10237	n-Propylbenzene	103-65-1	120	U	120	600	62.19
10237	Styrene	100-42-5	120	U	120	600	62.19
10237	1,1,1,2-Tetrachloroethane	630-20-6	120	U	120	600	62.19
10237	1,1,2,2-Tetrachloroethane	79-34-5	120	U	120	600	62.19
10237	**Tetrachloroethene**	127-18-4	**5,900**		120	600	62.19
10237	Tetrahydrofuran	109-99-9	480	U	480	960	62.19
10237	**Toluene**	108-88-3	**130**	**J**	120	600	62.19
10237	1,1,1-Trichloroethane	71-55-6	120	U	120	600	62.19
10237	1,1,2-Trichloroethane	79-00-5	120	U	120	600	62.19
10237	**Trichloroethene**	79-01-6	**260**	**J**	120	600	62.19
10237	**Trichlorofluoromethane**	75-69-4	**310**	**J**	240	600	62.19
10237	1,2,4-Trimethylbenzene	95-63-6	120	U	120	600	62.19
10237	1,3,5-Trimethylbenzene	108-67-8	120	U	120	600	62.19
10237	Vinyl Chloride	75-01-4	120	U	120	600	62.19
10237	**m+p-Xylene**	179601-23-1	**230**	**J**	120	600	62.19
10237	o-Xylene	95-47-6	120	U	120	600	62.19
10237	**Xylene (Total)**	1330-20-7	**230**	**J**	120	600	62.19

The project QA/QC requirements were not met.

The percent drift for the following is >20% in the continuing calibration verification standard associated with this sample: chloroethane and 2-butanone.

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/kg**		**ug/kg**	**ug/kg**	
13101	**Chlorodifluoroethane**	75-68-3	**6**	**J**	2	11	1.11
13101	Chlorodifluoromethane	75-45-6	4	U	4	11	1.11
13101	**Chlorofluoromethane**	593-70-4	**8**	**J**	2	11	1.11
13101	Chloropentafluoroethane	76-15-3	32	U	32	110	1.11
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	2	U	2	11	1.11
13101	1,2-Dichloro-1-fluoroethane	430-57-9	2	U	2	11	1.11
13101	**Dichlorotetrafluoroethane**	76-14-2	**550**		4	11	1.11
13101	**1,2-Dichlorotrifluoroethane**	354-23-4	**980**	**E**	2	11	1.11
13101	**Dichlorotrifluoroethane**	306-83-2	**2,100**	**E**	2	11	1.11
13101	Fluoromethane	593-53-3	6	U	6	21	1.11
13101	Freon 113a	354-58-5	11	U	11	43	1.11
13101	1,1,2-Trifluoroethane	430-66-0	4	U	4	11	1.11

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-23-(0-0.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299871
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/kg**		**ug/kg**	**ug/kg**	
13101	Vinyl fluoride	75-02-5	13	U	13	43	1.11
	The concentrations reported for Dichlorotrifluoroethane and 1,2-Dichlorotrifluoroethane are estimated since they exceed the calibration range of the instrument.						
00884	**Volatile Library Search - 15**						
	The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.						
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	**Acenaphthene**	83-32-9	**51**		6	33	1
10723	**Acenaphthylene**	208-96-8	**24**	**J**	6	33	1
10723	Acetophenone	98-86-2	32	U	32	64	1
10723	4-Aminobiphenyl	92-67-1	320	UZ	320	960	1
10723	Aniline	62-53-3	320	U	320	960	1
10723	**Anthracene**	120-12-7	**69**		6	33	1
10723	Benzidine	92-87-5	480	U	480	960	1
10723	**Benzo(a)anthracene**	56-55-3	**120**		6	33	1
10723	**Benzo(a)pyrene**	50-32-8	**100**		6	33	1
10723	**Benzo(b)fluoranthene**	205-99-2	**130**		6	33	1
10723	**Benzo(g,h,i)perylene**	191-24-2	**58**		6	33	1
10723	**Benzo(k)fluoranthene**	207-08-9	**82**		6	33	1
10723	**1,1'-Biphenyl**	92-52-4	**77**		32	64	1
10723	4-Bromophenyl-phenylether	101-55-3	32	U	32	64	1
10723	**Butylbenzylphthalate**	85-68-7	**300**	**J**	130	320	1
10723	Di-n-butylphthalate	84-74-2	130	U	130	320	1
10723	Carbazole	86-74-8	32	U	32	64	1
10723	4-Chloro-3-methylphenol	59-50-7	32	U	32	64	1
10723	**4-Chloroaniline**	106-47-8	**160**		64	130	1
10723	bis(2-Chloroethoxy)methane	111-91-1	32	U	32	64	1
10723	bis(2-Chloroethyl)ether	111-44-4	32	U	32	64	1
10723	2-Chloronaphthalene	91-58-7	13	U	13	63	1
10723	**2-Chlorophenol**	95-57-8	**90**		32	64	1
10723	4-Chlorophenyl-phenylether	7005-72-3	32	U	32	64	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	32	U	32	64	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	**Chrysene**	218-01-9	**180**		6	33	1
10723	**Dibenz(a,h)anthracene**	53-70-3	**13**	**J**	6	33	1
10723	**Dibenzofuran**	132-64-9	**38**	**J**	32	64	1
10723	3,3'-Dichlorobenzidine	91-94-1	190	U	190	640	1

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-23-(0-0.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299871
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	2,4-Dichlorophenol	120-83-2	32	U	32	64	1
10723	Diethylphthalate	84-66-2	130	U	130	320	1
10723	2,4-Dimethylphenol	105-67-9	32	U	32	64	1
10723	Dimethylphthalate	131-11-3	130	U	130	320	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	320	U	320	960	1
10723	2,4-Dinitrophenol	51-28-5	570	U	570	1,900	1
10723	2,4-Dinitrotoluene	121-14-2	130	U	130	320	1
10723	2,6-Dinitrotoluene	606-20-2	32	U	32	64	1
10723	1,4-Dioxane	123-91-1	190	U	190	640	1
10723	**Diphenyl ether**	101-84-8	**87**		32	64	1
10723	1,2-Diphenylhydrazine	122-66-7	32	U	32	64	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	130	U	130	330	1
10723	**Fluoranthene**	206-44-0	**210**		6	33	1
10723	**Fluorene**	86-73-7	**53**		6	33	1
10723	Hexachlorobenzene	118-74-1	6	U	6	33	1
10723	Hexachlorobutadiene	87-68-3	32	U	32	64	1
10723	Hexachlorocyclopentadiene	77-47-4	320	U	320	960	1
10723	Hexachloroethane	67-72-1	64	U	64	320	1
10723	**Indeno(1,2,3-cd)pyrene**	193-39-5	**49**		6	33	1
10723	Isophorone	78-59-1	32	U	32	64	1
10723	**2-Methylnaphthalene**	91-57-6	**130**		6	33	1
10723	2-Methylphenol	95-48-7	32	U	32	64	1
10723	**4-Methylphenol**	106-44-5	**67**		32	64	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10723	**Naphthalene**	91-20-3	**250**		6	33	1
10723	1-Naphthylamine	134-32-7	320	U	320	960	1
10723	2-Naphthylamine	91-59-8	320	U	320	960	1
10723	2-Nitroaniline	88-74-4	32	U	32	64	1
10723	3-Nitroaniline	99-09-2	130	U	130	320	1
10723	4-Nitroaniline	100-01-6	130	U	130	320	1
10723	Nitrobenzene	98-95-3	32	U	32	64	1
10723	2-Nitrophenol	88-75-5	32	U	32	64	1
10723	4-Nitrophenol	100-02-7	320	U	320	960	1
10723	N-Nitrosodimethylamine	62-75-9	130	U	130	320	1
10723	N-Nitroso-di-n-propylamine	621-64-7	32	U	32	64	1
10723	**N-Nitrosodiphenylamine**	86-30-6	**68**		32	64	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10723	Di-n-octylphthalate	117-84-0	130	U	130	320	1
10723	Parathion	56-38-2	320	U	320	960	1

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-23-(0-0.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299871
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:15

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	Pentachlorobenzene	608-93-5	32	U	32	64	1
10723	Pentachlorophenol	87-86-5	64	U	64	330	1
10723	**Phenanthrene**	85-01-8	**180**		6	33	1
10723	**Phenol**	108-95-2	**110**		32	64	1
10723	**Pyrene**	129-00-0	**210**		6	33	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	130	U	130	320	1
10723	o-Toluidine	95-53-4	380	U	380	1,300	1
10723	**1,2,4-Trichlorobenzene**	120-82-1	**120**		32	64	1
10723	2,4,5-Trichlorophenol	95-95-4	32	U	32	64	1
10723	2,4,6-Trichlorophenol	88-06-2	32	U	32	64	1

The project QA/QC requirements were not met.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	**Aluminum**	7429-90-5	**16,300**		13.2	29.5	1
01650	**Calcium**	7440-70-2	**3,420**		4.92	29.5	1
01654	**Iron**	7439-89-6	**26,900**		11.9	29.5	1
01657	**Magnesium**	7439-95-4	**5,040**		3.59	14.8	1
01662	**Potassium**	7440-09-7	**2,710**		24.7	73.8	1
01667	**Sodium**	7440-23-5	**740**		24.7	148	1
06972	**Zinc**	7440-66-6	**186**		0.354	2.95	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	**Antimony**	7440-36-0	**0.233**	**J**	0.138	0.295	2
	The NJ DKQP analyte list requirement was not met for Metals. The client specified list is reported.						
06125	**Arsenic**	7440-38-2	**13.0**		0.189	0.591	2
06126	**Barium**	7440-39-3	**94.8**		0.268	0.591	2

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-23-(0-0.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299871
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:15

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals		**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	
06127	**Beryllium**		7440-41-7	**0.897**	0.0155	0.148	2
06128	**Cadmium**		7440-43-9	**0.833**	0.0508	0.148	2
06131	**Chromium**		7440-47-3	**46.8**	0.257	0.591	2
06132	**Cobalt**		7440-48-4	**14.0**	0.0461	0.148	2
06133	**Copper**		7440-50-8	**44.3**	0.158	0.591	2
06135	**Lead**		7439-92-1	**50.9**	0.0328	0.295	2
06137	**Manganese**		7439-96-5	**888**	0.267	0.591	2
06139	**Nickel**		7440-02-0	**31.6**	0.294	0.591	2
06141	**Selenium**		7782-49-2	**0.843**	0.148	0.591	2
06142	**Silver**		7440-22-4	**0.580**	0.0431	0.148	2
06145	**Thallium**		7440-28-0	**0.188**	0.0369	0.148	2
06148	**Vanadium**		7440-62-2	**43.5**	0.0629	0.148	2
		SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	
00159	**Mercury**		7439-97-6	**0.192**	0.0184	0.184	1
Wet Chemistry		**SW-846 9060A modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02079	**Total Organic Carbon (TOC)**		n.a.	**28,900**	990	2,970	1
Wet Chemistry		**ASTM D422**		**% Passing**	**% Passing**	**% Passing**	
07103	**75 mm**		n.a.	**100**	0.50	0.50	1
07103	**37.5 mm**		n.a.	**100**	0.50	0.50	1
07103	**19 mm**		n.a.	**100**	0.50	0.50	1
07103	**4.75 mm**		n.a.	**97.6**	0.50	0.50	1
07103	**3.35 mm**		n.a.	**97.2**	0.50	0.50	1
07103	**2.36 mm**		n.a.	**96.6**	0.50	0.50	1
07103	**1.18 mm**		n.a.	**96.1**	0.50	0.50	1
07103	**0.6 mm**		n.a.	**95.7**	0.50	0.50	1
07103	**0.3 mm**		n.a.	**94.5**	0.50	0.50	1
07103	**0.15 mm**		n.a.	**88.4**	0.50	0.50	1
07103	**0.075 mm**		n.a.	**78.7**	0.50	0.50	1
07103	**0.064 mm**		n.a.	**75.0**	0.50	0.50	1
07103	**0.05 mm**		n.a.	**67.0**	0.50	0.50	1
07103	**0.02 mm**		n.a.	**40.0**	0.50	0.50	1
07103	**0.005 mm**		n.a.	**18.0**	0.50	0.50	1
07103	**0.002 mm**		n.a.	**10.0**	0.50	0.50	1
07103	**0.001 mm**		n.a.	**5.0**	0.50	0.50	1
Wet Chemistry		**SM 2540 G-1997 %Moisture Calc**		**%**	**%**	**%**	
00111	**Moisture**		n.a.	**48.3**	0.50	0.50	1

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-23-(0-0.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299871
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:15

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**SM 2540 G-1997 %Moisture Calc**		%	%	%	

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	R173162AA	11/13/2017 04:24	Stephen C Nolte	62.19
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	R173162AA	11/13/2017 04:49	Stephen C Nolte	621.89
13101	Freons	SW-846 8260FRN Modified	1	J173141AA	11/11/2017 05:04	Patrick T Herres	1.11
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201730847752	11/04/2017 10:50	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201730847752	11/04/2017 10:51	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201730847752	11/04/2017 10:51	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201730847752	11/04/2017 10:52	Anastasia K Jaynes	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201730847752	11/04/2017 10:49	Anastasia K Jaynes	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17313SLI026	11/16/2017 01:33	Anthony P Bauer	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17313SLI026	11/10/2017 16:10	Ashley R Transue	1
01643	Aluminum	SW-846 6010B	1	173100570805	11/12/2017 22:06	Elaine F Stoltzfus	1
01650	Calcium	SW-846 6010B	1	173100570805	11/12/2017 22:06	Elaine F Stoltzfus	1
01654	Iron	SW-846 6010B	1	173100570805	11/12/2017 22:06	Elaine F Stoltzfus	1
01657	Magnesium	SW-846 6010B	1	173100570805	11/12/2017 22:06	Elaine F Stoltzfus	1
01662	Potassium	SW-846 6010B	1	173100570805	11/12/2017 22:06	Elaine F Stoltzfus	1
01667	Sodium	SW-846 6010B	1	173100570805	11/12/2017 22:06	Elaine F Stoltzfus	1
06972	Zinc	SW-846 6010B	1	173100570805	11/12/2017 22:06	Elaine F Stoltzfus	1
06124	Antimony	SW-846 6020	1	173100570805A	11/13/2017 19:10	Bradley M Berlot	2
06125	Arsenic	SW-846 6020	1	173100570805A	11/13/2017 19:10	Bradley M Berlot	2
06126	Barium	SW-846 6020	1	173100570805D	11/13/2017 19:10	Bradley M Berlot	2
06127	Beryllium	SW-846 6020	1	173100570805A	11/13/2017 19:10	Bradley M Berlot	2
06128	Cadmium	SW-846 6020	1	173100570805A	11/13/2017 19:10	Bradley M Berlot	2
06131	Chromium	SW-846 6020	1	173100570805A	11/13/2017 19:10	Bradley M Berlot	2
06132	Cobalt	SW-846 6020	1	173100570805A	11/13/2017 19:10	Bradley M Berlot	2
06133	Copper	SW-846 6020	1	173100570805A	11/13/2017 19:10	Bradley M Berlot	2
06135	Lead	SW-846 6020	1	173100570805A	11/13/2017 19:10	Bradley M Berlot	2
06137	Manganese	SW-846 6020	1	173100570805A	11/13/2017 19:10	Bradley M Berlot	2
06139	Nickel	SW-846 6020	1	173100570805A	11/13/2017 19:10	Bradley M Berlot	2
06141	Selenium	SW-846 6020	1	173100570805B	11/13/2017 19:10	Bradley M Berlot	2
06142	Silver	SW-846 6020	1	173100570805A	11/13/2017 19:10	Bradley M Berlot	2
06145	Thallium	SW-846 6020	1	173100570805A	11/13/2017 19:10	Bradley M Berlot	2
06148	Vanadium	SW-846 6020	1	173100570805A	11/13/2017 19:10	Bradley M Berlot	2

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-23-(0-0.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299871
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:15

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	Mercury	SW-846 7471A	1	173100571105	11/09/2017 07:24	Damary Valentin	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	173100570805	11/09/2017 05:21	James L Mertz	1
05711	Hg-SW, 7471A - U3	SW-846 7471A	1	173100571105	11/08/2017 19:45	Barbara A Kane	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17317667632B	11/15/2017 01:38	Drew M Gerhart	1
07103	Grain Size to 1 um	ASTM D422	1	17335710302A	12/01/2017 21:20	Joshua P Trost	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17310820005A	11/06/2017 20:09	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15B09

Lab Name: Lancaster Laboratories Contract:_____
Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____
Matrix: (soil/water) SOIL Lab Sample ID: 9299871
Sample wt/vol: 4.02 (g/mL) g Lab File ID: HP07566.i/17nov12a.b/rn12s49.d
Level: (low/med) MED Date Received: 11/03/17
% Moisture: not dec. 48.3 Date Analyzed: 11/13/17
Column: (pack/cap) CAP Dilution Factor: 62.2
CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
2.				
3.				
4.				
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30.				

page 1 of 1

FORM I VOA-TIC

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15B09

Lab Name: Lancaster Laboratories Contract:
Lab Code: LANCAS Case No.: SAS No.: SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 9299871
Sample wt/vol: 30.34(g/mL) g Lab File ID: pk0564.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: 48.3 Decanted: (Y/N) Date Extracted: 11/10/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/17
Injection Volume: 1 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:
Number TICs found: 18 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown Aldol Condensate	4.007	840	JB
2.13798-23-7	Hexathiane	9.142	1000	J
3.	Unknown	9.230	610	J
4.	Unknown	10.183	1800	J
5.	Unknown	10.530	3800	J
6.15972-60-8	Alachlor	10.742	1800	J
7.	Unknown	11.313	510	J
8.10544-50-0	Cyclic octaatomic sulfur	11.618	7800	J
9.	Unknown	11.671	340	J
10.80-05-7	Phenol, 4,4'-(1-methylethyli	11.830	500	J
11.	Unknown	11.877	270	J
12.	Unknown	12.054	360	J
13.243-17-4	11H-Benzo[b]fluorene	12.142	300	J
14.3442-78-2	Pyrene, 2-methyl-	12.260	310	J
15.	Unknown	12.495	320	J
16.	Unknown	12.671	270	J
17.	Unknown	14.483	590	J
18.	Unknown	14.812	2300	J
19.				
20.SVOCTIC	Total SVOC TICs		24000	JB
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23.				
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25.				
26.				
27.				
28.				
29.				
30.				

page 1 of 1

FORM I SV-1

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Analysis Report

Sample Description: **D15-BOR-23-(0.5-1.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299872
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:20

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	Acetone	67-64-1	430	U	430	1,200	46.73
10237	**Benzene**	71-43-2	**840**		30	300	46.73
10237	Bromodichloromethane	75-27-4	61	U	61	300	46.73
10237	2-Butanone	78-93-3	240	U	240	610	46.73
10237	n-Butylbenzene	104-51-8	61	U	61	300	46.73
10237	sec-Butylbenzene	135-98-8	61	U	61	300	46.73
10237	tert-Butylbenzene	98-06-6	61	U	61	300	46.73
10237	Carbon Disulfide	75-15-0	61	U	61	300	46.73
10237	Carbon Tetrachloride	56-23-5	61	U	61	300	46.73
10237	**Chlorobenzene**	108-90-7	**26,000**		610	3,000	467.29
10237	Chloroethane	75-00-3	120	U	120	300	46.73
10237	**Chloroform**	67-66-3	**96**	**J**	61	300	46.73
10237	Chloromethane	74-87-3	120	U	120	300	46.73
10237	2-Chlorotoluene	95-49-8	61	U	61	300	46.73
10237	4-Chlorotoluene	106-43-4	61	U	61	300	46.73
10237	Chlorotrifluoroethene	79-38-9	120	U	120	300	46.73
10237	Dibromochloromethane	124-48-1	61	U	61	300	46.73
10237	1,2-Dibromoethane	106-93-4	61	U	61	300	46.73
10237	**1,2-Dichlorobenzene**	95-50-1	**3,000**		61	300	46.73
10237	**1,3-Dichlorobenzene**	541-73-1	**110**	**J**	61	300	46.73
10237	**1,4-Dichlorobenzene**	106-46-7	**5,800**		61	300	46.73
10237	Dichlorodifluoromethane	75-71-8	120	U	120	300	46.73
10237	1,1-Dichloroethane	75-34-3	61	U	61	300	46.73
10237	1,2-Dichloroethane	107-06-2	61	U	61	300	46.73
10237	1,1-Dichloroethene	75-35-4	61	U	61	300	46.73
10237	cis-1,2-Dichloroethene	156-59-2	61	U	61	300	46.73
10237	trans-1,2-Dichloroethene	156-60-5	61	U	61	300	46.73
10237	1,2-Dichloroethene (Total)	540-59-0	61	U	61	300	46.73
10237	Dichlorofluoromethane	75-43-4	120	U	120	300	46.73
10237	1,2-Dichloropropane	78-87-5	61	U	61	300	46.73
10237	1,1-Dichloropropene	563-58-6	61	U	61	300	46.73
10237	cis-1,3-Dichloropropene	10061-01-5	61	U	61	300	46.73
10237	Ethylbenzene	100-41-4	61	U	61	300	46.73
10237	**Freon 113**	76-13-1	**630**		120	610	46.73
10237	Freon 133a	75-88-7	120	U	120	300	46.73
10237	n-Hexane	110-54-3	61	U	61	300	46.73
10237	2-Hexanone	591-78-6	180	U	180	610	46.73
10237	Isobutyl Alcohol	78-83-1	6,100	U	6,100	15,000	46.73
10237	Isopropylbenzene	98-82-8	61	U	61	300	46.73
10237	p-Isopropyltoluene	99-87-6	61	U	61	300	46.73
10237	Methacrylonitrile	126-98-7	300	U	300	3,000	46.73
10237	Methyl Methacrylate	80-62-6	61	U	61	300	46.73

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-23-(0.5-1.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:20

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299872
ELLE Group #: 1871169
Matrix: Soil

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	Methyl Tertiary Butyl Ether	1634-04-4	30	U	30	300	46.73
10237	4-Methyl-2-pentanone	108-10-1	180	U	180	610	46.73
10237	**Methylene Chloride**	75-09-2	**200**	**J**	120	300	46.73
10237	Propionitrile	107-12-0	1,800	U	1,800	6,100	46.73
10237	n-Propylbenzene	103-65-1	61	U	61	300	46.73
10237	Styrene	100-42-5	61	U	61	300	46.73
10237	1,1,1,2-Tetrachloroethane	630-20-6	61	U	61	300	46.73
10237	1,1,2,2-Tetrachloroethane	79-34-5	61	U	61	300	46.73
10237	**Tetrachloroethene**	127-18-4	**2,900**		61	300	46.73
10237	Tetrahydrofuran	109-99-9	240	U	240	490	46.73
10237	Toluene	108-88-3	61	U	61	300	46.73
10237	1,1,1-Trichloroethane	71-55-6	61	U	61	300	46.73
10237	1,1,2-Trichloroethane	79-00-5	61	U	61	300	46.73
10237	**Trichloroethene**	79-01-6	**110**	**J**	61	300	46.73
10237	**Trichlorofluoromethane**	75-69-4	**240**	**J**	120	300	46.73
10237	1,2,4-Trimethylbenzene	95-63-6	61	U	61	300	46.73
10237	1,3,5-Trimethylbenzene	108-67-8	61	U	61	300	46.73
10237	Vinyl Chloride	75-01-4	61	U	61	300	46.73
10237	m+p-Xylene	179601-23-1	61	U	61	300	46.73
10237	o-Xylene	95-47-6	61	U	61	300	46.73
10237	Xylene (Total)	1330-20-7	61	U	61	300	46.73

The project QA/QC requirements were not met.

The percent drift for the following is >20% in the continuing calibration verification standard associated with this sample: chloroethane and 2-butanone.

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/kg**		**ug/kg**	**ug/kg**	
13101	Chlorodifluoroethane	75-68-3	1	U	1	7	1.06
13101	Chlorodifluoromethane	75-45-6	3	U	3	7	1.06
13101	Chlorofluoromethane	593-70-4	1	U	1	7	1.06
13101	Chloropentafluoroethane	76-15-3	21	U	21	69	1.06
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	1	U	1	7	1.06
13101	1,2-Dichloro-1-fluoroethane	430-57-9	1	U	1	7	1.06
13101	**Dichlorotetrafluoroethane**	76-14-2	**85**		3	7	1.06
13101	**1,2-Dichlorotrifluoroethane**	354-23-4	**27**		1	7	1.06
13101	**Dichlorotrifluoroethane**	306-83-2	**190**		1	7	1.06
13101	Fluoromethane	593-53-3	4	U	4	14	1.06
13101	Freon 113a	354-58-5	7	U	7	28	1.06
13101	1,1,2-Trifluoroethane	430-66-0	3	U	3	7	1.06

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-23-(0.5-1.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299872
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:20

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/kg**		**ug/kg**	**ug/kg**	
13101	Vinyl fluoride	75-02-5	8	U	8	28	1.06

The recovery for the sample internal standard is outside the QC acceptance limits. A re-analysis was not performed.

00884 Volatile Library Search - 15

The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	**Acenaphthene**	83-32-9	**40**		4	22	1
10723	**Acenaphthylene**	208-96-8	**10**	**J**	4	22	1
10723	Acetophenone	98-86-2	22	U	22	43	1
10723	4-Aminobiphenyl	92-67-1	220	UZ	220	650	1
10723	Aniline	62-53-3	220	U	220	650	1
10723	**Anthracene**	120-12-7	**30**		4	22	1
10723	Benzidine	92-87-5	320	U	320	650	1
10723	**Benzo(a)anthracene**	56-55-3	**51**		4	22	1
10723	**Benzo(a)pyrene**	50-32-8	**43**		4	22	1
10723	**Benzo(b)fluoranthene**	205-99-2	**74**		4	22	1
10723	**Benzo(g,h,i)perylene**	191-24-2	**22**		4	22	1
10723	**Benzo(k)fluoranthene**	207-08-9	**26**		4	22	1
10723	**1,1'-Biphenyl**	92-52-4	**36**	**J**	22	43	1
10723	4-Bromophenyl-phenylether	101-55-3	22	U	22	43	1
10723	**Butylbenzylphthalate**	85-68-7	**97**	**J**	86	220	1
10723	Di-n-butylphthalate	84-74-2	86	U	86	220	1
10723	Carbazole	86-74-8	22	U	22	43	1
10723	4-Chloro-3-methylphenol	59-50-7	22	U	22	43	1
10723	**4-Chloroaniline**	106-47-8	**89**		43	86	1
10723	bis(2-Chloroethoxy)methane	111-91-1	22	U	22	43	1
10723	bis(2-Chloroethyl)ether	111-44-4	22	U	22	43	1
10723	2-Chloronaphthalene	91-58-7	9	U	9	43	1
10723	**2-Chlorophenol**	95-57-8	**84**		22	43	1
10723	4-Chlorophenyl-phenylether	7005-72-3	22	U	22	43	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	22	U	22	43	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	**Chrysene**	218-01-9	**160**		4	22	1
10723	**Dibenz(a,h)anthracene**	53-70-3	**7**	**J**	4	22	1
10723	Dibenzofuran	132-64-9	22	U	22	43	1
10723	3,3'-Dichlorobenzidine	91-94-1	130	U	130	430	1
10723	2,4-Dichlorophenol	120-83-2	22	U	22	43	1

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-23-(0.5-1.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299872
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:20

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	Diethylphthalate	84-66-2	86	U	86	220	1
10723	2,4-Dimethylphenol	105-67-9	22	U	22	43	1
10723	Dimethylphthalate	131-11-3	86	U	86	220	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	220	U	220	650	1
10723	2,4-Dinitrophenol	51-28-5	390	U	390	1,300	1
10723	2,4-Dinitrotoluene	121-14-2	86	U	86	220	1
10723	2,6-Dinitrotoluene	606-20-2	22	U	22	43	1
10723	1,4-Dioxane	123-91-1	130	U	130	430	1
10723	**Diphenyl ether**	101-84-8	**58**		22	43	1
10723	1,2-Diphenylhydrazine	122-66-7	22	U	22	43	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	86	U	86	220	1
10723	**Fluoranthene**	206-44-0	**66**		4	22	1
10723	**Fluorene**	86-73-7	**48**		4	22	1
10723	Hexachlorobenzene	118-74-1	4	U	4	22	1
10723	Hexachlorobutadiene	87-68-3	22	U	22	43	1
10723	Hexachlorocyclopentadiene	77-47-4	220	U	220	650	1
10723	Hexachloroethane	67-72-1	43	U	43	220	1
10723	**Indeno(1,2,3-cd)pyrene**	193-39-5	**19**	**J**	4	22	1
10723	Isophorone	78-59-1	22	U	22	43	1
10723	**2-Methylnaphthalene**	91-57-6	**46**		4	22	1
10723	2-Methylphenol	95-48-7	22	U	22	43	1
10723	**4-Methylphenol**	106-44-5	**22**	**J**	22	43	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10723	**Naphthalene**	91-20-3	**190**		4	22	1
10723	1-Naphthylamine	134-32-7	220	U	220	650	1
10723	2-Naphthylamine	91-59-8	220	U	220	650	1
10723	2-Nitroaniline	88-74-4	22	U	22	43	1
10723	3-Nitroaniline	99-09-2	86	U	86	220	1
10723	4-Nitroaniline	100-01-6	86	U	86	220	1
10723	**Nitrobenzene**	98-95-3	**25**	**J**	22	43	1
10723	2-Nitrophenol	88-75-5	22	U	22	43	1
10723	4-Nitrophenol	100-02-7	220	U	220	650	1
10723	N-Nitrosodimethylamine	62-75-9	86	U	86	220	1
10723	N-Nitroso-di-n-propylamine	621-64-7	22	U	22	43	1
10723	**N-Nitrosodiphenylamine**	86-30-6	**46**		22	43	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10723	Di-n-octylphthalate	117-84-0	86	U	86	220	1
10723	Parathion	56-38-2	220	U	220	650	1
10723	Pentachlorobenzene	608-93-5	22	U	22	43	1

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-23-(0.5-1.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299872
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:20

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	Pentachlorophenol	87-86-5	43	U	43	220	1
10723	**Phenanthrene**	85-01-8	**45**		4	22	1
10723	**Phenol**	108-95-2	**39**	**J**	22	43	1
10723	**Pyrene**	129-00-0	**74**		4	22	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	86	U	86	220	1
10723	o-Toluidine	95-53-4	260	U	260	860	1
10723	**1,2,4-Trichlorobenzene**	120-82-1	**79**		22	43	1
10723	2,4,5-Trichlorophenol	95-95-4	22	U	22	43	1
10723	2,4,6-Trichlorophenol	88-06-2	22	U	22	43	1

The project QA/QC requirements were not met.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Metals	**SW-846 6010B**		**mg/kg**		**mg/kg**	**mg/kg**	
01643	**Aluminum**	7429-90-5	**7,530**		8.69	19.4	1
01650	**Calcium**	7440-70-2	**3,870**		3.24	19.4	1
01654	**Iron**	7439-89-6	**12,800**		7.82	19.4	1
01657	**Magnesium**	7439-95-4	**2,340**		2.36	9.72	1
01662	**Potassium**	7440-09-7	**1,270**		16.2	48.6	1
01667	**Sodium**	7440-23-5	**281**		16.2	97.2	1
06972	**Zinc**	7440-66-6	**79.6**		0.233	1.94	1
	SW-846 6020		**mg/kg**		**mg/kg**	**mg/kg**	
06124	**Antimony**	7440-36-0	**0.354**		0.0906	0.194	2
	The NJ DKQP analyte list requirement was not met for Metals. The client specified list is reported.						
06125	**Arsenic**	7440-38-2	**5.67**		0.124	0.389	2
06126	**Barium**	7440-39-3	**46.6**		0.176	0.389	2
06127	**Beryllium**	7440-41-7	**0.384**		0.0102	0.0972	2

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-23-(0.5-1.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:20

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299872
ELLE Group #: 1871169
Matrix: Soil

CAT No.	Analysis Name		CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals		**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	
06128	**Cadmium**		7440-43-9	**0.291**	0.0334	0.0972	2
06131	**Chromium**		7440-47-3	**26.9**	0.169	0.389	2
06132	**Cobalt**		7440-48-4	**6.25**	0.0303	0.0972	2
06133	**Copper**		7440-50-8	**27.1**	0.104	0.389	2
06135	**Lead**		7439-92-1	**85.8**	0.0216	0.194	2
06137	**Manganese**		7439-96-5	**333**	0.176	0.389	2
06139	**Nickel**		7440-02-0	**16.2**	0.194	0.389	2
06141	**Selenium**		7782-49-2	**0.410**	0.0972	0.389	2
06142	**Silver**		7440-22-4	**0.188**	0.0284	0.0972	2
06145	**Thallium**		7440-28-0	**0.0773 J**	0.0243	0.0972	2
06148	**Vanadium**		7440-62-2	**24.8**	0.0414	0.0972	2
		SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	
00159	**Mercury**		7439-97-6	**0.307**	0.0124	0.124	1
Wet Chemistry		**SW-846 9060A modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02079	**Total Organic Carbon (TOC)**		n.a.	**7,870**	660	1,980	1
Wet Chemistry		**ASTM D422**		**% Passing**	**% Passing**	**% Passing**	
07103	**75 mm**		n.a.	**100**	0.50	0.50	1
07103	**37.5 mm**		n.a.	**100**	0.50	0.50	1
07103	**19 mm**		n.a.	**100**	0.50	0.50	1
07103	**4.75 mm**		n.a.	**99.7**	0.50	0.50	1
07103	**3.35 mm**		n.a.	**99.2**	0.50	0.50	1
07103	**2.36 mm**		n.a.	**98.1**	0.50	0.50	1
07103	**1.18 mm**		n.a.	**97.4**	0.50	0.50	1
07103	**0.6 mm**		n.a.	**96.2**	0.50	0.50	1
07103	**0.3 mm**		n.a.	**93.3**	0.50	0.50	1
07103	**0.15 mm**		n.a.	**86.3**	0.50	0.50	1
07103	**0.075 mm**		n.a.	**74.3**	0.50	0.50	1
07103	**0.064 mm**		n.a.	**68.5**	0.50	0.50	1
07103	**0.05 mm**		n.a.	**53.0**	0.50	0.50	1
07103	**0.02 mm**		n.a.	**23.0**	0.50	0.50	1
07103	**0.005 mm**		n.a.	**7.0**	0.50	0.50	1
07103	**0.002 mm**		n.a.	**3.0**	0.50	0.50	1
07103	**0.001 mm**		n.a.	**0.50**	0.50	0.50	1
Wet Chemistry		**SM 2540 G-1997 %Moisture Calc**		**%**	**%**	**%**	
00111	**Moisture**		n.a.	**23.2**	0.50	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-23-(0.5-1.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:20

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299872
ELLE Group #: 1871169
Matrix: Soil

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	R173162AA	11/13/2017 03:12	Stephen C Nolte	46.73
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	R173171AA	11/14/2017 00:23	Stephen C Nolte	467.29
13101	Freons	SW-846 8260FRN Modified	1	J173141AA	11/11/2017 04:34	Patrick T Herres	1.06
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201730847752	11/04/2017 10:57	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201730847752	11/04/2017 10:57	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201730847752	11/04/2017 10:58	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201730847752	11/04/2017 10:58	Anastasia K Jaynes	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201730847752	11/04/2017 10:56	Anastasia K Jaynes	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17313SLI026	11/16/2017 01:57	Anthony P Bauer	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17313SLI026	11/10/2017 16:10	Ashley R Transue	1
01643	Aluminum	SW-846 6010B	1	173100570805	11/12/2017 22:10	Elaine F Stoltzfus	1
01650	Calcium	SW-846 6010B	1	173100570805	11/12/2017 22:10	Elaine F Stoltzfus	1
01654	Iron	SW-846 6010B	1	173100570805	11/12/2017 22:10	Elaine F Stoltzfus	1
01657	Magnesium	SW-846 6010B	1	173100570805	11/12/2017 22:10	Elaine F Stoltzfus	1
01662	Potassium	SW-846 6010B	1	173100570805	11/12/2017 22:10	Elaine F Stoltzfus	1
01667	Sodium	SW-846 6010B	1	173100570805	11/12/2017 22:10	Elaine F Stoltzfus	1
06972	Zinc	SW-846 6010B	1	173100570805	11/12/2017 22:10	Elaine F Stoltzfus	1
06124	Antimony	SW-846 6020	1	173100570805A	11/13/2017 19:13	Bradley M Berlot	2
06125	Arsenic	SW-846 6020	1	173100570805A	11/13/2017 19:13	Bradley M Berlot	2
06126	Barium	SW-846 6020	1	173100570805D	11/13/2017 19:13	Bradley M Berlot	2
06127	Beryllium	SW-846 6020	1	173100570805A	11/13/2017 19:13	Bradley M Berlot	2
06128	Cadmium	SW-846 6020	1	173100570805A	11/14/2017 13:04	Choon Y Tian	2
06131	Chromium	SW-846 6020	1	173100570805A	11/13/2017 19:13	Bradley M Berlot	2
06132	Cobalt	SW-846 6020	1	173100570805A	11/13/2017 19:13	Bradley M Berlot	2
06133	Copper	SW-846 6020	1	173100570805A	11/13/2017 19:13	Bradley M Berlot	2
06135	Lead	SW-846 6020	1	173100570805A	11/13/2017 19:13	Bradley M Berlot	2
06137	Manganese	SW-846 6020	1	173100570805A	11/13/2017 19:13	Bradley M Berlot	2
06139	Nickel	SW-846 6020	1	173100570805A	11/13/2017 19:13	Bradley M Berlot	2
06141	Selenium	SW-846 6020	1	173100570805B	11/13/2017 19:13	Bradley M Berlot	2
06142	Silver	SW-846 6020	1	173100570805A	11/13/2017 19:13	Bradley M Berlot	2
06145	Thallium	SW-846 6020	1	173100570805A	11/13/2017 19:13	Bradley M Berlot	2
06148	Vanadium	SW-846 6020	1	173100570805A	11/13/2017 19:13	Bradley M Berlot	2
00159	Mercury	SW-846 7471A	1	173100571105	11/09/2017 07:26	Damary Valentin	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	173100570805	11/09/2017 05:21	James L Mertz	1
05711	Hg-SW, 7471A - U3	SW-846 7471A	1	173100571105	11/08/2017 19:45	Barbara A Kane	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17317667632B	11/15/2017 01:51	Drew M Gerhart	1
07103	Grain Size to 1 um	ASTM D422	1	17335710302A	12/01/2017 21:20	Joshua P Trost	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17310820005A	11/06/2017 20:09	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15B10

Lab Name: Lancaster Laboratories Contract:_____
Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____
Matrix: (soil/water) SOIL Lab Sample ID: 9299872
Sample wt/vol: 5.35 (g/mL) g Lab File ID: HP07566.i/17nov12a.b/rn12s46.d
Level: (low/med) MED Date Received: 11/03/17
% Moisture: not dec. 23.2 Date Analyzed: 11/13/17
Column: (pack/cap) CAP Dilution Factor: 46.7
CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
2.				
3.				
4.				
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30.				

page 1 of 1

FORM I VOA-TIC

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15B10

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9299872
Sample wt/vol: 30.21(g/mL) g Lab File ID: pk0565.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: 23.2 Decanted: (Y/N) Date Extracted: 11/10/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/17
Injection Volume: 1 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:
Number TICs found: 18 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown Aldol Condensate	4.007	1300	JB
2.13798-23-7	Hexathiane	9.148	680	J
3.	Unknown	9.230	750	J
4.	Unknown	10.183	300	J
5.	Unknown	10.519	1200	J
6.	Unknown acid	10.636	260	J
7.	Unknown	10.854	320	J
8.57-10-3	n-Hexadecanoic acid	10.954	460	J
9.	Unknown	11.054	740	J
10.	Unknown	11.130	200	J
11.	Unknown	11.224	270	J
12.	Unknown	11.489	2900	J
13.	Unknown	11.530	1200	J
14.10544-50-0	Cyclic octaatomic sulfur	11.613	4600	J
15.	Unknown	11.783	240	J
16.80-05-7	Phenol, 4,4'-(1-methylethyli	11.830	190	J
17.	Unknown	11.989	260	J
18.	Unknown	12.266	180	J
19.				
20.SVOCTIC	Total SVOC TICs		16000	JB
21.				
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29.				
30.				

