

Town of Babylon

Dept. of Environmental Control
281 Phelps Lane, Room 400
North Babylon, NY 11703-4045
(631) 957-3000
(631) 422-7640
Fax: (631) 422-7686
e-mail: dec@townofbabylon.com



RICH SCHAFFER
SUPERVISOR

April 7, 2022

Susan Ackerman, Regional Permit Administrator
New York State Department of Environmental Conservation
Region 1
SUNY Stony Brook
50 Circle Road
Stony Brook, New York 11790

Re: Town of Babylon Leachate Monitoring Program, December 2021

Dear Ms. Ackerman,

The Town of Babylon has completed and forwarded the December 2021 LMP report via Microsoft One Drive. All on this correspondence should have received the document pursuant the contact information provided. If you have not received the report, please contact me at (631) 422-7640 or jguarino@townofbabylon.com.

Please feel free to contact this office with any questions.

Very truly yours,

Joseph Guarino
Principal Environmental Analyst

JG:eb

Encl.

cc: Rich Schaffer, Supervisor, Town of Babylon
Town Board of the Town of Babylon
Ronald C. Kluesener, Chief of Staff, Town of Babylon
Thomas Vetri, Commissioner, Environmental Control, Town of Babylon
David Bligh, Deputy Commissioner, Recycling Ctr./Environmental Control, Town of Babylon
Richard Groh, Chief Environmental Analyst, Environmental Control, Town of Babylon
Linda Waring, Suffolk County Department of Public Works
Lyja Jacob, New York State Department of Environmental Conservation
Richard Clarkson, New York State Department of Environmental Conservation
Tara Rutland, New York State Department of Environmental Conservation
Charlotte Bethoney, New York State Department of Health

Antonio A. Martinez
Councilman
Deputy Supervisor

DuWayne Gregory
Councilman

Anthony N. Manetta
Councilman

Terrence F. McSweeney
Councilman

Jennifer Montiglio
Receiver of Taxes

Geraldine Compitello
Town Clerk

TOBSWMF's Leachate Monitoring Program December 2021

Town of Babylon Department of Environmental
Control

Tom Vetri, Commissioner
Prepared by Joseph Guarino, Principal Environmental Analyst
281 Phelps Lane
North Babylon, NY 11703
631-422-7640

April 2022

Laboratory data and summary report from December 2021 sampling for Babylon's Leachate Monitoring Program.

TOBSWMF's Leachate Monitoring Program

December 2021

As part of its solid waste infrastructure the Town of Babylon maintains four ashfills, the Southern Ashfill (SA), the Old Northern U Ashfill (ONU), the New Northern U Ashfill (NNU) and the lateral expansion of the Southern Ashfill, also known as Cell 7 (NYSDEC Permit No. 1-4720-00778/00014). These ash facilities are located on the northern and southern face of the former Babylon Landfill located on Gleam Street in West Babylon, NY.

Babylon's leachate monitoring program (LMP) samples leachate from each of Babylon's ash facilities pursuant to the requirements of 6NYCRR part 363 (formerly part 360) and/or special condition attached to their NYSDEC solid waste management operating permits. Sampling procedures are described in detail within the 2018 Update Site Analytical Plan for the Town of Babylon Solid Waste Management Facilities (SAP) (TOBDEC, 2018).

Historically for the TOBSWMF's LMP, sampling at the SA, ONU and NNU ash facilities was limited to baseline parameters. In 2018 the NYSDEC required Babylon also sample for 1,4 dioxane and PFOA/PFAS when sampling these facilities for the LMP. December 2021 sampling for the LMP also included these emerging contaminants. Leachate at Cell 7 continues to be sampled for expanded parameters (the expanded parameters list was modified as part of the updated NYSDEC Solid Waste Management Facility regulations (appendix 2)). Sampling of the SA, ONU, NNU and Cell 7 were performed on December 14, 2021. The sampling protocol for the LMP is detailed in the Updated SAP for the Town of Babylon Solid Waste Management Facilities (TOBDEC, 2018). Sampling at the SA and ONU is limited to the Secondary Leachate Collection and Recovery System (SLCRS). Sampling at the NNU is performed for both the Primary Leachate Collection and Recovery System (PLCRS) and SLCRS. Sampling at Cell 7 was for the PLCRS. The complete laboratory report, case narrative and QA/QC package from Pace Analytical Services Inc has been attached as an appendix to this report. Included within the Pace Labs report is analysis for PFAS/PFOA's performed by Eurofins Environmental Testing America. In addition to internal laboratory QA/QC, a trip blank for VOC's was obtained as part of the operational QA/QC requirements. The trip blank was clean. The method blank provided as part of the PFAS/PFOA's analysis for Cell 7 was clean. The method blank provided with PFAS/PFOA analysis for the remaining leachate facilities was clean. The result of the field duplicate (GM-27I) was not notable. Phenolics were noted in the equipment blank (.0294 mg/l) taken with the GMP samples.

Project narratives prepared by the laboratory for each category were reviewed. Notations and flagging qualifiers discussed in the narratives were noted. A possible low bias was noted for 4-butanone at the NNUP, NNUS, SA and Cell 7 facilities. Each data package was certified by the

laboratory as being in compliance with the laboratories quality assurance manual both technically and for completeness.

This section of the LMP report provides a brief summary of the December 2021 leachate sampling at the TOBSWMF's. The sections that follow provide discussion of the results from each ash facility.

The following are notable observations from the December 2021 LMP sampling results:

- Manganese (<.1 mg/l) did not exceed its MCL at the ONU. Manganese exceeded its MCL at the ONU in 22 of the past 37 sampling events over the life of the facility and just 2 of the previous 12 sampling events at the ONU facility since June 2016.
- pH of leachate at the ONU was 8.88, 8.2 at the SA, 7.56 at the NNU PLCRS, 7.78 at the NNU SLCRS and 7.01 at Cell 7. All continue to be observed within an acceptable range.
- Baseline organics observed at each facility for the December 2021 LMP:
 - No baseline organics were observed at the SA facility.
 - Baseline organics observed at the ONU include acetone (.0341 mg/l) and MEK (.0021 mg/l, below reporting limit).
 - Total baseline organics observed at the NNU facility; 0.34 mg/l at the NNU P and 0.336 mg/l at the NNU S.
 - No individual organic compound from the baseline parameters list (SA, ONU and NNU), or summation of those compounds (TTO)¹ were observed at or above their MCL or TTO limits at any of these Babylon ash facilities during the December 2021 LMP.
- Total organics from the expanded parameters list (above mdl) observed at the Cell 7 facility was 1.01 mg/l. Total Toxic Organics (TTO) (>.01 mg/l) at the Cell 7 facility was .035 mg/l. This is below the overall TTO limit (10 mg/l) and 1.5 mg/l limit for acid extractable compounds within the Town of Babylon Discharge Certificate issued by SCDPW.
- Sulfide exceeded its MCL of 12 mg/l at the NNUP (19.2 mg/l), NNUS (91.2 mg/l) and Cell 7 (20.8 mg/l).
- Barium did not exceed its MCL at the ONU, SA or NNU for December 2021. Barium observed at the Cell 7 facility for December 2021 (8.19 mg/l) exceeded its MCL of 8 mg/l.
- Mercury was not detected at the ONU, SA, NNU PLCRS, NNU SLCRS or Cell 7 for December 2021.

¹ Suffolk County Department of Public Works Total Toxic Organics (TTO) limited to: VOC's 2.5 mg/l, Base Neutral Extractable Compounds 1.5 mg/l, Acid Extractable Compounds 1.5 mg/l and Pesticides and PCB's 1 mg/l.

- Chloride at the Cell 7 for June 2021 was reported at .36 mg/l. This was approximately 4-5 orders of magnitude below its historical range at this facility. Chloride was observed at 63,200 mg/l at Cell 7 for December 2021 (level anticipated based upon historical data).
- BOD exceeded its MCL (300 mg/l) at the NNUP (390 mg/l), NNUS (347 mg/l) and Cell 7 (529 mg/l).
- Piper diagrams for the SA, ONU, NNU and Cell 7 were updated with leachate data from the December 2021 LMP. The Piper diagrams for the SA, ONU, NNUP, NNUS and Cell 7 conform to historical data. For June 2021 the Cell 7 facility observed chloride significantly below its historical range caused a substantial change to the Piper diagram for this facility. This aberration or likely lab error was not observed in December 2021 and the Piper diagram for this facility returned to its historical pattern.
- Project narratives were prepared by Pace Analytical Services Inc. for the December 2021 LMP laboratory results. Any issues, deficiencies or flagging of results were summarized in these narratives, and can be found in the appendix of this report. Each data package was certified by the laboratory as being in compliance with its contract for Babylon's LMP both technically and for completeness.

TOBSWMF's Leachate Monitoring Program

Old Northern U

December 2021

Pursuant to NYSDEC 6NYCRR Part 363 requirements for the operation of the Town of Babylon's Old Northern U (ONU) Ashfill, leachate from that facility's secondary leachate collection and recovery system (SLCRS) was sampled in accordance with the procedures detailed in the TOBSWMF's SAP (TOBDEC, 2018). The ONU SLCRS is sampled semi-annually for baseline parameters. Pursuant to NYSDEC requirement to sample for "emerging contaminants", Babylon expanded sampling to include 1,4 dioxane and PFAS/PFOA's for this facility beginning in December 2019.

Ash has not been deposited in the ONU since it was capped in 2002 when the New Northern U (NNU) was constructed atop the facility. Leachate continues to be generated at the ONU despite the facility being capped and numerous attempts to locate the source. The LMP will continue at the ONU until there is a cessation of leachate generation. Included in this report is the December 2021 laboratory report from Pace Analytical Services, a spreadsheet summarizing parameters of concern dating back to 1995, a Piper diagram and a discussion of the laboratory results.

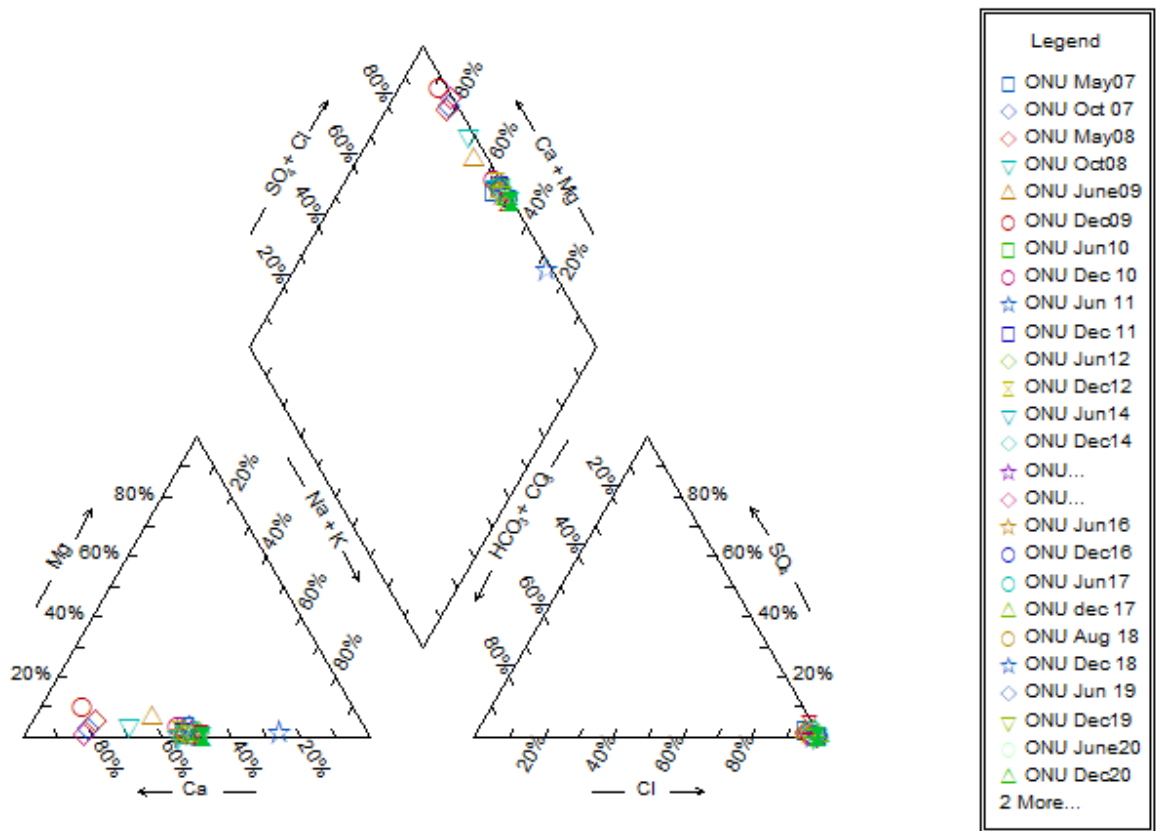
The attached spreadsheet provides a historical overview of leachate composition and any exceedance of MCL's at the ONU. The bullets below highlight notable observations from this round of sampling at the ONU and/or provide follow-up discussion/analysis of previous reports when appropriate.

- The chemical composition of leachate from the ONU for December 2021 generally conforms to historical data from the facility.
- pH measured in the field at the ONU SLCRS for December 2021 was 8.88.
- Manganese (<.1 mg/l) was observed below its mdl for December 2021. Manganese had exceeded its MCL at the ONU in 22 of the past 37 sampling events over the life of the facility but just 2 of the previous 12 sampling events at the ONU facility since June 2016.
- Barium (5.44 mg/l) was not observed above its MCL at the ONU for December 2021.
- Arsenic and lead were not detected above their mdl at the ONU for December 2021. Low values of arsenic and lead have been intermittently observed at this facility.
- Other metals observed at the ONU at values above their reporting limit and below their MCL (where one has been established) for December 2021 include boron (.412 mg/l), calcium (9540 mg/l), magnesium (7.06 mg/l), potassium (3740 mg/l), and sodium (9620 mg/l).

- 1,4 dioxane was observed at 2.0 ug/l for December 2021 at the ONU.
- Other organic compounds from the baseline list observed at the ONU for December 2021 included acetone (.0034 mg/l) and MEK (.0021 mg/l, below reporting limit).
- Sulfide (3.2 mg/l) was detected above its mdl and below its MCL at the ONU facility for December 2021.
- The Piper diagram from the ONU facility was updated with December 2021 data. The geochemical fingerprint for this facility remains unchanged.
- PFAS/PFOA's results are attached in appendix 1.

The next round of sampling at the ONU is scheduled for June 2022.

Piper Diagram ONU Secondary



Note: Solid hourglass = data point for December 2021.

PARAMETERS

03 MCL Oct_08 June_09 Dec_09 June_10 Dec_10 Jun_11 Dec_11 12-Jun DEC_12 Jun_13 Dec_13 Jun_14 DEC_14 June_15 Dec_15

perfluorobutanoic acid (PFBA)

perfluoropentanoic acid (PFPeA)

perfluorohexanoic acid(PFHxA)

perfluoroheptanoic acid

perfluorooctanoic acid(PFOA)

perfluorononanoic acid(PFNA)

perfluorodecanoic acid (PFDA)

perfluoroundecanoic acid(PFUnA)

perfluorododecanoic acid(PFDoA)

perfluorotridecanoic acid(PFTriA)

perfluorotetradecanoic acid(PFTeA)

perfluorobutanesulfonic acid(PFBS)

perfluorohexanesulfonic acid(PFHxS)

perfluoroheptanesulfonic acid(PFHpS)

perfluorooctanesulfonic acid(PFOS)

perfluorodecanesulfonic acid(PFDS)

perfluorooctanesulfonamide(FOSA)

N-methylperfluorooctanesulfonamidoacetic acid(NMeFOSAA)

N-ethylperfluorooctanesulfonamidoacetic acid(NEtFOSAA)

6:2FTS

8:2FTS

total PFAS

PARAMETERS	Jun_16	Dec_16	17-Jun	Dec_17	Aug_18	Dec_18	Jun_19	Dec_19	Jun_20	Dec_20	Jun_21	Dec_21
CHLORIDE	D 9630	D 44600	9970	348000	16400	19600	20400	D 14600	11600	12300	8970	40700
SULFATE	D 165	D 58	282	93.8	264	257	D 197	D 141	191	208	464	22.8 J
Alkalinity	D 271	182	143	148	293	139	245	302	196	137	157	155
Na	2390	8460	2500	6760	3720	3760	D 4560	D 3140	2230	3160	2670	9620
K	945	3870	1030	3310	1320	1570	D 1560	D 1140	937	1360	1170	3740
Ca	2960	9220	3100	8040	4290	4220	5140	D 3550	2390	3360	2770	9540
Mg	38.5	<10	19.4	0.293	19.2	11	192	71	12	7.27	8.1	0.706 J
pH	5.74	9.59/7	6.49	9.8	7.49	7.52	7.22	7.59	7.15	8.02	8.57	8.88
TDS	23900	52800	25200	69200	28600	24000	29900	19500	13700	20900	12300	23100
PHENOL												
PHENOLS	<.005	0.297	0.0264	0.0587	0.134	0.0059	<.00001	0.0158	<.005	0.0054	<.005	0.0563
IRON	4.79	<5	4.32	<.4	2.21	1.44	31.8	13.3	6.16	1.55	3.79	<1
MANGANESE	5.07	<.5	1.63	<.01	1.23	0.62	41.8	14.5	1.3	0.556	0.26	<.1
TKN	13.7	64.3	12.6	52.2	37.3	13.3	27.1	29.1	11.2	14	10.4	90.6
ALUMINUM	0.0704	J <10	<.0134	1.13	<10	<.2	<.2	<.2	<.2	<.2	<.2	<.2
ACETONE	J <	0.0804	<.001	0.0514	0.0024	J 0.0029	<.005	<.005	<.005	<.005	<.005	0.0341
3+4 methylphenol												
Methyl Ethyl Ketone	<	<.005	<.0005	.0025	J <.005	<.005	<.005	<.005	<.005	<.005	<.005	0.0021
Arsenic	<	<.5	<.0068	<.01	<.5	<.01	<.2	D <.01	<.01	<.01	<.01	<.1
Lead	0.0051	<.25	<.0013	<.4	<.25	0.0085	0.031	<.005	<.005	<.005	<.005	<.05
Barium	0.829	<10	1.32	4.9	1.34	J 1.13	2.77	2.07	0.619	1.11	0.566	5.54
Xylene	<	<.005	<.0005	<.002	<.003	<.003	<.003	<.003	<.003	<.003	<.003	<.003
Zinc	0.0358	<1	<.0012	<.02	<1	<.02	<.02	<.02	<.02	<.02	<.02	<.2
Beryllium	0.0022	J <.25	<.00057	.0036	J <.25	<.005	<.005	0.00034	J 0.00013	0.00017	J <.005	<.05
Nickel	<	<2	<.00088	<.04	<2	<.04	<.04	<.04	0.0478	0.0193	J 0.0229	J <.4
Selenium	<	<.5	<.0062	<.01	<.5	<.01	<.2	D 0.0135	<.01	<.01	<.01	<.1
Thallium	<	<.5	<.0036	<.01	<.5	0.0085	J 0.0798	<.01	<.01	<.01	<.01	<.1
Silver	B <	<.5	<.0036	<.01	<.5	<.01	0.0048	J 0.0035	J 0.0047	<.01	<.01	0.015
Toluene	<	<.005	<.0005	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001
Carbon Disulfide	<	<.005	<.0005	<.001	<.001	<.001	<.001	<.001	<.001	0.0033	<.001	<.001
methylene chloride	<	<.005	<.0005	<.001	<.001	<.01	<.001	<.001	<.001	<.001	<.001	<.001
chromium	<	<.5	<.0016	<.01	<.5	<.01	0.0071	J 0.0074	J 0.0489	0.0077	J 0.0031	J <.1
Antimony	<	<3	<.003	<.06	<3	<.06	0.06	<.06	<.06	<.06	<.06	<.6
4-Methyl-2-pentanone	J <	<.005	<.0005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005	<.005
Sulfide	<20	<2	<.61	9.6	<2	<.002	8	<2	1.6	<2	<2	3.2
1,4 dioxane					0.21	JH 0.66	21	18.6	0.38	0.57	0.57	2

PARAMETERS	Jun_16	Dec_16	17-Jun Dec_17	Aug_18	Dec_18	Jun_19	Dec_19	Jun_20	Dec_20	Jun_21	Dec_21
perfluorobutanoic acid (PFBA)							180	B 73	76	200	270
perfluoropentanoic acid (PFPeA)							120	43	67	59	120
perfluorohexanoic acid(PFHxA)							160	60	82	72	170
perfluoroheptanoic acid							53	25	29	28	36
perfluorooctanoic acid(PFOA)							150	44	48	49	51
perfluorononanoic acid(PFNA)							17	7.3	8.1	8.3	2.6
perfluorodecanoic acid (PFDA)							5.4	J 2.1	1.8	J 2.3	0.66 J
perfluoroundecanoic acid(PFUnA)							ND	ND	nd	ND	ND
perfluorododecanoic acid(PFDoA)							ND	ND	nd	ND	ND
perfluorotridecanoic acid(PFTriA)							ND	ND	nd	ND	ND
perfluorotetradecanoic acid(PFTeA)							ND	ND	nd	ND	ND
perfluorobutanesulfonic acid(PFBS)							76	51	82	56	150
perfluorohexanesulfonic acid(PFHxS)							69	B 13	B 17	14	34
perfluoroheptanesulfonic acid(PFHpS)							2.8	J 0.42	J 0.47	J 0.84	J 0.31
perfluorooctanesulfonic acid(PFOS)							98	32	29	28	9
perfluorodecanesulfonic acid(PFDS)							ND	ND	nd	ND	ND
perfluorooctanesulfonamide(FOSA)							ND	0.76	JE	nd	ND
N-methylperfluorooctanesulfonamidoaceti							ND	ND	nd	ND	ND
N-ethylperfluorooctanesulfonamidoacetic ;							ND	ND	nd	ND	ND
6:2FTS							ND	ND	nd	ND	5
8:2FTS							ND	ND	nd	ND	0.63 J
total PFAS							931.2	351.58	440.37	517.44	850.5

TOBSWMF's Leachate Monitoring Program

Southern Ashfill

December 2021

Pursuant to NYSDEC 6NYCRR Part 363 (formerly part 360) requirements for the operation of the Town of Babylon's Southern Ashfill (SA), leachate from that facility's Secondary Leachate Collection and Recovery System (SLCRS) was sampled in accordance with the procedures detailed in the TOBSWMF's SAP (TOBDEC, 2018). The SA facility requires semiannual sampling of leachate for baseline parameters from the facility's SLCRS. Pursuant to NYSDEC requirement to sample for "emerging contaminants", Babylon expanded sampling to include 1,4 dioxane and PFAS/PFOA's for this facility beginning in December 2019. This report includes the laboratory report from Pace Analytical Services, a Piper diagram, a spreadsheet summarizing parameters of concern dating back to 1994, and a discussion of the results.

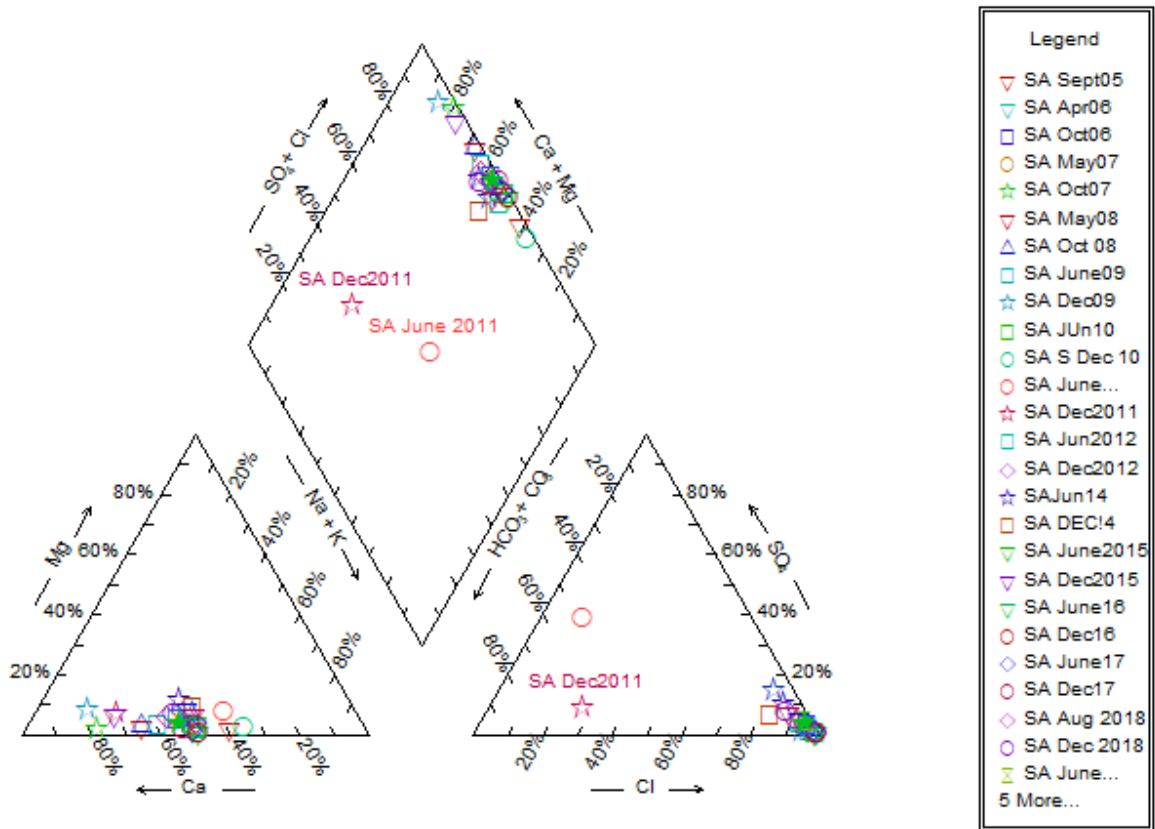
The attached spreadsheet provides a historical overview of leachate composition at the SA and any exceedance of the MCL's. The following bullets summarize any findings from this round of sampling at the SA and provide follow-up analysis or discussion when recommended from previous reports.

- Leachate indicators at the SA have been observed to be variable. Data from the December 2021 LMP at the SA fall within the range of historical data.
- A Piper diagram that includes SA data from December 2021 conforms to its established pattern.
- Lead and arsenic were reported below their mdl's for December 2021. Low values of lead and arsenic have been observed intermittently at the SA.
- Manganese was observed below its MCL at 3.35 mg/l for December 2021. Manganese had exceeded its MCL (8 mg/l) in June 2019. The only other sampling event where manganese exceeded its MCL at the SA facility was December 2013.
- Barium was observed (below its reporting limit) at 0.296 mg/l at the SA for December 2021.
- Other metals observed at the SA at values above their reporting limit and below their MCL (where one has been established) for December 2021 include boron (.928 mg/l), calcium (1930 mg/l), magnesium (79.4 mg/l), potassium (536 mg/l) and sodium (1530 mg/l).
- 1,4 dioxane was detected at 0.75 ug/l at the SA for December 2021.
- No organics from the baseline parameters list was detected at the SA facility for December 2021.

- Mercury was not detected (<.0002 mg/l) at the SA for December 2021.
- pH measured in the field was 8.2 at the SA facility.
- Sulfide (<2 mg/l) was not detected at the SA facility for December 2021.
- PFAS/PFOA's results are attached in appendix A.

The next round of sampling is scheduled for June 2022.

Piper Diagram SA-Secondary LCRS



Note: Solid star indicates December 2021 data.

SA PARAMETERS	03 MCL	Dec_15	Jun_16	Dec_16	17-Jun	Dec_17	Aug_18	Dec_18	June_19	Dec_19	Jun_20	Dec_20
TKN	na	9.4700 D	3.8800	43.2000	28.4000	24.2000	0.5800	1.8000	17.0000 D	2.9	1.2	1.3
TDS	na	16600.0000	12.6000	39900	43000.0000	33200.0000	6130.0000	6300.0000	9360.0000	6800	8290	5250
Phenols	na	<.005	<.005	0.277	0.0124	0.0103	0.0569 J	0.0028 J	<.01	0.0092	<.005	0.0051
Chloride	na	6990.0000 D	#####	31100.0000	15400	57900.0000	3630.0000	2330	5830 D	5470	6860	2540
Sulfide	12		<20	<2	<.61	<2	<2	<2	6.4	<2	<2	<2
Iron	na	17.8000	2.3500	<5	6.86	11.7000	0.4540	12.8	210	2.85	21.5	64.3
Manganese	8 mg/l	4.97	1.87	<.5	3.42	3.86	2.09	1.09	8.44	5.31	6.67	4.21
Phenol	1.5 mg/l											
Xylene	2.5 mg/l *		<	<.005	<.0005	<.002	<.003	<.003	<.003	<.003	<.003	<.003
1,2,4 Trimethylbenzene	na											
SULFATE	na	263.0000 D	182.0000 D	246	221.0000	423.0000	251.0000	267.0000 D	361.0000 D	427	322	621
Arsenic	.4 mg/l	0.0048 B	<.01	<.5	<.0068	<.01	<.01	<.01	0.0599	<.01	<.01	0.0154
Acetone	na ppm	0.002 J	<	0.048	0.0755	0.0264	0.0032 J	<.005	0.0016 J	<.005	<.005	<.005
pH	5 - 12.5	7.0100	6.5300	7.21/6.5	6.18	6.95	8.08	8.05	8	7.24	8.12	8.59
Aluminum	na	0.0527 B	<	<10	<.0134	.0823 J	0.0506 J	0.564	13.5	<.2	0.531	3.86
Barium	8 mg/l	0.6040	0.4350	<10	1.62	1.08	0.205	0.17 J	0.481	0.158 J	0.264	0.189
Lead		0.0042	0.0023 J	<.25	<.0013	0.0058	0.0028 J	0.013	0.279	<.005	0.011	0.0982
Zinc		0.0109 B	0.1060	<1	0.0352	.0163 J	0.0097 J	0.0652	1.87	0.0064 J	0.0762	0.486
Toluene	2.5 mg/l *		<	<.005	<.0005	<.001	<.001	<.001	<.001	<.001	<.001	<.001
Cadmium	.8 mg/l	0.0011 B	<	<.125	<.000063	<.0025	<.0025	<.0025	0.0125	<.0025	<.0025	0.0036
Vanadium		<	<	<2.5	<.0008	<.05	<.05	0.0016 J	0.0226 J	<.05	<.05	0.0113 J
Tin												
Antimony		<	<	<3	<.003	<.06	<.06	<.06	0.0765	<.06	<.06	0.0252 J
Copper	1.6 mg/l	0.0073 B	0.0026 J	<1.25	<.0025	.011 J	0.0042 J	0.0185 J	0.36	0.0087 J	0.0374	0.188
Selenium	.4 mg/l	0.0026 B	<	<.5	<.0062	<.01	<.01	<.01	<.01	<.01	<.01	<.01
Silver	.4 mg/l	0.0035 B	<	<.5	<.0036	<.01	<.01	<.01	0.0043 J	0.0038 J	0.0028	<.01
Beryllium		<	0.0009 J	<.25	0.0051	.0018 J	<.005	<.05	<.005	0.00022 J	0.00011	<.005
Chromium	8 mg/l	0.0016 B	0.0414	<.5	<.0016	<.01	0.003 J	0.0067	0.0989	0.0156	0.0342	0.0195
Nickel	8 mg/l	0.0054 B	0.0243 J	<2	<.00088	<.04	<.04	<.04	0.069	<.04	0.0352	0.0415
Thallium		0.0244	<	<.5	<.0036	.0025 J	<.01	<.01	0.0276	0.012	<.01	<.01
Carbon disulfide			<	<.005	<.0005	<.001	<.001	<.001	<.001	<.001	<.001	0.0015
Methylene Chloride	2.5 mg/l		<	<.005	<.0005	<.001	<.001	<.001	<.001	<.001	<.001	<.001
Alkalinity		261 D	178	151	206	149	225	223	183	268	199	244
Ammonia		1.28	4.39 D	57.1000	11.8	26.9	0.05 J	0.75	4.7	2.9	0.23	0.00097 J
Hardness		4700 D	3400 D	16400.0000	11800	9600	2500	2200	4000	4000	10000	1400
1,4 dioxane	ug/l						0.37 J	0.75	0.88	<.2	0.9	0.81

SA PARAMETERS	03 MCL	Dec_15	Jun_16	Dec_16	17-Jun Dec_17	Aug_18	Dec_18	June_19	Dec_19	Jun_20	Dec_20	
		Dec_15										
Chloride												
Sulfate												
Alkalinity												
Na		329	1170	1494.3944	4180	3360	560	538	1330	843	1200	565
K		640	520	1087.2889	1770	1750	305	293	486	324	418	247
Ca		1820	1410	2053.8333	4660	4420	914	807	1760	991	1550	642
Mg		99.5	63.1	70.7500	70.6	83.7	56.4	64.2	103	105	90.6	55.2
pH		7.01	7.01		6.18	6.95	8.08	8.05	8	7.24	8.12	8.59
perfluorobutanoic acid (PFBA)									70	B	76	37
perfluoropentanoic acid (PFPeA)									110		82	48
perfluorohexanoic acid(PFHxA)									130		130	58
perfluoroheptanoic acid									52		44	30
perfluorooctanoic acid(PFOA)									130		110	86
perfluorononanoic acid(PFNA)									11		11	9.8
perfluorodecanoic acid (PFDA)									15		19	18
perfluoroundecanoic acid(PFUnA)									ND	ND		nd
perfluorododecanoic acid(PFDoA)									ND		0.95 J	nd
perfluorotridecanoic acid(PFTriA)									ND	ND		nd
perfluorotetradecanoic acid(PFTeA)									ND	ND		nd
perfluorobutanesulfonic acid(PFBS)									23		36	15
perfluorohexanesulfonic acid(PFHxS)									36	B	46 B	14
perfluoroheptanesulfonic acid(PFHpS)									ND		2.8	1.2 J
perfluorooctanesulfonic acid(PFOS)									51		110	57
perfluorodecanesulfonic acid(PFDS)									ND	ND		nd
perfluorooctanesulfonamide(FOSA)									ND		0.38 JB	nd
N-methylperfluorooctanesulfonamidoacetic acid(NMeFOSAA)									ND	ND		nd
N-ethylperfluorooctanesulfonamidoacetic acid(NEtFOSAA)									ND	ND		nd
6:2FTS									6.3	J	11 J	nd
8:2FTS									ND	ND		0.73 J
total PFAS									634.3		679.13	374.73

SA PARAMETERS	03 MCL	Jun_21	Dec_21
TKN	na	1.5	8
TDS	na	3670	10400
Phenols	na	<.005	<.005
Chloride	na	3120	5870
Sulfide	12	9.6	<2
Iron	na	0.962	0.768 J
Manganese	8 mg/l	2.4	3.35
Phenol	1.5 mg/l		
Xylene	2.5 mg/l *	<.003	<.003
1,2,4 Trimethylbenzene	na		
SULFATE	na	328	329
Arsenic	.4 mg/l	<.01	<.1
Acetone	na ppm	<.005	<.005
pH	5 - 12.5	8.12	8.2
Aluminum	na	<.2	<2
Barium	8 mg/l	0.148	0.296 J
Lead		<.005	<.05
Zinc		<.02	<.2
Toluene	2.5 mg/l *	<.001	<.001
Cadmium	.8 mg/l	<.0025	<.025
Vanadium		<.05	<.5
Tin			
Antimony		<.06	<.6
Copper	1.6 mg/l	<.025	<.25
Selenium	.4 mg/l	<.01	<.1
Silver	.4 mg/l	<.01	<.1
Beryllium		<.005	<.05
Chromium	8 mg/l	<.01	<.1
Nickel	8 mg/l	0.0144	<.4
Thallium		<.01	<.1
Carbon disulfide		<.001	<.001
Methylene Chloride	2.5 mg/l	<.001	<.001
Alkalinity		240	188
Ammonia		0.12	3.5
Hardness		4000	4000
1,4 dioxane	ug/l	0.93	0.75

SA PARAMETERS

03 MCL

Jun_21

Dec_21

Chloride		
Sulfate		
Alkalinity		
Na	599	1530
K	258	536
Ca	654	1930
Mg	52.82	79.4
pH	8.12	8.2
perfluorobutanoic acid (PFBA)	46	72
perfluoropentanoic acid (PFPeA)	48	66
perfluorohexanoic acid(PFHxA)	63	86
perfluoroheptanoic acid	32	33
perfluorooctanoic acid(PFOA)	85	100
perfluorononanoic acid(PFNA)	8.3	7.5
perfluorodecanoic acid (PFDA)	15	12
perfluoroundecanoic acid(PFUnA)	ND	ND
perfluorododecanoic acid(PFDoA)	ND	ND
perfluorotridecanoic acid(PFTriA)	ND	ND
perfluorotetradecanoic acid(PFTeA)	ND	ND
perfluorobutanesulfonic acid(PFBS)	15	29
perfluorohexanesulfonic acid(PFHxS)	13	22
perfluoroheptanesulfonic acid(PFHpS)	ND	1.1 JCL
perfluorooctanesulfonic acid(PFOS)	43	42
perfluorodecanesulfonic acid(PFDS)	ND	ND
perfluorooctanesulfonamide(FOSA)	ND	ND
N-methylperfluorooctanesulfonamidoacetic acid(NMeFOSAA)	ND	ND
N-ethylperfluorooctanesulfonamidoacetic acid(NEtFOSAA)	1.4 J	ND
6:2FTS	ND	ND
8:2FTS	ND	0.46 J
total PFAS	369.7	471.06

TOBSWMF's Leachate Monitoring Program

New Northern U Ashfill

December 2021

Pursuant to NYSDEC 6NYCRR Part 363 (formerly part 360) requirements for the operation of the Town of Babylon's New Northern U Ashfill (NNU), leachate from the NNU Primary and Secondary Leachate Collection and Recovery System (PLCRS and SLCRS) were sampled in accordance with the procedures detailed in the TOBSWMF's Updated SAP (TOBDEC, 2018). These facilities are sampled semi-annually for baseline parameters as part of Babylon's Leachate Monitoring Program (LMP). Pursuant to NYSDEC requirement to sample for "emerging contaminants", Babylon expanded sampling to include 1,4 dioxane and PFAS/PFOA's for this facility beginning in December 2019. This document includes the laboratory report from Pace Analytical Services, Inc., a spreadsheet summarizing parameters of concern at the facility, a Piper diagram of leachate from each liner system, and a discussion of the results.

The NNU which began accepting ash in 2003 sits atop the ONU, separated by a double liner system, with each layer consisting of a bentonite blanket, liner and geocomposite. The NNU SLCRS is also separated from the ONU by the ONU cap. Both systems serve as near impermeable barriers. The elevation of the NNU system (approximately 25-30 feet above the water table) prevents groundwater infiltration from being considered a source of leachate to the system.

The attached spreadsheet provides a historical overview of leachate composition at the NNU, highlighting any exceedance of an MCL from the facility's PLCRS and SLCRS. The following discussion summarizes any noteworthy findings from the December 2021 sampling and provides follow-up analysis or discussion wherever necessary or recommended in previous reports.

- For the December 2021 LMP pH was 7.56 at the NNU SLCRS and 7.78 at the NNU PLCRS.
- The overall leachate characteristics of the NNU PLCRS and SLCRS largely conform to the historical dataset for this facility.
- Arsenic and lead were not detected above their mdl at the NNUP or NNUS. Low values of arsenic and lead have been intermittently observed at this facility.
- Mercury was not observed above its mdl at the NNU PLCRS or NNU SLCRS for December 2021.
- Organics from the baseline parameters list observed above their reporting limit at the NNU for December 2021 included:

Carbon disulfide was observed at .0011 mg/l at the NNUP.

Acetone was observed at .293 mg/l at the NNU PLCRS and .336 mg/l at the NNU SLCRS. Low concentrations of acetone have been observed at this facility since June 2010.

MEK was detected at the NNU PLCRS at .0412 mg/l and .0367 mg/l at NNU-SLCRS during December 2021 sampling. Trace values of MEK have been intermittently observed at this facility.

4methyl-2pentanone was observed at .0051 mg/l at the NNUP.

TTO as defined on the Town of Babylon discharge certificate issued by Suffolk County Department of Public Works is <.01 mg/l at the NNU facility.

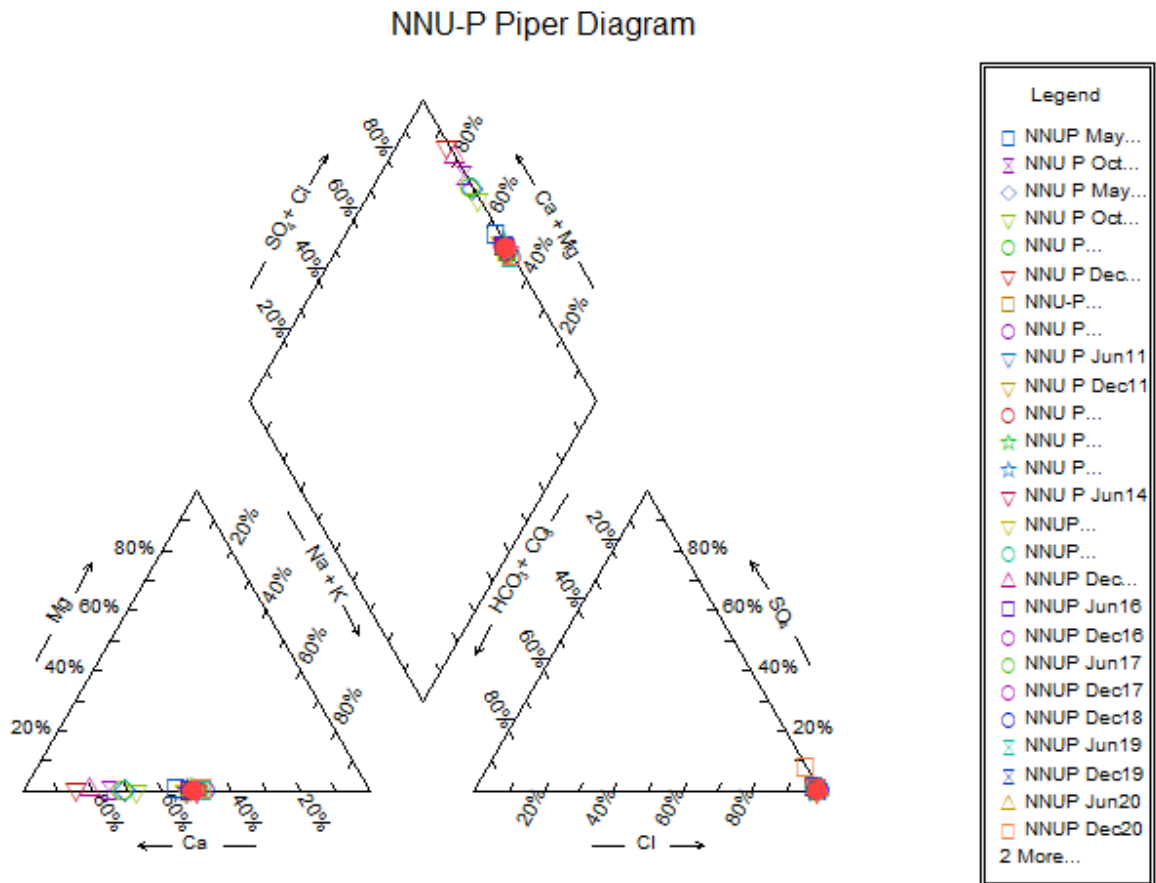
Total baseline organics for the NNU PLCRS was .34 mg/l and .336 mg/l at the NNU SLCRS.

- 1,4 dioxane was observed at 2.3 ug/l at the NNU PLCRS and 2.8 ug/l at the NNU SLCRS.
- Barium was observed below its MCL at the NNU PLCRS (2.94 mg/l) and NNU SLCRS (2.83 mg/l) for December 2021. Barium has been observed exceeding its MCL at the NNU PLCRS 5 times over 37 sampling events through the life of the facility. Barium has exceeded its MCL at the NNU SLCRS 3 times over 37 sampling events through the life of the facility. The last exceedance for barium at each of the facilities was December 2012.
- Other metals observed above their reporting limit and below their MCL at the NNU PLCRS for December 2021 include boron (7.24 mg/l), calcium (13900 mg/l), magnesium (5.29 mg/l), manganese (.476 mg/l), potassium (4680 mg/l) and sodium (12700 mg/l).
- Other metals observed above their mdl and below their MCL at the NNU SLCRS for December 2021 include boron (6.73 mg/l), calcium (15300 mg/l), chromium (.537 mg/l), iron (3.67 mg/l), magnesium (5.8 mg/l), manganese (.431 mg/l), potassium (5220 mg/l) and sodium (14100 mg/l).
- Sulfide exceeded its MCL at the NNUP (19.2 mg/l) and NNUS (91.2 mg/l) for the December 2021 LMP. Sulfide has exceeded its MCL at the NNUP for 8 of 12 sampling rounds since June 2016. At the NNUS sulfide has exceeded its MCL since December 2017.
- BOD was observed above its MCL (300 mg/l) at the NNUP (390 mg/l) and NNUS (347 mg/l). BOD has intermittently exceeded its MCL at these facilities.
- A Piper diagram was prepared with the December 2021 data added to the historical dataset. The geochemical fingerprint for the NNU facilities matches its historical pattern. Slight movement to the lower right quadrant of the NNUS was noted with the June 2021 data. This was likely the result of sulfate at the NNUS observed above its

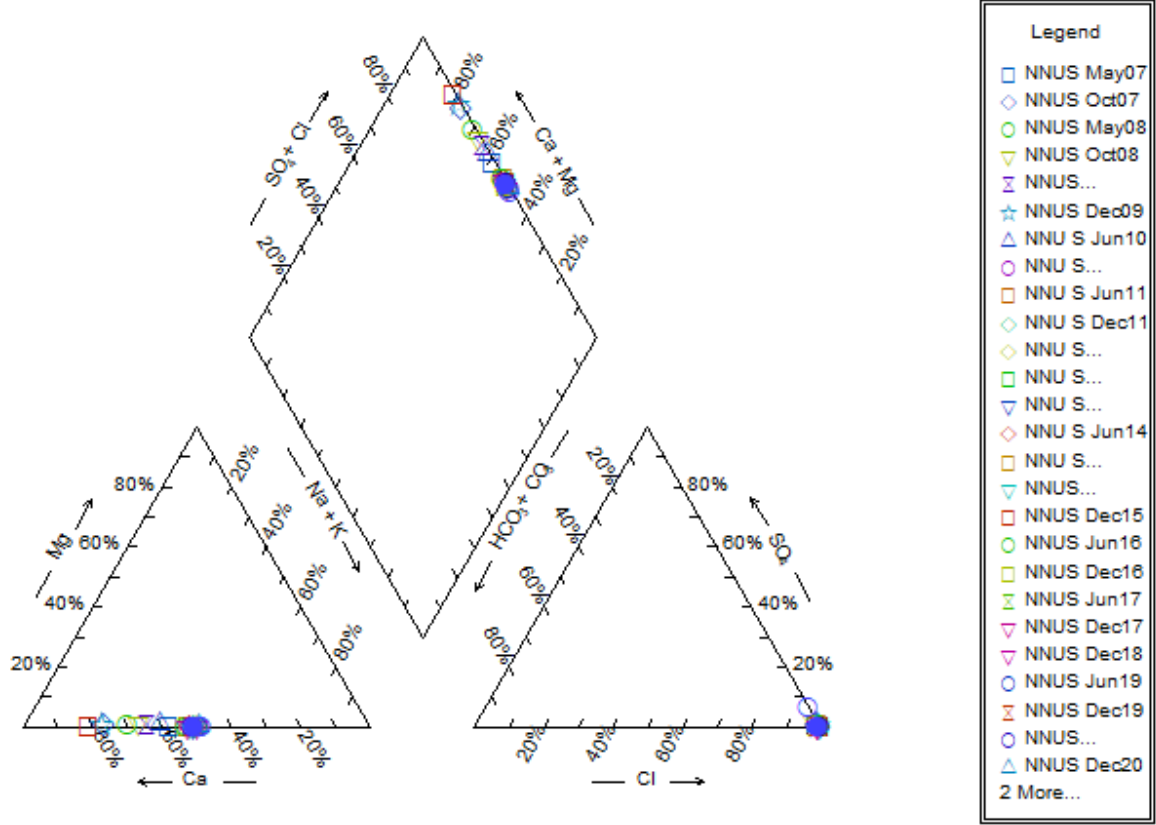
normal range. The same observance was made at the NNUP for December 2020 with a similar result on the Piper diagram.

- PFAS/PFOA's results are attached in appendix A.

The next round of sampling is scheduled for June 2022.



Piper Diagram-NNU Secondary



Note: solid circle represents December 2021 data.

NNUP PARAMETERS

95 MCL

03 MCL

Aug_03

Mar_04

Sept_04

Mar_05

Sept_05

Apr_06

Oct_06

May_07

Oct_07

May_08

Oct_08

June_09

Dec_09

Jun_10

DEC_10

Jun_2011

DEC_11

June_12

perfluorodecanoic acid (PFDA)

perfluoroundecanoic acid(PFUnA)

perfluorododecanoic acid(PFDoA)

perfluorotridecanoic acid(PFTriA)

perfluorotetradecanoic acid(PFTeA)

perfluorobutanesulfonic acid(PFBS)

perfluorohexanesulfonic acid(PFHxS)

perfluoroheptanesulfonic acid(PFHpS)

perfluorooctanesulfonic acid(PFOS)

perfluorodecanesulfonic acid(PFDS)

perfluorooctanesulfonamide(FOSA)

N-methylperfluorooctanesulfonamidoacetic acit(NMeFOSAA)

N-ethylperfluorooctanesulfonamidoacetic acit(NEtFOSAA)

6:2FTS

8:2FTS

Total PFAS

NNUP PARAMETERS	Jun_20	Dec_20	Jun_21	Dec_21
CHLORIDE	60800	24500	29100	68800
SULFATE	24.7	2670	784	25.5
Alkalinity	172	80.3	139	281
Na	10100	6420	6870	12700
K	4040	2780	3070	4680
Ca	11300	6400	7340	13900
Mg	2	16	3.75	5.29
pH	6.96	8.56	7.92	7.78
hardness		16200	21200	29600
TDS	70300	39900	40400	30800
PHENOL				
PHENOLS	0.118	0.0302	0.0348	0.222
IRON	0.368	0.247	0.324	0.495 J
MANGANESE	0.335	0.53	0.197	0.476
TKN	107	61.1	75.8	103
ALUMINUM	<1	0.236	0.21	<20
ACETONE	0.375	0.173	0.172	0.293
Methyl Ethyl Ketone	0.0412	0.0064	0.0187	0.0412
Arsenic	<.05	<.01	<.01	<.1
Lead	0.368	0.0047 J	0.005 J	<.05
Barium	2.24	1.59	1.44	2.94
Cadmium	<.0125	0.0194	<.0025	<.025
Copper	0.103	0.211	<.025	0.088 J
Selenium	<.052	<.01	<.01	<.1
Zinc	0.12	0.096	<.02	<.2
Carbon disulfide	<.001	<.001	<.001	0.0011
BOD	184	89.7	124	390
Antimony	<.3	0.026 J	<.06	<.6
Beryllium	0.00085	<.005	<.005	<.05
Chromium	0.237	0.0301	<.01	0.099 J
Nickel	0.111	0.0401	<.0155	J <.4
Thallium	0.0528	<.01	<.01	<.1
Vanadium	<.25	<.05	0.0085 J	<.5
methylene chloride	<.001	<.001	<.001	<.001
Toluene	<.001	<.001	<.001	<.001
Mercury	<.0002	<.0002	<.0002	<.0002
4-Methyl-2-pentanone	0.0052	<.005	<.005	0.0051
Iodomethane sulfide mg/l	17.6	<2	41.6	19.2
1,4 Dioxane	2.9	2.3	1.9	2.3
perfluorobutanoic acid (PFBA)	270	150	200	260
perfluoropentanoic acid (PFPeA)	130	120	130	120
perfluorohexanoic acid(PFHxA)	190	170	160	150
perfluoroheptanoic acid	31	39	33	25
perfluorooctanoic acid(PFOA)	43	54	31	36
perfluorononanoic acid(PFNA)	2.5	4.5	1.9	2.1

NNUP PARAMETERS	Jun_20	Dec_20	Jun_21	Dec_21
perfluorodecanoic acid (PFDA)	0.66 J	1.8 J	0.57 J	0.42 J
perfluoroundecanoic acid(PFUnA)	ND	nd	ND	ND
perfluorododecanoic acid(PFDoA)	ND	nd	ND	ND
perfluorotridecanoic acid(PFTriA)	ND	nd	ND	ND
perfluorotetradecanoic acid(PFTeA)	Nd	nd	ND	ND
perfluorobutanesulfonic acid(PFBS)	230	190	170	200
perfluorohexanesulfonic acid(PFHxS)	14 B	9.9	10	13
perfluoroheptanesulfonic acid(PFHpS)	0.29 J	.19 J	ND	ND
perfluorooctanesulfonic acid(PFOS)	12	12	3.9	8
perfluorodecanesulfonic acid(PFDS)	ND	nd	ND	ND
perfluorooctanesulfonamide(FOSA)	0.7 JB	nd	0.98 J	ND
N-methylperfluorooctanesulfonamidoacetic acid	ND	nd	ND	ND
N-ethylperfluorooctanesulfonamidoacetic acid	ND	nd	ND	ND
6:2FTS	4.3 J	6	3 J	5.2
8:2FTS	ND	.59 J	ND	ND
Total PFAS	928.45	755.4	744.35	819.72

NNUSPARAMETERS	95 MCL	Dec_12	June_13	13-Dec	Jun_14	DEC_14	June_15	Dec_15	Jun_16	Dec_16	June_17	Dec_17	Aug_18	Dec_18	June_19	Dec_19	
perfluorononanoic acid(PFNA)																ND	
perfluorodecanoic acid (PFDA)																ND	
perfluoroundecanoic acid(PFUnA)																ND	
perfluorododecanoic acid(PFDoA)																ND	
perfluorotridecanoic acid(PFTriA)																ND	
perfluorotetradecanoic acid(PFTeA)																ND	
perfluorobutanesulfonic acid(PFBS)																250	
perfluorohexanesulfonic acid(PFHxS)																11	B
perfluoroheptanesulfonic acid(PFHpS)																ND	
perfluorooctanesulfonic acid(PFOS)																7.1	J
perfluorodecanesulfonic acid(PFDS)																ND	
perfluorooctanesulfonamide(FOSA)																ND	
N-methylperfluorooctanesulfonamidoacetic acit(NMeFOSAA)																ND	
N-ethylperfluorooctanesulfonamidoacetic acit(NEtFOSAA)																ND	
6:2FTS																ND	
8:2FTS																ND	
total PFAS																922.1	

NNUSPARAMETERS	95 MCL	Jun_20	Dec_20	Jun_21	Dec_21
CHLORIDE	500mg/l	61600	45900	46600	48900
SULFATE	500mg/l	8.9	65.9	J 4250	6.2
Alkalinity		140	176	268	272
Na		10600	10400	12700	14100
K		4300	4680	5480	5220
Ca		11900	11100	13000	15300
Mg		2.02	2.3	3.06	5.8
pH	6.5-8.5	6.66	7.37	7.45	7.56
TDS	1000 mg/l	70800	71200	63600	35400
PHENOL	0.002mg/l				
PHENOLS		0.104	0.256	0.0862	0.165
IRON	0.6mg/l	0.108	0.185	0.0447	3.67
MANGANESE	0.6mg/l	0.322	0.312	0.146	0.431
TKN	10 mg/l	106	113	107	116
ALUMINUM	2mg/l	<1	0.0446	J 0.144	<20
ACETONE	5 ppb	0.333	0.617	0.597	0.336
Methyl Ethyl Ketone	5 ppb	0.0406	0.0718	0.036	0.0367
Arsenic	50 ppb	<.05	<.01	0.0116	<.1
Lead	50 ppb	<.025	<.005	0.0048	<.05
Barium		2.3	2.42	2.6	2.83
Cadmium		<.0125	<.0025	<.0025	<.025
Copper		0.0895	<.025	<.025	0.099 J
Zinc		0.0405	<.02	<.02	<.2
Antimony		<.3	<.06	<.06	<.6
Beryllium		0.00089	<.005	<.005	<.05
Chromium		0.232	0.0201	<.01	0.538
Nickel		0.112	0.0281	J 0.0236	0.086 J
Selenium		0.0468	<.01	<.01	<.1
Thallium		0.054	<.01	<.01	<.1
Vanadium		<.25	0.0062	J 0.01	<.5
Silver		0.0287	<.01	<.01	0.018 J
methylene chloride		<.001	<.001	<.001	<.001
ammonia		98.3	107	142	145
hardness		30800	32000	1000	31000
carbon disulfide		0.0018	0.0034	<.001	<.001
4methyl2pentano	ppb	0.0056	0.0064	<.005	0.0048 J
2 hexanone		<.005	<.005	<.005	<.005
Iodomethane		0.0043	<.004	<.004	<.005
sulfide	12 mg/l	12.8	<2	83.2	91.2
BOD	300 mg/l	180	167	265	347
1,4 dioxane	ug/l	2.7	2.6	3.8	2.8
perfluorobutanoic acid (PFBA)		270	210	270	280
perfluoropentanoic acid (PFPeA)		130	150	130	130
perfluorohexanoic acid(PFHxA)		190	170	150	150
perfluoroheptanoic acid		30	29	24	25
perfluorooctanoic acid(PFOA)		36	28	34	32

NNUSPARAMETERS	95 MCL	Jun_20	Dec_20	Jun_21	Dec_21
perfluorononanoic acid(PFNA)		1.8 J	1.6 J	1.4 J	1.7 J
perfluorodecanoic acid (PFDA)		0.72 J	0.58 J	0.68 J	0.47 J
perfluoroundecanoic acid(PFUnA)		ND	nd	ND	ND
perfluorododecanoic acid(PFDoA)		ND	nd	ND	ND
perfluorotridecanoic acid(PFTriA)		ND	nd	ND	ND
perfluorotetradecanoic acid(PFTeA)		ND	nd	ND	ND
perfluorobutanesulfonic acid(PFBS)		240	280	220	200
perfluorohexanesulfonic acid(PFHxS)		12 B	12	12	12
perfluoroheptanesulfonic acid(PFHpS)		ND	nd	0.19 J	ND
perfluorooctanesulfonic acid(PFOS)		9.1	6.9	6	7
perfluorodecanesulfonic acid(PFDS)		ND	nd	ND	ND
perfluorooctanesulfonamide(FOSA)		3.1 B	nd	ND	ND
N-methylperfluorooctanesulfonamidoacetic acit(NMeFOSAA)		ND	nd	ND	ND
N-ethylperfluorooctanesulfonamidoacetic acit(NEtFOSAA)		ND	nd	ND	ND
6:2FTS		3.5 J	2.7 J	4.5	4.6
8:2FTS		ND	nd	ND	ND
total PFAS		926.22	890.78	852.77	842.77

TOBSWMF's Leachate Monitoring Program

Cell 7

December 2021

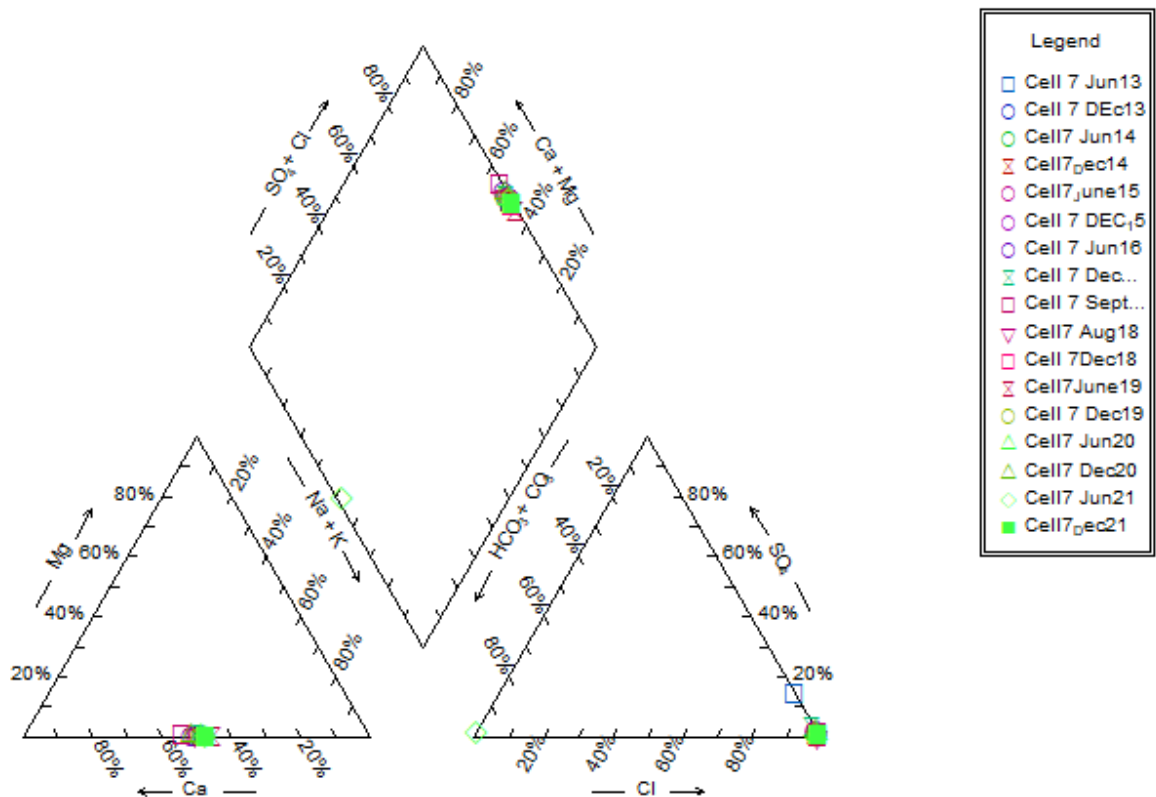
Pursuant to the NYSDEC operating permit for the operation of the Cell 7 Ashfill (Cell 7), leachate from that facility's PLCRS was sampled in accordance with the procedures detailed in the TOBSWMF's SAP (TOBDEC, 2018). The Cell 7 operating permit requires semiannual sampling of leachate for expanded parameters plus a scan for dioxins and furans from the facility's PLCRS. The expanded parameters list is found within 6NYCRR part 363-4.6(h) and includes 1,4 dioxane, fluorinated alkyl substances (PFOA's) and various other additional parameters (appendix 2) not found previously in NYCRR part 360. This report includes the laboratory report from Pace Analytical Services Inc., a spreadsheet summarizing the results, a Piper diagram and brief discussion.

- For June 2021 chloride was observed at 0.36 mg/l at the Cell 7 facility. Historical values of chloride at Cell 7 caused this result to be viewed as suspicious. For December 2021 chloride returned to a value in line with historical results.
- The Piper diagram prepared for June 2021 included a substantial change associated with the low value for chloride. The Piper diagram for December 2021 returned to its historical pattern as chloride returned to its previous range.
- For December 2021 pH at Cell 7 was measured at 7.01.
- Analysis for 2378 TCDD / TCDF for December 2021 was ND (Reporting limit 10 pg/l).
- Analysis for 1,4 dioxane for December 2021 was reported at 4.1 ug/l.
- Mercury was not detected above its mdl at Cell 7 for December 2021.
- Organics from the expanded parameters list observed during December 2021 included acetone (.308 mg/l), MEK (.027 mg/l), phenol (.35 mg/l), 3-4 methylphenol (.305 mg/l), isobutyl alcohol (.012 mg/l), 2-methylphenol (.002 mg/l) and 4methy-2pentanone (.002 mg/l). Total expanded organics observed for December 2021 was 1.01 mg/l.
- TTO (>.01 mg/l) observed at the Cell 7 facility for December 2021 is .35 mg/l (phenol). This is below the overall TTO limit of 10 mg/l, and below the limit for acid extractable organic compounds of 1.5 mg/l set forth in the Town of Babylon Discharge Certification issued by SCDPW.
- Barium was observed at 8.19 mg/l at the Cell 7 facility, exceeding its MCL (8 mg/l). This is the first exceedance of barium above its MCL at the Cell 7 facility.

- Metals observed above their reporting limit include boron (.793 mg/l), calcium (14900 mg/l), copper (.386 mg/l), magnesium (4.91 mg/l), manganese (.526 mg/l), potassium (8790 mg/l) and sodium (13900 mg/l).
- Sulfide was detected at 20.8 mg/l, exceeding its MCL of 12 mg/l.
- BOD at Cell 7 (529 mg/l) exceeded its MCL (300 mg/l).
- PFAS/PFOA and 1,4 dioxane results are included in appendix 1.

The next round of sampling for leachate at the Cell 7 facility is scheduled for June 2022.

Piper Diagram Cell 7 PLCRS



Note: solid green square represents December 2021 data.

