10-May-2021

Jeff Ranes
Delhi Charter Twp POTW
5961 McCue Rd
Holt, MI 48842-9646

Re: **2nd Quarter Biosolids 2021** Work Order: **21042415**

Dear Jeff,

ALS Environmental received 1 sample on 28-Apr-2021 10:00 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 40.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

Electronically approved by: Bill Carey

Bill Carey
Project Manager

Report of Laboratory Analysis

Certificate No: MN 026-999-449

ALS Group, USA

Date: 10-May-21

Client: Delhi Charter Twp POTW
Project: 2nd Quarter Biosolids 2021
Work Order: **21042415**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
21042415-01	2nd Quarter Biosolids 2021	Sludge		4/27/2021 14:15	4/28/2021 08:00	☐

Client:	Delhi Charter Twp POTW
Project:	2nd Quarter Biosolids 2021
WorkOrder:	**21042415**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

Acronym	Description
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

Units Reported	Description
% of sample	Percent of Sample
°C	Degrees Celcius
µg/Kg-dry	Micrograms per Kilogram Dry Weight
BTU/lb as recd.	British Thermal Units per Pound as Received
lbs/gallon	Pounds per Gallon
mg/Kg-dry	Milligrams per Kilogram Dry Weight
s.u.	Standard Units

ALS Group, USA

Date: *10-May-2021*

Client: Delhi Charter Twp POTW
Project: 2nd Quarter Biosolids 2021
Sample ID: 2nd Quarter Biosolids 2021
Collection Date: 4/27/2021 02:15 PM

Work Order: 21042415
Lab ID: 21042415-01
Matrix: SLUDGE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			**SW7471B**	Prep: SW7471 4/30/21 12:01		Analyst: **DSC**
Mercury	**0.22**		**0.19**	**mg/Kg-dry**	1	4/30/2021 01:35 PM
METALS BY ICP-MS			**SW6020B**	Prep: SW3050B 5/4/21 16:52		Analyst: **STP**
Arsenic	**12**		**4.2**	**mg/Kg-dry**	1	5/4/2021 06:51 PM
Barium	**370**		**4.2**	**mg/Kg-dry**	1	5/4/2021 06:51 PM
Cadmium	ND		1.7	mg/Kg-dry	1	5/4/2021 06:51 PM
Calcium	**34,000**		**420**	**mg/Kg-dry**	1	5/4/2021 06:51 PM
Chromium	**94**		**4.2**	**mg/Kg-dry**	1	5/4/2021 06:51 PM
Copper	**330**		**4.2**	**mg/Kg-dry**	1	5/4/2021 06:51 PM
Iron	**140,000**		**67**	**mg/Kg-dry**	1	5/4/2021 06:51 PM
Lead	**5.5**		**1.0**	**mg/Kg-dry**	1	5/4/2021 06:51 PM
Magnesium	**2,700**		**170**	**mg/Kg-dry**	1	5/4/2021 06:51 PM
Molybdenum	**9.7**		**4.2**	**mg/Kg-dry**	1	5/4/2021 06:51 PM
Nickel	**17**		**1.0**	**mg/Kg-dry**	1	5/4/2021 06:51 PM
Potassium	**1,200**		**170**	**mg/Kg-dry**	1	5/4/2021 06:51 PM
Selenium	ND		1.3	mg/Kg-dry	1	5/4/2021 06:51 PM
Silver	**1.0**		**1.0**	**mg/Kg-dry**	1	5/4/2021 06:51 PM
Sodium	**1,800**		**170**	**mg/Kg-dry**	1	5/4/2021 06:51 PM
Zinc	**680**		**8.3**	**mg/Kg-dry**	1	5/4/2021 06:51 PM
PFAS BY LC-MS-MS			**D7968-17A**	Prep: D7968-17a 5/3/21 16:19		Analyst: **SK**
Perfluorobutanoic Acid (PFBA)	ND		1.5	µg/Kg-dry	1	5/6/2021 07:00 PM
Perfluoropentanoic Acid (PFPeA)	ND		1.5	µg/Kg-dry	1	5/6/2021 07:00 PM
Perfluorohexanoic Acid (PFHxA)	ND		1.5	µg/Kg-dry	1	5/6/2021 07:00 PM
Perfluoroheptanoic Acid (PFHpA)	ND		1.5	µg/Kg-dry	1	5/6/2021 07:00 PM
Perfluorooctanoic Acid (PFOA)	**0.37**		**0.30**	**µg/Kg-dry**	1	5/6/2021 07:00 PM
Perfluorononanoic Acid (PFNA)	ND		0.30	µg/Kg-dry	1	5/6/2021 07:00 PM
Perfluorodecanoic Acid (PFDA)	ND		1.5	µg/Kg-dry	1	5/6/2021 07:00 PM
Perfluoroundecanoic Acid (PFUnA)	ND		1.5	µg/Kg-dry	1	5/6/2021 07:00 PM
Perfluorododecanoic Acid (PFDoA)	ND		1.5	µg/Kg-dry	1	5/6/2021 07:00 PM
Perfluorotridecanoic Acid (PFTriA)	ND		1.5	µg/Kg-dry	1	5/6/2021 07:00 PM
Perfluorotetradecanoic Acid (PFTeA)	ND		1.5	µg/Kg-dry	1	5/6/2021 07:00 PM
Perfluorobutanesulfonic Acid (PFBS)	ND		0.30	µg/Kg-dry	1	5/6/2021 07:00 PM
Perfluoropentanesulfonic Acid (PFPeS)	ND		0.30	µg/Kg-dry	1	5/6/2021 07:00 PM
Perfluorohexanesulfonic Acid (PFHxS)	ND		1.5	µg/Kg-dry	1	5/6/2021 07:00 PM
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.5	µg/Kg-dry	1	5/6/2021 07:00 PM
Perfluorooctanesulfonic Acid (PFOS)	**0.52**		**0.30**	**µg/Kg-dry**	1	5/6/2021 07:00 PM
Perfluorononanesulfonic Acid (PFNS)	ND		1.5	µg/Kg-dry	1	5/6/2021 07:00 PM
Perfluorodecanesulfonic Acid (PFDS)	ND		0.30	µg/Kg-dry	1	5/6/2021 07:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Delhi Charter Twp POTW
Project: 2nd Quarter Biosolids 2021 **Work Order:** 21042415
Sample ID: 2nd Quarter Biosolids 2021 **Lab ID:** 21042415-01
Collection Date: 4/27/2021 02:15 PM **Matrix:** SLUDGE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Fluorotelomer Sulphonic Acid 4:2 (FtS 4:2)	ND		1.5	µg/Kg-dry	1	5/6/2021 07:00 PM
Fluorotelomer Sulphonic Acid 6:2 (FtS 6:2)	ND		1.5	µg/Kg-dry	1	5/6/2021 07:00 PM
Fluorotelomer Sulphonic Acid 8:2 (FtS 8:2)	ND		1.5	µg/Kg-dry	1	5/6/2021 07:00 PM
Perfluorooctanesulfonamide (PFOSA)	ND		0.30	µg/Kg-dry	1	5/6/2021 07:00 PM
N-Ethylperfluorooctanesulfonamidoacetic Acid	**2.5**		**1.5**	**µg/Kg-dry**	1	5/6/2021 07:00 PM
N-Methylperfluorooctanesulfonamidoacetic Acid	**4.4**		**1.5**	**µg/Kg-dry**	1	5/6/2021 07:00 PM
11Cl-Pf3OUdS	ND		0.30	µg/Kg-dry	1	5/6/2021 07:00 PM
4,8-Dioxa-3H-perfluorononanoic Acid (DONA)	ND		0.30	µg/Kg-dry	1	5/6/2021 07:00 PM
9Cl-PF3ONS	ND		0.30	µg/Kg-dry	1	5/6/2021 07:00 PM
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND		1.5	µg/Kg-dry	1	5/6/2021 07:00 PM
BIOCHEMICAL OXYGEN DEMAND			**A5210B-11**	Prep: A5210B 4/28/21 14:43		Analyst: **QTN**
Biochemical Oxygen Demand	**99,000**		**240**	**mg/Kg-dry**	1	5/3/2021 12:24 PM
CALORIFIC VALUE (BTUS)			**D240**			Analyst: **RZM**
Calorific Value (BTU)	**5,900**		**100**	**BTU/lb as recd.**	1	5/4/2021 04:00 PM
CYANIDE, TOTAL			**SW9012B**	Prep: SW9012B 5/4/21 13:10		Analyst: **JMT**
Cyanide, Total	**10**		**3.6**	**mg/Kg-dry**	1	5/4/2021 03:42 PM
CHEMICAL OXYGEN DEMAND			**E410.4 R2.0**	Prep: EXTRACT 5/4/21 12:39		Analyst: **KF**
Chemical Oxygen Demand	**16,000**		**5,900**	**mg/Kg-dry**	1	5/4/2021 06:35 PM
DENSITY			**A2710 F**			Analyst: **RZM**
Density	**8.3**			**lbs/gallon**	1	5/7/2021 02:45 PM
ANIONS BY ION CHROMATOGRAPHY			**SW9056A**	Prep: EXTRACT 5/3/21 12:30		Analyst: **CAC**
Chloride	**1,900**		**120**	**mg/Kg-dry**	1	5/4/2021 12:25 AM
Sulfate	ND		120	mg/Kg-dry	1	5/4/2021 12:25 AM
MOISTURE			**SW3550C**			Analyst: **KTP**
Moisture	**92**		**0.10**	**% of sample**	1	4/28/2021 04:20 PM
AMMONIA AS NITROGEN (DISTILLED)			**A4500-NH3 G-11**	Prep: A4500-NH3 B 5/3/21 15:55		Analyst: **JMT**
Ammonia as Nitrogen	**12,000**		**1,800**	**mg NH3-N/Kg-dry**	10	5/4/2021 12:12 PM
NITROGEN, NITRITE			**A4500-NO2 B-11**	Prep: EXTRACT 5/5/21 09:30		Analyst: **CAC**
Nitrogen, Nitrite	ND		2.4	mg/Kg-dry	1	5/6/2021 02:40 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Delhi Charter Twp POTW
Project: 2nd Quarter Biosolids 2021 **Work Order:** 21042415
Sample ID: 2nd Quarter Biosolids 2021 **Lab ID:** 21042415-01
Collection Date: 4/27/2021 02:15 PM **Matrix:** SLUDGE