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FORM I SV-1

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Analysis Report

Sample Description: **D15-BOR-23-(3.0-3.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299873
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:25

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	**Acetone**	67-64-1	**17**	**J**	8	22	0.98
10237	**Benzene**	71-43-2	**18**		0.5	5	0.98
10237	Bromodichloromethane	75-27-4	1	U	1	5	0.98
10237	2-Butanone	78-93-3	4	U	4	11	0.98
10237	n-Butylbenzene	104-51-8	1	U	1	5	0.98
10237	sec-Butylbenzene	135-98-8	1	U	1	5	0.98
10237	tert-Butylbenzene	98-06-6	1	U	1	5	0.98
10237	Carbon Disulfide	75-15-0	1	U	1	5	0.98
10237	Carbon Tetrachloride	56-23-5	1	U	1	5	0.98
10237	**Chlorobenzene**	108-90-7	**85**		1	5	0.98
10237	Chloroethane	75-00-3	2	U	2	5	0.98
10237	**Chloroform**	67-66-3	**3**	**J**	1	5	0.98
10237	Chloromethane	74-87-3	2	U	2	5	0.98
10237	2-Chlorotoluene	95-49-8	1	U	1	5	0.98
10237	4-Chlorotoluene	106-43-4	1	U	1	5	0.98
10237	Chlorotrifluoroethene	79-38-9	2	U	2	5	0.98
10237	Dibromochloromethane	124-48-1	1	U	1	5	0.98
10237	1,2-Dibromoethane	106-93-4	1	U	1	5	0.98
10237	**1,2-Dichlorobenzene**	95-50-1	**11**		1	5	0.98
10237	1,3-Dichlorobenzene	541-73-1	1	U	1	5	0.98
10237	**1,4-Dichlorobenzene**	106-46-7	**15**		1	5	0.98
10237	Dichlorodifluoromethane	75-71-8	2	U	2	5	0.98
10237	1,1-Dichloroethane	75-34-3	1	U	1	5	0.98
10237	1,2-Dichloroethane	107-06-2	1	U	1	5	0.98
10237	1,1-Dichloroethene	75-35-4	1	U	1	5	0.98
10237	cis-1,2-Dichloroethene	156-59-2	1	U	1	5	0.98
10237	trans-1,2-Dichloroethene	156-60-5	1	U	1	5	0.98
10237	1,2-Dichloroethene (Total)	540-59-0	1	U	1	5	0.98
10237	Dichlorofluoromethane	75-43-4	2	U	2	5	0.98
10237	1,2-Dichloropropane	78-87-5	1	U	1	5	0.98
10237	1,1-Dichloropropene	563-58-6	1	U	1	5	0.98
10237	cis-1,3-Dichloropropene	10061-01-5	1	U	1	5	0.98
10237	Ethylbenzene	100-41-4	1	U	1	5	0.98
10237	**Freon 113**	76-13-1	**43**		2	11	0.98
10237	Freon 133a	75-88-7	2	U	2	5	0.98
10237	n-Hexane	110-54-3	1	U	1	5	0.98
10237	2-Hexanone	591-78-6	3	U	3	11	0.98
10237	Isobutyl Alcohol	78-83-1	110	U	110	270	0.98
10237	Isopropylbenzene	98-82-8	1	U	1	5	0.98
10237	p-Isopropyltoluene	99-87-6	1	U	1	5	0.98
10237	Methacrylonitrile	126-98-7	5	U	5	55	0.98
10237	Methyl Methacrylate	80-62-6	1	U	1	5	0.98

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-23-(3.0-3.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299873
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:25

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.5	U	0.5	5	0.98
10237	4-Methyl-2-pentanone	108-10-1	3	U	3	11	0.98
10237	**Methylene Chloride**	75-09-2	**8**		2	5	0.98
10237	Propionitrile	107-12-0	33	U	33	110	0.98
10237	n-Propylbenzene	103-65-1	1	U	1	5	0.98
10237	Styrene	100-42-5	1	U	1	5	0.98
10237	1,1,1,2-Tetrachloroethane	630-20-6	1	U	1	5	0.98
10237	**1,1,2,2-Tetrachloroethane**	79-34-5	**3**	**J**	1	5	0.98
10237	Tetrachloroethene	127-18-4	1	U	1	5	0.98
10237	Tetrahydrofuran	109-99-9	4	U	4	9	0.98
10237	Toluene	108-88-3	1	U	1	5	0.98
10237	1,1,1-Trichloroethane	71-55-6	1	U	1	5	0.98
10237	1,1,2-Trichloroethane	79-00-5	1	U	1	5	0.98
10237	Trichloroethene	79-01-6	1	U	1	5	0.98
10237	**Trichlorofluoromethane**	75-69-4	**93**		2	5	0.98
10237	1,2,4-Trimethylbenzene	95-63-6	1	U	1	5	0.98
10237	1,3,5-Trimethylbenzene	108-67-8	1	U	1	5	0.98
10237	Vinyl Chloride	75-01-4	1	U	1	5	0.98
10237	m+p-Xylene	179601-23-1	1	U	1	5	0.98
10237	o-Xylene	95-47-6	1	U	1	5	0.98
10237	Xylene (Total)	1330-20-7	1	U	1	5	0.98

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/kg**		**ug/kg**	**ug/kg**	
13101	Chlorodifluoroethane	75-68-3	1	U	1	5	0.92
13101	Chlorodifluoromethane	75-45-6	2	U	2	5	0.92
13101	Chlorofluoromethane	593-70-4	1	U	1	5	0.92
13101	Chloropentafluoroethane	76-15-3	15	UZ	15	51	0.92
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	1	U	1	5	0.92
13101	1,2-Dichloro-1-fluoroethane	430-57-9	1	U	1	5	0.92
13101	Dichlorotetrafluoroethane	76-14-2	2	U	2	5	0.92
13101	1,2-Dichlorotrifluoroethane	354-23-4	1	U	1	5	0.92
13101	**Dichlorotrifluoroethane**	306-83-2	**8**		1	5	0.92
13101	Fluoromethane	593-53-3	3	UZ	3	10	0.92
13101	Freon 113a	354-58-5	5	U	5	20	0.92
13101	1,1,2-Trifluoroethane	430-66-0	2	U	2	5	0.92
13101	Vinyl fluoride	75-02-5	6	U	6	20	0.92

Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-23-(3.0-3.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299873
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:25

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
00884	**Volatile Library Search - 15**						
	The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.						
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	Acenaphthene	83-32-9	4	U	4	19	1
10723	Acenaphthylene	208-96-8	4	U	4	19	1
10723	Acetophenone	98-86-2	18	U	18	37	1
10723	4-Aminobiphenyl	92-67-1	180	UZ	180	550	1
10723	Aniline	62-53-3	180	U	180	550	1
10723	Anthracene	120-12-7	4	U	4	19	1
10723	Benzidine	92-87-5	280	U	280	550	1
10723	Benzo(a)anthracene	56-55-3	4	U	4	19	1
10723	Benzo(a)pyrene	50-32-8	4	U	4	19	1
10723	Benzo(b)fluoranthene	205-99-2	4	U	4	19	1
10723	Benzo(g,h,i)perylene	191-24-2	4	U	4	19	1
10723	Benzo(k)fluoranthene	207-08-9	4	U	4	19	1
10723	1,1'-Biphenyl	92-52-4	18	U	18	37	1
10723	4-Bromophenyl-phenylether	101-55-3	18	U	18	37	1
10723	Butylbenzylphthalate	85-68-7	74	U	74	180	1
10723	Di-n-butylphthalate	84-74-2	74	U	74	180	1
10723	Carbazole	86-74-8	18	U	18	37	1
10723	4-Chloro-3-methylphenol	59-50-7	18	U	18	37	1
10723	4-Chloroaniline	106-47-8	37	U	37	74	1
10723	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	37	1
10723	bis(2-Chloroethyl)ether	111-44-4	18	U	18	37	1
10723	2-Chloronaphthalene	91-58-7	7	U	7	37	1
10723	2-Chlorophenol	95-57-8	18	U	18	37	1
10723	4-Chlorophenyl-phenylether	7005-72-3	18	U	18	37	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	18	U	18	37	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	4	U	4	19	1
10723	Dibenz(a,h)anthracene	53-70-3	4	U	4	19	1
10723	Dibenzofuran	132-64-9	18	U	18	37	1
10723	3,3'-Dichlorobenzidine	91-94-1	110	U	110	370	1
10723	2,4-Dichlorophenol	120-83-2	18	U	18	37	1
10723	Diethylphthalate	84-66-2	74	U	74	180	1
10723	2,4-Dimethylphenol	105-67-9	18	U	18	37	1
10723	Dimethylphthalate	131-11-3	74	U	74	180	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	550	1
10723	2,4-Dinitrophenol	51-28-5	330	U	330	1,100	1

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-23-(3.0-3.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299873
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:25

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	2,4-Dinitrotoluene	121-14-2	74	U	74	180	1
10723	2,6-Dinitrotoluene	606-20-2	18	U	18	37	1
10723	1,4-Dioxane	123-91-1	110	U	110	370	1
10723	Diphenyl ether	101-84-8	18	U	18	37	1
10723	1,2-Diphenylhydrazine	122-66-7	18	U	18	37	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	74	U	74	190	1
10723	Fluoranthene	206-44-0	4	U	4	19	1
10723	Fluorene	86-73-7	4	U	4	19	1
10723	Hexachlorobenzene	118-74-1	4	U	4	19	1
10723	Hexachlorobutadiene	87-68-3	18	U	18	37	1
10723	Hexachlorocyclopentadiene	77-47-4	180	U	180	550	1
10723	Hexachloroethane	67-72-1	37	U	37	180	1
10723	Indeno(1,2,3-cd)pyrene	193-39-5	4	U	4	19	1
10723	Isophorone	78-59-1	18	U	18	37	1
10723	2-Methylnaphthalene	91-57-6	4	U	4	19	1
10723	2-Methylphenol	95-48-7	18	U	18	37	1
10723	4-Methylphenol	106-44-5	18	U	18	37	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10723	**Naphthalene**	91-20-3	**11**	**J**	4	19	1
10723	1-Naphthylamine	134-32-7	180	U	180	550	1
10723	2-Naphthylamine	91-59-8	180	U	180	550	1
10723	2-Nitroaniline	88-74-4	18	U	18	37	1
10723	3-Nitroaniline	99-09-2	74	U	74	180	1
10723	4-Nitroaniline	100-01-6	74	U	74	180	1
10723	Nitrobenzene	98-95-3	18	U	18	37	1
10723	2-Nitrophenol	88-75-5	18	U	18	37	1
10723	4-Nitrophenol	100-02-7	180	U	180	550	1
10723	N-Nitrosodimethylamine	62-75-9	74	U	74	180	1
10723	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	37	1
10723	N-Nitrosodiphenylamine	86-30-6	18	U	18	37	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10723	Di-n-octylphthalate	117-84-0	74	U	74	180	1
10723	Parathion	56-38-2	180	U	180	550	1
10723	Pentachlorobenzene	608-93-5	18	U	18	37	1
10723	Pentachlorophenol	87-86-5	37	U	37	190	1
10723	Phenanthrene	85-01-8	4	U	4	19	1
10723	Phenol	108-95-2	18	U	18	37	1
10723	Pyrene	129-00-0	4	U	4	19	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	74	U	74	180	1

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-23-(3.0-3.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299873
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:25

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	o-Toluidine	95-53-4	220	U	220	740	1
10723	1,2,4-Trichlorobenzene	120-82-1	18	U	18	37	1
10723	2,4,5-Trichlorophenol	95-95-4	18	U	18	37	1
10723	2,4,6-Trichlorophenol	88-06-2	18	U	18	37	1

The project QA/QC requirements were not met.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Wet Chemistry	**SW-846 9060A modified**		**mg/kg**		**mg/kg**	**mg/kg**	
02079	**Total Organic Carbon (TOC)**	n.a.	**353**	**J**	118	354	1

Due to the nature of this sample matrix, the sample cup was filled to capacity with less than 1000 mg of sample being used. The lowered sample weight has resulted in a raised reporting limit.

Wet Chemistry	**SM 2540 G-1997 %Moisture Calc**		**%**		**%**	**%**	
00111	**Moisture**	n.a.	**10.1**		0.50	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-23-(3.0-3.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:25

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299873
ELLE Group #: 1871169
Matrix: Soil

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	X173143AA	11/10/2017 18:40	Linda C Pape	0.98
13101	Freons	SW-846 8260FRN Modified	1	J173171AA	11/13/2017 16:24	Kevin A Sposito	0.92
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201730847752	11/04/2017 11:00	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201730847752	11/04/2017 11:01	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201730847752	11/04/2017 11:01	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201730847752	11/04/2017 11:02	Anastasia K Jaynes	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201730847752	11/04/2017 10:59	Anastasia K Jaynes	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17313SLI026	11/16/2017 02:21	Anthony P Bauer	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17313SLI026	11/10/2017 16:10	Ashley R Transue	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17317667633A	11/15/2017 02:30	Drew M Gerhart	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17310820005A	11/06/2017 20:09	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15B11

Lab Name: Lancaster Laboratories Contract:_____
Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____
Matrix: (soil/water) SOIL Lab Sample ID: 9299873
Sample wt/vol: 5.08 (g/mL) g Lab File ID: HP09193.i/17nov10a.b/xn10s39.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: not dec. 10.1 Date Analyzed: 11/10/17
Column: (pack/cap) CAP Dilution Factor: 1.0
CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
2.				
3.				
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30.				

page 1 of 1

FORM I VOA-TIC

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

15B11

Lab Name: Lancaster Laboratories Contract:
Lab Code: LANCAS Case No.: SAS No.: SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 9299873
Sample wt/vol: 30.13(g/mL) g Lab File ID: pk0566.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: 10.1 Decanted: (Y/N) Date Extracted: 11/10/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/17
Injection Volume: 1 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:
Number TICs found: 2 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.625-86-5	Furan, 2,5-dimethyl-	1.907	190	JB
2.	Unknown Aldol Condensate	4.013	410	JB
3.				
4.SVOCTIC	Total SVOC TICs		610	JB
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FORM I SV-1

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Analysis Report

Sample Description: **D15-BOR-23-(5.0-6.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299874
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:45

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	**Acetone**	67-64-1	**15**	**J**	8	22	0.98
10237	**Benzene**	71-43-2	**0.9**	**J**	0.6	6	0.98
10237	Bromodichloromethane	75-27-4	1	U	1	6	0.98
10237	2-Butanone	78-93-3	4	U	4	11	0.98
10237	n-Butylbenzene	104-51-8	1	U	1	6	0.98
10237	sec-Butylbenzene	135-98-8	1	U	1	6	0.98
10237	tert-Butylbenzene	98-06-6	1	U	1	6	0.98
10237	Carbon Disulfide	75-15-0	1	U	1	6	0.98
10237	Carbon Tetrachloride	56-23-5	1	U	1	6	0.98
10237	**Chlorobenzene**	108-90-7	**6**		1	6	0.98
10237	Chloroethane	75-00-3	2	U	2	6	0.98
10237	Chloroform	67-66-3	1	U	1	6	0.98
10237	Chloromethane	74-87-3	2	U	2	6	0.98
10237	2-Chlorotoluene	95-49-8	1	U	1	6	0.98
10237	4-Chlorotoluene	106-43-4	1	U	1	6	0.98
10237	Chlorotrifluoroethene	79-38-9	2	U	2	6	0.98
10237	Dibromochloromethane	124-48-1	1	U	1	6	0.98
10237	1,2-Dibromoethane	106-93-4	1	U	1	6	0.98
10237	1,2-Dichlorobenzene	95-50-1	1	U	1	6	0.98
10237	1,3-Dichlorobenzene	541-73-1	1	U	1	6	0.98
10237	1,4-Dichlorobenzene	106-46-7	1	U	1	6	0.98
10237	Dichlorodifluoromethane	75-71-8	2	U	2	6	0.98
10237	1,1-Dichloroethane	75-34-3	1	U	1	6	0.98
10237	1,2-Dichloroethane	107-06-2	1	U	1	6	0.98
10237	1,1-Dichloroethene	75-35-4	1	U	1	6	0.98
10237	cis-1,2-Dichloroethene	156-59-2	1	U	1	6	0.98
10237	trans-1,2-Dichloroethene	156-60-5	1	U	1	6	0.98
10237	1,2-Dichloroethene (Total)	540-59-0	1	U	1	6	0.98
10237	Dichlorofluoromethane	75-43-4	2	U	2	6	0.98
10237	1,2-Dichloropropane	78-87-5	1	U	1	6	0.98
10237	1,1-Dichloropropene	563-58-6	1	U	1	6	0.98
10237	cis-1,3-Dichloropropene	10061-01-5	1	U	1	6	0.98
10237	Ethylbenzene	100-41-4	1	U	1	6	0.98
10237	Freon 113	76-13-1	2	U	2	11	0.98
10237	Freon 133a	75-88-7	2	U	2	6	0.98
10237	n-Hexane	110-54-3	1	U	1	6	0.98
10237	2-Hexanone	591-78-6	3	U	3	11	0.98
10237	Isobutyl Alcohol	78-83-1	110	U	110	280	0.98
10237	Isopropylbenzene	98-82-8	1	U	1	6	0.98
10237	p-Isopropyltoluene	99-87-6	1	U	1	6	0.98
10237	Methacrylonitrile	126-98-7	6	U	6	56	0.98
10237	Methyl Methacrylate	80-62-6	1	U	1	6	0.98

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-23-(5.0-6.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299874
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:45

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.6	U	0.6	6	0.98
10237	4-Methyl-2-pentanone	108-10-1	3	U	3	11	0.98
10237	Methylene Chloride	75-09-2	2	U	2	6	0.98
10237	Propionitrile	107-12-0	34	U	34	110	0.98
10237	n-Propylbenzene	103-65-1	1	U	1	6	0.98
10237	Styrene	100-42-5	1	U	1	6	0.98
10237	1,1,1,2-Tetrachloroethane	630-20-6	1	U	1	6	0.98
10237	1,1,2,2-Tetrachloroethane	79-34-5	1	U	1	6	0.98
10237	Tetrachloroethene	127-18-4	1	U	1	6	0.98
10237	Tetrahydrofuran	109-99-9	4	U	4	9	0.98
10237	Toluene	108-88-3	1	U	1	6	0.98
10237	1,1,1-Trichloroethane	71-55-6	1	U	1	6	0.98
10237	1,1,2-Trichloroethane	79-00-5	1	U	1	6	0.98
10237	Trichloroethene	79-01-6	1	U	1	6	0.98
10237	**Trichlorofluoromethane**	75-69-4	**3**	**J**	2	6	0.98
10237	1,2,4-Trimethylbenzene	95-63-6	1	U	1	6	0.98
10237	1,3,5-Trimethylbenzene	108-67-8	1	U	1	6	0.98
10237	Vinyl Chloride	75-01-4	1	U	1	6	0.98
10237	m+p-Xylene	179601-23-1	1	U	1	6	0.98
10237	o-Xylene	95-47-6	1	U	1	6	0.98
10237	Xylene (Total)	1330-20-7	1	U	1	6	0.98

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/kg**		**ug/kg**	**ug/kg**	
13101	Chlorodifluoroethane	75-68-3	1	U	1	5	0.96
13101	Chlorodifluoromethane	75-45-6	2	U	2	5	0.96
13101	Chlorofluoromethane	593-70-4	1	U	1	5	0.96
13101	Chloropentafluoroethane	76-15-3	16	U	16	54	0.96
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	1	U	1	5	0.96
13101	1,2-Dichloro-1-fluoroethane	430-57-9	1	U	1	5	0.96
13101	Dichlorotetrafluoroethane	76-14-2	2	U	2	5	0.96
13101	1,2-Dichlorotrifluoroethane	354-23-4	1	U	1	5	0.96
13101	Dichlorotrifluoroethane	306-83-2	1	U	1	5	0.96
13101	Fluoromethane	593-53-3	3	U	3	11	0.96
13101	Freon 113a	354-58-5	5	U	5	22	0.96
13101	1,1,2-Trifluoroethane	430-66-0	2	U	2	5	0.96
13101	Vinyl fluoride	75-02-5	7	U	7	22	0.96

00884 Volatile Library Search - 15

The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-23-(5.0-6.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299874
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:45

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	Acenaphthene	83-32-9	4	U	4	19	1
10723	Acenaphthylene	208-96-8	4	U	4	19	1
10723	Acetophenone	98-86-2	19	U	19	38	1
10723	4-Aminobiphenyl	92-67-1	190	UZ	190	570	1
10723	Aniline	62-53-3	190	U	190	570	1
10723	Anthracene	120-12-7	4	U	4	19	1
10723	Benzidine	92-87-5	280	U	280	570	1
10723	Benzo(a)anthracene	56-55-3	4	U	4	19	1
10723	Benzo(a)pyrene	50-32-8	4	U	4	19	1
10723	Benzo(b)fluoranthene	205-99-2	4	U	4	19	1
10723	Benzo(g,h,i)perylene	191-24-2	4	U	4	19	1
10723	Benzo(k)fluoranthene	207-08-9	4	U	4	19	1
10723	1,1'-Biphenyl	92-52-4	19	U	19	38	1
10723	4-Bromophenyl-phenylether	101-55-3	19	U	19	38	1
10723	Butylbenzylphthalate	85-68-7	76	U	76	190	1
10723	Di-n-butylphthalate	84-74-2	76	U	76	190	1
10723	Carbazole	86-74-8	19	U	19	38	1
10723	4-Chloro-3-methylphenol	59-50-7	19	U	19	38	1
10723	4-Chloroaniline	106-47-8	38	U	38	76	1
10723	bis(2-Chloroethoxy)methane	111-91-1	19	U	19	38	1
10723	bis(2-Chloroethyl)ether	111-44-4	19	U	19	38	1
10723	2-Chloronaphthalene	91-58-7	8	U	8	37	1
10723	2-Chlorophenol	95-57-8	19	U	19	38	1
10723	4-Chlorophenyl-phenylether	7005-72-3	19	U	19	38	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	19	U	19	38	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	4	U	4	19	1
10723	Dibenz(a,h)anthracene	53-70-3	4	U	4	19	1
10723	Dibenzofuran	132-64-9	19	U	19	38	1
10723	3,3'-Dichlorobenzidine	91-94-1	110	U	110	380	1
10723	2,4-Dichlorophenol	120-83-2	19	U	19	38	1
10723	Diethylphthalate	84-66-2	76	U	76	190	1
10723	2,4-Dimethylphenol	105-67-9	19	U	19	38	1
10723	Dimethylphthalate	131-11-3	76	U	76	190	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	190	U	190	570	1
10723	2,4-Dinitrophenol	51-28-5	340	U	340	1,100	1
10723	2,4-Dinitrotoluene	121-14-2	76	U	76	190	1
10723	2,6-Dinitrotoluene	606-20-2	19	U	19	38	1
10723	1,4-Dioxane	123-91-1	110	U	110	380	1
10723	Diphenyl ether	101-84-8	19	U	19	38	1

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-23-(5.0-6.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299874
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:45

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	1,2-Diphenylhydrazine	122-66-7	19	U	19	38	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	76	U	76	190	1
10723	Fluoranthene	206-44-0	4	U	4	19	1
10723	Fluorene	86-73-7	4	U	4	19	1
10723	Hexachlorobenzene	118-74-1	4	U	4	19	1
10723	Hexachlorobutadiene	87-68-3	19	U	19	38	1
10723	Hexachlorocyclopentadiene	77-47-4	190	U	190	570	1
10723	Hexachloroethane	67-72-1	38	U	38	190	1
10723	Indeno(1,2,3-cd)pyrene	193-39-5	4	U	4	19	1
10723	Isophorone	78-59-1	19	U	19	38	1
10723	2-Methylnaphthalene	91-57-6	4	U	4	19	1
10723	2-Methylphenol	95-48-7	19	U	19	38	1
10723	4-Methylphenol	106-44-5	19	U	19	38	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10723	**Naphthalene**	91-20-3	**4**	**J**	4	19	1
10723	1-Naphthylamine	134-32-7	190	U	190	570	1
10723	2-Naphthylamine	91-59-8	190	U	190	570	1
10723	2-Nitroaniline	88-74-4	19	U	19	38	1
10723	3-Nitroaniline	99-09-2	76	U	76	190	1
10723	4-Nitroaniline	100-01-6	76	U	76	190	1
10723	Nitrobenzene	98-95-3	19	U	19	38	1
10723	2-Nitrophenol	88-75-5	19	U	19	38	1
10723	4-Nitrophenol	100-02-7	190	U	190	570	1
10723	N-Nitrosodimethylamine	62-75-9	76	U	76	190	1
10723	N-Nitroso-di-n-propylamine	621-64-7	19	U	19	38	1
10723	N-Nitrosodiphenylamine	86-30-6	19	U	19	38	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10723	Di-n-octylphthalate	117-84-0	76	U	76	190	1
10723	Parathion	56-38-2	190	U	190	570	1
10723	Pentachlorobenzene	608-93-5	19	U	19	38	1
10723	Pentachlorophenol	87-86-5	38	U	38	190	1
10723	Phenanthrene	85-01-8	4	U	4	19	1
10723	Phenol	108-95-2	19	U	19	38	1
10723	Pyrene	129-00-0	4	U	4	19	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	76	U	76	190	1
10723	o-Toluidine	95-53-4	230	U	230	760	1
10723	1,2,4-Trichlorobenzene	120-82-1	19	U	19	38	1
10723	2,4,5-Trichlorophenol	95-95-4	19	U	19	38	1
10723	2,4,6-Trichlorophenol	88-06-2	19	U	19	38	1

The project QA/QC requirements were not met.

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-23-(5.0-6.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299874
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:45

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Wet Chemistry	**SW-846 9060A modified**		**mg/kg**		**mg/kg**	**mg/kg**	
02079	**Total Organic Carbon (TOC)**	n.a.	**156**	**J**	121	364	1
	Due to the nature of this sample matrix, the sample cup was filled to capacity with less than 1000 mg of sample being used. The lowered sample weight has resulted in a raised reporting limit.						
Wet Chemistry	**SM 2540 G-1997 %Moisture Calc**		**%**		**%**	**%**	
00111	**Moisture**	n.a.	**11.9**		0.50	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.						

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	X173143AA	11/10/2017 19:04	Linda C Pape	0.98
13101	Freons	SW-846 8260FRN Modified	1	J173141AA	11/11/2017 01:05	Patrick T Herres	0.96
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201730847752	11/04/2017 11:03	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201730847752	11/04/2017 11:04	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201730847752	11/04/2017 11:37	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201730847752	11/04/2017 11:38	Anastasia K Jaynes	n.a.

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-23-(5.0-6.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 11:45

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299874
ELLE Group #: 1871169
Matrix: Soil

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201730847752	11/04/2017 11:03	Anastasia K Jaynes	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17313SLI026	11/16/2017 02:45	Anthony P Bauer	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17313SLI026	11/10/2017 16:10	Ashley R Transue	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17317667633A	11/15/2017 02:43	Drew M Gerhart	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17310820005A	11/06/2017 20:09	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15B12

Lab Name: Lancaster Laboratories Contract:_____
Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____
Matrix: (soil/water) SOIL Lab Sample ID: 9299874
Sample wt/vol: 5.08 (g/mL) g Lab File ID: HP09193.i/17nov10a.b/xn10s40.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: not dec. 11.9 Date Analyzed: 11/10/17
Column: (pack/cap) CAP Dilution Factor: 1.0
CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

Number TICs found: 1

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 541-05-9	Cyclotrisiloxane, hexamethyl	10.14	6	J
2.				
3. VOCTIC	Total VOC TICs		6	J
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FORM I VOA-TIC

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1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15B12

Lab Name: Lancaster Laboratories Contract:
Lab Code: LANCAS Case No.: SAS No.: SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 9299874
Sample wt/vol: 30.03(g/mL) g Lab File ID: pk0567.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: 11.9 Decanted: (Y/N) Date Extracted: 11/10/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/17
Injection Volume: 1 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:
Number TICs found: 2 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.625-86-5	Furan, 2,5-dimethyl-	1.907	250	JB
2.	Unknown Aldol Condensate	4.013	420	JB
3.				
4.SVOCTIC	Total SVOC TICs		660	JB
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FORM I SV-1

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Analysis Report

Sample Description: **D15-BOR-23-(8.0-8.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299875
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 12:00

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	**Acetone**	67-64-1	**19**	**J**	7	21	0.98
10237	**Benzene**	71-43-2	**7**		0.5	5	0.98
10237	Bromodichloromethane	75-27-4	1	U	1	5	0.98
10237	2-Butanone	78-93-3	4	U	4	11	0.98
10237	n-Butylbenzene	104-51-8	1	U	1	5	0.98
10237	sec-Butylbenzene	135-98-8	1	U	1	5	0.98
10237	tert-Butylbenzene	98-06-6	1	U	1	5	0.98
10237	Carbon Disulfide	75-15-0	1	U	1	5	0.98
10237	Carbon Tetrachloride	56-23-5	1	U	1	5	0.98
10237	**Chlorobenzene**	108-90-7	**43**		1	5	0.98
10237	Chloroethane	75-00-3	2	U	2	5	0.98
10237	**Chloroform**	67-66-3	**1**	**J**	1	5	0.98
10237	Chloromethane	74-87-3	2	U	2	5	0.98
10237	2-Chlorotoluene	95-49-8	1	U	1	5	0.98
10237	4-Chlorotoluene	106-43-4	1	U	1	5	0.98
10237	Chlorotrifluoroethene	79-38-9	2	U	2	5	0.98
10237	Dibromochloromethane	124-48-1	1	U	1	5	0.98
10237	1,2-Dibromoethane	106-93-4	1	U	1	5	0.98
10237	**1,2-Dichlorobenzene**	95-50-1	**2**	**J**	1	5	0.98
10237	1,3-Dichlorobenzene	541-73-1	1	U	1	5	0.98
10237	**1,4-Dichlorobenzene**	106-46-7	**4**	**J**	1	5	0.98
10237	Dichlorodifluoromethane	75-71-8	2	U	2	5	0.98
10237	1,1-Dichloroethane	75-34-3	1	U	1	5	0.98
10237	1,2-Dichloroethane	107-06-2	1	U	1	5	0.98
10237	1,1-Dichloroethene	75-35-4	1	U	1	5	0.98
10237	cis-1,2-Dichloroethene	156-59-2	1	U	1	5	0.98
10237	trans-1,2-Dichloroethene	156-60-5	1	U	1	5	0.98
10237	1,2-Dichloroethene (Total)	540-59-0	1	U	1	5	0.98
10237	Dichlorofluoromethane	75-43-4	2	U	2	5	0.98
10237	1,2-Dichloropropane	78-87-5	1	U	1	5	0.98
10237	1,1-Dichloropropene	563-58-6	1	U	1	5	0.98
10237	cis-1,3-Dichloropropene	10061-01-5	1	U	1	5	0.98
10237	Ethylbenzene	100-41-4	1	U	1	5	0.98
10237	**Freon 113**	76-13-1	**66**		2	11	0.98
10237	Freon 133a	75-88-7	2	U	2	5	0.98
10237	n-Hexane	110-54-3	1	U	1	5	0.98
10237	2-Hexanone	591-78-6	3	U	3	11	0.98
10237	Isobutyl Alcohol	78-83-1	110	U	110	260	0.98
10237	Isopropylbenzene	98-82-8	1	U	1	5	0.98
10237	p-Isopropyltoluene	99-87-6	1	U	1	5	0.98
10237	Methacrylonitrile	126-98-7	5	U	5	53	0.98
10237	Methyl Methacrylate	80-62-6	1	U	1	5	0.98

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-23-(8.0-8.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299875
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 12:00

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	Methyl Tertiary Butyl Ether	1634-04-4	0.5	U	0.5	5	0.98
10237	4-Methyl-2-pentanone	108-10-1	3	U	3	11	0.98
10237	Methylene Chloride	75-09-2	2	U	2	5	0.98
10237	Propionitrile	107-12-0	32	U	32	110	0.98
10237	n-Propylbenzene	103-65-1	1	U	1	5	0.98
10237	Styrene	100-42-5	1	U	1	5	0.98
10237	1,1,1,2-Tetrachloroethane	630-20-6	1	U	1	5	0.98
10237	1,1,2,2-Tetrachloroethane	79-34-5	1	U	1	5	0.98
10237	Tetrachloroethene	127-18-4	1	U	1	5	0.98
10237	Tetrahydrofuran	109-99-9	4	U	4	8	0.98
10237	Toluene	108-88-3	1	U	1	5	0.98
10237	1,1,1-Trichloroethane	71-55-6	1	U	1	5	0.98
10237	1,1,2-Trichloroethane	79-00-5	1	U	1	5	0.98
10237	Trichloroethene	79-01-6	1	U	1	5	0.98
10237	**Trichlorofluoromethane**	75-69-4	**78**		2	5	0.98
10237	1,2,4-Trimethylbenzene	95-63-6	1	U	1	5	0.98
10237	1,3,5-Trimethylbenzene	108-67-8	1	U	1	5	0.98
10237	Vinyl Chloride	75-01-4	1	U	1	5	0.98
10237	m+p-Xylene	179601-23-1	1	U	1	5	0.98
10237	o-Xylene	95-47-6	1	U	1	5	0.98
10237	Xylene (Total)	1330-20-7	1	U	1	5	0.98

The project QA/QC requirements were not met.

The percent drift for the following is >20% in the continuing calibration verification standard associated with this sample: Freon 133a

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/kg**		**ug/kg**	**ug/kg**	
13101	Chlorodifluoroethane	75-68-3	1	U	1	5	0.96
13101	Chlorodifluoromethane	75-45-6	2	U	2	5	0.96
13101	Chlorofluoromethane	593-70-4	1	U	1	5	0.96
13101	Chloropentafluoroethane	76-15-3	16	UZ	16	52	0.96
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	1	U	1	5	0.96
13101	1,2-Dichloro-1-fluoroethane	430-57-9	1	U	1	5	0.96
13101	Dichlorotetrafluoroethane	76-14-2	2	U	2	5	0.96
13101	1,2-Dichlorotrifluoroethane	354-23-4	1	U	1	5	0.96
13101	Dichlorotrifluoroethane	306-83-2	1	U	1	5	0.96
13101	Fluoromethane	593-53-3	3	UZ	3	10	0.96
13101	Freon 113a	354-58-5	5	U	5	21	0.96
13101	1,1,2-Trifluoroethane	430-66-0	2	U	2	5	0.96
13101	Vinyl fluoride	75-02-5	6	U	6	21	0.96

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-23-(8.0-8.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299875
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 12:00

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
	Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.						

00884 Volatile Library Search - 15

The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	Acenaphthene	83-32-9	4	U	4	18	1
10723	Acenaphthylene	208-96-8	4	U	4	18	1
10723	Acetophenone	98-86-2	18	U	18	35	1
10723	4-Aminobiphenyl	92-67-1	180	UZ	180	530	1
10723	Aniline	62-53-3	180	U	180	530	1
10723	Anthracene	120-12-7	4	U	4	18	1
10723	Benzidine	92-87-5	270	U	270	530	1
10723	Benzo(a)anthracene	56-55-3	4	U	4	18	1
10723	Benzo(a)pyrene	50-32-8	4	U	4	18	1
10723	Benzo(b)fluoranthene	205-99-2	4	U	4	18	1
10723	Benzo(g,h,i)perylene	191-24-2	4	U	4	18	1
10723	Benzo(k)fluoranthene	207-08-9	4	U	4	18	1
10723	1,1'-Biphenyl	92-52-4	18	U	18	35	1
10723	4-Bromophenyl-phenylether	101-55-3	18	U	18	35	1
10723	Butylbenzylphthalate	85-68-7	71	U	71	180	1
10723	Di-n-butylphthalate	84-74-2	71	U	71	180	1
10723	Carbazole	86-74-8	18	U	18	35	1
10723	4-Chloro-3-methylphenol	59-50-7	18	U	18	35	1
10723	4-Chloroaniline	106-47-8	35	U	35	71	1
10723	bis(2-Chloroethoxy)methane	111-91-1	18	U	18	35	1
10723	bis(2-Chloroethyl)ether	111-44-4	18	U	18	35	1
10723	2-Chloronaphthalene	91-58-7	7	U	7	35	1
10723	2-Chlorophenol	95-57-8	18	U	18	35	1
10723	4-Chlorophenyl-phenylether	7005-72-3	18	U	18	35	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	18	U	18	35	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	4	U	4	18	1
10723	Dibenz(a,h)anthracene	53-70-3	4	U	4	18	1
10723	Dibenzofuran	132-64-9	18	U	18	35	1
10723	3,3'-Dichlorobenzidine	91-94-1	110	U	110	350	1
10723	2,4-Dichlorophenol	120-83-2	18	U	18	35	1
10723	Diethylphthalate	84-66-2	71	U	71	180	1

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-23-(8.0-8.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299875
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 12:00

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	2,4-Dimethylphenol	105-67-9	18	U	18	35	1
10723	Dimethylphthalate	131-11-3	71	U	71	180	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	180	U	180	530	1
10723	2,4-Dinitrophenol	51-28-5	320	U	320	1,100	1
10723	2,4-Dinitrotoluene	121-14-2	71	U	71	180	1
10723	2,6-Dinitrotoluene	606-20-2	18	U	18	35	1
10723	1,4-Dioxane	123-91-1	110	U	110	350	1
10723	Diphenyl ether	101-84-8	18	U	18	35	1
10723	1,2-Diphenylhydrazine	122-66-7	18	U	18	35	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	71	U	71	180	1
10723	Fluoranthene	206-44-0	4	U	4	18	1
10723	Fluorene	86-73-7	4	U	4	18	1
10723	Hexachlorobenzene	118-74-1	4	U	4	18	1
10723	Hexachlorobutadiene	87-68-3	18	U	18	35	1
10723	Hexachlorocyclopentadiene	77-47-4	180	U	180	530	1
10723	Hexachloroethane	67-72-1	35	U	35	180	1
10723	Indeno(1,2,3-cd)pyrene	193-39-5	4	U	4	18	1
10723	Isophorone	78-59-1	18	U	18	35	1
10723	2-Methylnaphthalene	91-57-6	4	U	4	18	1
10723	2-Methylphenol	95-48-7	18	U	18	35	1
10723	4-Methylphenol	106-44-5	18	U	18	35	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10723	**Naphthalene**	91-20-3	**8**	**J**	4	18	1
10723	1-Naphthylamine	134-32-7	180	U	180	530	1
10723	2-Naphthylamine	91-59-8	180	U	180	530	1
10723	2-Nitroaniline	88-74-4	18	U	18	35	1
10723	3-Nitroaniline	99-09-2	71	U	71	180	1
10723	4-Nitroaniline	100-01-6	71	U	71	180	1
10723	Nitrobenzene	98-95-3	18	U	18	35	1
10723	2-Nitrophenol	88-75-5	18	U	18	35	1
10723	4-Nitrophenol	100-02-7	180	U	180	530	1
10723	N-Nitrosodimethylamine	62-75-9	71	U	71	180	1
10723	N-Nitroso-di-n-propylamine	621-64-7	18	U	18	35	1
10723	N-Nitrosodiphenylamine	86-30-6	18	U	18	35	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10723	Di-n-octylphthalate	117-84-0	71	U	71	180	1
10723	Parathion	56-38-2	180	U	180	530	1
10723	Pentachlorobenzene	608-93-5	18	U	18	35	1
10723	Pentachlorophenol	87-86-5	35	U	35	180	1

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-23-(8.0-8.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299875
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 12:00

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	Phenanthrene	85-01-8	4	U	4	18	1
10723	Phenol	108-95-2	18	U	18	35	1
10723	Pyrene	129-00-0	4	U	4	18	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	71	U	71	180	1
10723	o-Toluidine	95-53-4	210	U	210	710	1
10723	1,2,4-Trichlorobenzene	120-82-1	18	U	18	35	1
10723	2,4,5-Trichlorophenol	95-95-4	18	U	18	35	1
10723	2,4,6-Trichlorophenol	88-06-2	18	U	18	35	1

The project QA/QC requirements were not met.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Wet Chemistry	**SW-846 9060A modified**		**mg/kg**		**mg/kg**	**mg/kg**	
02079	**Total Organic Carbon (TOC)**	n.a.	**169**	**J**	110	331	1

Due to the nature of this sample matrix, the sample cup was filled to capacity with less than 1000 mg of sample being used. The lowered sample weight has resulted in a raised reporting limit.

Wet Chemistry	**SM 2540 G-1997 %Moisture Calc**		**%**		**%**	**%**	
00111	**Moisture**	n.a.	**7.6**		0.50	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-23-(8.0-8.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299875
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 12:00

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	X173172AA	11/13/2017 17:33	Linda C Pape	0.98
13101	Freons	SW-846 8260FRN Modified	1	J173171AA	11/13/2017 16:54	Kevin A Sposito	0.96
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201730847752	11/04/2017 12:08	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201730847752	11/04/2017 12:09	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201730847752	11/04/2017 12:09	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201730847752	11/04/2017 12:09	Anastasia K Jaynes	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201730847752	11/04/2017 12:07	Anastasia K Jaynes	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17313SLI026	11/16/2017 03:09	Anthony P Bauer	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17313SLI026	11/10/2017 16:10	Ashley R Transue	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17317667633A	11/15/2017 02:56	Drew M Gerhart	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17310820005A	11/06/2017 20:09	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15B13

Lab Name: Lancaster Laboratories Contract:_____
Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____
Matrix: (soil/water) SOIL Lab Sample ID: 9299875
Sample wt/vol: 5.12 (g/mL) g Lab File ID: HP09193.i/17nov13a.b/xn13s36.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: not dec. 7.6 Date Analyzed: 11/13/17
Column: (pack/cap) CAP Dilution Factor: 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
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FORM I VOA-TIC

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1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15B13

Lab Name: Lancaster Laboratories Contract:
Lab Code: LANCAS Case No.: SAS No.: SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 9299875
Sample wt/vol: 30.49(g/mL) g Lab File ID: pk0568.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: 7.6 Decanted: (Y/N) Date Extracted: 11/10/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/17
Injection Volume: 1 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:
Number TICs found: 2 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.625-86-5	Furan, 2,5-dimethyl-	1.907	220	JB
2.	Unknown Aldol Condensate	4.013	370	JB
3.				
4.SVOCTIC	Total SVOC TICs		600	JB
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FORM I SV-1

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Analysis Report

Sample Description: **D15-BOR-23-(9.5-9.7) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299876
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 12:05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	Acetone	67-64-1	420	U	420	1,200	49.31
10237	**Benzene**	71-43-2	**1,000**		30	300	49.31
10237	Bromodichloromethane	75-27-4	60	U	60	300	49.31
10237	2-Butanone	78-93-3	240	U	240	600	49.31
10237	n-Butylbenzene	104-51-8	60	U	60	300	49.31
10237	sec-Butylbenzene	135-98-8	60	U	60	300	49.31
10237	tert-Butylbenzene	98-06-6	60	U	60	300	49.31
10237	Carbon Disulfide	75-15-0	60	U	60	300	49.31
10237	**Carbon Tetrachloride**	56-23-5	**95**	**J**	60	300	49.31
10237	**Chlorobenzene**	108-90-7	**4,600**		60	300	49.31
10237	Chloroethane	75-00-3	120	U	120	300	49.31
10237	**Chloroform**	67-66-3	**70**	**J**	60	300	49.31
10237	Chloromethane	74-87-3	120	U	120	300	49.31
10237	2-Chlorotoluene	95-49-8	60	U	60	300	49.31
10237	4-Chlorotoluene	106-43-4	60	U	60	300	49.31
10237	Chlorotrifluoroethene	79-38-9	120	U	120	300	49.31
10237	Dibromochloromethane	124-48-1	60	U	60	300	49.31
10237	1,2-Dibromoethane	106-93-4	60	U	60	300	49.31
10237	**1,2-Dichlorobenzene**	95-50-1	**150**	**J**	60	300	49.31
10237	1,3-Dichlorobenzene	541-73-1	60	U	60	300	49.31
10237	**1,4-Dichlorobenzene**	106-46-7	**260**	**J**	60	300	49.31
10237	Dichlorodifluoromethane	75-71-8	120	U	120	300	49.31
10237	1,1-Dichloroethane	75-34-3	60	U	60	300	49.31
10237	1,2-Dichloroethane	107-06-2	60	U	60	300	49.31
10237	1,1-Dichloroethene	75-35-4	60	U	60	300	49.31
10237	cis-1,2-Dichloroethene	156-59-2	60	U	60	300	49.31
10237	trans-1,2-Dichloroethene	156-60-5	60	U	60	300	49.31
10237	1,2-Dichloroethene (Total)	540-59-0	60	U	60	300	49.31
10237	Dichlorofluoromethane	75-43-4	120	U	120	300	49.31
10237	1,2-Dichloropropane	78-87-5	60	U	60	300	49.31
10237	1,1-Dichloropropene	563-58-6	60	U	60	300	49.31
10237	cis-1,3-Dichloropropene	10061-01-5	60	U	60	300	49.31
10237	Ethylbenzene	100-41-4	60	U	60	300	49.31
10237	**Freon 113**	76-13-1	**1,300**		120	600	49.31
10237	Freon 133a	75-88-7	120	U	120	300	49.31
10237	n-Hexane	110-54-3	60	U	60	300	49.31
10237	2-Hexanone	591-78-6	180	U	180	600	49.31
10237	Isobutyl Alcohol	78-83-1	6,000	U	6,000	15,000	49.31
10237	Isopropylbenzene	98-82-8	60	U	60	300	49.31
10237	p-Isopropyltoluene	99-87-6	60	U	60	300	49.31
10237	Methacrylonitrile	126-98-7	300	U	300	3,000	49.31
10237	Methyl Methacrylate	80-62-6	60	U	60	300	49.31

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-23-(9.5-9.7) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299876
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 12:05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	Methyl Tertiary Butyl Ether	1634-04-4	30	U	30	300	49.31
10237	4-Methyl-2-pentanone	108-10-1	180	U	180	600	49.31
10237	**Methylene Chloride**	75-09-2	**140**	**J**	120	300	49.31
10237	Propionitrile	107-12-0	1,800	U	1,800	6,000	49.31
10237	n-Propylbenzene	103-65-1	60	U	60	300	49.31
10237	Styrene	100-42-5	60	U	60	300	49.31
10237	1,1,1,2-Tetrachloroethane	630-20-6	60	U	60	300	49.31
10237	1,1,2,2-Tetrachloroethane	79-34-5	60	U	60	300	49.31
10237	Tetrachloroethene	127-18-4	60	U	60	300	49.31
10237	Tetrahydrofuran	109-99-9	240	U	240	480	49.31
10237	Toluene	108-88-3	60	U	60	300	49.31
10237	1,1,1-Trichloroethane	71-55-6	60	U	60	300	49.31
10237	1,1,2-Trichloroethane	79-00-5	60	U	60	300	49.31
10237	Trichloroethene	79-01-6	60	U	60	300	49.31
10237	**Trichlorofluoromethane**	75-69-4	**4,400**		120	300	49.31
10237	1,2,4-Trimethylbenzene	95-63-6	60	U	60	300	49.31
10237	1,3,5-Trimethylbenzene	108-67-8	60	U	60	300	49.31
10237	Vinyl Chloride	75-01-4	60	U	60	300	49.31
10237	m+p-Xylene	179601-23-1	60	U	60	300	49.31
10237	o-Xylene	95-47-6	60	U	60	300	49.31
10237	Xylene (Total)	1330-20-7	60	U	60	300	49.31

The project QA/QC requirements were not met.

The percent drift for the following is >20% in the continuing calibration verification standard associated with this sample: Chloroethane and 2-Butanone

The NJ DKQP required reporting limit could not be attained for 1,2-Dibromoethane.

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/kg**		**ug/kg**	**ug/kg**	
13101	**Chlorodifluoroethane**	75-68-3	**4**	**J**	1	6	0.93
13101	**Chlorodifluoromethane**	75-45-6	**4**	**J**	2	6	0.93
13101	**Chlorofluoromethane**	593-70-4	**3**	**J**	1	6	0.93
13101	Chloropentafluoroethane	76-15-3	17	UZ	17	57	0.93
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	1	U	1	6	0.93
13101	1,2-Dichloro-1-fluoroethane	430-57-9	1	U	1	6	0.93
13101	**Dichlorotetrafluoroethane**	76-14-2	**93**		2	6	0.93
13101	**1,2-Dichlorotrifluoroethane**	354-23-4	**27**		1	6	0.93
13101	**Dichlorotrifluoroethane**	306-83-2	**730**	**E**	1	6	0.93

*=This limit was used in the evaluation of the final result

Sample Description: D15-BOR-23-(9.5-9.7) Soil
DE RIVER NAPL DELINEATION PHASE III

Project Name: CWK - DE RIVER NAPL DELINEATION PHASE III

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 12:05

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299876
ELLE Group #: 1871169
Matrix: Soil

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/kg**		**ug/kg**	**ug/kg**	
13101	Fluoromethane	593-53-3	3	UZ	3	11	0.93
13101	Freon 113a	354-58-5	6	U	6	23	0.93
13101	1,1,2-Trifluoroethane	430-66-0	2	U	2	6	0.93
13101	Vinyl fluoride	75-02-5	7	UZ	7	23	0.93

Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

The concentration reported for Dichlorotrifluoroethane is estimated since it exceeds the calibration range of the instrument.