Cell7 PLCRS

CELL 7 PLCRS														
				07/01/13	3/13/2014	3/13/2014	06/25/14	12/12/14	06/16/15	12/14/2015				
				7/1/2013	13-Dec	DUP_1213	6/25/2014	12/12/2014	6/16/2015	12/14/2015	6/20/2016	Jan-17	Sept_17	Dec_17
TestNo	Analyte	CAS	Units											
	pH				7.88	1/30/2014	5.91	6.93	6.95		6.01	8.21	6.48	
	DO		mg/l		2.24	1/30/2014	1.31	0.86	1.77		0.87	1.87	0.53	
	Spec cond				61484		50900	45794	48822		56196	25443	65674	
	ORP						-256.4	-281.9	-276.2		-79.5	11.5	-326.5	
SW8270C	Pyrene	129-00-0	µg/L	10 U	10 U		ND U	ND U	ND U		10U	<2.5		<5.0
SW8270C	Safrole	94-59-7	µg/L	10 U	10 U		ND U	ND U	ND U	10 U	10U	<2.5		<5.0
SW9014	Cyanide	57-12-5	UG/L	10.0 U	10 U		50.0 U	10 U	20 U	10 U	10U	<2.9	<10	
SW9060	Total Organic Carbon		mg/L	51.6 D	108 D		35.2	88.0 D	21.3	2.5	22.6	<0.63	43.2	
E1613	Dioxin		Pg/L	1.0 U	10 U		ND	ND	ND U	10 U	10 U			
E300.0	Bromide	24959-67-9	mg/L	308 D	336 D			311 D	ND U	230 D	248D	117	373	
E300.0	Sulfate	14808-79-8	mg/L	5140 D	55 D		157 D	270 D	720 D	364 D	329D	338	375	
E351.2	Nitrogen, Kjeldahl, Total		mg/L	63.6 D	95 D		85.0 D	61.2 D	49.7 D	52.0 D	57.2D	17.1	67	
E353.2	Nitrate as N	14797-55-8	mg/L	2.50 U	2.00 U		2.00 U	0.100 U	0.100 U	0.10 U	.1U	<0.0050	<.05	
E353.2	Nitrite as N	14797-65-0	mg/L	0.100 U	0.100 U		0.100 U	0.100 U	0.100 U	0.10 U	.1U	<0.0050	<.05	
E410.4	Chemical Oxygen Demand		mg/L	517 D	1220 D		445 D	852 D	550 D	175 D	1400 D	560	1560	
E420.1	Phenolics, Total Recoverable		µg/L	49.4 D	309 D		66.6	47.5	54.8 D	5.0 U	41.9	76.2	110	
M3500-Cr D	Chromium, Hexavalent	18540-29-9	mg/L	0.0200 U	0.0200 U		0.0200 U	0.0200 U	0.0200 U	0.02 U	0.0200 U	<0.0030	<.1	
SM2120B	Color		units	75 D	150 D		200 D	150 D	75.0 D	15.0	25.0	40.0	25	
SM2320B	Alkalinity, Total (As CaCO3)		mg/L	181 D	266 D		223 D	273 D	175 D	119 D	122	78.6	160	
SM2340C	Hardness (As CaCO3)		mg/L	17200 D	13100 D		14200 D	17700 D	17800 D	13200 D	25800 D	6400	19600	
SM2540C	Total Dissolved Solids		mg/L	93900 D	39300 D		49400	51700	74000	55500	61100	2960	74800	
SM4500-CL	Chloride	16887-00-6	mg/L	23500 D	21600 D		21800 D	27900 D	26500 D	18400 D	18600 D	8320	31600	
SM4500-NH	Nitrogen, Ammonia (As N)	7664-41-7	mg/L	55.8 D	89.5 D		79.0 D	58.1 D	63.9 D	46.3 D	66.5 D	16.3	56.4	
SM5210B	Biochemical Oxygen Demand		mg/L	42	101		30	266	25	10 U	4	<3.3	43.5	
SW6010B	Aluminum	7429-90-5	UG/L	190 U	28.0 B		43.9 B	200 U	17.6 BN	39.5 B	200 U	200 U		
SW6010B	Antimony	7440-36-0	UG/L	24.0 U	4.0 B		15.8 B	60.0 U	13.2 BN	10.9 B	15.7 J	20.3 J		
SW6010B	Arsenic	7440-38-2	UG/L	56.0 U	8.4 B		39.0	19.1	11.4 N	21.1	19.9	7.6 J		
SW6010B	Barium	7440-39-3	UG/L	3170 B	2430		3490	2750	3940	2790	4250	954		
SW6010B	Beryllium	7440-41-7	UG/L	2.0 U	0.14 U		0.091 U	5.00 U	0.15 U	0.20 U	1.4 J	0.61 J		
SW6010B	Boron	7440-42-8	UG/L	958 B	381		333	666	673	480	651	429		
SW6010B	Cadmium	7440-43-9	UG/L	2.0 U	0.11 U		0.14 U	5.00 U	0.16 U	0.10 U	2.5 U	2.8	<2.5	
SW6010B	Calcium	7440-70-2	UG/L	6610000	6300000		7460000	7100000 D	7360000	5490000 DE	8830000	2570000	7180000	
SW6010B	Chromium	7440-47-3	UG/L	8.0 U	3.2 B		3.8 B	10.0 U	2.8 B	41.9	10 U	10 U		
SW6010B	Cobalt	7440-48-4	UG/L	8.0 U	0.19 U		0.16 U	50.0 U	1.5 B	0.20 U	50 U	2.6 J		
SW6010B	Copper	7440-50-8	UG/L	90.0 B	13.1 B		4.3 B	28.9	0.37 U	4.0 B	10.4 J	25 U		
SW6010B	Iron	7439-89-6	UG/L	896 B	839		1560	1480	894	3110	1230	1680	260	
SW6010B	Lead	7439-92-1	UG/L	20.0 U	10.6		7.7	3.00 U	0.85 UN	1.3 UN	5.8	<50	<100	
SW6010B	Magnesium	7439-95-4	UG/L	9900 B	3710 B		4560 B	7160	8620	9510	10400	8040	24000	
SW6010B	Manganese	7439-96-5	UG/L	2640	1690		2300	852	2100	672	755	304	861	
SW6010B	Nickel	7440-02-0	UG/L	6.0 U	0.34 U		0.29 U	40.0 U	2.8 B	0.30 U	40 U	3.1 J		
SW6010B	Potassium	7440-09-7	UG/L	2990000	3570000		3910000	3990000 D	3860000	2900000 D	4170000	1270000	415000	
SW6010B	Selenium	7782-49-2	UG/L	46.0 U	2.2 B		1.7 B	5.00 U	2.7 UN	2.2 UN	10 U	10 U		
SW6010B	Silver	7440-22-4	UG/L	4.0 U	0.43 U		0.37 U	10.0 U	0.87 UN	0.50 U	10 U			
SW6010B	Sodium	7440-23-5	UG/L	6310000	5760000		6490000	6240000 D	6230000	4870000 DE	7100000	2190000	6730000	
SW6010B	Thallium	7440-28-0	UG/L	38.0 U	1.3 U		4.6 B	10.0 U	1.0 U	1.9 U	10 U	10 U		
SW6010B	Tin	7440-31-5	UG/L	14.0 U	3.7 B		7.7 B	40.0 U	6.6	3.4 B	3.2 J	50 U		
SW6010B	Vanadium	7440-62-2	UG/L	6.0 U	6.4 B		3.7 B	50.0 U	5.4 B	5.0 B	50 U	1.6 J		

Cell7 PLCRS

CELL 7 PLCRS														
				07/01/13	3/13/2014	3/13/2014	06/25/14	12/12/14	06/16/15	12/14/2015				
				7/1/2013	13-Dec	DUP_1213	6/25/2014	12/12/2014	6/16/2015	12/14/2015	6/20/2016	Jan-17	Sept_17	Dec_17
SW6010B	Zinc	7440-66-6	UG/L	6.0 U	8.7 B		11.5 B	154	12.8 BN	1.6 U	4.2 J	20 U		
SW7470	Mercury	7439-97-6	UG/L	0.18 B	1.2 B		0.10 U	0.3	0.10 U	0.10 U	0.20 U	<0.2	.039J	
SW8081/808	4,4'-DDD	72-54-8	µg/L	ND U	ND U		ND U	ND U	0.10 U	0.10 U	0.10 U	.1 U		<0.10
SW8081/808	4,4'-DDE	72-55-9	µg/L	ND U	ND U		ND U	ND U	0.10 U	0.10 U	0.10 U	.1 U		<0.10
SW8081/808	4,4'-DDT	50-29-3	µg/L	ND U	ND U		ND U	ND U	0.10 U	0.10 U	0.10 U	.1 U		<0.10
SW8081/808	Aldrin	309-00-2	µg/L	ND U	ND U		ND U	ND U	0.050 U	0.050 U	0.050 U	.05 U		<0.050
SW8081/808	alpha-BHC	319-84-6	µg/L	ND U	ND U		ND U	ND U	0.050 U	0.050 U	0.050 U	.05 U		<0.050
SW8081/808	Aroclor 1016	12674-11-2	µg/L	ND U	ND U		ND U	ND U	1.0 U	1.0 U	1.0 U	1 U		<1.0
SW8081/808	Aroclor 1221	11104-28-2	µg/L	ND U	ND U		ND U	ND U	2.0 U	2.0 U	2.0 U	2 U		<2.0
SW8081/808	Aroclor 1232	11141-16-5	µg/L	ND U	ND U		ND U	ND U	1.0 U	1.0 U	1.0 U	1 U		<1.0
SW8081/808	Aroclor 1242	53469-21-9	µg/L	ND U	ND U		ND U	ND U	1.0 U	1.0 U	1.0 U	1 U		<1.0
SW8081/808	Aroclor 1248	12672-29-6	µg/L	ND U	ND U		ND U	ND U	1.0 U	1.0 U	1.0 U	1 U		<1.0
SW8081/808	Aroclor 1254	11097-69-1	µg/L	ND U	ND U		ND U	ND U	1.0 U	1.0 U	1.0 U	1 U		<1.0
SW8081/808	Aroclor 1260	11096-82-5	µg/L	ND U	ND U		ND U	ND U	1.0 U	1.0 U	1.0 U	1 U		<1.0
SW8081/808	beta-BHC	319-85-7	µg/L	ND U	ND U		ND U	ND U	0.050 U	0.050 U	0.050 U	.05 U		0.14
SW8081/808	Chlordane	57-74-9	µg/L	ND U	ND U		ND U	ND U	1.0 U	1.0 U	1.0 U			
SW8081/808	delta-BHC	319-86-8	µg/L	ND U	ND U		ND U	ND U	0.050 U	0.050 U	0.050 U	.05 U		<0.050
SW8081/808	Dieldrin	60-57-1	µg/L	ND U	ND U		ND U	ND U	0.10 U	0.10 U	0.10 U	.1 U		<0.10
SW8081/808	Endosulfan I	959-98-8	µg/L	ND U	ND U		ND U	ND U	0.050 U	0.050 U	0.050 U	.05 U		<0.050
SW8081/808	Endosulfan II	33213-65-9	µg/L	ND U	ND U		ND U	ND U	0.10 U	0.10 U	0.10 U	.1 U		<0.10
SW8081/808	Endosulfan sulfate	1031-07-8	µg/L	ND U	ND U		ND U	ND U	0.10 U	0.10 U	0.10 U	.1 U		<0.10
SW8081/808	Endrin	72-20-8	µg/L	ND U	ND U		ND U	ND U	0.10 U	0.10 U	0.10 U	.1 U		<0.10
SW8081/808	Endrin aldehyde	7421-93-4	µg/L	ND U	ND U		ND U	ND U	0.10 U	0.10 U	0.10 U	.1 U		<0.10
SW8081/808	gamma-BHC	58-89-9	µg/L	ND U	ND U		ND U	ND U	0.050 U	0.050 U	0.050 U	.05 U		<0.050
SW8081/808	Heptachlor	76-44-8	µg/L	ND U	ND U		ND U	ND U	0.050 U	0.050 U	0.050 U	.05 U		0.61
SW8081/808	Heptachlor epoxide	1024-57-3	µg/L	ND U	ND U		ND U	ND U	0.050 U	0.050 U	0.050 U	.05 U		<0.050
SW8081/808	Methoxychlor	72-43-5	µg/L	ND U	ND U		ND U	ND U	0.50 U	0.50 U	0.50 U	.5 U		<0.50
SW8081/808	Toxaphene	8001-35-2	µg/L	ND U	ND U		ND U	ND U	5.0 U	5.0 U	5.0 U	5 U		<5.0
SW8141A	Dimethoate	60-51-5	µg/L	ND U	ND U		ND U	ND U	1.0 U	1.0 U	1.0 U	.96 U		<.96
SW8141A	Disulfoton	298-04-4	µg/L	ND U	ND U		ND U	ND U	1.0 U	1.0 U	1.0 U	.96 U		<.96
SW8141A	Methyl parathion	298-00-0	µg/L	ND U	ND U		ND U	ND U	1.0 U	1.0 U	1.0 U	.96 U		<.96
SW8141A	Parathion	56-38-2	µg/L	ND U	ND U		ND U	ND U	1.0 U	1.0 U	1.0 U	.96 U		<.96
SW8141A	Phorate	298-02-2	µg/L	ND U	ND U		ND U	ND U	1.0 U	1.0 U	1.0 U	.96 U		<.96
SW8141A	Thionazin	297-97-2	µg/L	ND U	10 U		ND U					<2.5		<5.0
SW8151	2,4,5-T	93-76-5	µg/L	ND U	ND U		ND U	0.25 U	0.25 U	0.25 U	0.25 U	.047 J		<0.25
SW8151	2,4,5-TP (Silvex)	93-72-1	µg/L	ND U	ND U		0.33 P	0.25 U	0.25 U	0.25 U	0.25 U	.25 U		<0.25
SW8151	2,4-D	94-75-7	µg/L	3.2 P	ND U		0.26 PJ	0.50 U	0.57 P	0.52 P	0.50 U	.5 U		0.28 J
SW8151	Dinoseb	88-85-7	µg/L	ND	ND U		ND U	1.3	0.37 P	0.76 P	0.20 U	.085 J		<0.20
SW8260B	1,1,1,2-Tetrachloroethane	630-20-6	µg/L	ND U	ND U		ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	1,1,1-Trichloroethane	71-55-6	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	1,1,2,2-Tetrachloroethane	79-34-5	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	1,1,2-Trichloroethane	79-00-5	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	1,1-Dichloroethane	75-34-3	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	1,1-Dichloroethene	75-35-4	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	1,1-Dichloropropene	563-58-6	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	1,2,3-Trichloropropane	96-18-4	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	1,2-Dibromo-3-chloropropane	96-12-8	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	1,2-Dibromoethane	106-93-4	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	1,2-Dichlorobenzene	95-50-1	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0

Cell7 PLCRS

CELL 7 PLCRS				07/01/13	3/13/2014	3/13/2014	06/25/14	12/12/14	06/16/15	12/14/2015				
				7/1/2013	13-Dec	DUP_1213	6/25/2014	12/12/2014	6/16/2015	12/14/2015	6/20/2016	Jan-17	Sept_17	Dec_17
SW8260B	1,2-Dichloroethane	107-06-2	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	1,2-Dichloropropane	78-87-5	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	1,3-Dichlorobenzene	541-73-1	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	1,3-Dichloropropane	142-28-9	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	1,4-Dichlorobenzene	106-46-7	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
	1,4-Dioxane (p-Dioxane)		ug/l											<100
SW8260B	2,2-Dichloropropane	594-20-7	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	2-Butanone	78-93-3	µg/L	17	41 Z	39 DZ	23	35	16	5 U	5.0 U	<0.50	15.3	9.2
SW8260B	2-Hexanone	591-78-6	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<5.0	<5.0
SW8260B	4-Methyl-2-pentanone	108-10-1	µg/L	1 J	3 J	3 DJ	2 J	2 J	1 J	5 U	5.0 U	<0.50	<5.0	1.3 J
SW8260B	Acetone	67-64-1	µg/L	120	260 E	270 D	110	300 E	110	5 U	5.0 U	15.6	209	77.1
SW8260B	Acetonitrile	75-05-8	µg/L	ND U	28	25 D	35	100	49	40	5.0 U	<2.5	<5.0	<5.0
SW8260B	Acrolein	107-02-8	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Acrylonitrile	107-13-1	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Allyl Chloride	107-05-1	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Benzene	71-43-2	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Bromochloromethane	74-97-5	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Bromodichloromethane	75-27-4	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Bromoform	75-25-2	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Bromomethane	74-83-9	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Carbon disulfide	75-15-0	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Carbon tetrachloride	56-23-5	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Chlorobenzene	108-90-7	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Chloroethane	75-00-3	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Chloroform	67-66-3	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Chloromethane	74-87-3	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Chloroprene	126-99-8	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	cis-1,2-Dichloroethene	156-59-2	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	cis-1,3-Dichloropropene	10061-01-5	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Dibromochloromethane	124-48-1	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Dibromomethane	74-95-3	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Dichlorodifluoromethane	75-71-8	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Ethyl Methacrylate	97-63-2	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Ethylbenzene	100-41-4	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Iodomethane	74-88-4	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	2 J	<0.50	<1.0	<1.0
SW8260B	Isobutyl alcohol	78-83-1	µg/L	ND U	ND U	ND U	14 J	ND U	25 U	25 U	25 U			
SW8260B	Methacrylonitrile	126-98-7	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Methyl Methacrylate	80-62-6	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Methylene chloride	75-09-2	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Propionitrile	107-12-0	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<2.0	<4.0	<4.0
SW8260B	Silane, methoxytrimethyl-		ug/L	5 JN										
SW8260B	Silanol, trimethyl-		ug/L	19 JN				15 JN		13 JN				
SW8260B	Styrene	100-42-5	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Tetrachloroethene	127-18-4	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Toluene	108-88-3	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	trans-1,2-Dichloroethene	156-60-5	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	trans-1,3-Dichloropropene	10061-02-6	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	trans-1,4-Dichloro-2-butene	110-57-6	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Trichloroethene	79-01-6	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0

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				7/1/2013	13-Dec	DUP_1213	6/25/2014	12/12/2014	6/16/2015	12/14/2015	6/20/2016	Jan-17	Sept_17	Dec_17
SW8260B	Trichlorofluoromethane	75-69-4	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Trimethylsilyl fluoride+Sulfur diox		ug/L	220 JN										
SW8260B	Vinyl acetate	108-05-4	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Vinyl chloride	75-01-4	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<1.0	<1.0
SW8260B	Xylene (total)	1330-20-7	µg/L	ND U	ND U	ND U	ND U	ND U	5.0 U	5 U	5.0 U	<0.50	<2.0	<2.0
SW8270C	1,2,4,5-Tetrachlorobenzene	95-94-3	µg/L	ND U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	1,2,4-Trichlorobenzene	120-82-1	µg/L	ND U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	1,2-Dichlorobenzene	95-50-1	µg/L	ND U	10 U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	1,3,5-Trinitrobenzene	99-35-4	µg/L	ND U	ND U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	1,3-Dichlorobenzene	541-73-1	µg/L	ND U	10 U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	1,3-Dinitrobenzene	99-65-0	µg/L	ND U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	1,4-Dichlorobenzene	106-46-7	µg/L	ND U	10 U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	1,4-Naphthoquinone	130-15-4	µg/L	ND U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	1-Naphthylamine	134-32-7	µg/L	ND U	10 U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	2,2'-oxybis(1-chloropropane)	108-60-1	µg/L	ND U	ND U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	2,3,4,6-Tetrachlorophenol	58-90-2	µg/L	ND U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	2,4,5-Trichlorophenol	95-95-4	µg/L	25 U	25 U	ND U	ND U	ND U	25 U	25 U	25 U	<2.5		<5.0
SW8270C	2,4,6-Trichlorophenol	88-06-2	µg/L	10 U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	2,4-Dichlorophenol	120-83-2	µg/L	ND U	10 U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	2,4-Dimethylphenol	105-67-9	µg/L	10 U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	2,4-Dinitrophenol	51-28-5	µg/L	ND U	25 U	ND U	ND U	ND U	25 U	25 U	25 U	<5.0		<10.0
SW8270C	2,4-Dinitrotoluene	121-14-2	µg/L	ND U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	2,6-Dichlorophenol	87-65-0	µg/L	10 U	ND U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	2,6-Dinitrotoluene	606-20-2	µg/L	10 U	10 U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	2-Acetylaminofluorene	53-96-3	µg/L	ND U	ND U	ND U	ND U	ND U	20 U	20 U	20 U	<2.5		<5.0
SW8270C	2-Chloronaphthalene	91-58-7	µg/L	10 U	10 U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	2-Chlorophenol	95-57-8	µg/L	10 U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	2-Methylnaphthalene	91-57-6	µg/L	10 U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<0.17		<5.0
SW8270C	2-Methylphenol	95-48-7	µg/L	ND U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	2-Naphthylamine	91-59-8	µg/L	10 U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	2-Nitroaniline	88-74-4	µg/L	25 U	25 U	100 U	ND U	ND U	25 U	25 U	25 U	<2.5		<5.0
SW8270C	2-Nitrophenol	88-75-5	µg/L	10 U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	3,3'-Dichlorobenzidine	91-94-1	µg/L	ND U	ND U	80 U	ND U	ND U	20 U	20 U	20 U	<2.5		<5.0
SW8270C	3,3'-Dimethylbenzidine	119-93-7	µg/L	10 U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	3-Methylcholanthrene	56-49-5	µg/L	ND U	10 U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	3-Methylphenol/4-Methylphenol	12-03-3	µg/L	9 J	150	170 D	ND U	9 J	41	10 U	10 U			16.8
SW8270C	3-Nitroaniline	99-09-2	µg/L	ND U	25 U	ND U	ND U	ND U	25 U	25 U	25 U	<2.5		<5.0
SW8270C	4,6-Dinitro-2-methylphenol	534-52-1	µg/L	ND U	ND U	ND U	ND U	ND U	25 U	25 U	25 U	<5.0		<10.0
SW8270C	4-Aminobiphenyl	92-67-1	µg/L	20 U	ND U	80 U	ND U	ND U	20 U	20 U	20 U	<2.5		<5.0
SW8270C	4-Bromophenyl-phenylether	101-55-3	µg/L	10 U	ND U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	4-Chloro-3-methylphenol	59-50-7	µg/L	10 U	10 U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	4-Chloroaniline	106-47-8	µg/L	10 U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	4-Chlorophenyl-phenylether	7005-72-3	µg/L	10 U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	4-Nitroaniline	100-01-6	µg/L	25 U	ND U	100 U	ND U	ND U	25 U	25 U	25 U	<2.5		<5.0
SW8270C	4-Nitrophenol	100-02-7	µg/L	25 U	ND U	100 U	ND U	ND U	25 U	25 U	25 U	<5.0		<10.0
SW8270C	5-Nitro-o-toluidine	99-55-8	µg/L	10 U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	7,12-Dimethylbenz(a)anthracene	57-97-6	µg/L	10 U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Acenaphthene	83-32-9	µg/L	10 U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<0.22		<5.0
SW8270C	Acenaphthylene	208-96-8	µg/L	10 U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<0.21		<5.0

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SW8270C	Acetophenone	98-86-2	µg/L	10 U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		1.2 J
SW8270C	Anthracene	120-12-7	µg/L	10 U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		0.61 J
SW8270C	Benzo(a)anthracene	56-55-3	µg/L	10 U	ND U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Benzo(a)pyrene	50-32-8	µg/L	10 U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Benzo(b)fluoranthene	205-99-2	µg/L	10 U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Benzo(g,h,i)perylene	191-24-2	µg/L	ND U	ND U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Benzo(k)fluoranthene	207-08-9	µg/L	ND U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Benzyl alcohol	100-51-6	µg/L	1	ND U	40 U	ND U	4 J	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Bis(2-chloroethoxy)methane	111-91-1	µg/L	ND U	ND U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Bis(2-chloroethyl)ether	111-44-4	µg/L	ND U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Bis(2-ethylhexyl)phthalate	117-81-7	µg/L	10 U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		1.0 J
SW8270C	Butyl benzyl phthalate	85-68-7	µg/L	10 U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Chlorobenzilate	510-15-6	µg/L	ND U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Chrysene	218-01-9	µg/L	ND U	ND U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Diallate	2303-16-4	µg/L	ND U	10 U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Dibenzo(a,h)anthracene	53-70-3	µg/L	ND U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Dibenzofuran	132-64-9	µg/L	ND U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Diethylphthalate	84-66-2	µg/L	10 U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		0.15 J
SW8270C	Dimethylphthalate	131-11-3	µg/L	ND U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Di-n-butyl phthalate	84-74-2	µg/L	10 U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Di-n-octyl phthalate	117-84-0	µg/L	10 U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Ethyl methanesulfonate	62-50-0	µg/L	ND U	10 U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Famphur	52-85-7	µg/L	10 U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<5.0		<10.0
SW8270C	Fluoranthene	206-44-0	µg/L	ND U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Fluorene	86-73-7	µg/L	ND U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<0.17		<5.0
SW8270C	Hexachlorobenzene	118-74-1	µg/L	ND U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Hexachlorobutadiene	87-68-3	µg/L	10 U	ND U	40 U	ND U	ND U	10 U	10 U	10 U			<5
SW8270C	Hexachlorocyclopentadiene	77-47-4	µg/L	ND U	ND U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Hexachloroethane	67-72-1	µg/L	ND U	10 U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Hexachloropropene	1888-71-7	µg/L	ND U	10 U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Indeno(1,2,3-cd)pyrene	193-39-5	µg/L	10 U	ND U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Isodrin	465-73-6	µg/L	10 U	ND U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Isophorone	78-59-1	µg/L	10 U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Isosafrole	120-58-1	µg/L	ND U	ND U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Kepone	143-50-0	µg/L	ND U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<5.0		<10.0
SW8270C	Methapyrilene	91-80-5	µg/L	ND U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Methyl methanesulfonate	66-27-3	µg/L	ND U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Naphthalene	91-20-3	µg/L	10 U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<0.18		<5.0
SW8270C	Nitrobenzene	98-95-3	µg/L	10 U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	N-Nitrosodiethylamine	55-18-5	µg/L	10 U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	N-Nitrosodimethylamine	62-75-9	µg/L	ND U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	N-Nitroso-di-n-butylamine	924-16-3	µg/L	ND U	ND U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5
SW8270C	N-Nitroso-di-n-propylamine	621-64-7	µg/L	ND U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5
SW8270C	N-Nitrosodiphenylamine	86-30-6	µg/L	10 U	ND U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	N-Nitrosomethylethylamine	10595-95-6	µg/L	10 U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	N-Nitrosopiperidine	100-75-4	µg/L	ND U	ND U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	N-Nitrosopyrrolidine	930-55-2	µg/L	10 U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	O,O,O-Triethylphosphorothioate	126-68-1	µg/L	ND U	10 U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	o-Toluidine	95-53-4	µg/L	ND U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0

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				7/1/2013	13-Dec	DUP_1213	6/25/2014	12/12/2014	6/16/2015	12/14/2015	6/20/2016	Jan-17	Sept_17	Dec_17
SW8270C	p-Dimethylaminoazobenzene	60-11-7	µg/L	10 U	ND U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Pentachlorobenzene	608-93-5	µg/L	ND U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Pentachloronitrobenzene	82-68-8	µg/L	ND U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Pentachlorophenol	87-86-5	µg/L	ND U	25 U	100 U	ND U	ND U	25 U	25 U	25 U	<5.0		<10.0
SW8270C	Phenacetin	62-44-2	µg/L	10 U	ND U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
SW8270C	Phenanthrene	85-01-8	µg/L	ND U	10 U	40 U	ND U	ND U	10 U	10 U	10 U	<0.17		<5.0
SW8270C	Phenol	108-95-2	µg/L	20	10 U	40 U	ND U	34	6 J	10 U	10 U	<2.5		19.4
SW8270C	p-Phenylenediamine	106-50-3	µg/L	10 U	10 U	ND U	ND U	ND U	10 U	10 U	10 U			<5.0
SW8270C	Pronamide	23950-58-5	µg/L	10 U	10 U	ND U	ND U	ND U	10 U	10 U	10 U	<2.5		<5.0
	Sulfide	18496-25-8	mg/L		2.00 U		2.00 U	25.3	2 U		20 U	<0.61	6.4	
EPA1613B	2378-TCDF		pg/l				ND		2 U					ND
EPA1613B	2378-TCDD		pg/l				ND		2 U		10 U			ND
ASTM D517	Total Uranium	7440-61-1	ng/l											1.07 ± 0.050 (0.193) C:NA T:NA
EPA 537	Perfluorobutanesulfonic acid PFBS	375-73-5	ng/l											<84
EPA 537	Perfluoroheptanoic acid PFHpA	375-85-9	ng/l											23
EPA 537	Perfluorohexanesulfonic acid PFHxS	355-46-4	ng/l											13 J
EPA 537	Perfluorononanoic acid PFNA	375-95-1	ng/l											<19
EPA 537	Perfluorooctanesulfonic acid PFOS	1763-23-1	ng/l											<38
EPA 537	Perfluorooctanoic acid PFOA	335-67-1	ng/l											29
EPA 903.1	Radium-226	13982-63-3	ng/l											3.02 ± 1.28 (1.13) C:NA T:33%
EPA 904.0	Radium-228	15262-20-1	ng/l											4.14 ± 1.79 (2.70) C:75% T:16%
	6:2 FTS		ng/l											
	8:2 FTS		ng/l											
	N-ethyl perfluorooctandsulfamidoacetic acidNEtFOSAA		ng/l											
	N-methylperfluorooctansulfamicacetic acid NMeFOSAA		ng/l											
	perfluorobutanoic acid PFBA		ng/l											
	perfluorodecansulfonic acid PFDS		ng/l											
	perfluorodecanoic acid PFDA		ng/l											
	perfluorododecanoic acid PFDoA		ng/l											
	perfluoroheptanesulfonic acid PFHps		ng/l											
	perfluorohexanoic acid PFHxA		ng/l											
	perfluorooctane sulfonamide FOSA		ng/l											
	perfluoropentanoic acid PFPeA		ng/l											
	perfluorotetradecanoic acid PFTeA		ng/l											
	perfluorotridecnaoic acid PFTriA		ng/l											
	perfluoroundecanoic acid PFUnA		ng/l											
	n-Nitrosomorpholine													
	Dimethylbenz(A) Anthracene													
	Bis(2-chloroisopropyl)ether													
	total PFOA/PFAS													

Cell7 PLCRS

CELL 7 PLCRS							
	Aug_18	Dec_18	Jun_19	Dec_19	June_20	Dec_20	June_21
Analyte							
pH	7.11	7.43	7.81	7.48	7.36	7.93	7.25
DO	0.05	2.01	0	1.7	2.59	2.02	2.42
Spec cond	788	1112	876	2194	>20,000	>20,000	>20,000
ORP	-55.8	-75.1	-96.3	-79.2	-73.9	-102.4	-65.3
Pyrene	U	<5	<5.0	<.25	<5	<5.0	<5.0
Safrole	U	<5	<5.0	<.25	<5	<5.0	<5.0
Cyanide	<10	21.3	4.6J	7	4.7 J	3.2J	4.3 J
Total Organic Carbon	94.7	84.8	257 D	147	69.2	28.8	131
Dioxin							
Bromide	353	350	516	422	480	260	764
Sulfate	10.3	6.5	7.2	335	129 D	305J D	3.8
Nitrogen, Kjeldahl, Total	51.2	56.3	104 D	65.2 D	93.8 D	21.6	15.8
Nitrate as N	<.05	0.051	0.090	<0.50 D	<0.050	<0.25 D	<.25
Nitrite as N	<.05	<.05	<0.050	<0.050	<0.050	<0.050	<.05
Chemical Oxygen Demand	1810	1690	3870	3410	2240	1120	3240
Phenolics, Total Recoverable	236	177		358 D	278 D	35.3	188
Chromium, Hexavalent	<.1D	<.02	<.02	<.02	<.02	0.052	<0.020
Color		15		50.0		250 D	60.0
Alkalinity, Total (As CaCO3)	275	216	336	223	176	123	282
Hardness (As CaCO3)	20400	20100	28800	26700	28400	15800	30000
Total Dissolved Solids	54000	54400	74600	62000	58800	34000	65200
Chloride	30500	29600	50600	48500	49500	22700	0.36
Nitrogen, Ammonia (As N)	51.7D	29.8	93.3	78.7	82.2	50.7 D	108
Biochemical Oxygen Demand	137D	134	494	235	103	46.8 D	179
Aluminum	<10000 D	<200	<1000 D	77.6J D	<1000 D	311	<10000
Antimony	<3000 D	18.8J	<300 D	45.4J D	<300 D	19.2J	<3000
Arsenic	<500 D	<10.0	<50.0 D	28.4 D	<50.0 D	<10.0	<500
Barium	3580J D	3130	6450 D	5840 D	5550 D	3160	6450 J
Beryllium	<250 D	<5.0	1.7J D	<10.0 D	0.58J D	0.20J	<250
Boron	612J D	718	334 D	1040 D	92.5J D	594	740 J
Cadmium	<125 D	14.4J D	<12.5 D	<5.0 D	<12.5 D	<2.5	<125
Calcium	8140000 D	7430000	9750000 D	9300000 D	9900000 D	6120000 D	13000000
Chromium	<500 D	<10.0	46.1J D	<20.0 D	157 D	11.4	<500
Cobalt	<2500 D	5.0J	<250 D	<100 D	<250 D	<50.0	<2500
Copper	<1250 D	<25.0	59.0J D	<50.0 D	56.0J D	<25.0	<1250
Iron	10600 D	362	150 D	388 D	109 D	702	<1000
Lead	<250 D	<50.0 D	<25.0 D	<10.0 D	<25.0 D	<5.0	<250
Magnesium	18100 D	11400	4420 D	11100 D	6450 D	7170	10600
Manganese	3250 D	649	1440 D	750 D	221 D	255	496 J
Nickel	<2000 D	<40.0	<200 D	<80.0 D	72.0J D	26.2J	<2000
Potassium	3930000 D	4600000 D	6390000 D	5700000 D	5550000 D	3160000 D	8100000
Selenium	<500 D	<10.0	125 D	17.8J D	<50.0 D	<10.0	<500
Silver	<500 D	<10.0	<50.0 D	<20.0 D	18.8J D	<10.0	<500
Sodium	6910000 D	6870000 D	9900000 D	7950000 D	8800000 D	4860000 D	11800000
Thallium	<500 D	4.5J	<50.0 D	<20.0 D	<50.0 D	<10.0	<500
Tin	<2500 D	<50.0	<250 D	<100 D	<250 D	<50.0	<2500
Vanadium	<2500 D	<50.0	<250 D	13.6J D	<250 D	10.0J	<2500

Cell7 PLCRS

CELL 7 PLCRS							
	Aug_18	Dec_18	Jun_19	Dec_19	June_20	Dec_20	June_21
Zinc	<1000 D	16.8J D	132 D	<40.0 D	<100 D	<20.0	<1000
Mercury	<.2	<0.20	0.15J	0.15J	<.2	<0.200	<0.20
4,4'-DDD	<0.10	<0.10	<0.10	<0.10	<.1	<0.10	<0.094
4,4'-DDE	<0.10	<0.10	<0.10	<0.10	<.1	<0.10	<0.094
4,4'-DDT	<0.10	<0.10	<0.10	<0.10	<.1	0.023J	<0.094
Aldrin	<0.050	<0.050	<0.050	<0.050	<.05	<0.050	<0.047
alpha-BHC	<0.050	<.05	<0.050	<.05	<.05	<0.050	<0.047
Aroclor 1016	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<0.94
Aroclor 1221	<2.0	<2.0	<2.0	<2.0	<1	<1.0	<0.94
Aroclor 1232	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<0.94
Aroclor 1242	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<0.94
Aroclor 1248	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<0.94
Aroclor 1254	<1.0	<1.0	<1.0	0.68J	<1	<1.0	<0.94
Aroclor 1260	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<0.94
beta-BHC	<.05	<.05	<0.050	<.05	<.05	<0.050	<0.047
Chlordane							
delta-BHC	<.05	<.05	<0.050	<.05	<.05	<0.050	0.75
Dieldrin	<0.10	<0.10	<0.10	<0.10	<.1	<0.10	<0.094
Endosulfan I	<0.050	<0.050	<0.050	<0.050	<.05	<0.050	<0.047
Endosulfan II	<0.10	<0.10	<0.10	<0.10	<.1	<0.10	<0.094
Endosulfan sulfate	<0.10	<0.10	<0.10	<0.10	<.1	<0.10	<0.094
Endrin	<0.10	<0.10	<0.10	<0.10	<.1	<0.10	<0.094
Endrin aldehyde	<0.10	<0.10	<0.10	<0.10	<.1	0.026J	<0.094
gamma-BHC	<.05	<.05	<0.050	<.05	<.05	<0.050	<0.047
Heptachlor	<.05	<0.050	<0.050	<0.050	<.05	<0.050	0.23
Heptachlor epoxide	<0.050	<0.050	<0.050	<0.050	<.05	<0.050	<0.047
Methoxychlor	<0.50	<0.50	<0.50	<0.50	<.5	<0.50	<0.47
Toxaphene	<5.0	<5.0	<5.0	<5.0	<.5	<5.0	<4.7
Dimethoate	<.95	<5	<5	<.25	<5	<5.0	<5.0
Disulfoton	<.95	<5	<5.0		<5	<5.0	<5.0
Methyl parathion	<.95	<5	<5.0	<.25	<5	<5	<5.0
Parathion	<.95	<5	<5.0	<.25	<5	<5.0	<5.0
Phorate							
Thionazin	U	<5		<.25	<5	<5.0	<5.0
2,4,5-T	0.055J	0.19J	<0.25	<0.25	0.12 J	<0.25	1.9
2,4,5-TP (Silvex)	<0.25	<0.25	<0.25	0.16J	<.25	0.12J	2.0
2,4-D	<0.50	1.4	1.7	1.0	1.3	1.4	11.6
Dinoseb	0.14J	0.16J	0.30	0.43	<.2	<0.20	1.2
1,1,1,2-Tetrachloroethane	<1.0	<1.0	<1.0	<1	<1	<1.0	<1.0
1,1,1-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
1,1,2,2-Tetrachloroethane	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
1,1,2-Trichloroethane	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
1,1-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
1,1-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
1,1-Dichloropropene	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
1,2,3-Trichloropropane	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
1,2-Dibromo-3-chloropropane	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
1,2-Dibromoethane	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
1,2-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0

Cell7 PLCRS

CELL 7 PLCRS							
	Aug_18	Dec_18	Jun_19	Dec_19	June_20	Dec_20	June_21
1,2-Dichloroethane	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
1,2-Dichloropropane	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
1,3-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
1,3-Dichloropropane	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
1,4-Dichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
1,4-Dioxane (p-Dioxane)	0.59	2.7	<100 SIM 2.4ug/l	4.2	<100 SIM 3.3 ug/l	1.7	4.2
2,2-Dichloropropane	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
2-Butanone	16.7	14.4	10.8	13.1	14.2	3.6J	22.9
2-Hexanone	<5.0	<5.0	<5.0	<5.0	<5	<5.0	<5.0
4-Methyl-2-pentanone	1.8J	1.6J	1.4J	<5.0	<5	<5.0	<5.0
Acetone	274 D	195	103	179	124	49.7	267
Acetonitrile	62.9	156	128	193	<5	<5.0	191
Acrolein	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Acrylonitrile	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Allyl Chloride	<1.0	<1.0	<1.0	<1.0	<4	<4.0	<4.0
Benzene	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Bromochloromethane	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Bromodichloromethane	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Bromoform	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Bromomethane	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Carbon disulfide	<1.0	1.1	<1.0	<1.0	<1	1.1	<1.0
Carbon tetrachloride	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Chlorobenzene	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Chloroform	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Chloromethane	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Chloroprene	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
cis-1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
cis-1,3-Dichloropropene	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Dibromochloromethane	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Dibromomethane	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Dichlorodifluoromethane	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Ethyl Methacrylate	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Ethylbenzene	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Iodomethane	<1.0	<1.0	<1.0	<1.0	4.2	<4.0	<4.0
Isobutyl alcohol				5.8JJ	<20	<20.0	<20.0
Methacrylonitrile	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Methyl Methacrylate	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Methylene chloride	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Propionitrile	<4.0	<4.0	<4.0	<4.0	<4	<4.0	<4.0
Silane, methoxytrimethyl-			<1.0				
Silanol, trimethyl-							20.2 J
Styrene	<1.0	<1.0	<1.0		<1	<1.0	<1.0
Tetrachloroethene	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Toluene	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
trans-1,2-Dichloroethene	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
trans-1,3-Dichloropropene	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
trans-1,4-Dichloro-2-butene	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Trichloroethene	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0

Cell7 PLCRS

CELL 7 PLCRS							
	Aug_18	Dec_18	Jun_19	Dec_19	June_20	Dec_20	June_21
Trichlorofluoromethane	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Trimethylsilyl fluoride+Sulfur diox							
Vinyl acetate	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1	<1.0	<1.0
Xylene (total)	<3.0	<3.0	<3.0	<3.0	<3	<3.0	<3.0
1,2,4,5-Tetrachlorobenzene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
1,2,4-Trichlorobenzene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
1,2-Dichlorobenzene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
1,3,5-Trinitrobenzene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
1,3-Dichlorobenzene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
1,3-Dinitrobenzene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
1,4-Dichlorobenzene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
1,4-Naphthoquinone	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
1-Naphthylamine	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
2,2'-oxybis(1-chloropropane)		<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
2,3,4,6-Tetrachlorophenol	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
2,4,5-Trichlorophenol	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
2,4,6-Trichlorophenol	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
2,4-Dichlorophenol	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
2,4-Dimethylphenol	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
2,4-Dinitrophenol	U	<10.0	<10.0	<50.0 D	<10	<10.0	<10.0
2,4-Dinitrotoluene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
2,6-Dichlorophenol	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
2,6-Dinitrotoluene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
2-Acetylaminofluorene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
2-Chloronaphthalene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
2-Chlorophenol	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
2-Methylnaphthalene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
2-Methylphenol	0.328	<5.0	1.0J	<25.0 D	0.63 J	<5.0	<5.0
2-Naphthylamine	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
2-Nitroaniline	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
2-Nitrophenol	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
3,3'-Dichlorobenzidine	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
3,3'-Dimethylbenzidine	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
3-Methylcholanthrene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
3-Methylphenol/4-Methylphenol	46.8	39.1	110 D		44.4	1.2J	83.3
3-Nitroaniline	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
4,6-Dinitro-2-methylphenol	U	<10.0	<10.0	<50.0 D	<10	<10.0	<10.0
4-Aminobiphenyl	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
4-Bromophenyl-phenylether	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
4-Chloro-3-methylphenol	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
4-Chloroaniline	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
4-Chlorophenyl-phenylether	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
4-Nitroaniline	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
4-Nitrophenol	U	<10.0	<10.0	<50.0 D	<10	<10.0	<10.0
5-Nitro-o-toluidine	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
7,12-Dimethylbenz(a)anthracene		<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Acenaphthene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Acenaphthylene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0

Cell7 PLCRS

CELL 7 PLCRS							
	Aug_18	Dec_18	Jun_19	Dec_19	June_20	Dec_20	June_21
Acetophenone	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Anthracene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Benzo(a)anthracene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Benzo(a)pyrene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Benzo(b)fluoranthene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Benzo(g,h,i)perylene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Benzo(k)fluoranthene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Benzyl alcohol	U	<5.0	<5.0	<25.0 D	<5	0.88J	<5.0
Bis(2-chloroethoxy)methane	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5
Bis(2-chloroethyl)ether	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5
Bis(2-ethylhexyl)phthalate	U	<5.0	<5.0	8.9J D	<5	<5.0	<5
Butyl benzyl phthalate	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Chlorobenzilate	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Chrysene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Diallate	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Dibenzo(a,h)anthracene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Dibenzofuran	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Diethylphthalate	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Dimethylphthalate	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Di-n-butyl phthalate	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Di-n-octyl phthalate	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Ethyl methanesulfonate	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Famphur	<.95	<10.0	<10.0	<50.0 D	<10	<10.0	<20.0
Fluoranthene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Fluorene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Hexachlorobenzene	U	<5.0	<5.0	<.25	<5	<5.0	<5.0
Hexachlorobutadiene	U	<5	<5	<025	<5	<5.0	<5.0
Hexachlorocyclopentadiene	U	<5	<5.0	<25.0 D	<5	<5.0	<5.0
Hexachloroethane	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Hexachloropropene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Indeno(1,2,3-cd)pyrene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Isodrin	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Isophorone	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Isosafrole	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Kepone	U	<10.0	<10.0	<50.0 D	<10	<10.0	<20.0
Methapyrilene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
Methyl methanesulfonate	U	<5		<25.0 D	<5	<5.0	<5.0
Naphthalene	U	<5.0	<5.0	<25.0 D	<5	<5.0	0.62 J
Nitrobenzene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
N-Nitrosodiethylamine	U	<5	<5.0	<25.0 D	<5	<5.0	<5.0
N-Nitrosodimethylamine	U	<5	<5.0	<25.0 D	<5	<5.0	<5.0
N-Nitroso-di-n-butylamine	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
N-Nitroso-di-n-propylamine	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
N-Nitrosodiphenylamine	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
N-Nitrosomethylethylamine	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
N-Nitrosopiperidine	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
N-Nitrosopyrrolidine	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
O,O,O-Triethylphosphorothioate	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0
o-Toluidine	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0

Cell7 PLCRS

CELL 7 PLCRS								
	Aug_18	Dec_18	Jun_19	Dec_19	June_20	Dec_20	June_21	
p-Dimethylaminoazobenzene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0	
Pentachlorobenzene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0	
Pentachloronitrobenzene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0	
Pentachlorophenol	2.37	<10.0	<10.0	<50.0 D	<10	<10.0	<10.0	
Phenacetin	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0	
Phenanthrene	U	<5.0	<5.0	<25.0 D	<5	<5.0	<5.0	
Phenol	52.2	31.4	115 D	70.0 D	87.1	3.1J	62.7	
p-Phenylenediamine	U	<5	<10.0	<50	<10	<10.0	<6900	
Pronamide	U	<5.0	<5.0	<.25	<5	<5.0	<5.0	
Sulfide	1.6J	8	8.0	4.8	25.6	<2.0	16.0	
2378-TCDF	ND	ND	ND	ND	ND	ND	ND	
2378-TCDD	ND	ND	ND	ND	ND	ND	ND	
Total Uranium	0.347 ± 0.013 (0.262) C:NA T:NA	.855±.049 (2.62) C:NA T:NA	0.281 ± 0.014 (0.262) C:NA T:NA	0.789 ± 0.039 (0.262) C:NA T:NA	0.751 ± 0.045 (2.620) C:NA T:NA	0.526 ± 0.049 (2.620) C:NA T:NA	1.09 ± 0.061 (2.620) C:NA T:NA	
Perfluorobutanesulfonic acid PFBS	130	130		170	160	120	240	
Perfluoroheptanoic acid PFHpA	19	18		24	26	35	26	
Perfluorohexanesulfonic acid PFHxS	4.7	4.2		11	8.6	5.9	8.2	
Perfluorononanoic acid PFNA	1.7	1.2		1.4	5	2	nd	
Perfluorooctanesulfonic acid PFOS	3.3	2		3	16	4	nd	
Perfluorooctanoic acid PFOA	22	22		32	50	47	38	
Radium-226	6.34 ± 2.29 (1.80) C:NA T:42%	15.7 ± 7.46 (2.36) C:NA T:88%	9.05 ± 2.77 (0.511) C:NA T:85%	2.93 ± 1.62 (1.44) C:NA T:61%	3.77 ± 2.18 (0.852) C:NA T:43%	1.21 ± 0.852 (0.938) C:NA T:89%	3.05 ± 2.60 (3.15) C:NA T:94%	
Radium-228	10.2 ± 3.75 (5.39) C:72% T:85%	6.62 ± 2.38 (3.68) C:80% T:89%	6.45 ± 1.59 (1.46) C:78% T:52%	3.90 ± 2.48 (4.69) C:81% T:24%	7.79 ± 2.29 (2.88) C:78% T:33%	3.50 ± 1.31 (2.03) C:79% T:37%	8.59 ± 3.67 (5.94) C:70% T:92%	
6:2 FTS	5.4	6.6		11	10	6.2	nd	
8:2 FTS	ND	ND		ND	ND	ND	nd	
N-ethyl perfluorooctandsulfamidoacetic acidNEtFOSAA	19U	ND		ND	ND	ND	nd	
N-methylperfluorooctandsulfamicacetic acid NMeFOSAA	19U	ND		ND	ND	ND	nd	
perfluorobutanoic acid PFBA	260	170		180	260	170	310	
perfluorodecansulfonic acid PFDS	19U	ND		ND	ND	ND	nd	
perfluorodecanoic acid PFDA	4.5	0.44		0.38	3.2	0.55	nd	
perfluorododecanoic acid PFDoA	19U	ND		ND	ND	ND	nd	
perfluoroheptanesulfonic acid PFHps	19U	ND		ND	0.26	ND	nd	
perfluorohexanoic acid PFHxA	210	250		320	370	350	430	
perfluorooctane sulfonamide FOSA	19U	ND		1	2.2	ND	nd	
perfluoropentanoic acid PFPeA	100	94		130	140	120	190	
perfluorotetradecanoic acid PFTeA	19U	ND		ND	ND	ND	nd	
perfluorotridecnaoic acid PFTriA	19U	ND		ND	ND	ND	nd	
perfluoroundecanoic acid PFUnA	19U	ND		ND	ND	ND	nd	
n-Nitrosomorpholine	U							
Dimethylbenz(A) Anthracene	U							
Bis(2-chloroisopropyl)ether	U							
total PFOA/PFAS	760.6	698.44		883.78	1051.26	860.65	1242.2	

CELL 7 PLCRS	
	Dec_21
Analyte	
pH	7.01
DO	4.24
Spec cond	>20,000
ORP	-60.6
Pyrene	<5.0
Safrole	<5.0
Cyanide	34.0
Total Organic Carbon	273 D
Dioxin	
Bromide	534
Sulfate	171
Nitrogen, Kjeldahl, Total	248
Nitrate as N	<.05
Nitrite as N	<.05
Chemical Oxygen Demand	3080
Phenolics, Total Recoverable	689
Chromium, Hexavalent	<0.020
Color	70.0 D
Alkalinity, Total (As CaCO3)	344
Hardness (As CaCO3)	43000
Total Dissolved Solids	37700
Chloride	63200
Nitrogen, Ammonia (As N)	356 D
Biochemical Oxygen Demand	529 D
Aluminum	<20000
Antimony	<600 D
Arsenic	<100 D
Barium	8190 D
Beryllium	<50.0 D
Boron	793 D
Cadmium	<25.0 D
Calcium	14900000 D
Chromium	<100 D
Cobalt	<500 D
Copper	386 D
Iron	<1000 D
Lead	<50.0 D
Magnesium	4910 D
Manganese	526 D
Nickel	<400 D
Potassium	8790000 D
Selenium	<100 D
Silver	14.5J D
Sodium	13900000 D
Thallium	<100 D
Tin	<500 D
Vanadium	48.2J D

CELL 7 PLCRS	
	Dec_21
Zinc	<200 D
Mercury	<0.20
4,4'-DDD	<0.094
4,4'-DDE	<0.094
4,4'-DDT	<0.094
Aldrin	<0.047
alpha-BHC	<0.047
Aroclor 1016	<0.94
Aroclor 1221	<0.94
Aroclor 1232	<0.94
Aroclor 1242	<0.94
Aroclor 1248	<0.94
Aroclor 1254	<0.94
Aroclor 1260	<0.94
beta-BHC	<0.047
Chlordane	
delta-BHC	<0.047
Dieldrin	<0.094
Endosulfan I	<0.047
Endosulfan II	<0.094
Endosulfan sulfate	<0.094
Endrin	<0.094
Endrin aldehyde	<0.094
gamma-BHC	<0.047
Heptachlor	<0.047
Heptachlor epoxide	<0.047
Methoxychlor	<0.47
Toxaphene	<4.7
Dimethoate	<5.0
Disulfoton	<5.0
Methyl parathion	<5.0
Parathion	<5.0
Phorate	
Thionazin	<5.0
2,4,5-T	<200 D
2,4,5-TP (Silvex)	<200 D
2,4-D	<200 D
Dinoseb	<200 D
1,1,1,2-Tetrachloroethane	<1.0
1,1,1-Trichloroethane	<1.0
1,1,2,2-Tetrachloroethane	<1.0
1,1,2-Trichloroethane	<1.0
1,1-Dichloroethane	<1.0
1,1-Dichloroethene	<1.0
1,1-Dichloropropene	<1.0
1,2,3-Trichloropropane	<1.0
1,2-Dibromo-3-chloropropane	<1.0
1,2-Dibromoethane	<1.0
1,2-Dichlorobenzene	<1.0

CELL 7 PLCRS	
	Dec_21
1,2-Dichloroethane	<1.0
1,2-Dichloropropane	<1.0
1,3-Dichlorobenzene	<1.0
1,3-Dichloropropane	<1.0
1,4-Dichlorobenzene	<1.0
1,4-Dioxane (p-Dioxane)	4.1
2,2-Dichloropropane	<1.0
2-Butanone	27.2
2-Hexanone	<5.0
4-Methyl-2-pentanone	2.1J
Acetone	308 D
Acetonitrile	<5.0
Acrolein	<1.0
Acrylonitrile	<1.0
Allyl Chloride	<4.0
Benzene	<1.0
Bromochloromethane	<1.0
Bromodichloromethane	<1.0
Bromoform	<1.0
Bromomethane	<1.0
Carbon disulfide	<1.0
Carbon tetrachloride	<1.0
Chlorobenzene	<1.0
Chloroethane	<1.0
Chloroform	<1.0
Chloromethane	<1.0
Chloroprene	<1.0
cis-1,2-Dichloroethene	<1.0
cis-1,3-Dichloropropene	<1.0
Dibromochloromethane	<1.0
Dibromomethane	<1.0
Dichlorodifluoromethane	<1.0
Ethyl Methacrylate	<1.0
Ethylbenzene	<1.0
Iodomethane	<4.0
Isobutyl alcohol	11.7J
Methacrylonitrile	<1.0
Methyl Methacrylate	<1.0
Methylene chloride	<1.0
Propionitrile	<4.0
Silane, methoxytrimethyl-	29.4J
Silanol, trimethyl-	31.9J
Styrene	<1.0
Tetrachloroethene	<1.0
Toluene	<1.0
trans-1,2-Dichloroethene	<1.0
trans-1,3-Dichloropropene	<1.0
trans-1,4-Dichloro-2-butene	<1.0
Trichloroethene	<1.0

CELL 7 PLCRS	
	Dec_21
Trichlorofluoromethane	<1.0
Trimethylsilyl fluoride+Sulfur diox	5.6J
Vinyl acetate	<1.0
Vinyl chloride	<1.0
Xylene (total)	<3.0
1,2,4,5-Tetrachlorobenzene	<5.0
1,2,4-Trichlorobenzene	<5.0
1,2-Dichlorobenzene	<5.0
1,3,5-Trinitrobenzene	<5.0
1,3-Dichlorobenzene	<5.0
1,3-Dinitrobenzene	<5.0
1,4-Dichlorobenzene	<5.0
1,4-Naphthoquinone	<5.0
1-Naphthylamine	<5.0
2,2'-oxybis(1-chloropropane)	<5.0
2,3,4,6-Tetrachlorophenol	<5.0
2,4,5-Trichlorophenol	<5.0
2,4,6-Trichlorophenol	<5.0
2,4-Dichlorophenol	<5.0
2,4-Dimethylphenol	<5.0
2,4-Dinitrophenol	<10.0
2,4-Dinitrotoluene	<5.0
2,6-Dichlorophenol	<5.0
2,6-Dinitrotoluene	<5.0
2-Acetylaminofluorene	<5.0
2-Chloronaphthalene	<5.0
2-Chlorophenol	<5.0
2-Methylnaphthalene	<5.0
2-Methylphenol	1.8J
2-Naphthylamine	<5.0
2-Nitroaniline	<5.0
2-Nitrophenol	<5.0
3,3'-Dichlorobenzidine	<5.0
3,3'-Dimethylbenzidine	<5.0
3-Methylcholanthrene	<5.0
3-Methylphenol/4-Methylphenol	305 D
3-Nitroaniline	<5.0
4,6-Dinitro-2-methylphenol	<10.0
4-Aminobiphenyl	<5.0
4-Bromophenyl-phenylether	<5.0
4-Chloro-3-methylphenol	<5.0
4-Chloroaniline	<5.0
4-Chlorophenyl-phenylether	<5.0
4-Nitroaniline	<5.0
4-Nitrophenol	<10.0
5-Nitro-o-toluidine	<5.0
7,12-Dimethylbenz(a)anthracene	<5.0
Acenaphthene	<5.0
Acenaphthylene	<5.0

CELL 7 PLCRS	
	Dec_21
Acetophenone	<5.0
Anthracene	<5.0
Benzo(a)anthracene	<5.0
Benzo(a)pyrene	<5.0
Benzo(b)fluoranthene	<5.0
Benzo(g,h,i)perylene	<5.0
Benzo(k)fluoranthene	<5.0
Benzyl alcohol	<5.0
Bis(2-chloroethoxy)methane	<5.0
Bis(2-chloroethyl)ether	<5.0
Bis(2-ethylhexyl)phthalate	<5.0
Butyl benzyl phthalate	<5.0
Chlorobenzilate	<5.0
Chrysene	<5.0
Diallate	<5.0
Dibenzo(a,h)anthracene	<5.0
Dibenzofuran	<5.0
Diethylphthalate	<5.0
Dimethylphthalate	<5.0
Di-n-butyl phthalate	<5.0
Di-n-octyl phthalate	<5.0
Ethyl methanesulfonate	<5.0
Famphur	<20.0
Fluoranthene	<5.0
Fluorene	<5.0
Hexachlorobenzene	<5.0
Hexachlorobutadiene	
Hexachlorocyclopentadiene	<5.0
Hexachloroethane	<5.0
Hexachloropropene	<5.0
Indeno(1,2,3-cd)pyrene	<5.0
Isodrin	<5.0
Isophorone	<5.0
Isosafrole	<5.0
Kepone	<20.0
Methapyrilene	<5.0
Methyl methanesulfonate	<5.0
Naphthalene	<5.0
Nitrobenzene	<5.0
N-Nitrosodiethylamine	<5.0
N-Nitrosodimethylamine	<5.0
N-Nitroso-di-n-butylamine	<5.0
N-Nitroso-di-n-propylamine	<5.0
N-Nitrosodiphenylamine	<5.0
N-Nitrosomethylethylamine	<5.0
N-Nitrosopiperidine	<5.0
N-Nitrosopyrrolidine	<5.0
O,O,O-Triethylphosphorothioate	<5.0
o-Toluidine	<5.0

CELL 7 PLCRS	
	Dec_21
p-Dimethylaminoazobenzene	<5.0
Pentachlorobenzene	<5.0
Pentachloronitrobenzene	<5.0
Pentachlorophenol	<10.0
Phenacetin	<5.0
Phenanthrene	<5.0
Phenol	350 D
p-Phenylenediamine	<6900
Pronamide	<5.0
Sulfide	20.8
2378-TCDF	ND
2378-TCDD	ND
Total Uranium	5.13 ± 0.424 (26.200) C:NA T:NA
Perfluorobutanesulfonic acid PFBS	280
Perfluoroheptanoic acid PFHpA	33
Perfluorohexanesulfonic acid PFHxS	7
Perfluorononanoic acid PFNA	1.1
Perfluorooctanesulfonic acid PFOS	2.1
Perfluorooctanoic acid PFOA	33
Radium-226	4.57 ± 3.05 (3.27) C:NA T:98%
Radium-228	7.45 ± 4.64 (8.93) C:56% T:91%
6:2 FTS	6
8:2 FTS	ND
N-ethyl perfluorooctansulfamidoacetic acid NEtFOSAA	ND
N-methylperfluorooctansulfamicacetic acid NMeFOSAA	ND
perfluorobutanoic acid PFBA	440
perfluorodecansulfonic acid PFDS	ND
perfluorodecanoic acid PFDA	0.58
perfluorododecanoic acid PFDaA	ND
perfluoroheptanesulfonic acid PFHps	ND
perfluorohexanoic acid PFHxA	560
perfluorooctane sulfonamide FOSA	ND
perfluoropentanoic acid PFPeA	180
perfluorotetradecanoic acid PFTeA	ND
perfluorotridecnaoic acid PFTriA	ND
perfluoroundecanoic acid PFUnA	ND
n-Nitrosomorpholine	
Dimethylbenz(A) Anthracene	
Bis(2-chloroisopropyl)ether	
total PFOA/PFAS	1542.78

Appendix 1

December 2021 Pace Analytical Laboratory Report and QA/QC

BABYLON LANDFILL - FIELD DATA - DECEMBER 13,14,15, 2021

Traditional Wells - Groundwater Sampling Data

WELL #	Well Survey Elevation	Well Size	Metal or PVC	TPVC (in ft) (Top of PVC)	TOC (in ft) (Top of Casing)	BOC (in ft) (Bottom of Casing)	One Well Volume (Gallons)	Three Well Volumes (Gallons)	Groundwater Contour Levels
GM-2D	69.25	4"	PVC	26.20	26.93	86.00	38.40	115.19	42.32
GM-4D	62.43	4"	PVC	18.64	19.27	91.40	47.10	141.30	43.16
GM-5D	62.35	4"	PVC	18.93	19.35	91.80	47.31	141.93	43.00
GM-6D	63.84	4"	PVC	20.35	20.54	92.80	47.19	141.56	43.30
GM-7D	63.23	4"	PVC	19.89	20.57	91.10	45.84	137.53	42.66
GM-15D	50.74	4"	PVC	12.43	12.87	84.50	46.56	139.79	37.87
GM-16D	?	4"	PVC	9.02	9.37	87.00	50.62	152.08	?
GM-17D	52.09	4"	PVC	14.43	14.82	87.70	47.59	142.77	37.27
GM-18D	?	4"	PVC	14.76	15.19	78.00	41.01	123.04	?
GM-19D	53.34	4"	PVC	14.51	14.72	87.40	47.46	142.38	38.62

WELL #	Start Purge	Stop Purge	Well Notes For Sampling
GM-2D	730	819	Clear, some black particles, slight sulfur odor
GM-4D	715	758	Clear, no odors
GM-5D	803	841	Clear, no odors
GM-6D	835	928	Clear, no odors
GM-7D	823	906	Slightly cloudy, yellow tint, no odors
GM-15D	726	808	Clear, some small black particles from roadway, no odors
GM-16D	1155	1228	Clear, no odors
GM-17D	1112	1147	Clear, no odors
GM-18D	1028	1101	Clear, no odors
GM-19D	940	1020	Clear, no odors

Water Quality Parameters									
WELL #	Sampling Date	Sample Time	pH (SU)	ORP (mv)	Conductivity (umhos/cm2)	Temp. (oC)	Turbidity (NTU)	Dis. Oxygen (DO) mg/L	
GM-2D	12/15/2021	820	5.53	-80.9	178.4	11.7	3.64	5.26	
GM-4D	12/13/2021	800	6.98	-65.7	250	12.6	10.03	3.62	
GM-5D	12/13/2021	845	8.02	-124.1	711	11.4	20.70	4.28	
GM-6D	12/13/2021	930	8.12	-120.8	399	12.6	18.60	4.79	
GM-7D	12/14/2021	909	7.13	-110.2	834	13.0	14.70	4.97	
GM-15D	12/14/2021	810	6.91	-97.6	91	12.7	24.50	3.38	
GM-16D	12/13/2021	1230	7.81	-112.3	249	14.6	19.80	6.62	
GM-17D	12/13/2021	1150	7.01	-85.2	199.7	12.4	3.41	10.37	
GM-18D	12/13/2021	1105	8.26	-124.6	602	12.1	11.90	13.78	
GM-19D	12/13/2021	1024	6.93	-91.4	233	11.3	6.07	8.89	

BABYLON LANDFILL - FIELD DATA - DECEMBER 14, 2021

Leachate Sampling Data

WELL #	Date	Start Purge	Stop Purge	Gallons Purged	Well Notes For Sampling
NNU-PLCRS	12/14/2021	1045	1048	~ 40	Clear, slightly cloudy, sulfur odors
NNU-SLCRS	12/14/2021	1038	1040	~ 40	Black in color, black particles, sulfur odors
ONU-SLCRS	12/14/2021	1105	1108	~ 60	Clear, odors
SA-SLCRS	12/14/2021	Direct Sample	Direct Sample	0	Clear, small black sediment
CELL - 7	12/14/2021	Direct Sample	Direct Sample	0	Clear, odors, small black particles

Leachate Parameters

WELL #	Sampling Time	pH (SU)	ORP (mv)	Conductivity (umhos/cm2)	Temp. (oC)	Turbidity (NTU)	Dissolved Oxygen (DO) mg/L
NNU-PLCRS	1048	7.78	-112.1	>20,000	16.3	29.40	2.38
NNU-SLCRS	1040	7.56	-27.1	>20,000	24.0	64.80	2.42
ONU-SLCRS	1108	8.88	-164.5	>20,000	15.4	1.71	3.20
SA-SLCRS	1140	8.20	-67.7	16,190	13.3	7.95	4.89
CELL - 7	1202	7.01	-60.6	>20,000	17.8	4.17	4.24

Field Notes: MS/MSD performed on ONU-SLCRS @ 1110

NNU-PLCRS: **New Northern U Primary** * One Tap Location for Primary/Secondary (Top Road)

NNU-SLCRS: **New Northern U Secondary** * One Tap Location for Primary/Secondary (Top Road)

ONU-SLCRS: **Old Northern U Secondary** *One Tap Location for Primary/Secondary (Lower Road)

SA-SLCRS: **Southern Ash Secondary** *Use Bailer / Square Metal Door

CELL 7: **Primary System** * Use Bailer / First Round Black Cover (Left Cover)

BABYLON LANDFILL - FIELD DATA - DECEMBER 15, 2021

Wells GM-26 to GM-28 / Groundwater Sampling Data

WELL #	Well Survey Elevation	Well Size	Metal or PVC	TPVC (in ft) (Top of PVC)	TOC (in ft) (Top of Casing)	BOC (in ft) (Bottom of Casing)	One Well Volume (Gallons)	Three Well Volumes (Gallons)	Groundwater Contour Levels
GM-26		4"	*PVC	19.80	*	32.50	8.26	24.77	
GM-26I		4"	*PVC	19.41	*	42.50	15.01	45.03	
GM-27		4"	PVC	25.63	25.80	36.70	6.97	20.90	
GM-27I		4"	PVC	25.86	26.10	47.50	13.91	41.73	
GM-28		4"	PVC	25.29	25.50	37.50	7.80	23.40	
GM-28I		4"	PVC	25.55	25.71	46.91	13.78	41.34	

WELL #	Start Purge	Stop Purge	Well Notes For Sampling
GM-26	838	909	Turbid, cloudy, no odors, orange tint
GM-26I	832	913	Turbid, cloudy, no odors, orange tint
GM-27	925	1006	Cloudy, small black particles, no odors, yellow tint
GM-27I	930	1013	Slightly cloudy, some foam, no odors
GM-28	1035	1122	Slightly cloudy, small black particles, no odors
GM-28I	1045	1125	Clear, small black particles, no odors

Water Quality Parameters									
WELL #	Sampling Date	Sample Time	pH (SU)	ORP (mv)	Conductivity (umhos/cm2)	Temp. (oC)	Turbidity (NTU)	Dis. Oxygen (DO) mg/L	
GM-26	12/15/2021	910	8.84	-119.7	511	13.5	305.0	5.86	
GM-26I	12/15/2021	915	8.58	-124.8	463	11.9	315.0	6.23	
GM-27	12/15/2021	1008	8.22	-169.5	1,538	14.1	85.5	5.47	
GM-27I	12/15/2021	1015	8.96	-181.3	1,259	13.8	7.1	5.39	
GM-28	12/15/2021	1125	8.68	-138.3	2,080	15.1	22.2	5.68	
GM-28I	12/15/2021	1129	8.72	-141.7	732	14.7	4.9	5.58	

Field Notes: Duplicate (GM-X) performed on GM-27I @ 10:16

Equipment Blank @ 10:00 w/new bailer

MS/MSD performed on GM-28I @ NONE

GM-28I did not have a cover to the flush mount well

Notes: N/F : Not found due to high grass or deep snow.

N/S : No sample due to dry well or frozen well from extreme cold temps.

*PVC ABOVE TOC

MONDAY

PFCs Sampling Checklist

Date: 12-13-2021

Weather (temp./precipitation): Sunny, cold 35° Site Name: Babylon Landfill

Field Clothing and PPE:

- No clothing or boots containing Gore-Tex™
- All safety boots made from polyurethane and PVC
- No materials containing Tyvek®
- Field crew has not used fabric softener on clothing
- Field crew has not used cosmetics, moisturizers, hand cream, or other related products this morning
- Field crew has not applied unauthorized sunscreen or insect repellent

Field Equipment:

- No Teflon® or LDPE containing materials on-site
- All sample materials made from stainless steel, HDPE, acetate, silicon, or polypropylene
- No waterproof field books on-site
- No plastic clipboards, binders, or spiral hard cover notebooks on-site
- No adhesives (Post-It Notes) on-site

- Coolers filled with regular ice only. No chemical (blue) ice packs in possession

Sample Containers:

- All sample containers made of HDPE or polypropylene
- Caps are unlined and made of HDPE or polypropylene

Wet Weather (as applicable):

- Wet weather gear made of polyurethane and PVC only

Equipment Decontamination:

- "PFC-free" water on-site for decontamination of sample equipment. No other water sources to be used.
- Alconox and Liquinox to be used as decontamination materials


Food Considerations:

- No food or drink on-site with exception of bottled water and/or hydration drinks (i.e., Gatorade and Powerade) that is available for consumption only in the staging area

If any applicable boxes cannot be checked, the Field Lead shall describe the noncompliance issues below and work with field personnel to address noncompliance issues prior to commencement of that day's work. Corrective action shall include removal of noncompliance items from the site or removal of worker offsite until in compliance.

Describe the noncompliance issues (include personnel not in compliance) and action/outcome of noncompliance:

Field Lead Name: Brian Nichols

Field Lead Signature:  Time: 7:30 AM

TUESDAY

PFCs Sampling Checklist

Date: 12-14-2021

Weather (temp./precipitation): Sunny, cold 34° Site Name: Babylon Landfill

Field Clothing and PPE:

- No clothing or boots containing Gore-Tex™
- All safety boots made from polyurethane and PVC
- No materials containing Tyvek®
- Field crew has not used fabric softener on clothing
- Field crew has not used cosmetics, moisturizers, hand cream, or other related products this morning
- Field crew has not applied unauthorized sunscreen or insect repellent

Field Equipment:

- No Teflon® or LDPE containing materials on-site
- All sample materials made from stainless steel, HDPE, acetate, silicon, or polypropylene
- No waterproof field books on-site
- No plastic clipboards, binders, or spiral hard cover notebooks on-site
- No adhesives (Post-It Notes) on-site

- Coolers filled with regular ice only. No chemical (blue) ice packs in possession

Sample Containers:

- All sample containers made of HDPE or polypropylene
- Caps are unlined and made of HDPE or polypropylene

Wet Weather (as applicable):

- Wet weather gear made of polyurethane and PVC only

Equipment Decontamination:

- "PFC-free" water on-site for decontamination of sample equipment. No other water sources to be used.
- Alconox and Liquinox to be used as decontamination materials

Food Considerations:

- No food or drink on-site with exception of bottled water and/or hydration drinks (i.e., Gatorade and Powerade) that is available for consumption only in the staging area

If any applicable boxes cannot be checked, the Field Lead shall describe the noncompliance issues below and work with field personnel to address noncompliance issues prior to commencement of that day's work. Corrective action shall include removal of noncompliance items from the site or removal of worker offsite until in compliance.

Describe the noncompliance issues (include personnel not in compliance) and action/outcome of noncompliance:

Field Lead Name: Brian Nichols

Field Lead Signature: Brian Nichols Time: 7:10 Am

WEDNESDAY

PFCs Sampling Checklist

Date: 12-15-2021

Weather (temp./precipitation): Sunny Cold 29° Site Name: Babylon Landfill

Field Clothing and PPE:

- No clothing or boots containing Gore-Tex™
- All safety boots made from polyurethane and PVC
- No materials containing Tyvek®
- Field crew has not used fabric softener on clothing
- Field crew has not used cosmetics, moisturizers, hand cream, or other related products this morning
- Field crew has not applied unauthorized sunscreen or insect repellent

Field Equipment:

- No Teflon® or LDPE containing materials on-site
- All sample materials made from stainless steel, HDPE, acetate, silicon, or polypropylene
- No waterproof field books on-site
- No plastic clipboards, binders, or spiral hard cover notebooks on-site
- No adhesives (Post-It Notes) on-site

- Coolers filled with regular ice only. No chemical (blue) ice packs in possession

Sample Containers:

- All sample containers made of HDPE or polypropylene
- Caps are unlined and made of HDPE or polypropylene

Wet Weather (as applicable):

- Wet weather gear made of polyurethane and PVC only

Equipment Decontamination:

- "PFC-free" water on-site for decontamination of sample equipment. No other water sources to be used.
- Alconox and Liquinox to be used as decontamination materials

Food Considerations:

- No food or drink on-site with exception of bottled water and/or hydration drinks (i.e., Gatorade and Powerade) that is available for consumption only in the staging area

If any applicable boxes cannot be checked, the Field Lead shall describe the noncompliance issues below and work with field personnel to address noncompliance issues prior to commencement of that day's work. Corrective action shall include removal of noncompliance items from the site or removal of worker offsite until in compliance.