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
NITROGEN, NITRATE			**E353.2**	Prep: EXTRACT 5/5/21 09:30		Analyst: **JMT**
Nitrogen, Nitrate	ND		2.4	mg/Kg-dry	1	5/5/2021 04:08 PM
OIL AND GREASE			**SW9071B**	Prep: SW9071B 5/5/21 13:15		Analyst: **AWH**
Oil and Grease	**12,000**		**5,900**	**mg/Kg-dry**	1	5/5/2021 12:23 PM
PHOSPHORUS, TOTAL			**E365.1 R2.0**	Prep: E365.1 R2.0 5/3/21 12:06		Analyst: **CAC**
Phosphorus, Total	**19,000**		**5,900**	**mg/Kg-dry**	20	5/4/2021 04:50 PM
SOIL PH MEASURED IN WATER AT NOTED TEMP.			**SW9045D**	Prep: SW9045D 5/3/21 18:12		Analyst: **QTN**
pH	**7.61**		**0.10**	**s.u.**	1	5/4/2021 11:28 AM
Temperature	**20.1**		**0.10**	**°C**	1	5/4/2021 11:28 AM
PHENOLICS, TOTAL			**SW9066**	Prep: SW9066 5/4/21 14:30		Analyst: **JB**
Phenolics, Total	ND		5.7	mg/Kg-dry	1	5/5/2021 02:07 PM
NITROGEN, TOTAL KJELDAHL			**A4500-NH3 G-11**	Prep: A4500-N B 5/2/21 09:20		Analyst: **CAC**
Nitrogen, Total Kjeldahl	**48,000**		**32,000**	**mg/Kg-dry**	20	5/4/2021 10:44 AM
TOTAL SOLIDS			**A2540 G-11**			Analyst: **KTP**
Total Solids	**8.3**		**0.050**	**% of sample**	1	4/28/2021 04:20 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 10-May-21

Client: Delhi Charter Twp POTW

Work Order: 21042415

Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **175949** Instrument ID **HG4** Method: **SW7471B**

MBLK	Sample ID: **MBLK-175949-175949**				Units: **mg/Kg**			Analysis Date: **4/30/2021 12:58 PM**			
Client ID:	Run ID: **HG4_210430A**				SeqNo: **7354968**			Prep Date: **4/30/2021**		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	ND	0.020								

LCS	Sample ID: **LCS-175949-175949**				Units: **mg/Kg**			Analysis Date: **4/30/2021 01:00 PM**			
Client ID:	Run ID: **HG4_210430A**				SeqNo: **7354969**			Prep Date: **4/30/2021**		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1683	0.020	0.1665	0	101	80-120	0			

MS	Sample ID: **21042388-11BMS**				Units: **mg/Kg**			Analysis Date: **4/30/2021 01:32 PM**			
Client ID:	Run ID: **HG4_210430A**				SeqNo: **7354987**			Prep Date: **4/30/2021**		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1474	0.018	0.148	0.01088	92.2	75-125	0			

MSD	Sample ID: **21042388-11BMSD**				Units: **mg/Kg**			Analysis Date: **4/30/2021 01:34 PM**			
Client ID:	Run ID: **HG4_210430A**				SeqNo: **7354988**			Prep Date: **4/30/2021**		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.149	0.018	0.1489	0.01088	92.8	75-125	0.1474	1.1	35	

The following samples were analyzed in this batch: 21042415-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Delhi Charter Twp POTW
Work Order: 21042415
Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **176167** Instrument ID **ICPMS3** Method: **SW6020B**

MBLK Sample ID: **MBLK-176167-176167** Units: **mg/Kg** Analysis Date: **5/4/2021 06:23 PM**
Client ID: Run ID: **ICPMS3_210504B** SeqNo: **7364720** Prep Date: **5/4/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	ND	0.25								
Barium	ND	0.25								
Cadmium	ND	0.10								
Calcium	ND	25								
Chromium	ND	0.25								
Copper	ND	0.25								
Iron	ND	10								
Lead	ND	0.25								
Magnesium	ND	10								
Molybdenum	ND	0.25								
Nickel	ND	0.25								
Potassium	ND	10								
Selenium	ND	0.25								
Silver	ND	0.25								
Sodium	ND	15								
Zinc	ND	0.50								

LCS Sample ID: **LCS-176167-176167** Units: **mg/Kg** Analysis Date: **5/4/2021 06:25 PM**
Client ID: Run ID: **ICPMS3_210504B** SeqNo: **7364721** Prep Date: **5/4/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	4.962	0.25	5	0	99.2	80-120	0			
Barium	4.947	0.25	5	0	98.9	80-120	0			
Cadmium	4.901	0.10	5	0	98	80-120	0			
Calcium	526.8	25	500	0	105	80-120	0			
Chromium	5.152	0.25	5	0	103	80-120	0			
Copper	5.021	0.25	5	0	100	80-120	0			
Iron	514.6	10	500	0	103	80-120	0			
Lead	4.914	0.25	5	0	98.3	80-120	0			
Magnesium	517.3	10	500	0	103	80-120	0			
Molybdenum	4.916	0.25	5	0	98.3	80-120	0			
Nickel	4.985	0.25	5	0	99.7	80-120	0			
Potassium	513.5	10	500	0	103	80-120	0			
Selenium	4.819	0.25	5	0	96.4	80-120	0			
Silver	5.198	0.25	5	0	104	80-120	0			
Sodium	513	15	500	0	103	80-120	0			
Zinc	4.962	0.50	5	0	99.2	80-120	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Delhi Charter Twp POTW
Work Order: 21042415
Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **176167** Instrument ID **ICPMS3** Method: **SW6020B**

MS Sample ID: **21042596-01BMS** Units: **mg/Kg** Analysis Date: **5/4/2021 06:55 PM**
Client ID: Run ID: **ICPMS3_210504B** SeqNo: **7364738** Prep Date: **5/4/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	10.54	0.37	7.396	3.585	94	75-125	0			
Barium	30.2	0.37	7.396	26.48	50.3	75-125	0			S
Cadmium	6.61	0.15	7.396	-0.01374	89.6	75-125	0			
Calcium	20000	37	739.6	21410	-191	75-125	0			SEO
Chromium	18.41	0.37	7.396	12.18	84.3	75-125	0			
Copper	9.89	0.37	7.396	3.499	86.4	75-125	0			
Iron	5935	15	739.6	5488	60.4	75-125	0			SO
Lead	10.51	0.37	7.396	3.819	90.5	75-125	0			
Magnesium	7165	15	739.6	7100	8.78	75-125	0			SO
Molybdenum	7.331	0.37	7.396	0.6482	90.3	75-125	0			
Nickel	11.96	0.37	7.396	5.686	84.8	75-125	0			
Potassium	1125	15	739.6	390	99.4	75-125	0			
Selenium	6.89	0.37	7.396	0.03313	92.7	75-125	0			
Silver	6.702	0.37	7.396	0.01099	90.5	75-125	0			
Sodium	836.6	22	739.6	104	99.1	75-125	0			
Zinc	19.52	0.74	7.396	13.38	83	75-125	0			

MSD Sample ID: **21042596-01BMSD** Units: **mg/Kg** Analysis Date: **5/4/2021 06:57 PM**
Client ID: Run ID: **ICPMS3_210504B** SeqNo: **7364739** Prep Date: **5/4/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	10.57	0.37	7.463	3.585	93.6	75-125	10.54	0.297	20	
Barium	29.27	0.37	7.463	26.48	37.5	75-125	30.2	3.12	20	S
Cadmium	6.661	0.15	7.463	-0.01374	89.4	75-125	6.61	0.758	20	
Calcium	19790	37	746.3	21410	-218	75-125	20000	1.05	20	SEO
Chromium	18.55	0.37	7.463	12.18	85.4	75-125	18.41	0.759	20	
Copper	9.871	0.37	7.463	3.499	85.4	75-125	9.89	0.194	20	
Iron	5655	15	746.3	5488	22.4	75-125	5935	4.83	20	SO
Lead	10.37	0.37	7.463	3.819	87.8	75-125	10.51	1.34	20	
Magnesium	7014	15	746.3	7100	-11.5	75-125	7165	2.12	20	SO
Molybdenum	7.471	0.37	7.463	0.6482	91.4	75-125	7.331	1.89	20	
Nickel	11.99	0.37	7.463	5.686	84.5	75-125	11.96	0.259	20	
Potassium	1097	15	746.3	390	94.8	75-125	1125	2.52	20	
Selenium	7.028	0.37	7.463	0.03313	93.7	75-125	6.89	1.99	20	
Silver	6.834	0.37	7.463	0.01099	91.4	75-125	6.702	1.96	20	
Sodium	844.9	22	746.3	104	99.3	75-125	836.6	0.988	20	
Zinc	19.62	0.75	7.463	13.38	83.6	75-125	19.52	0.519	20	

The following samples were analyzed in this batch: 21042415-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Delhi Charter Twp POTW
Work Order: 21042415
Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **176080** Instrument ID **LCMS1** Method: **D7968-17a**