00884 Volatile Library Search - 15

The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	Acenaphthene	83-32-9	4	U	4	21	1
10723	Acenaphthylene	208-96-8	4	U	4	21	1
10723	Acetophenone	98-86-2	20	U	20	40	1
10723	4-Aminobiphenyl	92-67-1	200	UZ	200	600	1
10723	Aniline	62-53-3	200	U	200	600	1
10723	Anthracene	120-12-7	4	U	4	21	1
10723	Benzidine	92-87-5	300	U	300	600	1
10723	Benzo(a)anthracene	56-55-3	4	U	4	21	1
10723	Benzo(a)pyrene	50-32-8	4	U	4	21	1
10723	Benzo(b)fluoranthene	205-99-2	4	U	4	21	1
10723	Benzo(g,h,i)perylene	191-24-2	4	U	4	21	1
10723	Benzo(k)fluoranthene	207-08-9	4	U	4	21	1
10723	1,1'-Biphenyl	92-52-4	20	U	20	40	1
10723	4-Bromophenyl-phenylether	101-55-3	20	U	20	40	1
10723	Butylbenzylphthalate	85-68-7	81	U	81	200	1
10723	Di-n-butylphthalate	84-74-2	81	U	81	200	1
10723	Carbazole	86-74-8	20	U	20	40	1
10723	4-Chloro-3-methylphenol	59-50-7	20	U	20	40	1
10723	4-Chloroaniline	106-47-8	40	U	40	81	1
10723	bis(2-Chloroethoxy)methane	111-91-1	20	U	20	40	1
10723	bis(2-Chloroethyl)ether	111-44-4	20	U	20	40	1
10723	2-Chloronaphthalene	91-58-7	8	U	8	40	1
10723	2-Chlorophenol	95-57-8	20	U	20	40	1
10723	4-Chlorophenyl-phenylether	7005-72-3	20	U	20	40	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	20	U	20	40	1

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-23-(9.5-9.7) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299876
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 12:05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	Chrysene	218-01-9	4	U	4	21	1
10723	Dibenz(a,h)anthracene	53-70-3	4	U	4	21	1
10723	Dibenzofuran	132-64-9	20	U	20	40	1
10723	3,3'-Dichlorobenzidine	91-94-1	120	U	120	400	1
10723	2,4-Dichlorophenol	120-83-2	20	U	20	40	1
10723	Diethylphthalate	84-66-2	81	U	81	200	1
10723	2,4-Dimethylphenol	105-67-9	20	U	20	40	1
10723	Dimethylphthalate	131-11-3	81	U	81	200	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	200	U	200	600	1
10723	2,4-Dinitrophenol	51-28-5	360	U	360	1,200	1
10723	2,4-Dinitrotoluene	121-14-2	81	U	81	200	1
10723	2,6-Dinitrotoluene	606-20-2	20	U	20	40	1
10723	1,4-Dioxane	123-91-1	120	U	120	400	1
10723	Diphenyl ether	101-84-8	20	U	20	40	1
10723	1,2-Diphenylhydrazine	122-66-7	20	U	20	40	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	81	U	81	210	1
10723	Fluoranthene	206-44-0	4	U	4	21	1
10723	Fluorene	86-73-7	4	U	4	21	1
10723	Hexachlorobenzene	118-74-1	4	U	4	21	1
10723	Hexachlorobutadiene	87-68-3	20	U	20	40	1
10723	Hexachlorocyclopentadiene	77-47-4	200	U	200	600	1
10723	Hexachloroethane	67-72-1	40	U	40	200	1
10723	Indeno(1,2,3-cd)pyrene	193-39-5	4	U	4	21	1
10723	Isophorone	78-59-1	20	U	20	40	1
10723	2-Methylnaphthalene	91-57-6	4	U	4	21	1
10723	2-Methylphenol	95-48-7	20	U	20	40	1
10723	4-Methylphenol	106-44-5	20	U	20	40	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10723	**Naphthalene**	91-20-3	**6**	**J**	4	21	1
10723	1-Naphthylamine	134-32-7	200	U	200	600	1
10723	2-Naphthylamine	91-59-8	200	U	200	600	1
10723	2-Nitroaniline	88-74-4	20	U	20	40	1
10723	3-Nitroaniline	99-09-2	81	U	81	200	1
10723	4-Nitroaniline	100-01-6	81	U	81	200	1
10723	Nitrobenzene	98-95-3	20	U	20	40	1
10723	2-Nitrophenol	88-75-5	20	U	20	40	1
10723	4-Nitrophenol	100-02-7	200	U	200	600	1
10723	N-Nitrosodimethylamine	62-75-9	81	U	81	200	1

*=This limit was used in the evaluation of the final result

Sample Description: **D15-BOR-23-(9.5-9.7) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299876
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 12:05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	N-Nitroso-di-n-propylamine	621-64-7	20	U	20	40	1
10723	N-Nitrosodiphenylamine	86-30-6	20	U	20	40	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10723	Di-n-octylphthalate	117-84-0	81	U	81	200	1
10723	Parathion	56-38-2	200	U	200	600	1
10723	Pentachlorobenzene	608-93-5	20	U	20	40	1
10723	Pentachlorophenol	87-86-5	40	U	40	210	1
10723	Phenanthrene	85-01-8	4	U	4	21	1
10723	Phenol	108-95-2	20	U	20	40	1
10723	Pyrene	129-00-0	4	U	4	21	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	81	U	81	200	1
10723	o-Toluidine	95-53-4	240	U	240	810	1
10723	1,2,4-Trichlorobenzene	120-82-1	20	U	20	40	1
10723	2,4,5-Trichlorophenol	95-95-4	20	U	20	40	1
10723	2,4,6-Trichlorophenol	88-06-2	20	U	20	40	1

The project QA/QC requirements were not met.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Wet Chemistry	**SW-846 9060A modified**		**mg/kg**		**mg/kg**	**mg/kg**	
02079	**Total Organic Carbon (TOC)**	n.a.	**997**		127	381	1
Wet Chemistry	**SM 2540 G-1997 %Moisture Calc**		**%**		**%**	**%**	
00111	**Moisture**	n.a.	**18.1**		0.50	0.50	1

Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **D15-BOR-23-(9.5-9.7) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 12:05

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299876
ELLE Group #: 1871169
Matrix: Soil

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	R173162AA	11/13/2017 02:24	Stephen C Nolte	49.31
13101	Freons	SW-846 8260FRN Modified	1	J173181AA	11/14/2017 18:32	Kevin A Sposito	0.93
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201730847752	11/04/2017 12:11	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201730847752	11/04/2017 12:12	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201730847752	11/04/2017 12:12	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201730847752	11/04/2017 12:13	Anastasia K Jaynes	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201730847752	11/04/2017 12:11	Anastasia K Jaynes	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17313SLI026	11/16/2017 03:33	Anthony P Bauer	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17313SLI026	11/10/2017 16:10	Ashley R Transue	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17317667633A	11/15/2017 04:01	Drew M Gerhart	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17310820005A	11/06/2017 20:09	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15B14

Lab Name: Lancaster Laboratories Contract:_____
Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____
Matrix: (soil/water) SOIL Lab Sample ID: 9299876
Sample wt/vol: 5.07 (g/mL) g Lab File ID: HP07566.i/17nov12a.b/rn12s44.d
Level: (low/med) MED Date Received: 11/03/17
% Moisture: not dec. 18.1 Date Analyzed: 11/13/17
Column: (pack/cap) CAP Dilution Factor: 49.3
CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
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3.				
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FORM I VOA-TIC

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15B14

Lab Name: Lancaster Laboratories Contract:
Lab Code: LANCAS Case No.: SAS No.: SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 9299876
Sample wt/vol: 30.29(g/mL) g Lab File ID: pk0569.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: 18.1 Decanted: (Y/N) Date Extracted: 11/10/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/17
Injection Volume: 1 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:
Number TICs found: 2 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown Aldol Condensate	4.007	470	JB
2. 57-10-3	n-Hexadecanoic acid	10.954	340	J
3.				
4. SVOCTIC	Total SVOC TICs		800	JB
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FORM I SV-1

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Analysis Report

Sample Description: **E16-BOR-07-(0-0.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 15:05

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299877
ELLE Group #: 1871169
Matrix: Soil

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	Acetone	67-64-1	970	U	970	2,800	69.25
10237	**Benzene**	71-43-2	**75**	**J**	69	690	69.25
10237	Bromodichloromethane	75-27-4	140	U	140	690	69.25
10237	2-Butanone	78-93-3	550	U	550	1,400	69.25
10237	n-Butylbenzene	104-51-8	140	U	140	690	69.25
10237	sec-Butylbenzene	135-98-8	140	U	140	690	69.25
10237	tert-Butylbenzene	98-06-6	140	U	140	690	69.25
10237	Carbon Disulfide	75-15-0	140	U	140	690	69.25
10237	Carbon Tetrachloride	56-23-5	140	U	140	690	69.25
10237	**Chlorobenzene**	108-90-7	**3,800**		140	690	69.25
10237	Chloroethane	75-00-3	280	U	280	690	69.25
10237	Chloroform	67-66-3	140	U	140	690	69.25
10237	Chloromethane	74-87-3	280	U	280	690	69.25
10237	2-Chlorotoluene	95-49-8	140	U	140	690	69.25
10237	4-Chlorotoluene	106-43-4	140	U	140	690	69.25
10237	Chlorotrifluoroethene	79-38-9	280	U	280	690	69.25
10237	Dibromochloromethane	124-48-1	140	U	140	690	69.25
10237	1,2-Dibromoethane	106-93-4	140	U	140	690	69.25
10237	**1,2-Dichlorobenzene**	95-50-1	**11,000**		140	690	69.25
10237	**1,3-Dichlorobenzene**	541-73-1	**220**	**J**	140	690	69.25
10237	**1,4-Dichlorobenzene**	106-46-7	**6,000**		140	690	69.25
10237	Dichlorodifluoromethane	75-71-8	280	U	280	690	69.25
10237	1,1-Dichloroethane	75-34-3	140	U	140	690	69.25
10237	1,2-Dichloroethane	107-06-2	140	U	140	690	69.25
10237	1,1-Dichloroethene	75-35-4	140	U	140	690	69.25
10237	**cis-1,2-Dichloroethene**	156-59-2	**230**	**J**	140	690	69.25
10237	trans-1,2-Dichloroethene	156-60-5	140	U	140	690	69.25
10237	**1,2-Dichloroethene (Total)**	540-59-0	**230**	**J**	140	690	69.25
10237	**Dichlorofluoromethane**	75-43-4	**5,300**		280	690	69.25
10237	1,2-Dichloropropane	78-87-5	140	U	140	690	69.25
10237	1,1-Dichloropropene	563-58-6	140	U	140	690	69.25
10237	cis-1,3-Dichloropropene	10061-01-5	140	U	140	690	69.25
10237	Ethylbenzene	100-41-4	140	U	140	690	69.25
10237	**Freon 113**	76-13-1	**3,100**		280	1,400	69.25
10237	Freon 133a	75-88-7	280	U	280	690	69.25
10237	n-Hexane	110-54-3	140	U	140	690	69.25
10237	2-Hexanone	591-78-6	420	U	420	1,400	69.25
10237	Isobutyl Alcohol	78-83-1	14,000	U	14,000	35,000	69.25
10237	**Isopropylbenzene**	98-82-8	**710**		140	690	69.25
10237	p-Isopropyltoluene	99-87-6	140	U	140	690	69.25
10237	Methacrylonitrile	126-98-7	690	U	690	6,900	69.25
10237	Methyl Methacrylate	80-62-6	140	U	140	690	69.25

*=This limit was used in the evaluation of the final result

Sample Description: **E16-BOR-07-(0-0.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299877
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 15:05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	Methyl Tertiary Butyl Ether	1634-04-4	69	U	69	690	69.25
10237	4-Methyl-2-pentanone	108-10-1	420	U	420	1,400	69.25
10237	Methylene Chloride	75-09-2	280	U	280	690	69.25
10237	Propionitrile	107-12-0	4,200	U	4,200	14,000	69.25
10237	n-Propylbenzene	103-65-1	140	U	140	690	69.25
10237	Styrene	100-42-5	140	U	140	690	69.25
10237	1,1,1,2-Tetrachloroethane	630-20-6	140	U	140	690	69.25
10237	1,1,2,2-Tetrachloroethane	79-34-5	140	U	140	690	69.25
10237	**Tetrachloroethene**	127-18-4	**3,900**		140	690	69.25
10237	Tetrahydrofuran	109-99-9	550	U	550	1,100	69.25
10237	Toluene	108-88-3	140	U	140	690	69.25
10237	1,1,1-Trichloroethane	71-55-6	140	U	140	690	69.25
10237	1,1,2-Trichloroethane	79-00-5	140	U	140	690	69.25
10237	**Trichloroethene**	79-01-6	**190**	**J**	140	690	69.25
10237	**Trichlorofluoromethane**	75-69-4	**1,500**		280	690	69.25
10237	1,2,4-Trimethylbenzene	95-63-6	140	U	140	690	69.25
10237	1,3,5-Trimethylbenzene	108-67-8	140	U	140	690	69.25
10237	Vinyl Chloride	75-01-4	140	U	140	690	69.25
10237	m+p-Xylene	179601-23-1	140	U	140	690	69.25
10237	o-Xylene	95-47-6	140	U	140	690	69.25
10237	Xylene (Total)	1330-20-7	140	U	140	690	69.25

The project QA/QC requirements were not met.

The percent drift for the following is >20% in the continuing calibration verification standard associated with this sample: chloroethane and 2-butanone.

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/kg**		**ug/kg**	**ug/kg**	
13101	Chlorodifluoroethane	75-68-3	2	U	2	12	1.21
13101	**Chlorodifluoromethane**	75-45-6	**8**	**J**	5	12	1.21
13101	**Chlorofluoromethane**	593-70-4	**700**		2	12	1.21
13101	Chloropentafluoroethane	76-15-3	36	UZ	36	120	1.21
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	2	U	2	12	1.21
13101	1,2-Dichloro-1-fluoroethane	430-57-9	2	U	2	12	1.21
13101	**Dichlorotetrafluoroethane**	76-14-2	**210**		5	12	1.21
13101	**1,2-Dichlorotrifluoroethane**	354-23-4	**1,600**	**E**	2	12	1.21
13101	**Dichlorotrifluoroethane**	306-83-2	**110**		2	12	1.21
13101	Fluoromethane	593-53-3	7	UZ	7	24	1.21
13101	Freon 113a	354-58-5	12	U	12	48	1.21
13101	1,1,2-Trifluoroethane	430-66-0	5	U	5	12	1.21

*=This limit was used in the evaluation of the final result

Sample Description: **E16-BOR-07-(0-0.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299877
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 15:05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/kg**		**ug/kg**	**ug/kg**	
13101	Vinyl fluoride	75-02-5	14	U	14	48	1.21

Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

The concentration reported for 1,2-Dichlorotrifluoroethane is estimated since it exceeds the calibration range of the instrument.

00884 Volatile Library Search - 15

The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	**Acenaphthene**	83-32-9	**44**		7	34	1
10723	**Acenaphthylene**	208-96-8	**20**	**J**	7	34	1
10723	**Acetophenone**	98-86-2	**34**	**J**	33	66	1
10723	4-Aminobiphenyl	92-67-1	330	UZ	330	990	1
10723	Aniline	62-53-3	330	U	330	990	1
10723	**Anthracene**	120-12-7	**35**		7	34	1
10723	Benzidine	92-87-5	500	U	500	990	1
10723	**Benzo(a)anthracene**	56-55-3	**94**		7	34	1
10723	**Benzo(a)pyrene**	50-32-8	**84**		7	34	1
10723	**Benzo(b)fluoranthene**	205-99-2	**120**		7	34	1
10723	**Benzo(g,h,i)perylene**	191-24-2	**50**		7	34	1
10723	**Benzo(k)fluoranthene**	207-08-9	**43**		7	34	1
10723	1,1'-Biphenyl	92-52-4	33	U	33	66	1
10723	4-Bromophenyl-phenylether	101-55-3	33	U	33	66	1
10723	Butylbenzylphthalate	85-68-7	130	U	130	330	1
10723	Di-n-butylphthalate	84-74-2	130	U	130	330	1
10723	Carbazole	86-74-8	33	U	33	66	1
10723	4-Chloro-3-methylphenol	59-50-7	33	U	33	66	1
10723	4-Chloroaniline	106-47-8	66	U	66	130	1
10723	bis(2-Chloroethoxy)methane	111-91-1	33	U	33	66	1
10723	bis(2-Chloroethyl)ether	111-44-4	33	U	33	66	1
10723	2-Chloronaphthalene	91-58-7	13	U	13	66	1
10723	2-Chlorophenol	95-57-8	33	U	33	66	1
10723	4-Chlorophenyl-phenylether	7005-72-3	33	U	33	66	1
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	33	U	33	66	1

*=This limit was used in the evaluation of the final result

Sample Description: **E16-BOR-07-(0-0.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299877
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 15:05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	**Chrysene**	218-01-9	**180**		7	34	1
10723	**Dibenz(a,h)anthracene**	53-70-3	**13**	**J**	7	34	1
10723	Dibenzofuran	132-64-9	33	U	33	66	1
10723	3,3'-Dichlorobenzidine	91-94-1	200	U	200	660	1
10723	2,4-Dichlorophenol	120-83-2	33	U	33	66	1
10723	Diethylphthalate	84-66-2	130	U	130	330	1
10723	2,4-Dimethylphenol	105-67-9	33	U	33	66	1
10723	Dimethylphthalate	131-11-3	130	U	130	330	1
10723	4,6-Dinitro-2-methylphenol	534-52-1	330	U	330	990	1
10723	2,4-Dinitrophenol	51-28-5	600	U	600	2,000	1
10723	2,4-Dinitrotoluene	121-14-2	130	U	130	330	1
10723	2,6-Dinitrotoluene	606-20-2	33	U	33	66	1
10723	1,4-Dioxane	123-91-1	200	U	200	660	1
10723	Diphenyl ether	101-84-8	33	U	33	66	1
10723	1,2-Diphenylhydrazine	122-66-7	33	U	33	66	1
10723	bis(2-Ethylhexyl)phthalate	117-81-7	130	U	130	340	1
10723	**Fluoranthene**	206-44-0	**140**		7	34	1
10723	**Fluorene**	86-73-7	**34**		7	34	1
10723	Hexachlorobenzene	118-74-1	7	U	7	34	1
10723	Hexachlorobutadiene	87-68-3	33	U	33	66	1
10723	Hexachlorocyclopentadiene	77-47-4	330	U	330	990	1
10723	Hexachloroethane	67-72-1	66	U	66	330	1
10723	**Indeno(1,2,3-cd)pyrene**	193-39-5	**38**		7	34	1
10723	Isophorone	78-59-1	33	U	33	66	1
10723	**2-Methylnaphthalene**	91-57-6	**85**		7	34	1
10723	2-Methylphenol	95-48-7	33	U	33	66	1
10723	**4-Methylphenol**	106-44-5	**47**	**J**	33	66	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10723	**Naphthalene**	91-20-3	**330**		7	34	1
10723	1-Naphthylamine	134-32-7	330	U	330	990	1
10723	2-Naphthylamine	91-59-8	330	U	330	990	1
10723	2-Nitroaniline	88-74-4	33	U	33	66	1
10723	3-Nitroaniline	99-09-2	130	U	130	330	1
10723	4-Nitroaniline	100-01-6	130	U	130	330	1
10723	Nitrobenzene	98-95-3	33	U	33	66	1
10723	2-Nitrophenol	88-75-5	33	U	33	66	1
10723	4-Nitrophenol	100-02-7	330	U	330	990	1
10723	N-Nitrosodimethylamine	62-75-9	130	U	130	330	1

*=This limit was used in the evaluation of the final result

Sample Description: **E16-BOR-07-(0-0.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299877
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 15:05

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	N-Nitroso-di-n-propylamine	621-64-7	33	U	33	66	1
10723	N-Nitrosodiphenylamine	86-30-6	33	U	33	66	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10723	Di-n-octylphthalate	117-84-0	130	U	130	330	1
10723	Parathion	56-38-2	330	U	330	990	1
10723	Pentachlorobenzene	608-93-5	33	U	33	66	1
10723	Pentachlorophenol	87-86-5	66	U	66	340	1
10723	**Phenanthrene**	85-01-8	**85**		7	34	1
10723	Phenol	108-95-2	33	U	33	66	1
10723	**Pyrene**	129-00-0	**140**		7	34	1
10723	2,3,4,6-Tetrachlorophenol	58-90-2	130	U	130	330	1
10723	o-Toluidine	95-53-4	400	U	400	1,300	1
10723	**1,2,4-Trichlorobenzene**	120-82-1	**56**	**J**	33	66	1
10723	2,4,5-Trichlorophenol	95-95-4	33	U	33	66	1
10723	2,4,6-Trichlorophenol	88-06-2	33	U	33	66	1

The project QA/QC requirements were not met.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Metals		**SW-846 6010B**	**mg/kg**		**mg/kg**	**mg/kg**	
01643	**Aluminum**	7429-90-5	**14,300**		14.9	33.3	1
01650	**Calcium**	7440-70-2	**3,370**		5.55	33.3	1
01654	**Iron**	7439-89-6	**24,200**		13.4	33.3	1
01657	**Magnesium**	7439-95-4	**4,650**		4.05	16.7	1
01662	**Potassium**	7440-09-7	**2,350**		27.8	83.3	1
01667	**Sodium**	7440-23-5	**980**		27.8	167	1
06972	**Zinc**	7440-66-6	**131**		0.400	3.33	1

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **E16-BOR-07-(0-0.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299877
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 15:05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	**Antimony**	7440-36-0	**0.220 J**	0.155	0.333	2
	The NJ DKQP analyte list requirement was not met for Metals. The client specified list is reported.					
06125	**Arsenic**	7440-38-2	**9.62**	0.213	0.667	2
06126	**Barium**	7440-39-3	**79.7**	0.303	0.667	2
06127	**Beryllium**	7440-41-7	**0.761**	0.0175	0.167	2
06128	**Cadmium**	7440-43-9	**0.383**	0.0573	0.167	2
06131	**Chromium**	7440-47-3	**38.4**	0.290	0.667	2
06132	**Cobalt**	7440-48-4	**11.5**	0.0520	0.167	2
06133	**Copper**	7440-50-8	**24.9**	0.179	0.667	2
06135	**Lead**	7439-92-1	**36.3**	0.0370	0.333	2
06137	**Manganese**	7439-96-5	**743**	0.301	0.667	2
06139	**Nickel**	7440-02-0	**22.5**	0.332	0.667	2
06141	**Selenium**	7782-49-2	**0.518 J**	0.167	0.667	2
06142	**Silver**	7440-22-4	**0.166 J**	0.0487	0.167	2
06145	**Thallium**	7440-28-0	**0.120 J**	0.0417	0.167	2
06148	**Vanadium**	7440-62-2	**34.7**	0.0710	0.167	2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	
00159	**Mercury**	7439-97-6	**0.213**	0.0197	0.197	1
Wet Chemistry	**SW-846 9060A modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02079	**Total Organic Carbon (TOC)**	n.a.	**25,800**	1,080	3,250	1
Wet Chemistry	**ASTM D422**		**% Passing**	**% Passing**	**% Passing**	
07103	**75 mm**	n.a.	**100**	0.50	0.50	1
07103	**37.5 mm**	n.a.	**100**	0.50	0.50	1
07103	**19 mm**	n.a.	**100**	0.50	0.50	1
07103	**4.75 mm**	n.a.	**99.5**	0.50	0.50	1
07103	**3.35 mm**	n.a.	**99.3**	0.50	0.50	1
07103	**2.36 mm**	n.a.	**99.0**	0.50	0.50	1
07103	**1.18 mm**	n.a.	**98.9**	0.50	0.50	1
07103	**0.6 mm**	n.a.	**98.2**	0.50	0.50	1
07103	**0.3 mm**	n.a.	**96.8**	0.50	0.50	1
07103	**0.15 mm**	n.a.	**93.0**	0.50	0.50	1
07103	**0.075 mm**	n.a.	**83.1**	0.50	0.50	1
07103	**0.064 mm**	n.a.	**78.0**	0.50	0.50	1
07103	**0.05 mm**	n.a.	**65.0**	0.50	0.50	1
07103	**0.02 mm**	n.a.	**25.0**	0.50	0.50	1
07103	**0.005 mm**	n.a.	**8.0**	0.50	0.50	1
07103	**0.002 mm**	n.a.	**3.0**	0.50	0.50	1
07103	**0.001 mm**	n.a.	**1.0**	0.50	0.50	1

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **E16-BOR-07-(0-0.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299877
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 15:05

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**SM 2540 G-1997 %Moisture Calc**	**%**	**%**	**%**	
00111	**Moisture**	n.a.	**50.0**	0.50	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	R173162AA	11/13/2017 02:48	Stephen C Nolte	69.25
13101	Freons	SW-846 8260FRN Modified	1	J173171AA	11/13/2017 17:24	Kevin A Sposito	1.21
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201730847752	11/04/2017 12:14	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201730847752	11/04/2017 12:15	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201730847752	11/04/2017 12:16	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201730847752	11/04/2017 12:16	Anastasia K Jaynes	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201730847752	11/04/2017 12:14	Anastasia K Jaynes	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17313SLI026	11/16/2017 03:58	Anthony P Bauer	1
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17313SLI026	11/10/2017 16:10	Ashley R Transue	1
01643	Aluminum	SW-846 6010B	1	173100570805	11/12/2017 22:14	Elaine F Stoltzfus	1
01650	Calcium	SW-846 6010B	1	173100570805	11/12/2017 22:14	Elaine F Stoltzfus	1
01654	Iron	SW-846 6010B	1	173100570805	11/12/2017 22:14	Elaine F Stoltzfus	1
01657	Magnesium	SW-846 6010B	1	173100570805	11/12/2017 22:14	Elaine F Stoltzfus	1
01662	Potassium	SW-846 6010B	1	173100570805	11/12/2017 22:14	Elaine F Stoltzfus	1
01667	Sodium	SW-846 6010B	1	173100570805	11/12/2017 22:14	Elaine F Stoltzfus	1
06972	Zinc	SW-846 6010B	1	173100570805	11/12/2017 22:14	Elaine F Stoltzfus	1
06124	Antimony	SW-846 6020	1	173100570805A	11/13/2017 19:17	Bradley M Berlot	2
06125	Arsenic	SW-846 6020	1	173100570805A	11/13/2017 19:17	Bradley M Berlot	2
06126	Barium	SW-846 6020	1	173100570805D	11/13/2017 19:17	Bradley M Berlot	2
06127	Beryllium	SW-846 6020	1	173100570805A	11/13/2017 19:17	Bradley M Berlot	2
06128	Cadmium	SW-846 6020	1	173100570805A	11/13/2017 19:17	Bradley M Berlot	2
06131	Chromium	SW-846 6020	1	173100570805A	11/13/2017 19:17	Bradley M Berlot	2
06132	Cobalt	SW-846 6020	1	173100570805A	11/13/2017 19:17	Bradley M Berlot	2
06133	Copper	SW-846 6020	1	173100570805A	11/13/2017 19:17	Bradley M Berlot	2
06135	Lead	SW-846 6020	1	173100570805A	11/13/2017 19:17	Bradley M Berlot	2
06137	Manganese	SW-846 6020	1	173100570805A	11/13/2017 19:17	Bradley M Berlot	2
06139	Nickel	SW-846 6020	1	173100570805A	11/13/2017 19:17	Bradley M Berlot	2
06141	Selenium	SW-846 6020	1	173100570805B	11/13/2017 19:17	Bradley M Berlot	2
06142	Silver	SW-846 6020	1	173100570805A	11/13/2017 19:17	Bradley M Berlot	2
06145	Thallium	SW-846 6020	1	173100570805A	11/13/2017 19:17	Bradley M Berlot	2
06148	Vanadium	SW-846 6020	1	173100570805A	11/13/2017 19:17	Bradley M Berlot	2

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **E16-BOR-07-(0-0.5) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299877
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 15:05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	Mercury	SW-846 7471A	1	173100571106	11/09/2017 07:55	Damary Valentin	1
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	173100570805	11/09/2017 05:21	James L Mertz	1
05711	Hg-SW, 7471A - U3	SW-846 7471A	1	173100571106	11/08/2017 19:45	Barbara A Kane	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17317667633A	11/15/2017 04:14	Drew M Gerhart	1
07103	Grain Size to 1 um	ASTM D422	1	17335710302A	12/01/2017 21:20	Joshua P Trost	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17310820005A	11/06/2017 20:09	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
E1601

Lab Name: Lancaster Laboratories Contract:_____
Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____
Matrix: (soil/water) SOIL Lab Sample ID: 9299877
Sample wt/vol: 3.61 (g/mL) g Lab File ID: HP07566.i/17nov12a.b/rn12s45.d
Level: (low/med) MED Date Received: 11/03/17
% Moisture: not dec. 50 Date Analyzed: 11/13/17
Column: (pack/cap) CAP Dilution Factor: 69.3
CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
2.				
3.				
4.				
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page 1 of 1

FORM I VOA-TIC

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
E1601

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) SOIL Lab Sample ID: 9299877
Sample wt/vol: 30.23(g/mL) g Lab File ID: pk0570.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: 50 Decanted: (Y/N) Date Extracted: 11/10/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/17
Injection Volume: 1 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Mic

CONCENTRATION UNITS:
Number TICs found: 16 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown Aldol Condensate	4.007	670	JB
2.13798-23-7	Hexathiane	9.142	1100	J
3.	Unknown	10.183	290	J
4.	Unknown	10.501	410	J
5.	Unknown	11.436	720	J
6.	Unknown	11.478	380	J
7.	Unknown	11.513	510	J
8.10544-50-0	Cyclic octaatomic sulfur	11.589	3400	J
9.80-05-7	Phenol, 4,4'-(1-methylethyli	11.830	1500	J
10.	Unknown	12.048	320	J
11.	Unknown	12.230	300	J
12.	Unknown	12.566	350	J
13.112-88-9	1-Octadecene	13.554	490	J
14.226-98-2	Dibenzo(a,I)phenazine	14.713	430	J
15.	Unknown	14.907	300	J
16.	Unknown	15.783	310	J
17.				
18.SVOCTIC	Total SVOC TICs		12000	JB
19.				
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30.				

page 1 of 1

FORM I SV-1

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Analysis Report

Sample Description: **E16-BOR-07-(0.5-1.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 15:10

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299878
ELLE Group #: 1871169
Matrix: Soil

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	Acetone	67-64-1	400	U	400	1,200	48.36
10237	Benzene	71-43-2	29	U	29	290	48.36
10237	Bromodichloromethane	75-27-4	58	U	58	290	48.36
10237	2-Butanone	78-93-3	230	U	230	580	48.36
10237	n-Butylbenzene	104-51-8	58	U	58	290	48.36
10237	sec-Butylbenzene	135-98-8	58	U	58	290	48.36
10237	tert-Butylbenzene	98-06-6	58	U	58	290	48.36
10237	Carbon Disulfide	75-15-0	58	U	58	290	48.36
10237	Carbon Tetrachloride	56-23-5	58	U	58	290	48.36
10237	**Chlorobenzene**	108-90-7	**850**		58	290	48.36
10237	Chloroethane	75-00-3	120	U	120	290	48.36
10237	Chloroform	67-66-3	58	U	58	290	48.36
10237	Chloromethane	74-87-3	120	U	120	290	48.36
10237	2-Chlorotoluene	95-49-8	58	U	58	290	48.36
10237	4-Chlorotoluene	106-43-4	58	U	58	290	48.36
10237	Chlorotrifluoroethene	79-38-9	120	U	120	290	48.36
10237	Dibromochloromethane	124-48-1	58	U	58	290	48.36
10237	1,2-Dibromoethane	106-93-4	58	U	58	290	48.36
10237	**1,2-Dichlorobenzene**	95-50-1	**2,900**		58	290	48.36
10237	1,3-Dichlorobenzene	541-73-1	58	U	58	290	48.36
10237	**1,4-Dichlorobenzene**	106-46-7	**1,400**		58	290	48.36
10237	Dichlorodifluoromethane	75-71-8	120	U	120	290	48.36
10237	1,1-Dichloroethane	75-34-3	58	U	58	290	48.36
10237	1,2-Dichloroethane	107-06-2	58	U	58	290	48.36
10237	1,1-Dichloroethene	75-35-4	58	U	58	290	48.36
10237	cis-1,2-Dichloroethene	156-59-2	58	U	58	290	48.36
10237	trans-1,2-Dichloroethene	156-60-5	58	U	58	290	48.36
10237	1,2-Dichloroethene (Total)	540-59-0	58	U	58	290	48.36
10237	Dichlorofluoromethane	75-43-4	120	U	120	290	48.36
10237	1,2-Dichloropropane	78-87-5	58	U	58	290	48.36
10237	1,1-Dichloropropene	563-58-6	58	U	58	290	48.36
10237	cis-1,3-Dichloropropene	10061-01-5	58	U	58	290	48.36
10237	Ethylbenzene	100-41-4	58	U	58	290	48.36
10237	**Freon 113**	76-13-1	**5,600**		120	580	48.36
10237	Freon 133a	75-88-7	120	U	120	290	48.36
10237	n-Hexane	110-54-3	58	U	58	290	48.36
10237	2-Hexanone	591-78-6	170	U	170	580	48.36
10237	Isobutyl Alcohol	78-83-1	5,800	U	5,800	14,000	48.36
10237	Isopropylbenzene	98-82-8	58	U	58	290	48.36
10237	p-Isopropyltoluene	99-87-6	58	U	58	290	48.36
10237	Methacrylonitrile	126-98-7	290	U	290	2,900	48.36
10237	Methyl Methacrylate	80-62-6	58	U	58	290	48.36

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **E16-BOR-07-(0.5-1.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299878
ELLE Group #: 1871169
Matrix: Soil

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 15:10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/kg**		**ug/kg**	**ug/kg**	
10237	Methyl Tertiary Butyl Ether	1634-04-4	29	U	29	290	48.36
10237	4-Methyl-2-pentanone	108-10-1	170	U	170	580	48.36
10237	Methylene Chloride	75-09-2	120	U	120	290	48.36
10237	Propionitrile	107-12-0	1,700	U	1,700	5,800	48.36
10237	n-Propylbenzene	103-65-1	58	U	58	290	48.36
10237	Styrene	100-42-5	58	U	58	290	48.36
10237	1,1,1,2-Tetrachloroethane	630-20-6	58	U	58	290	48.36
10237	1,1,2,2-Tetrachloroethane	79-34-5	58	U	58	290	48.36
10237	**Tetrachloroethene**	127-18-4	**1,600**		58	290	48.36
10237	Tetrahydrofuran	109-99-9	230	U	230	460	48.36
10237	Toluene	108-88-3	58	U	58	290	48.36
10237	1,1,1-Trichloroethane	71-55-6	58	U	58	290	48.36
10237	1,1,2-Trichloroethane	79-00-5	58	U	58	290	48.36
10237	Trichloroethene	79-01-6	58	U	58	290	48.36
10237	**Trichlorofluoromethane**	75-69-4	**1,600**		120	290	48.36
10237	1,2,4-Trimethylbenzene	95-63-6	58	U	58	290	48.36
10237	1,3,5-Trimethylbenzene	108-67-8	58	U	58	290	48.36
10237	Vinyl Chloride	75-01-4	58	U	58	290	48.36
10237	m+p-Xylene	179601-23-1	58	U	58	290	48.36
10237	o-Xylene	95-47-6	58	U	58	290	48.36
10237	Xylene (Total)	1330-20-7	58	U	58	290	48.36

The project QA/QC requirements were not met.

The percent drift for the following is >20% in the continuing calibration verification standard associated with this sample: chloroethane.

The NJ DKQP required reporting limit could not be attained for 1,2-dibromoethane.

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/kg**		**ug/kg**	**ug/kg**	
13101	Chlorodifluoroethane	75-68-3	1	U	1	6	1.01
13101	Chlorodifluoromethane	75-45-6	2	U	2	6	1.01
13101	Chlorofluoromethane	593-70-4	1	U	1	6	1.01
13101	Chloropentafluoroethane	76-15-3	18	UZ	18	60	1.01
13101	1,1-Dichloro-1-fluoroethane	1717-00-6	1	U	1	6	1.01
13101	1,2-Dichloro-1-fluoroethane	430-57-9	1	U	1	6	1.01
13101	**Dichlorotetrafluoroethane**	76-14-2	**44**		2	6	1.01

*=This limit was used in the evaluation of the final result

Sample Description: **E16-BOR-07-(0.5-1.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299878
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 15:10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/kg**		**ug/kg**	**ug/kg**	
13101	**1,2-Dichlorotrifluoroethane**	354-23-4	**4**	**J**	1	6	1.01
13101	**Dichlorotrifluoroethane**	306-83-2	**14**		1	6	1.01
13101	Fluoromethane	593-53-3	4	UZ	4	12	1.01
13101	Freon 113a	354-58-5	6	U	6	24	1.01
13101	1,1,2-Trifluoroethane	430-66-0	2	U	2	6	1.01
13101	Vinyl fluoride	75-02-5	7	U	7	24	1.01

Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00884 Volatile Library Search - 15

The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	**Acenaphthene**	83-32-9	**930**		20	100	5
10723	**Acenaphthylene**	208-96-8	**130**		20	100	5
10723	**Acetophenone**	98-86-2	**120**	**J**	99	200	5
10723	4-Aminobiphenyl	92-67-1	990	UZ	990	3,000	5
10723	Aniline	62-53-3	990	U	990	3,000	5
10723	**Anthracene**	120-12-7	**120**		20	100	5
10723	Benzidine	92-87-5	1,500	U	1,500	3,000	5
10723	**Benzo(a)anthracene**	56-55-3	**490**		20	100	5
10723	**Benzo(a)pyrene**	50-32-8	**250**		20	100	5
10723	**Benzo(b)fluoranthene**	205-99-2	**860**		20	100	5
10723	**Benzo(g,h,i)perylene**	191-24-2	**250**		20	100	5
10723	**Benzo(k)fluoranthene**	207-08-9	**290**		20	100	5
10723	**1,1'-Biphenyl**	92-52-4	**360**		99	200	5
10723	4-Bromophenyl-phenylether	101-55-3	99	U	99	200	5
10723	Butylbenzylphthalate	85-68-7	400	U	400	990	5
10723	Di-n-butylphthalate	84-74-2	400	U	400	990	5
10723	**Carbazole**	86-74-8	**350**		99	200	5
10723	4-Chloro-3-methylphenol	59-50-7	99	U	99	200	5
10723	4-Chloroaniline	106-47-8	200	U	200	400	5
10723	bis(2-Chloroethoxy)methane	111-91-1	99	U	99	200	5
10723	bis(2-Chloroethyl)ether	111-44-4	99	U	99	200	5
10723	2-Chloronaphthalene	91-58-7	40	U	40	200	5
10723	2-Chlorophenol	95-57-8	99	U	99	200	5
10723	4-Chlorophenyl-phenylether	7005-72-3	99	U	99	200	5
10723	2,2'-oxybis(1-Chloropropane)	108-60-1	99	U	99	200	5

*=This limit was used in the evaluation of the final result

Sample Description: **E16-BOR-07-(0.5-1.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299878
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 15:10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
10723	**Chrysene**	218-01-9	**1,800**		20	100	5
10723	**Dibenz(a,h)anthracene**	53-70-3	**87**	**J**	20	100	5
10723	**Dibenzofuran**	132-64-9	**1,000**		99	200	5
10723	3,3'-Dichlorobenzidine	91-94-1	590	U	590	2,000	5
10723	2,4-Dichlorophenol	120-83-2	99	U	99	200	5
10723	Diethylphthalate	84-66-2	400	U	400	990	5
10723	2,4-Dimethylphenol	105-67-9	99	U	99	200	5
10723	Dimethylphthalate	131-11-3	400	U	400	990	5
10723	4,6-Dinitro-2-methylphenol	534-52-1	990	U	990	3,000	5
10723	2,4-Dinitrophenol	51-28-5	1,800	U	1,800	5,900	5
10723	2,4-Dinitrotoluene	121-14-2	400	U	400	990	5
10723	2,6-Dinitrotoluene	606-20-2	99	U	99	200	5
10723	1,4-Dioxane	123-91-1	590	U	590	2,000	5
10723	Diphenyl ether	101-84-8	99	U	99	200	5
10723	1,2-Diphenylhydrazine	122-66-7	99	U	99	200	5
10723	bis(2-Ethylhexyl)phthalate	117-81-7	400	U	400	1,000	5
10723	**Fluoranthene**	206-44-0	**470**		20	100	5
10723	**Fluorene**	86-73-7	**990**		20	100	5
10723	**Hexachlorobenzene**	118-74-1	**400**		20	100	5
10723	Hexachlorobutadiene	87-68-3	99	U	99	200	5
10723	Hexachlorocyclopentadiene	77-47-4	990	U	990	3,000	5
10723	Hexachloroethane	67-72-1	200	U	200	990	5
10723	**Indeno(1,2,3-cd)pyrene**	193-39-5	**180**		20	100	5
10723	Isophorone	78-59-1	99	U	99	200	5
10723	**2-Methylnaphthalene**	91-57-6	**900**		20	100	5
10723	2-Methylphenol	95-48-7	99	U	99	200	5
10723	4-Methylphenol	106-44-5	99	U	99	200	5
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
10723	**Naphthalene**	91-20-3	**2,000**		20	100	5
10723	1-Naphthylamine	134-32-7	990	U	990	3,000	5
10723	2-Naphthylamine	91-59-8	990	U	990	3,000	5
10723	2-Nitroaniline	88-74-4	99	U	99	200	5
10723	3-Nitroaniline	99-09-2	400	U	400	990	5
10723	4-Nitroaniline	100-01-6	400	U	400	990	5
10723	Nitrobenzene	98-95-3	99	U	99	200	5
10723	2-Nitrophenol	88-75-5	99	U	99	200	5
10723	4-Nitrophenol	100-02-7	990	U	990	3,000	5
10723	N-Nitrosodimethylamine	62-75-9	400	U	400	990	5

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **E16-BOR-07-(0.5-1.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299878
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 15:10

CAT No.	Analysis Name	CAS Number	Dry Result		Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/kg**		**ug/kg**	**ug/kg**	
10723	N-Nitroso-di-n-propylamine	621-64-7	99	U	99	200	5
10723	**N-Nitrosodiphenylamine**	86-30-6	**390**		99	200	5
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
10723	Di-n-octylphthalate	117-84-0	400	U	400	990	5
10723	Parathion	56-38-2	990	U	990	3,000	5
10723	Pentachlorobenzene	608-93-5	99	U	99	200	5
10723	Pentachlorophenol	87-86-5	200	U	200	1,000	5
10723	**Phenanthrene**	85-01-8	**2,600**		20	100	5
10723	Phenol	108-95-2	99	U	99	200	5
10723	**Pyrene**	129-00-0	**520**		20	100	5
10723	2,3,4,6-Tetrachlorophenol	58-90-2	400	U	400	990	5
10723	o-Toluidine	95-53-4	1,200	U	1,200	4,000	5
10723	**1,2,4-Trichlorobenzene**	120-82-1	**590**		99	200	5
10723	2,4,5-Trichlorophenol	95-95-4	99	U	99	200	5
10723	2,4,6-Trichlorophenol	88-06-2	99	U	99	200	5

The project QA/QC requirements were not met.