Describe the noncompliance issues (include personnel not in compliance) and action/outcome of noncompliance:

Field Lead Name: Brian Nichols

Field Lead Signature: Brian Nichols Time: 7:30 AM

January 12, 2022

Joe Guarino
Town of Babylon
281 Phelps Lane
North Babylon, NY 11703

RE: Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

Dear Joe Guarino:

Enclosed are the analytical results for sample(s) received by the laboratory on December 14, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses were subcontracted outside of the Pace Network. The test report from the external subcontractor is attached to this report in its entirety.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Melville

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kimberley M. Mack
kimberley.mack@pacelabs.com
(631)694-3040
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Pace Analytical Services Long Island

575 Broad Hollow Rd, Melville, NY 11747

Connecticut Certification #: PH-0435

Delaware Certification # NY 10478

Maryland Certification #: 208

Massachusetts Certification #: M-NY026

New Hampshire Certification #: 2987

New Jersey Certification #: NY158

New York Certification #: 10478 Primary Accrediting Body

Pennsylvania Certification #: 68-00350

Rhode Island Certification #: LAO00340

Virginia Certification # 460302

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

Method: EPA 6010C
Description: 6010 MET ICP
Client: Town of Babylon
Date: January 12, 2022

General Information:

4 samples were analyzed for EPA 6010C by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: 238104

B: Analyte was detected in the associated method blank.

- BLANK for HBN 238104 [MPRP/128 (Lab ID: 1202492)]
 - Potassium
 - Sodium

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 238104

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197895003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1207017)
 - Barium
 - Calcium
 - Potassium
 - Sodium

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Method: EPA 6010C

Description: 6010 MET ICP

Client: Town of Babylon

Date: January 12, 2022

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Method: EPA 7470A

Description: 7470 Mercury

Client: Town of Babylon

Date: January 12, 2022

General Information:

4 samples were analyzed for EPA 7470A by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 238119

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197895003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1202709)

- Mercury

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Method: EPA 8260C SIM/5030C

Description: 8260C SIM Volatile Organics

Client: Town of Babylon

Date: January 12, 2022

General Information:

4 samples were analyzed for EPA 8260C SIM/5030C by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Method: EPA 8260C/5030C

Description: 8260C Volatile Organics

Client: Town of Babylon

Date: January 12, 2022

General Information:

5 samples were analyzed for EPA 8260C/5030C by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

QC Batch: 237770

IC: The initial calibration for this compound was outside of method control limits. The result is estimated.

- BLANK (Lab ID: 1200861)
 - 1,2-Dibromoethane (EDB)
 - Bromodichloromethane
- DUP (Lab ID: 1201855)
 - 1,2-Dibromoethane (EDB)
 - Bromodichloromethane
- LCS (Lab ID: 1200862)
 - 1,2-Dibromoethane (EDB)
 - Bromodichloromethane
- MS (Lab ID: 1201856)
 - 1,2-Dibromoethane (EDB)
 - Bromodichloromethane
- NNU PLCRS (Lab ID: 70197895001)
 - 1,2-Dibromoethane (EDB)
 - Bromodichloromethane
- NNU SLCRS (Lab ID: 70197895002)
 - 1,2-Dibromoethane (EDB)
 - Bromodichloromethane
- SA SLCRS (Lab ID: 70197895004)
 - 1,2-Dibromoethane (EDB)
 - Bromodichloromethane
- TRIP BLANK (Lab ID: 70197895005)
 - 1,2-Dibromoethane (EDB)
 - Bromodichloromethane

QC Batch: 237976

IC: The initial calibration for this compound was outside of method control limits. The result is estimated.

- BLANK (Lab ID: 1201905)
 - 1,2-Dibromoethane (EDB)
 - Bromodichloromethane
- LCS (Lab ID: 1201906)
 - 1,2-Dibromoethane (EDB)
 - Bromodichloromethane

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

Method: EPA 8260C/5030C
Description: 8260C Volatile Organics
Client: Town of Babylon
Date: January 12, 2022

QC Batch: 237976

IC: The initial calibration for this compound was outside of method control limits. The result is estimated.

- MS (Lab ID: 1202152)
 - 1,2-Dibromoethane (EDB)
 - Bromodichloromethane
- MSD (Lab ID: 1202153)
 - 1,2-Dibromoethane (EDB)
 - Bromodichloromethane
- ONU SLCRS (Lab ID: 70197895003)
 - 1,2-Dibromoethane (EDB)
 - Bromodichloromethane

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

QC Batch: 237770

v3: The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have a low bias.

- BLANK (Lab ID: 1200861)
 - 1,2-Dibromo-3-chloropropane
 - 2-Butanone (MEK)
 - Acetone
 - Bromoform
- DUP (Lab ID: 1201855)
 - 1,2-Dibromo-3-chloropropane
 - 2-Butanone (MEK)
 - Acetone
 - Bromoform
- LCS (Lab ID: 1200862)
 - 1,2-Dibromo-3-chloropropane
 - 2-Butanone (MEK)
 - Acetone
 - Bromoform
- MS (Lab ID: 1201856)
 - 1,2-Dibromo-3-chloropropane
 - 2-Butanone (MEK)
 - Acetone
 - Bromoform
- NNU PLCRS (Lab ID: 70197895001)
 - 1,2-Dibromo-3-chloropropane
 - 2-Butanone (MEK)
 - Bromoform
- NNU SLCRS (Lab ID: 70197895002)
 - 1,2-Dibromo-3-chloropropane
 - 2-Butanone (MEK)
 - Bromoform

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Method: EPA 8260C/5030C

Description: 8260C Volatile Organics

Client: Town of Babylon

Date: January 12, 2022

QC Batch: 237770

v3: The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have a low bias.

- SA SLCRS (Lab ID: 70197895004)
 - 1,2-Dibromo-3-chloropropane
 - 2-Butanone (MEK)
 - Acetone
 - Bromoform
- TRIP BLANK (Lab ID: 70197895005)
 - 1,2-Dibromo-3-chloropropane
 - 2-Butanone (MEK)
 - Acetone
 - Bromoform

QC Batch: 237976

v3: The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have a low bias.

- BLANK (Lab ID: 1201905)
 - 1,2-Dibromo-3-chloropropane
 - 2-Butanone (MEK)
 - 2-Hexanone
 - Acetone
 - Bromoform
 - Bromomethane
 - Iodomethane
 - trans-1,4-Dichloro-2-butene
- LCS (Lab ID: 1201906)
 - 1,2-Dibromo-3-chloropropane
 - 2-Butanone (MEK)
 - 2-Hexanone
 - Acetone
 - Bromoform
 - Bromomethane
 - Iodomethane
 - trans-1,4-Dichloro-2-butene
- MS (Lab ID: 1202152)
 - 1,2-Dibromo-3-chloropropane
 - 2-Butanone (MEK)
 - 2-Hexanone
 - Acetone
 - Bromoform
 - Bromomethane
 - Iodomethane
 - trans-1,4-Dichloro-2-butene
- MSD (Lab ID: 1202153)
 - 1,2-Dibromo-3-chloropropane
 - 2-Butanone (MEK)

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Method: EPA 8260C/5030C

Description: 8260C Volatile Organics

Client: Town of Babylon

Date: January 12, 2022

QC Batch: 237976

v3: The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have a low bias.

- 2-Hexanone
- Acetone
- Bromoform
- Bromomethane
- Iodomethane
- trans-1,4-Dichloro-2-butene
- ONU SLCRS (Lab ID: 70197895003)
 - 1,2-Dibromo-3-chloropropane
 - 2-Butanone (MEK)
 - 2-Hexanone
 - Acetone
 - Bromoform
 - Bromomethane
 - Iodomethane
 - trans-1,4-Dichloro-2-butene

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 237976

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197895003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 1202153)
 - 1,4-Dichlorobenzene

MS: Analyte recovery in the matrix spike was outside QC limits for one or more of the constituent analytes used in the calculated result.

- MSD (Lab ID: 1202153)
 - Xylene (Total)

R1: RPD value was outside control limits.

- MSD (Lab ID: 1202153)

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Method: EPA 8260C/5030C

Description: 8260C Volatile Organics

Client: Town of Babylon

Date: January 12, 2022

QC Batch: 237976

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197895003

R1: RPD value was outside control limits.

- 1,1,1,2-Tetrachloroethane
- 1,1,1-Trichloroethane
- 1,1,2,2-Tetrachloroethane
- 1,1,2-Trichloroethane
- 1,1-Dichloroethane
- 1,1-Dichloroethene
- 1,2,3-Trichloropropane
- 1,2-Dibromo-3-chloropropane
- 1,2-Dibromoethane (EDB)
- 1,2-Dichlorobenzene
- 1,2-Dichloroethane
- 1,2-Dichloropropane
- 1,4-Dichlorobenzene
- 2-Hexanone
- 4-Methyl-2-pentanone (MIBK)
- Acrylonitrile
- Benzene
- Bromochloromethane
- Carbon disulfide
- Carbon tetrachloride
- Chlorobenzene
- Chloroethane
- Chloroform
- Chloromethane
- Dibromomethane
- Ethylbenzene
- Methylene Chloride
- Styrene
- Tetrachloroethene
- Toluene
- Trichloroethene
- Trichlorofluoromethane
- Vinyl acetate
- Vinyl chloride
- cis-1,2-Dichloroethene
- cis-1,3-Dichloropropene
- trans-1,2-Dichloroethene
- trans-1,3-Dichloropropene
- trans-1,4-Dichloro-2-butene

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Method: EPA 8260C/5030C

Description: 8260C Volatile Organics

Client: Town of Babylon

Date: January 12, 2022

QC Batch: 237770

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 1201855)
- Carbon disulfide

Additional Comments:

Analyte Comments:

QC Batch: 237976

RS: The RPD value in one of the constituent analytes was outside the control limits.

- MSD (Lab ID: 1202153)
 - Xylene (Total)
- ONU SLCRS (Lab ID: 70197895003)
 - Xylene (Total)

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Method: SM22 2120B

Description: 2120B W Apparent Color

Client: Town of Babylon

Date: January 12, 2022

General Information:

4 samples were analyzed for SM22 2120B by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Method: SM22 2320B

Description: 2320B Alkalinity

Client: Town of Babylon

Date: January 12, 2022

General Information:

4 samples were analyzed for SM22 2320B by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 238025

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197895003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1202200)
- Alkalinity, Total as CaCO₃

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Method: SM22 2340C

Description: 2340C Hardness, Total

Client: Town of Babylon

Date: January 12, 2022

General Information:

4 samples were analyzed for SM22 2340C by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Method: SM22 2540C

Description: 2540C Total Dissolved Solids

Client: Town of Babylon

Date: January 12, 2022

General Information:

4 samples were analyzed for SM22 2540C by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Method: SM22 3500-Cr B

Description: Chromium, Hexavalent

Client: Town of Babylon

Date: January 12, 2022

General Information:

4 samples were analyzed for SM22 3500-Cr B by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the EPA method holding time.

- NNU PLCRS (Lab ID: 70197895001)
- NNU SLCRS (Lab ID: 70197895002)
- ONU SLCRS (Lab ID: 70197895003)
- SA SLCRS (Lab ID: 70197895004)

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 237130

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197895003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1197179)
 - Chromium, Hexavalent

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Method: EPA 410.4

Description: 410.4 COD

Client: Town of Babylon

Date: January 12, 2022

General Information:

4 samples were analyzed for EPA 410.4 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 238211

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197895003,70197947001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1203347)
- Chemical Oxygen Demand

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Method: SM22 5210B

Description: 5210B BOD, 5 day

Client: Town of Babylon

Date: January 12, 2022

General Information:

4 samples were analyzed for SM22 5210B by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with SM22 5210B with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Method: EPA 9034

Description: 9034 Sulfide, Titration

Client: Town of Babylon

Date: January 12, 2022

General Information:

4 samples were analyzed for EPA 9034 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 9030B with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Method: EPA 300.0

Description: 300.0 IC Anions 28 Days

Client: Town of Babylon

Date: January 12, 2022

General Information:

4 samples were analyzed for EPA 300.0 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 238190

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197895003,70197990003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1203078)
 - Bromide
 - Chloride
 - Sulfate

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Method: EPA 351.2

Description: 351.2 Total Kjeldahl Nitrogen

Client: Town of Babylon

Date: January 12, 2022

General Information:

4 samples were analyzed for EPA 351.2 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 351.2 with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 237663

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197895003,70198006009

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1200560)
 - Nitrogen, Kjeldahl, Total
- MS (Lab ID: 1200562)
 - Nitrogen, Kjeldahl, Total

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 237663

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 1200563)
 - Nitrogen, Kjeldahl, Total

Additional Comments:

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Method: EPA 353.2

Description: 353.2 Nitrogen, NO₂/NO₃ unpres

Client: Town of Babylon

Date: January 12, 2022

General Information:

4 samples were analyzed for EPA 353.2 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 237216

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197895003,70197977009

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1197840)
- Nitrate-Nitrite (as N)

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Method: EPA 353.2

Description: 353.2 Nitrogen, NO₂

Client: Town of Babylon

Date: January 12, 2022

General Information:

4 samples were analyzed for EPA 353.2 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 237204

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197503016,70197895003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1197794)
- Nitrite as N

QC Batch: 237205

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197503012,70197850001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1197786)
- Nitrite as N

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

Method: EPA 420.1
Description: Phenolics, Total Recoverable
Client: Town of Babylon
Date: January 12, 2022

General Information:

4 samples were analyzed for EPA 420.1 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 420.1 with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 240042

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197503012,70197895003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1212863)
- Phenolics, Total Recoverable

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Method: SM22 4500 NH3 H

Description: 4500 Ammonia Water

Client: Town of Babylon

Date: January 12, 2022

General Information:

4 samples were analyzed for SM22 4500 NH3 H by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Method: EPA 9014 Total Cyanide

Description: 9014 Cyanide, Total

Client: Town of Babylon

Date: January 12, 2022

General Information:

4 samples were analyzed for EPA 9014 Total Cyanide by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 9010C with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 237385

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197895003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1198629)
- Cyanide

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Method: EPA 9060A

Description: 9060A TOC as NPOC

Client: Town of Babylon

Date: January 12, 2022

General Information:

4 samples were analyzed for EPA 9060A by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 238197

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197503012

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1203217)
- Total Organic Carbon

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Sample: NNU PLCRS	Lab ID: 70197895001	Collected: 12/14/21 10:48	Received: 12/14/21 13:34	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP								
Analytical Method: EPA 6010C Preparation Method: EPA 3005A								
Pace Analytical Services - Melville								
Aluminum	<20000	ug/L	20000	100	12/28/21 15:11	01/03/22 14:17	7429-90-5	
Antimony	<600	ug/L	600	10	12/28/21 15:11	12/30/21 15:16	7440-36-0	
Arsenic	<100	ug/L	100	10	12/28/21 15:11	12/30/21 15:16	7440-38-2	
Barium	2940	ug/L	2000	10	12/28/21 15:11	12/30/21 15:16	7440-39-3	
Beryllium	<50.0	ug/L	50.0	10	12/28/21 15:11	12/30/21 15:16	7440-41-7	
Boron	7240	ug/L	500	10	12/28/21 15:11	12/30/21 15:16	7440-42-8	
Cadmium	<25.0	ug/L	25.0	10	12/28/21 15:11	12/30/21 15:16	7440-43-9	
Calcium	13900000	ug/L	20000	100	12/28/21 15:11	01/03/22 14:17	7440-70-2	
Chromium	99.2J	ug/L	100	10	12/28/21 15:11	12/30/21 15:16	7440-47-3	
Cobalt	<500	ug/L	500	10	12/28/21 15:11	12/30/21 15:16	7440-48-4	
Copper	87.8J	ug/L	250	10	12/28/21 15:11	12/30/21 15:16	7440-50-8	
Iron	495J	ug/L	1000	10	12/28/21 15:11	12/30/21 15:16	7439-89-6	
Lead	<50.0	ug/L	50.0	10	12/28/21 15:11	12/30/21 15:16	7439-92-1	
Magnesium	5290	ug/L	2000	10	12/28/21 15:11	12/30/21 15:16	7439-95-4	
Manganese	476	ug/L	100	10	12/28/21 15:11	12/30/21 15:16	7439-96-5	
Nickel	<400	ug/L	400	10	12/28/21 15:11	12/30/21 15:16	7440-02-0	
Potassium	4680000	ug/L	500000	100	12/28/21 15:11	01/03/22 14:17	7440-09-7	
Selenium	<100	ug/L	100	10	12/28/21 15:11	12/30/21 15:16	7782-49-2	
Silver	20.2J	ug/L	100	10	12/28/21 15:11	12/30/21 15:16	7440-22-4	
Sodium	12700000	ug/L	500000	100	12/28/21 15:11	01/03/22 14:17	7440-23-5	
Thallium	<100	ug/L	100	10	12/28/21 15:11	12/30/21 15:16	7440-28-0	
Vanadium	<500	ug/L	500	10	12/28/21 15:11	12/30/21 15:16	7440-62-2	
Zinc	<200	ug/L	200	10	12/28/21 15:11	12/30/21 15:16	7440-66-6	
7470 Mercury								
Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Pace Analytical Services - Melville								
Mercury	<0.20	ug/L	0.20	1	12/22/21 15:12	12/23/21 10:55	7439-97-6	
8260C SIM Volatile Organics								
Analytical Method: EPA 8260C SIM/5030C								
Pace Analytical Services - Melville								
1,4-Dioxane (p-Dioxane)	2.3	ug/L	0.20	1		12/19/21 19:22	123-91-1	
Surrogates								
1,2-Dichlorobenzene-d4 (S)	79	%	43-153	1		12/19/21 19:22	2199-69-1	
4-Bromofluorobenzene (S)	82	%	79-139	1		12/19/21 19:22	460-00-4	
8260C Volatile Organics								
Analytical Method: EPA 8260C/5030C								
Pace Analytical Services - Melville								
Acetone	293	ug/L	25.0	5		12/22/21 16:22	67-64-1	
Acrylonitrile	<1.0	ug/L	1.0	1		12/20/21 21:34	107-13-1	
Benzene	<1.0	ug/L	1.0	1		12/20/21 21:34	71-43-2	
Bromochloromethane	<1.0	ug/L	1.0	1		12/20/21 21:34	74-97-5	
Bromodichloromethane	<1.0	ug/L	1.0	1		12/20/21 21:34	75-27-4	IC
Bromoform	<1.0	ug/L	1.0	1		12/20/21 21:34	75-25-2	v3
Bromomethane	<1.0	ug/L	1.0	1		12/20/21 21:34	74-83-9	
2-Butanone (MEK)	41.2	ug/L	5.0	1		12/20/21 21:34	78-93-3	v3

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Sample: NNU PLCRS	Lab ID: 70197895001	Collected: 12/14/21 10:48	Received: 12/14/21 13:34	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics		Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville						
Carbon disulfide	1.1	ug/L	1.0	1		12/20/21 21:34	75-15-0	
Carbon tetrachloride	<1.0	ug/L	1.0	1		12/20/21 21:34	56-23-5	
Chlorobenzene	<1.0	ug/L	1.0	1		12/20/21 21:34	108-90-7	
Chloroethane	<1.0	ug/L	1.0	1		12/20/21 21:34	75-00-3	
Chloroform	<1.0	ug/L	1.0	1		12/20/21 21:34	67-66-3	
Chloromethane	<1.0	ug/L	1.0	1		12/20/21 21:34	74-87-3	
1,2-Dibromo-3-chloropropane	<1.0	ug/L	1.0	1		12/20/21 21:34	96-12-8	v3
Dibromochloromethane	<1.0	ug/L	1.0	1		12/20/21 21:34	124-48-1	
1,2-Dibromoethane (EDB)	<1.0	ug/L	1.0	1		12/20/21 21:34	106-93-4	IC
Dibromomethane	<1.0	ug/L	1.0	1		12/20/21 21:34	74-95-3	
1,2-Dichlorobenzene	<1.0	ug/L	1.0	1		12/20/21 21:34	95-50-1	
1,4-Dichlorobenzene	<1.0	ug/L	1.0	1		12/20/21 21:34	106-46-7	
trans-1,4-Dichloro-2-butene	<1.0	ug/L	1.0	1		12/20/21 21:34	110-57-6	
1,1-Dichloroethane	<1.0	ug/L	1.0	1		12/20/21 21:34	75-34-3	
1,2-Dichloroethane	<1.0	ug/L	1.0	1		12/20/21 21:34	107-06-2	
1,1-Dichloroethene	<1.0	ug/L	1.0	1		12/20/21 21:34	75-35-4	
cis-1,2-Dichloroethene	<1.0	ug/L	1.0	1		12/20/21 21:34	156-59-2	
trans-1,2-Dichloroethene	<1.0	ug/L	1.0	1		12/20/21 21:34	156-60-5	
1,2-Dichloropropane	<1.0	ug/L	1.0	1		12/20/21 21:34	78-87-5	
cis-1,3-Dichloropropene	<1.0	ug/L	1.0	1		12/20/21 21:34	10061-01-5	
trans-1,3-Dichloropropene	<1.0	ug/L	1.0	1		12/20/21 21:34	10061-02-6	
Ethylbenzene	<1.0	ug/L	1.0	1		12/20/21 21:34	100-41-4	
2-Hexanone	<5.0	ug/L	5.0	1		12/20/21 21:34	591-78-6	
Iodomethane	<4.0	ug/L	4.0	1		12/20/21 21:34	74-88-4	
Methylene Chloride	<1.0	ug/L	1.0	1		12/20/21 21:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	5.1	ug/L	5.0	1		12/20/21 21:34	108-10-1	
Styrene	<1.0	ug/L	1.0	1		12/20/21 21:34	100-42-5	
1,1,1,2-Tetrachloroethane	<1.0	ug/L	1.0	1		12/20/21 21:34	630-20-6	
1,1,1,2,2-Tetrachloroethane	<1.0	ug/L	1.0	1		12/20/21 21:34	79-34-5	
Tetrachloroethene	<1.0	ug/L	1.0	1		12/20/21 21:34	127-18-4	
Toluene	<1.0	ug/L	1.0	1		12/20/21 21:34	108-88-3	
1,1,1-Trichloroethane	<1.0	ug/L	1.0	1		12/20/21 21:34	71-55-6	
1,1,2-Trichloroethane	<1.0	ug/L	1.0	1		12/20/21 21:34	79-00-5	
Trichloroethene	<1.0	ug/L	1.0	1		12/20/21 21:34	79-01-6	
Trichlorofluoromethane	<1.0	ug/L	1.0	1		12/20/21 21:34	75-69-4	
1,2,3-Trichloropropane	<1.0	ug/L	1.0	1		12/20/21 21:34	96-18-4	
Vinyl acetate	<1.0	ug/L	1.0	1		12/20/21 21:34	108-05-4	
Vinyl chloride	<1.0	ug/L	1.0	1		12/20/21 21:34	75-01-4	
Xylene (Total)	<3.0	ug/L	3.0	1		12/20/21 21:34	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	101	%	81-122	1		12/20/21 21:34	17060-07-0	
4-Bromofluorobenzene (S)	98	%	79-118	1		12/20/21 21:34	460-00-4	
Toluene-d8 (S)	100	%	82-122	1		12/20/21 21:34	2037-26-5	
Tentatively Identified Compounds								
Sulfur dioxide	21.4J	ug/L		1		12/20/21 21:34	7446-09-5	N
Trimethylsilyl fluoride	6.3J	ug/L		1		12/20/21 21:34	420-56-4	N

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

Sample: NNU PLCRS	Lab ID: 70197895001	Collected: 12/14/21 10:48	Received: 12/14/21 13:34	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Tentatively Identified Compounds								
Methanethiol	7.9J	ug/L		1		12/20/21 21:34	74-93-1	N
Ethanethiol	8.3J	ug/L		1		12/20/21 21:34	75-08-1	N
Silane, methoxytrimethyl	12.8J	ug/L		1		12/20/21 21:34	1825-61-2	N
Silanol, trimethyl-	11.5J	ug/L		1		12/20/21 21:34	1066-40-6	N
Disiloxane, hexamethyl-	7.0J	ug/L		1		12/20/21 21:34	107-46-0	N
Unknown	5.9J	ug/L		1		12/20/21 21:34		
2120B W Apparent Color	Analytical Method: SM22 2120B Pace Analytical Services - Melville							
Apparent Color	70.0	units	50.0	10		12/16/21 10:12		
pH	6.3	Std. Units	0.10	10		12/16/21 10:12		
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO3	281	mg/L	1.0	1		12/22/21 10:44		
2340C Hardness, Total	Analytical Method: SM22 2340C Pace Analytical Services - Melville							
Tot Hardness asCaCO3 (SM 2340B)	29600	mg/L	5.0	1		12/23/21 17:56		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C Pace Analytical Services - Melville							
Total Dissolved Solids	30800	mg/L	200	1		12/21/21 16:26		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	<0.020	mg/L	0.020	1		12/15/21 11:42	18540-29-9	H1
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Melville							
Chemical Oxygen Demand	4380	mg/L	200	1	12/23/21 06:04	12/23/21 08:20		
5210B BOD, 5 day	Analytical Method: SM22 5210B Preparation Method: SM22 5210B Pace Analytical Services - Melville							
BOD, 5 day	390	mg/L	66.7	33.33	12/15/21 14:32	12/20/21 10:40		
9034 Sulfide, Titration	Analytical Method: EPA 9034 Preparation Method: EPA 9030B Pace Analytical Services - Melville							
Sulfide	19.2	mg/L	2.0	1	12/21/21 11:28	12/21/21 15:09		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Melville							
Bromide	851	mg/L	50.0	100		12/26/21 21:34	24959-67-9	
Chloride	68800	mg/L	4000	2000		12/27/21 20:08	16887-00-6	

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ANALYTICAL RESULTS

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

Sample: NNU PLCRS	Lab ID: 70197895001	Collected: 12/14/21 10:48	Received: 12/14/21 13:34	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Melville							
Sulfate	25.5	mg/L	5.0	1		12/23/21 05:58	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2 Pace Analytical Services - Melville							
Nitrogen, Kjeldahl, Total	103	mg/L	2.5	5	12/20/21 06:22	12/21/21 17:02	7727-37-9	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrate as N	<0.050	mg/L	0.050	1		12/16/21 02:04	14797-55-8	
Nitrate-Nitrite (as N)	<0.050	mg/L	0.050	1		12/16/21 02:04	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrite as N	<0.050	mg/L	0.050	1		12/15/21 23:05	14797-65-0	
Phenolics, Total Recoverable	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1 Pace Analytical Services - Melville							
Phenolics, Total Recoverable	222	ug/L	25.0	5	01/10/22 12:45	01/11/22 14:34		
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H Pace Analytical Services - Melville							
Nitrogen, Ammonia	123	mg/L	10.0	100		12/22/21 13:44	7664-41-7	
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C Pace Analytical Services - Melville							
Cyanide	13.2	ug/L	10.0	1	12/16/21 19:06	12/16/21 21:19	57-12-5	
9060A TOC as NPOC	Analytical Method: EPA 9060A Pace Analytical Services - Melville							
Total Organic Carbon	170	mg/L	10.0	10		12/21/21 20:58	7440-44-0	
Total Organic Carbon	171	mg/L	10.0	10		12/21/21 20:58	7440-44-0	
Total Organic Carbon	170	mg/L	10.0	10		12/21/21 20:58	7440-44-0	
Total Organic Carbon	171	mg/L	10.0	10		12/21/21 20:58	7440-44-0	
Mean Total Organic Carbon	171	mg/L	10.0	10		12/21/21 20:58	7440-44-0	

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ANALYTICAL RESULTS

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Sample: NNU SLCRS	Lab ID: 70197895002	Collected: 12/14/21 10:40	Received: 12/14/21 13:34	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP								
Analytical Method: EPA 6010C Preparation Method: EPA 3005A								
Pace Analytical Services - Melville								
Aluminum	<20000	ug/L	20000	100	12/28/21 15:11	01/03/22 14:19	7429-90-5	
Antimony	<600	ug/L	600	10	12/28/21 15:11	12/30/21 15:19	7440-36-0	
Arsenic	<100	ug/L	100	10	12/28/21 15:11	12/30/21 15:19	7440-38-2	
Barium	2830	ug/L	2000	10	12/28/21 15:11	12/30/21 15:19	7440-39-3	
Beryllium	<50.0	ug/L	50.0	10	12/28/21 15:11	12/30/21 15:19	7440-41-7	
Boron	6730	ug/L	500	10	12/28/21 15:11	12/30/21 15:19	7440-42-8	
Cadmium	<25.0	ug/L	25.0	10	12/28/21 15:11	12/30/21 15:19	7440-43-9	
Calcium	15300000	ug/L	20000	100	12/28/21 15:11	01/03/22 14:19	7440-70-2	
Chromium	538	ug/L	100	10	12/28/21 15:11	12/30/21 15:19	7440-47-3	
Cobalt	<500	ug/L	500	10	12/28/21 15:11	12/30/21 15:19	7440-48-4	
Copper	99.1J	ug/L	250	10	12/28/21 15:11	12/30/21 15:19	7440-50-8	
Iron	3670	ug/L	1000	10	12/28/21 15:11	12/30/21 15:19	7439-89-6	
Lead	<50.0	ug/L	50.0	10	12/28/21 15:11	12/30/21 15:19	7439-92-1	
Magnesium	5800	ug/L	2000	10	12/28/21 15:11	12/30/21 15:19	7439-95-4	
Manganese	431	ug/L	100	10	12/28/21 15:11	12/30/21 15:19	7439-96-5	
Nickel	85.5J	ug/L	400	10	12/28/21 15:11	12/30/21 15:19	7440-02-0	
Potassium	5220000	ug/L	500000	100	12/28/21 15:11	01/03/22 14:19	7440-09-7	
Selenium	<100	ug/L	100	10	12/28/21 15:11	12/30/21 15:19	7782-49-2	
Silver	17.7J	ug/L	100	10	12/28/21 15:11	12/30/21 15:19	7440-22-4	
Sodium	14100000	ug/L	500000	100	12/28/21 15:11	01/03/22 14:19	7440-23-5	
Thallium	<100	ug/L	100	10	12/28/21 15:11	12/30/21 15:19	7440-28-0	
Vanadium	<500	ug/L	500	10	12/28/21 15:11	12/30/21 15:19	7440-62-2	
Zinc	<200	ug/L	200	10	12/28/21 15:11	12/30/21 15:19	7440-66-6	
7470 Mercury								
Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Pace Analytical Services - Melville								
Mercury	<0.20	ug/L	0.20	1	12/22/21 15:12	12/23/21 10:56	7439-97-6	
8260C SIM Volatile Organics								
Analytical Method: EPA 8260C SIM/5030C								
Pace Analytical Services - Melville								
1,4-Dioxane (p-Dioxane)	2.8	ug/L	0.20	1		12/19/21 19:45	123-91-1	
Surrogates								
1,2-Dichlorobenzene-d4 (S)	107	%	43-153	1		12/19/21 19:45	2199-69-1	
4-Bromofluorobenzene (S)	107	%	79-139	1		12/19/21 19:45	460-00-4	
8260C Volatile Organics								
Analytical Method: EPA 8260C/5030C								
Pace Analytical Services - Melville								
Acetone	336	ug/L	25.0	5		12/22/21 16:43	67-64-1	
Acrylonitrile	<1.0	ug/L	1.0	1		12/20/21 21:55	107-13-1	
Benzene	<1.0	ug/L	1.0	1		12/20/21 21:55	71-43-2	
Bromochloromethane	<1.0	ug/L	1.0	1		12/20/21 21:55	74-97-5	
Bromodichloromethane	<1.0	ug/L	1.0	1		12/20/21 21:55	75-27-4	IC
Bromoform	<1.0	ug/L	1.0	1		12/20/21 21:55	75-25-2	v3
Bromomethane	<1.0	ug/L	1.0	1		12/20/21 21:55	74-83-9	
2-Butanone (MEK)	36.7	ug/L	5.0	1		12/20/21 21:55	78-93-3	v3

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ANALYTICAL RESULTS

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Sample: NNU SLCRS	Lab ID: 70197895002	Collected: 12/14/21 10:40	Received: 12/14/21 13:34	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics		Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville						
Carbon disulfide	<1.0	ug/L	1.0	1		12/20/21 21:55	75-15-0	
Carbon tetrachloride	<1.0	ug/L	1.0	1		12/20/21 21:55	56-23-5	
Chlorobenzene	<1.0	ug/L	1.0	1		12/20/21 21:55	108-90-7	
Chloroethane	<1.0	ug/L	1.0	1		12/20/21 21:55	75-00-3	
Chloroform	<1.0	ug/L	1.0	1		12/20/21 21:55	67-66-3	
Chloromethane	<1.0	ug/L	1.0	1		12/20/21 21:55	74-87-3	
1,2-Dibromo-3-chloropropane	<1.0	ug/L	1.0	1		12/20/21 21:55	96-12-8	v3
Dibromochloromethane	<1.0	ug/L	1.0	1		12/20/21 21:55	124-48-1	
1,2-Dibromoethane (EDB)	<1.0	ug/L	1.0	1		12/20/21 21:55	106-93-4	IC
Dibromomethane	<1.0	ug/L	1.0	1		12/20/21 21:55	74-95-3	
1,2-Dichlorobenzene	<1.0	ug/L	1.0	1		12/20/21 21:55	95-50-1	
1,4-Dichlorobenzene	<1.0	ug/L	1.0	1		12/20/21 21:55	106-46-7	
trans-1,4-Dichloro-2-butene	<1.0	ug/L	1.0	1		12/20/21 21:55	110-57-6	
1,1-Dichloroethane	<1.0	ug/L	1.0	1		12/20/21 21:55	75-34-3	
1,2-Dichloroethane	<1.0	ug/L	1.0	1		12/20/21 21:55	107-06-2	
1,1-Dichloroethene	<1.0	ug/L	1.0	1		12/20/21 21:55	75-35-4	
cis-1,2-Dichloroethene	<1.0	ug/L	1.0	1		12/20/21 21:55	156-59-2	
trans-1,2-Dichloroethene	<1.0	ug/L	1.0	1		12/20/21 21:55	156-60-5	
1,2-Dichloropropane	<1.0	ug/L	1.0	1		12/20/21 21:55	78-87-5	
cis-1,3-Dichloropropene	<1.0	ug/L	1.0	1		12/20/21 21:55	10061-01-5	
trans-1,3-Dichloropropene	<1.0	ug/L	1.0	1		12/20/21 21:55	10061-02-6	
Ethylbenzene	<1.0	ug/L	1.0	1		12/20/21 21:55	100-41-4	
2-Hexanone	<5.0	ug/L	5.0	1		12/20/21 21:55	591-78-6	
Iodomethane	<4.0	ug/L	4.0	1		12/20/21 21:55	74-88-4	
Methylene Chloride	<1.0	ug/L	1.0	1		12/20/21 21:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	4.8J	ug/L	5.0	1		12/20/21 21:55	108-10-1	
Styrene	<1.0	ug/L	1.0	1		12/20/21 21:55	100-42-5	
1,1,1,2-Tetrachloroethane	<1.0	ug/L	1.0	1		12/20/21 21:55	630-20-6	
1,1,2,2-Tetrachloroethane	<1.0	ug/L	1.0	1		12/20/21 21:55	79-34-5	
Tetrachloroethene	<1.0	ug/L	1.0	1		12/20/21 21:55	127-18-4	
Toluene	<1.0	ug/L	1.0	1		12/20/21 21:55	108-88-3	
1,1,1-Trichloroethane	<1.0	ug/L	1.0	1		12/20/21 21:55	71-55-6	
1,1,2-Trichloroethane	<1.0	ug/L	1.0	1		12/20/21 21:55	79-00-5	
Trichloroethene	<1.0	ug/L	1.0	1		12/20/21 21:55	79-01-6	
Trichlorofluoromethane	<1.0	ug/L	1.0	1		12/20/21 21:55	75-69-4	
1,2,3-Trichloropropane	<1.0	ug/L	1.0	1		12/20/21 21:55	96-18-4	
Vinyl acetate	<1.0	ug/L	1.0	1		12/20/21 21:55	108-05-4	
Vinyl chloride	<1.0	ug/L	1.0	1		12/20/21 21:55	75-01-4	
Xylene (Total)	<3.0	ug/L	3.0	1		12/20/21 21:55	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	101	%	81-122	1		12/20/21 21:55	17060-07-0	
4-Bromofluorobenzene (S)	98	%	79-118	1		12/20/21 21:55	460-00-4	
Toluene-d8 (S)	101	%	82-122	1		12/20/21 21:55	2037-26-5	
Tentatively Identified Compounds								
Sulfur dioxide	22.7J	ug/L		1		12/20/21 21:55	7446-09-5	N
Trimethylsilyl fluoride	7.0J	ug/L		1		12/20/21 21:55	420-56-4	N

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEACHATES BASELINE 360 12/14
 Pace Project No.: 70197895

Sample: NNU SLCRS	Lab ID: 70197895002	Collected: 12/14/21 10:40	Received: 12/14/21 13:34	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics		Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville						
Tentatively Identified Compounds								
Methanethiol	6.0J	ug/L		1		12/20/21 21:55	74-93-1	N
Ethanethiol	6.4J	ug/L		1		12/20/21 21:55	75-08-1	N
Isopropyl Alcohol	6.6J	ug/L		1		12/20/21 21:55	67-63-0	N
Silane, methoxytrimethyl	11.0J	ug/L		1		12/20/21 21:55	1825-61-2	N
Silanol, trimethyl-	10.8J	ug/L		1		12/20/21 21:55	1066-40-6	N
Disiloxane, hexamethyl-	6.1J	ug/L		1		12/20/21 21:55	107-46-0	N
2120B W Apparent Color		Analytical Method: SM22 2120B Pace Analytical Services - Melville						
Apparent Color	140	units	100	20		12/16/21 10:11		
pH	6.5	Std. Units	0.10	20		12/16/21 10:11		
2320B Alkalinity		Analytical Method: SM22 2320B Pace Analytical Services - Melville						
Alkalinity, Total as CaCO3	272	mg/L	1.0	1		12/22/21 11:00		
2340C Hardness, Total		Analytical Method: SM22 2340C Pace Analytical Services - Melville						
Tot Hardness asCaCO3 (SM 2340B)	31000	mg/L	5.0	1		12/23/21 17:56		
2540C Total Dissolved Solids		Analytical Method: SM22 2540C Pace Analytical Services - Melville						
Total Dissolved Solids	35400	mg/L	200	1		12/21/21 16:26		
Chromium, Hexavalent		Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville						
Chromium, Hexavalent	<0.020	mg/L	0.020	1		12/15/21 11:41	18540-29-9	H1
410.4 COD		Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Melville						
Chemical Oxygen Demand	4380	mg/L	200	1	12/23/21 06:04	12/23/21 08:20		
5210B BOD, 5 day		Analytical Method: SM22 5210B Preparation Method: SM22 5210B Pace Analytical Services - Melville						
BOD, 5 day	347	mg/L	100	50	12/15/21 14:35	12/20/21 10:43		
9034 Sulfide, Titration		Analytical Method: EPA 9034 Preparation Method: EPA 9030B Pace Analytical Services - Melville						
Sulfide	91.2	mg/L	2.0	1	12/21/21 11:28	12/21/21 15:09		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0 Pace Analytical Services - Melville						
Bromide	812	mg/L	50.0	100		12/26/21 22:01	24959-67-9	
Chloride	48900	mg/L	2000	1000		12/27/21 20:21	16887-00-6	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

Sample: NNU SLCRS	Lab ID: 70197895002	Collected: 12/14/21 10:40	Received: 12/14/21 13:34	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Melville							
Sulfate	6.2	mg/L	5.0	1		12/23/21 06:11	14808-79-8	
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2 Pace Analytical Services - Melville							
Nitrogen, Kjeldahl, Total	116	mg/L	2.5	5	12/20/21 06:22	12/21/21 17:03	7727-37-9	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrate as N	<0.050	mg/L	0.050	1		12/16/21 01:54	14797-55-8	
Nitrate-Nitrite (as N)	<0.050	mg/L	0.050	1		12/16/21 01:54	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrite as N	<0.050	mg/L	0.050	1		12/15/21 22:58	14797-65-0	
Phenolics, Total Recoverable	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1 Pace Analytical Services - Melville							
Phenolics, Total Recoverable	165	ug/L	25.0	5	01/10/22 12:45	01/11/22 14:35		
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H Pace Analytical Services - Melville							
Nitrogen, Ammonia	145	mg/L	10.0	100		12/22/21 13:45	7664-41-7	
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C Pace Analytical Services - Melville							
Cyanide	27.7	ug/L	10.0	1	12/16/21 19:06	12/16/21 21:20	57-12-5	
9060A TOC as NPOC	Analytical Method: EPA 9060A Pace Analytical Services - Melville							
Total Organic Carbon	171	mg/L	10.0	10		12/21/21 21:12	7440-44-0	
Total Organic Carbon	172	mg/L	10.0	10		12/21/21 21:12	7440-44-0	
Total Organic Carbon	172	mg/L	10.0	10		12/21/21 21:12	7440-44-0	
Total Organic Carbon	174	mg/L	10.0	10		12/21/21 21:12	7440-44-0	
Mean Total Organic Carbon	172	mg/L	10.0	10		12/21/21 21:12	7440-44-0	

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ANALYTICAL RESULTS

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Sample: ONU SLCRS	Lab ID: 70197895003	Collected: 12/14/21 11:08	Received: 12/14/21 13:34	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP								
Analytical Method: EPA 6010C Preparation Method: EPA 3005A								
Pace Analytical Services - Melville								
Aluminum	<2000	ug/L	2000	10	12/28/21 15:11	12/30/21 15:21	7429-90-5	
Antimony	<600	ug/L	600	10	12/28/21 15:11	12/30/21 15:21	7440-36-0	
Arsenic	<100	ug/L	100	10	12/28/21 15:11	12/30/21 15:21	7440-38-2	
Barium	5540	ug/L	2000	10	12/28/21 15:11	12/30/21 15:21	7440-39-3	M1
Beryllium	<50.0	ug/L	50.0	10	12/28/21 15:11	12/30/21 15:21	7440-41-7	
Boron	412J	ug/L	500	10	12/28/21 15:11	12/30/21 15:21	7440-42-8	
Cadmium	<25.0	ug/L	25.0	10	12/28/21 15:11	12/30/21 15:21	7440-43-9	
Calcium	9540000	ug/L	2000	10	12/28/21 15:11	12/30/21 15:21	7440-70-2	M1
Chromium	<100	ug/L	100	10	12/28/21 15:11	12/30/21 15:21	7440-47-3	
Cobalt	<500	ug/L	500	10	12/28/21 15:11	12/30/21 15:21	7440-48-4	
Copper	68.0J	ug/L	250	10	12/28/21 15:11	12/30/21 15:21	7440-50-8	
Iron	<1000	ug/L	1000	10	12/28/21 15:11	12/30/21 15:21	7439-89-6	
Lead	<50.0	ug/L	50.0	10	12/28/21 15:11	12/30/21 15:21	7439-92-1	
Magnesium	706J	ug/L	2000	10	12/28/21 15:11	12/30/21 15:21	7439-95-4	
Manganese	<100	ug/L	100	10	12/28/21 15:11	12/30/21 15:21	7439-96-5	
Nickel	<400	ug/L	400	10	12/28/21 15:11	12/30/21 15:21	7440-02-0	
Potassium	3740000	ug/L	500000	100	12/28/21 15:11	01/03/22 14:22	7440-09-7	M1
Selenium	<100	ug/L	100	10	12/28/21 15:11	12/30/21 15:21	7782-49-2	
Silver	14.6J	ug/L	100	10	12/28/21 15:11	12/30/21 15:21	7440-22-4	
Sodium	9620000	ug/L	500000	100	12/28/21 15:11	01/03/22 14:22	7440-23-5	M1
Thallium	<100	ug/L	100	10	12/28/21 15:11	12/30/21 15:21	7440-28-0	
Vanadium	<500	ug/L	500	10	12/28/21 15:11	12/30/21 15:21	7440-62-2	
Zinc	<200	ug/L	200	10	12/28/21 15:11	12/30/21 15:21	7440-66-6	
7470 Mercury								
Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Pace Analytical Services - Melville								
Mercury	<0.20	ug/L	0.20	1	12/22/21 15:12	12/23/21 10:58	7439-97-6	M1
8260C SIM Volatile Organics								
Analytical Method: EPA 8260C SIM/5030C								
Pace Analytical Services - Melville								
1,4-Dioxane (p-Dioxane)	2.0	ug/L	0.20	1		12/19/21 20:09	123-91-1	
Surrogates								
1,2-Dichlorobenzene-d4 (S)	107	%	43-153	1		12/19/21 20:09	2199-69-1	
4-Bromofluorobenzene (S)	114	%	79-139	1		12/19/21 20:09	460-00-4	
8260C Volatile Organics								
Analytical Method: EPA 8260C/5030C								
Pace Analytical Services - Melville								
Acetone	34.1	ug/L	5.0	1		12/21/21 16:29	67-64-1	v3
Acrylonitrile	<1.0	ug/L	1.0	1		12/21/21 16:29	107-13-1	R1
Benzene	<1.0	ug/L	1.0	1		12/21/21 16:29	71-43-2	R1
Bromochloromethane	<1.0	ug/L	1.0	1		12/21/21 16:29	74-97-5	R1
Bromodichloromethane	<1.0	ug/L	1.0	1		12/21/21 16:29	75-27-4	IC
Bromoform	<1.0	ug/L	1.0	1		12/21/21 16:29	75-25-2	v3
Bromomethane	<1.0	ug/L	1.0	1		12/21/21 16:29	74-83-9	v3
2-Butanone (MEK)	2.1J	ug/L	5.0	1		12/21/21 16:29	78-93-3	v3

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Sample: ONU SLCRS	Lab ID: 70197895003	Collected: 12/14/21 11:08	Received: 12/14/21 13:34	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics		Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville						
Carbon disulfide	<1.0	ug/L	1.0	1		12/21/21 16:29	75-15-0	R1
Carbon tetrachloride	<1.0	ug/L	1.0	1		12/21/21 16:29	56-23-5	R1
Chlorobenzene	<1.0	ug/L	1.0	1		12/21/21 16:29	108-90-7	R1
Chloroethane	<1.0	ug/L	1.0	1		12/21/21 16:29	75-00-3	R1
Chloroform	<1.0	ug/L	1.0	1		12/21/21 16:29	67-66-3	R1
Chloromethane	<1.0	ug/L	1.0	1		12/21/21 16:29	74-87-3	R1
1,2-Dibromo-3-chloropropane	<1.0	ug/L	1.0	1		12/21/21 16:29	96-12-8	R1,v3
Dibromochloromethane	<1.0	ug/L	1.0	1		12/21/21 16:29	124-48-1	
1,2-Dibromoethane (EDB)	<1.0	ug/L	1.0	1		12/21/21 16:29	106-93-4	IC,R1
Dibromomethane	<1.0	ug/L	1.0	1		12/21/21 16:29	74-95-3	R1
1,2-Dichlorobenzene	<1.0	ug/L	1.0	1		12/21/21 16:29	95-50-1	R1
1,4-Dichlorobenzene	<1.0	ug/L	1.0	1		12/21/21 16:29	106-46-7	M1,R1
trans-1,4-Dichloro-2-butene	<1.0	ug/L	1.0	1		12/21/21 16:29	110-57-6	R1,v3
1,1-Dichloroethane	<1.0	ug/L	1.0	1		12/21/21 16:29	75-34-3	R1
1,2-Dichloroethane	<1.0	ug/L	1.0	1		12/21/21 16:29	107-06-2	R1
1,1-Dichloroethene	<1.0	ug/L	1.0	1		12/21/21 16:29	75-35-4	R1
cis-1,2-Dichloroethene	<1.0	ug/L	1.0	1		12/21/21 16:29	156-59-2	R1
trans-1,2-Dichloroethene	<1.0	ug/L	1.0	1		12/21/21 16:29	156-60-5	R1
1,2-Dichloropropane	<1.0	ug/L	1.0	1		12/21/21 16:29	78-87-5	R1
cis-1,3-Dichloropropene	<1.0	ug/L	1.0	1		12/21/21 16:29	10061-01-5	R1
trans-1,3-Dichloropropene	<1.0	ug/L	1.0	1		12/21/21 16:29	10061-02-6	R1
Ethylbenzene	<1.0	ug/L	1.0	1		12/21/21 16:29	100-41-4	R1
2-Hexanone	<5.0	ug/L	5.0	1		12/21/21 16:29	591-78-6	R1,v3
Iodomethane	<4.0	ug/L	4.0	1		12/21/21 16:29	74-88-4	v3
Methylene Chloride	<1.0	ug/L	1.0	1		12/21/21 16:29	75-09-2	R1
4-Methyl-2-pentanone (MIBK)	<5.0	ug/L	5.0	1		12/21/21 16:29	108-10-1	R1
Styrene	<1.0	ug/L	1.0	1		12/21/21 16:29	100-42-5	R1
1,1,1,2-Tetrachloroethane	<1.0	ug/L	1.0	1		12/21/21 16:29	630-20-6	R1
1,1,2,2-Tetrachloroethane	<1.0	ug/L	1.0	1		12/21/21 16:29	79-34-5	R1
Tetrachloroethene	<1.0	ug/L	1.0	1		12/21/21 16:29	127-18-4	R1
Toluene	<1.0	ug/L	1.0	1		12/21/21 16:29	108-88-3	R1
1,1,1-Trichloroethane	<1.0	ug/L	1.0	1		12/21/21 16:29	71-55-6	R1
1,1,2-Trichloroethane	<1.0	ug/L	1.0	1		12/21/21 16:29	79-00-5	R1
Trichloroethene	<1.0	ug/L	1.0	1		12/21/21 16:29	79-01-6	R1
Trichlorofluoromethane	<1.0	ug/L	1.0	1		12/21/21 16:29	75-69-4	R1
1,2,3-Trichloropropane	<1.0	ug/L	1.0	1		12/21/21 16:29	96-18-4	R1
Vinyl acetate	<1.0	ug/L	1.0	1		12/21/21 16:29	108-05-4	R1
Vinyl chloride	<1.0	ug/L	1.0	1		12/21/21 16:29	75-01-4	R1
Xylene (Total)	<3.0	ug/L	3.0	1		12/21/21 16:29	1330-20-7	MS,RS
Surrogates								
1,2-Dichloroethane-d4 (S)	103	%	81-122	1		12/21/21 16:29	17060-07-0	
4-Bromofluorobenzene (S)	97	%	79-118	1		12/21/21 16:29	460-00-4	
Toluene-d8 (S)	100	%	82-122	1		12/21/21 16:29	2037-26-5	
Tentatively Identified Compounds								
Sulfur dioxide	22.5J	ug/L		1		12/21/21 16:29	7446-09-5	N
Trimethylsilyl fluoride	10.2J	ug/L		1		12/21/21 16:29	420-56-4	N

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

Sample: ONU SLCRS	Lab ID: 70197895003	Collected: 12/14/21 11:08	Received: 12/14/21 13:34	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville							
Tentatively Identified Compounds								
Isopropyl Alcohol	5.4J	ug/L		1		12/21/21 16:29	67-63-0	N
Silane, methoxytrimethyl	11.8J	ug/L		1		12/21/21 16:29	1825-61-2	N
2120B W Apparent Color	Analytical Method: SM22 2120B Pace Analytical Services - Melville							
Apparent Color	26.0	units	10.0	2		12/16/21 10:13		
pH	9.5	Std. Units	0.10	2		12/16/21 10:13		
2320B Alkalinity	Analytical Method: SM22 2320B Pace Analytical Services - Melville							
Alkalinity, Total as CaCO ₃	155	mg/L	1.0	1		12/22/21 11:11		M1
2340C Hardness, Total	Analytical Method: SM22 2340C Pace Analytical Services - Melville							
Tot Hardness asCaCO ₃ (SM 2340B)	22000	mg/L	5.0	1		12/23/21 17:56		
2540C Total Dissolved Solids	Analytical Method: SM22 2540C Pace Analytical Services - Melville							
Total Dissolved Solids	23100	mg/L	200	1		12/21/21 16:27		
Chromium, Hexavalent	Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville							
Chromium, Hexavalent	0.030	mg/L	0.020	1		12/15/21 11:42	18540-29-9	H1,M1
410.4 COD	Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Melville							
Chemical Oxygen Demand	2280	mg/L	200	1	12/23/21 06:04	12/23/21 08:21		M1
5210B BOD, 5 day	Analytical Method: SM22 5210B Preparation Method: SM22 5210B Pace Analytical Services - Melville							
BOD, 5 day	21.5	mg/L	4.0	2	12/15/21 14:37	12/20/21 10:46		R6
9034 Sulfide, Titration	Analytical Method: EPA 9034 Preparation Method: EPA 9030B Pace Analytical Services - Melville							
Sulfide	3.2	mg/L	2.0	1	12/21/21 13:05	12/21/21 15:09		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Melville							
Bromide	580	mg/L	50.0	100		12/26/21 22:56	24959-67-9	M1
Chloride	40700	mg/L	2000	1000		12/27/21 20:35	16887-00-6	M1
Sulfate	22.8J	mg/L	50.0	10		12/26/21 22:15	14808-79-8	M1

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ANALYTICAL RESULTS

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Sample: ONU SLCRS	Lab ID: 70197895003	Collected: 12/14/21 11:08	Received: 12/14/21 13:34	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
351.2 Total Kjeldahl Nitrogen	Analytical Method: EPA 351.2 Preparation Method: EPA 351.2 Pace Analytical Services - Melville							
Nitrogen, Kjeldahl, Total	90.6	mg/L	2.5	5	12/20/21 06:22	12/21/21 17:03	7727-37-9	M1
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrate as N	<0.050	mg/L	0.050	1		12/16/21 01:58	14797-55-8	
Nitrate-Nitrite (as N)	<0.050	mg/L	0.050	1		12/16/21 01:58	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrite as N	<0.050	mg/L	0.050	1		12/15/21 22:51	14797-65-0	M1
Phenolics, Total Recoverable	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1 Pace Analytical Services - Melville							
Phenolics, Total Recoverable	56.3	ug/L	5.0	1	01/10/22 12:45	01/11/22 14:36		M1
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H Pace Analytical Services - Melville							
Nitrogen, Ammonia	95.0	mg/L	10.0	100		12/22/21 13:46	7664-41-7	
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C Pace Analytical Services - Melville							
Cyanide	10.6	ug/L	10.0	1	12/16/21 19:06	12/16/21 21:20	57-12-5	M1
9060A TOC as NPOC	Analytical Method: EPA 9060A Pace Analytical Services - Melville							
Total Organic Carbon	69.5	mg/L	10.0	10		12/21/21 21:25	7440-44-0	
Total Organic Carbon	69.0	mg/L	10.0	10		12/21/21 21:25	7440-44-0	
Total Organic Carbon	69.5	mg/L	10.0	10		12/21/21 21:25	7440-44-0	
Total Organic Carbon	69.8	mg/L	10.0	10		12/21/21 21:25	7440-44-0	
Mean Total Organic Carbon	69.4	mg/L	10.0	10		12/21/21 21:25	7440-44-0	

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ANALYTICAL RESULTS

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Sample: SA SLCRS	Lab ID: 70197895004	Collected: 12/14/21 11:40	Received: 12/14/21 13:34	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP								
Analytical Method: EPA 6010C Preparation Method: EPA 3005A								
Pace Analytical Services - Melville								
Aluminum	<2000	ug/L	2000	10	12/28/21 15:11	12/30/21 15:40	7429-90-5	
Antimony	<600	ug/L	600	10	12/28/21 15:11	12/30/21 15:40	7440-36-0	
Arsenic	<100	ug/L	100	10	12/28/21 15:11	12/30/21 15:40	7440-38-2	
Barium	296J	ug/L	2000	10	12/28/21 15:11	12/30/21 15:40	7440-39-3	
Beryllium	<50.0	ug/L	50.0	10	12/28/21 15:11	12/30/21 15:40	7440-41-7	
Boron	928	ug/L	500	10	12/28/21 15:11	12/30/21 15:40	7440-42-8	
Cadmium	<25.0	ug/L	25.0	10	12/28/21 15:11	12/30/21 15:40	7440-43-9	
Calcium	1930000	ug/L	2000	10	12/28/21 15:11	12/30/21 15:40	7440-70-2	
Chromium	<100	ug/L	100	10	12/28/21 15:11	12/30/21 15:40	7440-47-3	
Cobalt	<500	ug/L	500	10	12/28/21 15:11	12/30/21 15:40	7440-48-4	
Copper	<250	ug/L	250	10	12/28/21 15:11	12/30/21 15:40	7440-50-8	
Iron	768J	ug/L	1000	10	12/28/21 15:11	12/30/21 15:40	7439-89-6	
Lead	<50.0	ug/L	50.0	10	12/28/21 15:11	12/30/21 15:40	7439-92-1	
Magnesium	79400	ug/L	2000	10	12/28/21 15:11	12/30/21 15:40	7439-95-4	
Manganese	3350	ug/L	100	10	12/28/21 15:11	12/30/21 15:40	7439-96-5	
Nickel	<400	ug/L	400	10	12/28/21 15:11	12/30/21 15:40	7440-02-0	
Potassium	536000	ug/L	500000	100	12/28/21 15:11	01/03/22 14:44	7440-09-7	B
Selenium	<100	ug/L	100	10	12/28/21 15:11	12/30/21 15:40	7782-49-2	
Silver	<100	ug/L	100	10	12/28/21 15:11	12/30/21 15:40	7440-22-4	
Sodium	1530000	ug/L	500000	100	12/28/21 15:11	01/03/22 14:44	7440-23-5	B
Thallium	<100	ug/L	100	10	12/28/21 15:11	12/30/21 15:40	7440-28-0	
Vanadium	<500	ug/L	500	10	12/28/21 15:11	12/30/21 15:40	7440-62-2	
Zinc	<200	ug/L	200	10	12/28/21 15:11	12/30/21 15:40	7440-66-6	
7470 Mercury								
Analytical Method: EPA 7470A Preparation Method: EPA 7470A								
Pace Analytical Services - Melville								
Mercury	<0.20	ug/L	0.20	1	12/22/21 15:12	12/23/21 11:02	7439-97-6	
8260C SIM Volatile Organics								
Analytical Method: EPA 8260C SIM/5030C								
Pace Analytical Services - Melville								
1,4-Dioxane (p-Dioxane)	0.75	ug/L	0.20	1		12/19/21 20:32	123-91-1	
Surrogates								
1,2-Dichlorobenzene-d4 (S)	102	%	43-153	1		12/19/21 20:32	2199-69-1	
4-Bromofluorobenzene (S)	90	%	79-139	1		12/19/21 20:32	460-00-4	
8260C Volatile Organics								
Analytical Method: EPA 8260C/5030C								
Pace Analytical Services - Melville								
Acetone	<5.0	ug/L	5.0	1		12/20/21 20:52	67-64-1	v3
Acrylonitrile	<1.0	ug/L	1.0	1		12/20/21 20:52	107-13-1	
Benzene	<1.0	ug/L	1.0	1		12/20/21 20:52	71-43-2	
Bromochloromethane	<1.0	ug/L	1.0	1		12/20/21 20:52	74-97-5	
Bromodichloromethane	<1.0	ug/L	1.0	1		12/20/21 20:52	75-27-4	IC
Bromoform	<1.0	ug/L	1.0	1		12/20/21 20:52	75-25-2	v3
Bromomethane	<1.0	ug/L	1.0	1		12/20/21 20:52	74-83-9	
2-Butanone (MEK)	<5.0	ug/L	5.0	1		12/20/21 20:52	78-93-3	v3

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Sample: SA SLCRS	Lab ID: 70197895004	Collected: 12/14/21 11:40	Received: 12/14/21 13:34	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics		Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville						
Carbon disulfide	<1.0	ug/L	1.0	1		12/20/21 20:52	75-15-0	
Carbon tetrachloride	<1.0	ug/L	1.0	1		12/20/21 20:52	56-23-5	
Chlorobenzene	<1.0	ug/L	1.0	1		12/20/21 20:52	108-90-7	
Chloroethane	<1.0	ug/L	1.0	1		12/20/21 20:52	75-00-3	
Chloroform	<1.0	ug/L	1.0	1		12/20/21 20:52	67-66-3	
Chloromethane	<1.0	ug/L	1.0	1		12/20/21 20:52	74-87-3	
1,2-Dibromo-3-chloropropane	<1.0	ug/L	1.0	1		12/20/21 20:52	96-12-8	v3
Dibromochloromethane	<1.0	ug/L	1.0	1		12/20/21 20:52	124-48-1	
1,2-Dibromoethane (EDB)	<1.0	ug/L	1.0	1		12/20/21 20:52	106-93-4	IC
Dibromomethane	<1.0	ug/L	1.0	1		12/20/21 20:52	74-95-3	
1,2-Dichlorobenzene	<1.0	ug/L	1.0	1		12/20/21 20:52	95-50-1	
1,4-Dichlorobenzene	<1.0	ug/L	1.0	1		12/20/21 20:52	106-46-7	
trans-1,4-Dichloro-2-butene	<1.0	ug/L	1.0	1		12/20/21 20:52	110-57-6	
1,1-Dichloroethane	<1.0	ug/L	1.0	1		12/20/21 20:52	75-34-3	
1,2-Dichloroethane	<1.0	ug/L	1.0	1		12/20/21 20:52	107-06-2	
1,1-Dichloroethene	<1.0	ug/L	1.0	1		12/20/21 20:52	75-35-4	
cis-1,2-Dichloroethene	<1.0	ug/L	1.0	1		12/20/21 20:52	156-59-2	
trans-1,2-Dichloroethene	<1.0	ug/L	1.0	1		12/20/21 20:52	156-60-5	
1,2-Dichloropropane	<1.0	ug/L	1.0	1		12/20/21 20:52	78-87-5	
cis-1,3-Dichloropropene	<1.0	ug/L	1.0	1		12/20/21 20:52	10061-01-5	
trans-1,3-Dichloropropene	<1.0	ug/L	1.0	1		12/20/21 20:52	10061-02-6	
Ethylbenzene	<1.0	ug/L	1.0	1		12/20/21 20:52	100-41-4	
2-Hexanone	<5.0	ug/L	5.0	1		12/20/21 20:52	591-78-6	
Iodomethane	<4.0	ug/L	4.0	1		12/20/21 20:52	74-88-4	
Methylene Chloride	<1.0	ug/L	1.0	1		12/20/21 20:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	<5.0	ug/L	5.0	1		12/20/21 20:52	108-10-1	
Styrene	<1.0	ug/L	1.0	1		12/20/21 20:52	100-42-5	
1,1,1,2-Tetrachloroethane	<1.0	ug/L	1.0	1		12/20/21 20:52	630-20-6	
1,1,1,2,2-Tetrachloroethane	<1.0	ug/L	1.0	1		12/20/21 20:52	79-34-5	
Tetrachloroethene	<1.0	ug/L	1.0	1		12/20/21 20:52	127-18-4	
Toluene	<1.0	ug/L	1.0	1		12/20/21 20:52	108-88-3	
1,1,1-Trichloroethane	<1.0	ug/L	1.0	1		12/20/21 20:52	71-55-6	
1,1,2-Trichloroethane	<1.0	ug/L	1.0	1		12/20/21 20:52	79-00-5	
Trichloroethene	<1.0	ug/L	1.0	1		12/20/21 20:52	79-01-6	
Trichlorofluoromethane	<1.0	ug/L	1.0	1		12/20/21 20:52	75-69-4	
1,2,3-Trichloropropane	<1.0	ug/L	1.0	1		12/20/21 20:52	96-18-4	
Vinyl acetate	<1.0	ug/L	1.0	1		12/20/21 20:52	108-05-4	
Vinyl chloride	<1.0	ug/L	1.0	1		12/20/21 20:52	75-01-4	
Xylene (Total)	<3.0	ug/L	3.0	1		12/20/21 20:52	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%	81-122	1		12/20/21 20:52	17060-07-0	
4-Bromofluorobenzene (S)	98	%	79-118	1		12/20/21 20:52	460-00-4	
Toluene-d8 (S)	100	%	82-122	1		12/20/21 20:52	2037-26-5	
Tentatively Identified Compounds								
Sulfur dioxide	20.7J	ug/L		1		12/20/21 20:52	7446-09-5	N

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

Sample: SA SLCRS	Lab ID: 70197895004	Collected: 12/14/21 11:40	Received: 12/14/21 13:34	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2120B W Apparent Color								
Analytical Method: SM22 2120B Pace Analytical Services - Melville								
Apparent Color	26.0	units	10.0	2		12/16/21 10:16		
pH	7.5	Std. Units	0.10	2		12/16/21 10:16		
2320B Alkalinity								
Analytical Method: SM22 2320B Pace Analytical Services - Melville								
Alkalinity, Total as CaCO3	188	mg/L	1.0	1		12/22/21 11:58		
2340C Hardness, Total								
Analytical Method: SM22 2340C Pace Analytical Services - Melville								
Tot Hardness asCaCO3 (SM 2340B)	4000	mg/L	5.0	1		12/23/21 17:57		
2540C Total Dissolved Solids								
Analytical Method: SM22 2540C Pace Analytical Services - Melville								
Total Dissolved Solids	10400	mg/L	100	1		12/21/21 16:27		
Chromium, Hexavalent								
Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville								
Chromium, Hexavalent	<0.020	mg/L	0.020	1		12/15/21 11:40	18540-29-9	H1
410.4 COD								
Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Melville								
Chemical Oxygen Demand	606	mg/L	200	1	12/23/21 06:04	12/23/21 08:22		
5210B BOD, 5 day								
Analytical Method: SM22 5210B Preparation Method: SM22 5210B Pace Analytical Services - Melville								
BOD, 5 day	10.8	mg/L	4.0	2	12/15/21 14:39	12/20/21 10:50		
9034 Sulfide, Titration								
Analytical Method: EPA 9034 Preparation Method: EPA 9030B Pace Analytical Services - Melville								
Sulfide	<2.0	mg/L	2.0	1	12/21/21 13:05	12/21/21 15:09		
300.0 IC Anions 28 Days								
Analytical Method: EPA 300.0 Pace Analytical Services - Melville								
Bromide	65.0	mg/L	25.0	50		12/27/21 00:17	24959-67-9	
Chloride	5870	mg/L	500	250		12/27/21 21:15	16887-00-6	
Sulfate	329	mg/L	25.0	5		12/27/21 00:03	14808-79-8	
351.2 Total Kjeldahl Nitrogen								
Analytical Method: EPA 351.2 Preparation Method: EPA 351.2 Pace Analytical Services - Melville								
Nitrogen, Kjeldahl, Total	8.0	mg/L	0.50	5	12/20/21 06:22	12/21/21 17:06	7727-37-9	
353.2 Nitrogen, NO2/NO3 unpres								
Analytical Method: EPA 353.2 Pace Analytical Services - Melville								
Nitrate as N	2.9	mg/L	0.25	5		12/16/21 03:20	14797-55-8	

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ANALYTICAL RESULTS

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

Sample: SA SLCRS	Lab ID: 70197895004	Collected: 12/14/21 11:40	Received: 12/14/21 13:34	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrate-Nitrite (as N)	3.8	mg/L	0.25	5		12/16/21 03:20	7727-37-9	
353.2 Nitrogen, NO2	Analytical Method: EPA 353.2 Pace Analytical Services - Melville							
Nitrite as N	0.99	mg/L	0.050	1		12/15/21 23:18	14797-65-0	
Phenolics, Total Recoverable	Analytical Method: EPA 420.1 Preparation Method: EPA 420.1 Pace Analytical Services - Melville							
Phenolics, Total Recoverable	<5.0	ug/L	5.0	1	01/10/22 12:45	01/11/22 14:38		
4500 Ammonia Water	Analytical Method: SM22 4500 NH3 H Pace Analytical Services - Melville							
Nitrogen, Ammonia	3.5	mg/L	0.10	1		12/22/21 13:18	7664-41-7	
9014 Cyanide, Total	Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C Pace Analytical Services - Melville							
Cyanide	15.8	ug/L	10.0	1	12/16/21 19:06	12/16/21 21:55	57-12-5	
9060A TOC as NPOC	Analytical Method: EPA 9060A Pace Analytical Services - Melville							
Total Organic Carbon	5.2	mg/L	1.0	1		12/23/21 18:52	7440-44-0	
Total Organic Carbon	5.1	mg/L	1.0	1		12/23/21 18:52	7440-44-0	
Total Organic Carbon	5.2	mg/L	1.0	1		12/23/21 18:52	7440-44-0	
Total Organic Carbon	5.2	mg/L	1.0	1		12/23/21 18:52	7440-44-0	
Mean Total Organic Carbon	5.2	mg/L	1.0	1		12/23/21 18:52	7440-44-0	