MBLK1	Sample ID: **MBLK1-176080-176080**				Units: **ng/Kg**		Analysis Date: **5/6/2021 05:26 PM**			
Client ID:		Run ID: **LCMS1_210506B**			SeqNo: **7372303**		Prep Date: **5/3/2021**		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Perfluorobutanoic Acid (PFBA)	ND	120	0	0	0		0			
Perfluoropentanoic Acid (PFPeA)	ND	120	0	0	0		0			
Perfluorohexanoic Acid (PFHxA)	ND	120	0	0	0		0			
Perfluoroheptanoic Acid (PFHpA)	ND	120	0	0	0		0			
Perfluorooctanoic Acid (PFOA)	ND	25	0	0	0		0			
Perfluorononanoic Acid (PFNA)	ND	25	0	0	0		0			
Perfluorodecanoic Acid (PFDA)	ND	120	0	0	0		0			
Perfluoroundecanoic Acid (PFUnA)	ND	120	0	0	0		0			
Perfluorododecanoic Acid (PFDoA)	ND	120	0	0	0		0			
Perfluorotridecanoic Acid (PFTriA)	ND	120	0	0	0		0			
Perfluorotetradecanoic Acid (PFTeA)	ND	120	0	0	0		0			
Perfluorobutanesulfonic Acid (PFBS)	ND	25	0	0	0		0			
Perfluoropentanesulfonic Acid (PFPeS	ND	25	0	0	0		0			
Perfluorohexanesulfonic Acid (PFHxS)	ND	120	0	0	0		0			
Perfluoroheptanesulfonic Acid (PFHpS	ND	120	0	0	0		0			
Perfluorooctanesulfonic Acid (PFOS)	ND	25	0	0	0		0			
Perfluorononanesulfonic Acid (PFNS)	ND	120	0	0	0		0			
Perfluorodecanesulfonic Acid (PFDS)	ND	25	0	0	0		0			
Fluorotelomer Sulphonic Acid 4:2 (FtS	ND	120	0	0	0		0			
Fluorotelomer Sulphonic Acid 6:2 (FtS	ND	120	0	0	0		0			
Fluorotelomer Sulphonic Acid 8:2 (FtS	ND	120	0	0	0		0			
Perfluorooctanesulfonamide (PFOSA)	ND	25	0	0	0		0			
N-Ethylperfluorooctanesulfonamidoace	53.03	120	0	0	0		0			J
N-Methylperfluorooctanesulfonamidoa	ND	120	0	0	0		0			
11Cl-Pf3OUdS	ND	25	0	0	0		0			
4,8-Dioxa-3H-perfluorononanoic Acid (	ND	25	0	0	0		0			
9Cl-PF3ONS	ND	25	0	0	0		0			
Hexafluoropropylene oxide dimer acid	ND	120	0	0	0		0			
Surr: 13C4-PFBA	*431.2*	0	*400*	0	*108*	*50-130*	0			
Surr: 13C5-PFPeA	*428.3*	0	*400*	0	*107*	*50-130*	0			
Surr: 13C2-PFHxA	*441.7*	0	*400*	0	*110*	*50-130*	0			
Surr: 13C4-PFHpA	*423*	0	*400*	0	*106*	*50-130*	0			
Surr: 13C4-PFOA	*440.5*	0	*400*	0	*110*	*70-130*	0			
Surr: 13C5-PFNA	*442.3*	0	*400*	0	*111*	*70-130*	0			
Surr: 13C2-PFDA	*416.5*	0	*400*	0	*104*	*70-130*	0			
Surr: 13C2-PFUnA	*383.2*	0	*400*	0	*95.8*	*70-130*	0			
Surr: 13C2-PFDoA	*312.8*	0	*400*	0	*78.2*	*70-130*	0			
Surr: 13C2-PFTeA	*211.1*	0	*400*	0	*52.8*	*50-130*	0			
Surr: 13C3-PFBS	*399.5*	0	*400*	0	*99.9*	*50-130*	0			
Surr: 18O2-PFHxS	*412.4*	0	*378*	0	*109*	*70-130*	0			
Surr: 13C4-PFOS	*413.4*	0	*383*	0	*108*	*70-130*	0			
Surr: 13C2-FtS 4:2	*362.2*	0	*373*	0	*97.1*	*50-130*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **176080** Instrument ID **LCMS1** Method: **D7968-17a**

Surr: 13C2-FtS 6:2	*329.4*	0	*380*	0	*86.7*	*50-130*	0
Surr: 13C2-FtS 8:2	*366.7*	0	*383*	0	*95.7*	*50-130*	0
Surr: 13C8-FOSA	*391.6*	0	*400*	0	*97.9*	*50-130*	0
Surr: d3-N-MeFOSAA	*408.1*	0	*400*	0	*102*	*50-130*	0
Surr: d5-N-EtFOSAA	*474.4*	0	*400*	0	*119*	*50-130*	0
Surr: 13C3-HFPO-DA	*412.6*	0	*400*	0	*103*	*50-130*	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Delhi Charter Twp POTW
Work Order: 21042415
Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **176080** Instrument ID **LCMS1** Method: **D7968-17a**

MBLK2	Sample ID: **MBLK2-176080-176080**				Units: **ng/Kg**			Analysis Date: **5/6/2021 06:08 PM**			
Client ID:		Run ID: **LCMS1_210506B**			SeqNo: **7372307**			Prep Date: **5/3/2021**		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Perfluorobutanoic Acid (PFBA)	ND	120	0	0	0		0			
Perfluoropentanoic Acid (PFPeA)	ND	120	0	0	0		0			
Perfluorohexanoic Acid (PFHxA)	ND	120	0	0	0		0			
Perfluoroheptanoic Acid (PFHpA)	ND	120	0	0	0		0			
Perfluorooctanoic Acid (PFOA)	ND	25	0	0	0		0			
Perfluorononanoic Acid (PFNA)	14.08	25	0	0	0		0			J
Perfluorodecanoic Acid (PFDA)	19.98	120	0	0	0		0			J
Perfluoroundecanoic Acid (PFUnA)	ND	120	0	0	0		0			
Perfluorododecanoic Acid (PFDoA)	ND	120	0	0	0		0			
Perfluorotridecanoic Acid (PFTriA)	ND	120	0	0	0		0			
Perfluorotetradecanoic Acid (PFTeA)	ND	120	0	0	0		0			
Perfluorobutanesulfonic Acid (PFBS)	ND	25	0	0	0		0			
Perfluoropentanesulfonic Acid (PFPeS	ND	25	0	0	0		0			
Perfluorohexanesulfonic Acid (PFHxS)	ND	120	0	0	0		0			
Perfluoroheptanesulfonic Acid (PFHpS	ND	120	0	0	0		0			
Perfluorooctanesulfonic Acid (PFOS)	ND	25	0	0	0		0			
Perfluorononanesulfonic Acid (PFNS)	ND	120	0	0	0		0			
Perfluorodecanesulfonic Acid (PFDS)	ND	25	0	0	0		0			
Fluorotelomer Sulphonic Acid 4:2 (FtS	ND	120	0	0	0		0			
Fluorotelomer Sulphonic Acid 6:2 (FtS	ND	120	0	0	0		0			
Fluorotelomer Sulphonic Acid 8:2 (FtS	ND	120	0	0	0		0			
Perfluorooctanesulfonamide (PFOSA)	ND	25	0	0	0		0			
N-Ethylperfluorooctanesulfonamidoace	ND	120	0	0	0		0			
N-Methylperfluorooctanesulfonamidoa	ND	120	0	0	0		0			
11Cl-Pf3OUdS	ND	25	0	0	0		0			
4,8-Dioxa-3H-perfluorononanoic Acid (	ND	25	0	0	0		0			
9Cl-PF3ONS	ND	25	0	0	0		0			
Hexafluoropropylene oxide dimer acid	ND	120	0	0	0		0			
Surr: 13C4-PFBA	*439.3*	0	*400*	0	*110*	*50-130*	0			
Surr: 13C5-PFPeA	*447.8*	0	*400*	0	*112*	*50-130*	0			
Surr: 13C2-PFHxA	*454.7*	0	*400*	0	*114*	*50-130*	0			
Surr: 13C4-PFHpA	*442.9*	0	*400*	0	*111*	*50-130*	0			
Surr: 13C4-PFOA	*418.6*	0	*400*	0	*105*	*70-130*	0			
Surr: 13C5-PFNA	*449.8*	0	*400*	0	*112*	*70-130*	0			
Surr: 13C2-PFDA	*439.9*	0	*400*	0	*110*	*70-130*	0			
Surr: 13C2-PFUnA	*435.2*	0	*400*	0	*109*	*70-130*	0			
Surr: 13C2-PFDoA	*424.7*	0	*400*	0	*106*	*70-130*	0			
Surr: 13C2-PFTeA	*394.8*	0	*400*	0	*98.7*	*50-130*	0			
Surr: 13C3-PFBS	*408.1*	0	*400*	0	*102*	*50-130*	0			
Surr: 18O2-PFHxS	*423.2*	0	*378*	0	*112*	*70-130*	0			
Surr: 13C4-PFOS	*414.7*	0	*383*	0	*108*	*70-130*	0			
Surr: 13C2-FtS 4:2	*343.9*	0	*373*	0	*92.2*	*50-130*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **176080** Instrument ID **LCMS1** Method: **D7968-17a**

Surr: 13C2-FtS 6:2	*353.1*	0	*380*	0	*92.9*	*50-130*	0
Surr: 13C2-FtS 8:2	*342.5*	0	*383*	0	*89.4*	*50-130*	0
Surr: 13C8-FOSA	*403.7*	0	*400*	0	*101*	*50-130*	0
Surr: d3-N-MeFOSAA	*499.5*	0	*400*	0	*125*	*50-130*	0
Surr: d5-N-EtFOSAA	*516.1*	0	*400*	0	*129*	*50-130*	0
Surr: 13C3-HFPO-DA	*407.8*	0	*400*	0	*102*	*50-130*	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Delhi Charter Twp POTW
Work Order: 21042415
Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **176080** Instrument ID **LCMS1** Method: **D7968-17a**