Project defined QC acceptance limits are not met. All QC is compliant with the laboratory statistically generated limits.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since the recovery is high and the target analyte(s) was not detected in the sample, the data is reported.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Metals		**SW-846 6010B**	**mg/kg**		**mg/kg**	**mg/kg**	
01643	**Aluminum**	7429-90-5	**8,960**		7.58	16.9	1
01650	**Calcium**	7440-70-2	**270**		2.82	16.9	1
01654	**Iron**	7439-89-6	**11,500**		6.82	16.9	1
01657	**Magnesium**	7439-95-4	**2,160**		2.06	8.47	1
01662	**Potassium**	7440-09-7	**2,070**		14.2	42.4	1
01667	**Sodium**	7440-23-5	**138**		14.2	84.7	1
06972	**Zinc**	7440-66-6	**33.9**		0.203	1.69	1

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **E16-BOR-07-(0.5-1.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 15:10

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299878
ELLE Group #: 1871169
Matrix: Soil

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6020**		**mg/kg**	**mg/kg**	**mg/kg**	
06124	**Antimony**	7440-36-0	**2.49**	0.0790	0.169	2
	The NJ DKQP analyte list requirement was not met for Metals. The client specified list is reported.					
06125	**Arsenic**	7440-38-2	**1.98**	0.108	0.339	2
06126	**Barium**	7440-39-3	**43.3**	0.154	0.339	2
06127	**Beryllium**	7440-41-7	**0.228**	0.0089	0.0847	2
06128	Cadmium	7440-43-9	0.0291 U	0.0291	0.0847	2
06131	**Chromium**	7440-47-3	**29.8**	0.147	0.339	2
06132	**Cobalt**	7440-48-4	**6.29**	0.0264	0.0847	2
06133	**Copper**	7440-50-8	**296**	0.0908	0.339	2
06135	**Lead**	7439-92-1	**12.3**	0.0188	0.169	2
06137	**Manganese**	7439-96-5	**71.7**	0.153	0.339	2
06139	**Nickel**	7440-02-0	**12.9**	0.169	0.339	2
06141	**Selenium**	7782-49-2	**0.221 J**	0.0847	0.339	2
06142	**Silver**	7440-22-4	**1.95**	0.0247	0.0847	2
06145	**Thallium**	7440-28-0	**0.0883**	0.0212	0.0847	2
06148	**Vanadium**	7440-62-2	**21.7**	0.0361	0.0847	2
	SW-846 7471A		**mg/kg**	**mg/kg**	**mg/kg**	
00159	**Mercury**	7439-97-6	**1.31**	0.0578	0.578	5
Wet Chemistry	**SW-846 9060A modified**		**mg/kg**	**mg/kg**	**mg/kg**	
02079	**Total Organic Carbon (TOC)**	n.a.	**9,140**	476	1,430	1
Wet Chemistry	**ASTM D422**		**% Passing**	**% Passing**	**% Passing**	
07103	**75 mm**	n.a.	**100**	0.50	0.50	1
07103	**37.5 mm**	n.a.	**100**	0.50	0.50	1
07103	**19 mm**	n.a.	**89.4**	0.50	0.50	1
07103	**4.75 mm**	n.a.	**63.7**	0.50	0.50	1
07103	**3.35 mm**	n.a.	**56.8**	0.50	0.50	1
07103	**2.36 mm**	n.a.	**50.8**	0.50	0.50	1
07103	**1.18 mm**	n.a.	**33.4**	0.50	0.50	1
07103	**0.6 mm**	n.a.	**24.0**	0.50	0.50	1
07103	**0.3 mm**	n.a.	**11.9**	0.50	0.50	1
07103	**0.15 mm**	n.a.	**2.3**	0.50	0.50	1
07103	**0.075 mm**	n.a.	**1.4**	0.50	0.50	1
07103	**0.064 mm**	n.a.	**1.0**	0.50	0.50	1
07103	0.05 mm	n.a.	0.50 U	0.50	0.50	1
07103	0.02 mm	n.a.	0.50 U	0.50	0.50	1
07103	0.005 mm	n.a.	0.50 U	0.50	0.50	1
07103	0.002 mm	n.a.	0.50 U	0.50	0.50	1
07103	0.001 mm	n.a.	0.50 U	0.50	0.50	1

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **E16-BOR-07-(0.5-1.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299878
ELLE Group #: 1871169
Matrix: Soil

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 15:10

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry		**SM 2540 G-1997 %Moisture Calc**	**%**	**%**	**%**	
00111	**Moisture**	n.a.	**16.3**	0.50	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10237	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	R173171AA	11/14/2017 01:37	Stephen C Nolte	48.36
13101	Freons	SW-846 8260FRN Modified	1	J173171AA	11/13/2017 17:54	Kevin A Sposito	1.01
08389	GC/MS - LL Encore Prep	SW-846 5035A	1	201730847752	11/04/2017 12:18	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	2	201730847752	11/04/2017 12:19	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	3	201730847752	11/04/2017 12:19	Anastasia K Jaynes	n.a.
08389	GC/MS - LL Encore Prep	SW-846 5035A	4	201730847752	11/04/2017 12:20	Anastasia K Jaynes	n.a.
07578	GC/MS-HL Encore Prep-NC	SW-846 5035A	1	201730847752	11/04/2017 12:18	Anastasia K Jaynes	n.a.
10723	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17313SLI026	11/16/2017 04:22	Anthony P Bauer	5
10813	BNA Soil Microwave APP IX	SW-846 3546	1	17313SLI026	11/10/2017 16:10	Ashley R Transue	1
01643	Aluminum	SW-846 6010B	1	173100570805	11/12/2017 22:17	Elaine F Stoltzfus	1
01650	Calcium	SW-846 6010B	1	173100570805	11/14/2017 05:47	Jonathan J Allen	1
01654	Iron	SW-846 6010B	1	173100570805	11/12/2017 22:17	Elaine F Stoltzfus	1
01657	Magnesium	SW-846 6010B	1	173100570805	11/12/2017 22:17	Elaine F Stoltzfus	1
01662	Potassium	SW-846 6010B	1	173100570805	11/12/2017 22:17	Elaine F Stoltzfus	1
01667	Sodium	SW-846 6010B	1	173100570805	11/12/2017 22:17	Elaine F Stoltzfus	1
06972	Zinc	SW-846 6010B	1	173100570805	11/12/2017 22:17	Elaine F Stoltzfus	1
06124	Antimony	SW-846 6020	1	173100570805A	11/13/2017 19:20	Bradley M Berlot	2
06125	Arsenic	SW-846 6020	1	173100570805A	11/13/2017 19:20	Bradley M Berlot	2
06126	Barium	SW-846 6020	1	173100570805D	11/13/2017 19:20	Bradley M Berlot	2
06127	Beryllium	SW-846 6020	1	173100570805A	11/13/2017 19:20	Bradley M Berlot	2
06128	Cadmium	SW-846 6020	1	173100570805A	11/13/2017 19:20	Bradley M Berlot	2
06131	Chromium	SW-846 6020	1	173100570805A	11/13/2017 19:20	Bradley M Berlot	2
06132	Cobalt	SW-846 6020	1	173100570805A	11/13/2017 19:20	Bradley M Berlot	2
06133	Copper	SW-846 6020	1	173100570805A	11/13/2017 19:20	Bradley M Berlot	2
06135	Lead	SW-846 6020	1	173100570805A	11/13/2017 19:20	Bradley M Berlot	2
06137	Manganese	SW-846 6020	1	173100570805A	11/13/2017 19:20	Bradley M Berlot	2
06139	Nickel	SW-846 6020	1	173100570805A	11/13/2017 19:20	Bradley M Berlot	2
06141	Selenium	SW-846 6020	1	173100570805B	11/13/2017 19:20	Bradley M Berlot	2
06142	Silver	SW-846 6020	1	173100570805A	11/13/2017 19:20	Bradley M Berlot	2
06145	Thallium	SW-846 6020	1	173100570805A	11/13/2017 19:20	Bradley M Berlot	2
06148	Vanadium	SW-846 6020	1	173100570805A	11/13/2017 19:20	Bradley M Berlot	2

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **E16-BOR-07-(0.5-1.0) Soil**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/03/2017 15:10

CRG-The Chemours Co. FC, LLC
ELLE Sample #: SW 9299878
ELLE Group #: 1871169
Matrix: Soil

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00159	Mercury	SW-846 7471A	1	173100571106	11/09/2017 08:23	Damary Valentin	5
05708	ICP-ICPMS - SW, 3050B - U3	SW-846 3050B	1	173100570805	11/09/2017 05:21	James L Mertz	1
05711	Hg-SW, 7471A - U3	SW-846 7471A	1	173100571106	11/08/2017 19:45	Barbara A Kane	1
02079	Total Organic Carbon (TOC)	SW-846 9060A modified	1	17317667633A	11/15/2017 04:27	Drew M Gerhart	1
07103	Grain Size to 1 um	ASTM D422	1	17335710302A	12/01/2017 21:20	Joshua P Trost	1
00111	Moisture	SM 2540 G-1997 %Moisture Calc	1	17310820005A	11/06/2017 20:09	Scott W Freisher	1

*=This limit was used in the evaluation of the final result

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
E1602

Lab Name: Lancaster Laboratories Contract:_____
Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____
Matrix: (soil/water) SOIL Lab Sample ID: 9299878
Sample wt/vol: 5.17 (g/mL) g Lab File ID: HP07566.i/17nov13a.b/rn13s39.d
Level: (low/med) MED Date Received: 11/03/17
% Moisture: not dec. 16.3 Date Analyzed: 11/14/17
Column: (pack/cap) CAP Dilution Factor: 48.4
CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
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FORM I VOA-TIC

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
E1602

Lab Name: Lancaster Laboratories Contract:
Lab Code: LANCAS Case No.: SAS No.: SDG No.:
Matrix: (soil/water) SOIL Lab Sample ID: 9299878
Sample wt/vol: 30.24(g/mL) g Lab File ID: pk0571.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: 16.3 Decanted: (Y/N) Date Extracted: 11/10/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/16/17
Injection Volume: 1 (uL) Dilution Factor: 5
GPC Cleanup: N pH: Extraction: Mic
CONCENTRATION UNITS:
Number TICs found: 14 (ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.26137-53-1	Naphthalene, 1,2,3-trimethyl	9.813	2100	J
2.832-71-3	Phenanthrene, 3-methyl-	10.866	960	J
3.	Unknown	10.942	910	J
4.17851-53-5	1,2-Benzenedicarboxylic acid	10.966	5800	J
5.	Unknown	11.001	1300	J
6.	Unknown PAH	11.054	2500	J
7.	Unknown	11.130	2100	J
8.80-05-7	Phenol, 4,4'-(1-methylethyli	11.830	2800	J
9.	Unknown	12.571	1200	J
10.	Unknown	12.671	830	J
11.80252-14-8	6H-Benz[de]anthracen-6-one	13.071	3200	J
12.	Unknown	13.507	1400	J
13.17164-77-1	Benzo[b]thiophene, 2-(2-naph	13.595	1000	J
14.	Unknown	14.154	1500	J
15.				
16.SVOCTIC	Total SVOC TICs		28000	J
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FORM I SV-1

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Analysis Report

Sample Description: **CWKDERIVER3-EQBLK-3 Blank Water**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: WW 9299879
ELLE Group #: 1871169
Matrix: Blank Water

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/02/2017 09:00

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	**ug/l**	
10335	Acetone	67-64-1	6	U	6	20	1
10335	Benzene	71-43-2	0.5	U	0.5	1	1
10335	Bromodichloromethane	75-27-4	0.5	U	0.5	1	1
10335	2-Butanone	78-93-3	3	U	3	10	1
10335	n-Butylbenzene	104-51-8	1	U	1	5	1
10335	sec-Butylbenzene	135-98-8	1	U	1	5	1
10335	tert-Butylbenzene	98-06-6	1	U	1	5	1
10335	Carbon Disulfide	75-15-0	1	U	1	5	1
10335	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1	1
10335	Chlorobenzene	108-90-7	0.5	U	0.5	1	1
10335	Chloroethane	75-00-3	0.5	U	0.5	1	1
10335	Chloroform	67-66-3	0.5	U	0.5	1	1
10335	Chloromethane	74-87-3	0.5	U	0.5	1	1
10335	2-Chlorotoluene	95-49-8	1	U	1	5	1
10335	4-Chlorotoluene	106-43-4	1	U	1	5	1
10335	Chlorotrifluoroethene	79-38-9	2	U	2	5	1
10335	Dibromochloromethane	124-48-1	0.5	U	0.5	1	1
10335	1,2-Dibromoethane	106-93-4	0.5	U	0.5	1	1
10335	1,2-Dichlorobenzene	95-50-1	1	U	1	5	1
10335	1,3-Dichlorobenzene	541-73-1	1	U	1	5	1
10335	1,4-Dichlorobenzene	106-46-7	1	U	1	5	1
10335	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1	1
10335	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1	1
10335	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1	1
10335	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1	1
10335	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1	1
10335	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1	1
10335	1,2-Dichloroethene (Total)	540-59-0	0.5	U	0.5	1	1
10335	Dichlorofluoromethane	75-43-4	0.5	U	0.5	1	1
10335	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1	1
10335	1,1-Dichloropropene	563-58-6	1	U	1	5	1
10335	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1	1
10335	Ethylbenzene	100-41-4	0.5	U	0.5	1	1
10335	Freon 113	76-13-1	2	U	2	10	1
10335	Freon 133a	75-88-7	2	U	2	5	1
10335	n-Hexane	110-54-3	2	U	2	5	1
10335	2-Hexanone	591-78-6	3	U	3	10	1
10335	Isobutyl Alcohol	78-83-1	100	U	100	250	1
10335	Isopropylbenzene	98-82-8	1	U	1	5	1
10335	p-Isopropyltoluene	99-87-6	1	U	1	5	1
10335	Methacrylonitrile	126-98-7	10	U	10	50	1
10335	Methyl Methacrylate	80-62-6	1	U	1	5	1

*=This limit was used in the evaluation of the final result

Sample Description: **CWKDERIVER3-EQBLK-3 Blank Water**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: WW 9299879
ELLE Group #: 1871169
Matrix: Blank Water

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/02/2017 09:00

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	**ug/l**	
10335	Methyl Tertiary Butyl Ether	1634-04-4	0.5	U	0.5	1	1
10335	4-Methyl-2-pentanone	108-10-1	3	U	3	10	1
10335	Methylene Chloride	75-09-2	0.5	U	0.5	1	1
10335	Propionitrile	107-12-0	30	U	30	100	1
10335	n-Propylbenzene	103-65-1	1	U	1	5	1
10335	Styrene	100-42-5	1	U	1	5	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1	1
10335	Tetrachloroethene	127-18-4	0.5	U	0.5	1	1
10335	Tetrahydrofuran	109-99-9	4	U	4	10	1
10335	Toluene	108-88-3	0.5	U	0.5	1	1
10335	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1	1
10335	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1	1
10335	Trichloroethene	79-01-6	0.5	U	0.5	1	1
10335	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	1	U	1	5	1
10335	1,3,5-Trimethylbenzene	108-67-8	1	U	1	5	1
10335	Vinyl Chloride	75-01-4	0.5	U	0.5	1	1
10335	m+p-Xylene	179601-23-1	0.5	U	0.5	1	1
10335	o-Xylene	95-47-6	0.5	U	0.5	1	1
10335	Xylene (Total)	1330-20-7	0.5	U	0.5	1	1

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

The NJ DKQP required reporting limit could not be attained for1,2-Dibromoethane.

GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/l**		**ug/l**	**ug/l**	
13066	Chlorodifluoroethane	75-68-3	1	UZ	1	5	1
13066	Chlorodifluoromethane	75-45-6	2	U	2	5	1
13066	Chlorofluoromethane	593-70-4	1	U	1	5	1
13066	Chloropentafluoroethane	76-15-3	15	U	15	50	1
13066	1,1-Dichloro-1-fluoroethane	1717-00-6	1	U	1	5	1
13066	1,2-Dichloro-1-fluoroethane	430-57-9	1	U	1	5	1
13066	Dichlorotetrafluoroethane	76-14-2	2	U	2	5	1
13066	1,2-Dichlorotrifluoroethane	354-23-4	1	U	1	5	1
13066	Dichlorotrifluoroethane	306-83-2	1	U	1	5	1
13066	Fluoromethane	593-53-3	3	U	3	10	1
13066	Freon 113a	354-58-5	5	U	5	20	1
13066	1,1,2-Trifluoroethane	430-66-0	2	U	2	5	1
13066	Vinyl fluoride	75-02-5	2	U	2	10	1

Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased

*=This limit was used in the evaluation of the final result

Sample Description: **CWKDERIVER3-EQBLK-3 Blank Water**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: WW 9299879
ELLE Group #: 1871169
Matrix: Blank Water

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/02/2017 09:00

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
	sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.						
00884	**Volatile Library Search - 15**						
	The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.						
GC/MS Semivolatiles		**SW-846 8270C**	**ug/l**		**ug/l**	**ug/l**	
14239	Acenaphthene	83-32-9	0.1	U	0.1	0.5	1
14239	Acenaphthylene	208-96-8	0.1	U	0.1	0.5	1
14239	Acetophenone	98-86-2	0.5	U	0.5	1	1
14239	4-Aminobiphenyl	92-67-1	0.5	UZ	0.5	1	1
14239	Aniline	62-53-3	0.5	U	0.5	1	1
14239	Anthracene	120-12-7	0.1	U	0.1	0.5	1
14239	Benzidine	92-87-5	20	U	20	60	1
14239	Benzo(a)anthracene	56-55-3	0.1	U	0.1	0.5	1
14239	Benzo(a)pyrene	50-32-8	0.1	U	0.1	0.5	1
14239	Benzo(b)fluoranthene	205-99-2	0.1	U	0.1	0.5	1
14239	Benzo(g,h,i)perylene	191-24-2	0.1	U	0.1	0.5	1
14239	Benzo(k)fluoranthene	207-08-9	0.1	U	0.1	0.5	1
14239	1,1'-Biphenyl	92-52-4	0.5	U	0.5	1	1
14239	4-Bromophenyl-phenylether	101-55-3	0.5	U	0.5	1	1
14239	Butylbenzylphthalate	85-68-7	2	U	2	5	1
14239	Di-n-butylphthalate	84-74-2	2	U	2	5	1
14239	Carbazole	86-74-8	0.5	U	0.5	1	1
14239	4-Chloro-3-methylphenol	59-50-7	0.5	U	0.5	1	1
14239	4-Chloroaniline	106-47-8	2	U	2	4	1
14239	bis(2-Chloroethoxy)methane	111-91-1	0.5	U	0.5	1	1
14239	bis(2-Chloroethyl)ether	111-44-4	0.5	U	0.5	1	1
14239	2-Chloronaphthalene	91-58-7	0.4	U	0.4	1	1
14239	2-Chlorophenol	95-57-8	0.5	U	0.5	1	1
14239	4-Chlorophenyl-phenylether	7005-72-3	0.5	U	0.5	1	1
14239	2,2'-oxybis(1-Chloropropane)	108-60-1	0.5	U	0.5	1	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.						
14239	Chrysene	218-01-9	0.1	U	0.1	0.5	1
14239	Dibenz(a,h)anthracene	53-70-3	0.1	U	0.1	0.5	1
14239	Dibenzofuran	132-64-9	0.5	U	0.5	1	1
14239	3,3'-Dichlorobenzidine	91-94-1	2	U	2	5	1
14239	2,4-Dichlorophenol	120-83-2	0.5	U	0.5	1	1
14239	Diethylphthalate	84-66-2	2	U	2	5	1
14239	2,4-Dimethylphenol	105-67-9	0.5	U	0.5	1	1
14239	Dimethylphthalate	131-11-3	2	U	2	5	1

*=This limit was used in the evaluation of the final result

Sample Description: **CWKDERIVER3-EQBLK-3 Blank Water**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: WW 9299879
ELLE Group #: 1871169
Matrix: Blank Water

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/02/2017 09:00

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**		**ug/l**	**ug/l**	
14239	4,6-Dinitro-2-methylphenol	534-52-1	5	U	5	15	1
14239	2,4-Dinitrophenol	51-28-5	10	U	10	30	1
14239	2,4-Dinitrotoluene	121-14-2	1	U	1	5	1
14239	2,6-Dinitrotoluene	606-20-2	0.5	U	0.5	1	1
14239	1,4-Dioxane	123-91-1	1	U	1	5	1
14239	Diphenyl ether	101-84-8	0.5	U	0.5	1	1
14239	1,2-Diphenylhydrazine	122-66-7	0.5	U	0.5	1	1
14239	bis(2-Ethylhexyl)phthalate	117-81-7	2	U	2	5	1
14239	Fluoranthene	206-44-0	0.1	U	0.1	0.5	1
14239	Fluorene	86-73-7	0.1	U	0.1	0.5	1
14239	Hexachlorobenzene	118-74-1	0.1	U	0.1	0.5	1
14239	Hexachlorobutadiene	87-68-3	0.5	U	0.5	1	1
14239	Hexachlorocyclopentadiene	77-47-4	5	U	5	15	1
14239	Hexachloroethane	67-72-1	1	U	1	5	1
14239	Indeno(1,2,3-cd)pyrene	193-39-5	0.1	U	0.1	0.5	1
14239	Isophorone	78-59-1	0.5	U	0.5	1	1
14239	2-Methylnaphthalene	91-57-6	0.1	U	0.1	0.5	1
14239	2-Methylphenol	95-48-7	0.5	U	0.5	1	1
14239	4-Methylphenol	106-44-5	0.5	U	0.5	1	1
	3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds.						
14239	Naphthalene	91-20-3	0.1	U	0.1	0.5	1
14239	1-Naphthylamine	134-32-7	5	U	5	15	1
14239	2-Naphthylamine	91-59-8	5	U	5	15	1
14239	2-Nitroaniline	88-74-4	0.5	U	0.5	1	1
14239	3-Nitroaniline	99-09-2	0.5	U	0.5	1	1
14239	4-Nitroaniline	100-01-6	0.5	U	0.5	1	1
14239	Nitrobenzene	98-95-3	0.5	U	0.5	1	1
14239	2-Nitrophenol	88-75-5	0.5	U	0.5	1	1
14239	4-Nitrophenol	100-02-7	10	U	10	30	1
14239	N-Nitrosodimethylamine	62-75-9	2	U	2	5	1
14239	N-Nitroso-di-n-propylamine	621-64-7	0.5	U	0.5	1	1
14239	N-Nitrosodiphenylamine	86-30-6	0.5	U	0.5	1	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.						
14239	Di-n-octylphthalate	117-84-0	2	U	2	5	1
14239	Parathion	56-38-2	2	U	2	5	1
14239	Pentachlorobenzene	608-93-5	0.5	U	0.5	1	1
14239	Pentachlorophenol	87-86-5	1	U	1	5	1
14239	Phenanthrene	85-01-8	0.1	U	0.1	0.5	1
14239	Phenol	108-95-2	0.5	U	0.5	1	1

*=This limit was used in the evaluation of the final result

Sample Description: **CWKDERIVER3-EQBLK-3 Blank Water**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: WW 9299879
ELLE Group #: 1871169
Matrix: Blank Water

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/02/2017 09:00

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Semivolatiles	**SW-846 8270C**		**ug/l**		**ug/l**	**ug/l**	
14239	Pyrene	129-00-0	0.1	U	0.1	0.5	1
14239	2,3,4,6-Tetrachlorophenol	58-90-2	0.5	U	0.5	1	1
14239	o-Toluidine	95-53-4	0.5	U	0.5	1	1
14239	1,2,4-Trichlorobenzene	120-82-1	0.5	U	0.5	1	1
14239	2,4,5-Trichlorophenol	95-95-4	0.5	U	0.5	1	1
14239	2,4,6-Trichlorophenol	88-06-2	0.5	U	0.5	1	1

The project QA/QC requirements were not met.

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted outside the method required holding time and the QC is again outside of the acceptance limits.

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted outside the method required holding time and the QC is compliant.

The data is reported from the initial trial. Similar results were obtained in both trials.

Z=The response for a target analyte(s) in the initial calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00886 SVOA Library Search - 25

The results from the semivolatile library search are listed on the attached FORM 1 - SV-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Metals		**SW-846 6010B**	**mg/l**		**mg/l**	**mg/l**	
01743	Aluminum	7429-90-5	0.0894	U	0.0894	0.200	1
01750	**Calcium**	7440-70-2	**0.0800**	**J**	0.0600	0.200	1
	The NJ DKQP analyte list requirement was not met for Metals. The client specified list is reported.						
01754	Iron	7439-89-6	0.0805	U	0.0805	0.200	1
01757	Magnesium	7439-95-4	0.0374	U	0.0374	0.100	1
01762	Potassium	7440-09-7	0.179	U	0.179	0.500	1
01767	Sodium	7440-23-5	0.321	U	0.321	1.00	1
07072	Zinc	7440-66-6	0.0065	U	0.0065	0.0200	1
		SW-846 6020	**mg/l**		**mg/l**	**mg/l**	
06024	Antimony	7440-36-0	0.00045	U	0.00045	0.0010	1
	The NJ DKQP analyte list requirement was not met for Metals. The client specified list is reported.						

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **CWKDERIVER3-EQBLK-3 Blank Water**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: WW 9299879
ELLE Group #: 1871169
Matrix: Blank Water

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/02/2017 09:00

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
Metals	**SW-846 6020**		**mg/l**	**mg/l**	**mg/l**	
06025	Arsenic	7440-38-2	0.00072 U	0.00072	0.0020	1
06026	Barium	7440-39-3	0.00072 U	0.00072	0.0020	1
06027	Beryllium	7440-41-7	0.000071 U	0.000071	0.00050	1
06028	Cadmium	7440-43-9	0.00015 U	0.00015	0.00050	1
06031	Chromium	7440-47-3	0.00087 U	0.00087	0.0020	1
06032	Cobalt	7440-48-4	0.00016 U	0.00016	0.00050	1
06033	Copper	7440-50-8	0.00054 U	0.00054	0.0020	1
06035	Lead	7439-92-1	0.00011 U	0.00011	0.0010	1
06037	Manganese	7439-96-5	0.00090 U	0.00090	0.0020	1
06039	Nickel	7440-02-0	0.0010 U	0.0010	0.0020	1
06041	Selenium	7782-49-2	0.00050 U	0.00050	0.0020	1
06042	Silver	7440-22-4	0.00015 U	0.00015	0.00050	1
06045	Thallium	7440-28-0	0.00012 U	0.00012	0.00050	1
06048	Vanadium	7440-62-2	0.00021 U	0.00021	0.00050	1
	SW-846 7470A		**mg/l**	**mg/l**	**mg/l**	
00259	Mercury	7439-97-6	0.000050 U	0.000050	0.00020	1
Wet Chemistry	**SW-846 9060A**		**mg/l**	**mg/l**	**mg/l**	
00354	Total Organic Carbon (Quad)	n.a.	0.50 U	0.50	1.0	1

The reported result is the average of the following trials:
0 mg/l
0 mg/l
0 mg/l
0 mg/l

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	Y173182AA	11/14/2017 22:05	Don V Viray	1
13066	Freons	SW-846 8260FRN Modified	1	J173111AA	11/07/2017 15:31	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y173182AA	11/14/2017 22:05	Don V Viray	1
14239	TCL SVOAs + Add'l Cmpds	SW-846 8270C	1	17310WAE026	11/20/2017 02:47	William H Saadeh	1
10464	BNA Water Extraction (App IX)	SW-846 3510C	1	17310WAE026	11/06/2017 17:05	Christine E Gleim	1
01743	Aluminum	SW-846 6010B	1	173100570504	11/07/2017 21:10	Cindy M Gehman	1
01750	Calcium	SW-846 6010B	1	173100570504	11/07/2017 21:10	Cindy M Gehman	1
01754	Iron	SW-846 6010B	1	173100570504	11/07/2017 21:10	Cindy M Gehman	1

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **CWKDERIVER3-EQBLK-3 Blank Water**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

CRG-The Chemours Co. FC, LLC
ELLE Sample #: WW 9299879
ELLE Group #: 1871169
Matrix: Blank Water

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/02/2017 09:00

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01757	Magnesium	SW-846 6010B	1	173100570504	11/07/2017 21:10	Cindy M Gehman	1
01762	Potassium	SW-846 6010B	1	173100570504	11/07/2017 21:10	Cindy M Gehman	1
01767	Sodium	SW-846 6010B	1	173100570504	11/07/2017 21:10	Cindy M Gehman	1
07072	Zinc	SW-846 6010B	1	173100570504	11/07/2017 21:10	Cindy M Gehman	1
06024	Antimony	SW-846 6020	1	173100605001A	11/13/2017 07:34	Sarah L Burt	1
06025	Arsenic	SW-846 6020	1	173100605001A	11/13/2017 07:34	Sarah L Burt	1
06026	Barium	SW-846 6020	1	173100605001D	11/13/2017 07:34	Sarah L Burt	1
06027	Beryllium	SW-846 6020	1	173100605001A	11/13/2017 07:34	Sarah L Burt	1
06028	Cadmium	SW-846 6020	1	173100605001A	11/13/2017 07:34	Sarah L Burt	1
06031	Chromium	SW-846 6020	1	173100605001A	11/13/2017 07:34	Sarah L Burt	1
06032	Cobalt	SW-846 6020	1	173100605001A	11/13/2017 07:34	Sarah L Burt	1
06033	Copper	SW-846 6020	1	173100605001A	11/13/2017 07:34	Sarah L Burt	1
06035	Lead	SW-846 6020	1	173100605001A	11/13/2017 07:34	Sarah L Burt	1
06037	Manganese	SW-846 6020	1	173100605001A	11/13/2017 07:34	Sarah L Burt	1
06039	Nickel	SW-846 6020	1	173200605002A	11/17/2017 06:33	Sarah L Burt	1
06041	Selenium	SW-846 6020	1	173100605001B	11/13/2017 07:34	Sarah L Burt	1
06042	Silver	SW-846 6020	1	173100605001A	11/13/2017 07:34	Sarah L Burt	1
06045	Thallium	SW-846 6020	1	173100605001A	11/13/2017 07:34	Sarah L Burt	1
06048	Vanadium	SW-846 6020	1	173100605001A	11/13/2017 07:34	Sarah L Burt	1
00259	Mercury	SW-846 7470A	1	173110571302	11/08/2017 10:36	Damary Valentin	1
05705	ICP-WW/TL, 3010A (tot) - U3	SW-846 3010A	1	173100570504	11/06/2017 21:00	Annamaria Kuhns	1
06050	ICPMS-Water, 3020A - U3	SW-846 3020A	1	173100605001	11/07/2017 06:00	James L Mertz	1
06050	ICPMS-Water, 3020A - U3	SW-846 3020A	2	173200605002	11/16/2017 17:55	Barbara A Kane	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	173110571302	11/08/2017 02:45	Denise L Trimby	1
00354	Total Organic Carbon (Quad)	SW-846 9060A	1	17317667604A	11/13/2017 22:41	Drew M Gerhart	1

*=This limit was used in the evaluation of the final result

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15BEB

Lab Name: Lancaster Laboratories Contract:_____
Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____
Matrix: (soil/water) WATER Lab Sample ID: 9299879
Sample wt/vol: 5.0 (g/mL)mL Lab File ID:HP09355.i/17nov14b.b/yn14s45.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: not dec. Date Analyzed: 11/14/17
Column: (pack/cap) CAP Dilution Factor: 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
2.				
3.				
4.				
5.				
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FORM I VOA-TIC

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1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15BEB

Lab Name: Lancaster Laboratories Contract: _____
Lab Code: LANCAS Case No.: _____ SAS No.: _____ SDG No.: _____
Matrix: (soil/water) WATER Lab Sample ID: 9299879
Sample wt/vol: 248 (g/mL) mL Lab File ID: hk0868.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: Decanted: (Y/N) Date Extracted: 11/06/17
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 11/20/17
Injection Volume: 0.5 (uL) Dilution Factor: 1
GPC Cleanup: N pH: Extraction: Sepf
CONCENTRATION UNITS:
Number TICs found: 1 (ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	18.365	28	J
2.				
3. SVOCTIC	Total SVOC TICs		28	J
4.				
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FORM I SV-1

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Analysis Report

Sample Description: **CWKDERIVER3-TBLK-3 Blank Water**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/02/2017 09:00

CRG-The Chemours Co. FC, LLC
ELLE Sample #: WW 9299880
ELLE Group #: 1871169
Matrix: Blank Water

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	**ug/l**	
10335	Acetone	67-64-1	6	U	6	20	1
10335	Benzene	71-43-2	0.5	U	0.5	1	1
10335	Bromodichloromethane	75-27-4	0.5	U	0.5	1	1
10335	2-Butanone	78-93-3	3	U	3	10	1
10335	n-Butylbenzene	104-51-8	1	U	1	5	1
10335	sec-Butylbenzene	135-98-8	1	U	1	5	1
10335	tert-Butylbenzene	98-06-6	1	U	1	5	1
10335	Carbon Disulfide	75-15-0	1	U	1	5	1
10335	Carbon Tetrachloride	56-23-5	0.5	U	0.5	1	1
10335	Chlorobenzene	108-90-7	0.5	U	0.5	1	1
10335	Chloroethane	75-00-3	0.5	U	0.5	1	1
10335	Chloroform	67-66-3	0.5	U	0.5	1	1
10335	Chloromethane	74-87-3	0.5	U	0.5	1	1
10335	2-Chlorotoluene	95-49-8	1	U	1	5	1
10335	4-Chlorotoluene	106-43-4	1	U	1	5	1
10335	Chlorotrifluoroethene	79-38-9	2	U	2	5	1
10335	Dibromochloromethane	124-48-1	0.5	U	0.5	1	1
10335	1,2-Dibromoethane	106-93-4	0.5	U	0.5	1	1
10335	1,2-Dichlorobenzene	95-50-1	1	U	1	5	1
10335	1,3-Dichlorobenzene	541-73-1	1	U	1	5	1
10335	1,4-Dichlorobenzene	106-46-7	1	U	1	5	1
10335	Dichlorodifluoromethane	75-71-8	0.5	U	0.5	1	1
10335	1,1-Dichloroethane	75-34-3	0.5	U	0.5	1	1
10335	1,2-Dichloroethane	107-06-2	0.5	U	0.5	1	1
10335	1,1-Dichloroethene	75-35-4	0.5	U	0.5	1	1
10335	cis-1,2-Dichloroethene	156-59-2	0.5	U	0.5	1	1
10335	trans-1,2-Dichloroethene	156-60-5	0.5	U	0.5	1	1
10335	1,2-Dichloroethene (Total)	540-59-0	0.5	U	0.5	1	1
10335	Dichlorofluoromethane	75-43-4	0.5	U	0.5	1	1
10335	1,2-Dichloropropane	78-87-5	0.5	U	0.5	1	1
10335	1,1-Dichloropropene	563-58-6	1	U	1	5	1
10335	cis-1,3-Dichloropropene	10061-01-5	0.5	U	0.5	1	1
10335	Ethylbenzene	100-41-4	0.5	U	0.5	1	1
10335	Freon 113	76-13-1	2	U	2	10	1
10335	Freon 133a	75-88-7	2	U	2	5	1
10335	n-Hexane	110-54-3	2	U	2	5	1
10335	2-Hexanone	591-78-6	3	U	3	10	1
10335	Isobutyl Alcohol	78-83-1	100	U	100	250	1
10335	Isopropylbenzene	98-82-8	1	U	1	5	1
10335	p-Isopropyltoluene	99-87-6	1	U	1	5	1
10335	Methacrylonitrile	126-98-7	10	U	10	50	1
10335	Methyl Methacrylate	80-62-6	1	U	1	5	1

*=This limit was used in the evaluation of the final result

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Analysis Report

Sample Description: **CWKDERIVER3-TBLK-3 Blank Water**
DE RIVER NAPL DELINEATION PHASE III

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/02/2017 09:00

CRG-The Chemours Co. FC, LLC
ELLE Sample #: WW 9299880
ELLE Group #: 1871169
Matrix: Blank Water

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B**		**ug/l**		**ug/l**	**ug/l**	
10335	Methyl Tertiary Butyl Ether	1634-04-4	0.5	U	0.5	1	1
10335	4-Methyl-2-pentanone	108-10-1	3	U	3	10	1
10335	Methylene Chloride	75-09-2	0.5	U	0.5	1	1
10335	Propionitrile	107-12-0	30	U	30	100	1
10335	n-Propylbenzene	103-65-1	1	U	1	5	1
10335	Styrene	100-42-5	1	U	1	5	1
10335	1,1,1,2-Tetrachloroethane	630-20-6	0.5	U	0.5	1	1
10335	1,1,2,2-Tetrachloroethane	79-34-5	0.5	U	0.5	1	1
10335	Tetrachloroethene	127-18-4	0.5	U	0.5	1	1
10335	Tetrahydrofuran	109-99-9	4	U	4	10	1
10335	Toluene	108-88-3	0.5	U	0.5	1	1
10335	1,1,1-Trichloroethane	71-55-6	0.5	U	0.5	1	1
10335	1,1,2-Trichloroethane	79-00-5	0.5	U	0.5	1	1
10335	Trichloroethene	79-01-6	0.5	U	0.5	1	1
10335	Trichlorofluoromethane	75-69-4	0.5	U	0.5	1	1
10335	1,2,4-Trimethylbenzene	95-63-6	1	U	1	5	1
10335	1,3,5-Trimethylbenzene	108-67-8	1	U	1	5	1
10335	Vinyl Chloride	75-01-4	0.5	U	0.5	1	1
10335	m+p-Xylene	179601-23-1	0.5	U	0.5	1	1
10335	o-Xylene	95-47-6	0.5	U	0.5	1	1
10335	Xylene (Total)	1330-20-7	0.5	U	0.5	1	1

The NJ DKQP analyte list requirement was not met for Method 8260B. The client specified list is reported.

The NJ DKQP required reporting limit could not be attained for1,2-Dibromoethane.

GC/MS Volatiles	**SW-846 8260FRN Modified**		**ug/l**		**ug/l**	**ug/l**	
13066	Chlorodifluoroethane	75-68-3	1	UZ	1	5	1
13066	Chlorodifluoromethane	75-45-6	2	U	2	5	1
13066	Chlorofluoromethane	593-70-4	1	U	1	5	1
13066	Chloropentafluoroethane	76-15-3	15	U	15	50	1
13066	1,1-Dichloro-1-fluoroethane	1717-00-6	1	U	1	5	1
13066	1,2-Dichloro-1-fluoroethane	430-57-9	1	U	1	5	1
13066	Dichlorotetrafluoroethane	76-14-2	2	U	2	5	1
13066	1,2-Dichlorotrifluoroethane	354-23-4	1	U	1	5	1
13066	Dichlorotrifluoroethane	306-83-2	1	U	1	5	1
13066	Fluoromethane	593-53-3	3	U	3	10	1
13066	Freon 113a	354-58-5	5	U	5	20	1
13066	1,1,2-Trifluoroethane	430-66-0	2	U	2	5	1
13066	Vinyl fluoride	75-02-5	2	U	2	10	1

Z= The response for a target analyte(s) in the continuing calibration verification standard is outside the QC acceptance limits. Since the response is high indicating increased

*=This limit was used in the evaluation of the final result

Sample Description: **CWKDERIVER3-TBLK-3 Blank Water**
DE RIVER NAPL DELINEATION PHASE III

CRG-The Chemours Co. FC, LLC
ELLE Sample #: WW 9299880
ELLE Group #: 1871169
Matrix: Blank Water

Project Name: **CWK - DE RIVER NAPL DELINEATION PHASE III**

Submittal Date/Time: 11/03/2017 18:10
Collection Date/Time: 11/02/2017 09:00

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor

sensitivity, and the target analyte(s) is not detected in the sample, the data is reported.

00884 Volatile Library Search - 15

The results from the volatile library search are listed on the attached FORM 1 - VOA-TIC. The qualifiers appearing in the "Q" column are defined at the end of the report.

Sample Comments

State of New Jersey Lab Certification No. PA011

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10335	TCL Volatiles + Add'l Cmpds	SW-846 8260B	1	Y173182AA	11/14/2017 22:27	Don V Viray	1
13066	Freons	SW-846 8260FRN Modified	1	J173111AA	11/07/2017 16:02	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Y173182AA	11/14/2017 22:27	Don V Viray	1

*=This limit was used in the evaluation of the final result

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1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
15BTB

Lab Name: Lancaster Laboratories Contract:_____
Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____
Matrix: (soil/water) WATER Lab Sample ID: 9299880
Sample wt/vol: 5.0 (g/mL)mL Lab File ID:HP09355.i/17nov14b.b/yn14s46.d
Level: (low/med) LOW Date Received: 11/03/17
% Moisture: not dec. Date Analyzed: 11/14/17
Column: (pack/cap) CAP Dilution Factor: 1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. VOCTIC	Total VOC TICs		0	U
2.				
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4.				
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page 1 of 1

FORM I VOA-TIC

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result		MDL**	LOQ
	ug/kg		ug/kg	ug/kg
Batch number: J173141AA	Sample number(s): 9299863-9299864,9299866-9299868,9299870-9299872,9299874			
Chlorodifluoroethane	1	U	1	5
Chlorodifluoromethane	2	U	2	5
Chlorofluoromethane	1	U	1	5
Chloropentafluoroethane	15	U	15	50
1,1-Dichloro-1-fluoroethane	1	U	1	5
1,2-Dichloro-1-fluoroethane	1	U	1	5
Dichlorotetrafluoroethane	2	U	2	5
1,2-Dichlorotrifluoroethane	1	U	1	5
Dichlorotrifluoroethane	1	U	1	5
Fluoromethane	3	U	3	10
Freon 113a	5	U	5	20
1,1,2-Trifluoroethane	2	U	2	5
Vinyl fluoride	6	U	6	20
Batch number: J173171AA	Sample number(s): 9299865,9299873,9299875,9299877-9299878			
Chlorodifluoroethane	1	U	1	5
Chlorodifluoromethane	2	U	2	5
Chlorofluoromethane	1	U	1	5
Chloropentafluoroethane	15	U	15	50
1,1-Dichloro-1-fluoroethane	1	U	1	5
1,2-Dichloro-1-fluoroethane	1	U	1	5
Dichlorotetrafluoroethane	2	U	2	5
1,2-Dichlorotrifluoroethane	1	U	1	5
Dichlorotrifluoroethane	1	U	1	5
Fluoromethane	3	U	3	10
Freon 113a	5	U	5	20
1,1,2-Trifluoroethane	2	U	2	5
Vinyl fluoride	6	U	6	20
Batch number: J173181AA	Sample number(s): 9299876			
Chlorodifluoroethane	1	U	1	5
Chlorodifluoromethane	2	U	2	5
Chlorofluoromethane	1	U	1	5
Chloropentafluoroethane	15	U	15	50
1,1-Dichloro-1-fluoroethane	1	U	1	5
1,2-Dichloro-1-fluoroethane	1	U	1	5
Dichlorotetrafluoroethane	2	U	2	5
1,2-Dichlorotrifluoroethane	1	U	1	5
Dichlorotrifluoroethane	1	U	1	5
Fluoromethane	3	U	3	10

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Method Blank (continued)

Analysis Name	Result ug/kg		MDL** ug/kg	LOQ ug/kg
Freon 113a	5	U	5	20
1,1,2-Trifluoroethane	2	U	2	5
Vinyl fluoride	6	U	6	20
Batch number: R173162AA	Sample number(s): 9299863,9299868,9299870-9299872,9299876-9299877			
Acetone	350	U	350	1,000
Benzene	25	U	25	250
Bromodichloromethane	50	U	50	250
2-Butanone	200	U	200	500
n-Butylbenzene	50	U	50	250
sec-Butylbenzene	50	U	50	250
tert-Butylbenzene	50	U	50	250
Carbon Disulfide	50	U	50	250
Carbon Tetrachloride	50	U	50	250
Chlorobenzene	50	U	50	250
Chloroethane	100	U	100	250
Chloroform	50	U	50	250
Chloromethane	100	U	100	250
2-Chlorotoluene	50	U	50	250
4-Chlorotoluene	50	U	50	250
Chlorotrifluoroethene	100	U	100	250
Dibromochloromethane	50	U	50	250
1,2-Dibromoethane	50	U	50	250
1,2-Dichlorobenzene	50	U	50	250
1,3-Dichlorobenzene	50	U	50	250
1,4-Dichlorobenzene	50	U	50	250
Dichlorodifluoromethane	100	U	100	250
1,1-Dichloroethane	50	U	50	250
1,2-Dichloroethane	50	U	50	250
1,1-Dichloroethene	50	U	50	250
cis-1,2-Dichloroethene	50	U	50	250
trans-1,2-Dichloroethene	50	U	50	250
1,2-Dichloroethene (Total)	50	U	50	250
Dichlorofluoromethane	100	U	100	250
1,2-Dichloropropane	50	U	50	250
1,1-Dichloropropene	50	U	50	250
cis-1,3-Dichloropropene	50	U	50	250
Ethylbenzene	50	U	50	250
Freon 113	100	U	100	500
Freon 133a	100	U	100	250
n-Hexane	50	U	50	250
2-Hexanone	150	U	150	500
Isobutyl Alcohol	5,000	U	5,000	13,000
Isopropylbenzene	50	U	50	250
p-Isopropyltoluene	50	U	50	250

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Method Blank (continued)

Analysis Name	Result ug/kg		MDL** ug/kg	LOQ ug/kg
Methacrylonitrile	250	U	250	2,500
Methyl Methacrylate	50	U	50	250
Methyl Tertiary Butyl Ether	25	U	25	250
4-Methyl-2-pentanone	150	U	150	500
Methylene Chloride	100	U	100	250
Propionitrile	1,500	U	1,500	5,000
n-Propylbenzene	50	U	50	250
Styrene	50	U	50	250
1,1,1,2-Tetrachloroethane	50	U	50	250
1,1,2,2-Tetrachloroethane	50	U	50	250
Tetrachloroethene	50	U	50	250
Tetrahydrofuran	200	U	200	400
Toluene	50	U	50	250
1,1,1-Trichloroethane	50	U	50	250
1,1,2-Trichloroethane	50	U	50	250
Trichloroethene	50	U	50	250
Trichlorofluoromethane	100	U	100	250
1,2,4-Trimethylbenzene	50	U	50	250
1,3,5-Trimethylbenzene	50	U	50	250
Vinyl Chloride	50	U	50	250
m+p-Xylene	50	U	50	250
o-Xylene	50	U	50	250
Xylene (Total)	50	U	50	250
Batch number: R173171AA	Sample number(s): 9299866,9299872,9299878			
Acetone	350	U	350	1,000
Benzene	25	U	25	250
Bromodichloromethane	50	U	50	250
2-Butanone	200	U	200	500
n-Butylbenzene	50	U	50	250
sec-Butylbenzene	50	U	50	250
tert-Butylbenzene	50	U	50	250
Carbon Disulfide	50	U	50	250
Carbon Tetrachloride	50	U	50	250
Chlorobenzene	50	U	50	250
Chloroethane	100	U	100	250
Chloroform	50	U	50	250
Chloromethane	100	U	100	250
2-Chlorotoluene	50	U	50	250
4-Chlorotoluene	50	U	50	250
Chlorotrifluoroethene	100	U	100	250
Dibromochloromethane	50	U	50	250
1,2-Dibromoethane	50	U	50	250
1,2-Dichlorobenzene	50	U	50	250
1,3-Dichlorobenzene	50	U	50	250

*- Outside of specification
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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Method Blank (continued)