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ANALYTICAL RESULTS

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Sample: TRIP BLANK	Lab ID: 70197895005	Collected: 12/14/21 00:00	Received: 12/14/21 13:34	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics		Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville						
Acetone	<5.0	ug/L	5.0	1		12/20/21 21:13	67-64-1	v3
Acrylonitrile	<1.0	ug/L	1.0	1		12/20/21 21:13	107-13-1	
Benzene	<1.0	ug/L	1.0	1		12/20/21 21:13	71-43-2	
Bromochloromethane	<1.0	ug/L	1.0	1		12/20/21 21:13	74-97-5	
Bromodichloromethane	<1.0	ug/L	1.0	1		12/20/21 21:13	75-27-4	IC
Bromoform	<1.0	ug/L	1.0	1		12/20/21 21:13	75-25-2	v3
Bromomethane	<1.0	ug/L	1.0	1		12/20/21 21:13	74-83-9	
2-Butanone (MEK)	<5.0	ug/L	5.0	1		12/20/21 21:13	78-93-3	v3
Carbon disulfide	<1.0	ug/L	1.0	1		12/20/21 21:13	75-15-0	
Carbon tetrachloride	<1.0	ug/L	1.0	1		12/20/21 21:13	56-23-5	
Chlorobenzene	<1.0	ug/L	1.0	1		12/20/21 21:13	108-90-7	
Chloroethane	<1.0	ug/L	1.0	1		12/20/21 21:13	75-00-3	
Chloroform	<1.0	ug/L	1.0	1		12/20/21 21:13	67-66-3	
Chloromethane	<1.0	ug/L	1.0	1		12/20/21 21:13	74-87-3	
1,2-Dibromo-3-chloropropane	<1.0	ug/L	1.0	1		12/20/21 21:13	96-12-8	v3
Dibromochloromethane	<1.0	ug/L	1.0	1		12/20/21 21:13	124-48-1	
1,2-Dibromoethane (EDB)	<1.0	ug/L	1.0	1		12/20/21 21:13	106-93-4	IC
Dibromomethane	<1.0	ug/L	1.0	1		12/20/21 21:13	74-95-3	
1,2-Dichlorobenzene	<1.0	ug/L	1.0	1		12/20/21 21:13	95-50-1	
1,4-Dichlorobenzene	<1.0	ug/L	1.0	1		12/20/21 21:13	106-46-7	
trans-1,4-Dichloro-2-butene	<1.0	ug/L	1.0	1		12/20/21 21:13	110-57-6	
1,1-Dichloroethane	<1.0	ug/L	1.0	1		12/20/21 21:13	75-34-3	
1,2-Dichloroethane	<1.0	ug/L	1.0	1		12/20/21 21:13	107-06-2	
1,1-Dichloroethene	<1.0	ug/L	1.0	1		12/20/21 21:13	75-35-4	
cis-1,2-Dichloroethene	<1.0	ug/L	1.0	1		12/20/21 21:13	156-59-2	
trans-1,2-Dichloroethene	<1.0	ug/L	1.0	1		12/20/21 21:13	156-60-5	
1,2-Dichloropropane	<1.0	ug/L	1.0	1		12/20/21 21:13	78-87-5	
cis-1,3-Dichloropropene	<1.0	ug/L	1.0	1		12/20/21 21:13	10061-01-5	
trans-1,3-Dichloropropene	<1.0	ug/L	1.0	1		12/20/21 21:13	10061-02-6	
Ethylbenzene	<1.0	ug/L	1.0	1		12/20/21 21:13	100-41-4	
2-Hexanone	<5.0	ug/L	5.0	1		12/20/21 21:13	591-78-6	
Iodomethane	<4.0	ug/L	4.0	1		12/20/21 21:13	74-88-4	
Methylene Chloride	<1.0	ug/L	1.0	1		12/20/21 21:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	<5.0	ug/L	5.0	1		12/20/21 21:13	108-10-1	
Styrene	<1.0	ug/L	1.0	1		12/20/21 21:13	100-42-5	
1,1,1,2-Tetrachloroethane	<1.0	ug/L	1.0	1		12/20/21 21:13	630-20-6	
1,1,1,2,2-Tetrachloroethane	<1.0	ug/L	1.0	1		12/20/21 21:13	79-34-5	
Tetrachloroethene	<1.0	ug/L	1.0	1		12/20/21 21:13	127-18-4	
Toluene	<1.0	ug/L	1.0	1		12/20/21 21:13	108-88-3	
1,1,1-Trichloroethane	<1.0	ug/L	1.0	1		12/20/21 21:13	71-55-6	
1,1,2-Trichloroethane	<1.0	ug/L	1.0	1		12/20/21 21:13	79-00-5	
Trichloroethene	<1.0	ug/L	1.0	1		12/20/21 21:13	79-01-6	
Trichlorofluoromethane	<1.0	ug/L	1.0	1		12/20/21 21:13	75-69-4	
1,2,3-Trichloropropane	<1.0	ug/L	1.0	1		12/20/21 21:13	96-18-4	
Vinyl acetate	<1.0	ug/L	1.0	1		12/20/21 21:13	108-05-4	
Vinyl chloride	<1.0	ug/L	1.0	1		12/20/21 21:13	75-01-4	

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ANALYTICAL RESULTS

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Sample: TRIP BLANK		Lab ID: 70197895005	Collected: 12/14/21 00:00	Received: 12/14/21 13:34	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics		Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville						
Xylene (Total)	<3.0	ug/L	3.0	1		12/20/21 21:13	1330-20-7	
Surrogates								
1,2-Dichloroethane-d4 (S)	99	%	81-122	1		12/20/21 21:13	17060-07-0	
4-Bromofluorobenzene (S)	99	%	79-118	1		12/20/21 21:13	460-00-4	
Toluene-d8 (S)	102	%	82-122	1		12/20/21 21:13	2037-26-5	
Tentatively Identified Compounds								
Sulfur dioxide	10.4J	ug/L		1		12/20/21 21:13	7446-09-5	N

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

QC Batch: 238119	Analysis Method: EPA 7470A
QC Batch Method: EPA 7470A	Analysis Description: 7470 Mercury
	Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

METHOD BLANK: 1202707 Matrix: Water
Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	<0.20	0.20	12/23/21 10:52	

LABORATORY CONTROL SAMPLE: 1202708

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	1	1.1	108	80-120	

MATRIX SPIKE SAMPLE: 1202709

Parameter	Units	70197895003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	<0.20	1	0.65	65	75-125	M1

SAMPLE DUPLICATE: 1202710

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Mercury	ug/L	<0.20	<0.20		

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

QC Batch:	238104	Analysis Method:	EPA 6010C
QC Batch Method:	EPA 3005A	Analysis Description:	6010 MET Water
		Laboratory:	Pace Analytical Services - Melville

Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

METHOD BLANK: 1202492 Matrix: Water

Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	<200	200	12/30/21 15:02	
Antimony	ug/L	<60.0	60.0	12/30/21 15:02	
Arsenic	ug/L	<10.0	10.0	12/30/21 15:02	
Barium	ug/L	<200	200	12/30/21 15:02	
Beryllium	ug/L	<5.0	5.0	12/30/21 15:02	
Boron	ug/L	<50.0	50.0	12/30/21 15:02	
Cadmium	ug/L	<2.5	2.5	12/30/21 15:02	
Calcium	ug/L	<200	200	12/30/21 15:02	
Chromium	ug/L	<10.0	10.0	12/30/21 15:02	
Cobalt	ug/L	<50.0	50.0	12/30/21 15:02	
Copper	ug/L	<25.0	25.0	12/30/21 15:02	
Iron	ug/L	<100	100	12/30/21 15:02	
Lead	ug/L	<5.0	5.0	12/30/21 15:02	
Magnesium	ug/L	<200	200	12/30/21 15:02	
Manganese	ug/L	<10.0	10.0	12/30/21 15:02	
Nickel	ug/L	<40.0	40.0	12/30/21 15:02	
Potassium	ug/L	2390J	5000	01/04/22 14:31	
Selenium	ug/L	<10.0	10.0	12/30/21 15:02	
Silver	ug/L	<10.0	10.0	12/30/21 15:02	
Sodium	ug/L	2350J	5000	01/04/22 14:31	
Thallium	ug/L	<10.0	10.0	12/30/21 15:02	
Vanadium	ug/L	<50.0	50.0	12/30/21 15:02	
Zinc	ug/L	<20.0	20.0	12/30/21 15:02	

LABORATORY CONTROL SAMPLE: 1202493

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	25000	26400	106	80-120	
Antimony	ug/L	1000	1060	106	80-120	
Arsenic	ug/L	500	525	105	80-120	
Barium	ug/L	500	535	107	80-120	
Beryllium	ug/L	500	539	108	80-120	
Boron	ug/L	1000	1080	108	80-120	
Cadmium	ug/L	500	525	105	80-120	
Calcium	ug/L	25000	27000	108	80-120	
Chromium	ug/L	500	528	106	80-120	
Cobalt	ug/L	500	530	106	80-120	
Copper	ug/L	500	532	106	80-120	
Iron	ug/L	12500	13300	106	80-120	

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

LABORATORY CONTROL SAMPLE: 1202493

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	ug/L	500	531	106	80-120	
Magnesium	ug/L	25000	26800	107	80-120	
Manganese	ug/L	500	531	106	80-120	
Nickel	ug/L	500	532	106	80-120	
Potassium	ug/L	25000	25700	103	80-120	
Selenium	ug/L	500	534	107	80-120	
Silver	ug/L	250	264	106	80-120	
Sodium	ug/L	25000	25700	103	80-120	
Thallium	ug/L	250	264	106	80-120	
Vanadium	ug/L	500	533	107	80-120	
Zinc	ug/L	500	531	106	80-120	

MATRIX SPIKE SAMPLE: 1207017

Parameter	Units	70197895003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	<2000	25000	30800	123	75-125	
Antimony	ug/L	<600	1000	1150	115	75-125	
Arsenic	ug/L	<100	500	573	115	75-125	
Barium	ug/L	5540	500	5490	-10	75-125	M1
Beryllium	ug/L	<50.0	500	595	119	75-125	
Boron	ug/L	412J	1000	1610	120	75-125	
Cadmium	ug/L	<25.0	500	566	113	75-125	
Calcium	ug/L	9540000	25000	9230000	-1240	75-125	M1
Chromium	ug/L	<100	500	574	115	75-125	
Cobalt	ug/L	<500	500	575	115	75-125	
Copper	ug/L	68.0J	500	661	119	75-125	
Iron	ug/L	<1000	12500	14500	116	75-125	
Lead	ug/L	<50.0	500	521	104	75-125	
Magnesium	ug/L	706J	25000	28500	111	75-125	
Manganese	ug/L	<100	500	569	114	75-125	
Nickel	ug/L	<400	500	609	117	75-125	
Potassium	ug/L	3740000	25000	3650000	-360	75-125	M1
Selenium	ug/L	<100	500	571	114	75-125	
Silver	ug/L	14.6J	250	224	84	75-125	
Sodium	ug/L	9620000	25000	9400000	-880	75-125	M1
Thallium	ug/L	<100	250	265	101	75-125	
Vanadium	ug/L	<500	500	605	119	75-125	
Zinc	ug/L	<200	500	478	96	75-125	

SAMPLE DUPLICATE: 1207016

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Aluminum	ug/L	<2000	<2000		
Antimony	ug/L	<600	<600		

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

SAMPLE DUPLICATE: 1207016

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Arsenic	ug/L	<100	<100		
Barium	ug/L	5540	5950	7	
Beryllium	ug/L	<50.0	<50.0		
Boron	ug/L	412J	413J		
Cadmium	ug/L	<25.0	<25.0		
Calcium	ug/L	9540000	10300000	8	
Chromium	ug/L	<100	<100		
Cobalt	ug/L	<500	<500		
Copper	ug/L	68.0J	71.4J		
Iron	ug/L	<1000	<1000		
Lead	ug/L	<50.0	<50.0		
Magnesium	ug/L	706J	721J		
Manganese	ug/L	<100	<100		
Nickel	ug/L	<400	<400		
Potassium	ug/L	3740000	3710000	1	
Selenium	ug/L	<100	<100		
Silver	ug/L	14.6J	16.9J		
Sodium	ug/L	9620000	9590000	0	
Thallium	ug/L	<100	<100		
Vanadium	ug/L	<500	<500		
Zinc	ug/L	<200	<200		

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

QC Batch: 237659 Analysis Method: EPA 8260C SIM/5030C
QC Batch Method: EPA 8260C SIM/5030C Analysis Description: 8260C SIM 5030C
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

METHOD BLANK: 1200544 Matrix: Water
Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	<0.20	0.20	12/19/21 16:58	
1,2-Dichlorobenzene-d4 (S)	%	109	43-153	12/19/21 16:58	
4-Bromofluorobenzene (S)	%	104	79-139	12/19/21 16:58	

LABORATORY CONTROL SAMPLE: 1200545

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	2.5	2.0	79	59-135	
1,2-Dichlorobenzene-d4 (S)	%			102	43-153	
4-Bromofluorobenzene (S)	%			101	79-139	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1200546 1200547

Parameter	Units	70197895003		70197895004		MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result					
1,4-Dioxane (p-Dioxane)	ug/L	2.0	2.5	2.5	4.7	4.5	107	100	42-159	4
1,2-Dichlorobenzene-d4 (S)	%						81	97	43-153	
4-Bromofluorobenzene (S)	%						82	88	79-139	

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

QC Batch: 237770 Analysis Method: EPA 8260C/5030C
QC Batch Method: EPA 8260C/5030C Analysis Description: 8260 MSV
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70197895001, 70197895002, 70197895004, 70197895005

METHOD BLANK: 1200861 Matrix: Water
Associated Lab Samples: 70197895001, 70197895002, 70197895004, 70197895005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<1.0	1.0	12/20/21 14:45	
1,1,1-Trichloroethane	ug/L	<1.0	1.0	12/20/21 14:45	
1,1,2,2-Tetrachloroethane	ug/L	<1.0	1.0	12/20/21 14:45	
1,1,2-Trichloroethane	ug/L	<1.0	1.0	12/20/21 14:45	
1,1-Dichloroethane	ug/L	<1.0	1.0	12/20/21 14:45	
1,1-Dichloroethene	ug/L	<1.0	1.0	12/20/21 14:45	
1,2,3-Trichloropropane	ug/L	<1.0	1.0	12/20/21 14:45	
1,2-Dibromo-3-chloropropane	ug/L	<1.0	1.0	12/20/21 14:45	v3
1,2-Dibromoethane (EDB)	ug/L	<1.0	1.0	12/20/21 14:45	IC
1,2-Dichlorobenzene	ug/L	<1.0	1.0	12/20/21 14:45	
1,2-Dichloroethane	ug/L	<1.0	1.0	12/20/21 14:45	
1,2-Dichloropropane	ug/L	<1.0	1.0	12/20/21 14:45	
1,4-Dichlorobenzene	ug/L	<1.0	1.0	12/20/21 14:45	
2-Butanone (MEK)	ug/L	<5.0	5.0	12/20/21 14:45	v3
2-Hexanone	ug/L	<5.0	5.0	12/20/21 14:45	
4-Methyl-2-pentanone (MIBK)	ug/L	<5.0	5.0	12/20/21 14:45	
Acetone	ug/L	<5.0	5.0	12/20/21 14:45	v3
Acrylonitrile	ug/L	<1.0	1.0	12/20/21 14:45	
Benzene	ug/L	<1.0	1.0	12/20/21 14:45	
Bromochloromethane	ug/L	<1.0	1.0	12/20/21 14:45	
Bromodichloromethane	ug/L	<1.0	1.0	12/20/21 14:45	IC
Bromoform	ug/L	<1.0	1.0	12/20/21 14:45	v3
Bromomethane	ug/L	<1.0	1.0	12/20/21 14:45	
Carbon disulfide	ug/L	<1.0	1.0	12/20/21 14:45	
Carbon tetrachloride	ug/L	<1.0	1.0	12/20/21 14:45	
Chlorobenzene	ug/L	<1.0	1.0	12/20/21 14:45	
Chloroethane	ug/L	<1.0	1.0	12/20/21 14:45	
Chloroform	ug/L	<1.0	1.0	12/20/21 14:45	
Chloromethane	ug/L	<1.0	1.0	12/20/21 14:45	
cis-1,2-Dichloroethene	ug/L	<1.0	1.0	12/20/21 14:45	
cis-1,3-Dichloropropene	ug/L	<1.0	1.0	12/20/21 14:45	
Dibromochloromethane	ug/L	<1.0	1.0	12/20/21 14:45	
Dibromomethane	ug/L	<1.0	1.0	12/20/21 14:45	
Ethylbenzene	ug/L	<1.0	1.0	12/20/21 14:45	
Iodomethane	ug/L	<4.0	4.0	12/20/21 14:45	
Methylene Chloride	ug/L	<1.0	1.0	12/20/21 14:45	
Styrene	ug/L	<1.0	1.0	12/20/21 14:45	
Tetrachloroethene	ug/L	<1.0	1.0	12/20/21 14:45	
Toluene	ug/L	<1.0	1.0	12/20/21 14:45	
trans-1,2-Dichloroethene	ug/L	<1.0	1.0	12/20/21 14:45	

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

METHOD BLANK: 1200861

Matrix: Water

Associated Lab Samples: 70197895001, 70197895002, 70197895004, 70197895005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
trans-1,3-Dichloropropene	ug/L	<1.0	1.0	12/20/21 14:45	
trans-1,4-Dichloro-2-butene	ug/L	<1.0	1.0	12/20/21 14:45	
Trichloroethene	ug/L	<1.0	1.0	12/20/21 14:45	
Trichlorofluoromethane	ug/L	<1.0	1.0	12/20/21 14:45	
Vinyl acetate	ug/L	<1.0	1.0	12/20/21 14:45	
Vinyl chloride	ug/L	<1.0	1.0	12/20/21 14:45	
Xylene (Total)	ug/L	<3.0	3.0	12/20/21 14:45	
1,2-Dichloroethane-d4 (S)	%	99	81-122	12/20/21 14:45	
4-Bromofluorobenzene (S)	%	99	79-118	12/20/21 14:45	
Toluene-d8 (S)	%	101	82-122	12/20/21 14:45	

LABORATORY CONTROL SAMPLE: 1200862

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	49.6	99	75-122	
1,1,1-Trichloroethane	ug/L	50	48.2	96	72-126	
1,1,2,2-Tetrachloroethane	ug/L	50	50.6	101	70-127	
1,1,2-Trichloroethane	ug/L	50	51.0	102	81-119	
1,1-Dichloroethane	ug/L	50	46.6	93	72-126	
1,1-Dichloroethene	ug/L	50	47.0	94	66-133	
1,2,3-Trichloropropane	ug/L	50	54.0	108	69-120	
1,2-Dibromo-3-chloropropane	ug/L	50	39.8	80	47-133 v3	
1,2-Dibromoethane (EDB)	ug/L	50	56.8	114	81-123 IC	
1,2-Dichlorobenzene	ug/L	50	50.4	101	80-117	
1,2-Dichloroethane	ug/L	50	51.2	102	69-134	
1,2-Dichloropropane	ug/L	50	51.1	102	75-125	
1,4-Dichlorobenzene	ug/L	50	50.8	102	80-117	
2-Butanone (MEK)	ug/L	50	33.8	68	33-165 v3	
2-Hexanone	ug/L	50	37.8	76	50-128	
4-Methyl-2-pentanone (MIBK)	ug/L	50	50.5	101	62-131	
Acetone	ug/L	50	24.9	50	14-156 v3	
Acrylonitrile	ug/L	50	44.9	90	60-136	
Benzene	ug/L	50	52.7	105	78-117	
Bromochloromethane	ug/L	50	50.9	102	77-122	
Bromodichloromethane	ug/L	50	50.1	100	80-123 IC	
Bromoform	ug/L	50	37.5	75	49-138 v3	
Bromomethane	ug/L	50	48.4	97	10-143	
Carbon disulfide	ug/L	50	42.9	86	66-133	
Carbon tetrachloride	ug/L	50	44.7	89	64-135	
Chlorobenzene	ug/L	50	53.0	106	79-117	
Chloroethane	ug/L	50	44.8	90	31-156	
Chloroform	ug/L	50	49.5	99	79-123	
Chloromethane	ug/L	50	43.1	86	39-116	
cis-1,2-Dichloroethene	ug/L	50	49.0	98	77-125	

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

LABORATORY CONTROL SAMPLE: 1200862

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,3-Dichloropropene	ug/L	50	47.2	94	78-131	
Dibromochloromethane	ug/L	50	42.9	86	65-123	
Dibromomethane	ug/L	50	53.7	107	81-123	
Ethylbenzene	ug/L	50	51.3	103	79-115	
Iodomethane	ug/L	50	42.2	84	10-183	
Methylene Chloride	ug/L	50	48.2	96	67-123	
Styrene	ug/L	50	54.2	108	82-121	
Tetrachloroethene	ug/L	50	49.5	99	65-120	
Toluene	ug/L	50	51.0	102	80-114	
trans-1,2-Dichloroethene	ug/L	50	46.5	93	74-123	
trans-1,3-Dichloropropene	ug/L	50	45.8	92	73-135	
trans-1,4-Dichloro-2-butene	ug/L	50	50.0	100	52-137	
Trichloroethene	ug/L	50	50.1	100	79-115	
Trichlorofluoromethane	ug/L	50	50.6	101	51-136	
Vinyl acetate	ug/L	50	50.6	101	49-136	
Vinyl chloride	ug/L	50	45.0	90	49-118	
Xylene (Total)	ug/L	150	154	103	80-118	
1,2-Dichloroethane-d4 (S)	%			98	81-122	
4-Bromofluorobenzene (S)	%			99	79-118	
Toluene-d8 (S)	%			100	82-122	

MATRIX SPIKE SAMPLE: 1201856

Parameter	Units	70198349005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<1.0	50	46.7	93	65-122	
1,1,1-Trichloroethane	ug/L	<1.0	50	47.4	95	72-123	
1,1,2,2-Tetrachloroethane	ug/L	<1.0	50	46.8	94	64-133	
1,1,2-Trichloroethane	ug/L	<1.0	50	47.3	95	78-120	
1,1-Dichloroethane	ug/L	<1.0	50	46.5	93	70-124	
1,1-Dichloroethene	ug/L	<1.0	50	47.9	96	61-139	
1,2,3-Trichloropropane	ug/L	<1.0	50	48.4	97	64-120	
1,2-Dibromo-3-chloropropane	ug/L	<1.0	50	36.3	73	32-137	v3
1,2-Dibromoethane (EDB)	ug/L	<1.0	50	52.3	105	78-121	IC
1,2-Dichlorobenzene	ug/L	<1.0	50	49.6	99	75-120	
1,2-Dichloroethane	ug/L	<1.0	50	49.2	98	58-138	
1,2-Dichloropropane	ug/L	<1.0	50	48.7	97	74-122	
1,4-Dichlorobenzene	ug/L	<1.0	50	50.4	101	76-118	
2-Butanone (MEK)	ug/L	<5.0	50	31.0	62	33-148	v3
2-Hexanone	ug/L	<5.0	50	33.3	67	49-124	
4-Methyl-2-pentanone (MIBK)	ug/L	<5.0	50	44.0	88	60-136	
Acetone	ug/L	<5.0	50	19.8	40	35-112	v3
Acrylonitrile	ug/L	<1.0	50	40.4	81	45-132	
Benzene	ug/L	<1.0	50	51.4	103	70-130	
Bromochloromethane	ug/L	<1.0	50	49.8	100	70-122	
Bromodichloromethane	ug/L	<1.0	50	46.1	92	74-122	IC

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

MATRIX SPIKE SAMPLE: 1201856		70198349005	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Bromoform	ug/L	<1.0	50	32.8	66	39-139	v3
Bromomethane	ug/L	<1.0	50	13.4	27	10-130	
Carbon disulfide	ug/L	<1.0	50	50.0	100	60-129	
Carbon tetrachloride	ug/L	<1.0	50	42.6	85	56-143	
Chlorobenzene	ug/L	<1.0	50	51.5	103	74-122	
Chloroethane	ug/L	<1.0	50	43.7	87	35-146	
Chloroform	ug/L	<1.0	50	48.7	97	71-129	
Chloromethane	ug/L	<1.0	50	34.2	68	29-112	
cis-1,2-Dichloroethene	ug/L	<1.0	50	48.2	96	73-129	
cis-1,3-Dichloropropene	ug/L	<1.0	50	43.6	87	67-130	
Dibromochloromethane	ug/L	<1.0	50	38.6	77	55-126	
Dibromomethane	ug/L	<1.0	50	49.9	100	71-127	
Ethylbenzene	ug/L	<1.0	50	51.6	103	70-126	
Iodomethane	ug/L	<4.0	50	25.0	50	10-167	
Methylene Chloride	ug/L	<1.0	50	46.4	93	69-117	
Styrene	ug/L	<1.0	50	53.3	107	79-123	
Tetrachloroethene	ug/L	<1.0	50	48.4	97	64-124	
Toluene	ug/L	<1.0	50	50.0	100	76-123	
trans-1,2-Dichloroethene	ug/L	<1.0	50	46.9	94	69-127	
trans-1,3-Dichloropropene	ug/L	<1.0	50	41.7	83	61-130	
trans-1,4-Dichloro-2-butene	ug/L	<1.0	50	25.8	52	18-144	
Trichloroethene	ug/L	<1.0	50	49.1	98	73-125	
Trichlorofluoromethane	ug/L	<1.0	50	50.5	101	59-129	
Vinyl acetate	ug/L	<1.0	50	42.3	85	34-123	
Vinyl chloride	ug/L	<1.0	50	43.0	86	33-127	
Xylene (Total)	ug/L	<3.0	150	154	103	78-123	
1,2-Dichloroethane-d4 (S)	%				96	81-122	
4-Bromofluorobenzene (S)	%				101	79-118	
Toluene-d8 (S)	%				101	82-122	

SAMPLE DUPLICATE: 1201855

Parameter	Units	70198349001 Result	Dup Result	RPD	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<1.0	<1.0		
1,1,1-Trichloroethane	ug/L	<1.0	<1.0		
1,1,2,2-Tetrachloroethane	ug/L	<1.0	<1.0		
1,1,2-Trichloroethane	ug/L	<1.0	<1.0		
1,1-Dichloroethane	ug/L	<1.0	<1.0		
1,1-Dichloroethene	ug/L	<1.0	<1.0		
1,2,3-Trichloropropane	ug/L	<1.0	<1.0		
1,2-Dibromo-3-chloropropane	ug/L	<1.0	<1.0		v3
1,2-Dibromoethane (EDB)	ug/L	<1.0	<1.0		IC
1,2-Dichlorobenzene	ug/L	<1.0	<1.0		
1,2-Dichloroethane	ug/L	<1.0	<1.0		
1,2-Dichloropropane	ug/L	<1.0	<1.0		

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

SAMPLE DUPLICATE: 1201855

Parameter	Units	70198349001 Result	Dup Result	RPD	Qualifiers
1,4-Dichlorobenzene	ug/L	<1.0	<1.0		
2-Butanone (MEK)	ug/L	<5.0	2.9J		v3
2-Hexanone	ug/L	<5.0	<5.0		
4-Methyl-2-pentanone (MIBK)	ug/L	<5.0	<5.0		
Acetone	ug/L	9.0	10.7	17	v3
Acrylonitrile	ug/L	<1.0	<1.0		
Benzene	ug/L	<1.0	<1.0		
Bromochloromethane	ug/L	<1.0	<1.0		
Bromodichloromethane	ug/L	<1.0	<1.0		IC
Bromoform	ug/L	<1.0	<1.0		v3
Bromomethane	ug/L	<1.0	<1.0		
Carbon disulfide	ug/L	1.7	2.9	52	D6
Carbon tetrachloride	ug/L	<1.0	<1.0		
Chlorobenzene	ug/L	<1.0	<1.0		
Chloroethane	ug/L	<1.0	<1.0		
Chloroform	ug/L	<1.0	<1.0		
Chloromethane	ug/L	<1.0	<1.0		
cis-1,2-Dichloroethene	ug/L	<1.0	<1.0		
cis-1,3-Dichloropropene	ug/L	<1.0	<1.0		
Dibromochloromethane	ug/L	<1.0	<1.0		
Dibromomethane	ug/L	<1.0	<1.0		
Ethylbenzene	ug/L	<1.0	<1.0		
Iodomethane	ug/L	<4.0	<4.0		
Methylene Chloride	ug/L	<1.0	<1.0		
Styrene	ug/L	<1.0	<1.0		
Tetrachloroethene	ug/L	<1.0	<1.0		
Toluene	ug/L	11.3	12.2	8	
trans-1,2-Dichloroethene	ug/L	<1.0	<1.0		
trans-1,3-Dichloropropene	ug/L	<1.0	<1.0		
trans-1,4-Dichloro-2-butene	ug/L	<1.0	<1.0		
Trichloroethene	ug/L	<1.0	<1.0		
Trichlorofluoromethane	ug/L	<1.0	<1.0		
Vinyl acetate	ug/L	<1.0	<1.0		
Vinyl chloride	ug/L	<1.0	<1.0		
Xylene (Total)	ug/L	<3.0	<3.0		
1,2-Dichloroethane-d4 (S)	%	98	100		
4-Bromofluorobenzene (S)	%	100	99		
Toluene-d8 (S)	%	101	100		

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

QC Batch: 237976 Analysis Method: EPA 8260C/5030C
QC Batch Method: EPA 8260C/5030C Analysis Description: 8260 MSV
Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197895003

METHOD BLANK: 1201905 Matrix: Water
Associated Lab Samples: 70197895003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<1.0	1.0	12/21/21 15:36	
1,1,1-Trichloroethane	ug/L	<1.0	1.0	12/21/21 15:36	
1,1,2,2-Tetrachloroethane	ug/L	<1.0	1.0	12/21/21 15:36	
1,1,2-Trichloroethane	ug/L	<1.0	1.0	12/21/21 15:36	
1,1-Dichloroethane	ug/L	<1.0	1.0	12/21/21 15:36	
1,1-Dichloroethene	ug/L	<1.0	1.0	12/21/21 15:36	
1,2,3-Trichloropropane	ug/L	<1.0	1.0	12/21/21 15:36	
1,2-Dibromo-3-chloropropane	ug/L	<1.0	1.0	12/21/21 15:36	v3
1,2-Dibromoethane (EDB)	ug/L	<1.0	1.0	12/21/21 15:36	IC
1,2-Dichlorobenzene	ug/L	<1.0	1.0	12/21/21 15:36	
1,2-Dichloroethane	ug/L	<1.0	1.0	12/21/21 15:36	
1,2-Dichloropropane	ug/L	<1.0	1.0	12/21/21 15:36	
1,4-Dichlorobenzene	ug/L	<1.0	1.0	12/21/21 15:36	
2-Butanone (MEK)	ug/L	<5.0	5.0	12/21/21 15:36	v3
2-Hexanone	ug/L	<5.0	5.0	12/21/21 15:36	v3
4-Methyl-2-pentanone (MIBK)	ug/L	<5.0	5.0	12/21/21 15:36	
Acetone	ug/L	<5.0	5.0	12/21/21 15:36	v3
Acrylonitrile	ug/L	<1.0	1.0	12/21/21 15:36	
Benzene	ug/L	<1.0	1.0	12/21/21 15:36	
Bromochloromethane	ug/L	<1.0	1.0	12/21/21 15:36	
Bromodichloromethane	ug/L	<1.0	1.0	12/21/21 15:36	IC
Bromoform	ug/L	<1.0	1.0	12/21/21 15:36	v3
Bromomethane	ug/L	<1.0	1.0	12/21/21 15:36	v3
Carbon disulfide	ug/L	<1.0	1.0	12/21/21 15:36	
Carbon tetrachloride	ug/L	<1.0	1.0	12/21/21 15:36	
Chlorobenzene	ug/L	<1.0	1.0	12/21/21 15:36	
Chloroethane	ug/L	<1.0	1.0	12/21/21 15:36	
Chloroform	ug/L	<1.0	1.0	12/21/21 15:36	
Chloromethane	ug/L	<1.0	1.0	12/21/21 15:36	
cis-1,2-Dichloroethene	ug/L	<1.0	1.0	12/21/21 15:36	
cis-1,3-Dichloropropene	ug/L	<1.0	1.0	12/21/21 15:36	
Dibromochloromethane	ug/L	<1.0	1.0	12/21/21 15:36	
Dibromomethane	ug/L	<1.0	1.0	12/21/21 15:36	
Ethylbenzene	ug/L	<1.0	1.0	12/21/21 15:36	
Iodomethane	ug/L	<4.0	4.0	12/21/21 15:36	v3
Methylene Chloride	ug/L	<1.0	1.0	12/21/21 15:36	
Styrene	ug/L	<1.0	1.0	12/21/21 15:36	
Tetrachloroethene	ug/L	<1.0	1.0	12/21/21 15:36	
Toluene	ug/L	<1.0	1.0	12/21/21 15:36	
trans-1,2-Dichloroethene	ug/L	<1.0	1.0	12/21/21 15:36	

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

METHOD BLANK: 1201905

Matrix: Water

Associated Lab Samples: 70197895003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
trans-1,3-Dichloropropene	ug/L	<1.0	1.0	12/21/21 15:36	
trans-1,4-Dichloro-2-butene	ug/L	<1.0	1.0	12/21/21 15:36	v3
Trichloroethene	ug/L	<1.0	1.0	12/21/21 15:36	
Trichlorofluoromethane	ug/L	<1.0	1.0	12/21/21 15:36	
Vinyl acetate	ug/L	<1.0	1.0	12/21/21 15:36	
Vinyl chloride	ug/L	<1.0	1.0	12/21/21 15:36	
Xylene (Total)	ug/L	<3.0	3.0	12/21/21 15:36	
1,2-Dichloroethane-d4 (S)	%	101	81-122	12/21/21 15:36	
4-Bromofluorobenzene (S)	%	97	79-118	12/21/21 15:36	
Toluene-d8 (S)	%	99	82-122	12/21/21 15:36	

LABORATORY CONTROL SAMPLE: 1201906

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	47.8	96	75-122	
1,1,1-Trichloroethane	ug/L	50	47.4	95	72-126	
1,1,2,2-Tetrachloroethane	ug/L	50	50.1	100	70-127	
1,1,2-Trichloroethane	ug/L	50	51.1	102	81-119	
1,1-Dichloroethane	ug/L	50	48.1	96	72-126	
1,1-Dichloroethene	ug/L	50	47.6	95	66-133	
1,2,3-Trichloropropane	ug/L	50	52.7	105	69-120	
1,2-Dibromo-3-chloropropane	ug/L	50	38.7	77	47-133	v3
1,2-Dibromoethane (EDB)	ug/L	50	56.3	113	81-123	IC
1,2-Dichlorobenzene	ug/L	50	49.6	99	80-117	
1,2-Dichloroethane	ug/L	50	52.9	106	69-134	
1,2-Dichloropropane	ug/L	50	51.4	103	75-125	
1,4-Dichlorobenzene	ug/L	50	49.5	99	80-117	
2-Butanone (MEK)	ug/L	50	34.8	70	33-165	v3
2-Hexanone	ug/L	50	36.3	73	50-128	v3
4-Methyl-2-pentanone (MIBK)	ug/L	50	48.2	96	62-131	
Acetone	ug/L	50	27.9	56	14-156	v3
Acrylonitrile	ug/L	50	45.3	91	60-136	
Benzene	ug/L	50	52.4	105	78-117	
Bromochloromethane	ug/L	50	51.5	103	77-122	
Bromodichloromethane	ug/L	50	49.4	99	80-123	IC
Bromoform	ug/L	50	35.1	70	49-138	v3
Bromomethane	ug/L	50	19.2	38	10-143	v3
Carbon disulfide	ug/L	50	44.5	89	66-133	
Carbon tetrachloride	ug/L	50	44.2	88	64-135	
Chlorobenzene	ug/L	50	51.7	103	79-117	
Chloroethane	ug/L	50	46.3	93	31-156	
Chloroform	ug/L	50	50.7	101	79-123	
Chloromethane	ug/L	50	39.5	79	39-116	
cis-1,2-Dichloroethene	ug/L	50	49.5	99	77-125	

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

LABORATORY CONTROL SAMPLE: 1201906

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,3-Dichloropropene	ug/L	50	46.9	94	78-131	
Dibromochloromethane	ug/L	50	41.4	83	65-123	
Dibromomethane	ug/L	50	53.7	107	81-123	
Ethylbenzene	ug/L	50	50.0	100	79-115	
Iodomethane	ug/L	50	20.4	41	10-183 v3	
Methylene Chloride	ug/L	50	49.0	98	67-123	
Styrene	ug/L	50	53.2	106	82-121	
Tetrachloroethene	ug/L	50	46.9	94	65-120	
Toluene	ug/L	50	50.8	102	80-114	
trans-1,2-Dichloroethene	ug/L	50	47.3	95	74-123	
trans-1,3-Dichloropropene	ug/L	50	45.3	91	73-135	
trans-1,4-Dichloro-2-butene	ug/L	50	37.9	76	52-137 v3	
Trichloroethene	ug/L	50	49.7	99	79-115	
Trichlorofluoromethane	ug/L	50	51.9	104	51-136	
Vinyl acetate	ug/L	50	52.1	104	49-136	
Vinyl chloride	ug/L	50	46.1	92	49-118	
Xylene (Total)	ug/L	150	151	101	80-118	
1,2-Dichloroethane-d4 (S)	%			98	81-122	
4-Bromofluorobenzene (S)	%			100	79-118	
Toluene-d8 (S)	%			101	82-122	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1202152 1202153

Parameter	70197895003		MS	MSD	MS		MSD		% Rec Limits	RPD	Qual
	Units	Result	Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec			
1,1,1,2-Tetrachloroethane	ug/L	<1.0	50	50	44.0	34.1	88	68	65-122	26	R1
1,1,1-Trichloroethane	ug/L	<1.0	50	50	46.7	36.1	93	72	72-123	26	R1
1,1,2,2-Tetrachloroethane	ug/L	<1.0	50	50	55.4	43.8	111	88	64-133	23	R1
1,1,2-Trichloroethane	ug/L	<1.0	50	50	51.0	40.1	102	80	78-120	24	R1
1,1-Dichloroethane	ug/L	<1.0	50	50	49.5	38.8	99	78	70-124	24	R1
1,1-Dichloroethene	ug/L	<1.0	50	50	50.5	38.0	101	76	61-139	28	R1
1,2,3-Trichloropropane	ug/L	<1.0	50	50	59.0	47.3	118	95	64-120	22	R1
1,2-Dibromo-3-chloropropane	ug/L	<1.0	50	50	45.1	36.1	90	72	32-137	22	R1,v3
1,2-Dibromoethane (EDB)	ug/L	<1.0	50	50	57.2	44.7	114	89	78-121	25	IC,R1
1,2-Dichlorobenzene	ug/L	<1.0	50	50	48.9	37.3	98	75	75-120	27	R1
1,2-Dichloroethane	ug/L	<1.0	50	50	52.9	42.0	106	84	58-138	23	R1
1,2-Dichloropropane	ug/L	<1.0	50	50	51.3	40.7	103	81	74-122	23	R1
1,4-Dichlorobenzene	ug/L	<1.0	50	50	49.4	37.7	99	75	76-118	27	M1,R1
2-Butanone (MEK)	ug/L	2.1J	50	50	43.7	35.7	83	67	33-148	20	v3
2-Hexanone	ug/L	<5.0	50	50	49.7	39.9	99	80	49-124	22	R1,v3
4-Methyl-2-pentanone (MIBK)	ug/L	<5.0	50	50	64.8	50.5	130	101	60-136	25	R1
Acetone	ug/L	34.1	50	50	72.9	64.7	78	61	35-112	12	v3
Acrylonitrile	ug/L	<1.0	50	50	53.6	42.7	107	85	45-132	23	R1
Benzene	ug/L	<1.0	50	50	53.0	41.4	106	83	70-130	25	R1
Bromochloromethane	ug/L	<1.0	50	50	51.3	40.4	103	81	70-122	24	R1

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

Parameter	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1202152		MS		MSD		1202153		% Rec	Limits	RPD	Qual
	Units	Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec				
Bromodichloromethane	ug/L	<1.0	50	50	45.9	37.6	92	75	74-122	20	IC	
Bromoform	ug/L	<1.0	50	50	32.0	26.2	64	52	39-139	20	v3	
Bromomethane	ug/L	<1.0	50	50	21.2	17.4	42	35	10-130	20	v3	
Carbon disulfide	ug/L	<1.0	50	50	43.5	34.2	87	68	60-129	24	R1	
Carbon tetrachloride	ug/L	<1.0	50	50	40.2	31.2	80	62	56-143	25	R1	
Chlorobenzene	ug/L	<1.0	50	50	50.8	39.0	102	78	74-122	26	R1	
Chloroethane	ug/L	<1.0	50	50	49.9	36.7	100	73	35-146	31	R1	
Chloroform	ug/L	<1.0	50	50	50.8	40.6	102	81	71-129	22	R1	
Chloromethane	ug/L	<1.0	50	50	44.3	33.6	89	67	29-112	27	R1	
cis-1,2-Dichloroethene	ug/L	<1.0	50	50	50.5	40.7	101	81	73-129	22	R1	
cis-1,3-Dichloropropene	ug/L	<1.0	50	50	44.2	35.0	88	70	67-130	23	R1	
Dibromochloromethane	ug/L	<1.0	50	50	37.0	30.1	74	60	55-126	20		
Dibromomethane	ug/L	<1.0	50	50	52.8	41.6	106	83	71-127	24	R1	
Ethylbenzene	ug/L	<1.0	50	50	50.3	37.4	101	75	70-126	29	R1	
Iodomethane	ug/L	<4.0	50	50	31.6	28.9	63	58	10-167	9	v3	
Methylene Chloride	ug/L	<1.0	50	50	50.0	39.2	100	78	69-117	24	R1	
Styrene	ug/L	<1.0	50	50	52.5	39.7	105	79	79-123	28	R1	
Tetrachloroethene	ug/L	<1.0	50	50	45.7	34.1	91	68	64-124	29	R1	
Toluene	ug/L	<1.0	50	50	52.3	40.4	105	81	76-123	26	R1	
trans-1,2-Dichloroethene	ug/L	<1.0	50	50	48.6	38.0	97	76	69-127	25	R1	
trans-1,3-Dichloropropene	ug/L	<1.0	50	50	42.0	33.9	84	68	61-130	21	R1	
trans-1,4-Dichloro-2-butene	ug/L	<1.0	50	50	30.5	22.8	61	46	18-144	29	R1,v3	
Trichloroethene	ug/L	<1.0	50	50	49.9	38.6	100	77	73-125	25	R1	
Trichlorofluoromethane	ug/L	<1.0	50	50	53.4	39.9	107	80	59-129	29	R1	
Vinyl acetate	ug/L	<1.0	50	50	47.0	37.7	94	75	34-123	22	R1	
Vinyl chloride	ug/L	<1.0	50	50	50.0	38.5	100	77	33-127	26	R1	
Xylene (Total)	ug/L	<3.0	150	150	151	114	101	76	78-123	28	MS,RS	
1,2-Dichloroethane-d4 (S)	%						100	101	81-122			
4-Bromofluorobenzene (S)	%						99	99	79-118			
Toluene-d8 (S)	%						100	101	82-122			

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

QC Batch:	237239	Analysis Method:	SM22 2120B
QC Batch Method:	SM22 2120B	Analysis Description:	2120B Color
		Laboratory:	Pace Analytical Services - Melville

Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

METHOD BLANK: 1197988 Matrix: Water
Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Apparent Color	units	<5.0	5.0	12/16/21 09:41	

LABORATORY CONTROL SAMPLE: 1197989

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Apparent Color	units	40	40.0	100	90-110	

SAMPLE DUPLICATE: 1197990

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Apparent Color	units	26.0	26.0	0	
pH	Std. Units	9.5	9.6	0	

SAMPLE DUPLICATE: 1197991

Parameter	Units	70197503012 Result	Dup Result	RPD	Qualifiers
Apparent Color	units	1360	1360	0	
pH	Std. Units	6.8	6.8	0	

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

QC Batch: 238025 Analysis Method: SM22 2320B
QC Batch Method: SM22 2320B Analysis Description: 2320B Alkalinity
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

METHOD BLANK: 1202197 Matrix: Water
Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<1.0	1.0	12/22/21 09:24	

LABORATORY CONTROL SAMPLE: 1202198

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	25	23.1	92	85-115	

MATRIX SPIKE SAMPLE: 1202200

Parameter	Units	70197895003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	155	50	178	46	75-125	M1

SAMPLE DUPLICATE: 1202199

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	155	159	2	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

QC Batch: 238236 Analysis Method: SM22 2340C
QC Batch Method: SM22 2340C Analysis Description: 2340C Hardness, Total
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

METHOD BLANK: 1203409 Matrix: Water
Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Tot Hardness asCaCO3 (SM 2340B)	mg/L	<5.0	5.0	12/23/21 17:56	

LABORATORY CONTROL SAMPLE: 1203410

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tot Hardness asCaCO3 (SM 2340B)	mg/L	100	100	100	90-110	

MATRIX SPIKE SAMPLE: 1203411

Parameter	Units	70197895003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Tot Hardness asCaCO3 (SM 2340B)	mg/L	22000	20000	42000	100	75-125	

SAMPLE DUPLICATE: 1203412

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Tot Hardness asCaCO3 (SM 2340B)	mg/L	22000	22000	0	

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

QC Batch: 237875 Analysis Method: SM22 2540C
QC Batch Method: SM22 2540C Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

METHOD BLANK: 1201616 Matrix: Water
Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<10.0	10.0	12/21/21 15:50	

LABORATORY CONTROL SAMPLE: 1201617

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	500	548	110	85-115	

MATRIX SPIKE SAMPLE: 1201619

Parameter	Units	70197893001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	115	300	431	105	75-125	

MATRIX SPIKE SAMPLE: 1201621

Parameter	Units	70197895003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	23100	6000	29100	99	75-125	

SAMPLE DUPLICATE: 1201618

Parameter	Units	70197893001 Result	Dup Result	RPD	Qualifiers
Total Dissolved Solids	mg/L	115	118	3	

SAMPLE DUPLICATE: 1201620

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Total Dissolved Solids	mg/L	23100	22300	3	

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

QC Batch: 237130	Analysis Method: SM22 3500-Cr B
QC Batch Method: SM22 3500-Cr B	Analysis Description: Chromium, Hexavalent by 3500
	Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

METHOD BLANK: 1197177 Matrix: Water
Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	0.020	12/16/21 12:42	

LABORATORY CONTROL SAMPLE: 1197178

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	0.2	0.20	100	85-115	

MATRIX SPIKE SAMPLE: 1197179

Parameter	Units	70197895003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	0.030	0.2	0.15	58	75-125	H1,M1

SAMPLE DUPLICATE: 1197180

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Chromium, Hexavalent	mg/L	0.030	0.033	8	H1

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

QC Batch: 238211 Analysis Method: EPA 410.4
QC Batch Method: EPA 410.4 Analysis Description: 410.4 COD
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

METHOD BLANK: 1203345 Matrix: Water
Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	<10.0	10.0	12/23/21 08:19	

LABORATORY CONTROL SAMPLE: 1203346

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	500	502	100	90-110	

MATRIX SPIKE SAMPLE: 1203347

Parameter	Units	70197895003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	2280	10000	10500	83	90-110	M1

MATRIX SPIKE SAMPLE: 1203349

Parameter	Units	70197947001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	26.1	1000	1010	99	90-110	

SAMPLE DUPLICATE: 1203348

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Chemical Oxygen Demand	mg/L	2280	2200	4	

SAMPLE DUPLICATE: 1203350

Parameter	Units	70197947001 Result	Dup Result	RPD	Qualifiers
Chemical Oxygen Demand	mg/L	26.1	21.9	17	

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

QC Batch:	237141	Analysis Method:	SM22 5210B
QC Batch Method:	SM22 5210B	Analysis Description:	5210B BOD, 5 day
		Laboratory:	Pace Analytical Services - Melville

Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

METHOD BLANK: 1197216 Matrix: Water
Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
BOD, 5 day	mg/L	<2.0	2.0	12/20/21 10:04	

LABORATORY CONTROL SAMPLE: 1197217

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
BOD, 5 day	mg/L	198	206	104	84.5-115.4	

SAMPLE DUPLICATE: 1197218

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
BOD, 5 day	mg/L	21.5	21.9	2	R6

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

QC Batch:	237769	Analysis Method:	EPA 9034
QC Batch Method:	EPA 9030B	Analysis Description:	9034 Sulfide Waste Water
		Laboratory:	Pace Analytical Services - Melville

Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

METHOD BLANK: 1200858 Matrix: Water

Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide	mg/L	<2.0	2.0	12/21/21 15:07	

LABORATORY CONTROL SAMPLE: 1200859

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	56.1	48.0	86	80-120	

SAMPLE DUPLICATE: 1201615

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Sulfide	mg/L	3.2	3.2	0	

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

QC Batch: 238190 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

METHOD BLANK: 1203074 Matrix: Water
Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromide	mg/L	<0.50	0.50	12/23/21 03:28	
Chloride	mg/L	0.18J	2.0	12/23/21 03:28	
Sulfate	mg/L	0.15J	5.0	12/23/21 03:28	

LABORATORY CONTROL SAMPLE: 1203075

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	1	1.1	109	90-110	
Chloride	mg/L	10	10.8	108	90-110	
Sulfate	mg/L	10	10.7	107	90-110	

MATRIX SPIKE SAMPLE: 1203076

Parameter	Units	70197990003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	<0.50	1	1.1	99	90-110	
Chloride	mg/L	13.6	10	23.1	95	90-110	
Sulfate	mg/L	33.1	10	42.6	95	90-110	

MATRIX SPIKE SAMPLE: 1203078

Parameter	Units	70197895003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	580	100	668	88	90-110	M1
Chloride	mg/L	40700	10000	46900	62	90-110	M1
Sulfate	mg/L	22.8J	100	109	87	90-110	M1

SAMPLE DUPLICATE: 1203077

Parameter	Units	70197990003 Result	Dup Result	RPD	Qualifiers
Bromide	mg/L	<0.50	0.17J		
Chloride	mg/L	13.6	13.7	0	
Sulfate	mg/L	33.1	33.4	1	

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

SAMPLE DUPLICATE: 1203079

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Bromide	mg/L	580	579	0	
Chloride	mg/L	40700	37800	7	
Sulfate	mg/L	22.8J	25.1J		

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

QC Batch: 237663 Analysis Method: EPA 351.2
QC Batch Method: EPA 351.2 Analysis Description: 351.2 TKN
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

METHOD BLANK: 1200558 Matrix: Water
Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	<0.10	0.10	12/21/21 16:53	

LABORATORY CONTROL SAMPLE: 1200559

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	4	4.3	107	90-110	

MATRIX SPIKE SAMPLE: 1200560

Parameter	Units	70197895003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	90.6	20	134	218	90-110	M1

MATRIX SPIKE SAMPLE: 1200562

Parameter	Units	70198006009 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	8.2	4	16.1	198	90-110	M1

SAMPLE DUPLICATE: 1200561

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	90.6	98.3	8	

SAMPLE DUPLICATE: 1200563

Parameter	Units	70198006009 Result	Dup Result	RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	8.2	10.7	26	D6

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

QC Batch: 237204 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrite, Unpres.
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70197895001, 70197895002, 70197895003

METHOD BLANK: 1197773 Matrix: Water
Associated Lab Samples: 70197895001, 70197895002, 70197895003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrite as N	mg/L	<0.050	0.050	12/15/21 22:32	

LABORATORY CONTROL SAMPLE: 1197774

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	1	1.0	102	90-110	

MATRIX SPIKE SAMPLE: 1197775

Parameter	Units	70197503016 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.085	0.5	0.59	101	90-110	

MATRIX SPIKE SAMPLE: 1197794

Parameter	Units	70197895003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	0.5	0.30	60	90-110	M1

SAMPLE DUPLICATE: 1197776

Parameter	Units	70197503016 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	0.085	0.077	9	

SAMPLE DUPLICATE: 1197795

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

QC Batch: 237205

Analysis Method: EPA 353.2

QC Batch Method: EPA 353.2

Analysis Description: 353.2 Nitrite, Unpres.

Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197895004

METHOD BLANK: 1197782

Matrix: Water

Associated Lab Samples: 70197895004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrite as N	mg/L	<0.050	0.050	12/15/21 23:08	

LABORATORY CONTROL SAMPLE: 1197783

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	1	1.1	105	90-110	

MATRIX SPIKE SAMPLE: 1197784

Parameter	Units	70197850001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	0.5	0.54	109	90-110	

MATRIX SPIKE SAMPLE: 1197786

Parameter	Units	70197503012 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.042J	0.5	0.33	57	90-110	M1

SAMPLE DUPLICATE: 1197785

Parameter	Units	70197850001 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		

SAMPLE DUPLICATE: 1197787

Parameter	Units	70197503012 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	0.042J	0.042J		

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

QC Batch: 237216 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate, Unpres.
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

METHOD BLANK: 1197838 Matrix: Water
Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate-Nitrite (as N)	mg/L	<0.050	0.050	12/16/21 01:39	

LABORATORY CONTROL SAMPLE: 1197839

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	1	1.0	101	90-110	

MATRIX SPIKE SAMPLE: 1197840

Parameter	Units	70197977009 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	<0.050	0.5	0.050J	10	90-110	M1

MATRIX SPIKE SAMPLE: 1197842

Parameter	Units	70197895003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	<0.050	0.5	0.47	94	90-110	

SAMPLE DUPLICATE: 1197841

Parameter	Units	70197977009 Result	Dup Result	RPD	Qualifiers
Nitrate-Nitrite (as N)	mg/L	<0.050	<0.050		

SAMPLE DUPLICATE: 1197843

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Nitrate-Nitrite (as N)	mg/L	<0.050	<0.050		

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

QC Batch: 240042	Analysis Method: EPA 420.1
QC Batch Method: EPA 420.1	Analysis Description: 420.1 Phenolics Macro
	Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

METHOD BLANK: 1212859 Matrix: Water
Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phenolics, Total Recoverable	ug/L	<5.0	5.0	01/11/22 14:32	

LABORATORY CONTROL SAMPLE: 1212860

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	ug/L	100	94.9	95	90-110	

MATRIX SPIKE SAMPLE: 1212863

Parameter	Units	70197895003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	ug/L	56.3	50	127	141	75-125	M1

MATRIX SPIKE SAMPLE: 1212865

Parameter	Units	70197503012 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	ug/L	949	50	1000	102	75-125	

SAMPLE DUPLICATE: 1212864

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Phenolics, Total Recoverable	ug/L	56.3	56.7	1	

SAMPLE DUPLICATE: 1212866

Parameter	Units	70197503012 Result	Dup Result	RPD	Qualifiers
Phenolics, Total Recoverable	ug/L	949	913	4	

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

QC Batch: 238083 Analysis Method: SM22 4500 NH3 H
QC Batch Method: SM22 4500 NH3 H Analysis Description: 4500 Ammonia
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

METHOD BLANK: 1202441 Matrix: Water
Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	<0.10	0.10	12/22/21 12:57	

LABORATORY CONTROL SAMPLE: 1202442

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1	1.0	102	90-110	

MATRIX SPIKE SAMPLE: 1202443

Parameter	Units	70197895003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	95.0	100	197	102	75-125	

SAMPLE DUPLICATE: 1202444

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Nitrogen, Ammonia	mg/L	95.0	91.9	3	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

QC Batch: 237385	Analysis Method: EPA 9014 Total Cyanide
QC Batch Method: EPA 9010C	Analysis Description: 9014 Cyanide, Total
	Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

METHOD BLANK: 1198627 Matrix: Water
Associated Lab Samples: 70197895001, 70197895002, 70197895003, 70197895004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	ug/L	<10.0	10.0	12/16/21 21:03	

LABORATORY CONTROL SAMPLE: 1198628

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	75	75.7	101	85-115	

MATRIX SPIKE SAMPLE: 1198629

Parameter	Units	70197895003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	10.6	100	77.2	67	75-125	M1

SAMPLE DUPLICATE: 1198630

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Cyanide	ug/L	10.6	11.7	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

QC Batch: 237859 Analysis Method: EPA 9060A
QC Batch Method: EPA 9060A Analysis Description: 9060 TOC
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70197895001, 70197895002, 70197895003

METHOD BLANK: 1201577 Matrix: Water
Associated Lab Samples: 70197895001, 70197895002, 70197895003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mean Total Organic Carbon	mg/L	<1.0	1.0	12/21/21 19:19	
Total Organic Carbon	mg/L	<1.0	1.0	12/21/21 19:19	
Total Organic Carbon	mg/L	<1.0	1.0	12/21/21 19:19	
Total Organic Carbon	mg/L	<1.0	1.0	12/21/21 19:19	
Total Organic Carbon	mg/L	<1.0	1.0	12/21/21 19:19	

LABORATORY CONTROL SAMPLE: 1201578

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mean Total Organic Carbon	mg/L	10	9.3	93	85-115	
Total Organic Carbon	mg/L	10	9.3	93	85-115	
Total Organic Carbon	mg/L	10	9.4	94	85-115	
Total Organic Carbon	mg/L	10	9.4	94	85-115	
Total Organic Carbon	mg/L	10	9.2	92	85-115	

MATRIX SPIKE SAMPLE: 1201580

Parameter	Units	70197895003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mean Total Organic Carbon	mg/L	69.4	100	160	90	75-125	
Total Organic Carbon	mg/L	69.5	100	159	90	75-125	
Total Organic Carbon	mg/L	69.0	100	159	90	75-125	
Total Organic Carbon	mg/L	69.5	100	161	91	75-125	
Total Organic Carbon	mg/L	69.8	100	160	91	75-125	

SAMPLE DUPLICATE: 1201579

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Mean Total Organic Carbon	mg/L	69.4	68.9	1	
Total Organic Carbon	mg/L	69.5	69.2	0	
Total Organic Carbon	mg/L	69.0	68.9	0	
Total Organic Carbon	mg/L	69.5	68.7	1	
Total Organic Carbon	mg/L	69.8	68.8	1	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

QC Batch: 238197 Analysis Method: EPA 9060A
QC Batch Method: EPA 9060A Analysis Description: 9060 TOC
Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197895004

METHOD BLANK: 1203214 Matrix: Water
Associated Lab Samples: 70197895004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mean Total Organic Carbon	mg/L	<1.0	1.0	12/23/21 18:26	
Total Organic Carbon	mg/L	<1.0	1.0	12/23/21 18:26	
Total Organic Carbon	mg/L	<1.0	1.0	12/23/21 18:26	
Total Organic Carbon	mg/L	<1.0	1.0	12/23/21 18:26	
Total Organic Carbon	mg/L	<1.0	1.0	12/23/21 18:26	

LABORATORY CONTROL SAMPLE: 1203215

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mean Total Organic Carbon	mg/L	10	9.2	92	85-115	
Total Organic Carbon	mg/L	10	9.2	92	85-115	
Total Organic Carbon	mg/L	10	9.2	92	85-115	
Total Organic Carbon	mg/L	10	9.2	92	85-115	
Total Organic Carbon	mg/L	10	9.2	92	85-115	

MATRIX SPIKE SAMPLE: 1203217

Parameter	Units	70197503012 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mean Total Organic Carbon	mg/L	1350	200	1520	82	75-125	
Total Organic Carbon	mg/L	1350	200	1530	93	75-125	
Total Organic Carbon	mg/L	1340	200	1510	87	75-125	
Total Organic Carbon	mg/L	1370	200	1520	74	75-125 M1	
Total Organic Carbon	mg/L	1360	200	1520	81	75-125	

SAMPLE DUPLICATE: 1203216

Parameter	Units	70197503012 Result	Dup Result	RPD	Qualifiers
Mean Total Organic Carbon	mg/L	1350	1340	1	
Total Organic Carbon	mg/L	1370	1330	3	
Total Organic Carbon	mg/L	1350	1350	0	
Total Organic Carbon	mg/L	1360	1340	1	
Total Organic Carbon	mg/L	1340	1340	0	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

H1 Analysis conducted outside the EPA method holding time.

IC The initial calibration for this compound was outside of method control limits. The result is estimated.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

MS Analyte recovery in the matrix spike was outside QC limits for one or more of the constituent analytes used in the calculated result.

N The reported TIC has an 85% or higher match on a mass spectral library search.

R1 RPD value was outside control limits.

R6 The RPD between valid sample dilutions exceeded 30%.

RS The RPD value in one of the constituent analytes was outside the control limits.

v3 The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have a low bias.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: LEACHATES BASELINE 360 12/14

Pace Project No.: 70197895

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70197895001	NNU PLCRS	EPA 3005A	238104	EPA 6010C	238860
70197895002	NNU SLCRS	EPA 3005A	238104	EPA 6010C	238860
70197895003	ONU SLCRS	EPA 3005A	238104	EPA 6010C	238860
70197895004	SA SLCRS	EPA 3005A	238104	EPA 6010C	238860
70197895001	NNU PLCRS	EPA 7470A	238119	EPA 7470A	238253
70197895002	NNU SLCRS	EPA 7470A	238119	EPA 7470A	238253
70197895003	ONU SLCRS	EPA 7470A	238119	EPA 7470A	238253
70197895004	SA SLCRS	EPA 7470A	238119	EPA 7470A	238253
70197895001	NNU PLCRS	EPA 8260C SIM/5030C	237659		
70197895002	NNU SLCRS	EPA 8260C SIM/5030C	237659		
70197895003	ONU SLCRS	EPA 8260C SIM/5030C	237659		
70197895004	SA SLCRS	EPA 8260C SIM/5030C	237659		
70197895001	NNU PLCRS	EPA 8260C/5030C	237770		
70197895002	NNU SLCRS	EPA 8260C/5030C	237770		
70197895003	ONU SLCRS	EPA 8260C/5030C	237976		
70197895004	SA SLCRS	EPA 8260C/5030C	237770		
70197895005	TRIP BLANK	EPA 8260C/5030C	237770		
70197895001	NNU PLCRS	SM22 2120B	237239		
70197895002	NNU SLCRS	SM22 2120B	237239		
70197895003	ONU SLCRS	SM22 2120B	237239		
70197895004	SA SLCRS	SM22 2120B	237239		
70197895001	NNU PLCRS	SM22 2320B	238025		
70197895002	NNU SLCRS	SM22 2320B	238025		
70197895003	ONU SLCRS	SM22 2320B	238025		
70197895004	SA SLCRS	SM22 2320B	238025		
70197895001	NNU PLCRS	SM22 2340C	238236		
70197895002	NNU SLCRS	SM22 2340C	238236		
70197895003	ONU SLCRS	SM22 2340C	238236		
70197895004	SA SLCRS	SM22 2340C	238236		
70197895001	NNU PLCRS	SM22 2540C	237875		
70197895002	NNU SLCRS	SM22 2540C	237875		
70197895003	ONU SLCRS	SM22 2540C	237875		
70197895004	SA SLCRS	SM22 2540C	237875		
70197895001	NNU PLCRS	SM22 3500-Cr B	237130		
70197895002	NNU SLCRS	SM22 3500-Cr B	237130		
70197895003	ONU SLCRS	SM22 3500-Cr B	237130		
70197895004	SA SLCRS	SM22 3500-Cr B	237130		
70197895001	NNU PLCRS	EPA 410.4	238211	EPA 410.4	238222
70197895002	NNU SLCRS	EPA 410.4	238211	EPA 410.4	238222
70197895003	ONU SLCRS	EPA 410.4	238211	EPA 410.4	238222
70197895004	SA SLCRS	EPA 410.4	238211	EPA 410.4	238222
70197895001	NNU PLCRS	SM22 5210B	237141	SM22 5210B	238114
70197895002	NNU SLCRS	SM22 5210B	237141	SM22 5210B	238114

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: LEACHATES BASELINE 360 12/14
Pace Project No.: 70197895

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70197895003	ONU SLCRS	SM22 5210B	237141	SM22 5210B	238114
70197895004	SA SLCRS	SM22 5210B	237141	SM22 5210B	238114
70197895001	NNU PLCRS	EPA 9030B	237769	EPA 9034	237971
70197895002	NNU SLCRS	EPA 9030B	237769	EPA 9034	237971
70197895003	ONU SLCRS	EPA 9030B	237769	EPA 9034	237971
70197895004	SA SLCRS	EPA 9030B	237769	EPA 9034	237971
70197895001	NNU PLCRS	EPA 300.0	238190		
70197895002	NNU SLCRS	EPA 300.0	238190		
70197895003	ONU SLCRS	EPA 300.0	238190		
70197895004	SA SLCRS	EPA 300.0	238190		
70197895001	NNU PLCRS	EPA 351.2	237663	EPA 351.2	237666
70197895002	NNU SLCRS	EPA 351.2	237663	EPA 351.2	237666
70197895003	ONU SLCRS	EPA 351.2	237663	EPA 351.2	237666
70197895004	SA SLCRS	EPA 351.2	237663	EPA 351.2	237666
70197895001	NNU PLCRS	EPA 353.2	237216		
70197895002	NNU SLCRS	EPA 353.2	237216		
70197895003	ONU SLCRS	EPA 353.2	237216		
70197895004	SA SLCRS	EPA 353.2	237216		
70197895001	NNU PLCRS	EPA 353.2	237204		
70197895002	NNU SLCRS	EPA 353.2	237204		
70197895003	ONU SLCRS	EPA 353.2	237204		
70197895004	SA SLCRS	EPA 353.2	237205		
70197895001	NNU PLCRS	EPA 420.1	240042	EPA 420.1	240043
70197895002	NNU SLCRS	EPA 420.1	240042	EPA 420.1	240043
70197895003	ONU SLCRS	EPA 420.1	240042	EPA 420.1	240043
70197895004	SA SLCRS	EPA 420.1	240042	EPA 420.1	240043
70197895001	NNU PLCRS	SM22 4500 NH3 H	238083		
70197895002	NNU SLCRS	SM22 4500 NH3 H	238083		
70197895003	ONU SLCRS	SM22 4500 NH3 H	238083		
70197895004	SA SLCRS	SM22 4500 NH3 H	238083		
70197895001	NNU PLCRS	EPA 9010C	237385	EPA 9014 Total Cyanide	237421
70197895002	NNU SLCRS	EPA 9010C	237385	EPA 9014 Total Cyanide	237421
70197895003	ONU SLCRS	EPA 9010C	237385	EPA 9014 Total Cyanide	237421
70197895004	SA SLCRS	EPA 9010C	237385	EPA 9014 Total Cyanide	237421
70197895001	NNU PLCRS	EPA 9060A	237859		
70197895002	NNU SLCRS	EPA 9060A	237859		
70197895003	ONU SLCRS	EPA 9060A	237859		
70197895004	SA SLCRS	EPA 9060A	238197		

REPORT OF LABORATORY ANALYSIS

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Sample Condition Upon Receipt

WO#: 70197895

Client Name: Town of Babylon

Project

PM: KMM

Due Date: 12/23/21

CLIENT: BAB-ECO

Courier: Fed Ex UPS USPS Client Commercial Pace Other

Tracking #:

Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes No N/A

Packing Material: Bubble Wrap Bubble Bags Ziploc None Other

Thermometer Used: TH091

Correction Factor: 0.00

Temperature Blank Present: Yes No

Type of Ice: Wet Blue None

Cooler Temperature(°C): 2.8

Cooler Temperature Corrected(°C): 2.8

Samples on ice, cooling process has begun

Date/Time 5035A kits placed in freezer

Temp should be above freezing to 6.0°C

USDA Regulated Soil (N/A, water sample)

Date and Initials of person examining contents: MN 12/14/21

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? Yes No

Did samples originate from a foreign source including Hawaii and Puerto Rico)? Yes No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

		COMMENTS:
Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume: (Triple volume provided for)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	12.
-Includes date/time/ID, Matrix: <u>SL WT OIL</u>		
All containers needing preservation have been checked?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13. <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> HCl
pH paper Lot # <u>FLC160347</u>		Sample #
All containers needing preservation are found to be in compliance with method recommendation? (HNO ₃ , H ₂ SO ₄ , HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water).		Initial when completed: Lot # of added preservative: Date/Time preservative added:
Per Method, VOA pH is checked after analysis		
Samples checked for dechlorination: KI starch test strips Lot # <u>14-860</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14. Positive for Res. Chlorine? Y N
Residual chlorine strips Lot #		
SM 4500 CN samples checked for sulfide? Lead Acetate Strips Lot # <u>960125</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15. Positive for Sulfide? Y N
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	17.
Trip Blank Custody Seals Present	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if applicable):		

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted:

Date/Time:

Comments/ Resolution:

ANALYTICAL REPORT

Eurofins Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-83182-1

Client Project/Site: LEACHATES BASELINE 360 12/14

For:

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, New York 11747

Attn: Kimberley Mack



*Authorized for release by:
1/5/2022 5:52:31 PM*

Jill Kellmann, Client Service Manager
(916)374-4402

Jill.Kellmann@Eurofinset.com

Designee for

Cesar Cortes, Project Manager I
(916)374-4316

Cesar.Cortes@Eurofinset.com

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

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



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Definitions/Glossary

Client: Pace Analytical Services, LLC
Project/Site: LEACHATES BASELINE 360 12/14

Job ID: 320-83182-1

Qualifiers

LCMS

Qualifier	Qualifier Description
*5-	Isotope dilution analyte is outside acceptance limits, low biased.
CI	The peak identified by the data system exhibited chromatographic interference that could not be resolved. There is reason to suspect there may be a high bias.
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Case Narrative

Client: Pace Analytical Services, LLC
Project/Site: LEACHATES BASELINE 360 12/14

Job ID: 320-83182-1

Job ID: 320-83182-1

Laboratory: Eurofins Sacramento

Narrative

Receipt

The samples were received on 12/18/2021 10:10 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.5° C.