MS	Sample ID: **21050022-16A MS**				Units: **ng/Kg**		Analysis Date: **5/6/2021 06:18 PM**			
Client ID:		Run ID: **LCMS1_210506B**			SeqNo: **7372308**		Prep Date: **5/3/2021**		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Perfluorobutanoic Acid (PFBA)	498.8	130	502.5	47.31	89.8	50-130	0			
Perfluoropentanoic Acid (PFPeA)	493.8	130	502.5	40.23	90.3	70-130	0			
Perfluorohexanoic Acid (PFHxA)	519.5	130	502.5	61.43	91.1	50-130	0			
Perfluoroheptanoic Acid (PFHpA)	529.7	130	502.5	66.75	92.1	50-130	0			
Perfluorooctanoic Acid (PFOA)	613.9	25	502.5	161.1	90.1	70-130	0			
Perfluorononanoic Acid (PFNA)	569.2	25	502.5	79.78	97.4	70-130	0			
Perfluorodecanoic Acid (PFDA)	524.6	130	502.5	40.53	96.3	70-130	0			
Perfluoroundecanoic Acid (PFUnA)	463.3	130	502.5	11.29	90	70-130	0			
Perfluorododecanoic Acid (PFDoA)	495.5	130	502.5	27.38	93.2	70-130	0			
Perfluorotridecanoic Acid (PFTriA)	571.4	130	502.5	0	114	70-130	0			
Perfluorotetradecanoic Acid (PFTeA)	601.7	130	502.5	0.6463	120	70-130	0			
Perfluorobutanesulfonic Acid (PFBS)	416.9	25	444.2	23.29	88.6	70-130	0			
Perfluoropentanesulfonic Acid (PFPeS	429.6	25	471.4	7.695	89.5	70-130	0			
Perfluorohexanesulfonic Acid (PFHxS)	442.5	130	457.3	33.6	89.4	70-130	0			
Perfluoroheptanesulfonic Acid (PFHpS	422.1	130	478.4	10.72	86	70-130	0			
Perfluorooctanesulfonic Acid (PFOS)	563.5	25	466.3	167.4	84.9	70-130	0			
Perfluorononanesulfonic Acid (PFNS)	448.7	130	482.4	0	93	70-130	0			
Perfluorodecanesulfonic Acid (PFDS)	432.1	25	484.4	14.75	86.2	70-130	0			
Fluorotelomer Sulphonic Acid 4:2 (FtS	548	130	469.3	3.006	116	70-130	0			
Fluorotelomer Sulphonic Acid 6:2 (FtS	528	130	476.4	0	111	70-130	0			
Fluorotelomer Sulphonic Acid 8:2 (FtS	450.7	130	481.4	0	93.6	70-130	0			
Perfluorooctanesulfonamide (PFOSA)	471.6	25	502.5	0	93.9	70-130	0			
N-Ethylperfluorooctanesulfonamidoace	613	130	502.5	0	122	70-130	0			
N-Methylperfluorooctanesulfonamidoa	581.5	130	502.5	0	116	70-130	0			
11Cl-Pf3OUdS	407.3	25	473.4	6.341	84.7	70-130	0			
4,8-Dioxa-3H-perfluorononanoic Acid (	413.7	25	473.4	1.412	87.1	70-130	0			
9Cl-PF3ONS	448.6	25	468.3	2.383	95.3	70-130	0			
Hexafluoropropylene oxide dimer acid	395.5	130	502.5	0	78.7	50-130	0			
Surr: 13C4-PFBA	*419.4*	0	*402*	0	*104*	*50-130*	0			
Surr: 13C5-PFPeA	*407.8*	0	*402*	0	*101*	*50-130*	0			
Surr: 13C2-PFHxA	*427.7*	0	*402*	0	*106*	*50-130*	0			
Surr: 13C4-PFHpA	*430.9*	0	*402*	0	*107*	*50-130*	0			
Surr: 13C4-PFOA	*411.9*	0	*402*	0	*102*	*70-130*	0			
Surr: 13C5-PFNA	*429.9*	0	*402*	0	*107*	*70-130*	0			
Surr: 13C2-PFDA	*430.3*	0	*402*	0	*107*	*70-130*	0			
Surr: 13C2-PFUnA	*450.1*	0	*402*	0	*112*	*70-130*	0			
Surr: 13C2-PFDoA	*418.7*	0	*402*	0	*104*	*70-130*	0			
Surr: 13C2-PFTeA	*409.8*	0	*402*	0	*102*	*50-130*	0			
Surr: 13C3-PFBS	*389.4*	0	*402*	0	*96.9*	*50-130*	0			
Surr: 18O2-PFHxS	*387*	0	*379.9*	0	*102*	*70-130*	0			
Surr: 13C4-PFOS	*403.2*	0	*384.9*	0	*105*	*70-130*	0			
Surr: 13C2-FtS 4:2	*425.8*	0	*374.9*	0	*114*	*50-130*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **176080** Instrument ID **LCMS1** Method: **D7968-17a**

Surr: 13C2-FtS 6:2	*380.5*	0	*381.9*	0	*99.6*	*50-130*	0	
Surr: 13C2-FtS 8:2	*393.1*	0	*384.9*	0	*102*	*50-130*	0	
Surr: 13C8-FOSA	*424.3*	0	*402*	0	*106*	*50-130*	0	
Surr: d3-N-MeFOSAA	*535.3*	0	*402*	0	*133*	*50-130*	0	*S*
Surr: d5-N-EtFOSAA	*558.1*	0	*402*	0	*139*	*50-130*	0	*S*
Surr: 13C3-HFPO-DA	*338.6*	0	*402*	0	*84.2*	*50-130*	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Delhi Charter Twp POTW
Work Order: 21042415
Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **176080** Instrument ID **LCMS1** Method: **D7968-17a**

MSD	Sample ID: **21050022-16A MSD**				Units: **ng/Kg**		Analysis Date: **5/6/2021 06:29 PM**			
Client ID:	Run ID: **LCMS1_210506B**				SeqNo: **7372309**		Prep Date: **5/3/2021**		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Perfluorobutanoic Acid (PFBA)	491.1	120	487.8	47.31	91	50-130	498.8	1.56	30	
Perfluoropentanoic Acid (PFPeA)	516.4	120	487.8	40.23	97.6	70-130	493.8	4.48	30	
Perfluorohexanoic Acid (PFHxA)	492	120	487.8	61.43	88.3	50-130	519.5	5.43	30	
Perfluoroheptanoic Acid (PFHpA)	501.1	120	487.8	66.75	89.1	50-130	529.7	5.53	30	
Perfluorooctanoic Acid (PFOA)	627	24	487.8	161.1	95.5	70-130	613.9	2.1	30	
Perfluorononanoic Acid (PFNA)	559.4	24	487.8	79.78	98.3	70-130	569.2	1.75	30	
Perfluorodecanoic Acid (PFDA)	505.1	120	487.8	40.53	95.2	70-130	524.6	3.79	30	
Perfluoroundecanoic Acid (PFUnA)	494.9	120	487.8	11.29	99.1	70-130	463.3	6.58	30	
Perfluorododecanoic Acid (PFDoA)	541.6	120	487.8	27.38	105	70-130	495.5	8.88	30	
Perfluorotridecanoic Acid (PFTriA)	600.8	120	487.8	0	123	70-130	571.4	5.02	30	
Perfluorotetradecanoic Acid (PFTeA)	642.5	120	487.8	0.6463	132	70-130	601.7	6.56	30	S
Perfluorobutanesulfonic Acid (PFBS)	406.5	24	431.2	23.29	88.9	70-130	416.9	2.54	30	
Perfluoropentanesulfonic Acid (PFPeS	420.1	24	457.6	7.695	90.1	70-130	429.6	2.25	30	
Perfluorohexanesulfonic Acid (PFHxS)	417	120	443.9	33.6	86.4	70-130	442.5	5.92	30	
Perfluoroheptanesulfonic Acid (PFHpS	423.8	120	464.4	10.72	89	70-130	422.1	0.416	30	
Perfluorooctanesulfonic Acid (PFOS)	560.7	24	452.7	167.4	86.9	70-130	563.5	0.492	30	
Perfluorononanesulfonic Acid (PFNS)	480.3	120	468.3	0	103	70-130	448.7	6.79	30	
Perfluorodecanesulfonic Acid (PFDS)	455.3	24	470.2	14.75	93.7	70-130	432.1	5.23	30	
Fluorotelomer Sulphonic Acid 4:2 (FtS	531.9	120	455.6	3.006	116	70-130	548	2.96	30	
Fluorotelomer Sulphonic Acid 6:2 (FtS	537.4	120	462.4	0	116	70-130	528	1.78	30	
Fluorotelomer Sulphonic Acid 8:2 (FtS	497.8	120	467.3	0	107	70-130	450.7	9.94	30	
Perfluorooctanesulfonamide (PFOSA)	466.3	24	487.8	0	95.6	70-130	471.6	1.13	30	
N-Ethylperfluorooctanesulfonamidoace	654.9	120	487.8	0	134	70-130	613	6.61	30	S
N-Methylperfluorooctanesulfonamidoa	576.7	120	487.8	0	118	70-130	581.5	0.827	30	
11Cl-Pf3OUdS	403.4	24	459.5	6.341	86.4	70-130	407.3	0.959	30	
4,8-Dioxa-3H-perfluorononanoic Acid (	425.6	24	459.5	1.412	92.3	70-130	413.7	2.83	30	
9Cl-PF3ONS	446.9	24	454.6	2.383	97.8	70-130	448.6	0.392	30	
Hexafluoropropylene oxide dimer acid	449.1	120	487.8	0	92.1	50-130	395.5	12.7	30	
Surr: 13C4-PFBA	*403.4*	0	*390.2*	0	*103*	*50-130*	419.4	*3.87*	*30*	
Surr: 13C5-PFPeA	*413.3*	0	*390.2*	0	*106*	*50-130*	407.8	*1.36*	*30*	
Surr: 13C2-PFHxA	*419.7*	0	*390.2*	0	*108*	*50-130*	427.7	*1.9*	*30*	
Surr: 13C4-PFHpA	*412.1*	0	*390.2*	0	*106*	*50-130*	430.9	*4.48*	*30*	
Surr: 13C4-PFOA	*402.9*	0	*390.2*	0	*103*	*70-130*	411.9	*2.2*	*30*	
Surr: 13C5-PFNA	*419*	0	*390.2*	0	*107*	*70-130*	429.9	*2.56*	*30*	
Surr: 13C2-PFDA	*416*	0	*390.2*	0	*107*	*70-130*	430.3	*3.39*	*30*	
Surr: 13C2-PFUnA	*473.5*	0	*390.2*	0	*121*	*70-130*	450.1	*5.07*	*30*	
Surr: 13C2-PFDoA	*453*	0	*390.2*	0	*116*	*70-130*	418.7	*7.87*	*30*	
Surr: 13C2-PFTeA	*409.9*	0	*390.2*	0	*105*	*50-130*	409.8	*0.011*	*30*	
Surr: 13C3-PFBS	*382.2*	0	*390.2*	0	*98*	*50-130*	389.4	*1.87*	*30*	
Surr: 18O2-PFHxS	*382.1*	0	*368.8*	0	*104*	*70-130*	387	*1.27*	*30*	
Surr: 13C4-PFOS	*413*	0	*373.7*	0	*111*	*70-130*	403.2	*2.41*	*30*	
Surr: 13C2-FtS 4:2	*440.3*	0	*363.9*	0	*121*	*50-130*	425.8	*3.34*	*30*	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Batch ID: **176080** Instrument ID **LCMS1** Method: **D7968-17a**