Analysis Name	Result ug/kg		MDL** ug/kg	LOQ ug/kg
1,4-Dichlorobenzene	50	U	50	250
Dichlorodifluoromethane	100	U	100	250
1,1-Dichloroethane	50	U	50	250
1,2-Dichloroethane	50	U	50	250
1,1-Dichloroethene	50	U	50	250
cis-1,2-Dichloroethene	50	U	50	250
trans-1,2-Dichloroethene	50	U	50	250
1,2-Dichloroethene (Total)	50	U	50	250
Dichlorofluoromethane	100	U	100	250
1,2-Dichloropropane	50	U	50	250
1,1-Dichloropropene	50	U	50	250
cis-1,3-Dichloropropene	50	U	50	250
Ethylbenzene	50	U	50	250
Freon 113	100	U	100	500
Freon 133a	100	U	100	250
n-Hexane	50	U	50	250
2-Hexanone	150	U	150	500
Isobutyl Alcohol	5,000	U	5,000	13,000
Isopropylbenzene	50	U	50	250
p-Isopropyltoluene	50	U	50	250
Methacrylonitrile	250	U	250	2,500
Methyl Methacrylate	50	U	50	250
Methyl Tertiary Butyl Ether	25	U	25	250
4-Methyl-2-pentanone	150	U	150	500
Methylene Chloride	100	U	100	250
Propionitrile	1,500	U	1,500	5,000
n-Propylbenzene	50	U	50	250
Styrene	50	U	50	250
1,1,1,2-Tetrachloroethane	50	U	50	250
1,1,2,2-Tetrachloroethane	50	U	50	250
Tetrachloroethene	50	U	50	250
Tetrahydrofuran	200	U	200	400
Toluene	50	U	50	250
1,1,1-Trichloroethane	50	U	50	250
1,1,2-Trichloroethane	50	U	50	250
Trichloroethene	50	U	50	250
Trichlorofluoromethane	100	U	100	250
1,2,4-Trimethylbenzene	50	U	50	250
1,3,5-Trimethylbenzene	50	U	50	250
Vinyl Chloride	50	U	50	250
m+p-Xylene	50	U	50	250
o-Xylene	50	U	50	250
Xylene (Total)	50	U	50	250

Batch number: X173131AA Sample number(s): 9299863

*- Outside of specification
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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Method Blank (continued)

Analysis Name	Result ug/kg		MDL** ug/kg	LOQ ug/kg
Acetone	7	U	7	20
Benzene	0.5	U	0.5	5
Bromodichloromethane	1	U	1	5
2-Butanone	4	U	4	10
n-Butylbenzene	1	U	1	5
sec-Butylbenzene	1	U	1	5
tert-Butylbenzene	1	U	1	5
Carbon Disulfide	1	U	1	5
Carbon Tetrachloride	1	U	1	5
Chloroethane	2	U	2	5
Chloroform	1	U	1	5
Chloromethane	2	U	2	5
2-Chlorotoluene	1	U	1	5
4-Chlorotoluene	1	U	1	5
Chlorotrifluoroethene	2	U	2	5
Dibromochloromethane	1	U	1	5
1,2-Dibromoethane	1	U	1	5
1,3-Dichlorobenzene	1	U	1	5
Dichlorodifluoromethane	2	U	2	5
1,1-Dichloroethane	1	U	1	5
1,2-Dichloroethane	1	U	1	5
1,1-Dichloroethene	1	U	1	5
cis-1,2-Dichloroethene	1	U	1	5
trans-1,2-Dichloroethene	1	U	1	5
1,2-Dichloroethene (Total)	1	U	1	5
Dichlorofluoromethane	2	U	2	5
1,2-Dichloropropane	1	U	1	5
1,1-Dichloropropene	1	U	1	5
cis-1,3-Dichloropropene	1	U	1	5
Ethylbenzene	1	U	1	5
Freon 133a	2	U	2	5
n-Hexane	1	U	1	5
2-Hexanone	3	U	3	10
Isobutyl Alcohol	100	U	100	250
Isopropylbenzene	1	U	1	5
p-Isopropyltoluene	1	U	1	5
Methacrylonitrile	5	U	5	50
Methyl Methacrylate	1	U	1	5
Methyl Tertiary Butyl Ether	0.5	U	0.5	5
4-Methyl-2-pentanone	3	U	3	10
Methylene Chloride	2	U	2	5
Propionitrile	30	U	30	100
n-Propylbenzene	1	U	1	5
Styrene	1	U	1	5
1,1,1,2-Tetrachloroethane	1	U	1	5

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Method Blank (continued)

Analysis Name	Result ug/kg		MDL** ug/kg	LOQ ug/kg
1,1,2,2-Tetrachloroethane	1	U	1	5
Tetrahydrofuran	4	U	4	8
Toluene	1	U	1	5
1,1,1-Trichloroethane	1	U	1	5
1,1,2-Trichloroethane	1	U	1	5
Trichloroethene	1	U	1	5
1,2,4-Trimethylbenzene	1	U	1	5
1,3,5-Trimethylbenzene	1	U	1	5
Vinyl Chloride	1	U	1	5
m+p-Xylene	1	U	1	5
o-Xylene	1	U	1	5
Xylene (Total)	1	U	1	5
Batch number: X173143AA	Sample number(s): 9299866-9299867,9299873-9299874			
Acetone	7	U	7	20
Benzene	0.5	U	0.5	5
Bromodichloromethane	1	U	1	5
2-Butanone	4	U	4	10
n-Butylbenzene	1	U	1	5
sec-Butylbenzene	1	U	1	5
tert-Butylbenzene	1	U	1	5
Carbon Disulfide	1	U	1	5
Carbon Tetrachloride	1	U	1	5
Chlorobenzene	1	U	1	5
Chloroethane	2	U	2	5
Chloroform	1	U	1	5
Chloromethane	2	U	2	5
2-Chlorotoluene	1	U	1	5
4-Chlorotoluene	1	U	1	5
Chlorotrifluoroethene	2	U	2	5
Dibromochloromethane	1	U	1	5
1,2-Dibromoethane	1	U	1	5
1,2-Dichlorobenzene	1	U	1	5
1,3-Dichlorobenzene	1	U	1	5
1,4-Dichlorobenzene	1	U	1	5
Dichlorodifluoromethane	2	U	2	5
1,1-Dichloroethane	1	U	1	5
1,2-Dichloroethane	1	U	1	5
1,1-Dichloroethene	1	U	1	5
cis-1,2-Dichloroethene	1	U	1	5
trans-1,2-Dichloroethene	1	U	1	5
1,2-Dichloroethene (Total)	1	U	1	5
Dichlorofluoromethane	2	U	2	5
1,2-Dichloropropane	1	U	1	5
1,1-Dichloropropene	1	U	1	5

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Method Blank (continued)

Analysis Name	Result ug/kg		MDL** ug/kg	LOQ ug/kg
cis-1,3-Dichloropropene	1	U	1	5
Ethylbenzene	1	U	1	5
Freon 113	2	U	2	10
Freon 133a	2	U	2	5
n-Hexane	1	U	1	5
2-Hexanone	3	U	3	10
Isobutyl Alcohol	100	U	100	250
Isopropylbenzene	1	U	1	5
p-Isopropyltoluene	1	U	1	5
Methacrylonitrile	5	U	5	50
Methyl Methacrylate	1	U	1	5
Methyl Tertiary Butyl Ether	0.5	U	0.5	5
4-Methyl-2-pentanone	3	U	3	10
Methylene Chloride	2	U	2	5
Propionitrile	30	U	30	100
n-Propylbenzene	1	U	1	5
Styrene	1	U	1	5
1,1,1,2-Tetrachloroethane	1	U	1	5
1,1,2,2-Tetrachloroethane	1	U	1	5
Tetrachloroethene	1	U	1	5
Tetrahydrofuran	4	U	4	8
Toluene	1	U	1	5
1,1,1-Trichloroethane	1	U	1	5
1,1,2-Trichloroethane	1	U	1	5
Trichloroethene	1	U	1	5
Trichlorofluoromethane	2	U	2	5
1,2,4-Trimethylbenzene	1	U	1	5
1,3,5-Trimethylbenzene	1	U	1	5
Vinyl Chloride	1	U	1	5
m+p-Xylene	1	U	1	5
o-Xylene	1	U	1	5
Xylene (Total)	1	U	1	5
Batch number: X173172AA	Sample number(s): 9299864-9299865,9299875			
Acetone	7	U	7	20
Benzene	0.5	U	0.5	5
Bromodichloromethane	1	U	1	5
2-Butanone	4	U	4	10
n-Butylbenzene	1	U	1	5
sec-Butylbenzene	1	U	1	5
tert-Butylbenzene	1	U	1	5
Carbon Disulfide	1	U	1	5
Carbon Tetrachloride	1	U	1	5
Chlorobenzene	1	U	1	5
Chloroethane	2	U	2	5

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Method Blank (continued)

Analysis Name	Result ug/kg		MDL** ug/kg	LOQ ug/kg
Chloroform	1	U	1	5
Chloromethane	2	U	2	5
2-Chlorotoluene	1	U	1	5
4-Chlorotoluene	1	U	1	5
Chlorotrifluoroethene	2	U	2	5
Dibromochloromethane	1	U	1	5
1,2-Dibromoethane	1	U	1	5
1,2-Dichlorobenzene	1	U	1	5
1,3-Dichlorobenzene	1	U	1	5
1,4-Dichlorobenzene	1	U	1	5
Dichlorodifluoromethane	2	U	2	5
1,1-Dichloroethane	1	U	1	5
1,2-Dichloroethane	1	U	1	5
1,1-Dichloroethene	1	U	1	5
cis-1,2-Dichloroethene	1	U	1	5
trans-1,2-Dichloroethene	1	U	1	5
1,2-Dichloroethene (Total)	1	U	1	5
Dichlorofluoromethane	2	U	2	5
1,2-Dichloropropane	1	U	1	5
1,1-Dichloropropene	1	U	1	5
cis-1,3-Dichloropropene	1	U	1	5
Ethylbenzene	1	U	1	5
Freon 113	2	U	2	10
Freon 133a	2	U	2	5
n-Hexane	1	U	1	5
2-Hexanone	3	U	3	10
Isobutyl Alcohol	100	U	100	250
Isopropylbenzene	1	U	1	5
p-Isopropyltoluene	1	U	1	5
Methacrylonitrile	5	U	5	50
Methyl Methacrylate	1	U	1	5
Methyl Tertiary Butyl Ether	0.5	U	0.5	5
4-Methyl-2-pentanone	3	U	3	10
Methylene Chloride	2	U	2	5
Propionitrile	30	U	30	100
n-Propylbenzene	1	U	1	5
Styrene	1	U	1	5
1,1,1,2-Tetrachloroethane	1	U	1	5
1,1,2,2-Tetrachloroethane	1	U	1	5
Tetrachloroethene	1	U	1	5
Tetrahydrofuran	4	U	4	8
Toluene	1	U	1	5
1,1,1-Trichloroethane	1	U	1	5
1,1,2-Trichloroethane	1	U	1	5
Trichloroethene	1	U	1	5

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Method Blank (continued)

Analysis Name	Result		MDL**	LOQ
	ug/kg		ug/kg	ug/kg
Trichlorofluoromethane	2	U	2	5
1,2,4-Trimethylbenzene	1	U	1	5
1,3,5-Trimethylbenzene	1	U	1	5
Vinyl Chloride	1	U	1	5
m+p-Xylene	1	U	1	5
o-Xylene	1	U	1	5
Xylene (Total)	1	U	1	5
	ug/l		ug/l	ug/l
Batch number: J173111AA	Sample number(s): 9299879-9299880			
Chlorodifluoroethane	1	U	1	5
Chlorodifluoromethane	2	U	2	5
Chlorofluoromethane	1	U	1	5
Chloropentafluoroethane	15	U	15	50
1,1-Dichloro-1-fluoroethane	1	U	1	5
1,2-Dichloro-1-fluoroethane	1	U	1	5
Dichlorotetrafluoroethane	2	U	2	5
1,2-Dichlorotrifluoroethane	1	U	1	5
Dichlorotrifluoroethane	1	U	1	5
Fluoromethane	3	U	3	10
Freon 113a	5	U	5	20
1,1,2-Trifluoroethane	2	U	2	5
Vinyl fluoride	2	U	2	10
Batch number: Y173182AA	Sample number(s): 9299879-9299880			
Acetone	6	U	6	20
Benzene	0.5	U	0.5	1
Bromodichloromethane	0.5	U	0.5	1
2-Butanone	3	U	3	10
n-Butylbenzene	1	U	1	5
sec-Butylbenzene	1	U	1	5
tert-Butylbenzene	1	U	1	5
Carbon Disulfide	1	U	1	5
Carbon Tetrachloride	0.5	U	0.5	1
Chlorobenzene	0.5	U	0.5	1
Chloroethane	0.5	U	0.5	1
Chloroform	0.5	U	0.5	1
Chloromethane	0.5	U	0.5	1
2-Chlorotoluene	1	U	1	5
4-Chlorotoluene	1	U	1	5
Chlorotrifluoroethene	2	U	2	5
Dibromochloromethane	0.5	U	0.5	1
1,2-Dibromoethane	0.5	U	0.5	1
1,2-Dichlorobenzene	1	U	1	5
1,3-Dichlorobenzene	1	U	1	5
1,4-Dichlorobenzene	1	U	1	5

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Method Blank (continued)

Analysis Name	Result	MDL**	LOQ
	ug/l	ug/l	ug/l
Dichlorodifluoromethane	0.5 U	0.5	1
1,1-Dichloroethane	0.5 U	0.5	1
1,2-Dichloroethane	0.5 U	0.5	1
1,1-Dichloroethene	0.5 U	0.5	1
cis-1,2-Dichloroethene	0.5 U	0.5	1
trans-1,2-Dichloroethene	0.5 U	0.5	1
1,2-Dichloroethene (Total)	0.5 U	0.5	1
Dichlorofluoromethane	0.5 U	0.5	1
1,2-Dichloropropane	0.5 U	0.5	1
1,1-Dichloropropene	1 U	1	5
cis-1,3-Dichloropropene	0.5 U	0.5	1
Ethylbenzene	0.5 U	0.5	1
Freon 113	2 U	2	10
Freon 133a	2 U	2	5
n-Hexane	2 U	2	5
2-Hexanone	3 U	3	10
Isobutyl Alcohol	100 U	100	250
Isopropylbenzene	1 U	1	5
p-Isopropyltoluene	1 U	1	5
Methacrylonitrile	10 U	10	50
Methyl Methacrylate	1 U	1	5
Methyl Tertiary Butyl Ether	0.5 U	0.5	1
4-Methyl-2-pentanone	3 U	3	10
Methylene Chloride	0.5 U	0.5	1
Propionitrile	30 U	30	100
n-Propylbenzene	1 U	1	5
Styrene	1 U	1	5
1,1,1,2-Tetrachloroethane	0.5 U	0.5	1
1,1,2,2-Tetrachloroethane	0.5 U	0.5	1
Tetrachloroethene	0.5 U	0.5	1
Tetrahydrofuran	4 U	4	10
Toluene	0.5 U	0.5	1
1,1,1-Trichloroethane	0.5 U	0.5	1
1,1,2-Trichloroethane	0.5 U	0.5	1
Trichloroethene	0.5 U	0.5	1
Trichlorofluoromethane	0.5 U	0.5	1
1,2,4-Trimethylbenzene	1 U	1	5
1,3,5-Trimethylbenzene	1 U	1	5
Vinyl Chloride	0.5 U	0.5	1
m+p-Xylene	0.5 U	0.5	1
o-Xylene	0.5 U	0.5	1
Xylene (Total)	0.5 U	0.5	1
	ug/kg	ug/kg	ug/kg

Batch number: 17310SLI026 Sample number(s): 9299863

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Method Blank (continued)

Analysis Name	Result ug/kg	MDL** ug/kg	LOQ ug/kg
Acenaphthene	3 U	3	17
Acenaphthylene	3 U	3	17
Acetophenone	17 U	17	33
4-Aminobiphenyl	170 U	170	500
Aniline	170 U	170	500
Anthracene	3 U	3	17
Benzidine	250 U	250	500
Benzo(a)anthracene	3 U	3	17
Benzo(a)pyrene	3 U	3	17
Benzo(b)fluoranthene	3 U	3	17
Benzo(g,h,i)perylene	3 U	3	17
Benzo(k)fluoranthene	3 U	3	17
1,1'-Biphenyl	17 U	17	33
4-Bromophenyl-phenylether	17 U	17	33
Butylbenzylphthalate	67 U	67	170
Di-n-butylphthalate	67 U	67	170
Carbazole	17 U	17	33
4-Chloro-3-methylphenol	17 U	17	33
4-Chloroaniline	33 U	33	67
bis(2-Chloroethoxy)methane	17 U	17	33
bis(2-Chloroethyl)ether	17 U	17	33
2-Chloronaphthalene	7 U	7	33
2-Chlorophenol	17 U	17	33
4-Chlorophenyl-phenylether	17 U	17	33
2,2'-oxybis(1-Chloropropane)	17 U	17	33
Chrysene	3 U	3	17
Dibenz(a,h)anthracene	3 U	3	17
Dibenzofuran	17 U	17	33
3,3'-Dichlorobenzidine	100 U	100	330
2,4-Dichlorophenol	17 U	17	33
Diethylphthalate	67 U	67	170
2,4-Dimethylphenol	17 U	17	33
Dimethylphthalate	67 U	67	170
4,6-Dinitro-2-methylphenol	170 U	170	500
2,4-Dinitrophenol	300 U	300	1,000
2,4-Dinitrotoluene	67 U	67	170
2,6-Dinitrotoluene	17 U	17	33
1,4-Dioxane	100 U	100	330
Diphenyl ether	17 U	17	33
1,2-Diphenylhydrazine	17 U	17	33
bis(2-Ethylhexyl)phthalate	67 U	67	170
Fluoranthene	3 U	3	17
Fluorene	3 U	3	17
Hexachlorobenzene	3 U	3	17
Hexachlorobutadiene	17 U	17	33

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Method Blank (continued)

Analysis Name	Result ug/kg	MDL** ug/kg	LOQ ug/kg
Hexachlorocyclopentadiene	170 U	170	500
Hexachloroethane	33 U	33	170
Indeno(1,2,3-cd)pyrene	3 U	3	17
Isophorone	17 U	17	33
2-Methylnaphthalene	3 U	3	17
2-Methylphenol	17 U	17	33
4-Methylphenol	17 U	17	33
Naphthalene	4 J	3	17
1-Naphthylamine	170 U	170	500
2-Naphthylamine	170 U	170	500
2-Nitroaniline	17 U	17	33
3-Nitroaniline	67 U	67	170
4-Nitroaniline	67 U	67	170
Nitrobenzene	17 U	17	33
2-Nitrophenol	17 U	17	33
4-Nitrophenol	170 U	170	500
N-Nitrosodimethylamine	67 U	67	170
N-Nitroso-di-n-propylamine	17 U	17	33
N-Nitrosodiphenylamine	17 U	17	33
Di-n-octylphthalate	67 U	67	170
Parathion	170 U	170	500
Pentachlorobenzene	17 U	17	33
Pentachlorophenol	33 U	33	170
Phenanthrene	3 U	3	17
Phenol	17 U	17	33
Pyrene	3 U	3	17
2,3,4,6-Tetrachlorophenol	67 U	67	170
o-Toluidine	200 U	200	670
1,2,4-Trichlorobenzene	17 U	17	33
2,4,5-Trichlorophenol	17 U	17	33
2,4,6-Trichlorophenol	17 U	17	33
Batch number: 17313SLI026	Sample number(s): 9299865-9299868,9299870-9299878		
Acenaphthene	3 U	3	17
Acenaphthylene	3 U	3	17
Acetophenone	17 U	17	33
4-Aminobiphenyl	170 U	170	500
Aniline	170 U	170	500
Anthracene	3 U	3	17
Benzidine	250 U	250	500
Benzo(a)anthracene	3 U	3	17
Benzo(a)pyrene	3 U	3	17
Benzo(b)fluoranthene	3 U	3	17
Benzo(g,h,i)perylene	3 U	3	17
Benzo(k)fluoranthene	3 U	3	17

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Method Blank (continued)

Analysis Name	Result ug/kg		MDL** ug/kg	LOQ ug/kg
1,1'-Biphenyl	17	U	17	33
4-Bromophenyl-phenylether	17	U	17	33
Butylbenzylphthalate	67	U	67	170
Di-n-butylphthalate	67	U	67	170
Carbazole	17	U	17	33
4-Chloro-3-methylphenol	17	U	17	33
4-Chloroaniline	33	U	33	67
bis(2-Chloroethoxy)methane	17	U	17	33
bis(2-Chloroethyl)ether	17	U	17	33
2-Chloronaphthalene	7	U	7	33
2-Chlorophenol	17	U	17	33
4-Chlorophenyl-phenylether	17	U	17	33
2,2'-oxybis(1-Chloropropane)	17	U	17	33
Chrysene	3	U	3	17
Dibenz(a,h)anthracene	3	U	3	17
Dibenzofuran	17	U	17	33
3,3'-Dichlorobenzidine	100	U	100	330
2,4-Dichlorophenol	17	U	17	33
Diethylphthalate	67	U	67	170
2,4-Dimethylphenol	17	U	17	33
Dimethylphthalate	67	U	67	170
4,6-Dinitro-2-methylphenol	170	U	170	500
2,4-Dinitrophenol	300	U	300	1,000
2,4-Dinitrotoluene	67	U	67	170
2,6-Dinitrotoluene	17	U	17	33
1,4-Dioxane	100	U	100	330
Diphenyl ether	17	U	17	33
1,2-Diphenylhydrazine	17	U	17	33
bis(2-Ethylhexyl)phthalate	67	U	67	170
Fluoranthene	3	U	3	17
Fluorene	3	U	3	17
Hexachlorobenzene	3	U	3	17
Hexachlorobutadiene	17	U	17	33
Hexachlorocyclopentadiene	170	U	170	500
Hexachloroethane	33	U	33	170
Indeno(1,2,3-cd)pyrene	3	U	3	17
Isophorone	17	U	17	33
2-Methylnaphthalene	3	U	3	17
2-Methylphenol	17	U	17	33
4-Methylphenol	17	U	17	33
Naphthalene	3	U	3	17
1-Naphthylamine	170	U	170	500
2-Naphthylamine	170	U	170	500
2-Nitroaniline	17	U	17	33
3-Nitroaniline	67	U	67	170

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Method Blank (continued)

Analysis Name	Result ug/kg	MDL** ug/kg	LOQ ug/kg
4-Nitroaniline	67 U	67	170
Nitrobenzene	17 U	17	33
2-Nitrophenol	17 U	17	33
4-Nitrophenol	170 U	170	500
N-Nitrosodimethylamine	67 U	67	170
N-Nitroso-di-n-propylamine	17 U	17	33
N-Nitrosodiphenylamine	17 U	17	33
Di-n-octylphthalate	67 U	67	170
Parathion	170 U	170	500
Pentachlorobenzene	17 U	17	33
Pentachlorophenol	33 U	33	170
Phenanthrene	3 U	3	17
Phenol	17 U	17	33
Pyrene	3 U	3	17
2,3,4,6-Tetrachlorophenol	67 U	67	170
o-Toluidine	200 U	200	670
1,2,4-Trichlorobenzene	17 U	17	33
2,4,5-Trichlorophenol	17 U	17	33
2,4,6-Trichlorophenol	17 U	17	33
Batch number: 17314SLE026	Sample number(s): 9299864		
Acenaphthene	3 U	3	17
Acenaphthylene	3 U	3	17
Acetophenone	17 U	17	33
4-Aminobiphenyl	170 U	170	500
Aniline	170 U	170	500
Anthracene	3 U	3	17
Benzidine	250 U	250	500
Benzo(a)anthracene	3 U	3	17
Benzo(a)pyrene	3 U	3	17
Benzo(b)fluoranthene	3 U	3	17
Benzo(g,h,i)perylene	3 U	3	17
Benzo(k)fluoranthene	3 U	3	17
1,1'-Biphenyl	17 U	17	33
4-Bromophenyl-phenylether	17 U	17	33
Butylbenzylphthalate	67 U	67	170
Di-n-butylphthalate	67 U	67	170
Carbazole	17 U	17	33
4-Chloro-3-methylphenol	17 U	17	33
4-Chloroaniline	33 U	33	67
bis(2-Chloroethoxy)methane	17 U	17	33
bis(2-Chloroethyl)ether	17 U	17	33
2-Chloronaphthalene	7 U	7	33
2-Chlorophenol	17 U	17	33
4-Chlorophenyl-phenylether	17 U	17	33

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Method Blank (continued)

Analysis Name	Result ug/kg	MDL** ug/kg	LOQ ug/kg
2,2'-oxybis(1-Chloropropane)	17 U	17	33
Chrysene	3 U	3	17
Dibenz(a,h)anthracene	3 U	3	17
Dibenzofuran	17 U	17	33
3,3'-Dichlorobenzidine	100 U	100	330
2,4-Dichlorophenol	17 U	17	33
Diethylphthalate	67 U	67	170
2,4-Dimethylphenol	17 U	17	33
Dimethylphthalate	67 U	67	170
4,6-Dinitro-2-methylphenol	170 U	170	500
2,4-Dinitrophenol	300 U	300	1,000
2,4-Dinitrotoluene	67 U	67	170
2,6-Dinitrotoluene	17 U	17	33
1,4-Dioxane	100 U	100	330
Diphenyl ether	17 U	17	33
1,2-Diphenylhydrazine	17 U	17	33
bis(2-Ethylhexyl)phthalate	67 U	67	170
Fluoranthene	3 U	3	17
Fluorene	3 U	3	17
Hexachlorobenzene	3 U	3	17
Hexachlorobutadiene	17 U	17	33
Hexachlorocyclopentadiene	170 U	170	500
Hexachloroethane	33 U	33	170
Indeno(1,2,3-cd)pyrene	3 U	3	17
Isophorone	17 U	17	33
2-Methylnaphthalene	3 U	3	17
2-Methylphenol	17 U	17	33
4-Methylphenol	17 U	17	33
Naphthalene	3 U	3	17
1-Naphthylamine	170 U	170	500
2-Naphthylamine	170 U	170	500
2-Nitroaniline	17 U	17	33
3-Nitroaniline	67 U	67	170
4-Nitroaniline	67 U	67	170
Nitrobenzene	17 U	17	33
2-Nitrophenol	17 U	17	33
4-Nitrophenol	170 U	170	500
N-Nitrosodimethylamine	67 U	67	170
N-Nitroso-di-n-propylamine	17 U	17	33
N-Nitrosodiphenylamine	17 U	17	33
Di-n-octylphthalate	67 U	67	170
Parathion	170 U	170	500
Pentachlorobenzene	17 U	17	33
Pentachlorophenol	33 U	33	170
Phenanthrene	3 U	3	17

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Method Blank (continued)

Analysis Name	Result	MDL**	LOQ
	ug/kg	ug/kg	ug/kg
Phenol	17 U	17	33
Pyrene	3 U	3	17
2,3,4,6-Tetrachlorophenol	67 U	67	170
o-Toluidine	200 U	200	670
1,2,4-Trichlorobenzene	17 U	17	33
2,4,5-Trichlorophenol	17 U	17	33
2,4,6-Trichlorophenol	17 U	17	33
	ug/l	ug/l	ug/l
Batch number: 17310WAE026	Sample number(s): 9299879		
Acenaphthene	0.1 U	0.1	0.5
Acenaphthylene	0.1 U	0.1	0.5
Acetophenone	0.5 U	0.5	1
4-Aminobiphenyl	0.5 U	0.5	1
Aniline	0.5 U	0.5	1
Anthracene	0.1 U	0.1	0.5
Benzidine	20 U	20	60
Benzo(a)anthracene	0.1 U	0.1	0.5
Benzo(a)pyrene	0.1 U	0.1	0.5
Benzo(b)fluoranthene	0.1 U	0.1	0.5
Benzo(g,h,i)perylene	0.1 U	0.1	0.5
Benzo(k)fluoranthene	0.1 U	0.1	0.5
1,1'-Biphenyl	0.5 U	0.5	1
4-Bromophenyl-phenylether	0.5 U	0.5	1
Butylbenzylphthalate	2 U	2	5
Di-n-butylphthalate	2 U	2	5
Carbazole	0.5 U	0.5	1
4-Chloro-3-methylphenol	0.5 U	0.5	1
4-Chloroaniline	2 U	2	4
bis(2-Chloroethoxy)methane	0.5 U	0.5	1
bis(2-Chloroethyl)ether	0.5 U	0.5	1
2-Chloronaphthalene	0.4 U	0.4	1
2-Chlorophenol	0.5 U	0.5	1
4-Chlorophenyl-phenylether	0.5 U	0.5	1
2,2'-oxybis(1-Chloropropane)	0.5 U	0.5	1
Chrysene	0.1 U	0.1	0.5
Dibenz(a,h)anthracene	0.1 U	0.1	0.5
Dibenzofuran	0.5 U	0.5	1
3,3'-Dichlorobenzidine	2 U	2	5
2,4-Dichlorophenol	0.5 U	0.5	1
Diethylphthalate	2 U	2	5
2,4-Dimethylphenol	0.5 U	0.5	1
Dimethylphthalate	2 U	2	5
4,6-Dinitro-2-methylphenol	5 U	5	15
2,4-Dinitrophenol	10 U	10	30

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Method Blank (continued)

Analysis Name	Result	MDL**	LOQ
	ug/l	ug/l	ug/l
2,4-Dinitrotoluene	1 U	1	5
2,6-Dinitrotoluene	0.5 U	0.5	1
1,4-Dioxane	1 U	1	5
Diphenyl ether	0.5 U	0.5	1
1,2-Diphenylhydrazine	0.5 U	0.5	1
bis(2-Ethylhexyl)phthalate	2 U	2	5
Fluoranthene	0.1 U	0.1	0.5
Fluorene	0.1 U	0.1	0.5
Hexachlorobenzene	0.1 U	0.1	0.5
Hexachlorobutadiene	0.5 U	0.5	1
Hexachlorocyclopentadiene	5 U	5	15
Hexachloroethane	1 U	1	5
Indeno(1,2,3-cd)pyrene	0.1 U	0.1	0.5
Isophorone	0.5 U	0.5	1
2-Methylnaphthalene	0.1 U	0.1	0.5
2-Methylphenol	0.5 U	0.5	1
4-Methylphenol	0.5 U	0.5	1
Naphthalene	0.1 U	0.1	0.5
1-Naphthylamine	5 U	5	15
2-Naphthylamine	5 U	5	15
2-Nitroaniline	0.5 U	0.5	1
3-Nitroaniline	0.5 U	0.5	1
4-Nitroaniline	0.5 U	0.5	1
Nitrobenzene	0.5 U	0.5	1
2-Nitrophenol	0.5 U	0.5	1
4-Nitrophenol	10 U	10	30
N-Nitrosodimethylamine	2 U	2	5
N-Nitroso-di-n-propylamine	0.5 U	0.5	1
N-Nitrosodiphenylamine	0.5 U	0.5	1
Di-n-octylphthalate	2 U	2	5
Parathion	2 U	2	5
Pentachlorobenzene	0.5 U	0.5	1
Pentachlorophenol	1 U	1	5
Phenanthrene	0.1 U	0.1	0.5
Phenol	0.5 U	0.5	1
Pyrene	0.1 U	0.1	0.5
2,3,4,6-Tetrachlorophenol	0.5 U	0.5	1
o-Toluidine	0.5 U	0.5	1
1,2,4-Trichlorobenzene	0.5 U	0.5	1
2,4,5-Trichlorophenol	0.5 U	0.5	1
2,4,6-Trichlorophenol	0.5 U	0.5	1
	mg/kg	mg/kg	mg/kg
Batch number: 173100570805	Sample number(s): 9299863-9299864,9299871-9299872,9299877-9299878		
Aluminum	16.0 J	8.94	20.0

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Method Blank (continued)

Analysis Name	Result	MDL**	LOQ
	mg/kg	mg/kg	mg/kg
Calcium	3.33 U	3.33	20.0
Iron	8.05 U	8.05	20.0
Magnesium	2.43 U	2.43	10.0
Potassium	16.7 U	16.7	50.0
Sodium	30.1 J	16.7	100
Zinc	0.240 U	0.240	2.00
Batch number: 173100570805A	Sample number(s): 9299863-9299864,9299871-9299872,9299877-9299878		
Antimony	0.0932 U	0.0932	0.200
Arsenic	0.128 U	0.128	0.400
Beryllium	0.0105 U	0.0105	0.100
Cadmium	0.0344 U	0.0344	0.100
Chromium	0.174 U	0.174	0.400
Cobalt	0.0312 U	0.0312	0.100
Copper	0.107 U	0.107	0.400
Lead	0.0222 U	0.0222	0.200
Manganese	0.181 U	0.181	0.400
Nickel	0.199 U	0.199	0.400
Silver	0.0292 U	0.0292	0.100
Thallium	0.0250 U	0.0250	0.100
Vanadium	0.0426 U	0.0426	0.100
Batch number: 173100570805B	Sample number(s): 9299863-9299864,9299871-9299872,9299877-9299878		
Selenium	0.100 U	0.100	0.400
Batch number: 173100570805D	Sample number(s): 9299863-9299864,9299871-9299872,9299877-9299878		
Barium	0.182 U	0.182	0.400
Batch number: 173100571105	Sample number(s): 9299863-9299864,9299871-9299872		
Mercury	0.0100 U	0.0100	0.100
Batch number: 173100571106	Sample number(s): 9299877-9299878		
Mercury	0.0100 U	0.0100	0.100
	mg/l	mg/l	mg/l
Batch number: 173100570504	Sample number(s): 9299879		
Aluminum	0.0894 U	0.0894	0.200
Calcium	0.0600 U	0.0600	0.200
Iron	0.0805 U	0.0805	0.200
Magnesium	0.0374 U	0.0374	0.100
Potassium	0.179 U	0.179	0.500
Sodium	0.321 U	0.321	1.00
Zinc	0.0065 U	0.0065	0.0200
Batch number: 173100605001A	Sample number(s): 9299879		
Antimony	0.00045 U	0.00045	0.0010
Arsenic	0.00072 U	0.00072	0.0020
Beryllium	0.000071 U	0.000071	0.00050

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Method Blank (continued)

Analysis Name	Result	MDL**	LOQ
	mg/l	mg/l	mg/l
Cadmium	0.00015 U	0.00015	0.00050
Chromium	0.00087 U	0.00087	0.0020
Cobalt	0.00016 U	0.00016	0.00050
Copper	0.00054 U	0.00054	0.0020
Lead	0.00011 U	0.00011	0.0010
Manganese	0.0011 J	0.00090	0.0020
Silver	0.00015 U	0.00015	0.00050
Thallium	0.00012 U	0.00012	0.00050
Vanadium	0.00021 U	0.00021	0.00050
Batch number: 173100605001B	Sample number(s): 9299879		
Selenium	0.00050 U	0.00050	0.0020
Batch number: 173100605001D	Sample number(s): 9299879		
Barium	0.00072 U	0.00072	0.0020
Batch number: 173110571302	Sample number(s): 9299879		
Mercury	0.000050 U	0.000050	0.00020
Batch number: 173200605002A	Sample number(s): 9299879		
Nickel	0.0010 U	0.0010	0.0020
	mg/kg	mg/kg	mg/kg
Batch number: 17317667632B	Sample number(s): 9299863-9299868,9299870-9299872		
Total Organic Carbon (TOC)	100 U	100	300
Batch number: 17317667633A	Sample number(s): 9299873-9299878		
Total Organic Carbon (TOC)	100 U	100	300
	mg/l	mg/l	mg/l
Batch number: 17317667604A	Sample number(s): 9299879		
Total Organic Carbon (Quad)	0.50 U	0.50	1.0

LCS/LCSD

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: J173141AA	Sample number(s): 9299863-9299864,9299866-9299868,9299870-9299872,9299874								
Chlorodifluoroethane	20	19.53	20	16.95	98	85	70-130	14	30
Chlorodifluoromethane	20	18.77	20	17.35	94	87	70-130	8	30
Chlorofluoromethane	20	17.97	20	16.81	90	84	70-130	7	30
Chloropentafluoroethane	250	367.55	250	349.85	147*	140*	70-130	5	30
1,1-Dichloro-1-fluoroethane	20	21.26	20	19.23	106	96	70-130	10	30
1,2-Dichloro-1-fluoroethane	20	17.47	20	17.71	87	89	70-130	1	30

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Dichlorotetrafluoroethane	20	18.97	20	19.01	95	95	70-130	0	30
1,2-Dichlorotrifluoroethane	20	18.01	20	16.92	90	85	70-130	6	30
Dichlorotrifluoroethane	20	17.87	20	17.36	89	87	70-130	3	30
Fluoromethane	25	19.4	25	18.68	78	75	70-130	4	30
Freon 113a	20	17.37	20	17.29	87	86	70-130	0	30
1,1,2-Trifluoroethane	20	18.46	20	17.32	92	87	70-130	6	30
Vinyl fluoride	100	78.38	100	75.42	78	75	70-130	4	30
Batch number: J173171AA	Sample number(s): 9299865,9299873,9299875,9299877-9299878								
Chlorodifluoroethane	20	19.12	20	17.21	96	86	70-130	11	30
Chlorodifluoromethane	20	18.97	20	17.07	95	85	70-130	11	30
Chlorofluoromethane	20	17.93	20	16.92	90	85	70-130	6	30
Chloropentafluoroethane	250	266.68	250	252.08	107	101	70-130	6	30
1,1-Dichloro-1-fluoroethane	20	18.48	20	16.12	92	81	70-130	14	30
1,2-Dichloro-1-fluoroethane	20	19.29	20	18.77	96	94	70-130	3	30
Dichlorotetrafluoroethane	20	18.3	20	17.58	91	88	70-130	4	30
1,2-Dichlorotrifluoroethane	20	18.78	20	17.35	94	87	70-130	8	30
Dichlorotrifluoroethane	20	19.3	20	18.07	96	90	70-130	7	30
Fluoromethane	25	36.56	25	33.28	146*	133*	70-130	9	30
Freon 113a	20	19.64	20	17.69	98	88	70-130	10	30
1,1,2-Trifluoroethane	20	16.88	20	16.31	84	82	70-130	3	30
Vinyl fluoride	100	93.47	100	82.83	93	83	70-130	12	30
Batch number: J173181AA	Sample number(s): 9299876								
Chlorodifluoroethane	20	23.81	20	22.1	119	111	70-130	7	30
Chlorodifluoromethane	20	21.07	20	20.22	105	101	70-130	4	30
Chlorofluoromethane	20	19.38	20	19.18	97	96	70-130	1	30
Chloropentafluoroethane	250	246.07	250	248.11	98	99	70-130	1	30
1,1-Dichloro-1-fluoroethane	20	21.18	20	20.23	106	101	70-130	5	30
1,2-Dichloro-1-fluoroethane	20	20.36	20	19.42	102	97	70-130	5	30
Dichlorotetrafluoroethane	20	18.58	20	18.46	93	92	70-130	1	30
1,2-Dichlorotrifluoroethane	20	20.12	20	19.09	101	95	70-130	5	30
Dichlorotrifluoroethane	20	20.42	20	19.4	102	97	70-130	5	30
Fluoromethane	25	43.03	25	40.79	172*	163*	70-130	5	30
Freon 113a	20	18.77	20	17.95	94	90	70-130	4	30
1,1,2-Trifluoroethane	20	19.23	20	19.35	96	97	70-130	1	30
Vinyl fluoride	100	107.28	100	111.08	107	111	70-130	3	30
Batch number: R173162AA	Sample number(s): 9299863,9299868,9299870-9299872,9299876-9299877								
Acetone	7500	7168.56	7500	6871.25	96	92	60-140	4	30
Benzene	1000	1043.01	1000	1006.66	104	101	70-130	4	30
Bromodichloromethane	1000	1013.26	1000	994.36	101	99	70-130	2	30
2-Butanone	7500	5545.22	7500	5798.18	74	77	60-140	4	30
n-Butylbenzene	1000	958.38	1000	1015.92	96	102	70-130	6	30
sec-Butylbenzene	1000	908.49	1000	970.57	91	97	70-130	7	30

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
tert-Butylbenzene	1000	864.71	1000	960.15	86	96	70-130	10	30
Carbon Disulfide	1000	1023	1000	989.62	102	99	60-140	3	30
Carbon Tetrachloride	1000	1026.45	1000	1032.08	103	103	70-130	1	30
Chlorobenzene	1000	966.58	1000	974.46	97	97	70-130	1	30
Chloroethane	1000	761.71	1000	803.88	76	80	60-140	5	30
Chloroform	1000	1035.74	1000	1035.74	104	104	70-130	0	30
Chloromethane	1000	967.5	1000	908.52	97	91	60-140	6	30
2-Chlorotoluene	1000	884.71	1000	932.67	88	93	70-130	5	30
4-Chlorotoluene	1000	893.02	1000	930.64	89	93	70-130	4	30
Chlorotrifluoroethene	1000	750.38	1000	781.49	75	78	70-130	4	30
Dibromochloromethane	1000	962.6	1000	985.8	96	99	70-130	2	30
1,2-Dibromoethane	1000	941.53	1000	980	94	98	70-130	4	30
1,2-Dichlorobenzene	1000	941.18	1000	977.99	94	98	70-130	4	30
1,3-Dichlorobenzene	1000	921.92	1000	959.6	92	96	70-130	4	30
1,4-Dichlorobenzene	1000	926.79	1000	975.19	93	98	70-130	5	30
Dichlorodifluoromethane	1000	932.94	1000	852.23	93	85	60-140	9	30
1,1-Dichloroethane	1000	1043.26	1000	1010.09	104	101	70-130	3	30
1,2-Dichloroethane	1000	1036.29	1000	1020.93	104	102	70-130	1	30
1,1-Dichloroethene	1000	1103.99	1000	1080.48	110	108	70-130	2	30
cis-1,2-Dichloroethene	1000	1074.68	1000	1040.14	107	104	70-130	3	30
trans-1,2-Dichloroethene	1000	1054.29	1000	1014.54	105	101	70-130	4	30
1,2-Dichloroethene (Total)	2000	2128.98	2000	2054.68	106	103	70-130	4	30
Dichlorofluoromethane	1000	960.04	1000	913.64	96	91	70-130	5	30
1,2-Dichloropropane	1000	1031.11	1000	1042.74	103	104	70-130	1	30
1,1-Dichloropropene	1000	1003.87	1000	1007.9	100	101	70-130	0	30
cis-1,3-Dichloropropene	1000	1034.59	1000	1026.95	103	103	70-130	1	30
Ethylbenzene	1000	938.27	1000	957.11	94	96	70-130	2	30
Freon 113	1000	1095.33	1000	1027.39	110	103	70-130	6	30
Freon 133a	1000	923.14	1000	1021.38	92	102	70-130	10	30
n-Hexane	1000	1023.48	1000	1019.36	102	102	70-130	0	30
2-Hexanone	5000	4649.14	5000	4662.34	93	93	60-140	0	30
Isobutyl Alcohol	25000	22063.99	25000	22879.24	88	92	70-130	4	30
Isopropylbenzene	1000	947.05	1000	971.81	95	97	70-130	3	30
p-Isopropyltoluene	1000	944.91	1000	1012.71	94	101	70-130	7	30
Methacrylonitrile	7500	7652.78	7500	7492.49	102	100	70-130	2	30
Methyl Methacrylate	1000	978.53	1000	986.5	98	99	70-130	1	30
Methyl Tertiary Butyl Ether	1000	1008.07	1000	989	101	99	70-130	2	30
4-Methyl-2-pentanone	5000	5061.27	5000	5092.88	101	102	60-140	1	30
Methylene Chloride	1000	1072.56	1000	1026.3	107	103	70-130	4	30
Propionitrile	7500	7995.87	7500	7493.84	107	100	70-130	6	30
n-Propylbenzene	1000	877.01	1000	954.73	88	95	70-130	8	30
Styrene	1000	935.36	1000	959.09	94	96	70-130	3	30
1,1,1,2-Tetrachloroethane	1000	948.21	1000	969.98	95	97	70-130	2	30
1,1,2,2-Tetrachloroethane	1000	901.97	1000	917.93	90	92	70-130	2	30