Receipt Exceptions

Client label has two IDs listed for sample #3 and sample #4. Able to identify sample #4 since sample #3 was accounted for with correct ID and Date/Time. SA SLCRS (320-83182-4)

LCMS

Method 537 (modified): The "I" qualifier means the transition mass ratio for the indicated analyte was above the established ratio limits. The qualitative identification of the analyte has some degree of uncertainty, and the reported value may have some high bias. However, analyst judgment was used to positively identify the analyte.

Method 537 (modified): The Isotope Dilution Analyte (IDA) recovery associated with the following sample is below the method recommended limit: ONU SLCRS (320-83182-3). Generally, data quality is not considered affected if the IDA signal-to-noise ratio is greater than 10:1, which is achieved for all IDA in the sample.

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

Organic Prep

Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-554285.

Method 3535: The following samples contained floating particulates in the sample bottle prior to extraction: NNU PLCRS (320-83182-1), NNU SLCRS (320-83182-2) and ONU SLCRS (320-83182-3).

Method 3535: During the solid phase extraction process, the following samples contain non-settleable particulates which clogged the solid phase extraction column: NNU SLCRS (320-83182-2).

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

Detection Summary

Client: Pace Analytical Services, LLC
 Project/Site: LEACHATES BASELINE 360 12/14

Job ID: 320-83182-1

Client Sample ID: NNU PLCRS

Lab Sample ID: 320-83182-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	260		4.6	2.2	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	120		1.8	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	150		1.8	0.53	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	25		1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	36		1.8	0.77	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	2.1		1.8	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.42	J	1.8	0.28	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	200		1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	13		1.8	0.52	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	8.0		1.8	0.49	ng/L	1		537 (modified)	Total/NA
6:2 FTS	5.2		4.6	2.3	ng/L	1		537 (modified)	Total/NA

Client Sample ID: NNU SLCRS

Lab Sample ID: 320-83182-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	280		4.6	2.2	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	130		1.8	0.45	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	150		1.8	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	25		1.8	0.23	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	32		1.8	0.78	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.7	J	1.8	0.25	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.47	J	1.8	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	200		1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	12		1.8	0.53	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	7.0		1.8	0.50	ng/L	1		537 (modified)	Total/NA
6:2 FTS	4.6		4.6	2.3	ng/L	1		537 (modified)	Total/NA

Client Sample ID: ONU SLCRS

Lab Sample ID: 320-83182-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	270		4.7	2.3	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	120		1.9	0.46	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	170		1.9	0.55	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	36		1.9	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	51		1.9	0.80	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	2.6		1.9	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.66	J	1.9	0.29	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	150		1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	34		1.9	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	0.31	J	1.9	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	9.0		1.9	0.51	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonamide (FOSA)	1.3	J	1.9	0.93	ng/L	1		537 (modified)	Total/NA
6:2 FTS	5.0		4.7	2.4	ng/L	1		537 (modified)	Total/NA
8:2 FTS	0.63	J	1.9	0.43	ng/L	1		537 (modified)	Total/NA

Client Sample ID: SA SLCRS

Lab Sample ID: 320-83182-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanoic acid	72		4.8	2.3	ng/L	1		537 (modified)	Total/NA
Perfluoropentanoic acid (PFPeA)	66		1.9	0.47	ng/L	1		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA)	86		1.9	0.55	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	33		1.9	0.24	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Sacramento

Detection Summary

Client: Pace Analytical Services, LLC
Project/Site: LEACHATES BASELINE 360 12/14

Job ID: 320-83182-1

Client Sample ID: SA SLCRS (Continued)

Lab Sample ID: 320-83182-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid (PFOA)	100		1.9	0.81	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	7.5		1.9	0.26	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	12		1.9	0.30	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	29		1.9	0.19	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	22		1.9	0.54	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanesulfonic Acid (PFHpS)	1.1	J I Cl	1.9	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	42		1.9	0.51	ng/L	1		537 (modified)	Total/NA
8:2 FTS	0.46	J	1.9	0.44	ng/L	1		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Sacramento

Client Sample Results

Client: Pace Analytical Services, LLC
 Project/Site: LEACHATES BASELINE 360 12/14

Job ID: 320-83182-1

Client Sample ID: NNU PLCRS

Lab Sample ID: 320-83182-1

Date Collected: 12/14/21 10:48

Matrix: Water

Date Received: 12/18/21 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	260		4.6	2.2	ng/L		12/28/21 05:26	12/31/21 12:27	1
Perfluoropentanoic acid (PFPeA)	120		1.8	0.45	ng/L		12/28/21 05:26	12/31/21 12:27	1
Perfluorohexanoic acid (PFHxA)	150		1.8	0.53	ng/L		12/28/21 05:26	12/31/21 12:27	1
Perfluoroheptanoic acid	25		1.8	0.23	ng/L		12/28/21 05:26	12/31/21 12:27	1
Perfluorooctanoic acid (PFOA)	36		1.8	0.77	ng/L		12/28/21 05:26	12/31/21 12:27	1
Perfluorononanoic acid (PFNA)	2.1		1.8	0.25	ng/L		12/28/21 05:26	12/31/21 12:27	1
Perfluorodecanoic acid (PFDA)	0.42	J	1.8	0.28	ng/L		12/28/21 05:26	12/31/21 12:27	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.0	ng/L		12/28/21 05:26	12/31/21 12:27	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.50	ng/L		12/28/21 05:26	12/31/21 12:27	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.2	ng/L		12/28/21 05:26	12/31/21 12:27	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.67	ng/L		12/28/21 05:26	12/31/21 12:27	1
Perfluorobutanesulfonic acid (PFBS)	200		1.8	0.18	ng/L		12/28/21 05:26	12/31/21 12:27	1
Perfluorohexanesulfonic acid (PFHxS)	13		1.8	0.52	ng/L		12/28/21 05:26	12/31/21 12:27	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		12/28/21 05:26	12/31/21 12:27	1
Perfluorooctanesulfonic acid (PFOS)	8.0		1.8	0.49	ng/L		12/28/21 05:26	12/31/21 12:27	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.29	ng/L		12/28/21 05:26	12/31/21 12:27	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.89	ng/L		12/28/21 05:26	12/31/21 12:27	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.6	1.1	ng/L		12/28/21 05:26	12/31/21 12:27	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.6	1.2	ng/L		12/28/21 05:26	12/31/21 12:27	1
6:2 FTS	5.2		4.6	2.3	ng/L		12/28/21 05:26	12/31/21 12:27	1
8:2 FTS	ND		1.8	0.42	ng/L		12/28/21 05:26	12/31/21 12:27	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	64		25 - 150	12/28/21 05:26	12/31/21 12:27	1
13C5 PFPeA	103		25 - 150	12/28/21 05:26	12/31/21 12:27	1
13C2 PFHxA	102		25 - 150	12/28/21 05:26	12/31/21 12:27	1
13C4 PFHpA	109		25 - 150	12/28/21 05:26	12/31/21 12:27	1
13C4 PFOA	112		25 - 150	12/28/21 05:26	12/31/21 12:27	1
13C5 PFNA	115		25 - 150	12/28/21 05:26	12/31/21 12:27	1
13C2 PFDA	102		25 - 150	12/28/21 05:26	12/31/21 12:27	1
13C2 PFUnA	92		25 - 150	12/28/21 05:26	12/31/21 12:27	1
13C2 PFDoA	79		25 - 150	12/28/21 05:26	12/31/21 12:27	1
13C2 PFTeDA	51		25 - 150	12/28/21 05:26	12/31/21 12:27	1
13C3 PFBS	128		25 - 150	12/28/21 05:26	12/31/21 12:27	1
18O2 PFHxS	110		25 - 150	12/28/21 05:26	12/31/21 12:27	1
13C4 PFOS	121		25 - 150	12/28/21 05:26	12/31/21 12:27	1
13C8 FOSA	90		25 - 150	12/28/21 05:26	12/31/21 12:27	1
d3-NMeFOSAA	63		25 - 150	12/28/21 05:26	12/31/21 12:27	1
d5-NEtFOSAA	69		25 - 150	12/28/21 05:26	12/31/21 12:27	1
M2-6:2 FTS	97		25 - 150	12/28/21 05:26	12/31/21 12:27	1
M2-8:2 FTS	101		25 - 150	12/28/21 05:26	12/31/21 12:27	1

Client Sample Results

Client: Pace Analytical Services, LLC
 Project/Site: LEACHATES BASELINE 360 12/14

Job ID: 320-83182-1

Client Sample ID: NNU SLCRS

Lab Sample ID: 320-83182-2

Date Collected: 12/14/21 10:40

Matrix: Water

Date Received: 12/18/21 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	280		4.6	2.2	ng/L		12/28/21 05:26	12/31/21 12:38	1
Perfluoropentanoic acid (PFPeA)	130		1.8	0.45	ng/L		12/28/21 05:26	12/31/21 12:38	1
Perfluorohexanoic acid (PFHxA)	150		1.8	0.54	ng/L		12/28/21 05:26	12/31/21 12:38	1
Perfluoroheptanoic acid	25		1.8	0.23	ng/L		12/28/21 05:26	12/31/21 12:38	1
Perfluorooctanoic acid (PFOA)	32		1.8	0.78	ng/L		12/28/21 05:26	12/31/21 12:38	1
Perfluorononanoic acid (PFNA)	1.7	J	1.8	0.25	ng/L		12/28/21 05:26	12/31/21 12:38	1
Perfluorodecanoic acid (PFDA)	0.47	J	1.8	0.29	ng/L		12/28/21 05:26	12/31/21 12:38	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	1.0	ng/L		12/28/21 05:26	12/31/21 12:38	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.51	ng/L		12/28/21 05:26	12/31/21 12:38	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.2	ng/L		12/28/21 05:26	12/31/21 12:38	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.67	ng/L		12/28/21 05:26	12/31/21 12:38	1
Perfluorobutanesulfonic acid (PFBS)	200		1.8	0.18	ng/L		12/28/21 05:26	12/31/21 12:38	1
Perfluorohexanesulfonic acid (PFHxS)	12		1.8	0.53	ng/L		12/28/21 05:26	12/31/21 12:38	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.18	ng/L		12/28/21 05:26	12/31/21 12:38	1
Perfluorooctanesulfonic acid (PFOS)	7.0		1.8	0.50	ng/L		12/28/21 05:26	12/31/21 12:38	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.30	ng/L		12/28/21 05:26	12/31/21 12:38	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.90	ng/L		12/28/21 05:26	12/31/21 12:38	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.6	1.1	ng/L		12/28/21 05:26	12/31/21 12:38	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.6	1.2	ng/L		12/28/21 05:26	12/31/21 12:38	1
6:2 FTS	4.6		4.6	2.3	ng/L		12/28/21 05:26	12/31/21 12:38	1
8:2 FTS	ND		1.8	0.42	ng/L		12/28/21 05:26	12/31/21 12:38	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	70		25 - 150	12/28/21 05:26	12/31/21 12:38	1
13C5 PFPeA	96		25 - 150	12/28/21 05:26	12/31/21 12:38	1
13C2 PFHxA	108		25 - 150	12/28/21 05:26	12/31/21 12:38	1
13C4 PFHpA	104		25 - 150	12/28/21 05:26	12/31/21 12:38	1
13C4 PFOA	103		25 - 150	12/28/21 05:26	12/31/21 12:38	1
13C5 PFNA	99		25 - 150	12/28/21 05:26	12/31/21 12:38	1
13C2 PFDA	88		25 - 150	12/28/21 05:26	12/31/21 12:38	1
13C2 PFUnA	78		25 - 150	12/28/21 05:26	12/31/21 12:38	1
13C2 PFDoA	66		25 - 150	12/28/21 05:26	12/31/21 12:38	1
13C2 PFTeDA	48		25 - 150	12/28/21 05:26	12/31/21 12:38	1
13C3 PFBS	120		25 - 150	12/28/21 05:26	12/31/21 12:38	1
18O2 PFHxS	106		25 - 150	12/28/21 05:26	12/31/21 12:38	1
13C4 PFOS	112		25 - 150	12/28/21 05:26	12/31/21 12:38	1
13C8 FOSA	82		25 - 150	12/28/21 05:26	12/31/21 12:38	1
d3-NMeFOSAA	59		25 - 150	12/28/21 05:26	12/31/21 12:38	1
d5-NEtFOSAA	61		25 - 150	12/28/21 05:26	12/31/21 12:38	1
M2-6:2 FTS	82		25 - 150	12/28/21 05:26	12/31/21 12:38	1
M2-8:2 FTS	92		25 - 150	12/28/21 05:26	12/31/21 12:38	1

Client Sample Results

Client: Pace Analytical Services, LLC
 Project/Site: LEACHATES BASELINE 360 12/14

Job ID: 320-83182-1

Client Sample ID: ONU SLCRS

Lab Sample ID: 320-83182-3

Date Collected: 12/14/21 11:08

Matrix: Water

Date Received: 12/18/21 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	270		4.7	2.3	ng/L		12/28/21 05:26	12/31/21 12:48	1
Perfluoropentanoic acid (PFPeA)	120		1.9	0.46	ng/L		12/28/21 05:26	12/31/21 12:48	1
Perfluorohexanoic acid (PFHxA)	170		1.9	0.55	ng/L		12/28/21 05:26	12/31/21 12:48	1
Perfluoroheptanoic acid	36		1.9	0.24	ng/L		12/28/21 05:26	12/31/21 12:48	1
Perfluorooctanoic acid (PFOA)	51		1.9	0.80	ng/L		12/28/21 05:26	12/31/21 12:48	1
Perfluorononanoic acid (PFNA)	2.6		1.9	0.26	ng/L		12/28/21 05:26	12/31/21 12:48	1
Perfluorodecanoic acid (PFDA)	0.66	J	1.9	0.29	ng/L		12/28/21 05:26	12/31/21 12:48	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.0	ng/L		12/28/21 05:26	12/31/21 12:48	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.52	ng/L		12/28/21 05:26	12/31/21 12:48	1
Perfluorotridecanoic acid (PFTriA)	ND		1.9	1.2	ng/L		12/28/21 05:26	12/31/21 12:48	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.69	ng/L		12/28/21 05:26	12/31/21 12:48	1
Perfluorobutanesulfonic acid (PFBS)	150		1.9	0.19	ng/L		12/28/21 05:26	12/31/21 12:48	1
Perfluorohexanesulfonic acid (PFHxS)	34		1.9	0.54	ng/L		12/28/21 05:26	12/31/21 12:48	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.31	J	1.9	0.18	ng/L		12/28/21 05:26	12/31/21 12:48	1
Perfluorooctanesulfonic acid (PFOS)	9.0		1.9	0.51	ng/L		12/28/21 05:26	12/31/21 12:48	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.30	ng/L		12/28/21 05:26	12/31/21 12:48	1
Perfluorooctanesulfonamide (FOSA)	1.3	J	1.9	0.93	ng/L		12/28/21 05:26	12/31/21 12:48	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.7	1.1	ng/L		12/28/21 05:26	12/31/21 12:48	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.7	1.2	ng/L		12/28/21 05:26	12/31/21 12:48	1
6:2 FTS	5.0		4.7	2.4	ng/L		12/28/21 05:26	12/31/21 12:48	1
8:2 FTS	0.63	J	1.9	0.43	ng/L		12/28/21 05:26	12/31/21 12:48	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	23	*5-	25 - 150	12/28/21 05:26	12/31/21 12:48	1
13C5 PFPeA	93		25 - 150	12/28/21 05:26	12/31/21 12:48	1
13C2 PFHxA	106		25 - 150	12/28/21 05:26	12/31/21 12:48	1
13C4 PFHpA	111		25 - 150	12/28/21 05:26	12/31/21 12:48	1
13C4 PFOA	116		25 - 150	12/28/21 05:26	12/31/21 12:48	1
13C5 PFNA	114		25 - 150	12/28/21 05:26	12/31/21 12:48	1
13C2 PFDA	101		25 - 150	12/28/21 05:26	12/31/21 12:48	1
13C2 PFUnA	99		25 - 150	12/28/21 05:26	12/31/21 12:48	1
13C2 PFDoA	89		25 - 150	12/28/21 05:26	12/31/21 12:48	1
13C2 PFTeDA	68		25 - 150	12/28/21 05:26	12/31/21 12:48	1
13C3 PFBS	121		25 - 150	12/28/21 05:26	12/31/21 12:48	1
18O2 PFHxS	108		25 - 150	12/28/21 05:26	12/31/21 12:48	1
13C4 PFOS	118		25 - 150	12/28/21 05:26	12/31/21 12:48	1
13C8 FOSA	97		25 - 150	12/28/21 05:26	12/31/21 12:48	1
d3-NMeFOSAA	77		25 - 150	12/28/21 05:26	12/31/21 12:48	1
d5-NEtFOSAA	83		25 - 150	12/28/21 05:26	12/31/21 12:48	1
M2-6:2 FTS	89		25 - 150	12/28/21 05:26	12/31/21 12:48	1
M2-8:2 FTS	112		25 - 150	12/28/21 05:26	12/31/21 12:48	1

Client Sample Results

Client: Pace Analytical Services, LLC
 Project/Site: LEACHATES BASELINE 360 12/14

Job ID: 320-83182-1

Client Sample ID: SA SLCRS

Lab Sample ID: 320-83182-4

Date Collected: 12/14/21 11:40

Matrix: Water

Date Received: 12/18/21 10:10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	72		4.8	2.3	ng/L		12/28/21 05:26	12/31/21 12:58	1
Perfluoropentanoic acid (PFPeA)	66		1.9	0.47	ng/L		12/28/21 05:26	12/31/21 12:58	1
Perfluorohexanoic acid (PFHxA)	86		1.9	0.55	ng/L		12/28/21 05:26	12/31/21 12:58	1
Perfluoroheptanoic acid	33		1.9	0.24	ng/L		12/28/21 05:26	12/31/21 12:58	1
Perfluorooctanoic acid (PFOA)	100		1.9	0.81	ng/L		12/28/21 05:26	12/31/21 12:58	1
Perfluorononanoic acid (PFNA)	7.5		1.9	0.26	ng/L		12/28/21 05:26	12/31/21 12:58	1
Perfluorodecanoic acid (PFDA)	12		1.9	0.30	ng/L		12/28/21 05:26	12/31/21 12:58	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	1.0	ng/L		12/28/21 05:26	12/31/21 12:58	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.52	ng/L		12/28/21 05:26	12/31/21 12:58	1
Perfluorotridecanoic acid (PFTriA)	ND		1.9	1.2	ng/L		12/28/21 05:26	12/31/21 12:58	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.70	ng/L		12/28/21 05:26	12/31/21 12:58	1
Perfluorobutanesulfonic acid (PFBS)	29		1.9	0.19	ng/L		12/28/21 05:26	12/31/21 12:58	1
Perfluorohexanesulfonic acid (PFHxS)	22		1.9	0.54	ng/L		12/28/21 05:26	12/31/21 12:58	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.1	J I C I	1.9	0.18	ng/L		12/28/21 05:26	12/31/21 12:58	1
Perfluorooctanesulfonic acid (PFOS)	42		1.9	0.51	ng/L		12/28/21 05:26	12/31/21 12:58	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.30	ng/L		12/28/21 05:26	12/31/21 12:58	1
Perfluorooctanesulfonamide (FOSA)	ND		1.9	0.93	ng/L		12/28/21 05:26	12/31/21 12:58	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.8	1.1	ng/L		12/28/21 05:26	12/31/21 12:58	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.8	1.2	ng/L		12/28/21 05:26	12/31/21 12:58	1
6:2 FTS	ND		4.8	2.4	ng/L		12/28/21 05:26	12/31/21 12:58	1
8:2 FTS	0.46	J	1.9	0.44	ng/L		12/28/21 05:26	12/31/21 12:58	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	79		25 - 150				12/28/21 05:26	12/31/21 12:58	1
13C5 PFPeA	97		25 - 150				12/28/21 05:26	12/31/21 12:58	1
13C2 PFHxA	102		25 - 150				12/28/21 05:26	12/31/21 12:58	1
13C4 PFHpA	111		25 - 150				12/28/21 05:26	12/31/21 12:58	1
13C4 PFOA	111		25 - 150				12/28/21 05:26	12/31/21 12:58	1
13C5 PFNA	112		25 - 150				12/28/21 05:26	12/31/21 12:58	1
13C2 PFDA	101		25 - 150				12/28/21 05:26	12/31/21 12:58	1
13C2 PFUnA	98		25 - 150				12/28/21 05:26	12/31/21 12:58	1
13C2 PFDoA	92		25 - 150				12/28/21 05:26	12/31/21 12:58	1
13C2 PFTeDA	90		25 - 150				12/28/21 05:26	12/31/21 12:58	1
13C3 PFBS	126		25 - 150				12/28/21 05:26	12/31/21 12:58	1
18O2 PFHxS	108		25 - 150				12/28/21 05:26	12/31/21 12:58	1
13C4 PFOS	119		25 - 150				12/28/21 05:26	12/31/21 12:58	1
13C8 FOSA	88		25 - 150				12/28/21 05:26	12/31/21 12:58	1
d3-NMeFOSAA	79		25 - 150				12/28/21 05:26	12/31/21 12:58	1
d5-NEtFOSAA	80		25 - 150				12/28/21 05:26	12/31/21 12:58	1
M2-6:2 FTS	104		25 - 150				12/28/21 05:26	12/31/21 12:58	1
M2-8:2 FTS	103		25 - 150				12/28/21 05:26	12/31/21 12:58	1

Isotope Dilution Summary

Client: Pace Analytical Services, LLC
 Project/Site: LEACHATES BASELINE 360 12/14

Job ID: 320-83182-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	C4PFHA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
320-83182-1	NNU PLCRS	64	103	102	109	112	115	102	92
320-83182-2	NNU SLCRS	70	96	108	104	103	99	88	78
320-83182-3	ONU SLCRS	23 *5-	93	106	111	116	114	101	99
320-83182-4	SA SLCRS	79	97	102	111	111	112	101	98
LCS 320-554285/2-A	Lab Control Sample	104	102	108	113	114	116	106	107
LCSD 320-554285/3-A	Lab Control Sample Dup	100	95	104	109	111	101	92	90
MB 320-554285/1-A	Method Blank	100	95	99	106	106	110	108	103

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFDaA (25-150)	PFTDA (25-150)	C3PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (25-150)	d3NMFOS (25-150)	d5NEFOS (25-150)
320-83182-1	NNU PLCRS	79	51	128	110	121	90	63	69
320-83182-2	NNU SLCRS	66	48	120	106	112	82	59	61
320-83182-3	ONU SLCRS	89	68	121	108	118	97	77	83
320-83182-4	SA SLCRS	92	90	126	108	119	88	79	80
LCS 320-554285/2-A	Lab Control Sample	109	97	113	104	116	97	115	115
LCSD 320-554285/3-A	Lab Control Sample Dup	86	88	113	99	103	88	88	96
MB 320-554285/1-A	Method Blank	97	94	104	97	103	87	103	104

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	M262FTS (25-150)	M282FTS (25-150)
320-83182-1	NNU PLCRS	97	101
320-83182-2	NNU SLCRS	82	92
320-83182-3	ONU SLCRS	89	112
320-83182-4	SA SLCRS	104	103
LCS 320-554285/2-A	Lab Control Sample	143	147
LCSD 320-554285/3-A	Lab Control Sample Dup	134	108
MB 320-554285/1-A	Method Blank	129	138

Surrogate Legend

- PFBA = 13C4 PFBA
- PFPeA = 13C5 PFPeA
- PFHxA = 13C2 PFHxA
- C4PFHA = 13C4 PFHpA
- PFOA = 13C4 PFOA
- PFNA = 13C5 PFNA
- PFDA = 13C2 PFDA
- PFUnA = 13C2 PFUnA
- PFDaA = 13C2 PFDaA
- PFTDA = 13C2 PFTeDA
- C3PFBS = 13C3 PFBS
- PFHxS = 18O2 PFHxS
- PFOS = 13C4 PFOS
- PFOSA = 13C8 FOSA
- d3NMFOS = d3-NMeFOSAA
- d5NEFOS = d5-NEtFOSAA
- M262FTS = M2-6:2 FTS
- M282FTS = M2-8:2 FTS

QC Sample Results

Client: Pace Analytical Services, LLC
 Project/Site: LEACHATES BASELINE 360 12/14

Job ID: 320-83182-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-554285/1-A
Matrix: Water
Analysis Batch: 555103

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 554285

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluorobutanoic acid	ND		5.0	2.4	ng/L		12/28/21 05:26	12/31/21 11:57	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49	ng/L		12/28/21 05:26	12/31/21 11:57	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58	ng/L		12/28/21 05:26	12/31/21 11:57	1
Perfluoroheptanoic acid	ND		2.0	0.25	ng/L		12/28/21 05:26	12/31/21 11:57	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.85	ng/L		12/28/21 05:26	12/31/21 11:57	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		12/28/21 05:26	12/31/21 11:57	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.31	ng/L		12/28/21 05:26	12/31/21 11:57	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		12/28/21 05:26	12/31/21 11:57	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		12/28/21 05:26	12/31/21 11:57	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	1.3	ng/L		12/28/21 05:26	12/31/21 11:57	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.73	ng/L		12/28/21 05:26	12/31/21 11:57	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		12/28/21 05:26	12/31/21 11:57	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.57	ng/L		12/28/21 05:26	12/31/21 11:57	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19	ng/L		12/28/21 05:26	12/31/21 11:57	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54	ng/L		12/28/21 05:26	12/31/21 11:57	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		12/28/21 05:26	12/31/21 11:57	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.98	ng/L		12/28/21 05:26	12/31/21 11:57	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.0	1.2	ng/L		12/28/21 05:26	12/31/21 11:57	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.0	1.3	ng/L		12/28/21 05:26	12/31/21 11:57	1
6:2 FTS	ND		5.0	2.5	ng/L		12/28/21 05:26	12/31/21 11:57	1
8:2 FTS	ND		2.0	0.46	ng/L		12/28/21 05:26	12/31/21 11:57	1

Isotope Dilution	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C4 PFBA	100		25 - 150	12/28/21 05:26	12/31/21 11:57	1
13C5 PFPeA	95		25 - 150	12/28/21 05:26	12/31/21 11:57	1
13C2 PFHxA	99		25 - 150	12/28/21 05:26	12/31/21 11:57	1
13C4 PFHpA	106		25 - 150	12/28/21 05:26	12/31/21 11:57	1
13C4 PFOA	106		25 - 150	12/28/21 05:26	12/31/21 11:57	1
13C5 PFNA	110		25 - 150	12/28/21 05:26	12/31/21 11:57	1
13C2 PFDA	108		25 - 150	12/28/21 05:26	12/31/21 11:57	1
13C2 PFUnA	103		25 - 150	12/28/21 05:26	12/31/21 11:57	1
13C2 PFDoA	97		25 - 150	12/28/21 05:26	12/31/21 11:57	1
13C2 PFTeDA	94		25 - 150	12/28/21 05:26	12/31/21 11:57	1
13C3 PFBS	104		25 - 150	12/28/21 05:26	12/31/21 11:57	1
18O2 PFHxS	97		25 - 150	12/28/21 05:26	12/31/21 11:57	1
13C4 PFOS	103		25 - 150	12/28/21 05:26	12/31/21 11:57	1
13C8 FOSA	87		25 - 150	12/28/21 05:26	12/31/21 11:57	1
d3-NMeFOSAA	103		25 - 150	12/28/21 05:26	12/31/21 11:57	1
d5-NEtFOSAA	104		25 - 150	12/28/21 05:26	12/31/21 11:57	1
M2-6:2 FTS	129		25 - 150	12/28/21 05:26	12/31/21 11:57	1
M2-8:2 FTS	138		25 - 150	12/28/21 05:26	12/31/21 11:57	1

QC Sample Results

Client: Pace Analytical Services, LLC
 Project/Site: LEACHATES BASELINE 360 12/14

Job ID: 320-83182-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-554285/2-A
Matrix: Water
Analysis Batch: 555103

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 554285
%Rec.

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid	40.0	42.9		ng/L		107	76 - 136
Perfluoropentanoic acid (PFPeA)	40.0	39.3		ng/L		98	71 - 131
Perfluorohexanoic acid (PFHxA)	40.0	39.8		ng/L		99	73 - 133
Perfluoroheptanoic acid	40.0	41.8		ng/L		105	72 - 132
Perfluorooctanoic acid (PFOA)	40.0	39.9		ng/L		100	70 - 130
Perfluorononanoic acid (PFNA)	40.0	38.1		ng/L		95	75 - 135
Perfluorodecanoic acid (PFDA)	40.0	39.9		ng/L		100	76 - 136
Perfluoroundecanoic acid (PFUnA)	40.0	42.5		ng/L		106	68 - 128
Perfluorododecanoic acid (PFDoA)	40.0	40.8		ng/L		102	71 - 131
Perfluorotridecanoic acid (PFTriA)	40.0	38.0		ng/L		95	71 - 131
Perfluorotetradecanoic acid (PFTeA)	40.0	40.7		ng/L		102	70 - 130
Perfluorobutanesulfonic acid (PFBS)	35.4	32.1		ng/L		91	67 - 127
Perfluorohexanesulfonic acid (PFHxS)	36.4	35.2		ng/L		97	59 - 119
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	36.1		ng/L		95	76 - 136
Perfluorooctanesulfonic acid (PFOS)	37.1	34.3		ng/L		92	70 - 130
Perfluorodecanesulfonic acid (PFDS)	38.6	32.4		ng/L		84	71 - 131
Perfluorooctanesulfonamide (FOSA)	40.0	43.4		ng/L		108	73 - 133
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	38.1		ng/L		95	76 - 136
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	38.2		ng/L		95	76 - 136
6:2 FTS	37.9	39.0		ng/L		103	59 - 175
8:2 FTS	38.3	32.8		ng/L		86	75 - 135

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
13C4 PFBA	104		25 - 150
13C5 PFPeA	102		25 - 150
13C2 PFHxA	108		25 - 150
13C4 PFHpA	113		25 - 150
13C4 PFOA	114		25 - 150
13C5 PFNA	116		25 - 150
13C2 PFDA	106		25 - 150
13C2 PFUnA	107		25 - 150
13C2 PFDoA	109		25 - 150
13C2 PFTeDA	97		25 - 150
13C3 PFBS	113		25 - 150
18O2 PFHxS	104		25 - 150
13C4 PFOS	116		25 - 150
13C8 FOSA	97		25 - 150
d3-NMeFOSAA	115		25 - 150
d5-NEtFOSAA	115		25 - 150

QC Sample Results

Client: Pace Analytical Services, LLC
 Project/Site: LEACHATES BASELINE 360 12/14

Job ID: 320-83182-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-554285/2-A
Matrix: Water
Analysis Batch: 555103

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 554285

<i>Isotope Dilution</i>	<i>LCS LCS</i>		<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
M2-6:2 FTS	143		25 - 150
M2-8:2 FTS	147		25 - 150

Lab Sample ID: LCSD 320-554285/3-A
Matrix: Water
Analysis Batch: 555103

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 554285

<i>Analyte</i>	<i>Spike Added</i>	<i>LCSD Result</i>	<i>LCSD Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>%Rec</i>	<i>%Rec.</i>	<i>RPD</i>	<i>RPD</i>	<i>Limit</i>
							<i>Limits</i>			
Perfluorobutanoic acid	40.0	41.4		ng/L		103	76 - 136	4		30
Perfluoropentanoic acid (PFPeA)	40.0	39.1		ng/L		98	71 - 131	0		30
Perfluorohexanoic acid (PFHxA)	40.0	39.6		ng/L		99	73 - 133	0		30
Perfluoroheptanoic acid	40.0	38.0		ng/L		95	72 - 132	10		30
Perfluorooctanoic acid (PFOA)	40.0	37.5		ng/L		94	70 - 130	6		30
Perfluorononanoic acid (PFNA)	40.0	43.1		ng/L		108	75 - 135	12		30
Perfluorodecanoic acid (PFDA)	40.0	38.7		ng/L		97	76 - 136	3		30
Perfluoroundecanoic acid (PFUnA)	40.0	41.4		ng/L		103	68 - 128	3		30
Perfluorododecanoic acid (PFDoA)	40.0	43.9		ng/L		110	71 - 131	7		30
Perfluorotridecanoic acid (PFTriA)	40.0	42.9		ng/L		107	71 - 131	12		30
Perfluorotetradecanoic acid (PFTeA)	40.0	39.4		ng/L		99	70 - 130	3		30
Perfluorobutanesulfonic acid (PFBS)	35.4	30.9		ng/L		87	67 - 127	4		30
Perfluorohexanesulfonic acid (PFHxS)	36.4	35.0		ng/L		96	59 - 119	1		30
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	36.9		ng/L		97	76 - 136	2		30
Perfluorooctanesulfonic acid (PFOS)	37.1	35.2		ng/L		95	70 - 130	3		30
Perfluorodecanesulfonic acid (PFDS)	38.6	31.3		ng/L		81	71 - 131	4		30
Perfluorooctanesulfonamide (FOSA)	40.0	43.4		ng/L		109	73 - 133	0		30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	42.9		ng/L		107	76 - 136	12		30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	38.7		ng/L		97	76 - 136	1		30
6:2 FTS	37.9	42.5		ng/L		112	59 - 175	9		30
8:2 FTS	38.3	42.9		ng/L		112	75 - 135	27		30

<i>Isotope Dilution</i>	<i>LCSD LCSD</i>		<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
13C4 PFBA	100		25 - 150
13C5 PFPeA	95		25 - 150
13C2 PFHxA	104		25 - 150
13C4 PFHpA	109		25 - 150
13C4 PFOA	111		25 - 150
13C5 PFNA	101		25 - 150
13C2 PFDA	92		25 - 150
13C2 PFUnA	90		25 - 150
13C2 PFDoA	86		25 - 150

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QC Sample Results

Client: Pace Analytical Services, LLC
Project/Site: LEACHATES BASELINE 360 12/14

Job ID: 320-83182-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-554285/3-A

Matrix: Water

Analysis Batch: 555103

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 554285

<i>Isotope Dilution</i>	<i>LCSD LCSD</i>		<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
13C2 PFTeDA	88		25 - 150
13C3 PFBS	113		25 - 150
18O2 PFHxS	99		25 - 150
13C4 PFOS	103		25 - 150
13C8 FOSA	88		25 - 150
d3-NMeFOSAA	88		25 - 150
d5-NEtFOSAA	96		25 - 150
M2-6:2 FTS	134		25 - 150
M2-8:2 FTS	108		25 - 150

QC Association Summary

Client: Pace Analytical Services, LLC
Project/Site: LEACHATES BASELINE 360 12/14

Job ID: 320-83182-1

LCMS

Prep Batch: 554285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83182-1	NNU PLCRS	Total/NA	Water	3535	
320-83182-2	NNU SLCRS	Total/NA	Water	3535	
320-83182-3	ONU SLCRS	Total/NA	Water	3535	
320-83182-4	SA SLCRS	Total/NA	Water	3535	
MB 320-554285/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-554285/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-554285/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 555103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83182-1	NNU PLCRS	Total/NA	Water	537 (modified)	554285
320-83182-2	NNU SLCRS	Total/NA	Water	537 (modified)	554285
320-83182-3	ONU SLCRS	Total/NA	Water	537 (modified)	554285
320-83182-4	SA SLCRS	Total/NA	Water	537 (modified)	554285
MB 320-554285/1-A	Method Blank	Total/NA	Water	537 (modified)	554285
LCS 320-554285/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	554285
LCSD 320-554285/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	554285

Lab Chronicle

Client: Pace Analytical Services, LLC
Project/Site: LEACHATES BASELINE 360 12/14

Job ID: 320-83182-1

Client Sample ID: NNU PLCRS

Date Collected: 12/14/21 10:48

Date Received: 12/18/21 10:10

Lab Sample ID: 320-83182-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			274.3 mL	10.0 mL	554285	12/28/21 05:26	HK	TAL SAC
Total/NA	Analysis	537 (modified)		1			555103	12/31/21 12:27	MNV	TAL SAC

Client Sample ID: NNU SLCRS

Date Collected: 12/14/21 10:40

Date Received: 12/18/21 10:10

Lab Sample ID: 320-83182-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			271 mL	10.0 mL	554285	12/28/21 05:26	HK	TAL SAC
Total/NA	Analysis	537 (modified)		1			555103	12/31/21 12:38	MNV	TAL SAC

Client Sample ID: ONU SLCRS

Date Collected: 12/14/21 11:08

Date Received: 12/18/21 10:10

Lab Sample ID: 320-83182-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			264.6 mL	10.0 mL	554285	12/28/21 05:26	HK	TAL SAC
Total/NA	Analysis	537 (modified)		1			555103	12/31/21 12:48	MNV	TAL SAC

Client Sample ID: SA SLCRS

Date Collected: 12/14/21 11:40

Date Received: 12/18/21 10:10

Lab Sample ID: 320-83182-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			262.5 mL	10.0 mL	554285	12/28/21 05:26	HK	TAL SAC
Total/NA	Analysis	537 (modified)		1			555103	12/31/21 12:58	MNV	TAL SAC

Laboratory References:

TAL SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Pace Analytical Services, LLC
 Project/Site: LEACHATES BASELINE 360 12/14

Job ID: 320-83182-1

Laboratory: Eurofins Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11666	04-01-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
537 (modified)	3535	Water	6:2 FTS
537 (modified)	3535	Water	8:2 FTS
537 (modified)	3535	Water	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)
537 (modified)	3535	Water	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)
537 (modified)	3535	Water	Perfluorobutanesulfonic acid (PFBS)
537 (modified)	3535	Water	Perfluorobutanoic acid
537 (modified)	3535	Water	Perfluorodecanesulfonic acid (PFDS)
537 (modified)	3535	Water	Perfluorodecanoic acid (PFDA)
537 (modified)	3535	Water	Perfluorododecanoic acid (PFDoA)
537 (modified)	3535	Water	Perfluoroheptanesulfonic Acid (PFHpS)
537 (modified)	3535	Water	Perfluoroheptanoic acid
537 (modified)	3535	Water	Perfluorohexanesulfonic acid (PFHxS)
537 (modified)	3535	Water	Perfluorohexanoic acid (PFHxA)
537 (modified)	3535	Water	Perfluorononanoic acid (PFNA)
537 (modified)	3535	Water	Perfluorooctanesulfonamide (FOSA)
537 (modified)	3535	Water	Perfluorooctanesulfonic acid (PFOS)
537 (modified)	3535	Water	Perfluorooctanoic acid (PFOA)
537 (modified)	3535	Water	Perfluoropentanoic acid (PFPeA)
537 (modified)	3535	Water	Perfluorotetradecanoic acid (PFTeA)
537 (modified)	3535	Water	Perfluorotridecanoic acid (PFTriA)
537 (modified)	3535	Water	Perfluoroundecanoic acid (PFUnA)

Method Summary

Client: Pace Analytical Services, LLC
Project/Site: LEACHATES BASELINE 360 12/14

Job ID: 320-83182-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600



Sample Summary

Client: Pace Analytical Services, LLC
Project/Site: LEACHATES BASELINE 360 12/14

Job ID: 320-83182-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-83182-1	NNU PLCRS	Water	12/14/21 10:48	12/18/21 10:10
320-83182-2	NNU SLCRS	Water	12/14/21 10:40	12/18/21 10:10
320-83182-3	ONU SLCRS	Water	12/14/21 11:08	12/18/21 10:10
320-83182-4	SA SLCRS	Water	12/14/21 11:40	12/18/21 10:10

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Chain of Custody

PASI New York Laboratory



Workorder: 70197895

Workorder Name: LEACHATES BASELINE 360 12/14

Results Requested By: 12/23/2021

Report / Invoice To

Subcontract To

Requested Analysis

Kimberley M. Mack
Pace Analytical Melville
575 Broad Hollow Road
Melville, NY 11747
Phone (631)694-3040
Email: kimberley.mack@paceanalytical.com

Test America-Sacramento
880 Riverside Pkwy.
West Sacramento, CA 95605

P.O. 70197895KMM

State of Sample Origin: NY

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers		Comments
					Unpreserved	Preserved	
1	NNU PLCRS	12/14/2021 10:48	70197895001	Water			LAB USE ONLY
2	NNU SLCRS	12/14/2021 10:40	70197895002	Water			
3	ONU SLCRS	12/14/2021 11:08	70197895003	Water			
4	SA SLCRS	12/14/2021 11:40	70197895004	Water			
5							

PFAS by 537

Transfers	Released By	Date/Time	Received By	Date/Time
1	<i>[Signature]</i>	12/14/2021 10:48	<i>[Signature]</i>	12-15-21
2				
3				

Need Category B Package and EQUIS EDDs

Cooler Temperature on Receipt °C Custody Seal Y or N Received on Ice Y or N Samples Intact Y or N

Discolor



320-83182 Chain of Custody



Login Sample Receipt Checklist

Client: Pace Analytical Services, LLC

Job Number: 320-83182-1

Login Number: 83182

List Source: Eurofins Sacramento

List Number: 1

Creator: Oropeza, Salvador

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

January 18, 2022

Joe Guarino
Town of Babylon
281 Phelps Lane
North Babylon, NY 11703

RE: Project: CELL 7 LEACHATE EXPANDED 12/14
Pace Project No.: 70197894

Dear Joe Guarino:

Enclosed are the analytical results for sample(s) received by the laboratory on December 14, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses were subcontracted outside of the Pace Network. The test report from the external subcontractor is attached to this report in its entirety.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Melville
- Pace National - Mt. Juliet
- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kimberley M. Mack
kimberley.mack@pacelabs.com
(631)694-3040
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
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CERTIFICATIONS

Project: CELL 7 LEACHATE EXPANDED 12/14
Pace Project No.: 70197894

Pace Analytical Services Pennsylvania

1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991

Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services Long Island

575 Broad Hollow Rd, Melville, NY 11747
Connecticut Certification #: PH-0435
Delaware Certification # NY 10478
Maryland Certification #: 208
Massachusetts Certification #: M-NY026
New Hampshire Certification #: 2987

New Jersey Certification #: NY158
New York Certification #: 10478 Primary Accrediting Body
Pennsylvania Certification #: 68-00350
Rhode Island Certification #: LAO00340
Virginia Certification # 460302

Pace Analytical Services National

12065 Lebanon Road, Mt. Juliet, TN 37122
Alabama Certification #: 40660
Alaska Certification 17-026
Arizona Certification #: AZ0612
Arkansas Certification #: 88-0469
California Certification #: 2932
Canada Certification #: 1461.01
Colorado Certification #: TN00003
Connecticut Certification #: PH-0197
DOD Certification: #1461.01
EPA# TN00003
Florida Certification #: E87487

Georgia DW Certification #: 923
Georgia Certification: NELAP
Idaho Certification #: TN00003
Illinois Certification #: 200008
Indiana Certification #: C-TN-01
Iowa Certification #: 364
Kansas Certification #: E-10277
Kentucky UST Certification #: 16
Kentucky Certification #: 90010
Louisiana Certification #: AI30792
Louisiana DW Certification #: LA180010
Maine Certification #: TN0002

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: CELL 7 LEACHATE EXPANDED 12/14
Pace Project No.: 70197894

Pace Analytical Services National

Maryland Certification #: 324	Pennsylvania Certification #: 68-02979
Massachusetts Certification #: M-TN003	Rhode Island Certification #: LAO00356
Michigan Certification #: 9958	South Carolina Certification #: 84004
Minnesota Certification #: 047-999-395	South Dakota Certification
Mississippi Certification #: TN00003	Tennessee DW/Chem/Micro Certification #: 2006
Missouri Certification #: 340	Texas Mold Certification #: LAB0152
Montana Certification #: CERT0086	Texas Certification #: T 104704245-17-14
Nebraska Certification #: NE-OS-15-05	USDA Soil Permit #: P330-15-00234
Nevada Certification #: TN-03-2002-34	Utah Certification #: TN00003
New Hampshire Certification #: 2975	Virginia Certification #: VT2006
New Jersey Certification #: TN002	Vermont Dept. of Health: ID# VT-2006
New Mexico DW Certification	Virginia Certification #: 460132
New York Certification #: 11742	Washington Certification #: C847
North Carolina Aquatic Toxicity Certification #: 41	West Virginia Certification #: 233
North Carolina Drinking Water Certification #: 21704	Wisconsin Certification #: 998093910
North Carolina Environmental Certificate #: 375	Wyoming UST Certification #: via A2LA 2926.01
North Dakota Certification #: R-140	A2LA-ISO 17025 Certification #: 1461.01
Ohio VAP Certification #: CL0069	A2LA-ISO 17025 Certification #: 1461.02
Oklahoma Certification #: 9915	AIHA-LAP/LLC EMLAP Certification #:100789
Oregon Certification #: TN200002	

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: CELL 7 LEACHATE EXPANDED 12/14
Pace Project No.: 70197894

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
70197894001	CELL 7 PLCRS	EPA 8151A	HMH	11	PAN
		EPA 8081B	JMD, SKF	20	PACE-MV
		EPA 8082A	SKF	9	PACE-MV
		EPA 6010C	HMH	24	PACE-MV
		EPA 7470A	JJS	1	PACE-MV
		EPA 8270E	AMG	9	PAN
		EPA 8270D	RP1	114	PACE-MV
		EPA 8260C SIM/5030C	BBL	3	PACE-MV
		EPA 8260C/5030C	BBL	72	PACE-MV
		EPA 903.1	SLC	1	PASI-PA
		EPA 904.0	JC2	1	PASI-PA
		ASTM D5174-97	RMK	1	PASI-PA
		SM22 2120B	RESE	2	PACE-MV
		SM22 2320B	RESE	1	PACE-MV
		SM22 2340C	NAA	1	PACE-MV
		SM22 2540C	NAA	1	PACE-MV
		SM22 3500-Cr B	ODL	1	PACE-MV
		EPA 410.4	JCA	1	PACE-MV
		SM22 5210B	VNS	1	PACE-MV
		EPA 9034	HA1	1	PACE-MV
		EPA 300.0	BNK	3	PACE-MV
		EPA 351.2	AKS	1	PACE-MV
		EPA 353.2	DJM	2	PACE-MV
		EPA 353.2	DJM	1	PACE-MV
		EPA 420.1	RESE	1	PACE-MV
		SM22 4500 NH3 H	RESE	1	PACE-MV
		EPA 9014 Total Cyanide	HA1	1	PACE-MV
EPA 9060A	JWT	5	PACE-MV		

PACE-MV = Pace Analytical Services - Melville
PAN = Pace National - Mt. Juliet
PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Date: January 18, 2022

p-Phenylenediamine and a,a-Dimethylphenethylamine are reporting with critically low recovery in the laboratory control sample(s). These compounds are method defined poor performers. Results are estimated.

CELL 7 PLCRS (Lab ID: 70197894001)

- Chlorinated Acid Herbicides (GC) by Method 8151A - Dilution due to matrix.

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: EPA 8151A

Description: Chlorinated Herb. (GC) 8151A

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for EPA 8151A by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

QC Batch: 1791358

S4: Surrogate recovery not evaluated against control limits due to sample dilution.

- CELL 7 PLCRS (Lab ID: 70197894001)
- 2,4-DCAA (S)

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 1791358

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: R3744645-2)
 - 2,4,5-TP (Silvex)
 - MCPA
- LCSD (Lab ID: R3744645-3)
 - MCPA

R1: RPD value was outside control limits.

- LCSD (Lab ID: R3744645-3)
 - 2,4,5-TP (Silvex)

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: EPA 8081B

Description: 8081 GCS Pesticides

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for EPA 8081B by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3510C with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: EPA 8082A

Description: 8082 GCS PCB

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for EPA 8082A by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3510C with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

QC Batch: 237476

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- BLANK (Lab ID: 1199573)
 - Decachlorobiphenyl (S)
 - Tetrachloro-m-xylene (S)
- LCS (Lab ID: 1199574)
 - Decachlorobiphenyl (S)
 - Tetrachloro-m-xylene (S)
- LCSD (Lab ID: 1199575)
 - Decachlorobiphenyl (S)
 - Tetrachloro-m-xylene (S)

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14
Pace Project No.: 70197894

Method: EPA 6010C
Description: 6010 MET ICP
Client: Town of Babylon
Date: January 18, 2022

General Information:

1 sample was analyzed for EPA 6010C by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3005A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 240540

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197894001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1215211)
 - Barium
 - Calcium
 - Potassium
 - Sodium
 - Thallium

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: EPA 7470A

Description: 7470 Mercury

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for EPA 7470A by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 7470A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 239605

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197894001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1210727)
- Mercury

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: EPA 8270E

Description: SVOA (GC/MS) 8270E

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for EPA 8270E by Pace National Mt. Juliet. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 1791214

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: R3742535-2)
- p-Phenylenediamine

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: EPA 8270D

Description: 8270 MSSV

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for EPA 8270D by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

H2: Extraction or preparation conducted outside EPA method holding time.

- CELL 7 PLCRS (Lab ID: 70197894001)

Sample Preparation:

The samples were prepared in accordance with EPA 3510C with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

QC Batch: 238367

IC: The initial calibration for this compound was outside of method control limits. The result is estimated.

- BLANK (Lab ID: 1203973)
 - Methapyrilene
- CELL 7 PLCRS (Lab ID: 70197894001)
 - Methapyrilene
- LCS (Lab ID: 1203974)
 - Methapyrilene
- LCSD (Lab ID: 1204170)
 - Methapyrilene

IH: This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.

- LCS (Lab ID: 1203974)
 - 1,4-Naphthoquinone
- LCSD (Lab ID: 1204170)
 - 1,4-Naphthoquinone

IL: This analyte exceeded secondary source verification criteria low for the initial calibration. The reported results should be considered an estimated value.

- BLANK (Lab ID: 1203973)
 - 1-Naphthylamine
- CELL 7 PLCRS (Lab ID: 70197894001)
 - 1-Naphthylamine
- LCS (Lab ID: 1203974)
 - 1-Naphthylamine
- LCSD (Lab ID: 1204170)
 - 1-Naphthylamine

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: EPA 8270D

Description: 8270 MSSV

Client: Town of Babylon

Date: January 18, 2022

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

QC Batch: 238367

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- LCS (Lab ID: 1203974)
 - 1,3,5-Trinitrobenzene
 - 1,3-Dinitrobenzene
 - 2,6-Dinitrotoluene
- LCSD (Lab ID: 1204170)
 - 1,3,5-Trinitrobenzene
 - 1,3-Dinitrobenzene
 - 2,6-Dinitrotoluene

v3: The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have a low bias.

- BLANK (Lab ID: 1203973)
 - 2,2'-Oxybis(1-chloropropane)
 - 2-Nitroaniline
 - Hexachlorocyclopentadiene
 - Methyl methanesulfonate
 - N-Nitrosomethylethylamine
- CELL 7 PLCRS (Lab ID: 70197894001)
 - 2,2'-Oxybis(1-chloropropane)
 - 2-Nitroaniline
 - Hexachlorocyclopentadiene
 - Methyl methanesulfonate
 - N-Nitrosomethylethylamine
- LCS (Lab ID: 1203974)
 - 2,2'-Oxybis(1-chloropropane)
 - 2-Nitroaniline
 - Hexachlorocyclopentadiene
 - Methyl methanesulfonate
 - N-Nitrosomethylethylamine
- LCSD (Lab ID: 1204170)
 - 2,2'-Oxybis(1-chloropropane)
 - 2-Nitroaniline
 - Hexachlorocyclopentadiene
 - Methyl methanesulfonate
 - N-Nitrosomethylethylamine

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: EPA 8270D

Description: 8270 MSSV

Client: Town of Babylon

Date: January 18, 2022

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: EPA 8260C SIM/5030C

Description: 8260C SIM Volatile Organics

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for EPA 8260C SIM/5030C by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: EPA 8260C/5030C

Description: 8260C Volatile Organics

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for EPA 8260C/5030C by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

QC Batch: 237770

IC: The initial calibration for this compound was outside of method control limits. The result is estimated.

- BLANK (Lab ID: 1200861)
 - 1,2-Dibromoethane (EDB)
 - Bromodichloromethane
- CELL 7 PLCRS (Lab ID: 70197894001)
 - 1,2-Dibromoethane (EDB)
 - Bromodichloromethane
- DUP (Lab ID: 1201855)
 - 1,2-Dibromoethane (EDB)
 - Bromodichloromethane
- LCS (Lab ID: 1200862)
 - 1,2-Dibromoethane (EDB)
 - Bromodichloromethane
- MS (Lab ID: 1201856)
 - 1,2-Dibromoethane (EDB)
 - Bromodichloromethane

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

QC Batch: 237770

v3: The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have a low bias.

- BLANK (Lab ID: 1200861)
 - 1,2-Dibromo-3-chloropropane
 - 2-Butanone (MEK)
 - Acetone
 - Acrolein
 - Bromoform
- CELL 7 PLCRS (Lab ID: 70197894001)
 - 1,2-Dibromo-3-chloropropane
 - 2-Butanone (MEK)
 - Acrolein
 - Bromoform

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: EPA 8260C/5030C

Description: 8260C Volatile Organics

Client: Town of Babylon

Date: January 18, 2022

QC Batch: 237770

v3: The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have a low bias.

- DUP (Lab ID: 1201855)
 - 1,2-Dibromo-3-chloropropane
 - 2-Butanone (MEK)
 - Acetone
 - Acrolein
 - Bromoform
- LCS (Lab ID: 1200862)
 - 1,2-Dibromo-3-chloropropane
 - 2-Butanone (MEK)
 - Acetone
 - Acrolein
 - Bromoform
- MS (Lab ID: 1201856)
 - 1,2-Dibromo-3-chloropropane
 - 2-Butanone (MEK)
 - Acetone
 - Acrolein
 - Bromoform

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 237770

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70198349005

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1201856)
 - Acrolein

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: EPA 8260C/5030C

Description: 8260C Volatile Organics

Client: Town of Babylon

Date: January 18, 2022

QC Batch: 237770

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 1201855)
- Carbon disulfide

Additional Comments:

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: EPA 903.1

Description: 903.1 Radium 226

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for EPA 903.1 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: EPA 904.0

Description: 904.0 Radium 228

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for EPA 904.0 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: ASTM D5174-97

Description: D517497 Total Uranium KPA

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for ASTM D5174-97 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: SM22 2120B

Description: 2120B W Apparent Color

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for SM22 2120B by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: SM22 2320B

Description: 2320B Alkalinity

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for SM22 2320B by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 238025

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197895003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1202200)
- Alkalinity, Total as CaCO₃

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: SM22 2340C

Description: 2340C Hardness, Total

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for SM22 2340C by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: SM22 2540C

Description: 2540C Total Dissolved Solids

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for SM22 2540C by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: SM22 3500-Cr B

Description: Chromium, Hexavalent

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for SM22 3500-Cr B by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 237130

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197895003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1197179)
- Chromium, Hexavalent

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: EPA 410.4

Description: 410.4 COD

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for EPA 410.4 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 410.4 with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 238211

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197895003,70197947001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1203347)
- Chemical Oxygen Demand

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: SM22 5210B

Description: 5210B BOD, 5 day

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for SM22 5210B by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with SM22 5210B with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: EPA 9034

Description: 9034 Sulfide, Titration

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for EPA 9034 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 9030B with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: EPA 300.0

Description: 300.0 IC Anions 28 Days

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for EPA 300.0 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: EPA 351.2

Description: 351.2 Total Kjeldahl Nitrogen

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for EPA 351.2 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 351.2 with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 237663

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197895003,70198006009

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1200560)
 - Nitrogen, Kjeldahl, Total
- MS (Lab ID: 1200562)
 - Nitrogen, Kjeldahl, Total

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

QC Batch: 237663

D6: The precision between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 1200563)
 - Nitrogen, Kjeldahl, Total

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: EPA 353.2

Description: 353.2 Nitrogen, NO₂/NO₃ pres.

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for EPA 353.2 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 237587

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197136008,70197136020

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1199911)
- Nitrate-Nitrite (as N)

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: EPA 353.2

Description: 353.2 Nitrogen, NO₂

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for EPA 353.2 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 237205

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197503012,70197850001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1197786)
- Nitrite as N

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: EPA 420.1

Description: Phenolics, Total Recoverable

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for EPA 420.1 by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 420.1 with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 240042

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197503012,70197895003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1212863)
- Phenolics, Total Recoverable

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14
Pace Project No.: 70197894

Method: SM22 4500 NH3 H
Description: 4500 Ammonia Water
Client: Town of Babylon
Date: January 18, 2022

General Information:

1 sample was analyzed for SM22 4500 NH3 H by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 238781

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70198047001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1206830)
- Nitrogen, Ammonia

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: EPA 9014 Total Cyanide

Description: 9014 Cyanide, Total

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for EPA 9014 Total Cyanide by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 9010C with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 237385

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 70197895003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1198629)
- Cyanide

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Method: EPA 9060A

Description: 9060A TOC as NPOC

Client: Town of Babylon

Date: January 18, 2022

General Information:

1 sample was analyzed for EPA 9060A by Pace Analytical Services Melville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: CELL 7 LEACHATE EXPANDED 12/14
Pace Project No.: 70197894

Sample: CELL 7 PLCRS	Lab ID: 70197894001	Collected: 12/14/21 12:02	Received: 12/14/21 13:34	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
Chlorinated Herb. (GC) 8151A								
Analytical Method: EPA 8151A Preparation Method: 8151A								
Pace National - Mt. Juliet								
2,4-D	<200	ug/L	200	100	12/21/21 09:18	12/24/21 11:34	94-75-7	
Dalapon	<200	ug/L	200	100	12/21/21 09:18	12/24/21 11:34	75-99-0	
2,4-DB	<200	ug/L	200	100	12/21/21 09:18	12/24/21 11:34	94-82-6	
Dicamba	<200	ug/L	200	100	12/21/21 09:18	12/24/21 11:34	1918-00-9	
Dichloroprop	<200	ug/L	200	100	12/21/21 09:18	12/24/21 11:34	15165-67-0	
Dinoseb	<200	ug/L	200	100	12/21/21 09:18	12/24/21 11:34	88-85-7	
MCPA	<10000	ug/L	10000	100	12/21/21 09:18	12/24/21 11:34	94-74-6	L0
MCPP	<10000	ug/L	10000	100	12/21/21 09:18	12/24/21 11:34	7085-19-0	
2,4,5-T	<200	ug/L	200	100	12/21/21 09:18	12/24/21 11:34	93-76-5	
2,4,5-TP (Silvex)	<200	ug/L	200	100	12/21/21 09:18	12/24/21 11:34	93-72-1	L0,R1
Surrogates								
2,4-DCAA (S)	50.0	%	14.0-158	100	12/21/21 09:18	12/24/21 11:34	19719-28-9	S4
8081 GCS Pesticides								
Analytical Method: EPA 8081B Preparation Method: EPA 3510C								
Pace Analytical Services - Melville								
alpha-BHC	<0.047	ug/L	0.047	1	12/17/21 12:49	12/30/21 17:47	319-84-6	
gamma-BHC (Lindane)	<0.047	ug/L	0.047	1	12/17/21 12:49	12/30/21 17:47	58-89-9	
beta-BHC	<0.047	ug/L	0.047	1	12/17/21 12:49	12/30/21 17:47	319-85-7	
Heptachlor	<0.047	ug/L	0.047	1	12/17/21 12:49	12/30/21 17:47	76-44-8	
delta-BHC	<0.047	ug/L	0.047	1	12/17/21 12:49	12/30/21 17:47	319-86-8	
Aldrin	<0.047	ug/L	0.047	1	12/17/21 12:49	12/30/21 17:47	309-00-2	
Heptachlor epoxide	<0.047	ug/L	0.047	1	12/17/21 12:49	12/30/21 17:47	1024-57-3	
Endosulfan I	<0.047	ug/L	0.047	1	12/17/21 12:49	12/30/21 17:47	959-98-8	
4,4'-DDE	<0.094	ug/L	0.094	1	12/17/21 12:49	12/30/21 17:47	72-55-9	
Dieldrin	<0.094	ug/L	0.094	1	12/17/21 12:49	12/30/21 17:47	60-57-1	
Endrin	<0.094	ug/L	0.094	1	12/17/21 12:49	12/30/21 17:47	72-20-8	
4,4'-DDD	<0.094	ug/L	0.094	1	12/17/21 12:49	12/30/21 17:47	72-54-8	
Endosulfan II	<0.094	ug/L	0.094	1	12/17/21 12:49	12/30/21 17:47	33213-65-9	
4,4'-DDT	<0.094	ug/L	0.094	1	12/17/21 12:49	12/30/21 17:47	50-29-3	
Endrin aldehyde	<0.094	ug/L	0.094	1	12/17/21 12:49	12/20/21 21:37	7421-93-4	
Endosulfan sulfate	<0.094	ug/L	0.094	1	12/17/21 12:49	12/30/21 17:47	1031-07-8	
Methoxychlor	<0.47	ug/L	0.47	1	12/17/21 12:49	12/30/21 17:47	72-43-5	
Toxaphene	<4.7	ug/L	4.7	1	12/17/21 12:49	12/30/21 17:47	8001-35-2	
Surrogates								
Decachlorobiphenyl (S)	87	%	10-167	1	12/17/21 12:49	12/30/21 17:47	2051-24-3	
Tetrachloro-m-xylene (S)	105	%	27-139	1	12/17/21 12:49	12/30/21 17:47	877-09-8	
8082 GCS PCB								
Analytical Method: EPA 8082A Preparation Method: EPA 3510C								
Pace Analytical Services - Melville								
PCB-1016 (Aroclor 1016)	<0.94	ug/L	0.94	1	12/17/21 12:49	12/22/21 13:46	12674-11-2	
PCB-1221 (Aroclor 1221)	<0.94	ug/L	0.94	1	12/17/21 12:49	12/22/21 13:46	11104-28-2	
PCB-1232 (Aroclor 1232)	<0.94	ug/L	0.94	1	12/17/21 12:49	12/22/21 13:46	11141-16-5	
PCB-1242 (Aroclor 1242)	<0.94	ug/L	0.94	1	12/17/21 12:49	12/22/21 13:46	53469-21-9	
PCB-1248 (Aroclor 1248)	<0.94	ug/L	0.94	1	12/17/21 12:49	12/22/21 13:46	12672-29-6	
PCB-1254 (Aroclor 1254)	<0.94	ug/L	0.94	1	12/17/21 12:49	12/22/21 13:46	11097-69-1	
PCB-1260 (Aroclor 1260)	<0.94	ug/L	0.94	1	12/17/21 12:49	12/22/21 13:46	11096-82-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: CELL 7 LEACHATE EXPANDED 12/14
Pace Project No.: 70197894

Sample: CELL 7 PLCRS	Lab ID: 70197894001	Collected: 12/14/21 12:02	Received: 12/14/21 13:34	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

8082 GCS PCB

Analytical Method: EPA 8082A Preparation Method: EPA 3510C
Pace Analytical Services - Melville

Surrogates

Tetrachloro-m-xylene (S)	85	%	37-105	1	12/17/21 12:49	12/22/21 13:46	877-09-8	S8
Decachlorobiphenyl (S)	53	%	10-138	1	12/17/21 12:49	12/22/21 13:46	2051-24-3	

6010 MET ICP

Analytical Method: EPA 6010C Preparation Method: EPA 3005A
Pace Analytical Services - Melville

Aluminum	<20000	ug/L	20000	100	01/13/22 16:15	01/17/22 14:54	7429-90-5	
Antimony	<600	ug/L	600	10	01/13/22 16:15	01/17/22 11:07	7440-36-0	
Arsenic	<100	ug/L	100	10	01/13/22 16:15	01/17/22 11:07	7440-38-2	
Barium	8190	ug/L	2000	10	01/13/22 16:15	01/17/22 11:07	7440-39-3	M1
Beryllium	<50.0	ug/L	50.0	10	01/13/22 16:15	01/17/22 11:07	7440-41-7	
Boron	793	ug/L	500	10	01/13/22 16:15	01/17/22 11:07	7440-42-8	
Cadmium	<25.0	ug/L	25.0	10	01/13/22 16:15	01/17/22 11:07	7440-43-9	
Calcium	14900000	ug/L	20000	100	01/13/22 16:15	01/17/22 14:54	7440-70-2	M1
Chromium	<100	ug/L	100	10	01/13/22 16:15	01/17/22 11:07	7440-47-3	
Cobalt	<500	ug/L	500	10	01/13/22 16:15	01/17/22 11:07	7440-48-4	
Copper	386	ug/L	250	10	01/13/22 16:15	01/17/22 11:07	7440-50-8	
Iron	<1000	ug/L	1000	10	01/13/22 16:15	01/17/22 11:07	7439-89-6	
Lead	<50.0	ug/L	50.0	10	01/13/22 16:15	01/17/22 11:07	7439-92-1	
Magnesium	4910	ug/L	2000	10	01/13/22 16:15	01/17/22 11:07	7439-95-4	
Manganese	526	ug/L	100	10	01/13/22 16:15	01/17/22 11:07	7439-96-5	
Nickel	<400	ug/L	400	10	01/13/22 16:15	01/17/22 11:07	7440-02-0	
Potassium	8790000	ug/L	500000	100	01/13/22 16:15	01/17/22 14:54	7440-09-7	M1
Selenium	<100	ug/L	100	10	01/13/22 16:15	01/17/22 11:07	7782-49-2	
Silver	14.5J	ug/L	100	10	01/13/22 16:15	01/17/22 11:07	7440-22-4	
Sodium	13900000	ug/L	500000	100	01/13/22 16:15	01/17/22 14:54	7440-23-5	M1
Thallium	<100	ug/L	100	10	01/13/22 16:15	01/17/22 11:07	7440-28-0	M1
Tin	<500	ug/L	500	10	01/13/22 16:15	01/17/22 11:07	7440-31-5	
Vanadium	48.2J	ug/L	500	10	01/13/22 16:15	01/17/22 11:07	7440-62-2	
Zinc	<200	ug/L	200	10	01/13/22 16:15	01/17/22 11:07	7440-66-6	

7470 Mercury

Analytical Method: EPA 7470A Preparation Method: EPA 7470A
Pace Analytical Services - Melville

Mercury	<0.20	ug/L	0.20	1	01/06/22 11:00	01/06/22 15:46	7439-97-6	M1
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SVOA (GC/MS) 8270E

Analytical Method: EPA 8270E Preparation Method: 3510C
Pace National - Mt. Juliet

Famphur	<20.0	ug/L	20.0	1	12/18/21 05:08	12/19/21 19:35	52-85-7	G6
Kepone	<20.0	ug/L	20.0	1	12/18/21 05:08	12/19/21 19:35	143-50-0	G6,ML
p-Phenylenediamine	<6900	ug/L	6900	1	12/18/21 05:08	12/19/21 19:35	106-50-3	G6,LO,ML
Surrogates								
2-Fluorophenol (S)	23.4	%	10.0-120	1	12/18/21 05:08	12/19/21 19:35	367-12-4	
Phenol-d5 (S)	21.3	%	10.0-120	1	12/18/21 05:08	12/19/21 19:35	4165-62-2	
Nitrobenzene-d5 (S)	45.8	%	10.0-127	1	12/18/21 05:08	12/19/21 19:35	4165-60-0	
2-Fluorobiphenyl (S)	39.1	%	10.0-130	1	12/18/21 05:08	12/19/21 19:35	321-60-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Sample: CELL 7 PLCRS	Lab ID: 70197894001	Collected: 12/14/21 12:02	Received: 12/14/21 13:34	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

SVOA (GC/MS) 8270E

Analytical Method: EPA 8270E Preparation Method: 3510C
Pace National - Mt. Juliet

Surrogates

2,4,6-Tribromophenol (S)	50.5	%	10.0-155	1	12/18/21 05:08	12/19/21 19:35	118-79-6	
p-Terphenyl-d14 (S)	32.7	%	10.0-128	1	12/18/21 05:08	12/19/21 19:35	1718-51-0	

8270 MSSV

Analytical Method: EPA 8270D Preparation Method: EPA 3510C
Pace Analytical Services - Melville