Surr: 13C2-FtS 6:2	*392*	0	*370.7*	0	*106*	*50-130*	380.5	*2.98*	*30*	
Surr: 13C2-FtS 8:2	*417*	0	*373.7*	0	*112*	*50-130*	393.1	*5.89*	*30*	
Surr: 13C8-FOSA	*412.2*	0	*390.2*	0	*106*	*50-130*	424.3	*2.88*	*30*	
Surr: d3-N-MeFOSAA	*532*	0	*390.2*	0	*136*	*50-130*	535.3	*0.606*	*30*	*S*
Surr: d5-N-EtFOSAA	*558.2*	0	*390.2*	0	*143*	*50-130*	558.1	*0.0199*	*30*	*S*
Surr: 13C3-HFPO-DA	*328.5*	0	*390.2*	0	*84.2*	*50-130*	338.6	*3.04*	*30*	

LCS1 Sample ID: **LCS1-176080-176080** Units: **ng/Kg** Analysis Date: **5/6/2021 05:36 PM**

Client ID: Run ID: **LCMS1_210506B** SeqNo: **7372304** Prep Date: **5/3/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Perfluorooctanoic Acid (PFOA)	37.12	25	25	0	148	35-150	0			
Perfluorononanoic Acid (PFNA)	41.57	25	25	0	166	35-150	0			S
Perfluorobutanesulfonic Acid (PFBS)	28.14	25	22	0	128	35-150	0			
Perfluoropentanesulfonic Acid (PFPeS	34.94	25	23.5	0	149	35-150	0			
Perfluorooctanesulfonic Acid (PFOS)	30.06	25	23	0	131	35-150	0			
Perfluorodecanesulfonic Acid (PFDS)	27.04	25	24	0	113	35-150	0			
Perfluorooctanesulfonamide (PFOSA)	18.79	25	25	0	75.2	35-150	0			J
11Cl-Pf3OUdS	25.41	25	23.5	0	108	35-150	0			
4,8-Dioxa-3H-perfluorononanoic Acid (	25.82	25	23.5	0	110	35-150	0			
9Cl-PF3ONS	22.96	25	23	0	99.8	35-150	0			J
Surr: 13C4-PFBA	*420.3*	0	*400*	0	*105*	*50-130*	0			
Surr: 13C5-PFPeA	*436.6*	0	*400*	0	*109*	*50-130*	0			
Surr: 13C2-PFHxA	*440.8*	0	*400*	0	*110*	*50-130*	0			
Surr: 13C4-PFHpA	*410.8*	0	*400*	0	*103*	*50-130*	0			
Surr: 13C4-PFOA	*430.7*	0	*400*	0	*108*	*70-130*	0			
Surr: 13C5-PFNA	*425.1*	0	*400*	0	*106*	*70-130*	0			
Surr: 13C2-PFDA	*427.7*	0	*400*	0	*107*	*70-130*	0			
Surr: 13C2-PFUnA	*411.1*	0	*400*	0	*103*	*70-130*	0			
Surr: 13C2-PFDoA	*404.9*	0	*400*	0	*101*	*70-130*	0			
Surr: 13C2-PFTeA	*388.6*	0	*400*	0	*97.1*	*50-130*	0			
Surr: 13C3-PFBS	*392.7*	0	*400*	0	*98.2*	*50-130*	0			
Surr: 18O2-PFHxS	*401.7*	0	*378*	0	*106*	*70-130*	0			
Surr: 13C4-PFOS	*413.7*	0	*383*	0	*108*	*70-130*	0			
Surr: 13C2-FtS 4:2	*351.4*	0	*373*	0	*94.2*	*50-130*	0			
Surr: 13C2-FtS 6:2	*312.4*	0	*380*	0	*82.2*	*50-130*	0			
Surr: 13C2-FtS 8:2	*350.3*	0	*383*	0	*91.5*	*50-130*	0			
Surr: 13C8-FOSA	*425.8*	0	*400*	0	*106*	*50-130*	0			
Surr: d3-N-MeFOSAA	*436.5*	0	*400*	0	*109*	*50-130*	0			
Surr: d5-N-EtFOSAA	*490.7*	0	*400*	0	*123*	*50-130*	0			
Surr: 13C3-HFPO-DA	*409.6*	0	*400*	0	*102*	*50-130*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Delhi Charter Twp POTW
Work Order: 21042415
Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **176080** Instrument ID **LCMS1** Method: **D7968-17a**

LCS2	Sample ID: **LCS2-176080-176080**				Units: **ng/Kg**			Analysis Date: **5/6/2021 05:57 PM**			
Client ID:		Run ID: **LCMS1_210506B**			SeqNo: **7372306**			Prep Date: **5/3/2021**		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Perfluorobutanoic Acid (PFBA)	458.7	120	500	0	91.7	50-130	0			
Perfluoropentanoic Acid (PFPeA)	478.6	120	500	0	95.7	70-130	0			
Perfluorohexanoic Acid (PFHxA)	500.5	120	500	0	100	50-130	0			
Perfluoroheptanoic Acid (PFHpA)	471.6	120	500	0	94.3	50-130	0			
Perfluorooctanoic Acid (PFOA)	480.7	25	500	0	96.1	70-130	0			
Perfluorononanoic Acid (PFNA)	488.1	25	500	0	97.6	70-130	0			
Perfluorodecanoic Acid (PFDA)	465.3	120	500	0	93.1	70-130	0			
Perfluoroundecanoic Acid (PFUnA)	450.8	120	500	0	90.2	70-130	0			
Perfluorododecanoic Acid (PFDoA)	484	120	500	0	96.8	70-130	0			
Perfluorotridecanoic Acid (PFTriA)	579.6	120	500	0	116	70-130	0			
Perfluorotetradecanoic Acid (PFTeA)	646.5	120	500	0	129	70-130	0			
Perfluorobutanesulfonic Acid (PFBS)	405.9	25	442	0	91.8	70-130	0			
Perfluoropentanesulfonic Acid (PFPeS	440.8	25	469	0	94	70-130	0			
Perfluorohexanesulfonic Acid (PFHxS)	452.2	120	455	0	99.4	70-130	0			
Perfluoroheptanesulfonic Acid (PFHpS	460.4	120	476	0	96.7	70-130	0			
Perfluorooctanesulfonic Acid (PFOS)	441.1	25	464	0	95.1	70-130	0			
Perfluorononanesulfonic Acid (PFNS)	417.3	120	480	0	86.9	70-130	0			
Perfluorodecanesulfonic Acid (PFDS)	458.5	25	482	0	95.1	70-130	0			
Fluorotelomer Sulphonic Acid 4:2 (FtS	496.4	120	467	0	106	70-130	0			
Fluorotelomer Sulphonic Acid 6:2 (FtS	469.8	120	474	0	99.1	70-130	0			
Fluorotelomer Sulphonic Acid 8:2 (FtS	568.1	120	479	0	119	70-130	0			
Perfluorooctanesulfonamide (PFOSA)	468.2	25	500	0	93.6	70-130	0			
N-Ethylperfluorooctanesulfonamidoace	558.6	120	500	0	112	70-130	0			
N-Methylperfluorooctanesulfonamidoa	546.8	120	500	0	109	70-130	0			
11Cl-Pf3OUdS	423.7	25	471	0	90	70-130	0			
4,8-Dioxa-3H-perfluorononanoic Acid (	425.7	25	471	0	90.4	70-130	0			
9Cl-PF3ONS	446.5	25	466	0	95.8	70-130	0			
Hexafluoropropylene oxide dimer acid	403.5	120	500	0	80.7	50-130	0			
Surr: 13C4-PFBA	*427.5*	0	*400*	0	*107*	*50-130*	0			
Surr: 13C5-PFPeA	*426.1*	0	*400*	0	*107*	*50-130*	0			
Surr: 13C2-PFHxA	*421.7*	0	*400*	0	*105*	*50-130*	0			
Surr: 13C4-PFHpA	*415.2*	0	*400*	0	*104*	*50-130*	0			
Surr: 13C4-PFOA	*432.1*	0	*400*	0	*108*	*70-130*	0			
Surr: 13C5-PFNA	*436.9*	0	*400*	0	*109*	*70-130*	0			
Surr: 13C2-PFDA	*419.6*	0	*400*	0	*105*	*70-130*	0			
Surr: 13C2-PFUnA	*447.2*	0	*400*	0	*112*	*70-130*	0			
Surr: 13C2-PFDoA	*442.9*	0	*400*	0	*111*	*70-130*	0			
Surr: 13C2-PFTeA	*430.4*	0	*400*	0	*108*	*50-130*	0			
Surr: 13C3-PFBS	*409.4*	0	*400*	0	*102*	*50-130*	0			
Surr: 18O2-PFHxS	*404.2*	0	*378*	0	*107*	*70-130*	0			
Surr: 13C4-PFOS	*415.6*	0	*383*	0	*109*	*70-130*	0			
Surr: 13C2-FtS 4:2	*405.6*	0	*373*	0	*109*	*50-130*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