*- Outside of specification
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(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Tetrachloroethene	1000	953.64	1000	982.05	95	98	70-130	3	30
Tetrahydrofuran	5000	4249.02	5000	4477.78	85	90	70-130	5	30
Toluene	1000	958.91	1000	1003.88	96	100	70-130	5	30
1,1,1-Trichloroethane	1000	1050.43	1000	1047.32	105	105	70-130	0	30
1,1,2-Trichloroethane	1000	1004.84	1000	1014.75	100	101	70-130	1	30
Trichloroethene	1000	1016.04	1000	1010.42	102	101	70-130	1	30
Trichlorofluoromethane	1000	942.07	1000	876.22	94	88	60-140	7	30
1,2,4-Trimethylbenzene	1000	897.35	1000	944.73	90	94	70-130	5	30
1,3,5-Trimethylbenzene	1000	891.76	1000	964.8	89	96	70-130	8	30
Vinyl Chloride	1000	985.59	1000	961.65	99	96	70-130	2	30
m+p-Xylene	2000	1927.75	2000	1991.48	96	100	70-130	3	30
o-Xylene	1000	944.47	1000	959.24	94	96	70-130	2	30
Xylene (Total)	3000	2872.22	3000	2950.72	96	98	70-130	3	30
Batch number: R173171AA	Sample number(s): 9299866,9299872,9299878								
Acetone	7500	7528.82	7500	6998.66	100	93	60-140	7	30
Benzene	1000	1039.49	1000	1015.28	104	102	70-130	2	30
Bromodichloromethane	1000	978.05	1000	1012.53	98	101	70-130	3	30
2-Butanone	7500	5661.83	7500	5746.68	75	77	60-140	1	30
n-Butylbenzene	1000	908.8	1000	932.62	91	93	70-130	3	30
sec-Butylbenzene	1000	893.32	1000	932.78	89	93	70-130	4	30
tert-Butylbenzene	1000	881.2	1000	894.62	88	89	70-130	2	30
Carbon Disulfide	1000	1033.05	1000	996.24	103	100	60-140	4	30
Carbon Tetrachloride	1000	1033.27	1000	1011.09	103	101	70-130	2	30
Chlorobenzene	1000	932.86	1000	945.95	93	95	70-130	1	30
Chloroethane	1000	756.02	1000	820.53	76	82	60-140	8	30
Chloroform	1000	1026.79	1000	1005.17	103	101	70-130	2	30
Chloromethane	1000	958.23	1000	902.58	96	90	60-140	6	30
2-Chlorotoluene	1000	876.93	1000	904.76	88	90	70-130	3	30
4-Chlorotoluene	1000	890.68	1000	877.17	89	88	70-130	2	30
Chlorotrifluoroethene	1000	642.31	1000	797.69	64*	80	70-130	22	30
Dibromochloromethane	1000	919.02	1000	912.71	92	91	70-130	1	30
1,2-Dibromoethane	1000	937.68	1000	915.23	94	92	70-130	2	30
1,2-Dichlorobenzene	1000	915.74	1000	927.86	92	93	70-130	1	30
1,3-Dichlorobenzene	1000	898.04	1000	946.22	90	95	70-130	5	30
1,4-Dichlorobenzene	1000	915.29	1000	945.24	92	95	70-130	3	30
Dichlorodifluoromethane	1000	894.68	1000	893.31	89	89	60-140	0	30
1,1-Dichloroethane	1000	1056.42	1000	1026.14	106	103	70-130	3	30
1,2-Dichloroethane	1000	1044.77	1000	1018.49	104	102	70-130	3	30
1,1-Dichloroethene	1000	1136.71	1000	1057.69	114	106	70-130	7	30
cis-1,2-Dichloroethene	1000	1098.9	1000	1054.75	110	105	70-130	4	30
trans-1,2-Dichloroethene	1000	1102.95	1000	1049.89	110	105	70-130	5	30
1,2-Dichloroethene (Total)	2000	2201.86	2000	2104.64	110	105	70-130	5	30
Dichlorofluoromethane	1000	904.81	1000	884.03	90	88	70-130	2	30

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,2-Dichloropropane	1000	1035.26	1000	1049.12	104	105	70-130	1	30
1,1-Dichloropropene	1000	1035.18	1000	1002.88	104	100	70-130	3	30
cis-1,3-Dichloropropene	1000	1032.84	1000	1029.02	103	103	70-130	0	30
Ethylbenzene	1000	911.77	1000	906.56	91	91	70-130	1	30
Freon 113	1000	1115.81	1000	950.39	112	95	70-130	16	30
Freon 133a	1000	917.98	1000	1040.42	92	104	70-130	13	30
n-Hexane	1000	1027.49	1000	986.72	103	99	70-130	4	30
2-Hexanone	5000	4371.84	5000	4291.63	87	86	60-140	2	30
Isobutyl Alcohol	25000	20679.53	25000	22151.5	83	89	70-130	7	30
Isopropylbenzene	1000	916.44	1000	907.59	92	91	70-130	1	30
p-Isopropyltoluene	1000	914.08	1000	953.13	91	95	70-130	4	30
Methacrylonitrile	7500	7693.52	7500	7489.69	103	100	70-130	3	30
Methyl Methacrylate	1000	953.01	1000	967.8	95	97	70-130	2	30
Methyl Tertiary Butyl Ether	1000	1035.78	1000	987.67	104	99	70-130	5	30
4-Methyl-2-pentanone	5000	4949.83	5000	4871.99	99	97	60-140	2	30
Methylene Chloride	1000	1049.51	1000	1029.09	105	103	70-130	2	30
Propionitrile	7500	8129.62	7500	7754.42	108	103	70-130	5	30
n-Propylbenzene	1000	856.2	1000	880.83	86	88	70-130	3	30
Styrene	1000	886.55	1000	885.82	89	89	70-130	0	30
1,1,1,2-Tetrachloroethane	1000	919.62	1000	931.52	92	93	70-130	1	30
1,1,2,2-Tetrachloroethane	1000	897.15	1000	879.96	90	88	70-130	2	30
Tetrachloroethene	1000	952.23	1000	930.01	95	93	70-130	2	30
Tetrahydrofuran	5000	4188.85	5000	4099.4	84	82	70-130	2	30
Toluene	1000	977.27	1000	946.34	98	95	70-130	3	30
1,1,1-Trichloroethane	1000	1034.5	1000	1011.72	103	101	70-130	2	30
1,1,2-Trichloroethane	1000	970.08	1000	957.77	97	96	70-130	1	30
Trichloroethene	1000	997.94	1000	1012.16	100	101	70-130	1	30
Trichlorofluoromethane	1000	920.6	1000	835.88	92	84	60-140	10	30
1,2,4-Trimethylbenzene	1000	862.74	1000	894.88	86	89	70-130	4	30
1,3,5-Trimethylbenzene	1000	879.88	1000	890.94	88	89	70-130	1	30
Vinyl Chloride	1000	957.2	1000	911.74	96	91	70-130	5	30
m+p-Xylene	2000	1902.93	2000	1886.01	95	94	70-130	1	30
o-Xylene	1000	905.76	1000	915.07	91	92	70-130	1	30
Xylene (Total)	3000	2808.69	3000	2801.08	94	93	70-130	0	30
Batch number: X173131AA	Sample number(s): 9299863								
Acetone	150	155.22	150	165.26	103	110	60-140	6	30
Benzene	20	20.28	20	20.2	101	101	70-130	0	30
Bromodichloromethane	20	18.38	20	18.48	92	92	70-130	1	30
2-Butanone	150	148.09	150	161.18	99	107	60-140	8	30
n-Butylbenzene	20	17.86	20	17.65	89	88	70-130	1	30
sec-Butylbenzene	20	17.43	20	17.24	87	86	70-130	1	30
tert-Butylbenzene	20	18.06	20	17.95	90	90	70-130	1	30
Carbon Disulfide	20	18.9	20	18.58	94	93	60-140	2	30

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Carbon Tetrachloride	20	19.35	20	18.74	97	94	70-130	3	30
Chloroethane	20	18.81	20	18.4	94	92	60-140	2	30
Chloroform	20	20.01	20	19.92	100	100	70-130	0	30
Chloromethane	20	20.03	20	19.75	100	99	60-140	1	30
2-Chlorotoluene	20	17.37	20	17.17	87	86	70-130	1	30
4-Chlorotoluene	20	17.93	20	17.84	90	89	70-130	0	30
Chlorotrifluoroethene	20	25.65	20	26.14	128	131*	70-130	2	30
Dibromochloromethane	20	16.77	20	16.96	84	85	70-130	1	30
1,2-Dibromoethane	20	16.94	20	17.45	85	87	70-130	3	30
1,3-Dichlorobenzene	20	18.25	20	18.01	91	90	70-130	1	30
Dichlorodifluoromethane	20	19.38	20	19.3	97	97	60-140	0	30
1,1-Dichloroethane	20	19.65	20	19.76	98	99	70-130	1	30
1,2-Dichloroethane	20	19.74	20	19.93	99	100	70-130	1	30
1,1-Dichloroethene	20	19.74	20	19.71	99	99	70-130	0	30
cis-1,2-Dichloroethene	20	20.04	20	20.01	100	100	70-130	0	30
trans-1,2-Dichloroethene	20	19.75	20	19.76	99	99	70-130	0	30
1,2-Dichloroethene (Total)	40	39.79	40	39.77	99	99	70-130	0	30
Dichlorofluoromethane	20	13.88	20	13.74	69*	69*	70-130	1	30
1,2-Dichloropropane	20	21.04	20	21.13	105	106	70-130	0	30
1,1-Dichloropropene	20	18.78	20	18.62	94	93	70-130	1	30
cis-1,3-Dichloropropene	20	16.68	20	17.19	83	86	70-130	3	30
Ethylbenzene	20	18.58	20	18.44	93	92	70-130	1	30
Freon 133a	20	16.42	20	16.75	82	84	70-130	2	30
n-Hexane	20	17.88	20	17.77	89	89	70-130	1	30
2-Hexanone	100	91.23	100	100.07	91	100	60-140	9	30
Isobutyl Alcohol	500	604.75	500	578.02	121	116	70-130	5	30
Isopropylbenzene	20	17.56	20	17.45	88	87	70-130	1	30
p-Isopropyltoluene	20	17.69	20	17.3	88	87	70-130	2	30
Methacrylonitrile	150	151.58	150	161.16	101	107	70-130	6	30
Methyl Methacrylate	20	17.43	20	18.62	87	93	70-130	7	30
Methyl Tertiary Butyl Ether	20	14.9	20	15.93	74	80	70-130	7	30
4-Methyl-2-pentanone	100	99.16	100	106.69	99	107	60-140	7	30
Methylene Chloride	20	19.81	20	20.09	99	100	70-130	1	30
Propionitrile	150	194.38	150	179.2	130	119	70-130	8	30
n-Propylbenzene	20	18.28	20	18.02	91	90	70-130	1	30
Styrene	20	18.63	20	18.43	93	92	70-130	1	30
1,1,1,2-Tetrachloroethane	20	18.06	20	18.21	90	91	70-130	1	30
1,1,2,2-Tetrachloroethane	20	16.95	20	17.59	85	88	70-130	4	30
Tetrahydrofuran	100	119.71	100	116.08	120	116	70-130	3	30
Toluene	20	18.84	20	18.69	94	93	70-130	1	30
1,1,1-Trichloroethane	20	19.92	20	19.64	100	98	70-130	1	30
1,1,2-Trichloroethane	20	18.76	20	19.05	94	95	70-130	2	30
Trichloroethene	20	19.07	20	19.03	95	95	70-130	0	30
1,2,4-Trimethylbenzene	20	17.7	20	17.38	88	87	70-130	2	30

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,3,5-Trimethylbenzene	20	17.31	20	17.19	87	86	70-130	1	30
Vinyl Chloride	20	19.17	20	19.1	96	95	70-130	0	30
m+p-Xylene	40	37.95	40	37.71	95	94	70-130	1	30
o-Xylene	20	17.12	20	17.22	86	86	70-130	1	30
Xylene (Total)	60	55.07	60	54.93	92	92	70-130	0	30
Batch number: X173143AA	Sample number(s): 9299866-9299867,9299873-9299874								
Acetone	150	183.2	150	170.08	122	113	60-140	7	30
Benzene	20	20.16	20	19.98	101	100	70-130	1	30
Bromodichloromethane	20	18.4	20	18.09	92	90	70-130	2	30
2-Butanone	150	150.5	150	147.74	100	98	60-140	2	30
n-Butylbenzene	20	17.34	20	17.17	87	86	70-130	1	30
sec-Butylbenzene	20	16.83	20	16.81	84	84	70-130	0	30
tert-Butylbenzene	20	15.89	20	15.9	79	80	70-130	0	30
Carbon Disulfide	20	19.1	20	18.85	95	94	60-140	1	30
Carbon Tetrachloride	20	19.12	20	18.93	96	95	70-130	1	30
Chlorobenzene	20	18.76	20	18.41	94	92	70-130	2	30
Chloroethane	20	18.27	20	18.01	91	90	60-140	1	30
Chloroform	20	19.84	20	19.56	99	98	70-130	1	30
Chloromethane	20	19.17	20	19.4	96	97	60-140	1	30
2-Chlorotoluene	20	16.85	20	16.8	84	84	70-130	0	30
4-Chlorotoluene	20	17.09	20	17.16	85	86	70-130	0	30
Chlorotrifluoroethene	20	24.3	20	24.39	121	122	70-130	0	30
Dibromochloromethane	20	16.63	20	16.21	83	81	70-130	3	30
1,2-Dibromoethane	20	16.62	20	16.54	83	83	70-130	0	30
1,2-Dichlorobenzene	20	17.56	20	17.29	88	86	70-130	2	30
1,3-Dichlorobenzene	20	17.58	20	17.28	88	86	70-130	2	30
1,4-Dichlorobenzene	20	18.15	20	17.86	91	89	70-130	2	30
Dichlorodifluoromethane	20	19.46	20	19.04	97	95	60-140	2	30
1,1-Dichloroethane	20	19.41	20	19.58	97	98	70-130	1	30
1,2-Dichloroethane	20	19.59	20	19.52	98	98	70-130	0	30
1,1-Dichloroethene	20	19.63	20	19.46	98	97	70-130	1	30
cis-1,2-Dichloroethene	20	19.88	20	19.64	99	98	70-130	1	30
trans-1,2-Dichloroethene	20	19.93	20	19.64	100	98	70-130	1	30
1,2-Dichloroethene (Total)	40	39.81	40	39.28	100	98	70-130	1	30
Dichlorofluoromethane	20	20.08	20	19.61	100	98	70-130	2	30
1,2-Dichloropropane	20	21.01	20	20.57	105	103	70-130	2	30
1,1-Dichloropropene	20	18.66	20	18.6	93	93	70-130	0	30
cis-1,3-Dichloropropene	20	16.35	20	16.54	82	83	70-130	1	30
Ethylbenzene	20	18.06	20	17.81	90	89	70-130	1	30
Freon 113	20	20.23	20	19.77	101	99	70-130	2	30
Freon 133a	20	15.45	20	15.64	77	78	70-130	1	30
n-Hexane	20	18.02	20	17.89	90	89	70-130	1	30
2-Hexanone	100	90.39	100	88.33	90	88	60-140	2	30

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Isobutyl Alcohol	500	597.98	500	561.05	120	112	70-130	6	30
Isopropylbenzene	20	16.99	20	16.83	85	84	70-130	1	30
p-Isopropyltoluene	20	17.29	20	17.08	86	85	70-130	1	30
Methacrylonitrile	150	153.45	150	151.67	102	101	70-130	1	30
Methyl Methacrylate	20	17.73	20	17.63	89	88	70-130	1	30
Methyl Tertiary Butyl Ether	20	15.19	20	15.37	76	77	70-130	1	30
4-Methyl-2-pentanone	100	100.43	100	97.51	100	98	60-140	3	30
Methylene Chloride	20	21.14	20	20.93	106	105	70-130	1	30
Propionitrile	150	186.34	150	177.79	124	119	70-130	5	30
n-Propylbenzene	20	17.77	20	17.69	89	88	70-130	0	30
Styrene	20	17.82	20	17.55	89	88	70-130	2	30
1,1,1,2-Tetrachloroethane	20	17.75	20	17.49	89	87	70-130	1	30
1,1,2,2-Tetrachloroethane	20	16.7	20	16.64	83	83	70-130	0	30
Tetrachloroethene	20	18.26	20	17.79	91	89	70-130	3	30
Tetrahydrofuran	100	116.73	100	111.32	117	111	70-130	5	30
Toluene	20	18.21	20	18.06	91	90	70-130	1	30
1,1,1-Trichloroethane	20	19.52	20	19.33	98	97	70-130	1	30
1,1,2-Trichloroethane	20	18.23	20	17.89	91	89	70-130	2	30
Trichloroethene	20	18.81	20	18.76	94	94	70-130	0	30
Trichlorofluoromethane	20	22.19	20	21.53	111	108	60-140	3	30
1,2,4-Trimethylbenzene	20	16.98	20	16.84	85	84	70-130	1	30
1,3,5-Trimethylbenzene	20	16.66	20	16.79	83	84	70-130	1	30
Vinyl Chloride	20	19.14	20	18.89	96	94	70-130	1	30
m+p-Xylene	40	36.98	40	36.44	92	91	70-130	1	30
o-Xylene	20	16.42	20	16.38	82	82	70-130	0	30
Xylene (Total)	60	53.41	60	52.82	89	88	70-130	1	30
Batch number: X173172AA	Sample number(s): 9299864-9299865,9299875								
Acetone	150	160.48	150	157.59	107	105	60-140	2	30
Benzene	20	19.57	20	19.62	98	98	70-130	0	30
Bromodichloromethane	20	17.94	20	17.95	90	90	70-130	0	30
2-Butanone	150	154.16	150	151.23	103	101	60-140	2	30
n-Butylbenzene	20	17.02	20	17.07	85	85	70-130	0	30
sec-Butylbenzene	20	16.72	20	16.69	84	83	70-130	0	30
tert-Butylbenzene	20	15.81	20	15.75	79	79	70-130	0	30
Carbon Disulfide	20	18	20	18.17	90	91	60-140	1	30
Carbon Tetrachloride	20	18.41	20	18.71	92	94	70-130	2	30
Chlorobenzene	20	18.49	20	18.37	92	92	70-130	1	30
Chloroethane	20	17.61	20	17.59	88	88	60-140	0	30
Chloroform	20	19.22	20	19.25	96	96	70-130	0	30
Chloromethane	20	19.26	20	18.86	96	94	60-140	2	30
2-Chlorotoluene	20	16.69	20	16.64	83	83	70-130	0	30
4-Chlorotoluene	20	17.13	20	17.08	86	85	70-130	0	30
Chlorotrifluoroethene	20	34.62	20	33.94	173*	170*	70-130	2	30

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Dibromochloromethane	20	16.23	20	16.35	81	82	70-130	1	30
1,2-Dibromoethane	20	16.93	20	16.72	85	84	70-130	1	30
1,2-Dichlorobenzene	20	17.32	20	17.38	87	87	70-130	0	30
1,3-Dichlorobenzene	20	17.45	20	17.32	87	87	70-130	1	30
1,4-Dichlorobenzene	20	17.76	20	17.95	89	90	70-130	1	30
Dichlorodifluoromethane	20	18.9	20	19.16	95	96	60-140	1	30
1,1-Dichloroethane	20	19.07	20	18.79	95	94	70-130	1	30
1,2-Dichloroethane	20	19.43	20	19.54	97	98	70-130	1	30
1,1-Dichloroethene	20	19.36	20	19.49	97	97	70-130	1	30
cis-1,2-Dichloroethene	20	19.33	20	19.19	97	96	70-130	1	30
trans-1,2-Dichloroethene	20	19.2	20	19.41	96	97	70-130	1	30
1,2-Dichloroethene (Total)	40	38.53	40	38.6	96	96	70-130	0	30
Dichlorofluoromethane	20	18.3	20	18.67	92	93	70-130	2	30
1,2-Dichloropropane	20	20.54	20	20.5	103	102	70-130	0	30
1,1-Dichloropropene	20	18.22	20	18.28	91	91	70-130	0	30
cis-1,3-Dichloropropene	20	16.66	20	16.27	83	81	70-130	2	30
Ethylbenzene	20	17.84	20	17.74	89	89	70-130	1	30
Freon 113	20	19.13	20	19.81	96	99	70-130	4	30
Freon 133a	20	16.39	20	16.14	82	81	70-130	2	30
n-Hexane	20	17.78	20	17.5	89	88	70-130	2	30
2-Hexanone	100	93.32	100	92.2	93	92	60-140	1	30
Isobutyl Alcohol	500	581.5	500	597.32	116	119	70-130	3	30
Isopropylbenzene	20	16.92	20	16.84	85	84	70-130	0	30
p-Isopropyltoluene	20	16.96	20	17.03	85	85	70-130	0	30
Methacrylonitrile	150	156.3	150	154.27	104	103	70-130	1	30
Methyl Methacrylate	20	17.85	20	17.52	89	88	70-130	2	30
Methyl Tertiary Butyl Ether	20	15.49	20	15.11	77	76	70-130	3	30
4-Methyl-2-pentanone	100	101.9	100	100.58	102	101	60-140	1	30
Methylene Chloride	20	19.25	20	19.11	96	96	70-130	1	30
Propionitrile	150	185.87	150	193.61	124	129	70-130	4	30
n-Propylbenzene	20	17.49	20	17.49	87	87	70-130	0	30
Styrene	20	17.68	20	17.93	88	90	70-130	1	30
1,1,1,2-Tetrachloroethane	20	17.36	20	17.42	87	87	70-130	0	30
1,1,2,2-Tetrachloroethane	20	17.02	20	16.82	85	84	70-130	1	30
Tetrachloroethene	20	17.95	20	18.19	90	91	70-130	1	30
Tetrahydrofuran	100	117.32	100	122.92	117	123	70-130	5	30
Toluene	20	18.03	20	18.01	90	90	70-130	0	30
1,1,1-Trichloroethane	20	19.73	20	19.55	99	98	70-130	1	30
1,1,2-Trichloroethane	20	18.06	20	18.5	90	92	70-130	2	30
Trichloroethene	20	18.54	20	18.56	93	93	70-130	0	30
Trichlorofluoromethane	20	20.23	20	20.52	101	103	60-140	1	30
1,2,4-Trimethylbenzene	20	16.72	20	16.85	84	84	70-130	1	30
1,3,5-Trimethylbenzene	20	16.54	20	16.53	83	83	70-130	0	30
Vinyl Chloride	20	18.55	20	18.47	93	92	70-130	0	30

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
m+p-Xylene	40	36.45	40	36.6	91	91	70-130	0	30
o-Xylene	20	16.53	20	16.49	83	82	70-130	0	30
Xylene (Total)	60	52.99	60	53.09	88	88	70-130	0	30
	ug/l	**ug/l**	**ug/l**	**ug/l**					
Batch number: J173111AA	Sample number(s): 9299879-9299880								
Chlorodifluoroethane	20	29.67	20	28.01	148	140	57-153	6	30
Chlorodifluoromethane	20	29.74	20	29.28	149	146	60-157	2	30
Chlorofluoromethane	20	24.56	20	24.99	123*	125*	65-120	2	30
Chloropentafluoroethane	250	336.11	250	328.68	134	131	13-171	2	30
1,1-Dichloro-1-fluoroethane	20	24.25	20	23.64	121	118	56-158	3	30
1,2-Dichloro-1-fluoroethane	20	25.6	20	25.84	128*	129*	71-120	1	30
Dichlorotetrafluoroethane	20	22.32	20	22.41	112	112	49-159	0	30
1,2-Dichlorotrifluoroethane	20	26.28	20	27.05	131*	135*	73-127	3	30
Dichlorotrifluoroethane	20	24.26	20	24.69	121*	123*	80-120	2	30
Fluoromethane	25	18.7	25	18.04	75	72	24-147	4	30
Freon 113a	20	24.63	20	25.26	123	126	60-156	3	30
1,1,2-Trifluoroethane	20	30.66	20	29.65	153*	148*	66-133	3	30
Vinyl fluoride	50	42.85	50	44.42	86	89	25-139	4	30
Batch number: Y173182AA	Sample number(s): 9299879-9299880								
Acetone	150	153.62	150	148.07	102	99	60-140	4	20
Benzene	20	20.97	20	20.86	105	104	70-130	1	20
Bromodichloromethane	20	19.97	20	19.74	100	99	70-130	1	20
2-Butanone	150	150.69	150	151.01	100	101	60-140	0	20
n-Butylbenzene	20	20.93	20	21.02	105	105	70-130	0	20
sec-Butylbenzene	20	21.56	20	21.65	108	108	70-130	0	20
tert-Butylbenzene	20	20.79	20	20.84	104	104	70-130	0	20
Carbon Disulfide	20	23.04	20	23.06	115	115	60-140	0	20
Carbon Tetrachloride	20	18.34	20	18.33	92	92	70-130	0	20
Chlorobenzene	20	20.43	20	20.41	102	102	70-130	0	20
Chloroethane	20	18.51	20	18.66	93	93	60-140	1	20
Chloroform	20	20.16	20	20.3	101	101	70-130	1	20
Chloromethane	20	17.75	20	17.91	89	90	60-140	1	20
2-Chlorotoluene	20	20.28	20	20.38	101	102	70-130	0	20
4-Chlorotoluene	20	20.17	20	20.32	101	102	70-130	1	20
Chlorotrifluoroethene	20	14.18	20	14.51	71	73	70-130	2	20
Dibromochloromethane	20	20.31	20	19.91	102	100	70-130	2	20
1,2-Dibromoethane	20	20.8	20	20.75	104	104	70-130	0	20
1,2-Dichlorobenzene	20	20.33	20	20.33	102	102	70-130	0	20
1,3-Dichlorobenzene	20	20.42	20	20.34	102	102	70-130	0	20
1,4-Dichlorobenzene	20	20.66	20	20.63	103	103	70-130	0	20
Dichlorodifluoromethane	20	16.4	20	16.61	82	83	60-140	1	20
1,1-Dichloroethane	20	20.57	20	20.61	103	103	70-130	0	20

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
1,2-Dichloroethane	20	19.26	20	19.25	96	96	70-130	0	20
1,1-Dichloroethene	20	22.49	20	22.68	112	113	70-130	1	20
cis-1,2-Dichloroethene	20	21.67	20	21.45	108	107	70-130	1	20
trans-1,2-Dichloroethene	20	21.53	20	21.71	108	109	70-130	1	20
1,2-Dichloroethene (Total)	40	43.2	40	43.15	108	108	70-130	0	20
Dichlorofluoromethane	20	19.04	20	18.94	95	95	70-130	1	20
1,2-Dichloropropane	20	20.82	20	20.85	104	104	70-130	0	20
1,1-Dichloropropene	20	20.39	20	20.35	102	102	70-130	0	20
cis-1,3-Dichloropropene	20	20.33	20	20.42	102	102	70-130	0	20
Ethylbenzene	20	21.31	20	21.36	107	107	70-130	0	20
Freon 113	20	19.92	20	19.77	100	99	70-130	1	20
Freon 133a	20	16.32	20	16.57	82	83	70-130	2	20
n-Hexane	20	19.88	20	20.11	99	101	70-130	1	20
2-Hexanone	100	107.95	100	107.83	108	108	60-140	0	20
Isobutyl Alcohol	500	505.23	500	490.9	101	98	70-130	3	20
Isopropylbenzene	20	21.51	20	21.47	108	107	70-130	0	20
p-Isopropyltoluene	20	21.48	20	21.61	107	108	70-130	1	20
Methacrylonitrile	150	161.36	150	160.95	108	107	70-130	0	20
Methyl Methacrylate	20	20.75	20	20.96	104	105	70-130	1	20
Methyl Tertiary Butyl Ether	20	20.78	20	20.77	104	104	70-130	0	20
4-Methyl-2-pentanone	100	103.64	100	104.01	104	104	60-140	0	20
Methylene Chloride	20	21.3	20	21.35	106	107	70-130	0	20
Propionitrile	150	162.93	150	161.5	109	108	70-130	1	20
n-Propylbenzene	20	21.39	20	21.35	107	107	70-130	0	20
Styrene	20	22.39	20	22.41	112	112	70-130	0	20
1,1,1,2-Tetrachloroethane	20	19.58	20	19.24	98	96	70-130	2	20
1,1,2,2-Tetrachloroethane	20	20.85	20	20.95	104	105	70-130	0	20
Tetrachloroethene	20	20.44	20	20.47	102	102	70-130	0	20
Tetrahydrofuran	100	106.5	100	105.89	106	106	70-130	1	20
Toluene	20	21.35	20	21.55	107	108	70-130	1	20
1,1,1-Trichloroethane	20	19	20	19.28	95	96	70-130	1	20
1,1,2-Trichloroethane	20	21.7	20	21.36	108	107	70-130	2	20
Trichloroethene	20	20.34	20	20.37	102	102	70-130	0	20
Trichlorofluoromethane	20	18.15	20	18.18	91	91	60-140	0	20
1,2,4-Trimethylbenzene	20	21.43	20	21.62	107	108	70-130	1	20
1,3,5-Trimethylbenzene	20	21.31	20	21.35	107	107	70-130	0	20
Vinyl Chloride	20	17.97	20	18.1	90	90	70-130	1	20
m+p-Xylene	40	43.18	40	43.29	108	108	70-130	0	20
o-Xylene	20	20.94	20	20.97	105	105	70-130	0	20
Xylene (Total)	60	64.12	60	64.27	107	107	70-130	0	20
	ug/kg	**ug/kg**	**ug/kg**	**ug/kg**					
Batch number: 17310SLI026	Sample number(s): 9299863								
Acenaphthene	1666.67	1813.52			109		70-130		

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Acenaphthylene	1666.67	1742.26			105		70-130		
Acetophenone	1666.67	1610.73			97		70-130		
4-Aminobiphenyl	1666.67	2590.77			155*		70-130		
Aniline	1666.67	1067.91			64		20-160		
Anthracene	1666.67	1684.64			101		70-130		
Benzidine	8333.33	3023.13			36		20-160		
Benzo(a)anthracene	1666.67	1693.82			102		70-130		
Benzo(a)pyrene	1666.67	1562.21			94		70-130		
Benzo(b)fluoranthene	1666.67	1660.61			100		70-130		
Benzo(g,h,i)perylene	1666.67	1627.56			98		70-130		
Benzo(k)fluoranthene	1666.67	1733.08			104		70-130		
1,1'-Biphenyl	1666.67	1780.11			107		70-130		
4-Bromophenyl-phenylether	1666.67	1794.39			108		70-130		
Butylbenzylphthalate	1666.67	1552.52			93		70-130		
Di-n-butylphthalate	1666.67	1734.36			104		70-130		
Carbazole	1666.67	1684.85			101		70-130		
4-Chloro-3-methylphenol	1666.67	1671.02			100		70-130		
4-Chloroaniline	1666.67	434.37			26*		70-130		
bis(2-Chloroethoxy)methane	1666.67	1743.19			105		70-130		
bis(2-Chloroethyl)ether	1666.67	1697.44			102		70-130		
2-Chloronaphthalene	1666.67	1731.46			104		70-130		
2-Chlorophenol	1666.67	1769.18			106		70-130		
4-Chlorophenyl-phenylether	1666.67	1647.64			99		70-130		
2,2'-oxybis(1-Chloropropane)	1666.67	1532.73			92		70-130		
Chrysene	1666.67	1734.52			104		70-130		
Dibenz(a,h)anthracene	1666.67	1655.94			99		70-130		
Dibenzofuran	1666.67	1737.11			104		70-130		
3,3'-Dichlorobenzidine	1666.67	1519.66			91		70-130		
2,4-Dichlorophenol	1666.67	1725.43			104		70-130		
Diethylphthalate	1666.67	1684.75			101		70-130		
2,4-Dimethylphenol	1666.67	1428.49			86		70-130		
Dimethylphthalate	1666.67	1717.32			103		70-130		
4,6-Dinitro-2-methylphenol	1666.67	1832.53			110		70-130		
2,4-Dinitrophenol	3333.33	3536.43			106		20-160		
2,4-Dinitrotoluene	1666.67	1782.03			107		70-130		
2,6-Dinitrotoluene	1666.67	1751.5			105		70-130		
1,4-Dioxane	1666.67	1479.45			89		20-160		
Diphenyl ether	1666.67	1674.18			100		70-130		
1,2-Diphenylhydrazine	1666.67	1898.03			114		70-130		
bis(2-Ethylhexyl)phthalate	1666.67	1720.73			103		70-130		
Fluoranthene	1666.67	1627.94			98		70-130		
Fluorene	1666.67	1692.39			102		70-130		
Hexachlorobenzene	1666.67	1657.62			99		70-130		
Hexachlorobutadiene	1666.67	1587.34			95		70-130		

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Hexachlorocyclopentadiene	3333.33	3302.91			99		20-160		
Hexachloroethane	1666.67	1699.56			102		20-160		
Indeno(1,2,3-cd)pyrene	1666.67	1627.9			98		70-130		
Isophorone	1666.67	1559.88			94		70-130		
2-Methylnaphthalene	1666.67	1650.43			99		70-130		
2-Methylphenol	1666.67	1711.36			103		70-130		
4-Methylphenol	1666.67	1520.27			91		20-160		
Naphthalene	1666.67	1683.43			101		70-130		
1-Naphthylamine	3333.33	1438.28			43*		70-130		
2-Naphthylamine	3333.33	859.51			26*		70-130		
2-Nitroaniline	1666.67	1783.06			107		70-130		
3-Nitroaniline	1666.67	1384.92			83		70-130		
4-Nitroaniline	1666.67	1569.81			94		70-130		
Nitrobenzene	1666.67	1810.76			109		70-130		
2-Nitrophenol	1666.67	1759.28			106		70-130		
4-Nitrophenol	1666.67	1258.65			76		20-160		
N-Nitrosodimethylamine	1666.67	1753.67			105		20-160		
N-Nitroso-di-n-propylamine	1666.67	1610.82			97		70-130		
N-Nitrosodiphenylamine	1666.67	1695.09			102		70-130		
Di-n-octylphthalate	1666.67	1736.21			104		70-130		
Parathion	1666.67	1635			98		20-160		
Pentachlorobenzene	1666.67	1623.92			97		20-160		
Pentachlorophenol	1666.67	1594.1			96		20-160		
Phenanthrene	1666.67	1684.19			101		70-130		
Phenol	1666.67	1708.63			103		20-160		
Pyrene	1666.67	1678.58			101		70-130		
2,3,4,6-Tetrachlorophenol	1666.67	1701.91			102		70-130		
o-Toluidine	1666.67	731.91			44*		70-130		
1,2,4-Trichlorobenzene	1666.67	1685.31			101		70-130		
2,4,5-Trichlorophenol	1666.67	1746.56			105		70-130		
2,4,6-Trichlorophenol	1666.67	1867.62			112		70-130		
Batch number: 17313SLI026	Sample number(s): 9299865-9299868,9299870-9299878								
Acenaphthene	1666.67	1764.09			106		70-130		
Acenaphthylene	1666.67	1739.83			104		70-130		
Acetophenone	1666.67	1709.99			103		70-130		
4-Aminobiphenyl	1666.67	2841.72			171*		70-130		
Aniline	1666.67	1106.55			66		20-160		
Anthracene	1666.67	1712.35			103		70-130		
Benzidine	8333.33	2436.93			29		20-160		
Benzo(a)anthracene	1666.67	1777.22			107		70-130		
Benzo(a)pyrene	1666.67	1677.5			101		70-130		
Benzo(b)fluoranthene	1666.67	1716.33			103		70-130		
Benzo(g,h,i)perylene	1666.67	1554.59			93		70-130		

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Benzo(k)fluoranthene	1666.67	1822.26			109		70-130		
1,1'-Biphenyl	1666.67	1778.15			107		70-130		
4-Bromophenyl-phenylether	1666.67	1745.63			105		70-130		
Butylbenzylphthalate	1666.67	1801.79			108		70-130		
Di-n-butylphthalate	1666.67	1792.81			108		70-130		
Carbazole	1666.67	1741.66			104		70-130		
4-Chloro-3-methylphenol	1666.67	1856.73			111		70-130		
4-Chloroaniline	1666.67	430.17			26*		70-130		
bis(2-Chloroethoxy)methane	1666.67	1767.45			106		70-130		
bis(2-Chloroethyl)ether	1666.67	1669.71			100		70-130		
2-Chloronaphthalene	1666.67	1590.38			95		70-130		
2-Chlorophenol	1666.67	1789.15			107		70-130		
4-Chlorophenyl-phenylether	1666.67	1705.78			102		70-130		
2,2'-oxybis(1-Chloropropane)	1666.67	1795.24			108		70-130		
Chrysene	1666.67	1772.56			106		70-130		
Dibenz(a,h)anthracene	1666.67	1612.18			97		70-130		
Dibenzofuran	1666.67	1741.19			104		70-130		
3,3'-Dichlorobenzidine	1666.67	1534.64			92		70-130		
2,4-Dichlorophenol	1666.67	1835.88			110		70-130		
Diethylphthalate	1666.67	1536.27			92		70-130		
2,4-Dimethylphenol	1666.67	1530.72			92		70-130		
Dimethylphthalate	1666.67	1727.82			104		70-130		
4,6-Dinitro-2-methylphenol	1666.67	1658.76			100		70-130		
2,4-Dinitrophenol	3333.33	3052.48			92		20-160		
2,4-Dinitrotoluene	1666.67	1778.76			107		70-130		
2,6-Dinitrotoluene	1666.67	1873.12			112		70-130		
1,4-Dioxane	1666.67	1296.9			78		20-160		
Diphenyl ether	1666.67	1621.11			97		70-130		
1,2-Diphenylhydrazine	1666.67	1894.56			114		70-130		
bis(2-Ethylhexyl)phthalate	1666.67	1761.8			106		70-130		
Fluoranthene	1666.67	1716.55			103		70-130		
Fluorene	1666.67	1749.47			105		70-130		
Hexachlorobenzene	1666.67	1696.84			102		70-130		
Hexachlorobutadiene	1666.67	1665.5			100		70-130		
Hexachlorocyclopentadiene	3333.33	2710.61			81		20-160		
Hexachloroethane	1666.67	1632.7			98		20-160		
Indeno(1,2,3-cd)pyrene	1666.67	1600.31			96		70-130		
Isophorone	1666.67	1683.61			101		70-130		
2-Methylnaphthalene	1666.67	1689.33			101		70-130		
2-Methylphenol	1666.67	1830.46			110		70-130		
4-Methylphenol	1666.67	1744.59			105		20-160		
Naphthalene	1666.67	1688.8			101		70-130		
1-Naphthylamine	3333.33	1507.01			45*		70-130		
2-Naphthylamine	3333.33	740.72			22*		70-130		

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2-Nitroaniline	1666.67	1833.75			110		70-130		
3-Nitroaniline	1666.67	1512.78			91		70-130		
4-Nitroaniline	1666.67	1633.35			98		70-130		
Nitrobenzene	1666.67	1746.31			105		70-130		
2-Nitrophenol	1666.67	1784.8			107		70-130		
4-Nitrophenol	1666.67	1595.61			96		20-160		
N-Nitrosodimethylamine	1666.67	1727.22			104		20-160		
N-Nitroso-di-n-propylamine	1666.67	1756.17			105		70-130		
N-Nitrosodiphenylamine	1666.67	1712.92			103		70-130		
Di-n-octylphthalate	1666.67	1801.03			108		70-130		
Parathion	1666.67	1688.67			101		20-160		
Pentachlorobenzene	1666.67	1655.39			99		20-160		
Pentachlorophenol	1666.67	1685.75			101		20-160		
Phenanthrene	1666.67	1717.69			103		70-130		
Phenol	1666.67	1827.42			110		20-160		
Pyrene	1666.67	1657.99			99		70-130		
2,3,4,6-Tetrachlorophenol	1666.67	1779.73			107		70-130		
o-Toluidine	1666.67	752.15			45*		70-130		
1,2,4-Trichlorobenzene	1666.67	1665.94			100		70-130		
2,4,5-Trichlorophenol	1666.67	1824.85			109		70-130		
2,4,6-Trichlorophenol	1666.67	1875.25			113		70-130		
Batch number: 17314SLE026	Sample number(s): 9299864								
Acenaphthene	1666.67	1897.85			114		70-130		
Acenaphthylene	1666.67	1824.71			109		70-130		
Acetophenone	1666.67	1601.5			96		70-130		
4-Aminobiphenyl	1666.67	2336.16			140*		70-130		
Aniline	1666.67	1061.43			64		20-160		
Anthracene	1666.67	1736.99			104		70-130		
Benzidine	8333.33	3134.09			38		20-160		
Benzo(a)anthracene	1666.67	1775.17			107		70-130		
Benzo(a)pyrene	1666.67	1661.22			100		70-130		
Benzo(b)fluoranthene	1666.67	1729.52			104		70-130		
Benzo(g,h,i)perylene	1666.67	1627.09			98		70-130		
Benzo(k)fluoranthene	1666.67	1844.47			111		70-130		
1,1'-Biphenyl	1666.67	1775.96			107		70-130		
4-Bromophenyl-phenylether	1666.67	1585.51			95		70-130		
Butylbenzylphthalate	1666.67	1835.76			110		70-130		
Di-n-butylphthalate	1666.67	1747.9			105		70-130		
Carbazole	1666.67	1645.02			99		70-130		
4-Chloro-3-methylphenol	1666.67	1604.22			96		70-130		
4-Chloroaniline	1666.67	280.23			17*		70-130		
bis(2-Chloroethoxy)methane	1666.67	1555.7			93		70-130		
bis(2-Chloroethyl)ether	1666.67	1658.22			99		70-130		

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2-Chloronaphthalene	1666.67	2261.84			136*		70-130		
2-Chlorophenol	1666.67	1855.61			111		70-130		
4-Chlorophenyl-phenylether	1666.67	1621.19			97		70-130		
2,2'-oxybis(1-Chloropropane)	1666.67	1401.2			84		70-130		
Chrysene	1666.67	1826.94			110		70-130		
Dibenz(a,h)anthracene	1666.67	1758.48			106		70-130		
Dibenzofuran	1666.67	1792.94			108		70-130		
3,3'-Dichlorobenzidine	1666.67	1589.33			95		70-130		
2,4-Dichlorophenol	1666.67	1664.77			100		70-130		
Diethylphthalate	1666.67	1856.88			111		70-130		
2,4-Dimethylphenol	1666.67	1350.34			81		70-130		
Dimethylphthalate	1666.67	1688.76			101		70-130		
4,6-Dinitro-2-methylphenol	1666.67	1728.96			104		70-130		
2,4-Dinitrophenol	3333.33	3658			110		20-160		
2,4-Dinitrotoluene	1666.67	1815.33			109		70-130		
2,6-Dinitrotoluene	1666.67	1786.44			107		70-130		
1,4-Dioxane	1666.67	1130.28			68		20-160		
Diphenyl ether	1666.67	1614.06			97		70-130		
1,2-Diphenylhydrazine	1666.67	1792.55			108		70-130		
bis(2-Ethylhexyl)phthalate	1666.67	1909.35			115		70-130		
Fluoranthene	1666.67	1590.26			95		70-130		
Fluorene	1666.67	1746.91			105		70-130		
Hexachlorobenzene	1666.67	1542.63			93		70-130		
Hexachlorobutadiene	1666.67	1564.8			94		70-130		
Hexachlorocyclopentadiene	3333.33	3189.45			96		20-160		
Hexachloroethane	1666.67	1547.76			93		20-160		
Indeno(1,2,3-cd)pyrene	1666.67	1693.67			102		70-130		
Isophorone	1666.67	1566.12			94		70-130		
2-Methylnaphthalene	1666.67	1592.91			96		70-130		
2-Methylphenol	1666.67	1717.86			103		70-130		
4-Methylphenol	1666.67	1520.22			91		20-160		
Naphthalene	1666.67	1742.83			105		70-130		
1-Naphthylamine	3333.33	1668.35			50*		70-130		
2-Naphthylamine	3333.33	727.6			22*		70-130		
2-Nitroaniline	1666.67	1840.75			110		70-130		
3-Nitroaniline	1666.67	1566.31			94		70-130		
4-Nitroaniline	1666.67	1666.76			100		70-130		
Nitrobenzene	1666.67	1628.14			98		70-130		
2-Nitrophenol	1666.67	1736.53			104		70-130		
4-Nitrophenol	1666.67	1130.92			68		20-160		
N-Nitrosodimethylamine	1666.67	1528.47			92		20-160		
N-Nitroso-di-n-propylamine	1666.67	1534.1			92		70-130		
N-Nitrosodiphenylamine	1666.67	1652.41			99		70-130		
Di-n-octylphthalate	1666.67	2016.89			121		70-130		

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/kg	LCS Conc ug/kg	LCSD Spike Added ug/kg	LCSD Conc ug/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Parathion	1666.67	1392.73			84		20-160		
Pentachlorobenzene	1666.67	1633.9			98		20-160		
Pentachlorophenol	1666.67	1446.46			87		20-160		
Phenanthrene	1666.67	1737.81			104		70-130		
Phenol	1666.67	1710.28			103		20-160		
Pyrene	1666.67	1756.86			105		70-130		
2,3,4,6-Tetrachlorophenol	1666.67	1705.38			102		70-130		
o-Toluidine	1666.67	648.14			39*		70-130		
1,2,4-Trichlorobenzene	1666.67	1664.62			100		70-130		
2,4,5-Trichlorophenol	1666.67	1854.34			111		70-130		
2,4,6-Trichlorophenol	1666.67	1870.05			112		70-130		
	ug/l	**ug/l**	**ug/l**	**ug/l**					
Batch number: 17310WAE026	Sample number(s): 9299879								
Acenaphthene	50	38.59	50	37.46	77	75	70-130	3	20
Acenaphthylene	50	38.18	50	36.94	76	74	70-130	3	20
Acetophenone	50	36.25	50	35.1	72	70	70-130	3	20
4-Aminobiphenyl	50	113.86	50	95.41	228*	191*	70-130	18	20
Aniline	50	24.67	50	23.05	49	46	20-160	7	20
Anthracene	50	42.31	50	40.18	85	80	70-130	5	20
Benzidine	250	76.76	250	44.98	31	18*	20-160	52*	20
Benzo(a)anthracene	50	47.49	50	46.2	95	92	70-130	3	20
Benzo(a)pyrene	50	39.95	50	39.34	80	79	70-130	2	20
Benzo(b)fluoranthene	50	43.71	50	42.75	87	85	70-130	2	20
Benzo(g,h,i)perylene	50	39.44	50	37.99	79	76	70-130	4	20
Benzo(k)fluoranthene	50	44.14	50	41.86	88	84	70-130	5	20
1,1'-Biphenyl	50	36.38	50	35.4	73	71	70-130	3	20
4-Bromophenyl-phenylether	50	40.71	50	39.05	81	78	70-130	4	20
Butylbenzylphthalate	50	44.23	50	43.07	88	86	70-130	3	20
Di-n-butylphthalate	50	45.72	50	43.19	91	86	70-130	6	20
Carbazole	50	44.24	50	42.01	88	84	70-130	5	20
4-Chloro-3-methylphenol	50	39.35	50	38.34	79	77	70-130	3	20
4-Chloroaniline	50	30.95	50	27.91	62*	56*	70-130	10	20
bis(2-Chloroethoxy)methane	50	36.87	50	37.16	74	74	70-130	1	20
bis(2-Chloroethyl)ether	50	35.92	50	34.86	72	70	70-130	3	20
2-Chloronaphthalene	50	34.5	50	33.9	69*	68*	70-130	2	20
2-Chlorophenol	50	37.82	50	36.61	76	73	70-130	3	20
4-Chlorophenyl-phenylether	50	38.18	50	36.98	76	74	70-130	3	20
2,2'-oxybis(1-Chloropropane)	50	32.99	50	32.16	66*	64*	70-130	3	20
Chrysene	50	47.93	50	47.16	96	94	70-130	2	20
Dibenz(a,h)anthracene	50	41.63	50	41.03	83	82	70-130	1	20
Dibenzofuran	50	38.31	50	37.61	77	75	70-130	2	20
3,3'-Dichlorobenzidine	50	40.78	50	37.86	82	76	70-130	7	20
2,4-Dichlorophenol	50	41.61	50	42.15	83	84	70-130	1	20