1,2,4,5-Tetrachlorobenzene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	95-94-3	H2
1,2,4-Trichlorobenzene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	120-82-1	H2
1,2-Dichlorobenzene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	95-50-1	H2
1,3,5-Trinitrobenzene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	99-35-4	H2
1,3-Dichlorobenzene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	541-73-1	H2
1,3-Dinitrobenzene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	99-65-0	H2
1,4-Dichlorobenzene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	106-46-7	H2
1,4-Naphthoquinone	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	130-15-4	H2
1-Naphthylamine	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	134-32-7	H2,IL
2,2'-Oxybis(1-chloropropane)	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	108-60-1	H2,v3
2,3,4,6-Tetrachlorophenol	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	58-90-2	H2
2,4,5-Trichlorophenol	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	95-95-4	H2
2,4,6-Trichlorophenol	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	88-06-2	H2
2,4-Dichlorophenol	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	120-83-2	H2
2,4-Dimethylphenol	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	105-67-9	H2
2,4-Dinitrophenol	<10.0	ug/L	10.0	1	12/23/21 18:15	12/24/21 16:09	51-28-5	H2
2,4-Dinitrotoluene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	121-14-2	H2
2,6-Dichlorophenol	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	87-65-0	H2
2,6-Dinitrotoluene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	606-20-2	H2
2-Acetylaminofluorene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	53-96-3	H2
2-Chloronaphthalene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	91-58-7	H2
2-Chlorophenol	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	95-57-8	H2
2-Methylnaphthalene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	91-57-6	H2
2-Methylphenol(o-Cresol)	1.8J	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	95-48-7	H2
2-Naphthylamine	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	91-59-8	H2
2-Nitroaniline	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	88-74-4	H2,v3
2-Nitrophenol	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	88-75-5	H2
3&4-Methylphenol(m&p Cresol)	305	ug/L	50.0	10	12/23/21 18:15	12/27/21 14:56		H2
3,3'-Dichlorobenzidine	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	91-94-1	H2
3,3'-Dimethylbenzidine	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	119-93-7	H2
3-Methylcholanthrene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	56-49-5	H2
3-Nitroaniline	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	99-09-2	H2
4,6-Dinitro-2-methylphenol	<10.0	ug/L	10.0	1	12/23/21 18:15	12/24/21 16:09	534-52-1	H2
4-Aminobiphenyl	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	92-67-1	H2
4-Bromophenylphenyl ether	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	101-55-3	H2
4-Chloro-3-methylphenol	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	59-50-7	H2
4-Chloroaniline	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	106-47-8	H2
4-Chlorophenylphenyl ether	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	7005-72-3	H2
4-Nitroaniline	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	100-01-6	H2
4-Nitrophenol	<10.0	ug/L	10.0	1	12/23/21 18:15	12/24/21 16:09	100-02-7	H2

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Sample: CELL 7 PLCRS	Lab ID: 70197894001	Collected: 12/14/21 12:02	Received: 12/14/21 13:34	Matrix: Water					
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
8270 MSSV	Analytical Method: EPA 8270D Preparation Method: EPA 3510C Pace Analytical Services - Melville								
5-Nitro-o-toluidine	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	99-55-8	H2	
7,12-Dimethylbenz(a)anthracene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	57-97-6	H2	
Acenaphthene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	83-32-9	H2	
Acenaphthylene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	208-96-8	H2	
Acetophenone	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	98-86-2	H2	
Anthracene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	120-12-7	H2	
Benzo(a)anthracene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	56-55-3	H2	
Benzo(a)pyrene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	50-32-8	H2	
Benzo(b)fluoranthene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	205-99-2	H2	
Benzo(g,h,i)perylene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	191-24-2	H2	
Benzo(k)fluoranthene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	207-08-9	H2	
Benzyl alcohol	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	100-51-6	H2	
Butylbenzylphthalate	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	85-68-7	H2	
Chlorobenzilate	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	510-15-6	H2	
Chrysene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	218-01-9	H2	
Di-n-butylphthalate	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	84-74-2	H2	
Di-n-octylphthalate	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	117-84-0	H2	
Diallate	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	2303-16-4	H2	
Dibenz(a,h)anthracene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	53-70-3	H2	
Dibenzofuran	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	132-64-9	H2	
Diethylphthalate	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	84-66-2	H2	
Dimethoate	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	60-51-5	H2	
Dimethylphthalate	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	131-11-3	H2	
Disulfoton	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	298-04-4	H2	
Ethyl methanesulfonate	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	62-50-0	H2	
Fluoranthene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	206-44-0	H2	
Fluorene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	86-73-7	H2	
Hexachloro-1,3-butadiene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	87-68-3	H2	
Hexachlorobenzene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	118-74-1	H2	
Hexachlorocyclopentadiene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	77-47-4	H2,v3	
Hexachloroethane	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	67-72-1	H2	
Hexachloropropene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	1888-71-7	H2	
Indeno(1,2,3-cd)pyrene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	193-39-5	H2	
Isodrin	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	465-73-6	H2	
Isophorone	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	78-59-1	H2	
Isosafrole	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	120-58-1	H2	
Methapyrilene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	91-80-5	H2,IC	
Methyl methanesulfonate	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	66-27-3	H2,v3	
Methyl parathion	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	298-00-0	H2	
N-Nitroso-di-n-butylamine	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	924-16-3	H2	
N-Nitroso-di-n-propylamine	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	621-64-7	H2	
N-Nitrosodiethylamine	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	55-18-5	H2	
N-Nitrosodimethylamine	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	62-75-9	H2	
N-Nitrosodiphenylamine	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	86-30-6	H2	
N-Nitrosomethylethylamine	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	10595-95-6	H2,v3	
N-Nitrosopiperidine	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	100-75-4	H2	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Sample: CELL 7 PLCRS	Lab ID: 70197894001	Collected: 12/14/21 12:02	Received: 12/14/21 13:34	Matrix: Water					
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
8270 MSSV									
Analytical Method: EPA 8270D Preparation Method: EPA 3510C									
Pace Analytical Services - Melville									
N-Nitrosopyrrolidine	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	930-55-2	H2	
Naphthalene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	91-20-3	H2	
Nitrobenzene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	98-95-3	H2	
O,O,O-Triethylphosphorothioate	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	126-68-1	H2	
O-Toluidine	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	95-53-4	H2	
P-Dimethylaminoazobenzene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	60-11-7	H2	
Parathion (Ethyl parathion)	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	56-38-2	H2	
Pentachlorobenzene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	608-93-5	H2	
Pentachloronitrobenzene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	82-68-8	H2	
Pentachlorophenol	<10.0	ug/L	10.0	1	12/23/21 18:15	12/24/21 16:09	87-86-5	H2	
Phenacetin	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	62-44-2	H2	
Phenanthrene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	85-01-8	H2	
Phenol	350	ug/L	50.0	10	12/23/21 18:15	12/27/21 14:56	108-95-2	H2	
Pronamide	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	23950-58-5	H2	
Pyrene	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	129-00-0	H2	
Safrole	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	94-59-7	H2	
Thionazin	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	297-97-2	H2	
bis(2-Chloroethoxy)methane	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	111-91-1	H2	
bis(2-Chloroethyl) ether	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	111-44-4	H2	
bis(2-Ethylhexyl)phthalate	<5.0	ug/L	5.0	1	12/23/21 18:15	12/24/21 16:09	117-81-7	H2	
Surrogates									
Nitrobenzene-d5 (S)	79	%	38-113	1	12/23/21 18:15	12/24/21 16:09	4165-60-0		
2-Fluorobiphenyl (S)	80	%	42-110	1	12/23/21 18:15	12/24/21 16:09	321-60-8		
p-Terphenyl-d14 (S)	102	%	33-119	1	12/23/21 18:15	12/24/21 16:09	1718-51-0		
Phenol-d5 (S)	43	%	10-110	1	12/23/21 18:15	12/24/21 16:09	4165-62-2		
2-Fluorophenol (S)	63	%	12-110	1	12/23/21 18:15	12/24/21 16:09	367-12-4		
2,4,6-Tribromophenol (S)	119	%	57-131	10	12/23/21 18:15	12/27/21 14:56	118-79-6		
2-Chlorophenol-d4 (S)	73	%	43-110	1	12/23/21 18:15	12/24/21 16:09	93951-73-6		
1,2-Dichlorobenzene-d4 (S)	68	%	30-110	1	12/23/21 18:15	12/24/21 16:09	2199-69-1		
8260C SIM Volatile Organics									
Analytical Method: EPA 8260C SIM/5030C									
Pace Analytical Services - Melville									
1,4-Dioxane (p-Dioxane)	4.1	ug/L	0.20	1		12/19/21 18:58	123-91-1		
Surrogates									
1,2-Dichlorobenzene-d4 (S)	106	%	43-153	1		12/19/21 18:58	2199-69-1		
4-Bromofluorobenzene (S)	105	%	79-139	1		12/19/21 18:58	460-00-4		
8260C Volatile Organics									
Analytical Method: EPA 8260C/5030C									
Pace Analytical Services - Melville									
1,1,1,2-Tetrachloroethane	<1.0	ug/L	1.0	1		12/20/21 22:16	630-20-6		
1,1,1-Trichloroethane	<1.0	ug/L	1.0	1		12/20/21 22:16	71-55-6		
1,1,2,2-Tetrachloroethane	<1.0	ug/L	1.0	1		12/20/21 22:16	79-34-5		
1,1,2-Trichloroethane	<1.0	ug/L	1.0	1		12/20/21 22:16	79-00-5		
1,1-Dichloroethane	<1.0	ug/L	1.0	1		12/20/21 22:16	75-34-3		
1,1-Dichloroethene	<1.0	ug/L	1.0	1		12/20/21 22:16	75-35-4		
1,1-Dichloropropene	<1.0	ug/L	1.0	1		12/20/21 22:16	563-58-6		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Sample: CELL 7 PLCRS	Lab ID: 70197894001	Collected: 12/14/21 12:02	Received: 12/14/21 13:34	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics		Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville						
1,2,3-Trichloropropane	<1.0	ug/L	1.0	1		12/20/21 22:16	96-18-4	
1,2-Dibromo-3-chloropropane	<1.0	ug/L	1.0	1		12/20/21 22:16	96-12-8	v3
1,2-Dibromoethane (EDB)	<1.0	ug/L	1.0	1		12/20/21 22:16	106-93-4	IC
1,2-Dichlorobenzene	<1.0	ug/L	1.0	1		12/20/21 22:16	95-50-1	
1,2-Dichloroethane	<1.0	ug/L	1.0	1		12/20/21 22:16	107-06-2	
1,2-Dichloropropane	<1.0	ug/L	1.0	1		12/20/21 22:16	78-87-5	
1,3-Dichlorobenzene	<1.0	ug/L	1.0	1		12/20/21 22:16	541-73-1	
1,3-Dichloropropane	<1.0	ug/L	1.0	1		12/20/21 22:16	142-28-9	
1,4-Dichlorobenzene	<1.0	ug/L	1.0	1		12/20/21 22:16	106-46-7	
1,4-Dioxane (p-Dioxane)	<100	ug/L	100	1		12/20/21 22:16	123-91-1	
2,2-Dichloropropane	<1.0	ug/L	1.0	1		12/20/21 22:16	594-20-7	
2-Butanone (MEK)	27.2	ug/L	5.0	1		12/20/21 22:16	78-93-3	v3
2-Hexanone	<5.0	ug/L	5.0	1		12/20/21 22:16	591-78-6	
4-Methyl-2-pentanone (MIBK)	2.1J	ug/L	5.0	1		12/20/21 22:16	108-10-1	
Acetone	308	ug/L	10.0	2		12/21/21 22:51	67-64-1	
Acetonitrile	<5.0	ug/L	5.0	1		12/20/21 22:16	75-05-8	
Acrolein	<1.0	ug/L	1.0	1		12/20/21 22:16	107-02-8	v3
Acrylonitrile	<1.0	ug/L	1.0	1		12/20/21 22:16	107-13-1	
Allyl chloride	<4.0	ug/L	4.0	1		12/20/21 22:16	107-05-1	
Benzene	<1.0	ug/L	1.0	1		12/20/21 22:16	71-43-2	
Bromochloromethane	<1.0	ug/L	1.0	1		12/20/21 22:16	74-97-5	
Bromodichloromethane	<1.0	ug/L	1.0	1		12/20/21 22:16	75-27-4	IC
Bromoform	<1.0	ug/L	1.0	1		12/20/21 22:16	75-25-2	v3
Bromomethane	<1.0	ug/L	1.0	1		12/20/21 22:16	74-83-9	
Carbon disulfide	<1.0	ug/L	1.0	1		12/20/21 22:16	75-15-0	
Carbon tetrachloride	<1.0	ug/L	1.0	1		12/20/21 22:16	56-23-5	
Chlorobenzene	<1.0	ug/L	1.0	1		12/20/21 22:16	108-90-7	
Chloroethane	<1.0	ug/L	1.0	1		12/20/21 22:16	75-00-3	
Chloroform	<1.0	ug/L	1.0	1		12/20/21 22:16	67-66-3	
Chloromethane	<1.0	ug/L	1.0	1		12/20/21 22:16	74-87-3	
Chloroprene	<1.0	ug/L	1.0	1		12/20/21 22:16	126-99-8	
Dibromochloromethane	<1.0	ug/L	1.0	1		12/20/21 22:16	124-48-1	
Dibromomethane	<1.0	ug/L	1.0	1		12/20/21 22:16	74-95-3	
Dichlorodifluoromethane	<1.0	ug/L	1.0	1		12/20/21 22:16	75-71-8	
Ethyl methacrylate	<1.0	ug/L	1.0	1		12/20/21 22:16	97-63-2	
Ethylbenzene	<1.0	ug/L	1.0	1		12/20/21 22:16	100-41-4	
Iodomethane	<4.0	ug/L	4.0	1		12/20/21 22:16	74-88-4	
Isobutanol	<20.0	ug/L	20.0	1		12/20/21 22:16	78-83-1	
Methacrylonitrile	<1.0	ug/L	1.0	1		12/20/21 22:16	126-98-7	
Methyl methacrylate	<1.0	ug/L	1.0	1		12/20/21 22:16	80-62-6	
Methylene Chloride	<1.0	ug/L	1.0	1		12/20/21 22:16	75-09-2	
Propionitrile	<4.0	ug/L	4.0	1		12/20/21 22:16	107-12-0	
Styrene	<1.0	ug/L	1.0	1		12/20/21 22:16	100-42-5	
Tetrachloroethene	<1.0	ug/L	1.0	1		12/20/21 22:16	127-18-4	
Toluene	<1.0	ug/L	1.0	1		12/20/21 22:16	108-88-3	
Trichloroethene	<1.0	ug/L	1.0	1		12/20/21 22:16	79-01-6	

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ANALYTICAL RESULTS

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Sample: CELL 7 PLCRS	Lab ID: 70197894001	Collected: 12/14/21 12:02	Received: 12/14/21 13:34	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics		Analytical Method: EPA 8260C/5030C Pace Analytical Services - Melville						
Trichlorofluoromethane	<1.0	ug/L	1.0	1		12/20/21 22:16	75-69-4	
Vinyl acetate	<1.0	ug/L	1.0	1		12/20/21 22:16	108-05-4	
Vinyl chloride	<1.0	ug/L	1.0	1		12/20/21 22:16	75-01-4	
Xylene (Total)	<3.0	ug/L	3.0	1		12/20/21 22:16	1330-20-7	
cis-1,2-Dichloroethene	<1.0	ug/L	1.0	1		12/20/21 22:16	156-59-2	
cis-1,3-Dichloropropene	<1.0	ug/L	1.0	1		12/20/21 22:16	10061-01-5	
trans-1,2-Dichloroethene	<1.0	ug/L	1.0	1		12/20/21 22:16	156-60-5	
trans-1,3-Dichloropropene	<1.0	ug/L	1.0	1		12/20/21 22:16	10061-02-6	
trans-1,4-Dichloro-2-butene	<1.0	ug/L	1.0	1		12/20/21 22:16	110-57-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	100	%	81-122	1		12/20/21 22:16	17060-07-0	
4-Bromofluorobenzene (S)	99	%	79-118	1		12/20/21 22:16	460-00-4	
Toluene-d8 (S)	100	%	82-122	1		12/20/21 22:16	2037-26-5	
Tentatively Identified Compounds								
Sulfur dioxide	18.6J	ug/L		1		12/20/21 22:16	7446-09-5	N
Trimethylsilyl fluoride	5.6J	ug/L		1		12/20/21 22:16	420-56-4	N
Isopropyl Alcohol	11.7J	ug/L		1		12/20/21 22:16	67-63-0	N
Unknown	8.1J	ug/L		1		12/20/21 22:16		
Silane, methoxytrimethyl	29.4J	ug/L		1		12/20/21 22:16	1825-61-2	N
Silanol, trimethyl-	31.9J	ug/L		1		12/20/21 22:16	1066-40-6	N
Disiloxane, hexamethyl-	11.0J	ug/L		1		12/20/21 22:16	107-46-0	N
2120B W Apparent Color		Analytical Method: SM22 2120B Pace Analytical Services - Melville						
Apparent Color	70.0	units	50.0	10		12/16/21 10:19		
pH	6.7	Std. Units	0.10	10		12/16/21 10:19		
2320B Alkalinity		Analytical Method: SM22 2320B Pace Analytical Services - Melville						
Alkalinity, Total as CaCO3	344	mg/L	1.0	1		12/22/21 10:30		
2340C Hardness, Total		Analytical Method: SM22 2340C Pace Analytical Services - Melville						
Tot Hardness asCaCO3 (SM 2340B)	43000	mg/L	5.0	1		01/04/22 16:24		
2540C Total Dissolved Solids		Analytical Method: SM22 2540C Pace Analytical Services - Melville						
Total Dissolved Solids	37700	mg/L	200	1		12/21/21 16:18		
Chromium, Hexavalent		Analytical Method: SM22 3500-Cr B Pace Analytical Services - Melville						
Chromium, Hexavalent	<0.020	mg/L	0.020	1		12/15/21 11:41	18540-29-9	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: CELL 7 LEACHATE EXPANDED 12/14
Pace Project No.: 70197894

Sample: CELL 7 PLCRS		Lab ID: 70197894001	Collected: 12/14/21 12:02	Received: 12/14/21 13:34	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
410.4 COD								
Analytical Method: EPA 410.4 Preparation Method: EPA 410.4 Pace Analytical Services - Melville								
Chemical Oxygen Demand	3080	mg/L	200	1	12/23/21 06:04	12/23/21 08:19		
5210B BOD, 5 day								
Analytical Method: SM22 5210B Preparation Method: SM22 5210B Pace Analytical Services - Melville								
BOD, 5 day	529	mg/L	66.7	33.33	12/15/21 14:30	12/20/21 10:38		
9034 Sulfide, Titration								
Analytical Method: EPA 9034 Preparation Method: EPA 9030B Pace Analytical Services - Melville								
Sulfide	20.8	mg/L	2.0	1	12/21/21 11:28	12/21/21 15:09		
300.0 IC Anions 28 Days								
Analytical Method: EPA 300.0 Pace Analytical Services - Melville								
Bromide	534	mg/L	100	200		01/09/22 12:19	24959-67-9	
Chloride	63200	mg/L	4000	2000		01/10/22 01:00	16887-00-6	
Sulfate	171	mg/L	100	20		01/06/22 14:16	14808-79-8	
351.2 Total Kjeldahl Nitrogen								
Analytical Method: EPA 351.2 Preparation Method: EPA 351.2 Pace Analytical Services - Melville								
Nitrogen, Kjeldahl, Total	248	mg/L	5.0	10	12/20/21 06:22	12/21/21 17:21	7727-37-9	
353.2 Nitrogen, NO2/NO3 pres.								
Analytical Method: EPA 353.2 Pace Analytical Services - Melville								
Nitrate as N	<0.050	mg/L	0.050	1		12/17/21 21:46	14797-55-8	
Nitrate-Nitrite (as N)	<0.050	mg/L	0.050	1		12/17/21 21:46	7727-37-9	
353.2 Nitrogen, NO2								
Analytical Method: EPA 353.2 Pace Analytical Services - Melville								
Nitrite as N	<0.050	mg/L	0.050	1		12/15/21 23:20	14797-65-0	
Phenolics, Total Recoverable								
Analytical Method: EPA 420.1 Preparation Method: EPA 420.1 Pace Analytical Services - Melville								
Phenolics, Total Recoverable	689	ug/L	100	20	01/10/22 12:45	01/11/22 14:33		
4500 Ammonia Water								
Analytical Method: SM22 4500 NH3 H Pace Analytical Services - Melville								
Nitrogen, Ammonia	356	mg/L	20.0	200		12/29/21 12:28	7664-41-7	
9014 Cyanide, Total								
Analytical Method: EPA 9014 Total Cyanide Preparation Method: EPA 9010C Pace Analytical Services - Melville								
Cyanide	34.0	ug/L	10.0	1	12/16/21 19:06	12/16/21 21:18	57-12-5	
9060A TOC as NPOC								
Analytical Method: EPA 9060A Pace Analytical Services - Melville								
Total Organic Carbon	273	mg/L	10.0	10		12/21/21 20:45	7440-44-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Sample: CELL 7 PLCRS		Lab ID: 70197894001	Collected: 12/14/21 12:02	Received: 12/14/21 13:34	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9060A TOC as NPOC		Analytical Method: EPA 9060A Pace Analytical Services - Melville						
Total Organic Carbon	273	mg/L	10.0	10		12/21/21 20:45	7440-44-0	
Total Organic Carbon	275	mg/L	10.0	10		12/21/21 20:45	7440-44-0	
Total Organic Carbon	273	mg/L	10.0	10		12/21/21 20:45	7440-44-0	
Mean Total Organic Carbon	273	mg/L	10.0	10		12/21/21 20:45	7440-44-0	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14
Pace Project No.: 70197894

QC Batch: 1791358 Analysis Method: EPA 8151A
QC Batch Method: 8151A Analysis Description: Chlorinated Herb. (GC) 8151A
Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 70197894001

METHOD BLANK: R3744645-1 Matrix: Water
Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2,4-D	ug/L	<2.00	2.00	12/22/21 11:29	
Dalapon	ug/L	<2.00	2.00	12/22/21 11:29	
2,4-DB	ug/L	<2.00	2.00	12/22/21 11:29	
Dicamba	ug/L	<2.00	2.00	12/22/21 11:29	
Dichloroprop	ug/L	<2.00	2.00	12/22/21 11:29	
Dinoseb	ug/L	<2.00	2.00	12/22/21 11:29	
MCPA	ug/L	<100	100	12/22/21 11:29	
MCPP	ug/L	<100	100	12/22/21 11:29	
2,4,5-T	ug/L	<2.00	2.00	12/22/21 11:29	
2,4,5-TP (Silvex)	ug/L	<2.00	2.00	12/22/21 11:29	
2,4-DCAA (S)	%	89.6	14.0-158	12/22/21 11:29	

LABORATORY CONTROL SAMPLE & LCSD: R3744645-2 R3744645-3

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
2,4-D	ug/L	5.00	5.06	4.89	101	97.8	50.0-120	3.42	20	
Dalapon	ug/L	5.00	4.14	3.95	82.8	79.0	32.0-120	4.70	20	
2,4-DB	ug/L	5.00	4.95	5.08	99.0	102	53.0-140	2.59	20	P9
Dicamba	ug/L	5.00	5.21	4.99	104	99.8	51.0-120	4.31	20	
Dichloroprop	ug/L	5.00	5.30	4.99	106	99.8	55.0-127	6.03	20	
Dinoseb	ug/L	5.00	5.75	5.53	115	111	36.0-134	3.90	20	
MCPA	ug/L	500	926	817	185	163	10.0-160	12.5	40	L0,P9
MCPP	ug/L	500	459	439	91.8	87.8	10.0-160	4.45	23	
2,4,5-T	ug/L	5.00	4.74	4.58	94.8	91.6	54.0-120	3.43	20	
2,4,5-TP (Silvex)	ug/L	5.00	7.52	4.52	150	90.4	50.0-125	49.8	20	L0,P9,R1
2,4-DCAA (S)	%				98.4	99.8	14.0-158			

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

QC Batch: 239605

Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A

Analysis Description: 7470 Mercury

Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197894001

METHOD BLANK: 1210725

Matrix: Water

Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	<0.20	0.20	01/06/22 15:43	

LABORATORY CONTROL SAMPLE: 1210726

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	1	0.82	82	80-120	

MATRIX SPIKE SAMPLE: 1210727

Parameter	Units	70197894001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	<0.20	1	0.25	25	75-125	M1

SAMPLE DUPLICATE: 1210728

Parameter	Units	70197894001 Result	Dup Result	RPD	Qualifiers
Mercury	ug/L	<0.20	<0.20		

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14
Pace Project No.: 70197894

QC Batch: 240540 Analysis Method: EPA 6010C
QC Batch Method: EPA 3005A Analysis Description: 6010 MET Water
Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197894001

METHOD BLANK: 1215208 Matrix: Water
Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum	ug/L	<200	200	01/17/22 10:56	
Antimony	ug/L	<60.0	60.0	01/17/22 10:56	
Arsenic	ug/L	<10.0	10.0	01/17/22 10:56	
Barium	ug/L	<200	200	01/17/22 10:56	
Beryllium	ug/L	<5.0	5.0	01/17/22 10:56	
Boron	ug/L	<50.0	50.0	01/17/22 10:56	
Cadmium	ug/L	<2.5	2.5	01/17/22 10:56	
Calcium	ug/L	<200	200	01/17/22 10:56	
Chromium	ug/L	<10.0	10.0	01/17/22 10:56	
Cobalt	ug/L	<50.0	50.0	01/17/22 10:56	
Copper	ug/L	<25.0	25.0	01/17/22 10:56	
Iron	ug/L	<100	100	01/17/22 10:56	
Lead	ug/L	<5.0	5.0	01/17/22 10:56	
Magnesium	ug/L	<200	200	01/17/22 10:56	
Manganese	ug/L	<10.0	10.0	01/17/22 10:56	
Nickel	ug/L	<40.0	40.0	01/17/22 10:56	
Potassium	ug/L	<5000	5000	01/17/22 10:56	
Selenium	ug/L	<10.0	10.0	01/17/22 10:56	
Silver	ug/L	<10.0	10.0	01/17/22 10:56	
Sodium	ug/L	<5000	5000	01/17/22 10:56	
Thallium	ug/L	<10.0	10.0	01/17/22 10:56	
Tin	ug/L	<50.0	50.0	01/17/22 10:56	
Vanadium	ug/L	<50.0	50.0	01/17/22 10:56	
Zinc	ug/L	<20.0	20.0	01/17/22 10:56	

LABORATORY CONTROL SAMPLE: 1215209

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	25000	26800	107	80-120	
Antimony	ug/L	1000	1050	105	80-120	
Arsenic	ug/L	500	526	105	80-120	
Barium	ug/L	500	520	104	80-120	
Beryllium	ug/L	500	536	107	80-120	
Boron	ug/L	1000	1110	111	80-120	
Cadmium	ug/L	500	518	104	80-120	
Calcium	ug/L	25000	27000	108	80-120	
Chromium	ug/L	500	521	104	80-120	
Cobalt	ug/L	500	524	105	80-120	
Copper	ug/L	500	533	107	80-120	

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

LABORATORY CONTROL SAMPLE: 1215209

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	12500	13100	105	80-120	
Lead	ug/L	500	527	105	80-120	
Magnesium	ug/L	25000	26500	106	80-120	
Manganese	ug/L	500	524	105	80-120	
Nickel	ug/L	500	528	106	80-120	
Potassium	ug/L	25000	27000	108	80-120	
Selenium	ug/L	500	533	107	80-120	
Silver	ug/L	250	262	105	80-120	
Sodium	ug/L	25000	26700	107	80-120	
Thallium	ug/L	250	262	105	80-120	
Tin	ug/L	1000	1040	104	80-120	
Vanadium	ug/L	500	529	106	80-120	
Zinc	ug/L	500	531	106	80-120	

MATRIX SPIKE SAMPLE: 1215211

Parameter	Units	70197894001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Aluminum	ug/L	<20000	25000	23200	93	75-125	
Antimony	ug/L	<600	1000	1160	111	75-125	
Arsenic	ug/L	<100	500	429	86	75-125	
Barium	ug/L	8190	500	8220	6	75-125	M1
Beryllium	ug/L	<50.0	500	531	106	75-125	
Boron	ug/L	793	1000	1860	107	75-125	
Cadmium	ug/L	<25.0	500	491	98	75-125	
Calcium	ug/L	14900000	25000	14200000	-2800	75-125	M1
Chromium	ug/L	<100	500	503	101	75-125	
Cobalt	ug/L	<500	500	503	101	75-125	
Copper	ug/L	386	500	948	112	75-125	
Iron	ug/L	<1000	12500	12800	101	75-125	
Lead	ug/L	<50.0	500	439	88	75-125	
Magnesium	ug/L	4910	25000	29000	96	75-125	
Manganese	ug/L	526	500	1030	101	75-125	
Nickel	ug/L	<400	500	559	104	75-125	
Potassium	ug/L	8790000	25000	8370000	-1680	75-125	M1
Selenium	ug/L	<100	500	512	92	75-125	
Silver	ug/L	14.5J	250	233	87	75-125	
Sodium	ug/L	13900000	25000	13200000	-2800	75-125	M1
Thallium	ug/L	<100	250	157	63	75-125	M1
Tin	ug/L	<500	1000	1020	97	75-125	
Vanadium	ug/L	48.2J	500	586	108	75-125	
Zinc	ug/L	<200	500	436	87	75-125	

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

SAMPLE DUPLICATE: 1215210

Parameter	Units	70197894001 Result	Dup Result	RPD	Qualifiers
Aluminum	ug/L	<20000	<20000		
Antimony	ug/L	<600	<600		
Arsenic	ug/L	<100	<100		
Barium	ug/L	8190	8450	3	
Beryllium	ug/L	<50.0	<50.0		
Boron	ug/L	793	796	0	
Cadmium	ug/L	<25.0	<25.0		
Calcium	ug/L	14900000	14400000	3	
Chromium	ug/L	<100	<100		
Cobalt	ug/L	<500	<500		
Copper	ug/L	386	443	14	
Iron	ug/L	<1000	<1000		
Lead	ug/L	<50.0	<500		
Magnesium	ug/L	4910	5090	4	
Manganese	ug/L	526	543	3	
Nickel	ug/L	<400	<400		
Potassium	ug/L	8790000	8520000	3	
Selenium	ug/L	<100	<100		
Silver	ug/L	14.5J	16.9J		
Sodium	ug/L	13900000	13500000	3	
Thallium	ug/L	<100	<100		
Tin	ug/L	<500	<500		
Vanadium	ug/L	48.2J	48.2J		
Zinc	ug/L	<200	<200		

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

QC Batch: 1791214

Analysis Method: EPA 8270E

QC Batch Method: 3510C

Analysis Description: SVOA (GC/MS) 8270E

Laboratory: Pace National - Mt. Juliet

Associated Lab Samples: 70197894001

METHOD BLANK: R3742535-3

Matrix: Water

Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
p-Phenylenediamine	ug/L	<6900	6900	12/19/21 13:18	
Kepone	ug/L	<20.0	20.0	12/19/21 13:18	
Famphur	ug/L	<20.0	20.0	12/19/21 13:18	

LABORATORY CONTROL SAMPLE: R3742535-2

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
p-Phenylenediamine	ug/L	50.0	<6900	0.00	50.0-150	L0
Kepone	ug/L	50.0	26.3	52.6	10.0-120	
Famphur	ug/L	50.0	38.7	77.4	32.0-120	

MATRIX SPIKE SAMPLE: R3742535-4

Parameter	Units	70197894001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
p-Phenylenediamine	ug/L	ND	50.0	<6900	0.00	60.0-140	ML
Kepone	ug/L	ND	50.0	<20.0	0.00	10.0-120	ML
Famphur	ug/L	ND	50.0	29.3	58.6	32.0-120	

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

QC Batch: 237659	Analysis Method: EPA 8260C SIM/5030C
QC Batch Method: EPA 8260C SIM/5030C	Analysis Description: 8260C SIM 5030C
	Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197894001

METHOD BLANK: 1200544 Matrix: Water

Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	<0.20	0.20	12/19/21 16:58	
1,2-Dichlorobenzene-d4 (S)	%	109	43-153	12/19/21 16:58	
4-Bromofluorobenzene (S)	%	104	79-139	12/19/21 16:58	

LABORATORY CONTROL SAMPLE: 1200545

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dioxane (p-Dioxane)	ug/L	2.5	2.0	79	59-135	
1,2-Dichlorobenzene-d4 (S)	%			102	43-153	
4-Bromofluorobenzene (S)	%			101	79-139	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1200546 1200547

Parameter	Units	70197895003		1200546		1200547		% Rec	% Rec	% Rec Limits	RPD	Qual
		Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec					
1,4-Dioxane (p-Dioxane)	ug/L	2.0	2.5	2.5	4.7	4.5	107	100	42-159	4		
1,2-Dichlorobenzene-d4 (S)	%						81	97	43-153			
4-Bromofluorobenzene (S)	%						82	88	79-139			

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

QC Batch: 237770

Analysis Method: EPA 8260C/5030C

QC Batch Method: EPA 8260C/5030C

Analysis Description: 8260 MSV

Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197894001

METHOD BLANK: 1200861

Matrix: Water

Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<1.0	1.0	12/20/21 14:45	
1,1,1-Trichloroethane	ug/L	<1.0	1.0	12/20/21 14:45	
1,1,2,2-Tetrachloroethane	ug/L	<1.0	1.0	12/20/21 14:45	
1,1,2-Trichloroethane	ug/L	<1.0	1.0	12/20/21 14:45	
1,1-Dichloroethane	ug/L	<1.0	1.0	12/20/21 14:45	
1,1-Dichloroethene	ug/L	<1.0	1.0	12/20/21 14:45	
1,1-Dichloropropene	ug/L	<1.0	1.0	12/20/21 14:45	
1,2,3-Trichloropropane	ug/L	<1.0	1.0	12/20/21 14:45	
1,2-Dibromo-3-chloropropane	ug/L	<1.0	1.0	12/20/21 14:45	v3
1,2-Dibromoethane (EDB)	ug/L	<1.0	1.0	12/20/21 14:45	IC
1,2-Dichlorobenzene	ug/L	<1.0	1.0	12/20/21 14:45	
1,2-Dichloroethane	ug/L	<1.0	1.0	12/20/21 14:45	
1,2-Dichloropropane	ug/L	<1.0	1.0	12/20/21 14:45	
1,3-Dichlorobenzene	ug/L	<1.0	1.0	12/20/21 14:45	
1,3-Dichloropropane	ug/L	<1.0	1.0	12/20/21 14:45	
1,4-Dichlorobenzene	ug/L	<1.0	1.0	12/20/21 14:45	
1,4-Dioxane (p-Dioxane)	ug/L	<100	100	12/20/21 14:45	
2,2-Dichloropropane	ug/L	<1.0	1.0	12/20/21 14:45	
2-Butanone (MEK)	ug/L	<5.0	5.0	12/20/21 14:45	v3
2-Hexanone	ug/L	<5.0	5.0	12/20/21 14:45	
4-Methyl-2-pentanone (MIBK)	ug/L	<5.0	5.0	12/20/21 14:45	
Acetone	ug/L	<5.0	5.0	12/20/21 14:45	v3
Acetonitrile	ug/L	<5.0	5.0	12/20/21 14:45	
Acrolein	ug/L	<1.0	1.0	12/20/21 14:45	v3
Acrylonitrile	ug/L	<1.0	1.0	12/20/21 14:45	
Allyl chloride	ug/L	<4.0	4.0	12/20/21 14:45	
Benzene	ug/L	<1.0	1.0	12/20/21 14:45	
Bromochloromethane	ug/L	<1.0	1.0	12/20/21 14:45	
Bromodichloromethane	ug/L	<1.0	1.0	12/20/21 14:45	IC
Bromoform	ug/L	<1.0	1.0	12/20/21 14:45	v3
Bromomethane	ug/L	<1.0	1.0	12/20/21 14:45	
Carbon disulfide	ug/L	<1.0	1.0	12/20/21 14:45	
Carbon tetrachloride	ug/L	<1.0	1.0	12/20/21 14:45	
Chlorobenzene	ug/L	<1.0	1.0	12/20/21 14:45	
Chloroethane	ug/L	<1.0	1.0	12/20/21 14:45	
Chloroform	ug/L	<1.0	1.0	12/20/21 14:45	
Chloromethane	ug/L	<1.0	1.0	12/20/21 14:45	
Chloroprene	ug/L	<1.0	1.0	12/20/21 14:45	
cis-1,2-Dichloroethene	ug/L	<1.0	1.0	12/20/21 14:45	
cis-1,3-Dichloropropene	ug/L	<1.0	1.0	12/20/21 14:45	

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

METHOD BLANK: 1200861

Matrix: Water

Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromochloromethane	ug/L	<1.0	1.0	12/20/21 14:45	
Dibromomethane	ug/L	<1.0	1.0	12/20/21 14:45	
Dichlorodifluoromethane	ug/L	<1.0	1.0	12/20/21 14:45	
Ethyl methacrylate	ug/L	<1.0	1.0	12/20/21 14:45	
Ethylbenzene	ug/L	<1.0	1.0	12/20/21 14:45	
Iodomethane	ug/L	<4.0	4.0	12/20/21 14:45	
Isobutanol	ug/L	<20.0	20.0	12/20/21 14:45	
Methacrylonitrile	ug/L	<1.0	1.0	12/20/21 14:45	
Methyl methacrylate	ug/L	<1.0	1.0	12/20/21 14:45	
Methylene Chloride	ug/L	<1.0	1.0	12/20/21 14:45	
Propionitrile	ug/L	<4.0	4.0	12/20/21 14:45	
Styrene	ug/L	<1.0	1.0	12/20/21 14:45	
Tetrachloroethene	ug/L	<1.0	1.0	12/20/21 14:45	
Toluene	ug/L	<1.0	1.0	12/20/21 14:45	
trans-1,2-Dichloroethene	ug/L	<1.0	1.0	12/20/21 14:45	
trans-1,3-Dichloropropene	ug/L	<1.0	1.0	12/20/21 14:45	
trans-1,4-Dichloro-2-butene	ug/L	<1.0	1.0	12/20/21 14:45	
Trichloroethene	ug/L	<1.0	1.0	12/20/21 14:45	
Trichlorofluoromethane	ug/L	<1.0	1.0	12/20/21 14:45	
Vinyl acetate	ug/L	<1.0	1.0	12/20/21 14:45	
Vinyl chloride	ug/L	<1.0	1.0	12/20/21 14:45	
Xylene (Total)	ug/L	<3.0	3.0	12/20/21 14:45	
1,2-Dichloroethane-d4 (S)	%	99	81-122	12/20/21 14:45	
4-Bromofluorobenzene (S)	%	99	79-118	12/20/21 14:45	
Toluene-d8 (S)	%	101	82-122	12/20/21 14:45	

LABORATORY CONTROL SAMPLE: 1200862

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	49.6	99	75-122	
1,1,1-Trichloroethane	ug/L	50	48.2	96	72-126	
1,1,2,2-Tetrachloroethane	ug/L	50	50.6	101	70-127	
1,1,2-Trichloroethane	ug/L	50	51.0	102	81-119	
1,1-Dichloroethane	ug/L	50	46.6	93	72-126	
1,1-Dichloroethene	ug/L	50	47.0	94	66-133	
1,1-Dichloropropene	ug/L	50	48.4	97	69-124	
1,2,3-Trichloropropane	ug/L	50	54.0	108	69-120	
1,2-Dibromo-3-chloropropane	ug/L	50	39.8	80	47-133 v3	
1,2-Dibromoethane (EDB)	ug/L	50	56.8	114	81-123 IC	
1,2-Dichlorobenzene	ug/L	50	50.4	101	80-117	
1,2-Dichloroethane	ug/L	50	51.2	102	69-134	
1,2-Dichloropropane	ug/L	50	51.1	102	75-125	
1,3-Dichlorobenzene	ug/L	50	50.8	102	82-116	
1,3-Dichloropropane	ug/L	50	52.8	106	81-118	

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

LABORATORY CONTROL SAMPLE: 1200862

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	50.8	102	80-117	
1,4-Dioxane (p-Dioxane)	ug/L	1250	1270	102	32-175	
2,2-Dichloropropane	ug/L	50	43.2	86	47-151	
2-Butanone (MEK)	ug/L	50	33.8	68	33-165 v3	
2-Hexanone	ug/L	50	37.8	76	50-128	
4-Methyl-2-pentanone (MIBK)	ug/L	50	50.5	101	62-131	
Acetone	ug/L	50	24.9	50	14-156 v3	
Acetonitrile	ug/L	250	233	93	60-146	
Acrolein	ug/L	50	43.6	87	10-204 v3	
Acrylonitrile	ug/L	50	44.9	90	60-136	
Allyl chloride	ug/L	50	44.6	89	60-131	
Benzene	ug/L	50	52.7	105	78-117	
Bromochloromethane	ug/L	50	50.9	102	77-122	
Bromodichloromethane	ug/L	50	50.1	100	80-123 IC	
Bromoform	ug/L	50	37.5	75	49-138 v3	
Bromomethane	ug/L	50	48.4	97	10-143	
Carbon disulfide	ug/L	50	42.9	86	66-133	
Carbon tetrachloride	ug/L	50	44.7	89	64-135	
Chlorobenzene	ug/L	50	53.0	106	79-117	
Chloroethane	ug/L	50	44.8	90	31-156	
Chloroform	ug/L	50	49.5	99	79-123	
Chloromethane	ug/L	50	43.1	86	39-116	
Chloroprene	ug/L	50	45.2	90	63-126	
cis-1,2-Dichloroethene	ug/L	50	49.0	98	77-125	
cis-1,3-Dichloropropene	ug/L	50	47.2	94	78-131	
Dibromochloromethane	ug/L	50	42.9	86	65-123	
Dibromomethane	ug/L	50	53.7	107	81-123	
Dichlorodifluoromethane	ug/L	50	51.4	103	13-149	
Ethyl methacrylate	ug/L	50	51.9	104	62-140	
Ethylbenzene	ug/L	50	51.3	103	79-115	
Iodomethane	ug/L	50	42.2	84	10-183	
Isobutanol	ug/L	250	162	65	25-162	
Methacrylonitrile	ug/L	50	46.6	93	59-139	
Methyl methacrylate	ug/L	50	51.7	103	66-133	
Methylene Chloride	ug/L	50	48.2	96	67-123	
Propionitrile	ug/L	50	44.6	89	58-137	
Styrene	ug/L	50	54.2	108	82-121	
Tetrachloroethene	ug/L	50	49.5	99	65-120	
Toluene	ug/L	50	51.0	102	80-114	
trans-1,2-Dichloroethene	ug/L	50	46.5	93	74-123	
trans-1,3-Dichloropropene	ug/L	50	45.8	92	73-135	
trans-1,4-Dichloro-2-butene	ug/L	50	50.0	100	52-137	
Trichloroethene	ug/L	50	50.1	100	79-115	
Trichlorofluoromethane	ug/L	50	50.6	101	51-136	
Vinyl acetate	ug/L	50	50.6	101	49-136	
Vinyl chloride	ug/L	50	45.0	90	49-118	
Xylene (Total)	ug/L	150	154	103	80-118	

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

LABORATORY CONTROL SAMPLE: 1200862

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane-d4 (S)	%			98	81-122	
4-Bromofluorobenzene (S)	%			99	79-118	
Toluene-d8 (S)	%			100	82-122	

MATRIX SPIKE SAMPLE: 1201856

Parameter	Units	70198349005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<1.0	50	46.7	93	65-122	
1,1,1-Trichloroethane	ug/L	<1.0	50	47.4	95	72-123	
1,1,2,2-Tetrachloroethane	ug/L	<1.0	50	46.8	94	64-133	
1,1,2-Trichloroethane	ug/L	<1.0	50	47.3	95	78-120	
1,1-Dichloroethane	ug/L	<1.0	50	46.5	93	70-124	
1,1-Dichloroethene	ug/L	<1.0	50	47.9	96	61-139	
1,1-Dichloropropene	ug/L	<1.0	50	47.9	96	71-125	
1,2,3-Trichloropropane	ug/L	<1.0	50	48.4	97	64-120	
1,2-Dibromo-3-chloropropane	ug/L	<1.0	50	36.3	73	32-137	v3
1,2-Dibromoethane (EDB)	ug/L	<1.0	50	52.3	105	78-121	IC
1,2-Dichlorobenzene	ug/L	<1.0	50	49.6	99	75-120	
1,2-Dichloroethane	ug/L	<1.0	50	49.2	98	58-138	
1,2-Dichloropropane	ug/L	<1.0	50	48.7	97	74-122	
1,3-Dichlorobenzene	ug/L	<1.0	50	50.4	101	78-119	
1,3-Dichloropropane	ug/L	<1.0	50	49.2	98	74-118	
1,4-Dichlorobenzene	ug/L	<1.0	50	50.4	101	76-118	
1,4-Dioxane (p-Dioxane)	ug/L	<100	1250	1090	87	10-192	
2,2-Dichloropropane	ug/L	<1.0	50	43.0	86	43-136	
2-Butanone (MEK)	ug/L	<5.0	50	31.0	62	33-148	v3
2-Hexanone	ug/L	<5.0	50	33.3	67	49-124	
4-Methyl-2-pentanone (MIBK)	ug/L	<5.0	50	44.0	88	60-136	
Acetone	ug/L	<5.0	50	19.8	40	35-112	v3
Acetonitrile	ug/L	<5.0	250	217	87	57-124	
Acrolein	ug/L	<1.0	50	113	226	11-209	M1,v3
Acrylonitrile	ug/L	<1.0	50	40.4	81	45-132	
Allyl chloride	ug/L	<4.0	50	43.4	87	65-120	
Benzene	ug/L	<1.0	50	51.4	103	70-130	
Bromochloromethane	ug/L	<1.0	50	49.8	100	70-122	
Bromodichloromethane	ug/L	<1.0	50	46.1	92	74-122	IC
Bromoform	ug/L	<1.0	50	32.8	66	39-139	v3
Bromomethane	ug/L	<1.0	50	13.4	27	10-130	
Carbon disulfide	ug/L	<1.0	50	50.0	100	60-129	
Carbon tetrachloride	ug/L	<1.0	50	42.6	85	56-143	
Chlorobenzene	ug/L	<1.0	50	51.5	103	74-122	
Chloroethane	ug/L	<1.0	50	43.7	87	35-146	
Chloroform	ug/L	<1.0	50	48.7	97	71-129	
Chloromethane	ug/L	<1.0	50	34.2	68	29-112	
Chloroprene	ug/L	<1.0	50	46.1	92	76-114	

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

MATRIX SPIKE SAMPLE: 1201856		70198349005	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
cis-1,2-Dichloroethene	ug/L	<1.0	50	48.2	96	73-129	
cis-1,3-Dichloropropene	ug/L	<1.0	50	43.6	87	67-130	
Dibromochloromethane	ug/L	<1.0	50	38.6	77	55-126	
Dibromomethane	ug/L	<1.0	50	49.9	100	71-127	
Dichlorodifluoromethane	ug/L	<1.0	50	36.2	72	10-123	
Ethyl methacrylate	ug/L	<1.0	50	48.4	97	36-135	
Ethylbenzene	ug/L	<1.0	50	51.6	103	70-126	
Iodomethane	ug/L	<4.0	50	25.0	50	10-167	
Isobutanol	ug/L	<20.0	250	160	64	30-134	
Methacrylonitrile	ug/L	<1.0	50	43.8	88	26-132	
Methyl methacrylate	ug/L	<1.0	50	47.4	95	35-130	
Methylene Chloride	ug/L	<1.0	50	46.4	93	69-117	
Propionitrile	ug/L	<4.0	50	40.0	80	23-128	
Styrene	ug/L	<1.0	50	53.3	107	79-123	
Tetrachloroethene	ug/L	<1.0	50	48.4	97	64-124	
Toluene	ug/L	<1.0	50	50.0	100	76-123	
trans-1,2-Dichloroethene	ug/L	<1.0	50	46.9	94	69-127	
trans-1,3-Dichloropropene	ug/L	<1.0	50	41.7	83	61-130	
trans-1,4-Dichloro-2-butene	ug/L	<1.0	50	25.8	52	18-144	
Trichloroethene	ug/L	<1.0	50	49.1	98	73-125	
Trichlorofluoromethane	ug/L	<1.0	50	50.5	101	59-129	
Vinyl acetate	ug/L	<1.0	50	42.3	85	34-123	
Vinyl chloride	ug/L	<1.0	50	43.0	86	33-127	
Xylene (Total)	ug/L	<3.0	150	154	103	78-123	
1,2-Dichloroethane-d4 (S)	%				96	81-122	
4-Bromofluorobenzene (S)	%				101	79-118	
Toluene-d8 (S)	%				101	82-122	

SAMPLE DUPLICATE: 1201855

Parameter	Units	70198349001	Dup	RPD	Qualifiers
		Result	Result		
1,1,1,2-Tetrachloroethane	ug/L	<1.0	<1.0		
1,1,1-Trichloroethane	ug/L	<1.0	<1.0		
1,1,2,2-Tetrachloroethane	ug/L	<1.0	<1.0		
1,1,2-Trichloroethane	ug/L	<1.0	<1.0		
1,1-Dichloroethane	ug/L	<1.0	<1.0		
1,1-Dichloroethene	ug/L	<1.0	<1.0		
1,1-Dichloropropene	ug/L	<1.0	<1.0		
1,2,3-Trichloropropane	ug/L	<1.0	<1.0		
1,2-Dibromo-3-chloropropane	ug/L	<1.0	<1.0		v3
1,2-Dibromoethane (EDB)	ug/L	<1.0	<1.0		IC
1,2-Dichlorobenzene	ug/L	<1.0	<1.0		
1,2-Dichloroethane	ug/L	<1.0	<1.0		
1,2-Dichloropropane	ug/L	<1.0	<1.0		
1,3-Dichlorobenzene	ug/L	<1.0	<1.0		

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

SAMPLE DUPLICATE: 1201855

Parameter	Units	70198349001 Result	Dup Result	RPD	Qualifiers
1,3-Dichloropropane	ug/L	<1.0	<1.0		
1,4-Dichlorobenzene	ug/L	<1.0	<1.0		
1,4-Dioxane (p-Dioxane)	ug/L	<100	<100		
2,2-Dichloropropane	ug/L	<1.0	<1.0		
2-Butanone (MEK)	ug/L	<5.0	2.9J		v3
2-Hexanone	ug/L	<5.0	<5.0		
4-Methyl-2-pentanone (MIBK)	ug/L	<5.0	<5.0		
Acetone	ug/L	9.0	10.7	17	v3
Acetonitrile	ug/L	<5.0	<5.0		
Acrolein	ug/L	<1.0	<1.0		v3
Acrylonitrile	ug/L	<1.0	<1.0		
Allyl chloride	ug/L	<4.0	<4.0		
Benzene	ug/L	<1.0	<1.0		
Bromochloromethane	ug/L	<1.0	<1.0		
Bromodichloromethane	ug/L	<1.0	<1.0		IC
Bromoform	ug/L	<1.0	<1.0		v3
Bromomethane	ug/L	<1.0	<1.0		
Carbon disulfide	ug/L	1.7	2.9	52	D6
Carbon tetrachloride	ug/L	<1.0	<1.0		
Chlorobenzene	ug/L	<1.0	<1.0		
Chloroethane	ug/L	<1.0	<1.0		
Chloroform	ug/L	<1.0	<1.0		
Chloromethane	ug/L	<1.0	<1.0		
Chloroprene	ug/L	<1.0	<1.0		
cis-1,2-Dichloroethene	ug/L	<1.0	<1.0		
cis-1,3-Dichloropropene	ug/L	<1.0	<1.0		
Dibromochloromethane	ug/L	<1.0	<1.0		
Dibromomethane	ug/L	<1.0	<1.0		
Dichlorodifluoromethane	ug/L	<1.0	<1.0		
Ethyl methacrylate	ug/L	<1.0	<1.0		
Ethylbenzene	ug/L	<1.0	<1.0		
Iodomethane	ug/L	<4.0	<4.0		
Isobutanol	ug/L	<20.0	<20.0		
Methacrylonitrile	ug/L	<1.0	<1.0		
Methyl methacrylate	ug/L	<1.0	<1.0		
Methylene Chloride	ug/L	<1.0	<1.0		
Propionitrile	ug/L	<4.0	<4.0		
Styrene	ug/L	<1.0	<1.0		
Tetrachloroethene	ug/L	<1.0	<1.0		
Toluene	ug/L	11.3	12.2	8	
trans-1,2-Dichloroethene	ug/L	<1.0	<1.0		
trans-1,3-Dichloropropene	ug/L	<1.0	<1.0		
trans-1,4-Dichloro-2-butene	ug/L	<1.0	<1.0		
Trichloroethene	ug/L	<1.0	<1.0		
Trichlorofluoromethane	ug/L	<1.0	<1.0		
Vinyl acetate	ug/L	<1.0	<1.0		
Vinyl chloride	ug/L	<1.0	<1.0		

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

SAMPLE DUPLICATE: 1201855

Parameter	Units	70198349001 Result	Dup Result	RPD	Qualifiers
Xylene (Total)	ug/L	<3.0	<3.0		
1,2-Dichloroethane-d4 (S)	%	98	100		
4-Bromofluorobenzene (S)	%	100	99		
Toluene-d8 (S)	%	101	100		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14
Pace Project No.: 70197894

QC Batch: 237475 Analysis Method: EPA 8081B
QC Batch Method: EPA 3510C Analysis Description: 8081 GCS Pesticides
Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197894001

METHOD BLANK: 1199569 Matrix: Water
Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
4,4'-DDD	ug/L	<0.10	0.10	12/20/21 20:38	
4,4'-DDE	ug/L	<0.10	0.10	12/20/21 20:38	
4,4'-DDT	ug/L	<0.10	0.10	12/20/21 20:38	
Aldrin	ug/L	<0.050	0.050	12/20/21 20:38	
alpha-BHC	ug/L	<0.050	0.050	12/20/21 20:38	
beta-BHC	ug/L	<0.050	0.050	12/20/21 20:38	
delta-BHC	ug/L	<0.050	0.050	12/20/21 20:38	
Dieldrin	ug/L	<0.10	0.10	12/20/21 20:38	
Endosulfan I	ug/L	<0.050	0.050	12/20/21 20:38	
Endosulfan II	ug/L	<0.10	0.10	12/20/21 20:38	
Endosulfan sulfate	ug/L	<0.10	0.10	12/20/21 20:38	
Endrin	ug/L	<0.10	0.10	12/20/21 20:38	
Endrin aldehyde	ug/L	<0.10	0.10	12/20/21 20:38	
gamma-BHC (Lindane)	ug/L	<0.050	0.050	12/20/21 20:38	
Heptachlor	ug/L	<0.050	0.050	12/20/21 20:38	
Heptachlor epoxide	ug/L	<0.050	0.050	12/20/21 20:38	
Methoxychlor	ug/L	<0.50	0.50	12/20/21 20:38	
Toxaphene	ug/L	<5.0	5.0	12/20/21 20:38	
Decachlorobiphenyl (S)	%	63	10-167	12/20/21 20:38	
Tetrachloro-m-xylene (S)	%	60	27-139	12/20/21 20:38	

LABORATORY CONTROL SAMPLE & LCSD: 1199570

1199572

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
4,4'-DDD	ug/L	0.4	0.36	0.35	90	87	35-143	4	20	
4,4'-DDE	ug/L	0.4	0.37	0.36	91	90	36-135	2	20	
4,4'-DDT	ug/L	0.4	0.29	0.34	73	84	36-143	14	20	
Aldrin	ug/L	0.4	0.34	0.32	84	81	25-119	4	20	
alpha-BHC	ug/L	0.4	0.37	0.36	93	90	38-131	3	20	
beta-BHC	ug/L	0.4	0.34	0.35	86	88	41-134	3	20	
delta-BHC	ug/L	0.4	0.41	0.39	102	97	46-145	5	20	
Dieldrin	ug/L	0.4	0.37	0.35	91	87	39-134	5	20	
Endosulfan I	ug/L	0.4	0.25	0.22	62	56	35-114	9	20	
Endosulfan II	ug/L	0.4	0.25	0.26	62	64	44-127	3	20	
Endosulfan sulfate	ug/L	0.4	0.34	0.34	85	84	37-144	1	20	
Endrin	ug/L	0.4	0.39	0.38	99	94	43-143	5	20	
Endrin aldehyde	ug/L	0.4	0.36	0.34	89	84	39-136	6	20	
gamma-BHC (Lindane)	ug/L	0.4	0.39	0.37	97	91	41-136	5	20	
Heptachlor	ug/L	0.4	0.37	0.35	91	87	31-121	5	20	

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

LABORATORY CONTROL SAMPLE & LCSD: 1199570		1199572									
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers	
Heptachlor epoxide	ug/L	0.4	0.38	0.36	95	91	41-132	5	20		
Methoxychlor	ug/L	0.4	0.39J	0.38J	99	96	39-155		20		
Decachlorobiphenyl (S)	%				76	75	10-167		20		
Tetrachloro-m-xylene (S)	%				82	78	27-139		20		

LABORATORY CONTROL SAMPLE: 1199571

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4,4'-DDD	ug/L		<0.10			
4,4'-DDE	ug/L		<0.10			
4,4'-DDT	ug/L		<0.10			
Aldrin	ug/L		<0.050			
alpha-BHC	ug/L		<0.050			
beta-BHC	ug/L		<0.050			
delta-BHC	ug/L		<0.050			
Dieldrin	ug/L		<0.10			
Endosulfan I	ug/L		<0.050			
Endosulfan II	ug/L		<0.10			
Endosulfan sulfate	ug/L		<0.10			
Endrin	ug/L		<0.10			
Endrin aldehyde	ug/L		<0.10			
gamma-BHC (Lindane)	ug/L		<0.050			
Heptachlor	ug/L		<0.050			
Heptachlor epoxide	ug/L		<0.050			
Methoxychlor	ug/L		<0.50			
Toxaphene	ug/L	20	16.9	84	16-149	
Decachlorobiphenyl (S)	%			97	10-167	
Tetrachloro-m-xylene (S)	%			91	27-139	

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14
Project No.: 70197894

QC Batch: 237476 Analysis Method: EPA 8082A
QC Batch Method: EPA 3510C Analysis Description: 8082 GCS PCB
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70197894001

METHOD BLANK: 1199573 Matrix: Water
Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	<1.0	1.0	12/20/21 10:44	
PCB-1221 (Aroclor 1221)	ug/L	<1.0	1.0	12/20/21 10:44	
PCB-1232 (Aroclor 1232)	ug/L	<1.0	1.0	12/20/21 10:44	
PCB-1242 (Aroclor 1242)	ug/L	<1.0	1.0	12/20/21 10:44	
PCB-1248 (Aroclor 1248)	ug/L	<1.0	1.0	12/20/21 10:44	
PCB-1254 (Aroclor 1254)	ug/L	<1.0	1.0	12/20/21 10:44	
PCB-1260 (Aroclor 1260)	ug/L	<1.0	1.0	12/20/21 10:44	
Decachlorobiphenyl (S)	%	60	10-138	12/20/21 10:44	v1
Tetrachloro-m-xylene (S)	%	77	37-105	12/20/21 10:44	v1

LABORATORY CONTROL SAMPLE & LCSD: 1199574

Parameter	Units	1199575								
		Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
PCB-1016 (Aroclor 1016)	ug/L	5	4.2	4.2	83	84	16-139	1	30	
PCB-1260 (Aroclor 1260)	ug/L	5	4.2	4.5	85	90	27-150	6	30	
Decachlorobiphenyl (S)	%				78	87	10-138		30	v1
Tetrachloro-m-xylene (S)	%				75	78	37-105		30	v1

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

QC Batch: 238367

Analysis Method: EPA 8270D

QC Batch Method: EPA 3510C

Analysis Description: 8270 Water MSSV

Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197894001

METHOD BLANK: 1203973

Matrix: Water

Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4,5-Tetrachlorobenzene	ug/L	<5.0	5.0	12/24/21 14:00	
1,2,4-Trichlorobenzene	ug/L	<5.0	5.0	12/24/21 14:00	
1,2-Dichlorobenzene	ug/L	<5.0	5.0	12/24/21 14:00	
1,3,5-Trinitrobenzene	ug/L	<5.0	5.0	12/24/21 14:00	
1,3-Dichlorobenzene	ug/L	<5.0	5.0	12/24/21 14:00	
1,3-Dinitrobenzene	ug/L	<5.0	5.0	12/24/21 14:00	
1,4-Dichlorobenzene	ug/L	<5.0	5.0	12/24/21 14:00	
1,4-Naphthoquinone	ug/L	<5.0	5.0	12/24/21 14:00	
1-Naphthylamine	ug/L	<5.0	5.0	12/24/21 14:00	IL
2,2'-Oxybis(1-chloropropane)	ug/L	<5.0	5.0	12/24/21 14:00	v3
2,3,4,6-Tetrachlorophenol	ug/L	<5.0	5.0	12/24/21 14:00	
2,4,5-Trichlorophenol	ug/L	<5.0	5.0	12/24/21 14:00	
2,4,6-Trichlorophenol	ug/L	<5.0	5.0	12/24/21 14:00	
2,4-Dichlorophenol	ug/L	<5.0	5.0	12/24/21 14:00	
2,4-Dimethylphenol	ug/L	<5.0	5.0	12/24/21 14:00	
2,4-Dinitrophenol	ug/L	<10.0	10.0	12/24/21 14:00	
2,4-Dinitrotoluene	ug/L	<5.0	5.0	12/24/21 14:00	
2,6-Dichlorophenol	ug/L	<5.0	5.0	12/24/21 14:00	
2,6-Dinitrotoluene	ug/L	<5.0	5.0	12/24/21 14:00	
2-Acetylaminofluorene	ug/L	<5.0	5.0	12/24/21 14:00	
2-Chloronaphthalene	ug/L	<5.0	5.0	12/24/21 14:00	
2-Chlorophenol	ug/L	<5.0	5.0	12/24/21 14:00	
2-Methylnaphthalene	ug/L	<5.0	5.0	12/24/21 14:00	
2-Methylphenol(o-Cresol)	ug/L	<5.0	5.0	12/24/21 14:00	
2-Naphthylamine	ug/L	<5.0	5.0	12/24/21 14:00	
2-Nitroaniline	ug/L	<5.0	5.0	12/24/21 14:00	v3
2-Nitrophenol	ug/L	<5.0	5.0	12/24/21 14:00	
3&4-Methylphenol(m&p Cresol)	ug/L	<5.0	5.0	12/24/21 14:00	
3,3'-Dichlorobenzidine	ug/L	<5.0	5.0	12/24/21 14:00	
3,3'-Dimethylbenzidine	ug/L	<5.0	5.0	12/24/21 14:00	
3-Methylcholanthrene	ug/L	<5.0	5.0	12/24/21 14:00	
3-Nitroaniline	ug/L	<5.0	5.0	12/24/21 14:00	
4,6-Dinitro-2-methylphenol	ug/L	<10.0	10.0	12/24/21 14:00	
4-Aminobiphenyl	ug/L	<5.0	5.0	12/24/21 14:00	
4-Bromophenylphenyl ether	ug/L	<5.0	5.0	12/24/21 14:00	
4-Chloro-3-methylphenol	ug/L	<5.0	5.0	12/24/21 14:00	
4-Chloroaniline	ug/L	<5.0	5.0	12/24/21 14:00	
4-Chlorophenylphenyl ether	ug/L	<5.0	5.0	12/24/21 14:00	
4-Nitroaniline	ug/L	<5.0	5.0	12/24/21 14:00	
4-Nitrophenol	ug/L	<10.0	10.0	12/24/21 14:00	

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14
Pace Project No.: 70197894

METHOD BLANK: 1203973 Matrix: Water
Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
5-Nitro-o-toluidine	ug/L	<5.0	5.0	12/24/21 14:00	
7,12-Dimethylbenz(a)anthracene	ug/L	<5.0	5.0	12/24/21 14:00	
Acenaphthene	ug/L	<5.0	5.0	12/24/21 14:00	
Acenaphthylene	ug/L	<5.0	5.0	12/24/21 14:00	
Acetophenone	ug/L	<5.0	5.0	12/24/21 14:00	
Anthracene	ug/L	<5.0	5.0	12/24/21 14:00	
Benzo(a)anthracene	ug/L	<5.0	5.0	12/24/21 14:00	
Benzo(a)pyrene	ug/L	<5.0	5.0	12/24/21 14:00	
Benzo(b)fluoranthene	ug/L	<5.0	5.0	12/24/21 14:00	
Benzo(g,h,i)perylene	ug/L	<5.0	5.0	12/24/21 14:00	
Benzo(k)fluoranthene	ug/L	<5.0	5.0	12/24/21 14:00	
Benzyl alcohol	ug/L	<5.0	5.0	12/24/21 14:00	
bis(2-Chloroethoxy)methane	ug/L	<5.0	5.0	12/24/21 14:00	
bis(2-Chloroethyl) ether	ug/L	<5.0	5.0	12/24/21 14:00	
bis(2-Ethylhexyl)phthalate	ug/L	<5.0	5.0	12/24/21 14:00	
Butylbenzylphthalate	ug/L	<5.0	5.0	12/24/21 14:00	
Chlorobenzilate	ug/L	<5.0	5.0	12/24/21 14:00	
Chrysene	ug/L	<5.0	5.0	12/24/21 14:00	
Di-n-butylphthalate	ug/L	<5.0	5.0	12/24/21 14:00	
Di-n-octylphthalate	ug/L	<5.0	5.0	12/24/21 14:00	
Diallate	ug/L	<5.0	5.0	12/24/21 14:00	
Dibenz(a,h)anthracene	ug/L	<5.0	5.0	12/24/21 14:00	
Dibenzofuran	ug/L	<5.0	5.0	12/24/21 14:00	
Diethylphthalate	ug/L	<5.0	5.0	12/24/21 14:00	
Dimethoate	ug/L	<5.0	5.0	12/24/21 14:00	
Dimethylphthalate	ug/L	<5.0	5.0	12/24/21 14:00	
Disulfoton	ug/L	<5.0	5.0	12/24/21 14:00	
Ethyl methanesulfonate	ug/L	<5.0	5.0	12/24/21 14:00	
Fluoranthene	ug/L	<5.0	5.0	12/24/21 14:00	
Fluorene	ug/L	<5.0	5.0	12/24/21 14:00	
Hexachloro-1,3-butadiene	ug/L	<5.0	5.0	12/24/21 14:00	
Hexachlorobenzene	ug/L	<5.0	5.0	12/24/21 14:00	
Hexachlorocyclopentadiene	ug/L	<5.0	5.0	12/24/21 14:00	v3
Hexachloroethane	ug/L	<5.0	5.0	12/24/21 14:00	
Hexachloropropene	ug/L	<5.0	5.0	12/24/21 14:00	
Indeno(1,2,3-cd)pyrene	ug/L	<5.0	5.0	12/24/21 14:00	
Isodrin	ug/L	<5.0	5.0	12/24/21 14:00	
Isophorone	ug/L	<5.0	5.0	12/24/21 14:00	
Isosafrole	ug/L	<5.0	5.0	12/24/21 14:00	
Methapyrilene	ug/L	<5.0	5.0	12/24/21 14:00	IC
Methyl methanesulfonate	ug/L	<5.0	5.0	12/24/21 14:00	v3
Methyl parathion	ug/L	<5.0	5.0	12/24/21 14:00	
N-Nitroso-di-n-butylamine	ug/L	<5.0	5.0	12/24/21 14:00	
N-Nitroso-di-n-propylamine	ug/L	<5.0	5.0	12/24/21 14:00	
N-Nitrosodiethylamine	ug/L	<5.0	5.0	12/24/21 14:00	

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

METHOD BLANK: 1203973

Matrix: Water

Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
N-Nitrosodimethylamine	ug/L	<5.0	5.0	12/24/21 14:00	
N-Nitrosodiphenylamine	ug/L	<5.0	5.0	12/24/21 14:00	
N-Nitrosomethylethylamine	ug/L	<5.0	5.0	12/24/21 14:00	v3
N-Nitrosopiperidine	ug/L	<5.0	5.0	12/24/21 14:00	
N-Nitrosopyrrolidine	ug/L	<5.0	5.0	12/24/21 14:00	
Naphthalene	ug/L	<5.0	5.0	12/24/21 14:00	
Nitrobenzene	ug/L	<5.0	5.0	12/24/21 14:00	
O,O,O-Triethylphosphorothioate	ug/L	<5.0	5.0	12/24/21 14:00	
O-Toluidine	ug/L	<5.0	5.0	12/24/21 14:00	
P-Dimethylaminoazobenzene	ug/L	<5.0	5.0	12/24/21 14:00	
Parathion (Ethyl parathion)	ug/L	<5.0	5.0	12/24/21 14:00	
Pentachlorobenzene	ug/L	<5.0	5.0	12/24/21 14:00	
Pentachloronitrobenzene	ug/L	<5.0	5.0	12/24/21 14:00	
Pentachlorophenol	ug/L	<10.0	10.0	12/24/21 14:00	
Phenacetin	ug/L	<5.0	5.0	12/24/21 14:00	
Phenanthrene	ug/L	<5.0	5.0	12/24/21 14:00	
Phenol	ug/L	<5.0	5.0	12/24/21 14:00	
Pronamide	ug/L	<5.0	5.0	12/24/21 14:00	
Pyrene	ug/L	<5.0	5.0	12/24/21 14:00	
Safrole	ug/L	<5.0	5.0	12/24/21 14:00	
Thionazin	ug/L	<5.0	5.0	12/24/21 14:00	
1,2-Dichlorobenzene-d4 (S)	%	68	30-110	12/24/21 14:00	
2,4,6-Tribromophenol (S)	%	82	57-131	12/24/21 14:00	
2-Chlorophenol-d4 (S)	%	73	43-110	12/24/21 14:00	
2-Fluorobiphenyl (S)	%	79	42-110	12/24/21 14:00	
2-Fluorophenol (S)	%	47	12-110	12/24/21 14:00	
Nitrobenzene-d5 (S)	%	75	38-113	12/24/21 14:00	
p-Terphenyl-d14 (S)	%	99	33-119	12/24/21 14:00	
Phenol-d5 (S)	%	30	10-110	12/24/21 14:00	