QC BATCH REPORT

Batch ID: **176080** Instrument ID **LCMS1** Method: **D7968-17a**

Surr: 13C2-FtS 6:2	*347.6*	0	*380*	0	*91.5*	*50-130*	0	
Surr: 13C2-FtS 8:2	*402.9*	0	*383*	0	*105*	*50-130*	0	
Surr: 13C8-FOSA	*427.5*	0	*400*	0	*107*	*50-130*	0	
Surr: d3-N-MeFOSAA	*471.4*	0	*400*	0	*118*	*50-130*	0	
Surr: d5-N-EtFOSAA	*520.6*	0	*400*	0	*130*	*50-130*	0	*S*
Surr: 13C3-HFPO-DA	*352.8*	0	*400*	0	*88.2*	*50-130*	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Delhi Charter Twp POTW
Work Order: 21042415
Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **176080** Instrument ID **LCMS1** Method: **D7968-17a**

LCS3	Sample ID: **LCS3-176080-176080**				Units: **ng/Kg**		Analysis Date: **5/6/2021 05:47 PM**			
Client ID:		Run ID: **LCMS1_210506B**			SeqNo: **7372305**		Prep Date: **5/3/2021**		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Perfluorobutanoic Acid (PFBA)	124	120	125	0	99.2	35-150	0			
Perfluoropentanoic Acid (PFPeA)	114.5	120	125	0	91.6	35-150	0			J
Perfluorohexanoic Acid (PFHxA)	138.6	120	125	0	111	35-150	0			
Perfluoroheptanoic Acid (PFHpA)	125.2	120	125	0	100	35-150	0			
Perfluorooctanoic Acid (PFOA)	117.6	25	125	0	94.1	35-150	0			
Perfluorononanoic Acid (PFNA)	136.8	25	125	0	109	35-150	0			
Perfluorodecanoic Acid (PFDA)	135.5	120	125	0	108	35-150	0			
Perfluoroundecanoic Acid (PFUnA)	123.1	120	125	0	98.5	35-150	0			
Perfluorododecanoic Acid (PFDoA)	146.3	120	125	0	117	35-150	0			
Perfluorotridecanoic Acid (PFTriA)	152.9	120	125	0	122	35-150	0			
Perfluorotetradecanoic Acid (PFTeA)	159	120	125	0	127	35-150	0			
Perfluorobutanesulfonic Acid (PFBS)	107.9	25	110	0	98.1	35-150	0			
Perfluoropentanesulfonic Acid (PFPeS	111.3	25	118	0	94.3	35-150	0			
Perfluorohexanesulfonic Acid (PFHxS)	126.9	120	115	0	110	35-150	0			
Perfluoroheptanesulfonic Acid (PFHpS	125.6	120	120	0	105	35-150	0			
Perfluorooctanesulfonic Acid (PFOS)	112.6	25	115	0	98	35-150	0			
Perfluorononanesulfonic Acid (PFNS)	132.5	120	120	0	110	35-150	0			
Perfluorodecanesulfonic Acid (PFDS)	129.5	25	120	0	108	35-150	0			
Fluorotelomer Sulphonic Acid 4:2 (FtS	118.3	120	118	0	100	35-150	0			J
Fluorotelomer Sulphonic Acid 6:2 (FtS	107	120	118	0	90.6	35-150	0			J
Fluorotelomer Sulphonic Acid 8:2 (FtS	128.1	120	120	0	107	35-150	0			
Perfluorooctanesulfonamide (PFOSA)	124.7	25	125	0	99.7	35-150	0			
N-Ethylperfluorooctanesulfonamidoace	160.6	120	125	0	129	35-150	0			
N-Methylperfluorooctanesulfonamidoa	134.9	120	125	0	108	35-150	0			
11Cl-Pf3OUdS	114.1	25	118	0	96.7	35-150	0			
4,8-Dioxa-3H-perfluorononanoic Acid (	109.4	25	118	0	92.7	35-150	0			
9Cl-PF3ONS	106.4	25	118	0	90.2	35-150	0			
Hexafluoropropylene oxide dimer acid	139.5	120	125	0	112	35-150	0			
Surr: 13C4-PFBA	*417.7*	0	*400*	0	*104*	*50-130*	0			
Surr: 13C5-PFPeA	*418.1*	0	*400*	0	*105*	*50-130*	0			
Surr: 13C2-PFHxA	*436.4*	0	*400*	0	*109*	*50-130*	0			
Surr: 13C4-PFHpA	*405.7*	0	*400*	0	*101*	*50-130*	0			
Surr: 13C4-PFOA	*439.1*	0	*400*	0	*110*	*70-130*	0			
Surr: 13C5-PFNA	*430*	0	*400*	0	*107*	*70-130*	0			
Surr: 13C2-PFDA	*419.3*	0	*400*	0	*105*	*70-130*	0			
Surr: 13C2-PFUnA	*441.5*	0	*400*	0	*110*	*70-130*	0			
Surr: 13C2-PFDoA	*437.1*	0	*400*	0	*109*	*70-130*	0			
Surr: 13C2-PFTeA	*416.1*	0	*400*	0	*104*	*50-130*	0			
Surr: 13C3-PFBS	*390.3*	0	*400*	0	*97.6*	*50-130*	0			
Surr: 18O2-PFHxS	*391.9*	0	*378*	0	*104*	*70-130*	0			
Surr: 13C4-PFOS	*393.6*	0	*383*	0	*103*	*70-130*	0			
Surr: 13C2-FtS 4:2	*350.7*	0	*373*	0	*94*	*50-130*	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Delhi Charter Twp POTW
Work Order: 21042415
Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **176080**	Instrument ID **LCMS1**		Method: **D7968-17a**				
Surr: 13C2-FtS 6:2	*312.8*	0	*380*	0	*82.3*	*50-130*	0
Surr: 13C2-FtS 8:2	*323.4*	0	*383*	0	*84.4*	*50-130*	0
Surr: 13C8-FOSA	*434.6*	0	*400*	0	*109*	*50-130*	0
Surr: d3-N-MeFOSAA	*451.8*	0	*400*	0	*113*	*50-130*	0
Surr: d5-N-EtFOSAA	*481.4*	0	*400*	0	*120*	*50-130*	0
Surr: 13C3-HFPO-DA	*350*	0	*400*	0	*87.5*	*50-130*	0

The following samples were analyzed in this batch: 21042415-01C

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Delhi Charter Twp POTW
Work Order: 21042415
Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **175851** Instrument ID **WETCHEM** Method: **A5210B-11**

MBLK Sample ID: **MBLK-175851-175851** Units: **mg/Kg** Analysis Date: **5/3/2021 12:24 PM**

Client ID: Run ID: **WETCHEM_210503A** SeqNo: **7358687** Prep Date: **4/28/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Biochemical Oxygen Demand	ND	20								

DUP Sample ID: **21042415-01A DUP** Units: **mg/Kg** Analysis Date: **5/3/2021 12:24 PM**

Client ID: **2nd Quarter Biosolids 2021** Run ID: **WETCHEM_210503A** SeqNo: **7358690** Prep Date: **4/28/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Biochemical Oxygen Demand	8036	20	0	0	0		8277	2.95	20	

The following samples were analyzed in this batch: 21042415-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Delhi Charter Twp POTW
Work Order: 21042415
Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **176037** Instrument ID **LACHAT2** Method: **A4500-NH3 G-11**

MBLK	Sample ID: **MBLK-176037-176037**				Units: **mg/Kg**			Analysis Date: **5/4/2021 09:45 AM**			
Client ID:	Run ID: **LACHAT2_210504A**				SeqNo: **7361626**			Prep Date: **5/2/2021**		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Total Kjeldahl	ND	100								

LCS	Sample ID: **LCS-176037-176037**				Units: **mg/Kg**			Analysis Date: **5/4/2021 09:46 AM**			
Client ID:	Run ID: **LACHAT2_210504A**				SeqNo: **7361627**			Prep Date: **5/2/2021**		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Total Kjeldahl	296.3	100	320	0	92.6	84-114	0			

LCS	Sample ID: **LCS2-176037-176037**				Units: **mg/Kg**			Analysis Date: **5/4/2021 09:47 AM**			
Client ID:	Run ID: **LACHAT2_210504A**				SeqNo: **7361628**			Prep Date: **5/2/2021**		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Total Kjeldahl	285	100	320	0	89.1	84-114	0			

MS	Sample ID: **21042415-01A MS**				Units: **mg/Kg**			Analysis Date: **5/4/2021 10:45 AM**			
Client ID: **2nd Quarter Biosolids 2021**	Run ID: **LACHAT2_210504A**				SeqNo: **7361676**			Prep Date: **5/2/2021**		DF: **20**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Total Kjeldahl	4177	2,500	400	4025	37.9	84-114	0			SO

MSD	Sample ID: **21042415-01A MSD**				Units: **mg/Kg**			Analysis Date: **5/4/2021 10:46 AM**			
Client ID: **2nd Quarter Biosolids 2021**	Run ID: **LACHAT2_210504A**				SeqNo: **7361677**			Prep Date: **5/2/2021**		DF: **20**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Total Kjeldahl	4170	2,600	421.1	4025	34.4	84-114	4177	0.16	20	SO

The following samples were analyzed in this batch: 21042415-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Delhi Charter Twp POTW
Work Order: 21042415
Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **176096** Instrument ID **LACHAT** Method: **A4500-NH3 G-11**

MBLK Sample ID: **MBLK-176096-176096** Units: **mg NH3-N/Kg** Analysis Date: **5/4/2021 11:53 AM**
Client ID: Run ID: **LACHAT_210504A** SeqNo: **7362334** Prep Date: **5/3/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ammonia as Nitrogen	4.199	15								J

LCS Sample ID: **LCS-176096-176096** Units: **mg NH3-N/Kg** Analysis Date: **5/4/2021 11:54 AM**
Client ID: Run ID: **LACHAT_210504A** SeqNo: **7362335** Prep Date: **5/3/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ammonia as Nitrogen	50.82	15	50	0	102	71-119	0			