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Diethylphthalate	50	38.6	50	36.1	77	72	70-130	7	20
2,4-Dimethylphenol	50	33.22	50	32.72	66*	65*	70-130	2	20
Dimethylphthalate	50	28.6	50	25.82	57*	52*	70-130	10	20
4,6-Dinitro-2-methylphenol	50	44.35	50	45.71	89	91	70-130	3	20
2,4-Dinitrophenol	100	43.17	100	76.86	43	77	20-160	56*	20
2,4-Dinitrotoluene	50	47.33	50	47.94	95	96	70-130	1	20
2,6-Dinitrotoluene	50	47.76	50	48.18	96	96	70-130	1	20
1,4-Dioxane	50	17.84	50	17.47	36	35	20-160	2	20
Diphenyl ether	50	35.28	50	34.8	71	70	70-130	1	20
1,2-Diphenylhydrazine	50	39.61	50	38.28	79	77	70-130	3	20
bis(2-Ethylhexyl)phthalate	50	50.16	50	50.09	100	100	70-130	0	20
Fluoranthene	50	45.56	50	43.14	91	86	70-130	5	20
Fluorene	50	40.34	50	39.31	81	79	70-130	3	20
Hexachlorobenzene	50	39.4	50	37.19	79	74	70-130	6	20
Hexachlorobutadiene	50	23.7	50	20.71	47*	41*	70-130	13	20
Hexachlorocyclopentadiene	100	4.22	100	3.59	4*	4*	20-160	16	20
Hexachloroethane	50	24.25	50	21.22	49	42	20-160	13	20
Indeno(1,2,3-cd)pyrene	50	39.19	50	38.07	78	76	70-130	3	20
Isophorone	50	36.6	50	36.44	73	73	70-130	0	20
2-Methylnaphthalene	50	33.5	50	32.32	67*	65*	70-130	4	20
2-Methylphenol	50	33.87	50	33.25	68*	66*	70-130	2	20
4-Methylphenol	50	32.64	50	31.27	65	63	20-160	4	20
Naphthalene	50	33.16	50	32.93	66*	66*	70-130	1	20
1-Naphthylamine	100	45.57	100	38.06	46*	38*	70-130	18	20
2-Naphthylamine	100	47.56	100	36.97	48*	37*	70-130	25*	20
2-Nitroaniline	50	46.14	50	47.71	92	95	70-130	3	20
3-Nitroaniline	50	44.43	50	44.11	89	88	70-130	1	20
4-Nitroaniline	50	42.79	50	40.64	86	81	70-130	5	20
Nitrobenzene	50	40.01	50	40.3	80	81	70-130	1	20
2-Nitrophenol	50	40.95	50	43.14	82	86	70-130	5	20
4-Nitrophenol	50	27.32	50	26.83	55	54	20-160	2	20
N-Nitrosodimethylamine	50	22.42	50	23.36	45	47	20-160	4	20
N-Nitroso-di-n-propylamine	50	36.29	50	35.63	73	71	70-130	2	20
N-Nitrosodiphenylamine	50	42.96	50	40.73	86	81	70-130	5	20
Di-n-octylphthalate	50	50.22	50	50.78	100	102	70-130	1	20
Parathion	50	48.41	50	48.87	97	98	20-160	1	20
Pentachlorobenzene	50	29.03	50	31.94	58	64	20-160	10	20
Pentachlorophenol	50	44.76	50	43.7	90	87	20-160	2	20
Phenanthrene	50	42.12	50	38.97	84	78	70-130	8	20
Phenol	50	20.71	50	19.71	41	39	20-160	5	20
Pyrene	50	41.95	50	40.69	84	81	70-130	3	20
2,3,4,6-Tetrachlorophenol	50	51.67	50	50.77	103	102	70-130	2	20
o-Toluidine	50	27.34	50	24.42	55*	49*	70-130	11	20
1,2,4-Trichlorobenzene	50	29.48	50	27.89	59*	56*	70-130	6	20

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
2,4,5-Trichlorophenol	50	43.51	50	43.3	87	87	70-130	0	20
2,4,6-Trichlorophenol	50	46.94	50	46.83	94	94	70-130	0	20
	mg/kg	**mg/kg**	**mg/kg**	**mg/kg**					
Batch number: 173100570805	Sample number(s): 9299863-9299864,9299871-9299872,9299877-9299878								
Aluminum	200	200.21			100		80-120		
Calcium	400	403.27			101		80-120		
Iron	100	98.74			99		80-120		
Magnesium	200	201			100		80-120		
Potassium	1000	1000.98			100		80-120		
Sodium	1000	1011			101		80-120		
Zinc	50	50.63			101		80-120		
Batch number: 173100570805A	Sample number(s): 9299863-9299864,9299871-9299872,9299877-9299878								
Antimony	0.600	0.492			82		80-120		
Arsenic	1.00	0.886			89		80-120		
Beryllium	0.400	0.425			106		80-120		
Cadmium	0.500	0.479			96		80-120		
Chromium	5.00	5.08			102		80-120		
Cobalt	25	25.45			102		80-120		
Copper	5.00	5.25			105		80-120		
Lead	1.50	1.51			101		80-120		
Manganese	5.00	5.46			109		80-120		
Nickel	5.00	4.96			99		80-120		
Silver	5.00	5.25			105		80-120		
Thallium	0.200	0.199			100		80-120		
Vanadium	5.00	5.46			109		80-120		
Batch number: 173100570805B	Sample number(s): 9299863-9299864,9299871-9299872,9299877-9299878								
Selenium	1.00	1.07			107		80-120		
Batch number: 173100570805D	Sample number(s): 9299863-9299864,9299871-9299872,9299877-9299878								
Barium	5.00	5.13			103		80-120		
Batch number: 173100571105	Sample number(s): 9299863-9299864,9299871-9299872								
Mercury	0.100	0.101			101		80-120		
Batch number: 173100571106	Sample number(s): 9299877-9299878								
Mercury	0.100	0.0933			93		80-120		
	mg/l	**mg/l**	**mg/l**	**mg/l**					
Batch number: 173100570504	Sample number(s): 9299879								
Aluminum	2.00	2.17			108		80-120		
Calcium	4.00	3.84			96		80-120		
Iron	1.00	0.957			96		80-120		
Magnesium	2.00	1.95			98		80-120		

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

LCS/LCSD (continued)

Analysis Name	LCS Spike Added mg/l	LCS Conc mg/l	LCSD Spike Added mg/l	LCSD Conc mg/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Potassium	10	9.68			97		80-120		
Sodium	10	9.58			96		80-120		
Zinc	0.500	0.499			100		80-120		
Batch number: 173100605001A	Sample number(s): 9299879								
Antimony	0.00600	0.00503			84		80-120		
Arsenic	0.0100	0.0102			102		80-120		
Beryllium	0.00400	0.00402			100		80-120		
Cadmium	0.00500	0.00516			103		80-120		
Chromium	0.0500	0.0519			104		80-120		
Cobalt	0.250	0.252			101		80-120		
Copper	0.0500	0.0527			105		80-120		
Lead	0.0150	0.0152			101		80-120		
Manganese	0.0500	0.0491			98		80-120		
Silver	0.0500	0.0515			103		80-120		
Thallium	0.00200	0.00191			95		80-120		
Vanadium	0.0500	0.0516			103		80-120		
Batch number: 173100605001B	Sample number(s): 9299879								
Selenium	0.0100	0.00980			98		80-120		
Batch number: 173100605001D	Sample number(s): 9299879								
Barium	0.0500	0.0489			98		80-120		
Batch number: 173110571302	Sample number(s): 9299879								
Mercury	0.00100	0.000863			86		80-120		
Batch number: 173200605002A	Sample number(s): 9299879								
Nickel	0.0500	0.0488			98		80-120		
	mg/kg	**mg/kg**	**mg/kg**	**mg/kg**					
Batch number: 17317667632B	Sample number(s): 9299863-9299868,9299870-9299872								
Total Organic Carbon (TOC)	7150	7240.85			101		47-143		
Batch number: 17317667633A	Sample number(s): 9299873-9299878								
Total Organic Carbon (TOC)	7150	6437.83			90		47-143		
	mg/l	**mg/l**	**mg/l**	**mg/l**					
Batch number: 17317667604A	Sample number(s): 9299879								
Total Organic Carbon (Quad)	25	25.68			103		91-113		
	%	**%**	**%**	**%**					
Batch number: 17310820005A	Sample number(s): 9299863-9299868,9299870-9299878								
Moisture	89.5	89.41			100		99-101		

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/kg	MS Spike Added ug/kg	MS Conc ug/kg	MSD Spike Added ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: J173181AA	Sample number(s): 9299876 UNSPK: P300729									
Chlorodifluoroethane	1 U	19.92	21.66	19.57	21.12	109	108	70-130	3	30
Chlorodifluoromethane	2 U	19.92	21.22	19.57	22.28	107	114	70-130	5	30
Chlorofluoromethane	1 U	19.92	18.31	19.57	18.62	92	95	70-130	2	30
1,1-Dichloro-1-fluoroethane	1 U	19.92	23.16	19.57	20.9	116	107	70-130	10	30
1,2-Dichloro-1-fluoroethane	1 U	19.92	18.29	19.57	18.77	92	96	70-130	3	30
Dichlorotetrafluoroethane	2 U	19.92	19.61	19.57	19.83	98	101	70-130	1	30
1,2-Dichlorotrifluoroethane	1 U	19.92	19.45	19.57	19.88	98	102	70-130	2	30
Dichlorotrifluoroethane	1 U	19.92	19.11	19.57	19.08	96	97	70-130	0	30
Freon 113a	5 U	19.92	18.56	19.57	18.11	93	93	70-130	2	30
1,1,2-Trifluoroethane	2 U	19.92	20.97	19.57	18.74	105	96	70-130	11	30
Batch number: R173162AA	Sample number(s): 9299863,9299868,9299870-9299872,9299876-9299877 UNSPK: P294438									
Acetone	350 U	7878.15	8302.03	9236.46	8646.8	105	94	60-140	4	30
Benzene	165.9	1050.42	1614.6	1231.53	2056.85	138*	154*	70-130	24	30
Bromodichloromethane	51 U	1050.42	1024.35	1231.53	1100.74	98	89	70-130	7	30
2-Butanone	200 U	7878.15	6060.17	9236.46	6809.3	77	74	60-140	12	30
n-Butylbenzene	51 U	1050.42	936.92	1231.53	1120.91	89	91	70-130	18	30
sec-Butylbenzene	51 U	1050.42	942.66	1231.53	1091.59	90	89	70-130	15	30
tert-Butylbenzene	51 U	1050.42	921.66	1231.53	1100.41	88	89	70-130	18	30
Carbon Disulfide	51 U	1050.42	934.27	1231.53	1052.52	89	85	60-140	12	30
Carbon Tetrachloride	51 U	1050.42	1026.89	1231.53	1059.12	98	86	70-130	3	30
Chlorobenzene	10644.65	1050.42	20414.75	1231.53	21339.34	930 (2)	868 (2)	70-130	4	30
Chloroethane	100 U	1050.42	819.28	1231.53	894.7	78	73	60-140	9	30
Chloroform	51 U	1050.42	1110.15	1231.53	1188.19	106	96	70-130	7	30
Chloromethane	100 U	1050.42	701.05	1231.53	738.2	67	60	60-140	5	30
2-Chlorotoluene	51 U	1050.42	927.67	1231.53	1052	88	85	70-130	13	30
4-Chlorotoluene	51 U	1050.42	919.89	1231.53	1043.83	88	85	70-130	13	30
Dibromochloromethane	51 U	1050.42	992.09	1231.53	1060.7	94	86	70-130	7	30
1,2-Dibromoethane	51 U	1050.42	1002.56	1231.53	1068.43	95	87	70-130	6	30
1,2-Dichlorobenzene	3522.85	1050.42	6771.8	1231.53	6023.23	309*	203*	70-130	12	30
1,3-Dichlorobenzene	175.4	1050.42	1207.97	1231.53	1319.27	98	93	70-130	9	30
1,4-Dichlorobenzene	6518.71	1050.42	11314.68	1231.53	9971.84	457 (2)	280 (2)	70-130	13	30
Dichlorodifluoromethane	100 U	1050.42	303.74	1231.53	257.46	29*	21*	60-140	16	30
1,1-Dichloroethane	51 U	1050.42	1061.78	1231.53	1081.59	101	88	70-130	2	30
1,2-Dichloroethane	51 U	1050.42	1076.3	1231.53	1157.83	102	94	70-130	7	30
1,1-Dichloroethene	51 U	1050.42	1051.29	1231.53	1083.09	100	88	70-130	3	30
cis-1,2-Dichloroethene	51 U	1050.42	1116.21	1231.53	1176.97	106	96	70-130	5	30
trans-1,2-Dichloroethene	51 U	1050.42	1049.47	1231.53	1059.32	100	86	70-130	1	30
1,2-Dichloroethene (Total)	51 U	2100.84	2165.68	2463.06	2236.29	103	91	70-130	3	30
Dichlorofluoromethane	100 U	1050.42	1120.13	1231.53	1331.07	107	108	70-130	17	30
1,2-Dichloropropane	51 U	1050.42	1071.52	1231.53	1138.15	102	92	70-130	6	30

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/kg	MS Spike Added ug/kg	MS Conc ug/kg	MSD Spike Added ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
1,1-Dichloropropene	51 U	1050.42	1005.8	1231.53	1036.06	96	84	70-130	3	30
cis-1,3-Dichloropropene	51 U	1050.42	1090.42	1231.53	1149.19	104	93	70-130	5	30
Ethylbenzene	51 U	1050.42	981.09	1231.53	1054.2	93	86	70-130	7	30
Freon 113	100 U	1050.42	2254.22	1231.53	17771.9	215*	1443*	70-130	155*	30
n-Hexane	51 U	1050.42	683.94	1231.53	668.97	65*	54*	70-130	2	30
2-Hexanone	150 U	5252.1	4915.03	6157.64	5226.89	94	85	60-140	6	30
Isobutyl Alcohol	5,100 U	26260.5	21426.1	30788.2	25322.47	82	82	70-130	17	30
Isopropylbenzene	50.76	1050.42	1071.74	1231.53	1185.13	97	92	70-130	10	30
p-Isopropyltoluene	51 U	1050.42	939.24	1231.53	1126.34	89	91	70-130	18	30
Methacrylonitrile	250 U	7878.15	8167.74	9236.46	8535.08	104	92	70-130	4	30
Methyl Methacrylate	51 U	1050.42	1014.49	1231.53	1059.1	97	86	70-130	4	30
Methyl Tertiary Butyl Ether	25 U	1050.42	1074.84	1231.53	1117.91	102	91	70-130	4	30
4-Methyl-2-pentanone	150 U	5252.1	5405.55	6157.64	5809.47	103	94	60-140	7	30
Methylene Chloride	100 U	1050.42	1228.12	1231.53	1366.61	117	111	70-130	11	30
Propionitrile	1,500 U	7878.15	8121.87	9236.46	8782.07	103	95	70-130	8	30
n-Propylbenzene	51 U	1050.42	894.19	1231.53	1030.34	85	84	70-130	14	30
Styrene	51 U	1050.42	979.01	1231.53	1064.71	93	86	70-130	8	30
1,1,1,2-Tetrachloroethane	51 U	1050.42	1002.5	1231.53	1086.32	95	88	70-130	8	30
1,1,2,2-Tetrachloroethane	51 U	1050.42	921.52	1231.53	1069.96	88	87	70-130	15	30
Tetrachloroethene	531.3	1050.42	2516.52	1231.53	2747.97	189*	180*	70-130	9	30
Tetrahydrofuran	200 U	5252.1	4337.3	6157.64	4795.25	83	78	70-130	10	30
Toluene	51 U	1050.42	1004.94	1231.53	1083.75	96	88	70-130	8	30
1,1,1-Trichloroethane	51 U	1050.42	1056.48	1231.53	1071.6	101	87	70-130	1	30
1,1,2-Trichloroethane	51 U	1050.42	1043.14	1231.53	1124.95	99	91	70-130	8	30
Trichloroethene	51 U	1050.42	1077.95	1231.53	1180.35	103	96	70-130	9	30
Trichlorofluoromethane	100 U	1050.42	1224.95	1231.53	6859.4	117	557*	60-140	139*	30
1,2,4-Trimethylbenzene	51 U	1050.42	909.78	1231.53	1063.34	87	86	70-130	16	30
1,3,5-Trimethylbenzene	51 U	1050.42	904.86	1231.53	1059.09	86	86	70-130	16	30
Vinyl Chloride	51 U	1050.42	703.41	1231.53	707.38	67*	57*	70-130	1	30
m+p-Xylene	51 U	2100.84	2067.18	2463.06	2215.09	98	90	70-130	7	30
o-Xylene	51 U	1050.42	1012.59	1231.53	1097.49	96	89	70-130	8	30
Xylene (Total)	51 U	3151.26	3079.77	3694.58	3312.58	98	90	70-130	7	30
Batch number: R173171AA	Sample number(s): 9299866,9299872,9299878 UNSPK: P300729									
Acetone	360 U	7396.46	7418	7142.85	7551.11	100	106	60-140	2	30
Benzene	175.43	986.19	1035.9	952.38	1047.97	87	92	70-130	1	30
Bromodichloromethane	51 U	986.19	951.01	952.38	1001.22	96	105	70-130	5	30
2-Butanone	210 U	7396.46	6253.16	7142.85	6392.8	85	89	60-140	2	30
n-Butylbenzene	51 U	986.19	796.89	952.38	935.8	81	98	70-130	16	30
sec-Butylbenzene	51 U	986.19	824.86	952.38	947.42	84	99	70-130	14	30
tert-Butylbenzene	51 U	986.19	799.02	952.38	908.75	81	95	70-130	13	30
Carbon Disulfide	51 U	986.19	877.32	952.38	921.63	89	97	60-140	5	30
Carbon Tetrachloride	51 U	986.19	1021.52	952.38	1017.56	104	107	70-130	0	30

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/kg	MS Spike Added ug/kg	MS Conc ug/kg	MSD Spike Added ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Chlorobenzene	1389.41	986.19	1395.12	952.38	1067.38	1*	-33*	70-130	27	30
Chloroethane	100 U	986.19	854.16	952.38	900.63	87	95	60-140	5	30
Chloroform	51 U	986.19	976.38	952.38	1018.65	99	107	70-130	4	30
Chloromethane	100 U	986.19	734.76	952.38	716.3	75	75	60-140	3	30
2-Chlorotoluene	51 U	986.19	878.35	952.38	913.03	89	96	70-130	4	30
4-Chlorotoluene	51 U	986.19	866.58	952.38	904.41	88	95	70-130	4	30
Dibromochloromethane	51 U	986.19	874.51	952.38	953.9	89	100	70-130	9	30
1,2-Dibromoethane	51 U	986.19	890.34	952.38	965.7	90	101	70-130	8	30
1,2-Dichlorobenzene	120.61	986.19	940.01	952.38	990.39	83	91	70-130	5	30
1,3-Dichlorobenzene	51 U	986.19	862.65	952.38	943.2	87	99	70-130	9	30
1,4-Dichlorobenzene	269.88	986.19	1043.91	952.38	1021.41	78	79	70-130	2	30
Dichlorodifluoromethane	100 U	986.19	422.2	952.38	394.81	43*	41*	60-140	7	30
1,1-Dichloroethane	51 U	986.19	989.42	952.38	1038.57	100	109	70-130	5	30
1,2-Dichloroethane	51 U	986.19	1028.91	952.38	1037.59	104	109	70-130	1	30
1,1-Dichloroethene	51 U	986.19	1013.86	952.38	1045.59	103	110	70-130	3	30
cis-1,2-Dichloroethene	51 U	986.19	1047.46	952.38	1065.33	106	112	70-130	2	30
trans-1,2-Dichloroethene	51 U	986.19	996.71	952.38	1007.46	101	106	70-130	1	30
1,2-Dichloroethene (Total)	51 U	1972.39	2044.17	1904.76	2072.79	104	109	70-130	1	30
Dichlorofluoromethane	100 U	986.19	906.04	952.38	865.88	92	91	70-130	5	30
1,2-Dichloropropane	51 U	986.19	1001.65	952.38	1039.28	102	109	70-130	4	30
1,1-Dichloropropene	51 U	986.19	1003.87	952.38	1003.82	102	105	70-130	0	30
cis-1,3-Dichloropropene	51 U	986.19	978.14	952.38	1045.43	99	110	70-130	7	30
Ethylbenzene	51 U	986.19	893.85	952.38	933.48	91	98	70-130	4	30
Freon 113	100 U	986.19	935.31	952.38	972.11	95	102	70-130	4	30
n-Hexane	51 U	986.19	855.57	952.38	852.48	87	90	70-130	0	30
2-Hexanone	150 U	4930.97	4152.61	4761.9	4515.2	84	95	60-140	8	30
Isobutyl Alcohol	5,100 U	24654.85	21128.56	23809.5	21773.73	86	91	70-130	3	30
Isopropylbenzene	51 U	986.19	873.62	952.38	955.28	89	100	70-130	9	30
p-Isopropyltoluene	51 U	986.19	837.62	952.38	956.72	85	100	70-130	13	30
Methacrylonitrile	260 U	7396.46	7486.32	7142.85	7832.63	101	110	70-130	5	30
Methyl Methacrylate	51 U	986.19	911.92	952.38	952.2	92	100	70-130	4	30
Methyl Tertiary Butyl Ether	26 U	986.19	980.75	952.38	992.08	99	104	70-130	1	30
4-Methyl-2-pentanone	150 U	4930.97	4765.66	4761.9	4998.92	97	105	60-140	5	30
Methylene Chloride	100 U	986.19	973.42	952.38	1031.86	99	108	70-130	6	30
Propionitrile	1,500 U	7396.46	7808.42	7142.85	7834.96	106	110	70-130	0	30
n-Propylbenzene	51 U	986.19	824.87	952.38	883.12	84	93	70-130	7	30
Styrene	51 U	986.19	875.55	952.38	921.21	89	97	70-130	5	30
1,1,1,2-Tetrachloroethane	51 U	986.19	916.42	952.38	972.91	93	102	70-130	6	30
1,1,2,2-Tetrachloroethane	51 U	986.19	860.15	952.38	886.93	87	93	70-130	3	30
Tetrachloroethene	51 U	986.19	878.27	952.38	954.19	89	100	70-130	8	30
Tetrahydrofuran	210 U	4930.97	4367.33	4761.9	4675.06	89	98	70-130	7	30
Toluene	51 U	986.19	890.99	952.38	987.21	90	104	70-130	10	30
1,1,1-Trichloroethane	51 U	986.19	1002.34	952.38	1023.1	102	107	70-130	2	30

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/kg	MS Spike Added ug/kg	MS Conc ug/kg	MSD Spike Added ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
1,1,2-Trichloroethane	51 U	986.19	896.85	952.38	984.11	91	103	70-130	9	30
Trichloroethene	51 U	986.19	964.02	952.38	996.6	98	105	70-130	3	30
Trichlorofluoromethane	100 U	986.19	824.26	952.38	835.83	84	88	60-140	1	30
1,2,4-Trimethylbenzene	51 U	986.19	827.97	952.38	917.42	84	96	70-130	10	30
1,3,5-Trimethylbenzene	51 U	986.19	834.1	952.38	904.13	85	95	70-130	8	30
Vinyl Chloride	51 U	986.19	774.19	952.38	777.29	79	82	70-130	0	30
m+p-Xylene	51 U	1972.39	1839.3	1904.76	1931.11	93	101	70-130	5	30
o-Xylene	51 U	986.19	891.19	952.38	948.13	90	100	70-130	6	30
Xylene (Total)	51 U	2958.58	2730.49	2857.14	2879.24	92	101	70-130	5	30
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg					
Batch number: 17310SLI026	Sample number(s): 9299863 UNSPK: P294438									
Acenaphthene	155.06	1666.67	1834.47	1643.66	2041.85	101	115	70-130	11	30
Acenaphthylene	13.92	1666.67	1621.94	1643.66	1494.02	96	90	70-130	8	30
Acetophenone	17 U	1666.67	1425.69	1643.66	1691.24	86	103	70-130	17	30
4-Aminobiphenyl	170 U	1666.67	1698.78	1643.66	1497.78	102	91	70-130	13	30
Aniline	170 U	1666.67	1137.61	1643.66	676.84	68	41	20-160	51*	30
Anthracene	66.08	1666.67	1544.43	1643.66	1651.98	89	96	70-130	7	30
Benzidine	250 U	8333.33	526.46	8218.28	250 U	6*	0*	20-160	200*	30
Benzo(a)anthracene	66.16	1666.67	1443.02	1643.66	1496.74	83	87	70-130	4	30
Benzo(a)pyrene	52.71	1666.67	1213.74	1643.66	1182.21	70	69*	70-130	3	30
Benzo(b)fluoranthene	83.36	1666.67	1583.4	1643.66	1182.74	90	67*	70-130	29	30
Benzo(g,h,i)perylene	37.52	1666.67	1362.16	1643.66	1079.36	79	63*	70-130	23	30
Benzo(k)fluoranthene	34.84	1666.67	1415.01	1643.66	1272.61	83	75	70-130	11	30
1,1'-Biphenyl	98.03	1666.67	1739.82	1643.66	1659.97	99	95	70-130	5	30
4-Bromophenyl-phenylether	17 U	1666.67	1508.68	1643.66	1463.39	91	89	70-130	3	30
Butylbenzylphthalate	66 U	1666.67	1644.2	1643.66	1691.82	99	103	70-130	3	30
Di-n-butylphthalate	66 U	1666.67	1673.23	1643.66	1586.12	100	96	70-130	5	30
Carbazole	98.83	1666.67	1628.62	1643.66	1636.85	92	94	70-130	1	30
4-Chloro-3-methylphenol	17 U	1666.67	1713.35	1643.66	1617	103	98	70-130	6	30
4-Chloroaniline	33 U	1666.67	876.2	1643.66	946.84	53*	58*	70-130	8	30
bis(2-Chloroethoxy)methane	17 U	1666.67	1636.87	1643.66	1510.1	98	92	70-130	8	30
bis(2-Chloroethyl)ether	17 U	1666.67	1504.04	1643.66	1566.55	90	95	70-130	4	30
2-Chloronaphthalene	7 U	1666.67	2195.24	1643.66	1797.13	132*	109	70-130	20	30
2-Chlorophenol	44.37	1666.67	1668.76	1643.66	1718.52	97	102	70-130	3	30
4-Chlorophenyl-phenylether	17 U	1666.67	1413.22	1643.66	1456.64	85	89	70-130	3	30
2,2'-oxybis(1-Chloropropane)	17 U	1666.67	1543.22	1643.66	1612.26	93	98	70-130	4	30
Chrysene	106.28	1666.67	1399.7	1643.66	1602.96	78	91	70-130	14	30
Dibenz(a,h)anthracene	11.53	1666.67	1465.49	1643.66	1155.87	87	70	70-130	24	30
Dibenzofuran	243.1	1666.67	1673.33	1643.66	2357.53	86	129	70-130	34*	30
3,3'-Dichlorobenzidine	99 U	1666.67	1103.93	1643.66	1129.64	66*	69*	70-130	2	30
2,4-Dichlorophenol	17 U	1666.67	1712.61	1643.66	1585.22	103	96	70-130	8	30
Diethylphthalate	66 U	1666.67	1585.22	1643.66	1442.69	95	88	70-130	9	30

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(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/kg	MS Spike Added ug/kg	MS Conc ug/kg	MSD Spike Added ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
2,4-Dimethylphenol	17 U	1666.67	1389.17	1643.66	1225.98	83	75	70-130	12	30
Dimethylphthalate	66 U	1666.67	1652.04	1643.66	1500.43	99	91	70-130	10	30
4,6-Dinitro-2-methylphenol	170 U	1666.67	1044.79	1643.66	896.15	63*	55*	70-130	15	30
2,4-Dinitrophenol	300 U	3333.33	1321.83	3287.31	713.12	40	22	20-160	60*	30
2,4-Dinitrotoluene	66 U	1666.67	1542.73	1643.66	1551.9	93	94	70-130	1	30
2,6-Dinitrotoluene	17 U	1666.67	1719.97	1643.66	1552.4	103	94	70-130	10	30
1,4-Dioxane	99 U	1666.67	1244.86	1643.66	1279.07	75	78	20-160	3	30
Diphenyl ether	46.61	1666.67	1638.37	1643.66	1418.83	96	83	70-130	14	30
1,2-Diphenylhydrazine	17 U	1666.67	1644.52	1643.66	1784.36	99	109	70-130	8	30
bis(2-Ethylhexyl)phthalate	86.8	1666.67	1659.79	1643.66	1856.49	94	108	70-130	11	30
Fluoranthene	188.25	1666.67	1560.16	1643.66	1970.85	82	108	70-130	23	30
Fluorene	287.21	1666.67	1620.95	1643.66	2435.31	80	131*	70-130	40*	30
Hexachlorobenzene	3 U	1666.67	1470.85	1643.66	1409.76	88	86	70-130	4	30
Hexachlorobutadiene	17 U	1666.67	1551.77	1643.66	1542.88	93	94	70-130	1	30
Hexachlorocyclopentadiene	170 U	3333.33	170 U	3287.31	160 U	0*	0*	20-160	0	30
Hexachloroethane	33 U	1666.67	1200.55	1643.66	1354.53	72	82	20-160	12	30
Indeno(1,2,3-cd)pyrene	28.81	1666.67	1378.89	1643.66	1098.52	81	65*	70-130	23	30
Isophorone	17 U	1666.67	1527.95	1643.66	1576.68	92	96	70-130	3	30
2-Methylnaphthalene	232.4	1666.67	1695.67	1643.66	2140.22	88	116	70-130	23	30
2-Methylphenol	17 U	1666.67	1700.94	1643.66	1866.26	102	114	70-130	9	30
4-Methylphenol	19.72	1666.67	1381.73	1643.66	1637.33	82	98	20-160	17	30
Naphthalene	355.13	1666.67	1987.85	1643.66	2269.53	98	116	70-130	13	30
1-Naphthylamine	170 U	3333.33	1630.98	3287.31	1040.99	49*	32*	70-130	44*	30
2-Naphthylamine	170 U	3333.33	612.07	3287.31	427.67	18*	13*	70-130	35*	30
2-Nitroaniline	17 U	1666.67	1863.85	1643.66	1572.77	112	96	70-130	17	30
3-Nitroaniline	66 U	1666.67	1635.32	1643.66	1421.89	98	87	70-130	14	30
4-Nitroaniline	66 U	1666.67	1580.34	1643.66	1553.04	95	94	70-130	2	30
Nitrobenzene	17 U	1666.67	1598.93	1643.66	1728.62	96	105	70-130	8	30
2-Nitrophenol	17 U	1666.67	1554.93	1643.66	1619.36	93	99	70-130	4	30
4-Nitrophenol	170 U	1666.67	1448.74	1643.66	1436.7	87	87	20-160	1	30
N-Nitrosodimethylamine	66 U	1666.67	1701.69	1643.66	1874.68	102	114	20-160	10	30
N-Nitroso-di-n-propylamine	17 U	1666.67	1429.21	1643.66	1673.85	86	102	70-130	16	30
N-Nitrosodiphenylamine	30.36	1666.67	1509.33	1643.66	1661.29	89	99	70-130	10	30
Di-n-octylphthalate	66 U	1666.67	1757.65	1643.66	1503.3	105	91	70-130	16	30
Parathion	170 U	1666.67	1591.76	1643.66	1594.26	96	97	20-160	0	30
Pentachlorobenzene	17 U	1666.67	1568.84	1643.66	1370.88	94	83	20-160	13	30
Pentachlorophenol	33 U	1666.67	1496.06	1643.66	1378.5	90	84	20-160	8	30
Phenanthrene	570.48	1666.67	1927.11	1643.66	3726	81	192*	70-130	64*	30
Phenol	17 U	1666.67	1625.82	1643.66	1687.72	98	103	20-160	4	30
Pyrene	182.31	1666.67	1609.14	1643.66	1802.52	86	99	70-130	11	30
2,3,4,6-Tetrachlorophenol	66 U	1666.67	1490.05	1643.66	1490.28	89	91	70-130	0	30
o-Toluidine	200 U	1666.67	1005.61	1643.66	1339.52	60*	81	70-130	28	30
1,2,4-Trichlorobenzene	296.5	1666.67	1836.25	1643.66	2260.86	92	120	70-130	21	30

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/kg	MS Spike Added ug/kg	MS Conc ug/kg	MSD Spike Added ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
2,4,5-Trichlorophenol	17 U	1666.67	1839.55	1643.66	1451.82	110	88	70-130	24	30
2,4,6-Trichlorophenol	17 U	1666.67	1863.2	1643.66	1515.67	112	92	70-130	21	30
Batch number: 17313SLI026	Sample number(s): 9299865-9299868,9299870-9299878 UNSPK: 9299865									
Acenaphthene	3 U	1655.63	1782.18	1661.13	1761.89	108	106	70-130	1	30
Acenaphthylene	3 U	1655.63	1761.89	1661.13	1740.3	106	105	70-130	1	30
Acetophenone	17 U	1655.63	1680.36	1661.13	1686.23	101	102	70-130	0	30
4-Aminobiphenyl	170 U	1655.63	2247.1	1661.13	3142.9	136*	189*	70-130	33*	30
Aniline	170 U	1655.63	1112.62	1661.13	1408.58	67	85	20-160	23	30
Anthracene	3 U	1655.63	1737.63	1661.13	1699.19	105	102	70-130	2	30
Benzidine	250 U	8278.15	2143.89	8305.65	2851.73	26	34	20-160	28	30
Benzo(a)anthracene	3 U	1655.63	1788.71	1661.13	1756.89	108	106	70-130	2	30
Benzo(a)pyrene	3 U	1655.63	1695.32	1661.13	1663.47	102	100	70-130	2	30
Benzo(b)fluoranthene	3 U	1655.63	1764.58	1661.13	1752.52	107	106	70-130	1	30
Benzo(g,h,i)perylene	3 U	1655.63	1578.78	1661.13	1569.16	95	94	70-130	1	30
Benzo(k)fluoranthene	3 U	1655.63	1825.75	1661.13	1754.56	110	106	70-130	4	30
1,1'-Biphenyl	17 U	1655.63	1777.04	1661.13	1747.52	107	105	70-130	2	30
4-Bromophenyl-phenylether	17 U	1655.63	1804.57	1661.13	1736.19	109	105	70-130	4	30
Butylbenzylphthalate	66 U	1655.63	1791.62	1661.13	1795.66	108	108	70-130	0	30
Di-n-butylphthalate	66 U	1655.63	1819.38	1661.13	1769.55	110	107	70-130	3	30
Carbazole	17 U	1655.63	1748.43	1661.13	1727.25	106	104	70-130	1	30
4-Chloro-3-methylphenol	17 U	1655.63	1864.84	1661.13	1888.99	113	114	70-130	1	30
4-Chloroaniline	33 U	1655.63	424.09	1661.13	1048.81	26*	63*	70-130	85*	30
bis(2-Chloroethoxy)methane	17 U	1655.63	1772.84	1661.13	1805.53	107	109	70-130	2	30
bis(2-Chloroethyl)ether	17 U	1655.63	1658.61	1661.13	1669.85	100	101	70-130	1	30
2-Chloronaphthalene	7 U	1655.63	1566.19	1661.13	1561.64	95	94	70-130	0	30
2-Chlorophenol	17 U	1655.63	1760.14	1661.13	1757.13	106	106	70-130	0	30
4-Chlorophenyl-phenylether	17 U	1655.63	1710.87	1661.13	1704.01	103	103	70-130	0	30
2,2'-oxybis(1-Chloropropane)	17 U	1655.63	1792.11	1661.13	1788.93	108	108	70-130	0	30
Chrysene	3 U	1655.63	1771.88	1661.13	1737.04	107	105	70-130	2	30
Dibenz(a,h)anthracene	3 U	1655.63	1659.51	1661.13	1620.6	100	98	70-130	2	30
Dibenzofuran	17 U	1655.63	1724.24	1661.13	1687.51	104	102	70-130	2	30
3,3'-Dichlorobenzidine	99 U	1655.63	1264.4	1661.13	1425.6	76	86	70-130	12	30
2,4-Dichlorophenol	17 U	1655.63	1844.27	1661.13	1844.35	111	111	70-130	0	30
Diethylphthalate	66 U	1655.63	1547.22	1661.13	1523.31	93	92	70-130	2	30
2,4-Dimethylphenol	17 U	1655.63	1518.14	1661.13	1553.72	92	94	70-130	2	30
Dimethylphthalate	66 U	1655.63	1731.3	1661.13	1724.38	105	104	70-130	0	30
4,6-Dinitro-2-methylphenol	170 U	1655.63	1672.96	1661.13	1673.07	101	101	70-130	0	30
2,4-Dinitrophenol	300 U	3311.26	3057.03	3322.26	3151.68	92	95	20-160	3	30
2,4-Dinitrotoluene	66 U	1655.63	1780.22	1661.13	1762.44	108	106	70-130	1	30
2,6-Dinitrotoluene	17 U	1655.63	1881.69	1661.13	1860.21	114	112	70-130	1	30
1,4-Dioxane	99 U	1655.63	1238.41	1661.13	1294.85	75	78	20-160	4	30
Diphenyl ether	17 U	1655.63	1628.79	1661.13	1597.81	98	96	70-130	2	30

*- Outside of specification
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(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/kg	MS Spike Added ug/kg	MS Conc ug/kg	MSD Spike Added ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
1,2-Diphenylhydrazine	17 U	1655.63	1930.25	1661.13	1897.36	117	114	70-130	2	30
bis(2-Ethylhexyl)phthalate	66 U	1655.63	1758.18	1661.13	1761.6	106	106	70-130	0	30
Fluoranthene	3 U	1655.63	1719.64	1661.13	1706.13	104	103	70-130	1	30
Fluorene	3 U	1655.63	1725.08	1661.13	1726.26	104	104	70-130	0	30
Hexachlorobenzene	3 U	1655.63	1792.13	1661.13	1696.71	108	102	70-130	5	30
Hexachlorobutadiene	17 U	1655.63	1692.32	1661.13	1679.2	102	101	70-130	1	30
Hexachlorocyclopentadiene	170 U	3311.26	2303.55	3322.26	2125.91	70	64	20-160	8	30
Hexachloroethane	33 U	1655.63	1629.23	1661.13	1655.3	98	100	20-160	2	30
Indeno(1,2,3-cd)pyrene	3 U	1655.63	1640.94	1661.13	1599.44	99	96	70-130	3	30
Isophorone	17 U	1655.63	1682.16	1661.13	1722.59	102	104	70-130	2	30
2-Methylnaphthalene	3 U	1655.63	1680.59	1661.13	1724.27	102	104	70-130	3	30
2-Methylphenol	17 U	1655.63	1805.42	1661.13	1802.8	109	109	70-130	0	30
4-Methylphenol	17 U	1655.63	1725.07	1661.13	1758.61	104	106	20-160	2	30
Naphthalene	3.71	1655.63	1714.38	1661.13	1729.18	103	104	70-130	1	30
1-Naphthylamine	170 U	3311.26	1604.03	3322.26	2269.44	48*	68*	70-130	34*	30
2-Naphthylamine	170 U	3311.26	886.79	3322.26	1414.46	27*	43*	70-130	46*	30
2-Nitroaniline	17 U	1655.63	1843.54	1661.13	1842.42	111	111	70-130	0	30
3-Nitroaniline	66 U	1655.63	1577.38	1661.13	1809.17	95	109	70-130	14	30
4-Nitroaniline	66 U	1655.63	1560.62	1661.13	1616.71	94	97	70-130	4	30
Nitrobenzene	17 U	1655.63	1731.65	1661.13	1780.69	105	107	70-130	3	30
2-Nitrophenol	17 U	1655.63	1786.58	1661.13	1842.88	108	111	70-130	3	30
4-Nitrophenol	170 U	1655.63	1872.79	1661.13	1747.51	113	105	20-160	7	30
N-Nitrosodimethylamine	66 U	1655.63	1770.1	1661.13	1776.71	107	107	20-160	0	30
N-Nitroso-di-n-propylamine	17 U	1655.63	1755.21	1661.13	1755.91	106	106	70-130	0	30
N-Nitrosodiphenylamine	17 U	1655.63	1767.05	1661.13	1754.21	107	106	70-130	1	30
Di-n-octylphthalate	66 U	1655.63	1828.87	1661.13	1818.26	110	109	70-130	1	30
Parathion	170 U	1655.63	1833.5	1661.13	1811.39	111	109	20-160	1	30
Pentachlorobenzene	17 U	1655.63	1669.65	1661.13	1642.3	101	99	20-160	2	30
Pentachlorophenol	33 U	1655.63	1821.26	1661.13	1789.7	110	108	20-160	2	30
Phenanthrene	17.45	1655.63	1762.65	1661.13	1720.21	105	103	70-130	2	30
Phenol	17 U	1655.63	1796.85	1661.13	1836.79	109	111	20-160	2	30
Pyrene	3 U	1655.63	1667.35	1661.13	1654.37	101	100	70-130	1	30
2,3,4,6-Tetrachlorophenol	66 U	1655.63	1811.15	1661.13	1804.97	109	109	70-130	0	30
o-Toluidine	200 U	1655.63	753.38	1661.13	1286.06	46*	77	70-130	52*	30
1,2,4-Trichlorobenzene	17 U	1655.63	1683.35	1661.13	1665.31	102	100	70-130	1	30
2,4,5-Trichlorophenol	17 U	1655.63	1806.86	1661.13	1790.42	109	108	70-130	1	30
2,4,6-Trichlorophenol	17 U	1655.63	1887.42	1661.13	1836.75	114	111	70-130	3	30
Batch number: 17314SLE026	Sample number(s): 9299864 UNSPK: P300729									
Acenaphthene	3 U	1664.45	1932.67	1659.48	1923.05	116	116	70-130	0	30
Acenaphthylene	3 U	1664.45	1769.02	1659.48	1901.18	106	115	70-130	7	30
Acetophenone	17 U	1664.45	1632.85	1659.48	1671.38	98	101	70-130	2	30
4-Aminobiphenyl	170 U	1664.45	3190.54	1659.48	3206.43	192*	193*	70-130	0	30