LABORATORY CONTROL SAMPLE & LCSD: 1203974

1204170

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2,4,5-Tetrachlorobenzene	ug/L	25	19.7	19.8	79	79	28-114	1	30	
1,2,4-Trichlorobenzene	ug/L	25	17.3	19.0	69	76	15-108	10	30	
1,2-Dichlorobenzene	ug/L	25	14.4	17.0	57	68	10-105	17	30	
1,3,5-Trinitrobenzene	ug/L	25	30.1	31.4	121	126	10-218	4	30	v1
1,3-Dichlorobenzene	ug/L	25	13.8	16.7	55	67	10-101	19	30	
1,3-Dinitrobenzene	ug/L	25	27.0	27.0	108	108	55-142	0	30	v1
1,4-Dichlorobenzene	ug/L	25	14.0	16.7	56	67	10-104	18	30	
1,4-Naphthoquinone	ug/L	25	44.4	43.2	177	173	10-223	3	30	IH
1-Naphthylamine	ug/L	25	20.6	20.7	83	83	13-108	0	30	IL
2,2'-Oxybis(1-chloropropane)	ug/L	25	13.6	14.0	54	56	29-108	3	30	v3
2,3,4,6-Tetrachlorophenol	ug/L	25	20.9	21.3	84	85	42-127	2	30	

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

LABORATORY CONTROL SAMPLE & LCSD:		1203974	1204170		LCS	LCSD	% Rec		Max	
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	% Rec	% Rec	Limits	RPD	RPD	Qualifiers
2,4,5-Trichlorophenol	ug/L	25	22.8	23.1	91	92	56-126	2	30	
2,4,6-Trichlorophenol	ug/L	25	22.2	22.3	89	89	53-120	0	30	
2,4-Dichlorophenol	ug/L	25	20.6	20.9	82	84	51-112	1	30	
2,4-Dimethylphenol	ug/L	25	10.2	10.6	41	43	21-114	4	30	
2,4-Dinitrophenol	ug/L	25	13.4	16.5	54	66	10-139	20	30	
2,4-Dinitrotoluene	ug/L	25	26.3	26.1	105	105	53-132	1	30	
2,6-Dichlorophenol	ug/L	25	20.8	20.9	83	84	51-117	1	30	
2,6-Dinitrotoluene	ug/L	25	26.0	25.9	104	104	55-128	1	30	v1
2-Acetylaminofluorene	ug/L	25	25.5	27.0	102	108	57-133	6	30	
2-Chloronaphthalene	ug/L	25	19.0	19.2	76	77	32-111	1	30	
2-Chlorophenol	ug/L	25	18.5	19.0	74	76	47-110	3	30	
2-Methylnaphthalene	ug/L	25	18.3	18.6	73	74	24-115	2	30	
2-Methylphenol(o-Cresol)	ug/L	25	16.7	16.5	67	66	38-110	2	30	
2-Naphthylamine	ug/L	25	22.9	23.5	92	94	28-146	2	30	
2-Nitroaniline	ug/L	25	19.5	19.4	78	78	35-121	0	30	v3
2-Nitrophenol	ug/L	25	21.9	22.6	88	90	47-120	3	30	
3&4-Methylphenol(m&p Cresol)	ug/L	25	16.1	15.5	64	62	29-110	4	30	
3,3'-Dichlorobenzidine	ug/L	25	24.5	25.8	98	103	51-136	5	30	
3,3'-Dimethylbenzidine	ug/L	25	16.3	15.1	65	60	10-232	7	30	
3-Methylcholanthrene	ug/L	25	25.7	25.7	103	103	42-123	0	30	
3-Nitroaniline	ug/L	25	25.0	24.9	100	100	56-127	0	30	
4,6-Dinitro-2-methylphenol	ug/L	25	21.3	23.7	85	95	10-151	11	30	
4-Aminobiphenyl	ug/L	25	23.1	24.4	92	97	10-178	5	30	
4-Bromophenylphenyl ether	ug/L	25	25.2	25.4	101	102	52-123	1	30	
4-Chloro-3-methylphenol	ug/L	25	21.1	21.3	85	85	52-115	1	30	
4-Chloroaniline	ug/L	25	20.5	19.7	82	79	42-110	4	30	
4-Chlorophenylphenyl ether	ug/L	25	21.8	21.6	87	86	48-118	1	30	
4-Nitroaniline	ug/L	25	22.9	23.4	92	94	49-123	2	30	
4-Nitrophenol	ug/L	25	13.0	11.9	52	47	10-110	9	30	
5-Nitro-o-toluidine	ug/L	25	23.4	25.5	94	102	52-133	8	30	
7,12-Dimethylbenz(a)anthracene	ug/L	25	24.0	23.9	96	95	49-122	1	30	
Acenaphthene	ug/L	25	21.1	21.0	85	84	43-117	1	30	
Acenaphthylene	ug/L	25	21.9	21.8	88	87	47-119	0	30	
Acetophenone	ug/L	25	18.6	19.1	74	76	48-107	3	30	
Anthracene	ug/L	25	24.6	24.7	98	99	60-119	0	30	
Benzo(a)anthracene	ug/L	25	25.0	25.2	100	101	54-131	1	30	
Benzo(a)pyrene	ug/L	25	24.1	24.2	96	97	38-143	1	30	
Benzo(b)fluoranthene	ug/L	25	24.1	23.9	96	95	38-145	1	30	
Benzo(g,h,i)perylene	ug/L	25	25.5	25.7	102	103	36-149	1	30	
Benzo(k)fluoranthene	ug/L	25	22.2	22.4	89	90	42-139	1	30	
Benzyl alcohol	ug/L	25	16.0	15.3	64	61	10-118	5	30	
bis(2-Chloroethoxy)methane	ug/L	25	17.8	16.6	71	67	45-106	7	30	
bis(2-Chloroethyl) ether	ug/L	25	17.0	17.8	68	71	43-110	5	30	
bis(2-Ethylhexyl)phthalate	ug/L	25	21.9	21.6	87	87	60-131	1	30	
Butylbenzylphthalate	ug/L	25	23.4	23.2	93	93	56-129	1	30	
Chlorobenzilate	ug/L	25	23.7	23.3	95	93	49-150	2	30	
Chrysene	ug/L	25	23.7	23.7	95	95	54-129	0	30	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

LABORATORY CONTROL SAMPLE & LCSD:		1203974	1204170								
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers	
Di-n-butylphthalate	ug/L	25	24.9	25.2	100	101	61-130	1	30		
Di-n-octylphthalate	ug/L	25	24.2	24.3	97	97	49-145	0	30		
Diallate	ug/L	25	21.6	21.5	86	86	53-124	0	30		
Dibenz(a,h)anthracene	ug/L	25	25.5	25.9	102	104	35-150	1	30		
Dibenzofuran	ug/L	25	22.7	22.7	91	91	50-114	0	30		
Diethylphthalate	ug/L	25	23.1	23.0	92	92	58-125	1	30		
Dimethoate	ug/L	25	28.3	29.3	113	117	10-184	4	30		
Dimethylphthalate	ug/L	25	23.7	23.7	95	95	56-122	0	30		
Disulfoton	ug/L	25	26.7	26.7	107	107	10-159	0	30		
Ethyl methanesulfonate	ug/L	25	16.8	17.6	67	70	47-106	4	30		
Fluoranthene	ug/L	25	25.2	25.4	101	102	58-126	1	30		
Fluorene	ug/L	25	21.0	20.8	84	83	54-116	1	30		
Hexachloro-1,3-butadiene	ug/L	25	15.7	18.2	63	73	10-112	15	30		
Hexachlorobenzene	ug/L	25	24.0	24.3	96	97	51-121	1	30		
Hexachlorocyclopentadiene	ug/L	25	9.5	10.2	38	41	10-125	8	30	v3	
Hexachloroethane	ug/L	25	12.2	14.6	49	59	10-110	18	30		
Hexachloropropene	ug/L	25	14.0	15.4	56	62	10-112	10	30		
Indeno(1,2,3-cd)pyrene	ug/L	25	23.9	23.6	96	94	27-155	1	30		
Isodrin	ug/L	25	24.4	24.6	98	99	55-136	1	30		
Isophorone	ug/L	25	18.5	18.6	74	74	51-113	0	30		
Isosafrole	ug/L	25	20.7	21.1	83	84	39-127	2	30		
Methapyrilene	ug/L	25	9.0	8.6	36	35	10-230	4	30	IC	
Methyl methanesulfonate	ug/L	25	13.7	13.1	55	53	24-110	4	30	v3	
Methyl parathion	ug/L	25	30.9	31.4	124	126	60-140	2	30		
N-Nitroso-di-n-butylamine	ug/L	25	20.0	20.2	80	81	40-113	1	30		
N-Nitroso-di-n-propylamine	ug/L	25	17.2	17.2	69	69	42-111	0	30		
N-Nitrosodiethylamine	ug/L	25	18.3	19.6	73	78	49-110	7	30		
N-Nitrosodimethylamine	ug/L	25	12.4	10.6	49	43	14-110	15	30		
N-Nitrosodiphenylamine	ug/L	25	23.2	23.3	93	93	58-120	0	30		
N-Nitrosomethylethylamine	ug/L	25	11.5	12.1	46	48	21-121	5	30	v3	
N-Nitrosopiperidine	ug/L	25	19.6	20.7	78	83	33-126	6	30		
N-Nitrosopyrrolidine	ug/L	25	20.1	20.5	80	82	44-105	2	30		
Naphthalene	ug/L	25	17.8	19.3	71	77	18-114	8	30		
Nitrobenzene	ug/L	25	17.8	18.3	71	73	48-109	3	30		
O,O,O-Triethylphosphorothioate	ug/L	25	20.7	21.3	83	85	49-119	3	30		
O-Toluidine	ug/L	25	17.1	17.0	68	68	40-104	1	30		
P-Dimethylaminoazobenzene	ug/L	25	24.4	25.1	98	100	43-147	3	30		
Parathion (Ethyl parathion)	ug/L	25	26.5	26.8	106	107	10-190	1	30		
Pentachlorobenzene	ug/L	25	23.1	23.0	92	92	54-132	0	30		
Pentachloronitrobenzene	ug/L	25	24.9	25.5	100	102	61-145	2	30		
Pentachlorophenol	ug/L	25	15.9	16.8	64	67	11-141	5	30		
Phenacetin	ug/L	25	24.8	25.9	99	104	57-135	5	30		
Phenanthrene	ug/L	25	24.6	24.8	98	99	61-118	1	30		
Phenol	ug/L	25	10.9	9.3	44	37	12-110	17	30		
Pronamide	ug/L	25	22.4	22.5	90	90	56-134	0	30		
Pyrene	ug/L	25	24.9	24.7	100	99	54-134	1	30		
Safrole	ug/L	25	20.6	21.1	82	85	50-120	2	30		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

LABORATORY CONTROL SAMPLE & LCSD: 1203974		1204170								
Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Thionazin	ug/L	25	22.5	22.4	90	90	54-138	0	30	
1,2-Dichlorobenzene-d4 (S)	%				59	62	30-110			
2,4,6-Tribromophenol (S)	%				88	89	57-131			
2-Chlorophenol-d4 (S)	%				69	71	43-110			
2-Fluorobiphenyl (S)	%				78	77	42-110			
2-Fluorophenol (S)	%				49	47	12-110			
Nitrobenzene-d5 (S)	%				67	69	38-113			
p-Terphenyl-d14 (S)	%				95	95	33-119			
Phenol-d5 (S)	%				37	32	10-110			

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

QC Batch: 237239	Analysis Method: SM22 2120B
QC Batch Method: SM22 2120B	Analysis Description: 2120B Color
	Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197894001

METHOD BLANK: 1197988 Matrix: Water

Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Apparent Color	units	<5.0	5.0	12/16/21 09:41	

LABORATORY CONTROL SAMPLE: 1197989

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Apparent Color	units	40	40.0	100	90-110	

SAMPLE DUPLICATE: 1197990

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Apparent Color	units	26.0	26.0	0	
pH	Std. Units	9.5	9.6	0	

SAMPLE DUPLICATE: 1197991

Parameter	Units	70197503012 Result	Dup Result	RPD	Qualifiers
Apparent Color	units	1360	1360	0	
pH	Std. Units	6.8	6.8	0	

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14
Pace Project No.: 70197894

QC Batch: 238025	Analysis Method: SM22 2320B
QC Batch Method: SM22 2320B	Analysis Description: 2320B Alkalinity
	Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197894001

METHOD BLANK: 1202197 Matrix: Water
Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<1.0	1.0	12/22/21 09:24	

LABORATORY CONTROL SAMPLE: 1202198

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	25	23.1	92	85-115	

MATRIX SPIKE SAMPLE: 1202200

Parameter	Units	70197895003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	155	50	178	46	75-125	M1

SAMPLE DUPLICATE: 1202199

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	155	159	2	

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14
Pace Project No.: 70197894

QC Batch: 239375	Analysis Method: SM22 2340C
QC Batch Method: SM22 2340C	Analysis Description: 2340C Hardness, Total
	Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197894001

METHOD BLANK: 1209535 Matrix: Water
Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Tot Hardness asCaCO3 (SM 2340B)	mg/L	<5.0	5.0	01/04/22 16:24	

LABORATORY CONTROL SAMPLE: 1209536

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Tot Hardness asCaCO3 (SM 2340B)	mg/L	100	100	100	90-110	

MATRIX SPIKE SAMPLE: 1209537

Parameter	Units	70197894001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Tot Hardness asCaCO3 (SM 2340B)	mg/L	43000	20000	63000	100	75-125	

SAMPLE DUPLICATE: 1209538

Parameter	Units	70197894001 Result	Dup Result	RPD	Qualifiers
Tot Hardness asCaCO3 (SM 2340B)	mg/L	43000	43000	0	

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14
Pace Project No.: 70197894

QC Batch: 237875 Analysis Method: SM22 2540C
QC Batch Method: SM22 2540C Analysis Description: 2540C Total Dissolved Solids
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70197894001

METHOD BLANK: 1201616 Matrix: Water
Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	<10.0	10.0	12/21/21 15:50	

LABORATORY CONTROL SAMPLE: 1201617

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	500	548	110	85-115	

MATRIX SPIKE SAMPLE: 1201619

Parameter	Units	70197893001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	115	300	431	105	75-125	

MATRIX SPIKE SAMPLE: 1201621

Parameter	Units	70197895003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Dissolved Solids	mg/L	23100	6000	29100	99	75-125	

SAMPLE DUPLICATE: 1201618

Parameter	Units	70197893001 Result	Dup Result	RPD	Qualifiers
Total Dissolved Solids	mg/L	115	118	3	

SAMPLE DUPLICATE: 1201620

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Total Dissolved Solids	mg/L	23100	22300	3	

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

QC Batch: 237130	Analysis Method: SM22 3500-Cr B
QC Batch Method: SM22 3500-Cr B	Analysis Description: Chromium, Hexavalent by 3500
	Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197894001

METHOD BLANK: 1197177 Matrix: Water

Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.020	0.020	12/16/21 12:42	

LABORATORY CONTROL SAMPLE: 1197178

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	0.2	0.20	100	85-115	

MATRIX SPIKE SAMPLE: 1197179

Parameter	Units	70197895003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	0.030	0.2	0.15	58	75-125	H1,M1

SAMPLE DUPLICATE: 1197180

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Chromium, Hexavalent	mg/L	0.030	0.033	8	H1

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

QC Batch: 238211	Analysis Method: EPA 410.4
QC Batch Method: EPA 410.4	Analysis Description: 410.4 COD
	Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197894001

METHOD BLANK: 1203345 Matrix: Water

Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chemical Oxygen Demand	mg/L	<10.0	10.0	12/23/21 08:19	

LABORATORY CONTROL SAMPLE: 1203346

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	500	502	100	90-110	

MATRIX SPIKE SAMPLE: 1203347

Parameter	Units	70197895003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	2280	10000	10500	83	90-110	M1

MATRIX SPIKE SAMPLE: 1203349

Parameter	Units	70197947001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chemical Oxygen Demand	mg/L	26.1	1000	1010	99	90-110	

SAMPLE DUPLICATE: 1203348

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Chemical Oxygen Demand	mg/L	2280	2200	4	

SAMPLE DUPLICATE: 1203350

Parameter	Units	70197947001 Result	Dup Result	RPD	Qualifiers
Chemical Oxygen Demand	mg/L	26.1	21.9	17	

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

QC Batch: 237141	Analysis Method: SM22 5210B
QC Batch Method: SM22 5210B	Analysis Description: 5210B BOD, 5 day
	Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197894001

METHOD BLANK: 1197216 Matrix: Water

Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
BOD, 5 day	mg/L	<2.0	2.0	12/20/21 10:04	

LABORATORY CONTROL SAMPLE: 1197217

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
BOD, 5 day	mg/L	198	206	104	84.5-115.4	

SAMPLE DUPLICATE: 1197218

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
BOD, 5 day	mg/L	21.5	21.9	2	R6

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

QC Batch: 237769	Analysis Method: EPA 9034
QC Batch Method: EPA 9030B	Analysis Description: 9034 Sulfide Waste Water
	Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197894001

METHOD BLANK: 1200858 Matrix: Water

Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide	mg/L	<2.0	2.0	12/21/21 15:07	

LABORATORY CONTROL SAMPLE: 1200859

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide	mg/L	56.1	48.0	86	80-120	

SAMPLE DUPLICATE: 1201615

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Sulfide	mg/L	3.2	3.2	0	

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14
Pace Project No.: 70197894

QC Batch: 239554 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197894001

METHOD BLANK: 1210170 Matrix: Water
Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromide	mg/L	<0.50	0.50	01/05/22 22:43	
Chloride	mg/L	0.13J	2.0	01/05/22 22:43	
Sulfate	mg/L	<5.0	5.0	01/05/22 22:43	

LABORATORY CONTROL SAMPLE: 1210171

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	1	1.1	106	90-110	
Chloride	mg/L	10	10.1	101	90-110	
Sulfate	mg/L	10	10.1	101	90-110	

MATRIX SPIKE SAMPLE: 1210172

Parameter	Units	70199224001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	<0.50	1	0.94	94	90-110	
Chloride	mg/L	24.1	10	35.1	110	90-110	
Sulfate	mg/L	16.6	10	26.2	96	90-110	

MATRIX SPIKE SAMPLE: 1210174

Parameter	Units	70199380001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	<0.50	1	1.0	96	90-110	
Chloride	mg/L	3.7	10	13.2	95	90-110	
Sulfate	mg/L	<5.0	10	12.8	94	90-110	

SAMPLE DUPLICATE: 1210173

Parameter	Units	70199224001 Result	Dup Result	RPD	Qualifiers
Bromide	mg/L	<0.50	<0.50		
Chloride	mg/L	24.1	23.9	1	
Sulfate	mg/L	16.6	16.4	1	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

SAMPLE DUPLICATE: 1210175

Parameter	Units	70199380001 Result	Dup Result	RPD	Qualifiers
Bromide	mg/L	<0.50	<0.50		
Chloride	mg/L	3.7	3.7	0	
Sulfate	mg/L	<5.0	3.3J		

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

QC Batch: 237663

Analysis Method: EPA 351.2

QC Batch Method: EPA 351.2

Analysis Description: 351.2 TKN

Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197894001

METHOD BLANK: 1200558

Matrix: Water

Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	<0.10	0.10	12/21/21 16:53	

LABORATORY CONTROL SAMPLE: 1200559

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	4	4.3	107	90-110	

MATRIX SPIKE SAMPLE: 1200560

Parameter	Units	70197895003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	90.6	20	134	218	90-110	M1

MATRIX SPIKE SAMPLE: 1200562

Parameter	Units	70198006009 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	8.2	4	16.1	198	90-110	M1

SAMPLE DUPLICATE: 1200561

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	90.6	98.3	8	

SAMPLE DUPLICATE: 1200563

Parameter	Units	70198006009 Result	Dup Result	RPD	Qualifiers
Nitrogen, Kjeldahl, Total	mg/L	8.2	10.7	26	D6

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14
Pace Project No.: 70197894

QC Batch: 237205 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrite, Unpres.
Laboratory: Pace Analytical Services - Melville
Associated Lab Samples: 70197894001

METHOD BLANK: 1197782 Matrix: Water
Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrite as N	mg/L	<0.050	0.050	12/15/21 23:08	

LABORATORY CONTROL SAMPLE: 1197783

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	1	1.1	105	90-110	

MATRIX SPIKE SAMPLE: 1197784

Parameter	Units	70197850001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	<0.050	0.5	0.54	109	90-110	

MATRIX SPIKE SAMPLE: 1197786

Parameter	Units	70197503012 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrite as N	mg/L	0.042J	0.5	0.33	57	90-110	M1

SAMPLE DUPLICATE: 1197785

Parameter	Units	70197850001 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	<0.050	<0.050		

SAMPLE DUPLICATE: 1197787

Parameter	Units	70197503012 Result	Dup Result	RPD	Qualifiers
Nitrite as N	mg/L	0.042J	0.042J		

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14
Pace Project No.: 70197894

QC Batch: 237587 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved
Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197894001

METHOD BLANK: 1199907 Matrix: Water
Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrate-Nitrite (as N)	mg/L	<0.050	0.050	12/17/21 21:23	

LABORATORY CONTROL SAMPLE: 1199908

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	1	0.91	91	90-110	

MATRIX SPIKE SAMPLE: 1199909

Parameter	Units	70197136008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	0.14	0.5	0.60	93	90-110	

MATRIX SPIKE SAMPLE: 1199911

Parameter	Units	70197136020 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrate-Nitrite (as N)	mg/L	0.040J	0.5	0.20	33	90-110	M1

SAMPLE DUPLICATE: 1199910

Parameter	Units	70197136008 Result	Dup Result	RPD	Qualifiers
Nitrate-Nitrite (as N)	mg/L	0.14	0.13	3	

SAMPLE DUPLICATE: 1199912

Parameter	Units	70197136020 Result	Dup Result	RPD	Qualifiers
Nitrate-Nitrite (as N)	mg/L	0.040J	<0.050		

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

QC Batch: 240042	Analysis Method: EPA 420.1
QC Batch Method: EPA 420.1	Analysis Description: 420.1 Phenolics Macro
	Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197894001

METHOD BLANK: 1212859 Matrix: Water

Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phenolics, Total Recoverable	ug/L	<5.0	5.0	01/11/22 14:32	

LABORATORY CONTROL SAMPLE: 1212860

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	ug/L	100	94.9	95	90-110	

MATRIX SPIKE SAMPLE: 1212863

Parameter	Units	70197895003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	ug/L	56.3	50	127	141	75-125	M1

MATRIX SPIKE SAMPLE: 1212865

Parameter	Units	70197503012 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Phenolics, Total Recoverable	ug/L	949	50	1000	102	75-125	

SAMPLE DUPLICATE: 1212864

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Phenolics, Total Recoverable	ug/L	56.3	56.7	1	

SAMPLE DUPLICATE: 1212866

Parameter	Units	70197503012 Result	Dup Result	RPD	Qualifiers
Phenolics, Total Recoverable	ug/L	949	913	4	

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14
Pace Project No.: 70197894

QC Batch: 238781	Analysis Method: SM22 4500 NH3 H
QC Batch Method: SM22 4500 NH3 H	Analysis Description: 4500 Ammonia
	Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197894001

METHOD BLANK: 1206826 Matrix: Water
Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	<0.10	0.10	12/29/21 12:26	

LABORATORY CONTROL SAMPLE: 1206827

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1	1.1	106	90-110	

MATRIX SPIKE SAMPLE: 1206830

Parameter	Units	70198047001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	0.069J	1	0.74	67	75-125	M1

SAMPLE DUPLICATE: 1206831

Parameter	Units	70198047001 Result	Dup Result	RPD	Qualifiers
Nitrogen, Ammonia	mg/L	0.069J	0.10J		

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

QC Batch: 237385	Analysis Method: EPA 9014 Total Cyanide
QC Batch Method: EPA 9010C	Analysis Description: 9014 Cyanide, Total
	Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197894001

METHOD BLANK: 1198627 Matrix: Water

Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	ug/L	<10.0	10.0	12/16/21 21:03	

LABORATORY CONTROL SAMPLE: 1198628

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	75	75.7	101	85-115	

MATRIX SPIKE SAMPLE: 1198629

Parameter	Units	70197895003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	ug/L	10.6	100	77.2	67	75-125	M1

SAMPLE DUPLICATE: 1198630

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Cyanide	ug/L	10.6	11.7	10	

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QUALITY CONTROL DATA

Project: CELL 7 LEACHATE EXPANDED 12/14
Pace Project No.: 70197894

QC Batch: 237859 Analysis Method: EPA 9060A
QC Batch Method: EPA 9060A Analysis Description: 9060 TOC
Laboratory: Pace Analytical Services - Melville

Associated Lab Samples: 70197894001

METHOD BLANK: 1201577 Matrix: Water
Associated Lab Samples: 70197894001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mean Total Organic Carbon	mg/L	<1.0	1.0	12/21/21 19:19	
Total Organic Carbon	mg/L	<1.0	1.0	12/21/21 19:19	
Total Organic Carbon	mg/L	<1.0	1.0	12/21/21 19:19	
Total Organic Carbon	mg/L	<1.0	1.0	12/21/21 19:19	
Total Organic Carbon	mg/L	<1.0	1.0	12/21/21 19:19	

LABORATORY CONTROL SAMPLE: 1201578

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mean Total Organic Carbon	mg/L	10	9.3	93	85-115	
Total Organic Carbon	mg/L	10	9.4	94	85-115	
Total Organic Carbon	mg/L	10	9.3	93	85-115	
Total Organic Carbon	mg/L	10	9.4	94	85-115	
Total Organic Carbon	mg/L	10	9.2	92	85-115	

MATRIX SPIKE SAMPLE: 1201580

Parameter	Units	70197895003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mean Total Organic Carbon	mg/L	69.4	100	160	90	75-125	
Total Organic Carbon	mg/L	69.5	100	159	90	75-125	
Total Organic Carbon	mg/L	69.0	100	159	90	75-125	
Total Organic Carbon	mg/L	69.5	100	161	91	75-125	
Total Organic Carbon	mg/L	69.8	100	160	91	75-125	

SAMPLE DUPLICATE: 1201579

Parameter	Units	70197895003 Result	Dup Result	RPD	Qualifiers
Mean Total Organic Carbon	mg/L	69.4	68.9	1	
Total Organic Carbon	mg/L	69.5	69.2	0	
Total Organic Carbon	mg/L	69.0	68.9	0	
Total Organic Carbon	mg/L	69.5	68.7	1	
Total Organic Carbon	mg/L	69.8	68.8	1	

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REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Sample: CELL 7 PLCRS **Lab ID: 70197894001** Collected: 12/14/21 12:02 Received: 12/14/21 13:34 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 903.1	4.57 ± 3.05 (3.27) C:NA T:98%	pCi/L	01/09/22 13:31	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 904.0	7.45 ± 4.64 (8.93) C:56% T:91%	pCi/L	01/11/22 11:38	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Uranium	ASTM D5174-97	5.13 ± 0.424 (26.200) C:NA T:NA	ug/L	01/14/22 11:23	7440-61-1	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

QC Batch: 476806

Analysis Method: EPA 903.1

QC Batch Method: EPA 903.1

Analysis Description: 903.1 Radium-226

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 70197894001

METHOD BLANK: 2303566

Matrix: Water

Associated Lab Samples: 70197894001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0349 ± 0.274 (0.492) C:NA T:95%	pCi/L	01/09/22 13:07	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

QC Batch:	478061	Analysis Method:	ASTM D5174-97
QC Batch Method:	ASTM D5174-97	Analysis Description:	D5174.97 Total Uranium KPA
		Laboratory:	Pace Analytical Services - Greensburg

Associated Lab Samples: 70197894001

METHOD BLANK:	2310718	Matrix:	Water
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Associated Lab Samples: 70197894001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Total Uranium	0.021 ± 0.002 (0.262) C:NA T:NA	ug/L	01/14/22 10:08	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

QC Batch: 476808

Analysis Method: EPA 904.0

QC Batch Method: EPA 904.0

Analysis Description: 904.0 Radium 228

Laboratory: Pace Analytical Services - Greensburg

Associated Lab Samples: 70197894001

METHOD BLANK: 2303572

Matrix: Water

Associated Lab Samples: 70197894001

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.315 ± 0.344 (0.714) C:57% T:91%	pCi/L	01/11/22 11:36	

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QUALIFIERS

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval).

Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

WORKORDER QUALIFIERS

WO: 70197894

[1] p-Phenylenediamine and a,a-Dimethylphenethylamine are reporting with critically low recovery in the laboratory control sample(s). These compounds are method defined poor performers. Results are estimated.

SAMPLE QUALIFIERS

Sample: 70197894001

[1] Chlorinated Acid Herbicides (GC) by Method 8151A - Dilution due to matrix.

ANALYTE QUALIFIERS

D6 The precision between the sample and sample duplicate exceeded laboratory control limits.

G6 An aliquot for analysis was taken from the original container received due to volume requirements of the laboratory's procedure. Rinsing of the original sample container for inclusion in the sample extraction was not performed.

H1 Analysis conducted outside the EPA method holding time.

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QUALIFIERS

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

ANALYTE QUALIFIERS

H2	Extraction or preparation conducted outside EPA method holding time.
IC	The initial calibration for this compound was outside of method control limits. The result is estimated.
IH	This analyte exceeded secondary source verification criteria high for the initial calibration. The reported results should be considered an estimated value.
IL	This analyte exceeded secondary source verification criteria low for the initial calibration. The reported results should be considered an estimated value.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
ML	Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.
N	The reported TIC has an 85% or higher match on a mass spectral library search.
P9	RPD between the primary and confirmatory analysis exceeded 40%.
R1	RPD value was outside control limits.
R6	The RPD between valid sample dilutions exceeded 30%.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
S8	Surrogate recovery outside laboratory control limits due to matrix interferences (confirmed by similar results from sample re-extraction and/or re-analysis)
v1	The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.
v3	The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have a low bias.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: CELL 7 LEACHATE EXPANDED 12/14

Pace Project No.: 70197894

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
70197894001	CELL 7 PLCRS	8151A	1791358	EPA 8151A	1791358
70197894001	CELL 7 PLCRS	EPA 3510C	237475	EPA 8081B	237607
70197894001	CELL 7 PLCRS	EPA 3510C	237476	EPA 8082A	237608
70197894001	CELL 7 PLCRS	EPA 3005A	240540	EPA 6010C	240627
70197894001	CELL 7 PLCRS	EPA 7470A	239605	EPA 7470A	239677
70197894001	CELL 7 PLCRS	3510C	1791214	EPA 8270E	1791214
70197894001	CELL 7 PLCRS	EPA 3510C	238367	EPA 8270D	238387
70197894001	CELL 7 PLCRS	EPA 8260C SIM/5030C	237659		
70197894001	CELL 7 PLCRS	EPA 8260C/5030C	237770		
70197894001	CELL 7 PLCRS	EPA 903.1	476806		
70197894001	CELL 7 PLCRS	EPA 904.0	476808		
70197894001	CELL 7 PLCRS	ASTM D5174-97	478061		
70197894001	CELL 7 PLCRS	SM22 2120B	237239		
70197894001	CELL 7 PLCRS	SM22 2320B	238025		
70197894001	CELL 7 PLCRS	SM22 2340C	239375		
70197894001	CELL 7 PLCRS	SM22 2540C	237875		
70197894001	CELL 7 PLCRS	SM22 3500-Cr B	237130		
70197894001	CELL 7 PLCRS	EPA 410.4	238211	EPA 410.4	238222
70197894001	CELL 7 PLCRS	SM22 5210B	237141	SM22 5210B	238114
70197894001	CELL 7 PLCRS	EPA 9030B	237769	EPA 9034	237971
70197894001	CELL 7 PLCRS	EPA 300.0	239554		
70197894001	CELL 7 PLCRS	EPA 351.2	237663	EPA 351.2	237666
70197894001	CELL 7 PLCRS	EPA 353.2	237587		
70197894001	CELL 7 PLCRS	EPA 353.2	237205		
70197894001	CELL 7 PLCRS	EPA 420.1	240042	EPA 420.1	240043
70197894001	CELL 7 PLCRS	SM22 4500 NH3 H	238781		
70197894001	CELL 7 PLCRS	EPA 9010C	237385	EPA 9014 Total Cyanide	237421
70197894001	CELL 7 PLCRS	EPA 9060A	237859		

REPORT OF LABORATORY ANALYSIS

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Sample Condition Upon Receipt

WO#: 70197894

Client Name: Town of Babylon Project

PM: KMM Due Date: 12/23/21
CLIENT: BAB-ECO

Courier: Fed Ex UPS USPS Client Commercial Pace Other

Tracking #:

Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes No N/A

Packing Material: Bubble Wrap Bubble Bags Ziploc None Other

Thermometer Used: TH091 Correction Factor: 0.00

Cooler Temperature(°C): 2.2 Cooler Temperature Corrected(°C): 2.2

Temp should be above freezing to 6.0°C

USDA Regulated Soil (N/A, water sample)

Date and Initials of person examining contents: MW 12/14/21

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? Yes No

Did samples originate from a foreign source including Hawaii and Puerto Rico)? Yes No

If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		5.
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		7.
Sufficient Volume: (Triple volume provided for ICP)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Containers Intact:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		12.
-Includes date/time/ID, Matrix: SL (WT) OIL				
All containers needing preservation have been checked?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	13. <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> HCl
pH paper Lot # <u>HC160347</u>				Sample #
All containers needing preservation are found to be in compliance with method recommendation? (HNO ₃ , H ₂ SO ₄ , HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water). Per Method, VOA pH is checked after analysis				Initial when completed: Lot # of added preservative: Date/Time preservative added:
Samples checked for dechlorination: KI starch test strips Lot # <u>14-860</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	14. Positive for Res. Chlorine? Y N
Residual chlorine strips Lot #				
SM 4500 CN samples checked for sulfide? Lead Acetate Strips Lot # <u>56025</u>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	15. Positive for Sulfide? Y N
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	16.
Trip Blank Present:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	17.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if applicable):				

Client Notification/ Resolution:

Field Data Required? Y / N

Person Contacted:

Date/Time:

Comments/ Resolution:

Pace Analytical - Melville, NY

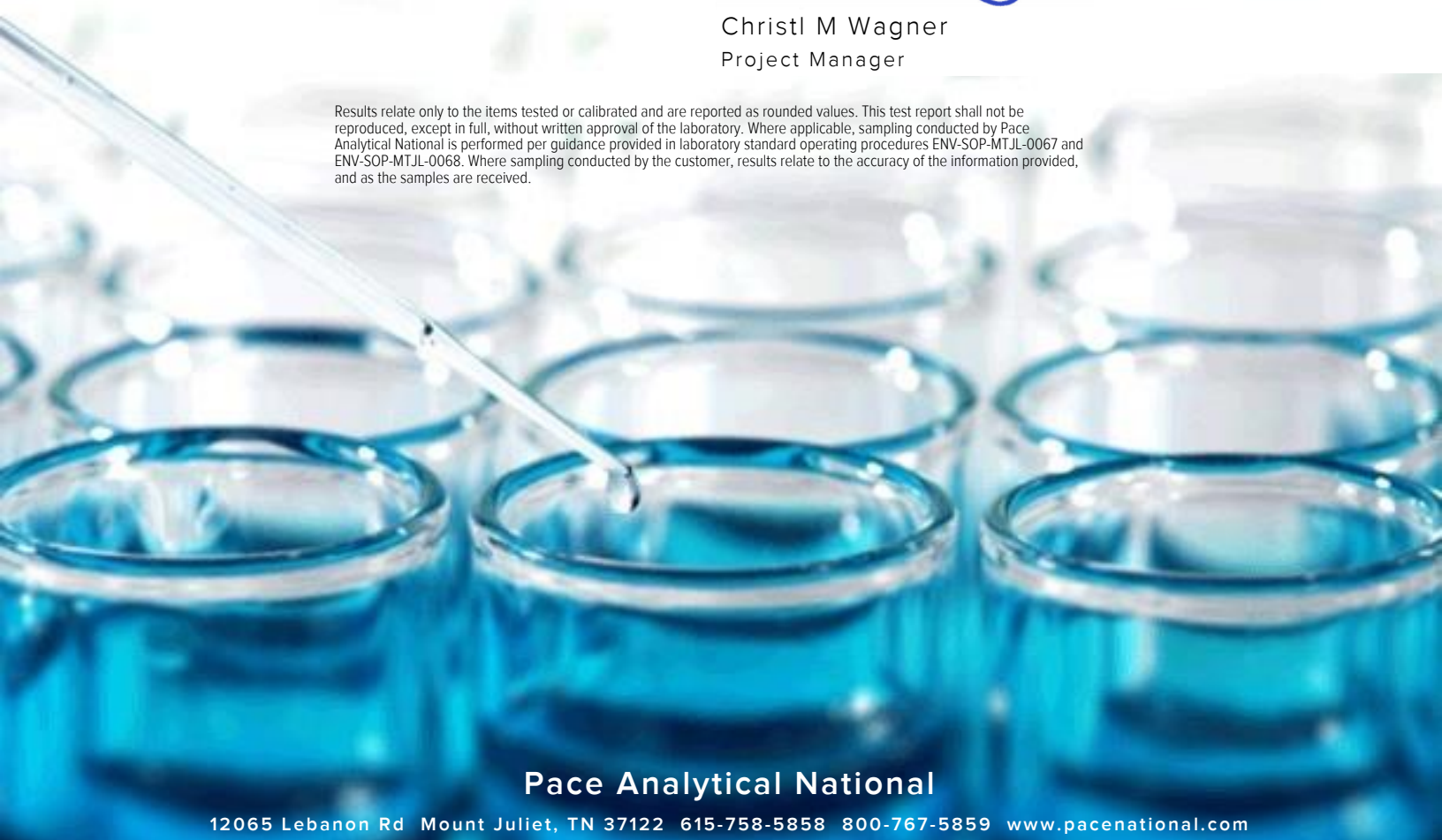
Sample Delivery Group: L1443206
Samples Received: 12/16/2021
Project Number: 70197894
Description: CELL 7 LEACHATE EXPANDED 12/14
Site: 001
Report To: Kimberley Mack
575 Broad Hollow Rd
Melville, NY 11747

Entire Report Reviewed By:



Christl M Wagner
Project Manager










Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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SAMPLE SUMMARY

CELL 7 PLCRS L1443206-01 GW

Collected by:
 Collected date/time: 12/14/21 12:02
 Received date/time: 12/16/21 15:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Chlorinated Acid Herbicides (GC) by Method 8151A	WG1791358	100	12/21/21 09:18	12/24/21 11:34	HMH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270E	WG1791214	1	12/18/21 05:08	12/19/21 19:35	AMG	Mt. Juliet, TN

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Christl M Wagner
Project Manager

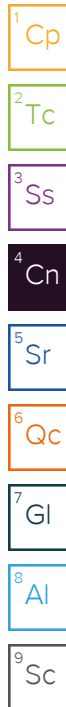
Project Narrative

p-Phenylenediamine and a,a-Dimethylphenethylamine are reporting with critically low recovery in the laboratory control sample(s). These compounds are method defined poor performers. Results are estimated.

Sample Delivery Group (SDG) Narrative

An aliquot for analysis was taken from the original container received due to volume requirements of the laboratory's procedure. Rinsing of the original sample container for inclusion in the sample extraction was not performed.

<u>Lab Sample ID</u>	<u>Project Sample ID</u>	<u>Method</u>
L1443206-01	CELL 7 PLCRS	8270E



Chlorinated Acid Herbicides (GC) by Method 8151A

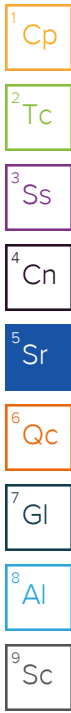
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
2,4-D	U		54.7	200	100	12/24/2021 11:34	WG1791358
Dalapon	U		34.4	200	100	12/24/2021 11:34	WG1791358
2,4-DB	U		30.2	200	100	12/24/2021 11:34	WG1791358
Dicamba	U		24.5	200	100	12/24/2021 11:34	WG1791358
Dichloroprop	U		104	200	100	12/24/2021 11:34	WG1791358
Dinoseb	U		25.0	200	100	12/24/2021 11:34	WG1791358
MCPA	U	J4	1310	10000	100	12/24/2021 11:34	WG1791358
MCPP	U		6600	10000	100	12/24/2021 11:34	WG1791358
2,4,5-T	U		25.8	200	100	12/24/2021 11:34	WG1791358
2,4,5-TP (Silvex)	U	J3 J4	33.5	200	100	12/24/2021 11:34	WG1791358
(S) 2,4-Dichlorophenyl Acetic Acid	50.0	J7		14.0-158		12/24/2021 11:34	WG1791358

Sample Narrative:

L1443206-01 WG1791358: Dilution due to matrix.

Semi Volatile Organic Compounds (GC/MS) by Method 8270E

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Famphur	U		3.92	20.0	1	12/19/2021 19:35	WG1791214
Kepone	U	J6	2.66	20.0	1	12/19/2021 19:35	WG1791214
p-Phenylenediamine	U	J4 J6	387	6900	1	12/19/2021 19:35	WG1791214
(S) 2-Fluorophenol	23.4			10.0-120		12/19/2021 19:35	WG1791214
(S) Phenol-d5	21.3			10.0-120		12/19/2021 19:35	WG1791214
(S) Nitrobenzene-d5	45.8			10.0-127		12/19/2021 19:35	WG1791214
(S) 2-Fluorobiphenyl	39.1			10.0-130		12/19/2021 19:35	WG1791214
(S) 2,4,6-Tribromophenol	50.5			10.0-155		12/19/2021 19:35	WG1791214
(S) p-Terphenyl-d14	32.7			10.0-128		12/19/2021 19:35	WG1791214



Method Blank (MB)

(MB) R3744645-1 12/22/21 11:29

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
2,4-D	U		0.547	2.00
Dalapon	U		0.344	2.00
2,4-DB	U		0.302	2.00
Dicamba	U		0.245	2.00
Dichloroprop	U		1.04	2.00
Dinoseb	U		0.250	2.00
MCPA	U		13.1	100
MCPP	U		66.0	100
2,4,5-T	U		0.258	2.00
2,4,5-TP (Silvex)	U		0.335	2.00
(S) 2,4-Dichlorophenyl Acetic Acid	89.6			14.0-158

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3744645-2 12/22/21 11:43 • (LCSD) R3744645-3 12/22/21 11:58

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
2,4-D	5.00	5.06	4.89	101	97.8	50.0-120			3.42	20
Dalapon	5.00	4.14	3.95	82.8	79.0	32.0-120			4.70	20
2,4-DB	5.00	4.95	5.08	99.0	102	53.0-140	P		2.59	20
Dicamba	5.00	5.21	4.99	104	99.8	51.0-120			4.31	20
Dichloroprop	5.00	5.30	4.99	106	99.8	55.0-127			6.03	20
Dinoseb	5.00	5.75	5.53	115	111	36.0-134			3.90	20
MCPA	500	926	817	185	163	10.0-160	J4 P	J4 P	12.5	40
MCPP	500	459	439	91.8	87.8	10.0-160			4.45	23
2,4,5-T	5.00	4.74	4.58	94.8	91.6	54.0-120			3.43	20
2,4,5-TP (Silvex)	5.00	7.52	4.52	150	90.4	50.0-125	J4 P	J3	49.8	20
(S) 2,4-Dichlorophenyl Acetic Acid				98.4	99.8	14.0-158				

Method Blank (MB)

(MB) R3742535-3 12/19/21 13:18

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
p-Phenylenediamine	U		387	6900
Kepone	U		2.66	20.0
Famphur	U		3.92	20.0

Laboratory Control Sample (LCS)

(LCS) R3742535-2 12/19/21 12:57

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
p-Phenylenediamine	50.0	0.000	0.000	50.0-150	<u>J4</u>
Kepone	50.0	26.3	52.6	10.0-120	
Famphur	50.0	38.7	77.4	32.0-120	

L1443206-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1443206-01 12/19/21 19:35 • (MS) R3742535-4 12/19/21 20:38

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
p-Phenylenediamine	50.0	U	U	0.000	1	60.0-140	<u>J6</u>
Kepone	50.0	U	U	0.000	1	10.0-120	<u>J6</u>
Famphur	50.0	U	29.3	58.6	1	32.0-120	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

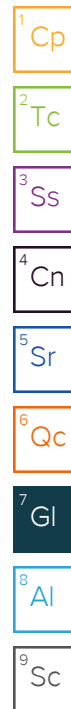
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
J7	Surrogate recovery cannot be used for control limit evaluation due to dilution.
P	RPD between the primary and confirmatory analysis exceeded 40%.



ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

F196

Internal Transfer Chain of Custody



Samples Pre-Logged into eCOC.

State Of Origin: NY

Cert. Needed: Yes No

Pace Analytical®
www.pacelabs.com

Workorder: 70197894 Workorder Name: CELL 7 LEACHATE EXPANDED 12/14 Owner Received Date: 12/14/2021 Results Requested By: 12/23/2021

Report To		Subcontract To				Requested Analysis												
Kimberley M. Mack Pace Analytical Melville 575 Broad Hollow Road Melville, NY 11747 Phone (631)694-3040		Pace National 12065 Lebanon Rd Mt. Juliet, TN 37122 Phone (615) 758-5858																
						8151 8270												
						LAB USE ONLY												
						L1443206												
						-21												
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Unpreserved	Preserved Containers											
1	CELL 7 PLCRS	PS	12/14/2021 12:02	70197894001	Water	2					X	X						
2																		
3																		
4																		
5																		
Transfers		Released By	Date/Time	Received By	Date/Time	Comments												
1		Noranne Saager NY	12-15-21 1800	N. Swart	1500 12/16/21	S850: Famphur, Kepone, and P-phenylenediamine ONLY by 8270 Need Category B Package and EQUIS EDDs												
2																		
3																		
Cooler Temperature on Receipt		°C	Custody Seal		Y or N	Received on Ice		Y or N	Samples Intact Y or N									

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.
This chain of custody is considered complete as is since this information is available in the owner laboratory.

5.3 + W = 5.3
DATA 2

8551 3518 0604

Sample Receipt Checklist

COC Seal Present/Intact: Y N If Applicable

COC Signed/Accurate: Y N VOA Zero Headspace: Y N

Bottles arrive intact: Y N Pres. Correct/Check: Y N

Correct bottles used: Y N

Sufficient volume sent: Y N

RAD Screen <0.5 mR/hr: Y N

\$125.00
\$187.50
TOTAL

1443206



Sample Condition Upon Receipt

WO#: 70197894

PM: KMM Due Date: 12/23/21
CLIENT: BAB-ECO

Client Name: Town of Babylon
Project: Babylon
Commercial Face Other

Courier: Fed Ex UPS USPS Client Tracking #: _____
Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes No N/A Other
Packing Material: Bubble Wrap Bubble Bags Ziploc None Other
Thermometer Used: TH091 Correction Factor: 0.00
Cooler Temperature (°C): 2.2 Cooler Temperature Corrected (°C): 2.2
Temp should be above freezing to 6.0°C

Temperature Blank Present: Yes No
Type of Ice: Wat Blue None
 Samples on ice, cooling process has begun
Date/Time 5035A Kits placed in freezer: _____

USDA Regulated Soil (N/A, water sample)

Date and Initials of person examining contents: MM 12/14/21
Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? Yes No
If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

Chain of Custody Present:	1.	COMMENTS:
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Chain of Custody Filled Out:	2.	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Chain of Custody Relinquished:	3.	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Sampler Name & Signature on COC:	4.	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Samples Arrived within Hold Time:	5.	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Short Hold Time Analysis (<72hr):	6.	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Rush Turn Around Time Requested:	7.	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Sufficient Volume: (Triple volume provided for)	8.	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Correct Containers Used:	9.	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
-Pace Containers Used:	9.	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Containers Intact:	10.	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Filtered volume received for Dissolved tests	11.	Note if sediment is visible in the dissolved container.
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Sample Labels match COC:	12.	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
-Includes date/time/ID, Matrix: <u>SL (WT) OIL</u>		
All containers needing preservation have been checked?	13.	<input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> HCl
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
pH paper Lot # <u>11160347</u>		Sample #
All containers needing preservation are found to be in compliance with method recommendation? (HNO ₃ , H ₂ SO ₄ , HCl, NaOH-9 Sulfide, NaOH>12 Cyanide)		
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRD/8015 (water).		
Per Method, VOA pH is checked after analysis		
Samples checked for dechlorination:	14.	Initial when completed: _____ Lot # of added preservative: _____ Date/Time preservative added: _____
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
KI starch test strips Lot # <u>14-860</u>		Positive for Res. Chlorine? Y N
Residual chlorine strips Lot # _____		Positive for Sulfide? Y N
SM 4500 CN samples checked for sulfide?	15.	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Lead Acetate Strips Lot # <u>560175</u>		
Headspace in VOA Vials (>6mm):	16.	
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Trip Blank Present:	17.	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Trip Blank Custody Seals Present		
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Pace Trip Blank Lot # (if applicable): _____		

Field Data Required? Y / N
Person Contacted: _____ Date/Time: _____
Comments/ Resolution: _____

ANALYTICAL REPORT

Eurofins Sacramento
880 Riverside Parkway
West Sacramento, CA 95605
Tel: (916)373-5600

Laboratory Job ID: 320-83140-1
Client Project/Site: Pace PFAS Testing

For:
Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, New York 11747

Attn: Kimberley Mack



Authorized for release by:
1/5/2022 5:00:07 PM
Jill Kellmann, Client Service Manager
(916)374-4402
Jill.Kellmann@Eurofinset.com
Designee for
Cesar Cortes, Project Manager I
(916)374-4316
Cesar.Cortes@Eurofinset.com

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

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



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Definitions/Glossary

Client: Pace Analytical Services, LLC
Project/Site: Pace PFAS Testing

Job ID: 320-83140-1

Qualifiers

LCMS

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Case Narrative

Client: Pace Analytical Services, LLC
Project/Site: Pace PFAS Testing

Job ID: 320-83140-1

Job ID: 320-83140-1

Laboratory: Eurofins Sacramento

Narrative

Receipt

The sample was received on 12/17/2021 11:00 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.3° C.

LCMS

Method 537 (modified): Results for sample CELL 7 PLCRS (320-83140-1) were reported from the analysis of a diluted extract due to high concentration of the target analyte in the analysis of the undiluted extract. The dilution factor was applied to the labeled internal standard area counts and these area counts were within acceptance limits

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

Organic Prep

Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 320-553024.

Method 3535: The following samples were observed to be light yellow in color prior to extraction: CELL 7 PLCRS (320-83140-1).

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

Detection Summary

Client: Pace Analytical Services, LLC
Project/Site: Pace PFAS Testing

Job ID: 320-83140-1

Client Sample ID: CELL 7 PLCRS

Lab Sample ID: 320-83140-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoropentanoic acid (PFPeA)	180		1.8	0.43	ng/L	1		537 (modified)	Total/NA
Perfluoroheptanoic acid	33		1.8	0.22	ng/L	1		537 (modified)	Total/NA
Perfluorooctanoic acid (PFOA)	33		1.8	0.74	ng/L	1		537 (modified)	Total/NA
Perfluorononanoic acid (PFNA)	1.1	J	1.8	0.24	ng/L	1		537 (modified)	Total/NA
Perfluorodecanoic acid (PFDA)	0.58	J	1.8	0.27	ng/L	1		537 (modified)	Total/NA
Perfluorobutanesulfonic acid (PFBS)	280		1.8	0.18	ng/L	1		537 (modified)	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	7.0		1.8	0.50	ng/L	1		537 (modified)	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.1		1.8	0.47	ng/L	1		537 (modified)	Total/NA
6:2 FTS	6.0		4.4	2.2	ng/L	1		537 (modified)	Total/NA
Perfluorobutanoic acid - DL	440		22	11	ng/L	5		537 (modified)	Total/NA
Perfluorohexanoic acid (PFHxA) - DL	560		8.8	2.5	ng/L	5		537 (modified)	Total/NA

This Detection Summary does not include radiochemical test results.

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Client Sample Results

Client: Pace Analytical Services, LLC
Project/Site: Pace PFAS Testing

Job ID: 320-83140-1

Client Sample ID: CELL 7 PLCRS

Lab Sample ID: 320-83140-1

Date Collected: 12/14/21 12:02

Matrix: Water

Date Received: 12/17/21 11:00

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoropentanoic acid (PFPeA)	180		1.8	0.43	ng/L		12/21/21 19:47	12/25/21 02:29	1
Perfluoroheptanoic acid	33		1.8	0.22	ng/L		12/21/21 19:47	12/25/21 02:29	1
Perfluorooctanoic acid (PFOA)	33		1.8	0.74	ng/L		12/21/21 19:47	12/25/21 02:29	1
Perfluorononanoic acid (PFNA)	1.1	J	1.8	0.24	ng/L		12/21/21 19:47	12/25/21 02:29	1
Perfluorodecanoic acid (PFDA)	0.58	J	1.8	0.27	ng/L		12/21/21 19:47	12/25/21 02:29	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.96	ng/L		12/21/21 19:47	12/25/21 02:29	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.48	ng/L		12/21/21 19:47	12/25/21 02:29	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	1.1	ng/L		12/21/21 19:47	12/25/21 02:29	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.64	ng/L		12/21/21 19:47	12/25/21 02:29	1
Perfluorobutanesulfonic acid (PFBS)	280		1.8	0.18	ng/L		12/21/21 19:47	12/25/21 02:29	1
Perfluorohexanesulfonic acid (PFHxS)	7.0		1.8	0.50	ng/L		12/21/21 19:47	12/25/21 02:29	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.8	0.17	ng/L		12/21/21 19:47	12/25/21 02:29	1
Perfluorooctanesulfonic acid (PFOS)	2.1		1.8	0.47	ng/L		12/21/21 19:47	12/25/21 02:29	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.28	ng/L		12/21/21 19:47	12/25/21 02:29	1
Perfluorooctanesulfonamide (FOSA)	ND		1.8	0.86	ng/L		12/21/21 19:47	12/25/21 02:29	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.4	1.1	ng/L		12/21/21 19:47	12/25/21 02:29	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.4	1.1	ng/L		12/21/21 19:47	12/25/21 02:29	1
6:2 FTS	6.0		4.4	2.2	ng/L		12/21/21 19:47	12/25/21 02:29	1
8:2 FTS	ND		1.8	0.40	ng/L		12/21/21 19:47	12/25/21 02:29	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	27		25 - 150	12/21/21 19:47	12/25/21 02:29	1
13C5 PFPeA	69		25 - 150	12/21/21 19:47	12/25/21 02:29	1
13C2 PFHxA	77		25 - 150	12/21/21 19:47	12/25/21 02:29	1
13C4 PFHpA	111		25 - 150	12/21/21 19:47	12/25/21 02:29	1
13C4 PFOA	111		25 - 150	12/21/21 19:47	12/25/21 02:29	1
13C5 PFNA	106		25 - 150	12/21/21 19:47	12/25/21 02:29	1
13C2 PFDA	83		25 - 150	12/21/21 19:47	12/25/21 02:29	1
13C2 PFUnA	78		25 - 150	12/21/21 19:47	12/25/21 02:29	1
13C2 PFDoA	77		25 - 150	12/21/21 19:47	12/25/21 02:29	1
13C2 PFTeDA	73		25 - 150	12/21/21 19:47	12/25/21 02:29	1
13C3 PFBS	104		25 - 150	12/21/21 19:47	12/25/21 02:29	1
18O2 PFHxS	110		25 - 150	12/21/21 19:47	12/25/21 02:29	1
13C4 PFOS	106		25 - 150	12/21/21 19:47	12/25/21 02:29	1
13C8 FOSA	66		25 - 150	12/21/21 19:47	12/25/21 02:29	1
d3-NMeFOSAA	60		25 - 150	12/21/21 19:47	12/25/21 02:29	1
d5-NEtFOSAA	74		25 - 150	12/21/21 19:47	12/25/21 02:29	1
M2-6:2 FTS	98		25 - 150	12/21/21 19:47	12/25/21 02:29	1
M2-8:2 FTS	72		25 - 150	12/21/21 19:47	12/25/21 02:29	1

Method: 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	440		22	11	ng/L		12/21/21 19:47	12/30/21 19:09	5
Perfluorohexanoic acid (PFHxA)	560		8.8	2.5	ng/L		12/21/21 19:47	12/30/21 19:09	5

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	58		25 - 150	12/21/21 19:47	12/30/21 19:09	5

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Client Sample Results

Client: Pace Analytical Services, LLC
Project/Site: Pace PFAS Testing

Job ID: 320-83140-1

Client Sample ID: CELL 7 PLCRS

Lab Sample ID: 320-83140-1

Date Collected: 12/14/21 12:02

Matrix: Water

Date Received: 12/17/21 11:00

Method: 537 (modified) - Fluorinated Alkyl Substances - DL (Continued)

<u>Isotope Dilution</u>	<u>%Recovery</u>	<u>Qualifier</u>	<u>Limits</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>Dil Fac</u>
13C2 PFHxA	86		25 - 150	12/21/21 19:47	12/30/21 19:09	5

1

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Isotope Dilution Summary

Client: Pace Analytical Services, LLC
 Project/Site: Pace PFAS Testing

Job ID: 320-83140-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Matrix: Water

Prep Type: Total/NA

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFBA (25-150)	PFPeA (25-150)	PFHxA (25-150)	C4PFHA (25-150)	PFOA (25-150)	PFNA (25-150)	PFDA (25-150)	PFUnA (25-150)
320-83140-1	CELL 7 PLCRS	27	69	77	111	111	106	83	78
320-83140-1 - DL	CELL 7 PLCRS	58		86					
LCS 320-553024/2-A	Lab Control Sample	95	104	97	107	113	96	100	107
LCSD 320-553024/3-A	Lab Control Sample Dup	92	88	86	98	98	84	87	97
MB 320-553024/1-A	Method Blank	99	104	96	113	110	92	88	102

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PFDoA (25-150)	PFTDA (25-150)	C3PFBS (25-150)	PFHxS (25-150)	PFOS (25-150)	PFOSA (25-150)	d3NMFOS (25-150)	d5NEFOS (25-150)
320-83140-1	CELL 7 PLCRS	77	73	104	110	106	66	60	74
320-83140-1 - DL	CELL 7 PLCRS								
LCS 320-553024/2-A	Lab Control Sample	117	109	107	107	103	76	96	120
LCSD 320-553024/3-A	Lab Control Sample Dup	103	99	89	101	88	73	88	98
MB 320-553024/1-A	Method Blank	100	84	107	106	99	69	88	95

Percent Isotope Dilution Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	M262FTS (25-150)	M282FTS (25-150)
320-83140-1	CELL 7 PLCRS	98	72
320-83140-1 - DL	CELL 7 PLCRS		
LCS 320-553024/2-A	Lab Control Sample	86	79
LCSD 320-553024/3-A	Lab Control Sample Dup	80	74
MB 320-553024/1-A	Method Blank	91	83

Surrogate Legend

- PFBA = 13C4 PFBA
- PFPeA = 13C5 PFPeA
- PFHxA = 13C2 PFHxA
- C4PFHA = 13C4 PFHpA
- PFOA = 13C4 PFOA
- PFNA = 13C5 PFNA
- PFDA = 13C2 PFDA
- PFUnA = 13C2 PFUnA
- PFDoA = 13C2 PFDoA
- PFTDA = 13C2 PFTeDA
- C3PFBS = 13C3 PFBS
- PFHxS = 18O2 PFHxS
- PFOS = 13C4 PFOS
- PFOSA = 13C8 FOSA
- d3NMFOS = d3-NMeFOSAA
- d5NEFOS = d5-NEtFOSAA
- M262FTS = M2-6:2 FTS
- M282FTS = M2-8:2 FTS

QC Sample Results

Client: Pace Analytical Services, LLC
 Project/Site: Pace PFAS Testing

Job ID: 320-83140-1

Method: 537 (modified) - Fluorinated Alkyl Substances

Lab Sample ID: MB 320-553024/1-A
Matrix: Water
Analysis Batch: 553793

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 553024

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Perfluorobutanoic acid	ND		5.0	2.4	ng/L		12/21/21 19:47	12/25/21 01:06	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.49	ng/L		12/21/21 19:47	12/25/21 01:06	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.58	ng/L		12/21/21 19:47	12/25/21 01:06	1
Perfluoroheptanoic acid	ND		2.0	0.25	ng/L		12/21/21 19:47	12/25/21 01:06	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.85	ng/L		12/21/21 19:47	12/25/21 01:06	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.27	ng/L		12/21/21 19:47	12/25/21 01:06	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.31	ng/L		12/21/21 19:47	12/25/21 01:06	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	1.1	ng/L		12/21/21 19:47	12/25/21 01:06	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.55	ng/L		12/21/21 19:47	12/25/21 01:06	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	1.3	ng/L		12/21/21 19:47	12/25/21 01:06	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.73	ng/L		12/21/21 19:47	12/25/21 01:06	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.20	ng/L		12/21/21 19:47	12/25/21 01:06	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.57	ng/L		12/21/21 19:47	12/25/21 01:06	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		2.0	0.19	ng/L		12/21/21 19:47	12/25/21 01:06	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.54	ng/L		12/21/21 19:47	12/25/21 01:06	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.32	ng/L		12/21/21 19:47	12/25/21 01:06	1
Perfluorooctanesulfonamide (FOSA)	ND		2.0	0.98	ng/L		12/21/21 19:47	12/25/21 01:06	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.0	1.2	ng/L		12/21/21 19:47	12/25/21 01:06	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.0	1.3	ng/L		12/21/21 19:47	12/25/21 01:06	1
6:2 FTS	ND		5.0	2.5	ng/L		12/21/21 19:47	12/25/21 01:06	1
8:2 FTS	ND		2.0	0.46	ng/L		12/21/21 19:47	12/25/21 01:06	1

Isotope Dilution	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
13C4 PFBA	99		25 - 150	12/21/21 19:47	12/25/21 01:06	1
13C5 PFPeA	104		25 - 150	12/21/21 19:47	12/25/21 01:06	1
13C2 PFHxA	96		25 - 150	12/21/21 19:47	12/25/21 01:06	1
13C4 PFHpA	113		25 - 150	12/21/21 19:47	12/25/21 01:06	1
13C4 PFOA	110		25 - 150	12/21/21 19:47	12/25/21 01:06	1
13C5 PFNA	92		25 - 150	12/21/21 19:47	12/25/21 01:06	1
13C2 PFDA	88		25 - 150	12/21/21 19:47	12/25/21 01:06	1
13C2 PFUnA	102		25 - 150	12/21/21 19:47	12/25/21 01:06	1
13C2 PFDoA	100		25 - 150	12/21/21 19:47	12/25/21 01:06	1
13C2 PFTeDA	84		25 - 150	12/21/21 19:47	12/25/21 01:06	1
13C3 PFBS	107		25 - 150	12/21/21 19:47	12/25/21 01:06	1
18O2 PFHxS	106		25 - 150	12/21/21 19:47	12/25/21 01:06	1
13C4 PFOS	99		25 - 150	12/21/21 19:47	12/25/21 01:06	1
13C8 FOSA	69		25 - 150	12/21/21 19:47	12/25/21 01:06	1
d3-NMeFOSAA	88		25 - 150	12/21/21 19:47	12/25/21 01:06	1
d5-NEtFOSAA	95		25 - 150	12/21/21 19:47	12/25/21 01:06	1
M2-6:2 FTS	91		25 - 150	12/21/21 19:47	12/25/21 01:06	1
M2-8:2 FTS	83		25 - 150	12/21/21 19:47	12/25/21 01:06	1

QC Sample Results

Client: Pace Analytical Services, LLC
 Project/Site: Pace PFAS Testing

Job ID: 320-83140-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-553024/2-A
Matrix: Water
Analysis Batch: 555468

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 553024

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Perfluorobutanoic acid	40.0	43.9		ng/L		110	76 - 136
Perfluoropentanoic acid (PFPeA)	40.0	35.6		ng/L		89	71 - 131
Perfluorohexanoic acid (PFHxA)	40.0	40.1		ng/L		100	73 - 133
Perfluoroheptanoic acid	40.0	40.8		ng/L		102	72 - 132
Perfluorooctanoic acid (PFOA)	40.0	35.8		ng/L		90	70 - 130
Perfluorononanoic acid (PFNA)	40.0	40.0		ng/L		100	75 - 135
Perfluorodecanoic acid (PFDA)	40.0	36.3		ng/L		91	76 - 136
Perfluoroundecanoic acid (PFUnA)	40.0	38.3		ng/L		96	68 - 128
Perfluorododecanoic acid (PFDoA)	40.0	39.9		ng/L		100	71 - 131
Perfluorotridecanoic acid (PFTriA)	40.0	37.6		ng/L		94	71 - 131
Perfluorotetradecanoic acid (PFTeA)	40.0	39.2		ng/L		98	70 - 130
Perfluorobutanesulfonic acid (PFBS)	35.4	31.0		ng/L		88	67 - 127
Perfluorohexanesulfonic acid (PFHxS)	36.4	38.1		ng/L		105	59 - 119
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	38.0		ng/L		100	76 - 136
Perfluorooctanesulfonic acid (PFOS)	37.1	35.0		ng/L		94	70 - 130
Perfluorodecanesulfonic acid (PFDS)	38.6	43.3		ng/L		112	71 - 131
Perfluorooctanesulfonamide (FOSA)	40.0	50.9		ng/L		127	73 - 133
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	37.1		ng/L		93	76 - 136
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	38.0		ng/L		95	76 - 136
6:2 FTS	37.9	38.1		ng/L		101	59 - 175
8:2 FTS	38.3	41.9		ng/L		109	75 - 135

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
13C4 PFBA	95		25 - 150
13C5 PFPeA	104		25 - 150
13C2 PFHxA	97		25 - 150
13C4 PFHpA	107		25 - 150
13C4 PFOA	113		25 - 150
13C5 PFNA	96		25 - 150
13C2 PFDA	100		25 - 150
13C2 PFUnA	107		25 - 150
13C2 PFDoA	117		25 - 150
13C2 PFTeDA	109		25 - 150
13C3 PFBS	107		25 - 150
18O2 PFHxS	107		25 - 150
13C4 PFOS	103		25 - 150
13C8 FOSA	76		25 - 150
d3-NMeFOSAA	96		25 - 150
d5-NEtFOSAA	120		25 - 150

Eurofins Sacramento

QC Sample Results

Client: Pace Analytical Services, LLC
 Project/Site: Pace PFAS Testing

Job ID: 320-83140-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCS 320-553024/2-A
Matrix: Water
Analysis Batch: 555468

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 553024

Isotope Dilution	LCS LCS		Limits
	%Recovery	Qualifier	
M2-6:2 FTS	86		25 - 150
M2-8:2 FTS	79		25 - 150

Lab Sample ID: LCSD 320-553024/3-A
Matrix: Water
Analysis Batch: 555468

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 553024

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits	RPD		
Perfluorobutanoic acid	40.0	40.8		ng/L		102	76 - 136	7		30
Perfluoropentanoic acid (PFPeA)	40.0	36.4		ng/L		91	71 - 131	2		30
Perfluorohexanoic acid (PFHxA)	40.0	41.0		ng/L		102	73 - 133	2		30
Perfluoroheptanoic acid	40.0	39.9		ng/L		100	72 - 132	2		30
Perfluorooctanoic acid (PFOA)	40.0	37.7		ng/L		94	70 - 130	5		30
Perfluorononanoic acid (PFNA)	40.0	39.7		ng/L		99	75 - 135	1		30
Perfluorodecanoic acid (PFDA)	40.0	38.6		ng/L		97	76 - 136	6		30
Perfluoroundecanoic acid (PFUnA)	40.0	37.4		ng/L		93	68 - 128	2		30
Perfluorododecanoic acid (PFDoA)	40.0	41.6		ng/L		104	71 - 131	4		30
Perfluorotridecanoic acid (PFTriA)	40.0	41.8		ng/L		105	71 - 131	11		30
Perfluorotetradecanoic acid (PFTeA)	40.0	38.7		ng/L		97	70 - 130	1		30
Perfluorobutanesulfonic acid (PFBS)	35.4	33.6		ng/L		95	67 - 127	8		30
Perfluorohexanesulfonic acid (PFHxS)	36.4	34.5		ng/L		95	59 - 119	10		30
Perfluoroheptanesulfonic Acid (PFHpS)	38.1	37.9		ng/L		99	76 - 136	0		30
Perfluorooctanesulfonic acid (PFOS)	37.1	37.3		ng/L		100	70 - 130	6		30
Perfluorodecanesulfonic acid (PFDS)	38.6	43.2		ng/L		112	71 - 131	0		30
Perfluorooctanesulfonamide (FOSA)	40.0	48.1		ng/L		120	73 - 133	6		30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	40.8		ng/L		102	76 - 136	10		30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	41.7		ng/L		104	76 - 136	9		30
6:2 FTS	37.9	40.1		ng/L		106	59 - 175	5		30
8:2 FTS	38.3	37.0		ng/L		97	75 - 135	12		30

Isotope Dilution	LCSD LCSD		Limits
	%Recovery	Qualifier	
13C4 PFBA	92		25 - 150
13C5 PFPeA	88		25 - 150
13C2 PFHxA	86		25 - 150
13C4 PFHpA	98		25 - 150
13C4 PFOA	98		25 - 150
13C5 PFNA	84		25 - 150
13C2 PFDA	87		25 - 150
13C2 PFUnA	97		25 - 150
13C2 PFDoA	103		25 - 150

Eurofins Sacramento

QC Sample Results

Client: Pace Analytical Services, LLC
Project/Site: Pace PFAS Testing

Job ID: 320-83140-1

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Lab Sample ID: LCSD 320-553024/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 555468

Prep Batch: 553024

<i>Isotope Dilution</i>	<i>LCSD LCSD</i>		<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>13C2 PFTeDA</i>	99		25 - 150
<i>13C3 PFBS</i>	89		25 - 150
<i>18O2 PFHxS</i>	101		25 - 150
<i>13C4 PFOS</i>	88		25 - 150
<i>13C8 FOSA</i>	73		25 - 150
<i>d3-NMeFOSAA</i>	88		25 - 150
<i>d5-NEtFOSAA</i>	98		25 - 150
<i>M2-6:2 FTS</i>	80		25 - 150
<i>M2-8:2 FTS</i>	74		25 - 150

QC Association Summary

Client: Pace Analytical Services, LLC
Project/Site: Pace PFAS Testing

Job ID: 320-83140-1

LCMS

Prep Batch: 553024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83140-1 - DL	CELL 7 PLCRS	Total/NA	Water	3535	
320-83140-1	CELL 7 PLCRS	Total/NA	Water	3535	
MB 320-553024/1-A	Method Blank	Total/NA	Water	3535	
LCS 320-553024/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 320-553024/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 553793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83140-1	CELL 7 PLCRS	Total/NA	Water	537 (modified)	553024
MB 320-553024/1-A	Method Blank	Total/NA	Water	537 (modified)	553024

Analysis Batch: 555393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
320-83140-1 - DL	CELL 7 PLCRS	Total/NA	Water	537 (modified)	553024

Analysis Batch: 555468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 320-553024/2-A	Lab Control Sample	Total/NA	Water	537 (modified)	553024
LCSD 320-553024/3-A	Lab Control Sample Dup	Total/NA	Water	537 (modified)	553024

Lab Chronicle

Client: Pace Analytical Services, LLC
Project/Site: Pace PFAS Testing

Job ID: 320-83140-1

Client Sample ID: CELL 7 PLCRS

Lab Sample ID: 320-83140-1

Date Collected: 12/14/21 12:02

Matrix: Water

Date Received: 12/17/21 11:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			285.3 mL	10.0 mL	553024	12/21/21 19:47	AP	TAL SAC
Total/NA	Analysis	537 (modified)		1			553793	12/25/21 02:29	K1S	TAL SAC
Total/NA	Prep	3535	DL		285.3 mL	10.0 mL	553024	12/21/21 19:47	AP	TAL SAC
Total/NA	Analysis	537 (modified)	DL	5			555393	12/30/21 19:09	AF	TAL SAC

Laboratory References:

TAL SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600



Accreditation/Certification Summary

Client: Pace Analytical Services, LLC
 Project/Site: Pace PFAS Testing

Job ID: 320-83140-1

Laboratory: Eurofins Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	11666	04-01-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
537 (modified)	3535	Water	6:2 FTS
537 (modified)	3535	Water	8:2 FTS
537 (modified)	3535	Water	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)
537 (modified)	3535	Water	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)
537 (modified)	3535	Water	Perfluorobutanesulfonic acid (PFBS)
537 (modified)	3535	Water	Perfluorobutanoic acid
537 (modified)	3535	Water	Perfluorodecanesulfonic acid (PFDS)
537 (modified)	3535	Water	Perfluorodecanoic acid (PFDA)
537 (modified)	3535	Water	Perfluorododecanoic acid (PFDoA)
537 (modified)	3535	Water	Perfluoroheptanesulfonic Acid (PFHpS)
537 (modified)	3535	Water	Perfluoroheptanoic acid
537 (modified)	3535	Water	Perfluorohexanesulfonic acid (PFHxS)
537 (modified)	3535	Water	Perfluorohexanoic acid (PFHxA)
537 (modified)	3535	Water	Perfluorononanoic acid (PFNA)
537 (modified)	3535	Water	Perfluorooctanesulfonamide (FOSA)
537 (modified)	3535	Water	Perfluorooctanesulfonic acid (PFOS)
537 (modified)	3535	Water	Perfluorooctanoic acid (PFOA)
537 (modified)	3535	Water	Perfluoropentanoic acid (PFPeA)
537 (modified)	3535	Water	Perfluorotetradecanoic acid (PFTeA)
537 (modified)	3535	Water	Perfluorotridecanoic acid (PFTriA)
537 (modified)	3535	Water	Perfluoroundecanoic acid (PFUnA)

Method Summary

Client: Pace Analytical Services, LLC
Project/Site: Pace PFAS Testing

Job ID: 320-83140-1

Method	Method Description	Protocol	Laboratory
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL SAC = Eurofins Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600



Sample Summary

Client: Pace Analytical Services, LLC
Project/Site: Pace PFAS Testing

Job ID: 320-83140-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
320-83140-1	CELL 7 PLCRS	Water	12/14/21 12:02	12/17/21 11:00

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

Chain of Custody

PASI New York Laboratory



Workorder: 70197894

Workorder Name: CELL 7 LEACHATE EXPANDED 12/14

Results Requested By: 12/23/2021

Report / Invoice To		Subcontract To	
Kimberley M. Mack Pace Analytical Melville 575 Broad Hollow Road Melville, NY 11747 Phone (631)694-3040 Email: kimberley.mack@pacelabs.com		TA Eurofins-Sacramento 880 Riverside Pkwy. West Sacramento, CA 95605 P.O. 70197894KMM	

State of Sample Origin: NY

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers		LAB USE ONLY
					Unpreserved	Preserved	
1	CELL 7 PLCRS	12/14/2021 12:02	70197894001	Water			
2							
3							
4							
5							



PAS by 537

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	<i>Kevin Davidson Pace/11</i>	12/15/2021	<i>[Signature]</i>	12/17/21	Need a Category B Package and EQUIS EDDS
2					
3					

Cooler Temperature on Receipt 3.3 °C Custody Seal Y or N Received on Ice Y or N Samples Intact Y or N

3.3°C



Login Sample Receipt Checklist

Client: Pace Analytical Services, LLC

Job Number: 320-83140-1

Login Number: 83140

List Source: Eurofins Sacramento

List Number: 1

Creator: Oropeza, Salvador

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

Report Prepared for:

Kimberley Mack
PASI Long Island
575 Broad Hollow Road
Melville NY 11747

**REPORT OF
LABORATORY
ANALYSIS FOR
PCDD/PCDF**

Report Prepared Date:

December 31, 2021

Report Information:


Pace Project #: 10591678
Sample Receipt Date: 12/16/2021
Client Project #: 70197894
Client Sub PO #: N/A
State Cert #: 11647

Invoicing & Reporting Options:

The report provided has been invoiced as a Level 2 PCDD/PCDF Report. If an upgrade of this report package is requested, an additional charge may be applied.