MS Sample ID: **21042415-01A MS** Units: **mg NH3-N/Kg** Analysis Date: **5/4/2021 12:13 PM**
Client ID: **2nd Quarter Biosolids 2021** Run ID: **LACHAT_210504A** SeqNo: **7362351** Prep Date: **5/3/2021** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ammonia as Nitrogen	1111	160	53.19	1011	188	71-119	0			SEO

MSD Sample ID: **21042415-01A MSD** Units: **mg NH3-N/Kg** Analysis Date: **5/4/2021 12:14 PM**
Client ID: **2nd Quarter Biosolids 2021** Run ID: **LACHAT_210504A** SeqNo: **7362352** Prep Date: **5/3/2021** DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ammonia as Nitrogen	1121	160	52.08	1011	212	71-119	1111	0.936	25	SEO

The following samples were analyzed in this batch: 21042415-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Delhi Charter Twp POTW
Work Order: 21042415
Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **176105** Instrument ID **IC3** Method: **SW9056A**

MBLK Sample ID: **MBLK-176105-176105** Units: **mg/Kg** Analysis Date: **5/3/2021 01:11 PM**
Client ID: Run ID: **IC3_210503A** SeqNo: **7360407** Prep Date: **5/3/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	ND	10	0	0	0	0-0	0			
Sulfate	ND	10	0	0	0	0-0	0			

LCS Sample ID: **LCS-176105-176105** Units: **mg/Kg** Analysis Date: **5/3/2021 01:30 PM**
Client ID: Run ID: **IC3_210503A** SeqNo: **7360419** Prep Date: **5/3/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	95.47	10	100	0	95.5	80-116	0			
Sulfate	98.74	10	100	0	98.7	85-114	0			

MS Sample ID: **21050084-01A MS** Units: **mg/Kg** Analysis Date: **5/4/2021 01:03 AM**
Client ID: Run ID: **IC3_210503A** SeqNo: **7360401** Prep Date: **5/3/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	201.1	10	100.6	113.5	87.1	80-116	0			
Sulfate	92.51	10	100.6	0.6856	91.3	85-114	0			

MSD Sample ID: **21050084-01A MSD** Units: **mg/Kg** Analysis Date: **5/4/2021 01:23 AM**
Client ID: Run ID: **IC3_210503A** SeqNo: **7360402** Prep Date: **5/3/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	192.4	10	100.6	113.5	78.5	80-116	201.1	4.43	20	S
Sulfate	94.01	10	100.6	0.6856	92.8	85-114	92.51	1.61	20	

The following samples were analyzed in this batch: 21042415-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Delhi Charter Twp POTW
Work Order: 21042415
Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **176106** Instrument ID **WETCHEM** Method: **SW9045D**

LCS Sample ID: **LCS-176106-176106** Units: **s.u.** Analysis Date: **5/4/2021 11:28 AM**
Client ID: Run ID: **WETCHEM_210504G** SeqNo: **7362709** Prep Date: **5/3/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	4.04	0.10	4	0	101	90-110	0			

DUP Sample ID: **21042415-01A DUP** Units: **s.u.** Analysis Date: **5/4/2021 11:28 AM**
Client ID: **2nd Quarter Biosolids 2021** Run ID: **WETCHEM_210504G** SeqNo: **7362711** Prep Date: **5/3/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	7.62	0.10	0	0	0	0-0	7.61	0.131	20	
Temperature	19.8	0.10	0	0	0		20.1	1.5		

DUP Sample ID: **21050024-01A DUP** Units: **s.u.** Analysis Date: **5/4/2021 11:28 AM**
Client ID: Run ID: **WETCHEM_210504G** SeqNo: **7362721** Prep Date: **5/3/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
pH	5.85	0.10	0	0	0	0-0	5.82	0.514	20	
Temperature	20	0.10	0	0	0		20.2	0.995		

The following samples were analyzed in this batch: 21042415-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Delhi Charter Twp POTW
Work Order: 21042415
Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **176154** Instrument ID **LACHAT2** Method: **E365.1 R2.0**

MBLK Sample ID: **MBLK-176154-176154** Units: **mg/Kg** Analysis Date: **5/4/2021 04:25 PM**
Client ID: Run ID: **LACHAT2_210504C** SeqNo: **7363734** Prep Date: **5/3/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phosphorus, Total	ND	5.0								

LCS Sample ID: **LCS-176154-176154** Units: **mg/Kg** Analysis Date: **5/4/2021 04:46 PM**
Client ID: Run ID: **LACHAT2_210504C** SeqNo: **7363753** Prep Date: **5/3/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phosphorus, Total	10.32	5.0	10	0	103	90-110	0			

MS Sample ID: **21042415-01A MS** Units: **mg/Kg** Analysis Date: **5/4/2021 04:51 PM**
Client ID: **2nd Quarter Biosolids 2021** Run ID: **LACHAT2_210504C** SeqNo: **7363757** Prep Date: **5/3/2021** DF: **20**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phosphorus, Total	1639	500	49.5	1555	168	90-110	0			SO

MSD Sample ID: **21042415-01A MSD** Units: **mg/Kg** Analysis Date: **5/4/2021 04:52 PM**
Client ID: **2nd Quarter Biosolids 2021** Run ID: **LACHAT2_210504C** SeqNo: **7363758** Prep Date: **5/3/2021** DF: **20**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phosphorus, Total	1830	500	50	1555	549	90-110	1639	11	20	SO

The following samples were analyzed in this batch: 21042415-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Delhi Charter Twp POTW
Work Order: 21042415
Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **176161** Instrument ID **LACHAT** Method: **SW9012B**

MBLK Sample ID: **MBLK-176161-176161** Units: **mg/Kg** Analysis Date: **5/4/2021 03:39 PM**
Client ID: Run ID: **LACHAT_210504B** SeqNo: **7363114** Prep Date: **5/4/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Total	ND	0.030								

LCS Sample ID: **LCS-176161-176161** Units: **mg/Kg** Analysis Date: **5/4/2021 03:39 PM**
Client ID: Run ID: **LACHAT_210504B** SeqNo: **7363115** Prep Date: **5/4/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Total	1.517	0.030	1.5	0	101	87-115	0			

MS Sample ID: **21042673-01B MS** Units: **mg/Kg** Analysis Date: **5/4/2021 03:44 PM**
Client ID: Run ID: **LACHAT_210504B** SeqNo: **7363120** Prep Date: **5/4/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Total	14.82	0.30	15	0.2476	97.2	87-115	0			

MSD Sample ID: **21042673-01B MSD** Units: **mg/Kg** Analysis Date: **5/4/2021 03:45 PM**
Client ID: Run ID: **LACHAT_210504B** SeqNo: **7363121** Prep Date: **5/4/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Cyanide, Total	15.05	0.30	15	0.2476	98.7	87-115	14.82	1.5	20	

The following samples were analyzed in this batch: 21042415-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Delhi Charter Twp POTW
Work Order: 21042415
Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **176164** Instrument ID **SKALAR1** Method: **SW9066**

MBLK Sample ID: **MBLK-176164-176164** Units: **mg/Kg** Analysis Date: **5/5/2021 02:02 PM**
Client ID: Run ID: **SKALAR1_210505A** SeqNo: **7365909** Prep Date: **5/4/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	ND	0.50								

LCS Sample ID: **LCS-176164-176164** Units: **mg/Kg** Analysis Date: **5/5/2021 02:04 PM**
Client ID: Run ID: **SKALAR1_210505A** SeqNo: **7365910** Prep Date: **5/4/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	5.062	0.50	5	0	101	86-116	0			

MS Sample ID: **21042415-01A MS** Units: **mg/Kg** Analysis Date: **5/5/2021 02:09 PM**
Client ID: **2nd Quarter Biosolids 2021** Run ID: **SKALAR1_210505A** SeqNo: **7365912** Prep Date: **5/4/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	5.085	0.51	5.05	0.3779	93.2	86-116	0			

MSD Sample ID: **21042415-01A MSD** Units: **mg/Kg** Analysis Date: **5/5/2021 02:21 PM**
Client ID: **2nd Quarter Biosolids 2021** Run ID: **SKALAR1_210505A** SeqNo: **7365917** Prep Date: **5/4/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Phenolics, Total	5.012	0.51	5.05	0.3779	91.8	86-116	5.085	1.44	17	

The following samples were analyzed in this batch: 21042415-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Delhi Charter Twp POTW
Work Order: 21042415
Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **176242** Instrument ID **O&G** Method: **SW9071B**

MBLK Sample ID: **MBLK-176242-176242** Units: **mg/Kg** Analysis Date: **5/5/2021 12:23 PM**
Client ID: Run ID: **O&G_210505C** SeqNo: **7369024** Prep Date: **5/5/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Oil and Grease	108	180								J

LCS Sample ID: **LCS-176242-176242** Units: **mg/Kg** Analysis Date: **5/5/2021 12:23 PM**
Client ID: Run ID: **O&G_210505C** SeqNo: **7369023** Prep Date: **5/5/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Oil and Grease	1684	180	1600	0	105	78-114	0			

MS Sample ID: **21042560-01A MS** Units: **mg/Kg** Analysis Date: **5/5/2021 12:23 PM**
Client ID: Run ID: **O&G_210505C** SeqNo: **7369017** Prep Date: **5/5/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Oil and Grease	1928	180	1600	456	92	75-125	0			

MSD Sample ID: **21042560-01A MSD** Units: **mg/Kg** Analysis Date: **5/5/2021 12:23 PM**
Client ID: Run ID: **O&G_210505C** SeqNo: **7369018** Prep Date: **5/5/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Oil and Grease	1908	180	1600	456	90.8	75-125	1928	1.04	25	

The following samples were analyzed in this batch: 21042415-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Delhi Charter Twp POTW
Work Order: 21042415
Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **176301** Instrument ID **WETCHEM** Method: **E410.4 R2.0**

MBLK Sample ID: **MBLK-176301-176301** Units: **mg/Kg** Analysis Date: **5/4/2021 06:35 PM**
Client ID: Run ID: **WETCHEM_210504V** SeqNo: **7368739** Prep Date: **5/4/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chemical Oxygen Demand	ND	500								