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(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/kg	MS Spike Added ug/kg	MS Conc ug/kg	MSD Spike Added ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Aniline	170 U	1664.45	1028.16	1659.48	1012.32	62	61	20-160	2	30
Anthracene	3 U	1664.45	1712.52	1659.48	1670.48	103	101	70-130	2	30
Benzidine	250 U	8322.24	3508.37	8297.38	3175.4	42	38	20-160	10	30
Benzo(a)anthracene	3 U	1664.45	1575.22	1659.48	1655.02	95	100	70-130	5	30
Benzo(a)pyrene	3 U	1664.45	1606.54	1659.48	1594.39	97	96	70-130	1	30
Benzo(b)fluoranthene	3 U	1664.45	1792.98	1659.48	1705.06	108	103	70-130	5	30
Benzo(g,h,i)perylene	3 U	1664.45	1655.83	1659.48	1674.83	99	101	70-130	1	30
Benzo(k)fluoranthene	3 U	1664.45	1711.59	1659.48	1732.34	103	104	70-130	1	30
1,1'-Biphenyl	17 U	1664.45	1852.79	1659.48	1765.02	111	106	70-130	5	30
4-Bromophenyl-phenylether	17 U	1664.45	1667.55	1659.48	1523.46	100	92	70-130	9	30
Butylbenzylphthalate	66 U	1664.45	1816.8	1659.48	1827.77	109	110	70-130	1	30
Di-n-butylphthalate	66 U	1664.45	1735.99	1659.48	1549.67	104	93	70-130	11	30
Carbazole	17 U	1664.45	1636.22	1659.48	1477.01	98	89	70-130	10	30
4-Chloro-3-methylphenol	17 U	1664.45	1776.5	1659.48	1745.5	107	105	70-130	2	30
4-Chloroaniline	33 U	1664.45	615.12	1659.48	548.44	37*	33*	70-130	11	30
bis(2-Chloroethoxy)methane	17 U	1664.45	1625.74	1659.48	1525.74	98	92	70-130	6	30
bis(2-Chloroethyl)ether	17 U	1664.45	1606.14	1659.48	1643.61	96	99	70-130	2	30
2-Chloronaphthalene	7 U	1664.45	1796.26	1659.48	1722.06	108	104	70-130	4	30
2-Chlorophenol	17 U	1664.45	1814.11	1659.48	1876.91	109	113	70-130	3	30
4-Chlorophenyl-phenylether	17 U	1664.45	1582.9	1659.48	1762.25	95	106	70-130	11	30
2,2'-oxybis(1-Chloropropane)	17 U	1664.45	1480.32	1659.48	1505.69	89	91	70-130	2	30
Chrysene	3 U	1664.45	1554.72	1659.48	1706.86	93	103	70-130	9	30
Dibenz(a,h)anthracene	3 U	1664.45	1539.89	1659.48	1536.89	93	93	70-130	0	30
Dibenzofuran	17 U	1664.45	1793.86	1659.48	1859.39	108	112	70-130	4	30
3,3'-Dichlorobenzidine	99 U	1664.45	969.92	1659.48	1132.6	58*	68*	70-130	15	30
2,4-Dichlorophenol	17 U	1664.45	1703.51	1659.48	1644.71	102	99	70-130	4	30
Diethylphthalate	66 U	1664.45	1863.09	1659.48	1963.84	112	118	70-130	5	30
2,4-Dimethylphenol	17 U	1664.45	1388.12	1659.48	1379.4	83	83	70-130	1	30
Dimethylphthalate	66 U	1664.45	1665.72	1659.48	1812.9	100	109	70-130	8	30
4,6-Dinitro-2-methylphenol	170 U	1664.45	1495.16	1659.48	1601.55	90	97	70-130	7	30
2,4-Dinitrophenol	300 U	3328.89	1547.45	3318.95	1847.44	46	56	20-160	18	30
2,4-Dinitrotoluene	66 U	1664.45	1861.75	1659.48	1884.26	112	114	70-130	1	30
2,6-Dinitrotoluene	17 U	1664.45	1715.68	1659.48	1827.9	103	110	70-130	6	30
1,4-Dioxane	99 U	1664.45	1236.13	1659.48	1236.09	74	74	20-160	0	30
Diphenyl ether	17 U	1664.45	1645.82	1659.48	1670.71	99	101	70-130	2	30
1,2-Diphenylhydrazine	17 U	1664.45	1772.5	1659.48	1804.64	106	109	70-130	2	30
bis(2-Ethylhexyl)phthalate	66 U	1664.45	1728.35	1659.48	1812.95	104	109	70-130	5	30
Fluoranthene	3 U	1664.45	1558.98	1659.48	1536.25	94	93	70-130	1	30
Fluorene	3 U	1664.45	1748.75	1659.48	1804.33	105	109	70-130	3	30
Hexachlorobenzene	3 U	1664.45	1569.88	1659.48	1502.95	94	91	70-130	4	30
Hexachlorobutadiene	17 U	1664.45	1553.35	1659.48	1517.89	93	91	70-130	2	30
Hexachlorocyclopentadiene	170 U	3328.89	2454.05	3318.95	2711.44	74	82	20-160	10	30
Hexachloroethane	33 U	1664.45	1610.47	1659.48	1641.01	97	99	20-160	2	30

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(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/kg	MS Spike Added ug/kg	MS Conc ug/kg	MSD Spike Added ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Indeno(1,2,3-cd)pyrene	3 U	1664.45	1535.7	1659.48	1617.29	92	97	70-130	5	30
Isophorone	17 U	1664.45	1663.38	1659.48	1646.98	100	99	70-130	1	30
2-Methylnaphthalene	3 U	1664.45	1730.01	1659.48	1699.16	104	102	70-130	2	30
2-Methylphenol	17 U	1664.45	1799.15	1659.48	1860.75	108	112	70-130	3	30
4-Methylphenol	17 U	1664.45	1579.02	1659.48	1639.41	95	99	20-160	4	30
Naphthalene	3 U	1664.45	1740.4	1659.48	1712.16	105	103	70-130	2	30
1-Naphthylamine	170 U	3328.89	1590.86	3318.95	1513.25	48*	46*	70-130	5	30
2-Naphthylamine	170 U	3328.89	979.11	3318.95	980.54	29*	30*	70-130	0	30
2-Nitroaniline	17 U	1664.45	1957.91	1659.48	2012.08	118	121	70-130	3	30
3-Nitroaniline	66 U	1664.45	1526.82	1659.48	1461.62	92	88	70-130	4	30
4-Nitroaniline	66 U	1664.45	1572.47	1659.48	1779.1	94	107	70-130	12	30
Nitrobenzene	17 U	1664.45	1693.1	1659.48	1707.06	102	103	70-130	1	30
2-Nitrophenol	17 U	1664.45	1802.76	1659.48	1802.56	108	109	70-130	0	30
4-Nitrophenol	170 U	1664.45	976.39	1659.48	969.06	59	58	20-160	1	30
N-Nitrosodimethylamine	66 U	1664.45	1673.04	1659.48	1658.38	101	100	20-160	1	30
N-Nitroso-di-n-propylamine	17 U	1664.45	1653.6	1659.48	1678.3	99	101	70-130	1	30
N-Nitrosodiphenylamine	17 U	1664.45	1588.85	1659.48	1616.65	95	97	70-130	2	30
Di-n-octylphthalate	66 U	1664.45	2052.68	1659.48	2035.74	123	123	70-130	1	30
Parathion	170 U	1664.45	1593.48	1659.48	1429.08	96	86	20-160	11	30
Pentachlorobenzene	17 U	1664.45	1605.62	1659.48	1701.62	96	103	20-160	6	30
Pentachlorophenol	33 U	1664.45	1227.74	1659.48	1103.61	74	67	20-160	11	30
Phenanthrene	3 U	1664.45	1700.07	1659.48	1684.76	102	102	70-130	1	30
Phenol	17 U	1664.45	1730.37	1659.48	1756.99	104	106	20-160	2	30
Pyrene	3 U	1664.45	1674.84	1659.48	1696.94	101	102	70-130	1	30
2,3,4,6-Tetrachlorophenol	66 U	1664.45	1736.85	1659.48	1821.18	104	110	70-130	5	30
o-Toluidine	200 U	1664.45	734.5	1659.48	691.34	44*	42*	70-130	6	30
1,2,4-Trichlorobenzene	17 U	1664.45	1651.91	1659.48	1586.86	99	96	70-130	4	30
2,4,5-Trichlorophenol	17 U	1664.45	1791.3	1659.48	1863.46	108	112	70-130	4	30
2,4,6-Trichlorophenol	17 U	1664.45	1843.51	1659.48	1844.94	111	111	70-130	0	30
	mg/kg	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**					
Batch number: 173100570805	Sample number(s): 9299863-9299864,9299871-9299872,9299877-9299878 UNSPK: P300729									
Aluminum	3128.92	176.99	5534.79	186.92	5868.48	1359 (2)	1466 (2)	75-125	6	20
Calcium	60.75	353.98	423.37	373.83	433.15	102	100	75-125	2	20
Iron	4450.05	88.5	5591.27	93.46	6376.46	1290 (2)	2061 (2)	75-125	13	20
Magnesium	615.28	176.99	1149.22	186.92	1125.01	302*	273*	75-125	2	20
Potassium	506.71	884.96	1857.13	934.58	1941.24	153*	153*	75-125	4	20
Sodium	71.95	884.96	965.5	934.58	987.64	101	98	75-125	2	20
Zinc	8.50	44.25	54.91	46.73	57.42	105	105	75-125	4	20
Batch number: 173100570805A	Sample number(s): 9299863-9299864,9299871-9299872,9299877-9299878 UNSPK: P300729									
Antimony	0.0825 U	1.06	0.774	1.12	0.844	73*	75	75-125	9	20
Arsenic	1.14	1.77	3.23	1.87	3.37	118	119	75-125	4	20

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(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/kg	MS Spike Added mg/kg	MS Conc mg/kg	MSD Spike Added mg/kg	MSD Conc mg/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Beryllium	0.0904	0.708	0.807	0.748	0.834	101	99	75-125	3	20
Cadmium	0.0304 U	0.885	0.865	0.935	0.853	98	91	75-125	1	20
Chromium	5.45	8.85	15.83	9.35	15.8	117	111	75-125	0	20
Cobalt	1.48	44.25	46.07	46.73	49.25	101	102	75-125	7	20
Copper	3.13	8.85	13.04	9.35	13.86	112	115	75-125	6	20
Lead	1.66	2.65	6.20	2.80	4.84	171*	113	75-125	25*	20
Manganese	33.47	8.85	51.94	9.35	50.54	209*	183*	75-125	3	20
Nickel	3.57	8.85	13.74	9.35	14.63	115	118	75-125	6	20
Silver	0.0258 U	8.85	8.95	9.35	9.58	101	103	75-125	7	20
Thallium	0.0242	0.354	0.372	0.374	0.393	98	99	75-125	6	20
Vanadium	4.57	8.85	15.12	9.35	15.28	119	115	75-125	1	20
Batch number: 173100570805B	Sample number(s): 9299863-9299864,9299871-9299872,9299877-9299878 UNSPK: P300729									
Selenium	0.0885 U	1.77	1.79	1.87	1.84	101	98	75-125	3	20
Batch number: 173100570805D	Sample number(s): 9299863-9299864,9299871-9299872,9299877-9299878 UNSPK: P300729									
Barium	9.77	8.85	33.45	9.35	23.67	268*	149*	75-125	34*	20
Batch number: 173100571105	Sample number(s): 9299863-9299864,9299871-9299872 UNSPK: P294438									
Mercury	0.175	0.156	0.289	0.161	0.345	73*	105	80-120	18	20
Batch number: 173100571106	Sample number(s): 9299877-9299878 UNSPK: P300729									
Mercury	0.0094 U	0.156	0.151	0.161	0.156	97	97	80-120	4	20
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 173100570504	Sample number(s): 9299879 UNSPK: P292995									
Aluminum	0.0894 U	2.00	2.18	2.00	2.15	109	107	75-125	2	20
Calcium	26.78	4.00	30.13	4.00	30.58	84 (2)	95 (2)	75-125	1	20
Iron	0.0805 U	1.00	1.02	1.00	1.01	102	101	75-125	1	20
Magnesium	10.48	2.00	12.16	2.00	12.33	84 (2)	92 (2)	75-125	1	20
Potassium	2.83	10	12.42	10	12.37	96	95	75-125	0	20
Sodium	7.27	10	16.76	10	16.86	95	96	75-125	1	20
Zinc	0.0065 U	0.500	0.503	0.500	0.502	101	100	75-125	0	20
Batch number: 173100605001A	Sample number(s): 9299879 UNSPK: P298505									
Antimony	0.00045 U	0.00600	0.00557	0.00600	0.00647	93	108	75-125	15	20
Arsenic	0.000782	0.0100	0.0121	0.0100	0.0113	113	105	75-125	7	20
Beryllium	0.000071 U	0.00400	0.00407	0.00400	0.00408	102	102	75-125	0	20
Cadmium	0.00015 U	0.00500	0.00500	0.00500	0.00493	100	99	75-125	1	20
Chromium	0.00087 U	0.0500	0.0526	0.0500	0.0508	105	102	75-125	3	20
Cobalt	0.000315	0.250	0.261	0.250	0.265	104	106	75-125	2	20
Copper	0.00054 U	0.0500	0.0542	0.0500	0.0553	108	111	75-125	2	20
Lead	0.000289	0.0150	0.0158	0.0150	0.0156	104	102	75-125	1	20

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/l	MS Spike Added mg/l	MS Conc mg/l	MSD Spike Added mg/l	MSD Conc mg/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Manganese	0.0450	0.0500	0.0997	0.0500	0.0929	110	96	75-125	7	20
Silver	0.00015 U	0.0500	0.0454	0.0500	0.0463	91	93	75-125	2	20
Thallium	0.00012 U	0.00200	0.00219	0.00200	0.00212	110	106	75-125	4	20
Vanadium	0.00021 U	0.0500	0.0529	0.0500	0.0525	106	105	75-125	1	20
Batch number: 173100605001B	Sample number(s): 9299879 UNSPK: P298505									
Selenium	0.00050 U	0.0100	0.00990	0.0100	0.00984	99	98	75-125	1	20
Batch number: 173100605001D	Sample number(s): 9299879 UNSPK: P298505									
Barium	0.0217	0.0500	0.0709	0.0500	0.0711	98	99	75-125	0	20
Batch number: 173110571302	Sample number(s): 9299879 UNSPK: P300820									
Mercury	0.000050 U	0.00100	0.000853	0.00100	0.000845	85	84	80-120	1	20
Batch number: 173200605002A	Sample number(s): 9299879 UNSPK: P316597									
Nickel	0.00241	0.0500	0.0537	0.0500	0.0571	103	109	75-125	6	20
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 17317667632B	Sample number(s): 9299863-9299868,9299870-9299872 UNSPK: 9299868									
Total Organic Carbon (TOC)	1038.95	14700	18574.23			119		47-143		
Batch number: 17317667633A	Sample number(s): 9299873-9299878 UNSPK: 9299875									
Total Organic Carbon (TOC)	156.6	13530	16284.42			119		47-143		
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 17317667604A	Sample number(s): 9299879 UNSPK: P302105									
Total Organic Carbon (Quad)	0.50 U	10	10.3	10	10.58	103	106	91-113	3	20

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/kg	DUP Conc mg/kg	DUP RPD	DUP RPD Max
Batch number: 173100570805	Sample number(s): 9299863-9299864,9299871-9299872,9299877-9299878 BKG: P300729			
Aluminum	3128.92	3873.93	21*	20
Calcium	60.75	66.85	10 (1)	20
Iron	4450.05	6218.75	33*	20
Magnesium	615.28	858.62	33*	20
Potassium	506.71	557.1	9	20

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Laboratory Duplicate (continued)

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc	DUP Conc	DUP RPD	DUP RPD Max
	mg/kg	mg/kg		
Sodium	71.95	80.92	12 (1)	20
Zinc	8.50	12.31	37* (1)	20
Batch number: 173100570805A	Sample number(s): 9299863-9299864,9299871-9299872,9299877-9299878 BKG: P300729			
Antimony	0.0825 U	0.0879 U	0 (1)	20
Arsenic	1.14	1.18	3 (1)	20
Beryllium	0.0904	0.108	18 (1)	20
Cadmium	0.0304 U	0.0325 U	0 (1)	20
Chromium	5.45	6.51	18	20
Cobalt	1.48	1.81	20	20
Copper	3.13	4.40	34*	20
Lead	1.66	1.97	17	20
Manganese	33.47	44.22	28*	20
Nickel	3.57	4.87	31*	20
Silver	0.0258 U	0.0275 U	0 (1)	20
Thallium	0.0242	0.0236 U	200* (1)	20
Vanadium	4.57	5.49	18	20
Batch number: 173100570805B	Sample number(s): 9299863-9299864,9299871-9299872,9299877-9299878 BKG: P300729			
Selenium	0.0885 U	0.0943 U	0 (1)	20
Batch number: 173100570805D	Sample number(s): 9299863-9299864,9299871-9299872,9299877-9299878 BKG: P300729			
Barium	9.77	10.49	7	20
Batch number: 173100571105	Sample number(s): 9299863-9299864,9299871-9299872 BKG: P294438			
Mercury	0.175	0.201	14 (1)	20
Batch number: 173100571106	Sample number(s): 9299877-9299878 BKG: P300729			
Mercury	0.0094 U	0.0098 U	0 (1)	20
	mg/l	mg/l		
Batch number: 173100570504	Sample number(s): 9299879 BKG: P292995			
Aluminum	0.0894 U	0.0894 U	0 (1)	20
Calcium	26.78	26.5	1	20
Iron	0.0805 U	0.104	200* (1)	20
Magnesium	10.48	10.32	2	20
Potassium	2.83	2.79	2	20
Sodium	7.27	7.20	1	20
Zinc	0.0065 U	0.0065 U	0 (1)	20
Batch number: 173100605001A	Sample number(s): 9299879 BKG: P298505			
Antimony	0.00045 U	0.00045 U	0 (1)	20
Arsenic	0.000782	0.00072 U	200* (1)	20
Beryllium	0.000071 U	0.000071 U	0 (1)	20
Cadmium	0.00015 U	0.00015 U	0 (1)	20

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Laboratory Duplicate (continued)

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc	DUP Conc	DUP RPD	DUP RPD Max
	mg/l	mg/l		
Chromium	0.00087 U	0.00087 U	0 (1)	20
Cobalt	0.000315	0.000273	14 (1)	20
Copper	0.00054 U	0.000569	200* (1)	20
Lead	0.000289	0.000363	23* (1)	20
Manganese	0.0450	0.0498	10	20
Silver	0.00015 U	0.00015 U	0 (1)	20
Thallium	0.00012 U	0.00012 U	0 (1)	20
Vanadium	0.00021 U	0.00021 U	0 (1)	20
Batch number: 173100605001B	Sample number(s): 9299879 BKG: P298505			
Selenium	0.00050 U	0.00050 U	0 (1)	20
Batch number: 173100605001D	Sample number(s): 9299879 BKG: P298505			
Barium	0.0217	0.0200	8	20
Batch number: 173110571302	Sample number(s): 9299879 BKG: P300820			
Mercury	0.000050 U	0.000050 U	0 (1)	20
Batch number: 173200605002A	Sample number(s): 9299879 BKG: P316597			
Nickel	0.00241	0.00289	18 (1)	20
	mg/kg	mg/kg		
Batch number: 17317667632B	Sample number(s): 9299863-9299868,9299870-9299872 BKG: 9299868			
Total Organic Carbon (TOC)	1038.95	1030.7	1 (1)	7
Batch number: 17317667633A	Sample number(s): 9299873-9299878 BKG: 9299875			
Total Organic Carbon (TOC)	156.6	212.72	30* (1)	7
	%	%		
Batch number: 17310820005A	Sample number(s): 9299863-9299868,9299870-9299878 BKG: P300088			
Moisture	16.87	16.97	1	5

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report. For dual column analyses, the surrogate (at least one surrogate for multi-surrogate tests) must be within the acceptance limits on at least one of the two columns.

Analysis Name: Freons
Batch number: J173111AA

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

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Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report. For dual column analyses, the surrogate (at least one surrogate for multi-surrogate tests) must be within the acceptance limits on at least one of the two columns.

Analysis Name: Freons
Batch number: J173111AA

	1,2-Dichloroethane-d4	Fluorobenzene
9299879	108	105
9299880	107	107
Blank	110	112
LCS	107	107
LCSD	108	108
Limits:	70-130	70-130

Analysis Name: Freons
Batch number: J173141AA

	1,2-Dichloroethane-d4	Fluorobenzene
9299863	100	103
9299864	104	101
9299866	102	100
9299867	101	99
9299868	101	105
9299870	102	103
9299871	101	102
9299872	100	97
9299874	104	103
Blank	99	94
LCS	101	101
LCSD	101	103
Limits:	70-130	70-130

Analysis Name: Freons
Batch number: J173171AA

	1,2-Dichloroethane-d4	Fluorobenzene
9299865	96	97
9299873	97	90
9299875	98	94
9299877	99	99
9299878	92	88
Blank	99	98
LCS	100	97
LCSD	98	94
Limits:	70-130	70-130

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report. For dual column analyses, the surrogate (at least one surrogate for multi-surrogate tests) must be within the acceptance limits on at least one of the two columns.

Analysis Name: Freons
Batch number: J173181AA

	1,2-Dichloroethane-d4	Fluorobenzene
9299876	97	101
Blank	98	97
LCS	103	104
LCSD	99	99
MS	99	99
MSD	104	102
Limits:	70-130	70-130

Analysis Name: TCL Volatiles + Add'l Cmpds
Batch number: R173162AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9299868	78	81	75	79
9299870	87	88	78	83
9299871	52*	55*	48*	59*
9299872	70	72	62*	72
9299876	85	89	80	79
9299877	67*	72	65*	66*
Blank	98	100	91	91
LCS	104	106	94	96
LCSD	101	103	99	96
MS	74	75	67*	74
MSD	71	74	68*	65*
Limits:	70-130	70-130	70-130	70-130

Analysis Name: TCL Volatiles + Add'l Cmpds
Batch number: R173171AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9299878	94	97	85	85
Blank	102	105	92	91
LCS	99	100	92	92
LCSD	97	100	88	87
MS	91	97	80	79
MSD	91	92	86	80
Limits:	70-130	70-130	70-130	70-130

Analysis Name: TCL Volatiles + Add'l Cmpds
Batch number: X173131AA

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report. For dual column analyses, the surrogate (at least one surrogate for multi-surrogate tests) must be within the acceptance limits on at least one of the two columns.

Analysis Name: TCL Volatiles + Add'l Cmpds
Batch number: X173131AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9299863	99	97	118	85
Blank	106	106	94	88
LCS	100	100	97	99
LCSD	100	100	97	99
Limits:	70-130	70-130	70-130	70-130

Analysis Name: TCL Volatiles + Add'l Cmpds
Batch number: X173143AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9299866	109	106	88	99
9299867	109	106	93	92
9299873	108	106	91	92
9299874	111	108	91	89
Blank	106	103	92	88
LCS	102	100	96	99
LCSD	101	100	96	98
Limits:	70-130	70-130	70-130	70-130

Analysis Name: TCL Volatiles + Add'l Cmpds
Batch number: X173172AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9299864	108	106	87	94
9299865	109	108	92	91
9299875	108	108	92	88
Blank	104	101	95	85
LCS	100	100	96	99
LCSD	101	101	97	100
Limits:	70-130	70-130	70-130	70-130

Analysis Name: TCL Volatiles + Add'l Cmpds
Batch number: Y173182AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
9299879	95	103	99	95
9299880	95	104	99	95
Blank	93	103	99	95
LCS	93	99	101	101

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report. For dual column analyses, the surrogate (at least one surrogate for multi-surrogate tests) must be within the acceptance limits on at least one of the two columns.

Analysis Name: TCL Volatiles + Add'l Cmpds
Batch number: Y173182AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
LCSD	93	100	101	101
Limits:	70-130	70-130	70-130	70-130

Analysis Name: TCL SVOAs + Add'l Cmpds
Batch number: 17310SLI026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
9299863	68	64	58	60	57	57
Blank	98	101	100	100	98	92
LCS	102	106	96	97	97	95
MS	94	100	87	86	98	82
MSD	99	110	82	93	82	84
Limits:	30-130	30-130	30-130	30-130	30-130	30-130

Analysis Name: TCL SVOAs + Add'l Cmpds
Batch number: 17310WAE026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
9299879	26	38	78	18*	13*	59
Blank	26	38	78	67	70	81
LCS	35	47	89	69	64	77
LCSD	34	46	89	71	63	75
Limits:	15-110	15-110	15-110	30-130	30-130	30-130

Analysis Name: TCL SVOAs + Add'l Cmpds
Batch number: 17313SLI026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
9299865	92	96	100	96	93	93
9299866	95	97	104	100	96	95
9299867	91	94	98	93	94	93
9299868	94	97	102	94	93	91
9299870	97	98	100	95	93	92
9299871	93	92	87	91	90	86
9299872	100	99	94	94	94	91
9299873	98	98	98	96	95	92
9299874	97	98	99	97	94	94
9299875	95	97	96	97	94	95
9299876	95	95	97	94	92	91

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: CRG-The Chemours Co. FC, LLC
Reported: 12/14/2017 15:06

Group Number: 1871169

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report. For dual column analyses, the surrogate (at least one surrogate for multi-surrogate tests) must be within the acceptance limits on at least one of the two columns.

Analysis Name: TCL SVOAs + Add'l Cmpds
Batch number: 17313SLI026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
9299877	98	97	93	91	87	87
9299878	84	84	73	89	85	84
Blank	97	100	106	101	102	102
LCS	102	101	98	97	98	93
MS	101	101	99	97	98	96
MSD	100	99	97	99	95	95
Limits:	30-130	30-130	30-130	30-130	30-130	30-130

Analysis Name: TCL SVOAs + Add'l Cmpds
Batch number: 17314SLE026

	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
9299864	98	103	96	96	90	91
Blank	90	99	97	88	93	92
LCS	102	107	90	90	101	96
MS	103	107	90	94	98	91
MSD	106	109	96	94	102	92
Limits:	30-130	30-130	30-130	30-130	30-130	30-130

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.
P###### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

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Analysis Request / Environmental Services Chain of Custody

VOA + CFCs

For Eurofins Lancaster Laboratories Use Only
Group No.: 1871169 Sample Nos.: 9299863-80
Acc't: 07032 SF: 285389 SCR No.: 214379 Cooler No.: C300988 37576
Cooler Temperature upon receipt: 4.7 °C Container No.: 4

Facility Name: Chambers Works	Project Manager: Kathy West
Facility Contact: Kathy West	Facility Contact Phone No.: 856-540-2056
Facility Address: Chemours Chambers Works	Job No.: 77201000-WH06507774
Rt 130 & Canal Road	Release No.:
Deepwater NJ 08023	PO Number: LBIO-67047
Sampler(s): A.D. KW JG	
Project Name: DE RIVER NAPL DELINEATION PHASE III	

Analyses Required

Comments: DKQP

Condition upon receipt: Intact

Sample Identification	Date Collected	Time Collected	Matrix	Containers Volume (ml)	Preserv	No.	TCL Volatiles + TICs (8260B)	Freons (8260B)
D15-BOR-22-(0-0.5)	11/3/17	13:15	SW	5	None	5	X	X
D15-BOR-22-(0.5-1.0)		13:20	SW	5	None	5	X	X
D15-BOR-22-(2.0-2.5)		13:25	SW	5	None	5	X	X
D15-BOR-22-(7.0-7.5)		13:40	SW	5	None	5	X	X
D15-BOR-22-(7.8-8.0)		14:05	SW	5	None	5	X	X
D15-BOR-22-(8.0-8.2)		14:10	SW	5	None	5	X	X
~~D15-BOR-22-(8.0-8.5)~~		~~14:15~~	~~SW~~					

Turnaround Time Requested (please circle): Standard RUSH Number of days: 8

Special Instructions:

Bottles Relinquished by:	Date	Time	Bottles Received by:	Date:	Time:
[signature]	11/3/17	1600			
			[signature]	11/3/17	1810

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Analysis Request / Environmental Services Chain of Custody

For Eurofins Lancaster Laboratories Use Only
Group No.: 1871169 Sample Nos.: 9299863-80
Acc't: 07032 SF: 285389 SCR No.: 214391 Cooler No.: C19563
Cooler Temperature upon receipt: 0.8 °C Container No.: 1

37598

Facility Name: Chambers Works	Project Manager: Kathy West
Facility Contact: Kathy West	Facility Contact Phone No.: 856-540-2056
Facility Address: Chemours Chambers Works	Job No.: 77201000-WH06507462
Rt 130 & Canal Road	Release No.:
Deepwater NJ 08023	PO Number: LBIO-67047
Sampler(s): AD, KW, JG	
Project Name: DE RIVER NAPL DELINEATION PHASE III	

Analyses Required

Comments: DKQP

Sample Identification	Date Collected	Time Collected	Matrix	Containers Volume (ml)	Preserv	No.	TCL Semivolatiles (8270C) + TICs	Grain Size (ASTM D422)	TAL Metals (6020/7471A)	Moisture (2540 G)	TOC (SW-846 9060A mod)
D15-BOR-22-(0-0.5)	11/3/17	13:15	SW	125	None	1	X		X	X	X
D15-BOR-22-(0-0.5)		13:15	SW	500	None	1		X			
D15-BOR-22-(0.5-1.0)		13:20	SW	125	None	1	X		X	X	X
D15-BOR-22-(0.5-1.0)		13:20	SW	500	None	1		X			
D15-BOR-22-(2.0-2.5)		13:25	SW	125	None	1	X			X	X
D15-BOR-22-(7.0-7.5)		13:40	SW	125	None	1	X			X	X
D15-BOR-22-(7.8-8.0)		14:05	SW	125	None	1	X			X	X
D15-BOR-22-(8.0-8.2)		14:10	SW	125	None	1	X			X	X
D15-BOR-22-(8.0-8.5)	11/3/17	14:15	SW	500	None	1		X			

Condition upon receipt: Intact

Turnaround Time Requested (please circle) : Standard RUSH Number of days: 8

Special Instructions:

Bottles Relinquished by:	Date	Time	Bottles Received by:	Date:	Time:
Bottle Storage	10/25/17	1525			
	11/3/17	1600			
				11/3/17	1810

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Analysis Request / Environmental Services Chain of Custody

DUP2
~~MS/MSD~~ 3

For Eurofins Lancaster Laboratories Use Only
Group No.: 1871169 Sample Nos.: 9299863-80
Acc't: 07032 SF: 285389 SCR No.: 214379 Cooler No.: C32574
Cooler Temperature upon receipt: 4.7 °C Container No.: 4

37585

Facility Name: Chambers Works	Project Manager: Kathy West
Facility Contact: Kathy West	Facility Contact Phone No.: 856-540-2056
Facility Address: Chemours Chambers Works	Job No.: 77201000-WH06507774
Rt 130 & Canal Road	Release No.:
Deepwater NJ 08023	PO Number: LBIO-67047
Sampler(s): AD, JG, KW	
Project Name: DE RIVER NAPL DELINEATION PHASE III	

Analyses Required

Comments: DKQP

Condition upon receipt: Intact

Sample Identification	Date Collected	Time Collected	Matrix	Containers Volume (ml)	Preserv	No.	TCL Volatiles + TICs (8260B)	Freons (8260B)	Comments
~~-BOR- -( )~~			~~SW~~	~~5~~	~~None~~	~~5~~	~~X~~	~~X~~	~~MS~~
~~-BOR- -( )~~			~~SW~~	~~5~~	~~None~~	~~5~~	~~X~~	~~X~~	~~MSD~~
D15 -BOR- 22 -(8.0-8.2)-D	11/3/17	14:10	SW	5	None	5	X	X	

Turnaround Time Requested (please circle): (Standard) RUSH Number of days: 8

Special Instructions:

Bottles Relinquished by:	Date 11/3/17	Time 1600	Bottles Received by:	Date:	Time:
Bottles Relinquished by:	Date	Time	Bottles Received by:	Date:	Time:
Bottles Relinquished by:	Date	Time	Bottles Received by:	Date:	Time:
Bottles Relinquished by:	Date	Time	Bottles Received by:	Date: 11/3/17	Time: 1810

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Analysis Request / Environmental Services Chain of Custody

DUP2 ~~MS/MSD3~~

For Eurofins Lancaster Laboratories Use Only
Group No.: 1871169 Sample Nos.: 9299863-80
Acc't: 07032 SF: 285389 SCR No.: 214474 Cooler No.: C27804 **37632**
Cooler Temperature upon receipt: 0.8 °C Container No.: 1

Facility Name: Chambers Works	Project Manager: Kathy West
Facility Contact: Kathy West	Facility Contact Phone No.: 856-540-2056
Facility Address: Chemours Chambers Works	Job No.: 77201000-WH06507462
Rt 130 & Canal Road	Release No.:
Deepwater NJ 08023	PO Number: LBIO-67047
Sampler(s): AD, KW, JG	
Project Name: DE RIVER NAPL DELINEATION PHASE III	

Analyses Required

Comments: DKQP

Condition upon receipt: Intact

Sample Identification	Date Collected	Time Collected	Matrix	Containers Volume (ml)	Preserv	No.	TCL Semivolatiles (8270C) + TICs	Moisture (2540 G)	TOC (SW-846 9060A mod)
~~-BOR- -(~~			SW	125	None	1	X	X	X
~~-BOR- -(~~			SW	125	None	1	X	X	X
D15 -BOR-22 -(8.0-8.2)-D	11/3/17	14:10	SW	125	None	1	X	X	X

Turnaround Time Requested (please circle) : (Standard) RUSH Number of days: 8

Special Instructions:

Bottles Relinquished by:	Date	Time	Bottles Received by:	Date:	Time:
Bottle Storage					
[signature]	11/3/17	1600			
			[signature]	11/3/17	1810

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Analysis Request / Environmental Services Chain of Custody

For Eurofins Lancaster Laboratories Use Only
Group No.: 1871169 Sample Nos.: 9299863-80
Acc't: 07032 SF: 285389 SCR No.: 214379 Cooler No.: C30088 37577
Cooler Temperature upon receipt: 4.7 °C Container No.: 4

Facility Name: Chambers Works	Project Manager: Kathy West
Facility Contact: Kathy West	Facility Contact Phone No.: 856-540-2056
Facility Address: Chemours Chambers Works	Job No.: 77201000-WH06507774
Rt 130 & Canal Road	Release No.:
Deepwater NJ 08023	PO Number: LBIO-67047
Sampler(s): A.D, JG, KW	
Project Name: DE RIVER NAPL DELINEATION PHASE III	

Analyses Required: TCL Volatiles + TICs (8260B); Freons (8260B)

Comments: DKQP

Sample Identification	Date Collected	Time Collected	Matrix	Containers Volume (ml)	Preserv	No.	TCL Volatiles + TICs (8260B)	Freons (8260B)	Condition upon receipt: Intact
D15-BOR-23-(0-0.5)	11/3/17	11:15	SW	5	None	5	X	X	
D15-BOR-23-(0.5-1.0)		11:20	SW	5	None	5	X	X	
D15-BOR-23-(3.0-3.5)		11:25	SW	5	None	5	X	X	
D15-BOR-23-(5.0-6.0)		11:45	SW	5	None	5	X	X	
D15-BOR-23-(8.0-8.5)		12:00	SW	5	None	5	X	X	
D15-BOR-23-(9.5		12:05	SW	5	None	5	X	X	Aquitard

Turnaround Time Requested (please circle) : (Standard) RUSH Number of days: 8

Special Instructions:

Bottles Relinquished by:	Date 11/3/17	Time 1600	Bottles Received by:	Date:	Time:
Bottles Relinquished by:	Date	Time	Bottles Received by:	Date:	Time:
Bottles Relinquished by:	Date	Time	Bottles Received by:	Date:	Time:
Bottles Relinquished by:	Date	Time	Bottles Received by:	Date: 11/3/17	Time: 1810

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Analysis Request / Environmental Services Chain of Custody

For Eurofins Lancaster Laboratories Use Only
Group No.: 18711169 Sample Nos.: 92998 63-80
Acc't: 07032 SF: 285389 SCR No.: 214392 Cooler No.: C21980 **37599**
Cooler Temperature upon receipt: 0.6 °C Container No.: 3

Facility Name: Chambers Works	Project Manager: Kathy West
Facility Contact: Kathy West	Facility Contact Phone No.: 856-540-2056
Facility Address: Chemours Chambers Works	Job No.: 77201000-WH06507462
Rt 130 & Canal Road	Release No.:
Deepwater NJ 08023	PO Number: LBIO-67047
Sampler(s): AD, J. Gomes, K. West	
Project Name: DE RIVER NAPL DELINEATION PHASE III	

Analyses Required

Sample Identification	Date Collected	Time Collected	Matrix	Containers Volume (ml)	Preserv	No.	TCL Semivolatiles (8270C) + TICs	Grain Size (ASTM D422)	TAL Metals (6020/7471A)	Moisture (2540 G)	TOC (SW-846 9060A mod)	Comments: DKQP / Condition upon receipt: Intact
D15-BOR-23-(0-0.5)	11/3/17	11:15	SW	125	None	1	X		X	X	X	
D15-BOR-23-(0-0.5)		11:15	SW	500	None	1		X				
D15-BOR-23-(0.5-1.0)		11:20	SW	125	None	1	X		X	X	X	
D15-BOR-23-(0.5-1.0)		11:20	SW	500	None	1		X				
D15-BOR-23-(3.0-3.5)		11:25	SW	125	None	1	X			X	X	
D15-BOR-23-(5.0-6.0)		11:45	SW	125	None	1	X			X	X	
D15-BOR-23-(8.0-8.5)		12:00	SW	125	None	1	X			X	X	
D15-BOR-23-(9.5-9.7)		12:05	SW	125	None	1	X			X	X	Aquitard

Turnaround Time Requested (please circle) : (Standard) RUSH Number of days: 8

Special Instructions:

Bottles Relinquished by:	Date	Time	Bottles Received by:	Date:	Time:
Bottle Storage	10/24/17	1525			
	11/3/17	1600			
			11/3/17	1810	

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Analysis Request / Environmental Services Chain of Custody

For Eurofins Lancaster Laboratories Use Only
Group No.: 1871169 Sample Nos.: 92998630-80 C3225 / 37579
Acc't: 07032 SF: 285389 SCR No.: 214379 Cooler No.:
Cooler Temperature upon receipt: 4.7 °C Container No.: 4

Facility Name: Chambers Works	Project Manager: Kathy West
Facility Contact: Kathy West	Facility Contact Phone No.: 856-540-2056
Facility Address: Chemours Chambers Works	Job No.: 77201000-WH06507774
Rt 130 & Canal Road	Release No.:
Deepwater NJ 08023	PO Number: LBIO-67047
Sampler(s): A. Dyroff, K. West, J. Gomez	
Project Name: DE RIVER NAPL DELINEATION PHASE III	

Analyses Required

Comments: DKQP

Sample Identification	Date Collected	Time Collected	Matrix	Containers Volume (ml)	Preserv	No.	TCL Volatiles + TICs (8260B)	Freons (8260B)
E16-BOR-07-(0-0.5)	11-3-17	15:05	SW	5	None	5	X	X
E16-BOR-07-(0.5-1.0)		15:10	SW	5	None	5	X	X
~~E16-BOR-07-(~~			SW	5	None	5	X	X

Condition upon receipt: Intact

Turnaround Time Requested (please circle): (Standard) RUSH Number of days: 8

Special Instructions:

Bottles Relinquished by:	Date 11-3-17	Time 1600	Bottles Received by:	Date:	Time:
Bottles Relinquished by:	Date	Time	Bottles Received by:	Date:	Time:
Bottles Relinquished by:	Date	Time	Bottles Received by:	Date:	Time:
Bottles Relinquished by:	Date	Time	Bottles Received by:	Date: 11/3/17	Time: 1800

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Copies: White copy should accompany samples to Lancaster Laboratories. The pink copy should be retained by the samplers.

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Analysis Request / Environmental Services Chain of Custody

For Eurofins Lancaster Laboratories Use Only
Group No.: 1871169 Sample Nos.: 9299863-80
Acc't: 07032 SF: 285389 SCR No.: 214395 Cooler No.: C26047 **37602**
Cooler Temperature upon receipt: 0.5 °C Container No.: 2

Facility Name: Chambers Works	Project Manager: Kathy West
Facility Contact: Kathy West	Facility Contact Phone No.: 856-540-2056
Facility Address: Chemours Chambers Works	Job No.: 77201000-WH06507462
Rt 130 & Canal Road	Release No.:
Deepwater NJ 08023	PO Number: LBIO-67047
Sampler(s): AD, JG, KW	
Project Name: DE RIVER NAPL DELINEATION PHASE III	

Analyses Required

Sample Identification	Date Collected	Time Collected	Matrix	Containers Volume (ml)	Preserv	No.	TCL Semivolatiles (8270C) + TICs	Grain Size (ASTM D422)	TAL Metals (6020/7471A)	Moisture (2540 G)	TOC (SW-846 9060A mod)									Comments:
																				DKQP
E16-BOR-07-(0-0.5)	11/3/17	15:05	SW	125	None	1	X		X	X	X									Condition upon receipt: Intact
E16-BOR-07-(0-0.5)		15:05	SW	500	None	1		X												
E16-BOR-07-(0.5-1.0)		15:10	SW	125	None	1	X		X	X	X									
E16-BOR-07-(0.5-1.0)		15:10	SW	500	None	1		X												
~~E16-BOR-07-(~~			~~SW~~	~~125~~	~~None~~	~~1~~	~~X~~			~~X~~	~~X~~									
~~E16-BOR-07-(~~			~~SW~~	~~500~~	~~None~~	~~1~~		~~X~~												

Turnaround Time Requested (please circle) : Standard RUSH Number of days: 8

Special Instructions:

Bottles Relinquished by:	Date	Time	Bottles Received by:	Date:	Time:
Bottle Storage	10/24/17	1525			
	11/3/17	1600			
				11/3/17	1810

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Analysis Request / Environmental Services Chain of Custody

For Eurofins Lancaster Laboratories Use Only
Group No.: 1871169 Sample Nos.: 9299863-80
Acc't: 07032 SF: 285389 SCR No.: 214379 Cooler No.: C30088 **37588**
Cooler Temperature upon receipt: 4.7 °C Container No.: 4

Facility Name: Chambers Works	Project Manager: Kathy West
Facility Contact: Kathy West	Facility Contact Phone No.: 856-540-2056
Facility Address: Chemours Chambers Works	Job No.: 77201000-WH06507774
Rt 130 & Canal Road	Release No.:
Deepwater NJ 08023	PO Number: LBIO-67047
Sampler(s): A. Pyroff, J. Gomez, K. West	
Project Name: DE RIVER NAPL DELINEATION PHASE III	

Analyses Required

Comments: DKQP

Sample Identification	Date Collected	Time Collected	Matrix	Containers Volume (ml)	Preserv	No.	TCL Volatiles + TICs (8260B)	Freons (8260B)	Condition upon receipt:
CWKDERIVER3-EQBLK-3	11/2/17	9:00	SW	40	HCl	4	X	X	Intact
CWKDERIVER3-TBLK-3	11/2/17	9:00	SW	40	HCl	4	X	X	

Turnaround Time Requested (please circle) : (Standard) RUSH Number of days: 8

Special Instructions:

Bottles Relinquished by:	Date	Time	Bottles Received by:	Date:	Time:
[signature]	11/3/17	1600			
			[signature]	11/3/17	1810

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Analysis Request / Environmental Services Chain of Custody

For Eurofins Lancaster Laboratories Use Only
Group No.: 1871169 Sample Nos.: 9299863-80
Acc't: 07032 SF: 285389 SCR No.: 214397 Cooler No.: C29246 **37627**
Cooler Temperature upon receipt: 4.7 °C Container No.: 4

Facility Name: Chambers Works	Project Manager: Kathy West
Facility Contact: Kathy West	Facility Contact Phone No.: 856-540-2056
Facility Address: Chemours Chambers Works	Job No.: 77201000-WH06507774
Rt 130 & Canal Road	Release No.:
Deepwater NJ 08023	PO Number: LBIO-67047
Sampler(s): A. Dyroff, J. Gomes, K. West	
Project Name: DE RIVER NAPL DELINEATION PHASE II	

Analyses Required

Sample Identification	Date Collected	Time Collected	Matrix	Containers Volume (ml)	Preserv	No.	TCL Semivolatiles (8270C) + TICs	TAL Metals (6020/7470A)	TOC Quad (SW-846 9060A)
CWKDERIVER-EQBLK-3	11/2/17	9:00	WW	250	HNO3	1		X	
CWKDERIVER-EQBLK-3	↓	↓	WW	250	None	2	X		
CWKDERIVER-EQBLK-3	↓	↓	WW	40	H3PO4	5			X

Comments: DKQP

Condition upon receipt: Intact

Turnaround Time Requested (please circle) : (Standard) RUSH Number of days: 8

Special Instructions:

Bottles Relinquished by:	Date	Time	Bottles Received by:	Date:	Time:
Bottle Storage					
[signature]	11/3/17	1600			
			[signature]	11/3/17	1810

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Sample Administration Receipt Documentation Log

Doc Log ID: 199975

Group Number(s): 1871169

Client: Chambers Works

Delivery and Receipt Information

Delivery Method:	ELLE Courier	Arrival Timestamp:	11/03/2017 18:10
Number of Packages:	4	Number of Projects:	1
State/Province of Origin:	NJ		

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	N/A
Samples Chilled:	Yes	Total Trip Blank Qty:	0
Paperwork Enclosed:	Yes	Air Quality Samples Present:	No
Samples Intact:	Yes		
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Simon Nies (25112) at 18:52 on 11/03/2017

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT42-01	0.8	DT	Wet	Y	Bagged	N
2	DT42-01	0.5	DT	Wet	Y	Bagged	N
3	DT42-01	0.6	DT	Wet	Y	Bagged	N
4	DT42-01	4.7	DT	Wet	Y	Bagged	N

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Lancaster, PA 17605-2425
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Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mg**	milligram(s)
C	degrees Celsius	**mL**	milliliter(s)
cfu	colony forming units	**MPN**	Most Probable Number
CP Units	cobalt-chloroplatinate units	**N.D.**	non-detect
F	degrees Fahrenheit	**ng**	nanogram(s)
g	gram(s)	**NTU**	nephelometric turbidity units
IU	International Units	**pg/L**	picogram/liter
kg	kilogram(s)	**RL**	Reporting Limit
L	liter(s)	**TNTC**	Too Numerous To Count
lb.	pound(s)	**µg**	microgram(s)
m3	cubic meter(s)	**µL**	microliter(s)
meq	milliequivalents	**umhos/cm**	micromhos/cm

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.