Please review the attached invoice for accuracy and forward any questions to Joanne Richardson, your Pace Project Manager.

This report has been reviewed by:



January 04, 2022

Joanne Richardson,
(612) 607-6453
(612) 607-6444 (fax)



Report of Laboratory Analysis

This report should not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

The results relate only to the samples included in this report.



DISCUSSION

This report presents the results from the analysis performed on one sample submitted by a representative of Pace Analytical Services, LLC. The sample was analyzed for the presence or absence of polychlorodibenzo-p-dioxins (PCDDs) and polychlorodibenzofurans (PCDFs) using USEPA Method 1613B. The reporting limits were set to correspond to the lowest calibration points and a nominal 1-Liter sample amount, and the sensitivity was verified by signal-to-noise measurements. The quantitation limits, adjusted for sample extraction amount, may be somewhat higher or lower than the reporting limits provided in this report. Estimated maximum possible concentration (EMPC) values, where present, were treated as positives in the toxic equivalence calculations.

The recoveries of the isotopically-labeled PCDD/PCDF internal standards in the sample extract ranged from 49-79%. All of the labeled standard recoveries obtained for this project were within the target ranges specified in Method 1613B. Also, since the quantification of the native 2,3,7,8-substituted congeners was based on isotope dilution, the data were automatically corrected for variation in recovery and accurate values were obtained.

A laboratory method blank was prepared and analyzed with the sample batch as part of our routine quality control procedures. The results show the blank to be free of PCDDs and PCDFs at the reporting limits.

Laboratory spike samples were also prepared with the sample batch using clean reference matrix that had been fortified with native standard materials. The results show that the spiked native compounds were recovered at 97-124% with relative percent differences of 0.9-5.3%. These results were within the target ranges for the method. Matrix spikes were not prepared with the sample batch.

REPORT OF LABORATORY ANALYSIS

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Minnesota Laboratory Certifications

Authority	Certificate #	Authority	Certificate #
A2LA	2926.01	Missouri	10100
Alabama	40770	Montana	CERT0092
Alaska-DW	MN00064	Nebraska	NE-OS-18-06
Alaska-UST	17-009	Nevada	MN00064
Arizona	AZ0014	New Hampshire	2081
Arkansas - WW	88-0680	New Jersey	MN002
Arkansas-DW	MN00064	New York	11647
California	2929	North Carolina-	27700
Colorado	MN00064	North Carolina-	530
Connecticut	PH-0256	North Dakota	R-036
Florida	E87605	Ohio-DW	41244
Georgia	959	Ohio-VAP (170	CL101
Hawaii	MN00064	Ohio-VAP (180	CL110
Idaho	MN00064	Oklahoma	9507
Illinois	200011	Oregon- rimary	MN300001
Indiana	C-MN-01	Oregon-Second	MN200001
Iowa	368	Pennsylvania	68-00563
Kansas	E-10167	Puerto Rico	MN00064
Kentucky-DW	90062	South Carolina	74003
Kentucky-WW	90062	Tennessee	TN02818
Louisiana-DEQ	AI-84596	Texas	T104704192
Louisiana-DW	MN00064	Utah	MN00064
Maine	MN00064	Vermont	VT-027053137
Maryland	322	Virginia	460163
Michigan	9909	Washington	C486
Minnesota	027-053-137	West Virginia-D	382
Minnesota-Ag	via MN 027-053	West Virginia-D	9952C
Minnesota-Petr	1240	Wisconsin	999407970
Mississippi	MN00064	Wyoming-UST	via A2LA 2926.

REPORT OF LABORATORY ANALYSIS

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Report No.....10591678

Appendix A

Sample Management

Internal Transfer Chain of Custody



Samples Pre-Logged into eCOC.

State Of Origin: NY
 Cert. Needed: Yes No



Workorder: 70197894 Workorder Name: CELL 7 LEACHATE EXPANDED 12/14 Owner Received Date: 12/14/2021 Results Requested By: 12/23/2021

Report To		Subcontract To		Requested Analysis			
Kimberley M. Mack Pace Analytical Melville 575 Broad Hollow Road Melville, NY 11747 Phone (631)694-3040		Pace Analytical Minnesota 1700 Elm Street Suite 200 Minneapolis, MN 55414 Phone (612)607-1700		Dioxin-Furan Screen			
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers	LAB USE ONLY
1	CELL 7 PLCRS	PS	12/14/2021 12:02	70197894001	Water	1	001
2							
3							
4							
5							

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	<i>Kevin Danton Pace/1</i>	12/15/2021 18:00	<i>Kevin Danton Pace</i>	12/16/21 10:45	DIOXIN/FURAN TCDD/TCDF scan only
2					Need Category B Package and EQUIS EDDs
3					

Cooler Temperature on Receipt 2.0 °C Custody Seal Y or N Received on Ice or N Samples Intact or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.
 This chain of custody is considered complete as is since this information is available in the owner laboratory.

WO# : 10591678





WO#: 70197894



70197894

CHAIN-OF-CUSTODY / Analytical Request
The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields m

Section A		Section B		Section C	
Required Client Information:		Required Project Information:		Invoice Information:	
Company: Town of Babylon	Report To: Joe Guarino	Company Name:	Company Address:	Regulatory Agency:	
Address: 281 Phelps Lane	Copy To:	Address:	Address:	State/Location:	NY
North Babylon, NY 11703		Purchase Order #:	Pace Quote:		
Email: jguarino@townofbabylon.com	Project Name: Cell 7 Leachate Expanded 360	Project #:	Pace Project Manager: Kimberly Mack@Pacelabs.com		
Phone: 631-422-7640	Requested Due Date:		Pace Profile #: 5271 LINE 2 & 6		
Fax:					

ITEM #	MATRIX	CODE	COLLECTED		SAMPLE TYPE (G-GRAB C-COMP)	MATRIX CODE (see valid codes to left)	# OF CONTAINERS	Preservatives						Y/N	Analytes Test	DATE	TIME	DATE	TIME	SAMPLE CONDITIONS
			START	END				H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol							
1	Cell 7 PLCRS	WT	12/14	12:02	18		X	X	X	X	X	X	X	X	X	X	X	X	X	
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

Cell 7, Leachate Expanded 360	RELINQUISHED BY / AFFILIATION	DATE	TIME	RECEIVED BY / AFFILIATION	DATE	TIME	TEMP in C	Received on	Ice (Y/N)	Custody Sealed (Y/N)	Cooler (Y/N)	Samples Intact (Y/N)
	Brian Nichols / Zion Environmental, LLC	12/14/20	13:10	<i>[Signature]</i> / Zion Env	12/14	13:29	100%					
SAMPLER NAME AND SIGNATURE		PRINT Name of SAMPLER:		SIGNATURE of SAMPLER:		DATE Signed:						
		Brian Nichols		<i>[Signature]</i>		12-14-2021						

WO#: 70197894

PM: KMM Due Date: 12/23/21
 CLIENT: BAB-ECO

CHAIN-OF-CUSTODY / Analytical Request
 The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed.

Report No.: 10591678_1613FC_DFR

Section A		Section B		Section C	
Required Client Information:		Required Project Information:		Invoice Information:	
Company: Town of Babylon	Report To: Joe Guarino	Company Name:	Attention:	Company Name:	Regulatory Agency:
Address: 281 Phelps Lane	Copy To:	Address:	Address:	Address:	State/Location:
North Babylon, NY 11703		Purchase Order #:	Face Quote:	State/Location:	NY
Email: jguarino@townofbabylon.com		Project Name: Cell 7 Leachate Expanded 360	Face Project Manager: Kimberly Mack@Pacel-Labs.com	State/Location:	NY
Phone: 631-422-7640	Fax:	Project #:	Face Profile #:	State/Location:	NY
Requested Due Date:			5271 LINE 2 & 5		

ITEM #	MATRIX	CODE	COLLECTED		SAMPLE TYPE (G-RAB C-COMP)	MATRIX CODE (see valid codes in I)	SAMPLE TEMP AT COLLECTION		# OF CONTAINERS	PRESERVATIVES	ANALYSES TEST	DATE	TIME	DATE	TIME	RECEIVED BY / AFFILIATION	DATE	TIME	TEMP IN C	Received on	Ice (Y/N)	Custody Sealed (Y/N)	Cooler (Y/N)	Samples Intact (Y/N)								
			START	END			DATE	TIME																	DATE	TIME	DATE	TIME				
13	Cell 7 PLCRS	WT	12/14	1202		WT	12/14	1310	9	Unpreserved	Dioxin/Furan Scan	12/14	1310	12/14	1310	Brian Nichols / Zion Environmental, LLC	12/14	1310	12.3													
14																																
15																																
16																																
17																																
18																																
19																																
20																																
21																																
22																																
23																																
24																																
Cell 7 Leachate Expanded 360																	Brian Nichols / Zion Environmental, LLC		12/14/21		1310		BRIAN NICHOLS		12/14/21		1310		BRIAN NICHOLS		12-14-2021	

Report No.: 10591678_1613FC_DFR



Sample Condition Upon Receipt

WO#: 70197894

Client Name: Town of Babylon Project

PM: KMM Due Date: 12/23/21
CLIENT: BAB-ECO

Courier: Fed Ex UPS USPS Client Commercial Pace Other
Tracking #: _____

Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes No N/A
Packing Material: Bubble Wrap Bubble Bags Ziploc None Other
Thermometer Used: TH091 Correction Factor: 0.00
Cooler Temperature(°C): 2.2 Cooler Temperature Corrected(°C): 2.2

Temperature Blank Present: Yes No
Type of Ice: Wat Blue None
 Samples on ice, cooling process has begun
Date/Time 5035A kits placed in freezer _____

Temp should be above freezing to 6.0°C
USDA Regulated Soil (N/A, water sample)

Date and Initials of person examining contents: KL 12/14/21

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX, or VA (check map)? Yes No
Did samples originate from a foreign source including Hawaii and Puerto Rico)? Yes No
If Yes to either question, fill out a Regulated Soil Checklist (F-LI-C-010) and include with SCUR/COC paperwork.

				COMMENTS:
Chain of Custody Present:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		5.
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No		7.
Sufficient Volume: (Triple volume provided for I)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		8.
Correct Containers Used:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		
Containers Intact:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	11. Note if sediment is visible in the dissolved container.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No		12.
-Includes date/time/ID, Matrix: <u>SL (WT) OIL</u>				
All containers needing preservation have been checked?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	13. <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> NaOH <input type="checkbox"/> HCl
pH paper Lot # <u>HC160347</u>				Sample #
All containers needing preservation are found to be in compliance with method recommendation?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	
(HNO ₃ , H ₂ SO ₄ , HCl, NaOH>9 Sulfide, NAOH>12 Cyanide)				
Exceptions: VOA, Coliform, TOC/DOC, Oil and Grease, DRO/8015 (water).				Initial when completed: Lot # of added preservative: Date/Time preservative added:
Per Method, VOA pH is checked after analysis				
Samples checked for dechlorination:	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	14. Positive for Res. Chlorine? Y N
KI starch test strips Lot # <u>14-860</u>				
Residual chlorine strips Lot #				
SM 4500 CN samples checked for sulfide?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A	15. Positive for Sulfide? Y N
Lead Acetate Strips Lot # <u>560125</u>				
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/> N/A	16.
Trip Blank Present:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	17.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if applicable):				

Client Notification/ Resolution: _____ Field Data Required? Y / N
Person Contacted: _____ Date/Time: _____
Comments/ Resolution: _____



Document Name:
Sample Condition Upon Receipt (SCUR) - MN

Document Revised: 02Dec2021
Page 1 of 1

Document No.:
ENV-FRM-MIN4-0150 Rev.03

Pace Analytical Services - Minneapolis

Sample Condition Upon Receipt

Client Name:

Project #:

Pace Melville

WO# : 10591678

Courier: Fed Ex UPS USPS Client
 Pace Speedee Commercial

PM: JMR Due Date: 12/23/21
CLIENT: PASI-LINY

Tracking Number: 5551 3518 0567 See Exceptions
ENV-FRM-MIN4-0142

Custody Seal on Cooler/Box Present? Yes No Seals Intact? Yes No Biological Tissue Frozen? Yes No N/A

Packing Material: Bubble Wrap Bubble Bags None Other: _____ Temp Blank? Yes No

Thermometer: T1(0461) T2(1336) T3(0459) T4(0254)
 T5(0489) 01339252/1710 122639816 140792808 Type of Ice: Wet Blue None Dry Melted

Did Samples Originate in West Virginia? Yes No Were All Container Temps Taken? Yes No N/A

Temp should be above freezing to 6°C Cooler Temp Read w/temp blank: _____ °C Average Corrected Temp (no temp blank only): 2.0 °C See Exceptions ENV-FRM-MIN4-0142 1 Container

Correction Factor: true Cooler Temp Corrected w/temp blank: _____ °C

USDA Regulated Soil: (N/A, water sample/Other: _____) Date/initials of Person Examining Contents: HB 12/16/21

Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, GA, ID, LA, MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? Yes No Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? Yes No

If Yes to either question, fill out a Regulated Soil Checklist ENV-FRM-MIN4-0154 and include with SCUR/COC paperwork.

	COMMENTS:
Chain of Custody Present and Filled Out? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.
Chain of Custody Relinquished? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2.
Sampler Name and/or Signature on COC? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	3.
Samples Arrived within Hold Time? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	4. If Fecal: <input type="checkbox"/> <8 hrs <input type="checkbox"/> >8hr, <24 hrs, <input type="checkbox"/> >24 hrs
Short Hold Time Analysis (<72 hr)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	5. <input type="checkbox"/> Fecal Coliform <input type="checkbox"/> HPC <input type="checkbox"/> Total Coliform/E coli <input type="checkbox"/> BOD/cBOD <input type="checkbox"/> Hex Chrome <input type="checkbox"/> Turbidity <input type="checkbox"/> Nitrate <input type="checkbox"/> Nitrite <input type="checkbox"/> Orthophos <input type="checkbox"/> Other
Rush Turn Around Time Requested? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6. <u>12/23/21</u>
Sufficient Volume? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	7.
Correct Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No -Pace Containers Used? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	8.
Containers Intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
Field Filtered Volume Received for Dissolved Tests? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	10. Is sediment visible in the dissolved container? <input type="checkbox"/> Yes <input type="checkbox"/> No
Is sufficient information available to reconcile the samples to the COC? Matrix: <input checked="" type="checkbox"/> Water <input type="checkbox"/> Soil <input type="checkbox"/> Oil <input type="checkbox"/> Other-	11. If no, write ID/ Date/Time on Container Below: <u>Received 2 AGIU's. COC states 1 container</u> See Exception <input type="checkbox"/> ENV-FRM-MIN4-0142
All containers needing acid/base preservation have been checked? All containers needing preservation are found to be in compliance with EPA recommendation? (HNO ₃ , H ₂ SO ₄ , <2pH, NaOH >9 Sulfide, NaOH >10 Cyanide)	12. Sample # <input type="checkbox"/> NaOH <input type="checkbox"/> HNO ₃ <input type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> Zinc Acetate
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Positive for Res. <input type="checkbox"/> Yes <input type="checkbox"/> No Chlorine? <input type="checkbox"/> Yes <input type="checkbox"/> No pH Paper Lot# Res. Chlorine 0-6 Roll 0-6 Strip 0-14 Strip See Exception <input type="checkbox"/> ENV-FRM-MIN4-0142
Headspace in Methyl Mercury Container? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Extra labels present on soil VOA or WIDRO containers? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A Headspace in VOA Vials (greater than 6mm)? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13. See Exception <input type="checkbox"/> ENV-FRM-MIN4-0140
Trip Blank Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A Trip Blank Custody Seals Present? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14. Pace Trip Blank Lot # (if purchased): _____

CLIENT NOTIFICATION/RESOLUTION

Person Contacted: _____
Comments/Resolution: _____

Field Data Required? Yes No

Date/Time: _____

Project Manager Review: Joanne Richardson

Date: 12-16-21

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e., out of hold, incorrect preservative, out of temp, incorrect containers).

Labeled by: HB

SCUR Exceptions:

Workorder #: 10591678

Out of Temp Sample IDs	Container Type	# of Containers	PM Notified? <input type="checkbox"/> Yes <input type="checkbox"/> No
			If yes, indicate who was contacted/date/time. If no, indicate reason why.
			Multiple Cooler Project? <input type="checkbox"/> Yes <input type="checkbox"/> No <small>If you answered yes, fill out information in the CF.</small>
			No Temp Blank
		Read Temp	Corrected Temp
		2.0	true
		2.0	true
		Average Temp	
		2.0	
		T1	

Tracking Number/Temperature

Issue Type:	Container Type	# of Containers
Sample ID	Type	

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preserv.	pH Upon Receipt	Date Adjusted	Time Adjusted	Amount Added (mL)	Lot # Added	pH After	In Compliance after addition?	Initials
								<input type="checkbox"/> Yes <input type="checkbox"/> No	
								<input type="checkbox"/> Yes <input type="checkbox"/> No	
								<input type="checkbox"/> Yes <input type="checkbox"/> No	
								<input type="checkbox"/> Yes <input type="checkbox"/> No	

Comments:

Reporting Flags

- A = Reporting Limit based on signal to noise (EDL)
- B = Less than 10x higher than method blank level
- C = Result obtained from confirmation analysis
- D = Result obtained from analysis of diluted sample
- E = Exceeds calibration range
- I = Interference present
- J = Estimated value
- L = Suppressive interference, analyte may be biased low
- Nn = Value obtained from additional analysis
- P = PCDE Interference
- R = Recovery outside target range
- S = Peak saturated
- U = Analyte not detected
- V = Result verified by confirmation analysis
- X = %D Exceeds limits
- Y = Calculated using average of daily RFs
- * = See Discussion

REPORT OF LABORATORY ANALYSIS

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Report No.....10591678

Appendix B

Sample Analysis Summary



Method 1613B Sample Analysis Results

Client - PASI Long Island

Client's Sample ID	CELL 7 PLCRS		
Lab Sample ID	70197894001		
Filename	L211223B_15		
Injected By	SMT		
Total Amount Extracted	1030 mL	Matrix	Water
% Moisture	NA	Dilution	NA
Dry Weight Extracted	NA	Collected	12/14/2021 12:02
ICAL ID	L211219	Received	12/16/2021 10:45
CCal Filename(s)	L211223A_19	Extracted	12/20/2021 10:20
Method Blank ID	BLANK-95207	Analyzed	12/24/2021 05:07

Native Isomers	Conc pg/L	EMPC pg/L	RL pg/L	Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF	ND	----	10	2,3,7,8-TCDF-13C	2.00	58
Total TCDF	ND	----	10	2,3,7,8-TCDD-13C	2.00	52
				1,2,3,7,8-PeCDF-13C	2.00	70
2,3,7,8-TCDD	ND	----	10	2,3,4,7,8-PeCDF-13C	2.00	73
Total TCDD	ND	----	10	1,2,3,7,8-PeCDD-13C	2.00	75
				1,2,3,4,7,8-HxCDF-13C	2.00	72
1,2,3,7,8-PeCDF	ND	----	50	1,2,3,6,7,8-HxCDF-13C	2.00	79
2,3,4,7,8-PeCDF	ND	----	50	2,3,4,6,7,8-HxCDF-13C	2.00	76
Total PeCDF	ND	----	50	1,2,3,7,8,9-HxCDF-13C	2.00	72
				1,2,3,4,7,8-HxCDD-13C	2.00	73
1,2,3,7,8-PeCDD	ND	----	50	1,2,3,6,7,8-HxCDD-13C	2.00	68
Total PeCDD	ND	----	50	1,2,3,4,6,7,8-HpCDF-13C	2.00	63
				1,2,3,4,7,8,9-HpCDF-13C	2.00	54
1,2,3,4,7,8-HxCDF	ND	----	50	1,2,3,4,6,7,8-HpCDD-13C	2.00	63
1,2,3,6,7,8-HxCDF	ND	----	50	OCDD-13C	4.00	49
2,3,4,6,7,8-HxCDF	ND	----	50			
1,2,3,7,8,9-HxCDF	ND	----	50	1,2,3,4-TCDD-13C	2.00	NA
Total HxCDF	ND	----	50	1,2,3,7,8,9-HxCDD-13C	2.00	NA
1,2,3,4,7,8-HxCDD	ND	----	50	2,3,7,8-TCDD-37Cl4	0.20	64
1,2,3,6,7,8-HxCDD	ND	----	50			
1,2,3,7,8,9-HxCDD	ND	----	50			
Total HxCDD	ND	----	50			
1,2,3,4,6,7,8-HpCDF	ND	----	50	Total 2,3,7,8-TCDD		
1,2,3,4,7,8,9-HpCDF	ND	----	50	Equivalence: 0.00 pg/L		
Total HpCDF	ND	----	50	(Lower-bound - Using 2005 WHO Factors)		
1,2,3,4,6,7,8-HpCDD	ND	----	50			
Total HpCDD	ND	----	50			
OCDF	ND	----	100			
OCDD	ND	----	100			

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
 EMPC = Estimated Maximum Possible Concentration
 RL = Reporting Limit

ND = Not Detected
 NA = Not Applicable
 NC = Not Calculated

REPORT OF LABORATORY ANALYSIS

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Method 1613B Blank Analysis Results

Lab Sample Name	DFBLKXZ	Matrix	Water
Lab Sample ID	BLANK-95207	Dilution	NA
Filename	L211223B_10	Extracted	12/20/2021 10:20
Total Amount Extracted	994 mL	Analyzed	12/24/2021 01:39
ICAL ID	L211219	Injected By	SMT
CCal Filename(s)	L211223A_19		

Native Isomers	Conc pg/L	EMPC pg/L	RL pg/L	Internal Standards	ng's Added	Percent Recovery
2,3,7,8-TCDF	ND	----	10	2,3,7,8-TCDF-13C	2.00	76
Total TCDF	ND	----	10	2,3,7,8-TCDD-13C	2.00	66
				1,2,3,7,8-PeCDF-13C	2.00	81
2,3,7,8-TCDD	ND	----	10	2,3,4,7,8-PeCDF-13C	2.00	84
Total TCDD	ND	----	10	1,2,3,7,8-PeCDD-13C	2.00	86
				1,2,3,4,7,8-HxCDF-13C	2.00	80
1,2,3,7,8-PeCDF	ND	----	50	1,2,3,6,7,8-HxCDF-13C	2.00	86
2,3,4,7,8-PeCDF	ND	----	50	2,3,4,6,7,8-HxCDF-13C	2.00	83
Total PeCDF	ND	----	50	1,2,3,7,8,9-HxCDF-13C	2.00	81
				1,2,3,4,7,8-HxCDD-13C	2.00	77
1,2,3,7,8-PeCDD	ND	----	50	1,2,3,6,7,8-HxCDD-13C	2.00	67
Total PeCDD	ND	----	50	1,2,3,4,6,7,8-HpCDF-13C	2.00	66
				1,2,3,4,7,8,9-HpCDF-13C	2.00	59
1,2,3,4,7,8-HxCDF	ND	----	50	1,2,3,4,6,7,8-HpCDD-13C	2.00	61
1,2,3,6,7,8-HxCDF	ND	----	50	OCDD-13C	4.00	50
2,3,4,6,7,8-HxCDF	ND	----	50			
1,2,3,7,8,9-HxCDF	ND	----	50	1,2,3,4-TCDD-13C	2.00	NA
Total HxCDF	ND	----	50	1,2,3,7,8,9-HxCDD-13C	2.00	NA
1,2,3,4,7,8-HxCDD	ND	----	50	2,3,7,8-TCDD-37Cl4	0.20	81
1,2,3,6,7,8-HxCDD	ND	----	50			
1,2,3,7,8,9-HxCDD	ND	----	50			
Total HxCDD	ND	----	50			
1,2,3,4,6,7,8-HpCDF	ND	----	50	Total 2,3,7,8-TCDD		
1,2,3,4,7,8,9-HpCDF	ND	----	50	Equivalence: 0.00 pg/L		
Total HpCDF	ND	----	50	(Lower-bound - Using 2005 WHO Factors)		
1,2,3,4,6,7,8-HpCDD	ND	----	50			
Total HpCDD	ND	----	50			
OCDF	ND	----	100			
OCDD	ND	----	100			

Conc = Concentration (Totals include 2,3,7,8-substituted isomers).
EMPC = Estimated Maximum Possible Concentration
RL = Reporting Limit

REPORT OF LABORATORY ANALYSIS

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Method 1613B Laboratory Control Spike Results

Lab Sample ID	LCS-95208	Matrix	Water
Filename	L211223B_05	Dilution	NA
Total Amount Extracted	1030 mL	Extracted	12/20/2021 10:20
ICAL ID	L211219	Analyzed	12/23/2021 22:12
CCal Filename	L211223A_19	Injected By	SMT
Method Blank ID	BLANK-95207		

Compound	Cs	Cr	Lower Limit	Upper Limit	% Rec.
2,3,7,8-TCDF	10	11	7.5	15.8	107
2,3,7,8-TCDD	10	12	6.7	15.8	120
1,2,3,7,8-PeCDF	50	52	40.0	67.0	105
2,3,4,7,8-PeCDF	50	51	34.0	80.0	102
1,2,3,7,8-PeCDD	50	49	35.0	71.0	97
1,2,3,4,7,8-HxCDF	50	55	36.0	67.0	111
1,2,3,6,7,8-HxCDF	50	53	42.0	65.0	106
2,3,4,6,7,8-HxCDF	50	52	35.0	78.0	104
1,2,3,7,8,9-HxCDF	50	54	39.0	65.0	108
1,2,3,4,7,8-HxCDD	50	52	35.0	82.0	104
1,2,3,6,7,8-HxCDD	50	60	38.0	67.0	119
1,2,3,7,8,9-HxCDD	50	55	32.0	81.0	109
1,2,3,4,6,7,8-HpCDF	50	56	41.0	61.0	111
1,2,3,4,7,8,9-HpCDF	50	54	39.0	69.0	108
1,2,3,4,6,7,8-HpCDD	50	52	35.0	70.0	105
OCDF	100	120	63.0	170.0	118
OCDD	100	120	78.0	144.0	121
2,3,7,8-TCDD-37Cl4	10	7.9	3.1	19.1	79
2,3,7,8-TCDF-13C	100	73	22.0	152.0	73
2,3,7,8-TCDD-13C	100	63	20.0	175.0	63
1,2,3,7,8-PeCDF-13C	100	79	21.0	192.0	79
2,3,4,7,8-PeCDF-13C	100	84	13.0	328.0	84
1,2,3,7,8-PeCDD-13C	100	87	21.0	227.0	87
1,2,3,4,7,8-HxCDF-13C	100	75	19.0	202.0	75
1,2,3,6,7,8-HxCDF-13C	100	79	21.0	159.0	79
2,3,4,6,7,8-HxCDF-13C	100	77	22.0	176.0	77
1,2,3,7,8,9-HxCDF-13C	100	76	17.0	205.0	76
1,2,3,4,7,8-HxCDD-13C	100	74	21.0	193.0	74
1,2,3,6,7,8-HxCDD-13C	100	67	25.0	163.0	67
1,2,3,4,6,7,8-HpCDF-13C	100	65	21.0	158.0	65
1,2,3,4,7,8,9-HpCDF-13C	100	58	20.0	186.0	58
1,2,3,4,6,7,8-HpCDD-13C	100	66	26.0	166.0	66
OCDD-13C	200	100	26.0	397.0	52

Cs = Concentration Spiked (ng/mL)
 Cr = Concentration Recovered (ng/mL)
 Rec. = Recovery (Expressed as Percent)
 Control Limit Reference: Method 1613, Table 6, 10/94 Revision
 R = Recovery outside of control limits
 Nn = Value obtained from additional analysis
 * = See Discussion

REPORT OF LABORATORY ANALYSIS

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Method 1613B Laboratory Control Spike Results

Lab Sample ID	LCSD-95209	Matrix	Water
Filename	L211223B_06	Dilution	NA
Total Amount Extracted	1010 mL	Extracted	12/20/2021 10:20
ICAL ID	L211219	Analyzed	12/23/2021 22:53
CCal Filename	L211223A_19	Injected By	SMT
Method Blank ID	BLANK-95207		

Compound	Cs	Cr	Lower Limit	Upper Limit	% Rec.
2,3,7,8-TCDF	10	11	7.5	15.8	111
2,3,7,8-TCDD	10	12	6.7	15.8	123
1,2,3,7,8-PeCDF	50	53	40.0	67.0	107
2,3,4,7,8-PeCDF	50	53	34.0	80.0	106
1,2,3,7,8-PeCDD	50	51	35.0	71.0	101
1,2,3,4,7,8-HxCDF	50	58	36.0	67.0	117
1,2,3,6,7,8-HxCDF	50	54	42.0	65.0	108
2,3,4,6,7,8-HxCDF	50	54	35.0	78.0	108
1,2,3,7,8,9-HxCDF	50	56	39.0	65.0	112
1,2,3,4,7,8-HxCDD	50	53	35.0	82.0	106
1,2,3,6,7,8-HxCDD	50	61	38.0	67.0	123
1,2,3,7,8,9-HxCDD	50	54	32.0	81.0	108
1,2,3,4,6,7,8-HpCDF	50	58	41.0	61.0	117
1,2,3,4,7,8,9-HpCDF	50	56	39.0	69.0	112
1,2,3,4,6,7,8-HpCDD	50	53	35.0	70.0	106
OCDF	100	120	63.0	170.0	124
OCDD	100	120	78.0	144.0	123
2,3,7,8-TCDD-37Cl4	10	7.4	3.1	19.1	74
2,3,7,8-TCDF-13C	100	79	22.0	152.0	79
2,3,7,8-TCDD-13C	100	70	20.0	175.0	70
1,2,3,7,8-PeCDF-13C	100	85	21.0	192.0	85
2,3,4,7,8-PeCDF-13C	100	88	13.0	328.0	88
1,2,3,7,8-PeCDD-13C	100	90	21.0	227.0	90
1,2,3,4,7,8-HxCDF-13C	100	86	19.0	202.0	86
1,2,3,6,7,8-HxCDF-13C	100	92	21.0	159.0	92
2,3,4,6,7,8-HxCDF-13C	100	89	22.0	176.0	89
1,2,3,7,8,9-HxCDF-13C	100	86	17.0	205.0	86
1,2,3,4,7,8-HxCDD-13C	100	86	21.0	193.0	86
1,2,3,6,7,8-HxCDD-13C	100	73	25.0	163.0	73
1,2,3,4,6,7,8-HpCDF-13C	100	70	21.0	158.0	70
1,2,3,4,7,8,9-HpCDF-13C	100	64	20.0	186.0	64
1,2,3,4,6,7,8-HpCDD-13C	100	67	26.0	166.0	67
OCDD-13C	200	120	26.0	397.0	59

Cs = Concentration Spiked (ng/mL)
Cr = Concentration Recovered (ng/mL)
Rec. = Recovery (Expressed as Percent)
Control Limit Reference: Method 1613, Table 6, 10/94 Revision
R = Recovery outside of control limits
Nn = Value obtained from additional analysis
* = See Discussion

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Method 1613B

Spike Recovery Relative Percent Difference (RPD) Results

Client PASI Long Island

Spike 1 ID LCS-95208
 Spike 1 Filename L211223B_05

Spike 2 ID LCSD-95209
 Spike 2 Filename L211223B_06

Compound	Spike 1 %REC	Spike 2 %REC	%RPD
2,3,7,8-TCDF	107	111	3.7
2,3,7,8-TCDD	120	123	2.5
1,2,3,7,8-PeCDF	105	107	1.9
2,3,4,7,8-PeCDF	102	106	3.8
1,2,3,7,8-PeCDD	97	101	4.0
1,2,3,4,7,8-HxCDF	111	117	5.3
1,2,3,6,7,8-HxCDF	106	108	1.9
2,3,4,6,7,8-HxCDF	104	108	3.8
1,2,3,7,8,9-HxCDF	108	112	3.6
1,2,3,4,7,8-HxCDD	104	106	1.9
1,2,3,6,7,8-HxCDD	119	123	3.3
1,2,3,7,8,9-HxCDD	109	108	0.9
1,2,3,4,6,7,8-HpCDF	111	117	5.3
1,2,3,4,7,8,9-HpCDF	108	112	3.6
1,2,3,4,6,7,8-HpCDD	105	106	0.9
OCDF	118	124	5.0
OCDD	121	123	1.6

%REC = Percent Recovered

RPD = The difference between the two values divided by the mean value

REPORT OF LABORATORY ANALYSIS

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Appendix 2

Baseline and Expanded Parameters List (6NYCRR Part 363-4.6(h))

(5) Data quality assessment. At the conclusion of each sampling event and analysis of the samples collected, data quality assessment must occur. A data quality assessment report must be submitted with the results from each sampling event. Data quality assessment must occur in two phases – data validation and data usability analysis.

(i) Data validation.

(a) For those sampling events for which only routine parameters are analyzed, the required data validation may be performed by the laboratory that performed the sample analyses.

(b) For those sampling events in which groundwater samples are analyzed for baseline or expanded parameters, the data validation must be performed by a person with experience with similar validation projects and who is not affiliated with the laboratory that performed the analyses and who is acceptable to the department.

(c) The data validation must be performed on all analytical data for the facility at a rate acceptable to the department, but not less than five percent of the data generated, and must consist, at a minimum, of the following:

(1) field records and analytical data are reviewed to determine whether the data are accurate and defensible. All AQA/AQC information must be reviewed along with any corrective actions taken during that sampling event, and

(2) all data summaries must be clearly marked to identify any data that are not representative of environmental conditions at the site, or that were not generated in accordance with the site analytical plan.

(ii) Data usability analysis.

(a) The data usability analysis must be performed on all analytical data generated by the requirements for this Part for the facility and must consist of the following:

(1) an assessment to determine if the data quality objectives were met;

(2) for consistency, comparison of the analytical data with the results from previous sampling events;

(3) evaluation of field duplicate results to indicate the samples are representative;

(4) comparison of the results of all field blanks, trip blanks, equipment rinse blanks, and method blanks with full data sets to provide information concerning contaminants that may have been introduced during sampling, shipping, or analysis;

(5) evaluation of matrix effects to assess the performance of the analytical method with respect to the sample matrix, and determine whether the data have been biased high or low due to matrix effects;

(6) integration of the field and laboratory data with geological, hydrogeological, and meteorological data to provide information about the extent of contamination, if it occurs; and

(7) comparison of precision, accuracy, representativeness, comparability, completeness, and defensibility of the data generated with that required to meet the data quality objectives established in the site analytical plan.

(h) Water quality analysis tables.

The water quality analysis tables in this section list the routine, baseline, and expanded parameters for analysis of all monitoring samples. The department may modify the parameters for analysis based on the location of the landfill or site-specific characteristics of waste disposed at the landfill.

TABLE 1: ROUTINE PARAMETERS ¹

Common Name (and CAS number, as appropriate) ²		
Field Parameters	Leachate Indicators:	Inorganic Parameters (total)
Static water level (in wells and sumps)	Total Kjeldahl Nitrogen	Arsenic
Specific Conductance	Ammonia (7664-41-7)	Cadmium
Temperature	Nitrate	Calcium
Floaters or Sinkers ³	Chemical Oxygen Demand	Iron
Temperature	Biochemical Oxygen Demand (BOD ₅)	Lead
pH	Total Organic Carbon	Magnesium
Eh	Total Dissolved Solids	Manganese
Dissolved Oxygen ⁴	Sulfate	Potassium
Field Observations ⁵	Alkalinity	Sodium
Turbidity	Phenols (108-95-2)	
	Chloride	
	Bromide (24959-67-9)	
	Total hardness as CaCO ₃	

TABLE 2A: BASELINE PARAMETERS: Field Parameters, Leachate Indicators, and Inorganic Parameters ⁶

Common Name (and CAS number, as appropriate) ⁷		
Field Parameters:	Leachate Indicators:	Inorganic Parameters (total unless otherwise noted):
Static water level (in wells and sumps)	Total Kjeldahl Nitrogen	Aluminum
Specific Conductance	Ammonia (7664-41-7)	Antimony
Temperature	Nitrate	Arsenic
Floater or Sinkers ⁸	Chemical Oxygen Demand	Barium
Temperature	Biochemical Oxygen Demand (BOD ₅)	Beryllium
pH	Total Organic Carbon	Cadmium
Eh	Total Dissolved Solids	Calcium
Dissolved Oxygen ⁹	Sulfate	Chromium
Field Observations ¹⁰	Alkalinity	Chromium (Hexavalent) ¹¹
Turbidity	Phenols (108-95-2)	Cobalt
	Chloride	Copper
	Bromide (24959-67-9)	Cyanide
	Total hardness as CaCO ₃	Iron
	Color	Lead
	Boron (7440-42-8)	Magnesium
		Manganese
		Mercury
		Nickel
		Potassium
		Selenium
		Silver
		Sodium
		Thallium
		Vanadium
		Zinc

TABLE 2B: BASELINE PARAMETERS: Organic Parameters¹²

Common Name (and CAS number, as appropriate) ¹³		
Organic Parameters:		
Acetone (67-64-1)	1,1-Dichloroethane; Ethylidene chloride (75-34-3)	Styrene (100-42-5)
Acrylonitrile (107-13-1)	1,2-Dichloroethane; Ethylene dichloride (107-06-02)	1,1,1,2-Tetrachloroethane (630-20-6)
Benzene (71-43-2)	1,1-Dichloroethylene; 1,1-Dichloroethene; Vinylidene chloride (75-35-4)	1,1,2,2-Tetrachloroethane (79-34-5)
Bromochloromethane (74-97-5)	cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene (156-59-2)	Tetrachloroethylene; Tetrachloroethene; Perchloroethylene (127-18-4)
Bromodichloromethane (75-27-4)	trans-1,2-Dichloroethylene; trans-1,2-Dichloroethene (156-60-2)	Toluene (108-88-3)
Bromoform; Tribromomethane (75-25-2)	1,2-Dichloropropane; Propylene dichloride (78-87-5)	1,1,1-Trichloroethane; Methylchloroform (71-55-6)
Carbon disulfide (75-15-0)	cis-1,3-Dichloropropene (10061-01-5)	1,1,2-Trichloroethane (79-00-5)
Carbon tetrachloride (56-23-5)	trans-1,3-Dichloropropene (10061-02-6)	Trichloroethylene; Trichloroethene (79-01-6)
Chlorobenzene (108-90-7)	Ethylbenzene (100-41-4)	Trichlorofluoromethane; CFC-11 (75-69-4)
Chloroethane; Ethyl chloride (75-00-3)	2-Hexanone; Methyl butyl ketone (591-78-6)	1,2,3-Trichloropropane (96-18-4)
Chloroform; Trichloromethane (67-66-3)	Methyl bromide; Bromomethane (74-83-9)	Vinyl acetate (108-05-4)
Dibromochloromethane; Chlorodibromomethane (124-48-1)	Methyl chloride; Chloromethane (74-87-3)	Vinyl chloride; Chloroethene (75-01-4)
1,2-Dibromo-3-chloropropane; DBCP (96-12-8)	Methylene bromide; Dibromomethane (74-95-3)	Xylenes (1330-20-7)
1,2-Dibromoethane; Ethylene dibromide; EDB (106-93-4)	Methylene chloride; Dichloromethane (75-09-2)	
o-Dichlorobenzene; 1,2-Dichlorobenzene (95-50-1)	Methyl ethyl ketone; MEK; 2-Butanone (78-93-3)	
p-Dichlorobenzene; 1,4-Dichlorobenzene (106-46-7)	Methyl iodide; Iodomethane (74-88-4)	
trans-1,4-Dichloro-2-butene (110-57-6)	4-Methyl-2-pentanone; Methyl isobutyl ketone (108-10-1)	

TABLE 3A: EXPANDED PARAMETERS: Field Parameters, Leachate Indicators, Radionuclides, and Inorganic Parameters¹⁴

Common Name (and CAS number, as appropriate) ¹⁵

Field Parameters:	Leachate Indicators:	Inorganic Parameters: (total unless otherwise noted)	Radionuclides ¹⁶
Static water level (in wells and sumps)	Total Kjeldahl Nitrogen	Aluminum	Radium-226 per EPA 903.1
Specific Conductance	Ammonia (7664-41-7)	Antimony	Radium-228 per EPA 904.0
Temperature	Nitrate	Arsenic	Total Uranium per EPA 908.0
Floaters or Sinkers ¹⁷	Chemical Oxygen Demand	Barium	
Temperature	Biochemical Oxygen Demand (BOD ₅)	Beryllium	
pH	Total Organic Carbon	Cadmium	
Eh	Total Dissolved Solids	Calcium	
Dissolved Oxygen ¹⁸	Sulfate	Chromium	
Field Observations ¹⁹	Alkalinity	Chromium (Hexavalent) ²⁰	
Turbidity	Phenols (108-95-2)	Cobalt	
	Chloride	Copper	
	Bromide (24959-67-9)	Cyanide	
	Total hardness as CaCO ₃	Iron	
	Color	Lead	
	Boron (7440-42-8)	Magnesium	
		Manganese	
		Mercury	
		Nickel	
		Potassium	
		Selenium	
		Silver	
		Sodium	
		Thallium	
		Tin	
		Vanadium	
		Zinc	

TABLE 3B: EXPANDED PARAMETERS: Organic Parameters²¹

Common Name (and CAS number, as appropriate) ²²		
Organic Parameters:		
Acenaphthene (83-32-9)	2,4-Dichlorophenol (120-83-2)	Naphthalene (91-20-3)
Acenaphthylene (208-96-8)	2,6-Dichlorophenol (87-65-0)	1,4-Naphthoquinone (130-15-4)
Acetone (67-64-1)	1,2-Dichloropropane; Propylene dichloride (78-87-5)	1-Naphthylamine (134-32-7)
Acetonitrile, Methyl cyanide (75-05-8)	1,3-Dichloropropane, Trimethylene dichloride (142-28-9)	2-Naphthylamine (91-59-8)
Acetophenone (98-86-2)	2,2-Dichloropropane, Isopropylidene chloride (594-20-7)	o-Nitroaniline, 2-Nitroaniline (88-74-4)
2-Acetylamino fluorene; 2-AAF (53-96-3)	1,1-Dichloropropene (563-58-6)	m-Nitroaniline; 3-Nitroaniline (99-09-2)
Acrolein (107-02-8)	cis-1,3-Dichloropropene (10061-01-5)	p-Nitroaniline, 4-Nitroaniline (100-01-6)
Acrylonitrile (107-13-1)	trans-1,3-Dichloropropene (10061-02-6)	Nitrobenzene (98-95-3)
Aldrin (309-00-2)	Dieldrin (60-57-1)	o-Nitrophenol 2-Nitrophenol (88-75-5)
Allyl chloride (107-05-1)	Diethyl phthalate (84-66-2)	p-Nitrophenol; 4-Nitrophenol (100-02-7)
4-aminobiphenyl (92-67-1)	0,0-Diethyl 0-2-pyrazinyl	N-Nitrosodi-n-butylamine (924-16-3)
Anthracene (120-12-7)	cis-1,2-Dichloroethylene; cis-1,2-Dichloroethene (156-59-2)	
N-Nitrosodiethylamine (55-18-5)		
Benzene (71-43-2)	trans-1,2-Dichloroethylene (156-60-2)	N-Nitrosodimethylamine (62-75-9)
Benzo[a]anthracene, Benzanthracene (56-55-3)	Phosphorothioate, Thionazin (297-97-2)	N-Nitrosodiphenylamine (86-30-6)
Benzo[b]fluoranthene (205-99-2)	Dimethoate (60-51-5)	N-Nitrosodipropylamine; N-Nitroso-N-dipropyl-amine, Di-n-propylnitrosamine (621-64-7)
Benzo[k]fluoranthene (207-08-9)	p-(Dimethylamino)azobenzene (60-11-7)	N-Nitrosomethylethylamine (10595-95-6)
Benzo[ghi]perylene (191-24-2)	7,12-Dimethylbenz[a]anthracene (57-97-6)	N-Nitrosopiperidine (100-75-4)
Benzo[a]pyrene (50-32-8)	3,3 ²¹ -Dimethylbenzidine (119-93-7)	N-Nitrosopyrrolidine (930-55-2)
Benzyl alcohol (100-51-6)	2,4-Dimethylphenol, m-Xylenol (105-67-9)	5-Nitro-o-toluidine (99-55-8)
alpha-BHC (319-84-6)	Dimethyl phthalate (131-11-3)	Parathion (56-38-2)
beta-BHC (319-85-7)	m-Dinitrobenzene (99-65-0)	Pentachlorobenzene (608-93-5)
delta-BHC (319-86-8)	4,6-Dinitro-o-cresol 4,6-Dinitro-2-methylphenol (534-52-1)	Pentachloronitrobenzene (82-68-8)

gamma-BHC, Lindane (58-89-9)	2,4-Dinitrophenol (51-28-5)	Pentachlorophenol (87-86-5)
Bis(2-chloroethoxy)methane (111-91-1)	2,4-Dinitrotoluene (121-14-2)	Phenacetin (62-44-2)
Bis(2-chloroethyl) ether, Dichloroethyl ether (111-44-4)	2,6-Dinitrotoluene (606-20-2)	Phenanthrene (85-01-8)
Bis-(2-chloro-1-methyl-ethyl)ether, 2,2 ²¹ -Dichlorodiisopropyl ether, DCIP ²³	Dinoseb, DNBP; 2-sec-Butyl-4,6-dinitrophenol (88-85-7)	Phenol (108-95-2)
Bis(2-ethylhexyl)phthalate (117-81-7)	Di-n-octyl phthalate (117-84-0)	p-Phenylenediamine (106-50-9)
Bromochloromethane (74-97-5)	Diphenylamine (122-39-4)	Phorate (298-02-2)
Bromodichloromethane (75-27-4)	Disulfoton (298-04-4)	Polychlorinated biphenyls; PCBs; Aroclors ²⁴
Bromoform (75-25-2)	Endosulfan I (959-98-8)	Polychlorinated dibenzo-p-dioxins; PCDDs ²⁵
4-Bromophenyl phenyl ether (101-55-3)	Endosulfan II (33213-65-9)	Polychlorinated dibenzo-furans; PCDFs ²⁶
Butyl benzyl phthalate, Benzyl butyl phthalate (117-81-7)	Endosulfan sulfate (1031-07-8)	Pronamide (23950-58-5)
Carbon disulfide (75-15-0)	Endrin (72-20-8)	Propionitrile; Ethyl cyanide (107-12-0)
Carbon tetrachloride (56-23-5)	Endrin aldehyde (7421-93-4)	Pyrene (129-00-0)
Chlordane ²⁷	Ethylbenzene (100-41-4)	Safrole (94-59-7)
p-Chloroaniline (106-47-8)	Ethyl methacrylate (97-63-2)	Silvex, 2,4,5-TP (93-72-1)
Chlorobenzene (108-90-7)	Ethyl methanesulfonate (62-50-0)	Styrene (100-42-5)
Chlorobenzilate (510-15-6)	Famphur (52-85-7)	2,4,5-T, 2,4,5-trichloro- phenoxyacetic acid (93-76-5)
p-Chloro-m-cresol; 4-Chloro-3-methylphenol (59-50-7)	Fluoranthene (206-44-0)	1,2,4,5-Tetrachlorobenzene (95-94-3)
Chloroethane, Ethyl chloride (75-00-3)	Fluorene (86-73-7)	2,3,7,8-Tetrachlorodi- benzo-p-dioxin, 2,3,7,8-TCDD (1746-01-6)
Chloroform; Trichloromethane (67-66-3)	Heptachlor (76-44-8)	1,1,1,2-Tetrachloroethane (630-20-6)
2-Chloronaphthalene (91-58-7)	Heptachlor epoxide (1024-57-3)	1,1,2,2-Tetrachloroethane (79-34-5)
2-Chlorophenol (95-57-8)	Hexachlorobenzene (118-74-1)	Tetrachloroethylene; Tetrachloroethene; Perchloroethylene (127-18-4)
4-Chlorophenyl phenyl ether (7005-72-3)	Hexachlorobutadiene (87-68-3)	2,3,4,6-Tetrachlorophenol (58-90-2)
Chloroprene (126-99-8)	Hexachlorocyclopentadiene (77-47-4)	Toluene (108-88-3)
Chrysene (218-01-9)	Hexachloroethane (67-72-1)	o-Toluidine (95-53-4)
m-Cresol, 3-methylphenol (108-39-4)	Hexachloropropene (1888-71-7)	Toxaphene ²⁸
o-Cresol, 2-methylphenol (95-48-7)	2-Hexanone, Methyl butyl ketone (591-78-6)	1,2,4-Trichlorobenzene (120-82-1)
p-Cresol; 4-methylphenol (106-44-5)	Indeno(1,2,3-cd)pyrene (193-39-5)	1,1,1-Trichloroethane, Methylchloroform (71-55-6)
2,4-D, 2,4-Dichlorophen- oxyacetic acid (94-75-7)	Isobutyl alcohol (78-83-1)	1,1,2-Trichloroethane (79-00-5)
4,4 ²¹ -DDD (72-54-8)	Isodrin (465-73-6)	Trichloroethylene, Trichloroethene (79-01-6)
4,4 ²¹ -DDE (72-55-9)	Isophorone (78-59-1)	Trichlorofluoromethane, R-11 (75-69-4)
4,4 ²¹ -DDT (50-29-3)	Isosafrole (120-58-1)	2,4,5-Trichlorophenol (95-95-4)
Diallate (2303-16-4)	Kepone (143-50-0)	2,4,6-Trichlorophenol (88-06-2)
Dibenz[a,h]anthracene (53-70-3)	Methacrylonitrile (126-98-7)	1,2,3-Trichloropropane (96-18-4)
Dibenzofuran (132-64-9)	Methapyrilene (91-80-5)	0,0,0-Triethyl phosphorothioate (126-68-1)
Dibromochloromethane; Chlorodibromomethane (124-48-1)	Methoxychlor (72-43-5)	sym-Trinitrobenzene (99-35-4)
1,2-Dibromo-3-chloro- propane; DBCP (96-12-8)	Methyl bromide, Bromomethane (74-83-9)	Vinyl acetate (108-05-4)
1,2-Dibromoethane, Ethylene dibromide; EDB (106-93-4)	Methyl chloride, Chloromethane (74-87-3)	Vinyl chloride; Chloroethene (75-01-4)
Di-n-butyl phthalate (84-74-2)	3-Methylcholanthrene (56-49-5)	Xylene (total)
o-Dichlorobenzene; 1,2-Dichlorobenzene (95-50-1)	Methyl ethyl ketone, MEK, 2-Butanone (78-93-3)	Per- and polyfluoroalkyl substances ²⁹
m-Dichlorobenzene; 1,3-Dichlorobenzene (541-73-1)	Methyl iodide, Iodomethane (74-88-4)	1,4-Dioxane (123-91-1)
p-Dichlorobenzene; 1,4-dichlorobenzene (106-46-7)	Methyl methacrylate (80-62-6)	
3,3 ²¹ -Dichlorobenzidine (91-94-1)	Methyl methanesulfonate (66-27-3)	
trans-1,4-Dichloro- 2-butene (110-57-6)	2-Methylnaphthalene (91-57-6)	

Dichlorodifluoromethane, CFC 12 (75-71-8)	Methyl parathion; Parathion methyl (298-00-0)
1,1-Dichloroethane; Ethylidene chloride (75-34-3)	4-Methyl-2-pentanone, Methyl isobutyl ketone (108-10-1)
1,2-Dichloroethane; Ethylene dichloride (107-06-2)	Methylene bromide; Dibromomethane (74-95-3)
1,1-Dichloroethylene, 1,1-Dichloroethene; Vinylidene chloride (75-35-4)	Methylene chloride, Dichloromethane (75-09-2)

(i) Leachate management plan.

The leachate management plan must include:

- (1) a description of how the landfill will be constructed, operated, and closed in a manner that minimizes the generation of leachate, except in those cases where the department has approved the recirculation of leachate for waste mass stabilization enhancement, and how the migration of leachate into surface water or groundwater will be prevented;
- (2) a description of operational methods to minimize the occurrence of perched leachate trapped above the leachate collection and removal system and surface seeps of leachate from above-grade landfill operations;
- (3) a schedule for biennial video inspection and annual maintenance of the primary and secondary leachate collection and removal system;
- (4) a schedule for the monitoring and recording of the secondary leachate collection and removal system flow data to determine the presence, quantity, nature and significance of any liquid detected;
- (5) a discussion of the specific design and operational features related to the system, including leachate monitoring and sampling, locations of all leachate sampling points, alarm systems and maintenance, and any required back up equipment; and
- (6) if leachate recirculation is proposed, the leachate management plan must include
 - (i) a supporting geotechnical analysis evaluating the effect of leachate recirculation on the structural integrity and stability of the landfill's liner system, leachate collection and removal system, and waste mass;
 - (ii) a description of how increased landfill gas emissions and associated odors will be controlled;
 - (iii) a description of the methods and rate of leachate recirculation and addition;
 - (iv) procedures for recording the date and volume of recirculated leachate;
 - (v) a description of the operation, which addresses:
 - (a) the use of permeable operating cover or alternative operating cover to facilitate leachate distribution throughout the waste mass, and
 - (b) operational controls such as monitoring of surface seeps, liner system performance and excessive leachate head buildup, prevention of subsurface fires, odor control, and instruction for cessation of leachate recirculation and remediation of these conditions.

(j) Odor control plan.

The odor control plan must include:

- (1) identification of all potential sources for odors and a description of the operational procedures and strategies to be followed to effectively control odors at the facility;
- (2) procedures to be taken in the event of proposed waste volume increases or changes in waste characterization that may increase landfill gas emissions or odors;
- (3) identification of the landfill personnel who would be responsible for implementation of the odor control plan; and
- (4) operational and design-related recommendations that can be implemented upon detection of odor control problems, including impervious membranes and interim covers in conjunction with other landfill gas control methods. The odor control plan may include but not be limited to, gas control systems that are appropriately connected to the landfill liner system's primary leachate collection and removal system (including the drainage area on the landfill's side slopes), use of a horizontal gas collection lines, which may include rejection or mitigation of odiferous wastes that are determined to be contributing to off-site odors.

(k) Gas monitoring and emission control plan.

The gas monitoring and emission control plan must include:

- (1) a description of the day-to-day operation of the landfill gas management system with respect to operation of odor and emission controls;

(2) a description of any air quality monitoring, including monitoring for fugitive landfill odor and air emissions; and

(3) for a landfill with an appurtenant landfill gas-to-energy facility or other landfill gas recovery facility, a discussion of how the landfill's odor and air emission controls are integrated with a recovery facility.

(l) Winter and inclement weather operation plan.

A description of how winter and inclement weather operations will be conducted, including identification of the specific actions to be taken to prevent frost action on the liner system in places where waste will not be placed within one year of construction certification approval.

(m) Residential drop-off operation plan.

A description of the operation of a residential drop-off area, if applicable, for non-commercial vehicles to unload waste and recyclables at an area other than the landfill working face.

(n) A radioactive waste detection plan.

The radioactive waste detection plan must include procedures for detecting radioactive material; operation and maintenance documents for radiation detectors which address proper equipment placement for effective operation and include setting of investigation alarm setpoint settings and calibration methods; and response procedures to be implemented if radioactive waste is detected.

(o) Emergency response plan.

An emergency response plan must include a description of, at a minimum, the actions to be taken in response to:

- (1) uncontrolled explosive landfill gases detected on-site or beyond the property boundary;
- (2) unexpected events during the construction and operation of the landfill gas management system, including the equipment to be utilized to maintain proper landfill gas venting and control when normal operations cease; and
- (3) unexpected events during the subsequent construction and/or daily operation of the landfill's leachate collection and removal system.

(p) Conceptual closure, post-closure care, custodial care, and end use plan.

The conceptual closure, post-closure care, custodial care, and end use plan must include:

- (1) a site plan that shows proposed final contours, property lines, storm water drainage system, streams and water courses, roads, structures and, if applicable, the groundwater and leachate treatment system, air pollution control system and any active landfill gas collection system;
- (2) typical details of final cover system components and facility structures;
- (3) a description of how the sequential closure of areas of the landfill is expected to progress in concert with the fill progression schedule, including effects of landfill reclamation activities if proposed;
- (4) an estimate of the greatest number of landfill cells which, at any given point during the lifetime of the facility, will have received waste but not undergone final closure;
- (5) an estimate of the maximum volume of waste and alternative operating cover that will be contained within the landfill;
- (6) sufficient information upon which to estimate closure costs and post-closure and custodial care monitoring and maintenance costs. This information must be based upon the requirements of Subpart 363-9 of this Part, including a rolling 30-year post-closure care period, and must include estimates of:
 - (i) quantities and costs for each component of the final cover system, including related construction costs;
 - (ii) the anticipated length of the post-closure care period based on the types of wastes disposed and the criteria provided in section 363-9.6(a) of this Part;
 - (iii) post-closure operational, monitoring and maintenance costs including costs to replace system components based on predicted service life; and
 - (iv) custodial care monitoring and maintenance costs including costs to replace system components based on predicted service life; and
- (7) a conceptual end use for the site, if proposed.

Footnotes

- 1 This list contains parameters for which possible analytical procedures are provided in: *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846 (Third Edition, (November 1986), as amended by Updates I

- (July 1992), II (September 1994), IIA (August 1993), IIB (January 1995), III (December 1996), IIIA (April 1998), document number 955-001-00000-1), incorporated by reference in section 360.3 of this Title. *Methods for Chemical Analysis of Water and Wastes*, USEPA-600/4-79-020, March, 1983, incorporated by reference in section 360.3 of this Title.
- 2 Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals. "Total" indicates all species in the groundwater that contain this element.
- 3 Any floaters or sinkers found must be analyzed separately for baseline parameters.
- 4 Surface water only.
- 5 Any unusual conditions (colors, odors, surface sheens, etc.) noticed during well development, purging, or sampling must be reported.
- 6 This list contains parameters for which possible analytical procedures are provided in: *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846 (Third Edition, (November 1986), as amended by Updates I (July 1992), II (September 1994), IIA (August 1993), IIB (January 1995), III (December 1996), IIIA (April 1998), document number 955-001-00000-1), incorporated by reference in section 360.3 of this Title. *Methods for Chemical Analysis of Water and Wastes*, USEPA-600/4-79-020, March, 1983, incorporated by reference in section 360.3 of this Title.
- 7 Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals. "Total" indicates all species in the groundwater that contain this element.
- 8 Any floaters or sinkers found must be analyzed separately for baseline parameters.
- 9 Surface water only.
- 10 Any unusual conditions (colors, odors, surface sheens, etc.) noticed during well development, purging, or sampling must be reported.
- 11 The department may waive the requirement to analyze hexavalent chromium provided that total and hexavalent and trivalent chromium values do not exceed 0.05 mg/l.
- 12 This list contains parameters for which possible analytical procedures are provided in: *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846 (Third Edition, (November 1986), as amended by Updates I (July 1992), II (September 1994), IIA (August 1993), IIB (January 1995), III (December 1996), and IIIA (April 1998) document number 955-001-00000-1), incorporated by reference in section 360.3 of this Title. *Methods for Chemical Analysis of Water and Wastes*, USEPA-600/4-79-020, March, 1983, incorporated by reference in 360.3 of this Title.
- 13 Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.
- 14 This list contains parameters for which possible analytical procedures are provided in: *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846 (Third Edition, (November 1986), as amended by Updates I (July 1992), II (September 1994), IIA (August 1993), IIB (January 1995), III (December 1996), and IIIA (April 1998) document number 955-001-00000-1), incorporated by reference in section 360.3 of this Title. *Methods for Chemical Analysis of Water and Wastes*, USEPA-600/4-79-020, March 1983, incorporated by reference in 360.3 of this Title. *Prescribed Procedures for Measurement of Radioactivity in Drinking Water*, USEPA-600/4-80-032, August 1980, incorporated by reference in section 360.3 of this Title.
- 15 Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals. "Total" indicates all species in the groundwater that contain this element.
- 16 Two sets of samples must be collected: one filtered and one unfiltered. Filtered samples must be filtered using a 0.45 micron filter via standard techniques.
- 17 Any floaters or sinkers found must be analyzed separately for baseline parameters.
- 18 Surface water only.
- 19 Any unusual conditions (colors, odors, surface sheens, etc.) noticed during well development, purging, or sampling must be reported.
- 20 The department may waive the requirement to analyze hexavalent chromium provided that total and hexavalent and trivalent chromium values do not exceed 0.05 mg/l.
- 21 This list contains parameters for which possible analytical procedures are provided in: *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, EPA Publication SW-846 (Third Edition, (November 1986), as amended by Updates I (July 1992), II (September 1994), IIA (August 1993), IIB (January 1995), III (December 1996), and IIIA (April 1998) document number 955-001-00000-1), incorporated by reference in section 360.3 of this Title. *Methods for Chemical Analysis of Water and Wastes*, USEPA-600/4-79-020, March 1983, incorporated by reference in section 360.3 of this Title.

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Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

- 23 This substance is often called Bis(2-chloroisopropyl) ether, the name Chemical Abstracts Service applies to its noncommercial isomer, Propane, 2,2"-oxybis[2]-chloro- (CAS RN 39638-32-9).
- 24 Polychlorinated biphenyls (1336-36-3): This category contains congener chemicals, including constituents of Aroclor 1016 (12674-11-2), Aroclor 1221 (11104-28-2), Aroclor 1232 (11097-69-1), and Aroclor 1260 (11096-82-5).
- 25 Polychlorinated dibenzo-p-dioxins: This category contains congener chemicals, including tetrachlorodibenzo-p-dioxins, pentachlorodibenzo-p-dioxins, and hexachlorodibenzo-p-dioxins.
- 26 Polychlorinated dibenzofurans: This category includes congener chemicals, including tetrachlorodibenzofurans, pentachlorodibenzofurans, and hexachlorodibenzofurans.
- 27 Chlordane: This entry includes alpha-chlordane (5103-71-9), beta-chlordane (5103-74-2), gamma-chlordane (5566-34-7), and constituents of chlordane (57-74-9; 12789-03-6).
- 28 Toxaphene: This entry includes congener chemicals contained in technical toxaphene (CAS RN 8001-35-2), *i.e.*, chlorinated camphene.
- 29 Per- and polyfluoroalkyl substances (PFAS): This category contains congener chemicals, including but not limited to perfluorooctanoic acid, perfluorooctanesulfonic acid, perfluorononanoic acid, perfluorohexanesulfonic acid, perfluoroheptanoic acid, perfluorobutanesulfonic acid.

6 CRR-NY 363-4.6

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