LCS Sample ID: **LCS-176301-176301** Units: **mg/Kg** Analysis Date: **5/4/2021 06:35 PM**
Client ID: Run ID: **WETCHEM_210504V** SeqNo: **7368740** Prep Date: **5/4/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chemical Oxygen Demand	5938	500	6000	0	99	90-110	0			

MS Sample ID: **21042415-01A MS** Units: **mg/Kg** Analysis Date: **5/4/2021 06:35 PM**
Client ID: **2nd Quarter Biosolids 2021** Run ID: **WETCHEM_210504V** SeqNo: **7368742** Prep Date: **5/4/2021** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chemical Oxygen Demand	7320	980	5906	1295	102	80-120	0			

MSD Sample ID: **21042415-01A MSD** Units: **mg/Kg** Analysis Date: **5/4/2021 06:35 PM**
Client ID: **2nd Quarter Biosolids 2021** Run ID: **WETCHEM_210504V** SeqNo: **7368743** Prep Date: **5/4/2021** DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chemical Oxygen Demand	7826	980	5906	1295	111	80-120	7320	6.68	20	

The following samples were analyzed in this batch: 21042415-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Delhi Charter Twp POTW
Work Order: 21042415
Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **176318** Instrument ID **WETCHEM** Method: **A4500-NO2 B-11**

MBLK Sample ID: **MBLK-176318-176318** Units: **mg/Kg** Analysis Date: **5/6/2021 02:40 PM**
Client ID: Run ID: **WETCHEM_210506I** SeqNo: **7370036** Prep Date: **5/5/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrite	ND	0.20								

LCS Sample ID: **LCS-176318-176318** Units: **mg/Kg** Analysis Date: **5/6/2021 02:40 PM**
Client ID: Run ID: **WETCHEM_210506I** SeqNo: **7370037** Prep Date: **5/5/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrite	1.864	0.20	2	0	93.2	87-121	0			

MS Sample ID: **21050107-01A MS** Units: **mg/Kg** Analysis Date: **5/6/2021 02:40 PM**
Client ID: Run ID: **WETCHEM_210506I** SeqNo: **7370040** Prep Date: **5/5/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrite	2.322	0.20	2	0.006	116	87-121	0			

MSD Sample ID: **21050107-01A MSD** Units: **mg/Kg** Analysis Date: **5/6/2021 02:40 PM**
Client ID: Run ID: **WETCHEM_210506I** SeqNo: **7370041** Prep Date: **5/5/2021** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrite	2.419	0.20	2	0.006	121	87-121	2.322	4.09	14	

The following samples were analyzed in this batch: 21042415-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Delhi Charter Twp POTW
Work Order: 21042415
Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **176319** Instrument ID **LACHAT** Method: **E353.2**

MBLK	Sample ID: **MBLK-176319-176319**				Units: **mg/Kg**			Analysis Date: **5/5/2021 04:06 PM**			
Client ID:		Run ID: **LACHAT_210505A**			SeqNo: **7370669**			Prep Date: **5/5/2021**		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate	ND	0.20								

MS	Sample ID: **21050107-01A MS**				Units: **mg/Kg**			Analysis Date: **5/5/2021 04:21 PM**			
Client ID:		Run ID: **LACHAT_210505A**			SeqNo: **7370682**			Prep Date: **5/5/2021**		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate	24.72	0.20	2.5	-0.1624	995	90-110	0			S

MSD	Sample ID: **21050107-01A MSD**				Units: **mg/Kg**			Analysis Date: **5/5/2021 04:23 PM**			
Client ID:		Run ID: **LACHAT_210505A**			SeqNo: **7370683**			Prep Date: **5/5/2021**		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate	24.07	0.20	2.5	-0.1624	969	90-110	24.72	2.67	20	S

The following samples were analyzed in this batch: 21042415-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Delhi Charter Twp POTW
Work Order: 21042415
Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **R315285** Instrument ID **WETCHEM** Method: **A2540 G-11**

MBLK Sample ID: **MB-R315285-R315285** Units: **% of sample** Analysis Date: **4/28/2021 04:20 PM**
Client ID: Run ID: **WETCHEM_210428S** SeqNo: **7353440** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Solids	ND	0.050								

MBLK Sample ID: **MB-R315285-R315285** Units: **% of sample** Analysis Date: **4/28/2021 04:20 PM**
Client ID: Run ID: **WETCHEM_210428S** SeqNo: **7362850** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	ND	0.10								

DUP Sample ID: **21042415-01A DUP** Units: **% of sample** Analysis Date: **4/28/2021 04:20 PM**
Client ID: **2nd Quarter Biosolids 2021** Run ID: **WETCHEM_210428S** SeqNo: **7353443** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Total Solids	8.29	0.050	0	0	0	0-0	8.34	0.601	10	

DUP Sample ID: **21042415-01A DUP** Units: **% of sample** Analysis Date: **4/28/2021 04:20 PM**
Client ID: **2nd Quarter Biosolids 2021** Run ID: **WETCHEM_210428S** SeqNo: **7362853** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	91.71	0.10	0	0	0	0-0	91.66	0.0545	10	

The following samples were analyzed in this batch: 21042415-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Delhi Charter Twp POTW
Work Order: 21042415
Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **R315533** Instrument ID **WETCHEM** Method: **D240**

LCS	Sample ID: **LCS-R315533-R315533**				Units: **BTU/lb as recd.**		Analysis Date: **5/4/2021 04:00 PM**			
Client ID:		Run ID: **WETCHEM_210504M**			SeqNo: **7363179**		Prep Date:		DF: **1**	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Calorific Value (BTU)	11370	100	11370	0	100	80-120	0			

The following samples were analyzed in this batch: 21042415-01B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Delhi Charter Twp POTW
Work Order: 21042415
Project: 2nd Quarter Biosolids 2021

QC BATCH REPORT

Batch ID: **R315851** Instrument ID **WETCHEM** Method: **A2710 F**

DUP	Sample ID: **21050198-01A DUP**				Units: **lbs/gallon**			Analysis Date: **5/7/2021 02:45 PM**			
Client ID:		Run ID: **WETCHEM_210507N**			SeqNo: **7374120**		Prep Date:		DF: **1**		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Density	8.86	0	0	0	0	0-0	8.795	0.728	20		

The following samples were analyzed in this batch: 21042415-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

☐ ALS Laboratory Group
10450 Stancliff Rd. #210
Houston, Texas 77099
(Tel) 281.530.5656
(Fax) 281.530.5887

Chain of Custody Form

Page _____ of _____

☐ ALS Laboratory Group
3352 128th Avenue
Holland, Michigan 49424
(Tel) 616.399.6070
(Fax) 616.399.6185

ALS Project Manager: | ALS Work Order #: 2104215

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order	39800	Project Name	2nd Quarter Biosolids 2021	A	Chloride, Sulfate, Density, Total Solids, TSS
Work Order		Project Number		B	Ammonia N, TKN, Nitrate N, Nitrite N, Total P
Company Name	Delhi Charter Township	Bill To Company		C	As, Ba, Cd, Ca, Cr, Cu, Pb, Mg, Mo, Ni, K, Se, Ag, Na, Zn, & Hg
Send Report To	Jeff Ranes	Invoice Attn.		D	pH
Address	5961 McCue	Address		E	BTU Value
				F	cyanide
City/State/Zip	Holt, MI 48842	City/State/Zip		G	phenol
Phone	517-699-3873	Phone	517-749-6326 Cell	H	BOD, COD
Fax	517-694-1490	Fax		I	FOG
e-Mail Address	jeff.ranes@delhitownship.com			J	PFOS EPA 537 Modified

No.	Sample Description	Date	Time	Matrix	Pres. Key Numbers	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	Second Quarter Biosolids	4/27/2021	2:15pm	SL	8	2	x	x	x	x	x	x	x	x	x		
2	Second Quarter Biosolids	4/27/2021	2:15pm	SL	8	2										x	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s): Please Print & Sign: Noah Trigo

Shipment Method: UPS

Required Turnaround Time: (Check Box) ☐ 10 Wk Days ☐ 5 Wk Days ☐ 3 Wk Days ☐ 2 Wk Days ☐ 24 Hour ☐ Other _____

Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Notes:
Noah Trigo	4/27/2021	3:30pm	UPS	42721	3:30pm	
Relinquished by: UPS	Date: 4/28/21	Time: 0800	Received by (Laboratory):	Date:	Time:	
Logged by (Laboratory): KE	Date: 4/28/21	Time: 0905	Checked by (Laboratory):			

ALS Cooler ID	Cooler Temp
1E3	4.2°C

QC Package: (Check Box Below)
☐ Level II: Standard QC ☐ Level III: Raw Data
☐ TRRP LRC ☐ TRRP Level IV
☐ Level IV: SW846 Methods/CLP like
☐ Other: _____

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C

Note: Any changes must be made in writing once samples and COC Form have been submitted to ALS.

Date: 13Apr21 SHIPPING: 0.00

18 LBS 1 OF 1

AH

JEFF RANES
5176993874
DELHI CHARTER TOWNSHIP DPS
5961 MCCUE ROAD
HOLT MI 48842

SHIP TO:
BILL CAREY
616 3996070
ALS LABS
3352 128TH STREET
HOLLAND MI 49424

MI 495 9-04

UPS NEXT DAY AIR EARLY 1+

TRACKING #: 1Z V4X 305 15 9872 8905

BILLING: P/P

XOL 21.03.15 NV45 45.0A 04/2021*

This Package Conforms to 49 CFR 173.4

ALS Group, USA

Sample Receipt Checklist

Client Name: **DELHITWP** Date/Time Received: **28-Apr-21 10:00**

Work Order: **21042415** Received by: **KRW**

Checklist completed by Keith Wierenga (eSignature) 28-Apr-21 (Date) Reviewed by: Bill Carey (eSignature) 28-Apr-21 (Date)

Matrices: Solid

Carrier name: UPS

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	4.2/5.2 c	ir3	
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	4/28/2021 9:13:02 AM		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:	-		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction: